Contents

1	nru		2
	1.1	base_nrun_r_planck_BICEP_lowl_lowLike	
	1.2	base_nrun_r_planck_BICEP_lowl_lowLike_highL	
	1.3	base_nrun_r_planck_BICEPxKECK_lowl_lowLike	
	1.4 1.5	base_nrun_r_planck_BICEPxKECK_lowl_lowLike_highL	
	1.0	base_nrun_r_pnanck_btoer_lowi	U
2	\mathbf{r}		7
	2.1	base_r_planck_BICEP_lowl_lowLike	7
	2.2	base_r_planck_BICEP_lowl_lowLike_highL	
	2.3	base_r_planck_BICEPxKECK_lowl_lowLike	
	2.4	base_r_planck_BICEPxKECK_lowl_lowLike_highL	
	2.5	base_r_planck_BICEP_lowl	11
3		A 1	10
3	r+A	Alens base_r_Alens_planck_BICEP_lowl_lowLike	12
	$\frac{3.1}{3.2}$	base_r_Alens_planck_BICEP_lowl_lowLike	
	$\frac{3.2}{3.3}$	base_r_Alens_planck_BICEPxKECK_lowl_lowLike	
	3.4	base_r_Alens_planck_BICEPxKECK_lowl_lowLike_highL	
	0.1	based in the planet Die Art Bert dew Liew Blacking in Die 1997 in 1997	10
4	r+r		16
	4.1	base_r_mnu_planck_BICEP_lowl_lowLike	
	4.2	base_r_mnu_planck_BICEP_lowl_lowLike_highL	17
5	r+n		18
J	5.1	base_r_nnu_planck_BICEP_lowl_lowLike	
	5.1	base_r_nnu_planck_BICEP_lowl_lowLike_highL	
	5.3	base_r_nnu_planck_BICEPxKECK_lowl_lowLike	
	5.4	base_r_nnu_planck_BICEPxKECK_lowl_lowLike_highL	
6	r+r	nnu+meffsterile	2 2
	6.1	base_r_nnu_meffsterile_planck_BICEP_lowl_lowLike	
	6.2	base_r_nnu_meffsterile_planck_BICEP_lowl_lowLike_highL	23
7	-a -a	$\mathrm{nnu+mnu}$	24
1	r+n	inu+mnu base_r_nnu_mnu_planck_BICEP_lowl_lowLike	24
	$7.1 \\ 7.2$	base_r_nnu_mnu_planck_BICEP_lowl_lowLike_highL	
	1.4	Dase_1_IIIIu_IIIIu_planck_DIOE1_low1_lowDike_IIIgiiD	20
8	r+r	$\operatorname{nrun}+\operatorname{omegak}$	26
	8.1	base_r_nrun_omegak_planck_BICEP_lowl_lowLike_BAO	26
9		omegak	27
	9.1	base_r_omegak_planck_BICEP_lowl_lowLike_BAO	27

1 nrun+r

1.1 $base_nrun_r_planck_BICEP_lowl_lowLike$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02231	$0.02235^{+0.00063}_{-0.00060}$	$\gamma^{ ext{CIB}}$	0.530	$0.54^{+0.24}_{-0.26}$	$Y_{ m P}$	0.244946	$0.24496^{+0.00027}_{-0.00026}$
$\Omega_{ m c} h^2$	0.1196	$0.1194^{+0.0052}_{-0.0053}$	c_{100}	1.00058	$1.00058^{+0.00076}_{-0.00076}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8434	$1.843^{+0.028}_{-0.028}$
$100\theta_{\rm MC}$	1.04138	$1.0414^{+0.0013}_{-0.0013}$	c_{217}	0.99642	$0.9966^{+0.0027}_{-0.0027}$	Age/Gyr	13.788	$13.782^{+0.097}_{-0.11}$
au	0.1015	$0.104^{+0.033}_{-0.031}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.00	_	z_*	1089.94	$1089.9_{-1.1}^{+1.1}$
$n_{ m s}$	0.9565	$0.958^{+0.016}_{-0.016}$	$A^{ m kSZ}$	9.84	_	r_*	144.57	$144.6^{+1.2}_{-1.2}$
$dn_{ m s}/d\ln k$	-0.0281	$-0.028^{+0.020}_{-0.020}$	$oldsymbol{eta_1^1}$	0.78	$0.7^{+1.1}_{-1.1}$	$100\theta_*$	1.04159	$1.0416^{+0.0013}_{-0.0013}$
$\ln(10^{10}A_{ m s})$	3.117	$3.122^{+0.067}_{-0.063}$	Ω_{Λ}	0.6879	$0.689^{+0.032}_{-0.033}$	$z_{ m drag}$	1059.74	$1059.8_{-1.3}^{+1.3}$
$r_{0.05}$	0.188	$0.196^{+0.085}_{-0.074}$	$\Omega_{ m m}$	0.3121	$0.311^{+0.033}_{-0.032}$	$r_{ m drag}$	147.26	$147.3^{+1.2}_{-1.2}$
$A_{100}^{ m PS}$	152	189^{+100}_{-100}	σ_8	0.8321	$0.834^{+0.029}_{-0.027}$	$k_{ m D}$	0.14066	$0.1407^{+0.0013}_{-0.0014}$
$A_{143}^{ m PS}$	44	57^{+30}_{-30}	$z_{ m re}$	12.00	$12.2^{+2.6}_{-2.4}$	$100\theta_{\mathrm{D}}$	0.16091	$0.16088^{+0.00072}_{-0.00073}$
$A_{217}^{ m PS}$	104.3	103^{+40}_{-40}	r_{10}	0.106	$0.113^{+0.061}_{-0.054}$	$z_{ m eq}$	3392	3387^{+120}_{-120}
$A_{143}^{ m CIB}$	4.85	_	H_0	67.59	$67.7^{+2.5}_{-2.3}$	$100\theta_{\mathrm{eq}}$	0.8153	$0.816^{+0.023}_{-0.022}$
$A_{217}^{ m CIB}$	28	32^{+20}_{-20}	$r_{0.002}$	0.203	$0.22^{+0.11}_{-0.10}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07157	$0.0717^{+0.0019}_{-0.0018}$
$A_{143}^{ m tSZ}$	7.06	_	$10^{9} A_{\rm s}$	2.258	$2.27^{+0.15}_{-0.14}$	H(0.57)	0.00031046	$0.0003107^{+0.0000037}_{-0.0000036}$
$r_{143 imes217}^{ ext{PS}}$	0.868	> 0.717	$\Omega_{ m m} h^2$	0.1426	$0.1424^{+0.0050}_{-0.0051}$	$D_{\rm A}(0.57)$	1387.3	1385_{-32}^{+31}
$r_{143 imes217}^{ ext{CIB}}$	0.382	$0.50^{+0.38}_{-0.47}$	$\Omega_{ m m} h^3$	0.09638	$0.0964^{+0.0013}_{-0.0012}$			

Best-fit $\chi^2_{\text{eff}} = 9846.33$; $\bar{\chi}^2_{\text{eff}} = 9864.37$; R-1=0.01629 χ^2_{eff} : CMB - lowlike_v222: 2013.59 BICEP2: 39.40 commander_v4.1_lm49: -7.90 CAMspec_v6.2TN_2013_02_26_dist: 7801.23

1.2 $base_nrun_r_planck_BICEP_lowl_lowLike_highL$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02237	$0.02243^{+0.00060}_{-0.00059}$	$A_{148}^{\mathrm{PS,ACT}}$	10.49	$10.5^{+1.2}_{-1.1}$	H_0	67.67	$67.8^{+2.4}_{-2.3}$
$\Omega_{ m c} h^2$	0.1196	$0.1193^{+0.0051}_{-0.0051}$	$A_{218}^{\mathrm{PS,ACT}}$	76.9	$76.5^{+8.5}_{-8.8}$	$r_{0.002}$	0.201	$0.21^{+0.12}_{-0.10}$
$100\theta_{\rm MC}$	1.04139	$1.0415^{+0.0012}_{-0.0012}$	$A_{95}^{ m PS,SPT}$	7.27	$7.53^{+2.9}_{-2.8}$	$10^{9}A_{\rm s}$	2.274	$2.28^{+0.15}_{-0.14}$
au	0.1049	$0.107^{+0.034}_{-0.031}$	$A_{150}^{\mathrm{PS,SPT}}$	9.97	$9.99^{+0.99}_{-0.99}$	$\Omega_{ m m} h^2$	0.14257	$0.1424^{+0.0048}_{-0.0048}$
$n_{ m s}$	0.9564	$0.957^{+0.015}_{-0.014}$	$A_{220}^{\mathrm{PS,SPT}}$	74.0	74^{+9}_{-9}	$\Omega_{ m m} h^3$	0.09648	$0.0966^{+0.0012}_{-0.0012}$
$dn_{ m s}/d\ln k$	-0.0282	$-0.029^{+0.018}_{-0.019}$	$r_{95 imes150}^{ ext{PS}}$	0.817	> 0.684	$Y_{ m P}$	0.244973	$0.24500^{+0.00025}_{-0.00025}$
$\ln(10^{10}A_{ m s})$	3.124	$3.128^{+0.067}_{-0.063}$	$r_{95 imes220}^{ ext{PS}}$	0.592	$0.59^{+0.24}_{-0.23}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8431	$1.843^{+0.027}_{-0.027}$
$r_{0.05}$	0.185	$0.193^{+0.086}_{-0.079}$	$r_{150 imes220}^{ ext{PS}}$	0.9214	$0.938^{+0.047}_{-0.045}$	Age/Gyr	13.781	$13.772^{+0.093}_{-0.099}$
A_{100}^{PS}	223	228^{+100}_{-100}	$A_{ m dust}^{ m ACTs}$	0.427	$0.44^{+0.37}_{-0.39}$	z_*	1089.86	$1089.8^{+1.0}_{-1.0}$
$A_{143}^{ m PS}$	80.4	79^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	0.847	$0.85^{+0.40}_{-0.39}$	r_*	144.55	$144.6^{+1.2}_{-1.2}$
A_{217}^{PS}	65.8	64^{+20}_{-20}	$y_{148}^{ m ACTs}$	0.9884	$0.990^{+0.015}_{-0.014}$	$100\theta_*$	1.04159	$1.0417^{+0.0012}_{-0.0012}$
$A_{143}^{ m CIB}$	3.14	$3.21^{+1.6}_{-1.5}$	$y_{217}^{ m ACTs}$	1.0016	$1.003^{+0.026}_{-0.026}$	$z_{ m drag}$	1059.89	$1060.0_{-1.3}^{+1.3}$
$A_{217}^{ m CIB}$	49.5	49^{+10}_{-9}	$y_{148}^{ m ACTe}$	0.9846	$0.986^{+0.015}_{-0.014}$	$r_{ m drag}$	147.21	$147.2^{+1.2}_{-1.2}$
$A_{143}^{ m tSZ}$	3.29	< 4.70	$y_{217}^{ m ACTe}$	0.9601	$0.961^{+0.021}_{-0.020}$	$k_{ m D}$	0.14076	$0.1408^{+0.0013}_{-0.0013}$
$r_{143 imes217}^{ ext{PS}}$	0.826	$0.83^{+0.13}_{-0.13}$	$y_{95}^{ m SPT}$	0.9774	$0.980^{+0.039}_{-0.036}$	$100\theta_{\mathrm{D}}$	0.16082	$0.16077^{+0.00071}_{-0.00069}$
$r_{143 imes217}^{ ext{CIB}}$	1.000	> 0.854	$y_{150}^{ m SPT}$	0.9813	$0.983^{+0.019}_{-0.018}$	$z_{ m eq}$	3392	3388^{+120}_{-120}
$\gamma^{ ext{CIB}}$	0.618	$0.63^{+0.16}_{-0.16}$	$y_{220}^{ m SPT}$	1.0165	$1.022_{-0.043}^{+0.047}$	$100\theta_{\mathrm{eq}}$	0.8156	$0.817^{+0.023}_{-0.021}$
c_{100}	1.00058	$1.00058^{+0.00078}_{-0.00078}$	Ω_{Λ}	0.6887	$0.690^{+0.030}_{-0.032}$	$r_{\rm drag}/D_{\rm V}(0.57)$	0.07161	$0.0717^{+0.0018}_{-0.0017}$
c_{217}	0.99744	$0.9975^{+0.0027}_{-0.0026}$	$\Omega_{ m m}$	0.3113	$0.310^{+0.032}_{-0.030}$	H(0.57)	0.00031065	$0.0003110^{+0.0000036}_{-0.0000035}$
$\mathbf{\xi}^{ ext{tSZ} imes ext{CIB}}$	0.19	_	σ_8	0.8341	$0.835^{+0.028}_{-0.027}$	$D_{\rm A}(0.57)$	1386.0	1384^{+30}_{-32}
$A^{ m kSZ}$	4.34	$5.87^{+3.9}_{-4.1}$	$z_{ m re}$	12.27	$12.4^{+2.5}_{-2.4}$			
eta_1^1	0.61	$0.6^{+1.1}_{-1.1}$	r_{10}	0.104	$0.111^{+0.062}_{-0.054}$			

Best-fit $\chi^2_{\text{eff}} = 10548.41$; $\bar{\chi}^2_{\text{eff}} = 10586.06$; R-1=0.02076 χ^2_{eff} : CMB - lowlike_v222: 2013.90 BICEP2: 39.45 commander_v4.1_lm49: -7.84 CAMspec_v6.2TN_2013_02_26_dist: 7809.58 actspt_2013_01: 693.26

$base_nrun_r_planck_BICEPxKECK_lowl_lowLike$ 1.3

			1					
Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02230	$0.02234^{+0.00062}_{-0.00060}$	$\gamma^{ ext{CIB}}$	0.528	$0.54^{+0.23}_{-0.25}$	$Y_{ m P}$	0.244940	$0.24496^{+0.00026}_{-0.00025}$
$\Omega_{ m c} h^2$	0.1200	$0.1197^{+0.0055}_{-0.0052}$	c_{100}	1.00058	$1.00058^{+0.00078}_{-0.00077}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8421	$1.844^{+0.029}_{-0.027}$
$100\theta_{\rm MC}$	1.04130	$1.0413^{+0.0012}_{-0.0012}$	c_{217}	0.99642	$0.9965^{+0.0027}_{-0.0028}$	Age/Gyr	13.793	$13.786^{+0.096}_{-0.10}$
au	0.0989	$0.102^{+0.032}_{-0.032}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.00	_	z_*	1089.99	$1089.9^{+1.1}_{-1.1}$
$n_{ m s}$	0.9540	$0.957^{+0.016}_{-0.015}$	$A^{ m kSZ}$	6.19	_	r_*	144.49	$144.5^{+1.2}_{-1.2}$
$dn_{ m s}/d\ln k$	-0.0258	$-0.025^{+0.019}_{-0.019}$	eta_1^1	0.65	$0.7^{+1.1}_{-1.1}$	$100\theta_*$	1.04151	$1.0415^{+0.0012}_{-0.0012}$
$\ln(10^{10}A_{ m s})$	3.111	$3.118^{+0.064}_{-0.063}$	Ω_{Λ}	0.6855	$0.687^{+0.031}_{-0.034}$	$z_{ m drag}$	1059.74	$1059.8^{+1.3}_{-1.2}$
$r_{0.05}$	0.127	$0.136^{+0.078}_{-0.072}$	$\Omega_{ m m}$	0.3145	$0.313^{+0.034}_{-0.031}$	$r_{ m drag}$	147.17	$147.2^{+1.2}_{-1.2}$
A_{100}^{PS}	170	187^{+100}_{-100}	σ_8	0.8307	$0.833^{+0.029}_{-0.027}$	$k_{ m D}$	0.14074	$0.1407^{+0.0014}_{-0.0014}$
$A_{143}^{ m PS}$	31	56^{+30}_{-30}	$z_{ m re}$	11.80	$12.0_{-2.4}^{+2.5}$	$100\theta_{\mathrm{D}}$	0.16090	$0.16086^{+0.00072}_{-0.00072}$
A_{217}^{PS}	95.5	103^{+30}_{-40}	r_{10}	0.0683	$0.074^{+0.050}_{-0.045}$	$z_{ m eq}$	3401	3395^{+130}_{-120}
$A_{143}^{ m CIB}$	13.1	_	H_0	67.42	$67.6^{+2.4}_{-2.4}$	$100\theta_{\mathrm{eq}}$	0.8137	$0.815^{+0.023}_{-0.023}$
$A_{217}^{ m CIB}$	35.3	32^{+20}_{-20}	$r_{0.002}$	0.132	$0.143^{+0.094}_{-0.085}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07144	$0.0715^{+0.0018}_{-0.0018}$
A_{143}^{tSZ}	8.72	_	$10^{9}A_{\rm s}$	2.245	$2.26^{+0.15}_{-0.14}$	H(0.57)	0.00031024	$0.0003105^{+0.0000036}_{-0.0000036}$
$r_{143\times217}^{\mathrm{PS}}$	0.889	> 0.716	$\Omega_{ m m} h^2$	0.1430	$0.1427^{+0.0052}_{-0.0050}$	$D_{\rm A}(0.57)$	1389.5	1387^{+32}_{-32}
$r_{143 imes217}^{ ext{CIB}}$	0.599	$0.49^{+0.35}_{-0.48}$	$\Omega_{ m m} h^3$	0.09638	$0.0964^{+0.0013}_{-0.0012}$			

Best-fit $\chi^2_{\text{eff}} = 9807.16$; $\bar{\chi}^2_{\text{eff}} = 9825.07$; R-1=0.00823 χ^2_{eff} : CMB - lowlike_v222: 2013.74 BICEPxKECKfudge: 1.55 commander_v4.1_lm49: -8.85 CAMspec_v6.2TN_2013_02_26_dist: 7800.72

$base_nrun_r_planck_BICEPxKECK_lowl_lowLike_highL$ 1.4

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02236	$0.02241^{+0.00060}_{-0.00059}$	$A_{148}^{\mathrm{PS,ACT}}$	10.50	$10.5^{+1.2}_{-1.1}$	H_0	67.48	$67.6^{+2.4}_{-2.3}$
$\Omega_{ m c} h^2$	0.1200	$0.1198^{+0.0054}_{-0.0053}$	$A_{218}^{\mathrm{PS,ACT}}$	76.7	77^{+9}_{-9}	$r_{0.002}$	0.129	$0.140^{+0.089}_{-0.083}$
$100\theta_{\rm MC}$	1.04131	$1.0414^{+0.0012}_{-0.0012}$	$A_{95}^{ m PS,SPT}$	7.40	$7.56^{+3.0}_{-2.8}$	$10^{9}A_{\rm s}$	2.258	$2.28^{+0.15}_{-0.15}$
au	0.1015	$0.105^{+0.033}_{-0.032}$	$A_{150}^{\mathrm{PS,SPT}}$	9.98	$10.0^{+1.0}_{-0.99}$	$\Omega_{ m m} h^2$	0.1430	$0.1429^{+0.0051}_{-0.0050}$
$n_{ m s}$	0.9554	$0.956^{+0.015}_{-0.014}$	$A_{220}^{\mathrm{PS,SPT}}$	74.0	74^{+9}_{-9}	$\Omega_{ m m} h^3$	0.09649	$0.0966^{+0.0013}_{-0.0012}$
$dn_{ m s}/d\ln k$	-0.0247	$-0.026^{+0.019}_{-0.019}$	$r_{95 imes150}^{ ext{PS}}$	0.804	> 0.685	$Y_{ m P}$	0.244968	$0.24499^{+0.00026}_{-0.00023}$
$\ln(10^{10}A_{ m s})$	3.117	$3.124^{+0.066}_{-0.064}$	$r_{95 imes220}^{ ext{PS}}$	0.576	$0.59^{+0.24}_{-0.23}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8436	$1.843^{+0.028}_{-0.028}$
$r_{0.05}$	0.125	$0.132^{+0.074}_{-0.070}$	$r_{150 imes220}^{ ext{PS}}$	0.9209	$0.937^{+0.046}_{-0.045}$	Age/Gyr	13.787	$13.780^{+0.093}_{-0.098}$
A_{100}^{PS}	223	227^{+100}_{-100}	$A_{ m dust}^{ m ACTs}$	0.426	$0.43^{+0.36}_{-0.39}$	z_*	1089.91	$1089.8^{+1.0}_{-1.0}$
$A_{143}^{ m PS}$	79.2	78^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	0.838	$0.85^{+0.39}_{-0.39}$	r_*	144.44	$144.5^{+1.2}_{-1.2}$
$A_{217}^{ m PS}$	64.9	64^{+20}_{-20}	$y_{148}^{ m ACTs}$	0.9888	$0.990^{+0.014}_{-0.014}$	$100\theta_*$	1.04150	$1.0415^{+0.0012}_{-0.0012}$
$A_{143}^{ m CIB}$	3.01	$3.24_{-1.5}^{+1.6}$	$y_{217}^{ m ACTs}$	1.0017	$1.004^{+0.026}_{-0.026}$	$z_{ m drag}$	1059.89	$1060.0^{+1.2}_{-1.2}$
$A_{217}^{ m CIB}$	49.8	49^{+10}_{-9}	$y_{148}^{ m ACTe}$	0.9850	$0.986^{+0.015}_{-0.014}$	$r_{ m drag}$	147.11	$147.1_{-1.2}^{+1.2}$
$A_{143}^{ m tSZ}$	3.19	< 4.82	$y_{217}^{ m ACTe}$	0.9604	$0.962^{+0.020}_{-0.020}$	$k_{ m D}$	0.14086	$0.1409^{+0.0014}_{-0.0013}$
$r_{143 imes217}^{ ext{PS}}$	0.826	$0.83^{+0.13}_{-0.13}$	$y_{95}^{ m SPT}$	0.9788	$0.980^{+0.039}_{-0.037}$	$100\theta_{\mathrm{D}}$	0.16081	$0.16077^{+0.00067}_{-0.00068}$
$r_{143 imes217}^{ ext{CIB}}$	0.9999	> 0.854	$y_{150}^{ m SPT}$	0.9816	$0.984^{+0.019}_{-0.018}$	$z_{ m eq}$	3402	3399^{+120}_{-120}
$\gamma^{ ext{CIB}}$	0.625	$0.63^{+0.16}_{-0.16}$	$y_{220}^{ m SPT}$	1.0169	$1.022^{+0.046}_{-0.043}$	$100\theta_{\mathrm{eq}}$	0.8137	$0.814^{+0.023}_{-0.022}$
c_{100}	1.00056	$1.00058^{+0.00078}_{-0.00078}$	Ω_{Λ}	0.6859	$0.687^{+0.031}_{-0.033}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07145	$0.0715^{+0.0018}_{-0.0018}$
c_{217}	0.99737	$0.9975^{+0.0026}_{-0.0026}$	$\Omega_{ m m}$	0.3141	$0.313^{+0.033}_{-0.031}$	H(0.57)	0.00031040	$0.0003107^{+0.0000035}_{-0.0000033}$
$\mathbf{\xi}^{ ext{tSZ} imes ext{CIB}}$	0.17	_	σ_8	0.8332	$0.835^{+0.029}_{-0.026}$	$D_{\rm A}(0.57)$	1388.5	1387^{+31}_{-31}
$A^{ m kSZ}$	4.41	$5.72^{+4.0}_{-4.2}$	$z_{ m re}$	11.99	$12.2^{+2.6}_{-2.4}$			
eta_1^1	0.57	$0.6^{+1.1}_{-1.1}$	r_{10}	0.0666	$0.072^{+0.047}_{-0.043}$			

Best-fit $\chi^2_{\text{eff}} = 10509.07$; $\bar{\chi}^2_{\text{eff}} = 10546.80$; R-1=0.02141 χ^2_{eff} : CMB - lowlike_v222: 2013.94 BICEPxKECKfudge: 1.57 commander_v4.1_lm49: -8.75 CAMspec_v6.2TN_2013_02_26_dist: 7809.37 actspt_2013_01: 692.89

$base_nrun_r_planck_BICEP_lowl$ 1.5

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\overline{\Omega_{ m b} h^2}$	0.02339	$0.0233^{+0.0012}_{-0.0011}$	$\gamma^{ ext{CIB}}$	0.526	$0.54^{+0.23}_{-0.25}$	$Y_{ m P}$	0.245401	$0.24536^{+0.00050}_{-0.00047}$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\Omega_{ m c} h^2$	0.1130	$0.1135^{+0.0074}_{-0.0075}$	c_{100}	1.00059	$1.00058^{+0.00078}_{-0.00079}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8243	$1.824^{+0.031}_{-0.030}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$100\theta_{\rm MC}$	1.04249	$1.0424^{+0.0017}_{-0.0016}$	c_{217}	0.99633	$0.9964^{+0.0027}_{-0.0027}$	Age/Gyr	13.616	$13.63^{+0.18}_{-0.20}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	au	0.255	$0.24^{+0.12}_{-0.12}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.00	_	z_*	1088.08	$1088.2^{+1.9}_{-1.9}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$n_{ m s}$	0.9860	$0.980^{+0.028}_{-0.027}$	$A^{ m kSZ}$	0.0	_	r_*	145.49	$145.4_{-1.4}^{+1.4}$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$dn_{ m s}/d\ln k$	-0.0502	$-0.052^{+0.033}_{-0.036}$	eta_1^1	0.75	$0.6^{+1.1}_{-1.1}$	$100\theta_*$	1.04259	$1.0425^{+0.0016}_{-0.0015}$
$m{A_{100}^{PS}}$ 127 173 $_{-100}^{+100}$ σ_8 0.937 0.923 $_{-0.082}^{+0.080}$ $k_{\rm D}$ 0.14080 0.1408 $_{-0.00}^{+0.00}$ $m{A_{143}^{PS}}$ 57.2 53 $_{-30}^{+30}$ $z_{\rm re}$ 21.8 21 $_{-7}^{+7}$ 100 $ heta_{ m D}$ 0.15989 0.1600 $_{-0.00}^{+0.00}$	$\ln(10^{10}A_{ m s})$	3.414	$3.38^{+0.23}_{-0.24}$	Ω_{Λ}	0.7304	$0.726^{+0.042}_{-0.045}$	$z_{ m drag}$	1061.73	$1061.6^{+2.4}_{-2.2}$
A_{143}^{PS} 57.2 53 $_{-30}^{+30}$ z_{re} 21.8 21 $_{-7}^{+7}$ 100 θ_{D} 0.15989 0.1600 $_{-0.00}^{+0.00}$	$r_{0.05}$	0.173	$0.183^{+0.082}_{-0.079}$	$\Omega_{ m m}$	0.2696	$0.274^{+0.045}_{-0.042}$	$r_{ m drag}$	147.85	$147.8^{+1.2}_{-1.3}$
	A_{100}^{PS}	127	173^{+100}_{-100}	σ_8	0.937	$0.923^{+0.080}_{-0.082}$	$k_{ m D}$	0.14080	$0.1408^{+0.0013}_{-0.0013}$
A_{217}^{PS} 121.9 104_{-40}^{+30} r_{10} 0.103 $0.112_{-0.057}^{+0.062}$ z_{eq} 3258 3269_{-160}^{+160}	A_{143}^{PS}	57.2	53^{+30}_{-30}	$z_{ m re}$	21.8	21^{+7}_{-7}	$100\theta_{\mathrm{D}}$	0.15989	$0.1600^{+0.0011}_{-0.0011}$
217 -40 -0.007 -4 -100	A_{217}^{PS}	121.9	104_{-40}^{+30}	r_{10}	0.103	$0.112^{+0.062}_{-0.057}$	$z_{ m eq}$	3258	3269^{+160}_{-160}
A_{143}^{CIB} 0.2 — H_0 71.29 $71.0^{+4.2}_{-3.9}$ $100\theta_{\text{eq}}$ 0.8442 $0.842^{+0.03}_{-0.03}$	$A_{143}^{ m CIB}$	0.2	_	H_0	71.29	$71.0_{-3.9}^{+4.2}$	$100\theta_{\mathrm{eq}}$	0.8442	$0.842^{+0.035}_{-0.032}$
A_{217}^{CIB} 24 30_{-10}^{+20} $r_{0.002}$ 0.231 $0.25_{-0.13}^{+0.14}$ $r_{drag}/D_V(0.57)$ 0.07413 $0.0740_{-0.00}^{+0.00}$	$A_{217}^{ m CIB}$	24	30^{+20}_{-10}	$r_{0.002}$	0.231	$0.25^{+0.14}_{-0.13}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07413	$0.0740^{+0.0030}_{-0.0028}$
A_{143}^{tSZ} 8.43 — $10^9 A_s$ 3.04 $2.97_{-0.70}^{+0.73}$ $H(0.57)$ 0.0003167 0.0003163 $_{-0.00}^{+0.00}$	$A_{143}^{ m tSZ}$	8.43	_	$10^{9}A_{\rm s}$	3.04	$2.97^{+0.73}_{-0.70}$	H(0.57)	0.0003167	$0.0003163^{+0.0000075}_{-0.0000071}$
$r_{143\times217}^{PS} = 0.897 > 0.728$ $\Omega_{\rm m}h^2 = 0.1370 = 0.1374^{+0.0066}_{-0.0066}$ $D_{\rm A}(0.57) = 1337 = 1341^{+52}_{-54}$	$r_{143\times217}^{\mathrm{PS}}$	0.897	> 0.728	$\Omega_{ m m} h^2$	0.1370	$0.1374^{+0.0066}_{-0.0066}$	$D_{\rm A}(0.57)$	1337	1341^{+52}_{-54}
$r_{143\times217}^{\text{CIB}}$ 0.321 < 0.799 $\Omega_{\text{m}}h^3$ 0.09767 0.0975 $^{+0.0018}_{-0.0017}$	$r_{143 imes 217}^{ ext{CIB}}$	0.321	< 0.799	$\Omega_{ m m} h^3$	0.09767	$0.0975^{+0.0018}_{-0.0017}$			

Best-fit $\chi^2_{\rm eff} = 7827.64$; $\bar{\chi}^2_{\rm eff} = 7845.23$; R-1=0.01970 $\chi^2_{\rm eff}$: CMB - BICEP2: 37.96 commander_v4.1_lm49: -8.66 CAMspec_v6.2TN_2013_02_26_dist: 7798.33

2 r $base_r_planck_BICEP_lowl_lowLike$ 2.1

D	D4 C4	0507 1::4	D	D4 C4	0.504 1::+	D	D + C +	0507 1::4-
Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02207	$0.02203^{+0.00054}_{-0.00055}$	c_{100}	1.00059	$1.00058^{+0.00077}_{-0.00078}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8326	$1.828^{+0.026}_{-0.025}$
$\Omega_{ m c} h^2$	0.1190	$0.1187^{+0.0053}_{-0.0050}$	c_{217}	0.99637	$0.9965^{+0.0027}_{-0.0027}$	Age/Gyr	13.810	$13.812^{+0.093}_{-0.094}$
$100\theta_{\rm MC}$	1.04134	$1.0414^{+0.0012}_{-0.0012}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.11	_	z_*	1090.19	$1090.2_{-1.0}^{+1.1}$
au	0.0902	$0.090^{+0.026}_{-0.023}$	$A^{ m kSZ}$	0.0	_	r_*	144.93	$145.0^{+1.1}_{-1.2}$
$n_{ m s}$	0.9671	$0.964^{+0.014}_{-0.015}$	eta_1^1	0.71	$0.5^{+1.2}_{-1.1}$	$100\theta_*$	1.04157	$1.0416^{+0.0012}_{-0.0012}$
$\ln(10^{10}A_{ m s})$	3.0886	$3.085^{+0.049}_{-0.045}$	Ω_{Λ}	0.6901	$0.691^{+0.032}_{-0.033}$	$z_{ m drag}$	1059.17	$1059.0_{-1.1}^{+1.1}$
$r_{0.05}$	0.162	$0.166^{+0.070}_{-0.067}$	$\Omega_{ m m}$	0.3099	$0.309^{+0.033}_{-0.032}$	$r_{ m drag}$	147.70	$147.8^{+1.1}_{-1.2}$
A_{100}^{PS}	123	164^{+100}_{-100}	σ_8	0.8279	$0.825^{+0.025}_{-0.024}$	$k_{ m D}$	0.14002	$0.1399^{+0.0012}_{-0.0012}$
$A_{143}^{ m PS}$	57.4	54^{+30}_{-30}	$z_{ m re}$	11.10	$11.0^{+2.1}_{-2.1}$	$100\theta_{ m D}$	0.16125	$0.16134^{+0.00066}_{-0.00062}$
A_{217}^{PS}	124.0	107^{+30}_{-30}	r_{10}	0.0784	$0.080^{+0.038}_{-0.035}$	$z_{ m eq}$	3370	3364^{+120}_{-110}
$A_{143}^{ m CIB}$	0.2	_	H_0	67.61	$67.7^{+2.3}_{-2.4}$	$100\theta_{\mathrm{eq}}$	0.8185	$0.820^{+0.022}_{-0.022}$
$A_{217}^{ m CIB}$	23	28^{+20}_{-10}	$r_{0.002}$	0.156	$0.159^{+0.074}_{-0.070}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07173	$0.0718^{+0.0018}_{-0.0018}$
$A_{143}^{ m tSZ}$	8.45	_	$10^{9}A_{\rm s}$	2.195	$2.19_{-0.10}^{+0.11}$	H(0.57)	0.00031006	$0.0003101^{+0.0000035}_{-0.0000033}$
$r_{143\times217}^{\mathrm{PS}}$	0.921	> 0.741	$\Omega_{ m m} h^2$	0.14169	$0.1414^{+0.0050}_{-0.0046}$	$D_{\rm A}(0.57)$	1387.9	1387^{+32}_{-31}
$r_{143 imes217}^{ ext{CIB}}$	0.34	_	$\Omega_{ m m}h^3$	0.09580	$0.0957^{+0.0011}_{-0.0011}$			
$\gamma^{ ext{CIB}}$	0.522	$0.53^{+0.23}_{-0.26}$	$Y_{ m P}$	0.244850	$0.24483^{+0.00023}_{-0.00025}$			

Best-fit $\chi^2_{\text{eff}} = 9852.89$; $\bar{\chi}^2_{\text{eff}} = 9870.59$; R - 1 = 0.01721 χ^2_{eff} : CMB - lowlike_v222: 2013.38 BICEP2: 40.02 commander_v4.1_lm49: -0.98 CAMspec_v6.2TN_2013_02_26_dist: 7800.47

$2.2 \quad base_r_planck_BICEP_lowl_lowLike_highL$

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{ m b} h^2$	$0.02205^{+0.00051}_{-0.00052}$	$A_{148}^{\mathrm{PS,ACT}}$	$10.5^{+1.2}_{-1.1}$	r_{10}	$0.078^{+0.037}_{-0.035}$
$\Omega_{ m c} h^2$	$0.1186^{+0.0052}_{-0.0050}$	$A_{218}^{\mathrm{PS,ACT}}$	77^{+9}_{-9}	H_0	$67.7^{+2.3}_{-2.3}$
$100\theta_{\rm MC}$	$1.0414^{+0.0012}_{-0.0012}$	$A_{95}^{ m PS,SPT}$	$7.62^{+3.0}_{-2.9}$	$r_{0.002}$	$0.155^{+0.073}_{-0.068}$
au	$0.090^{+0.026}_{-0.024}$	$A_{150}^{\mathrm{PS,SPT}}$	$10.08^{+0.99}_{-1.0}$	$10^9 A_{\rm s}$	$2.19_{-0.098}^{+0.11}$
$n_{ m s}$	$0.962^{+0.014}_{-0.014}$	$A_{220}^{\mathrm{PS,SPT}}$	74^{+9}_{-9}	$\Omega_{ m m} h^2$	$0.1413^{+0.0049}_{-0.0047}$
$\ln(10^{10}A_{ m s})$	$3.084^{+0.049}_{-0.046}$	$r_{95 imes150}^{ ext{PS}}$	> 0.683	$\Omega_{ m m}h^3$	$0.0957^{+0.0011}_{-0.0011}$
$r_{0.05}$	$0.163^{+0.070}_{-0.066}$	$r_{95 imes220}^{ ext{PS}}$	$0.59^{+0.24}_{-0.23}$	$Y_{ m P}$	$0.24484^{+0.00022}_{-0.00023}$
A_{100}^{PS}	208^{+100}_{-100}	$r_{150 imes220}^{ ext{PS}}$	$0.937^{+0.047}_{-0.045}$	$10^9 A_{\rm s} e^{-2\tau}$	$1.825^{+0.025}_{-0.024}$
A_{143}^{PS}	71^{+20}_{-20}	$A_{ m dust}^{ m ACTs}$	$0.43^{+0.36}_{-0.39}$	Age/Gyr	$13.810^{+0.092}_{-0.089}$
A_{217}^{PS}	58^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	$0.85^{+0.39}_{-0.38}$	z_*	$1090.2^{+1.0}_{-0.96}$
$A_{143}^{ m CIB}$	$3.26^{+1.6}_{-1.5}$	$y_{148}^{ m ACTs}$	$0.993^{+0.014}_{-0.014}$	r_*	$145.0^{+1.2}_{-1.2}$
$A_{217}^{ m CIB}$	50^{+10}_{-9}	$y_{217}^{ m ACTs}$	$1.006^{+0.026}_{-0.025}$	$100\theta_*$	$1.0416^{+0.0012}_{-0.0012}$
$A_{143}^{ m tSZ}$	< 5.20	$y_{148}^{ m ACTe}$	$0.989^{+0.014}_{-0.014}$	$z_{ m drag}$	$1059.1_{-1.1}^{+1.1}$
$r_{143 imes217}^{ ext{PS}}$	$0.82^{+0.15}_{-0.14}$	$y_{217}^{ m ACTe}$	$0.965^{+0.020}_{-0.020}$	$r_{ m drag}$	$147.8^{+1.2}_{-1.2}$
$r_{143 imes217}^{ ext{CIB}}$	> 0.849	$y_{95}^{ m SPT}$	$0.985^{+0.040}_{-0.037}$	$k_{ m D}$	$0.1399^{+0.0012}_{-0.0012}$
$\gamma^{ ext{CIB}}$	$0.64^{+0.16}_{-0.16}$	$y_{150}^{ m SPT}$	$0.989^{+0.019}_{-0.018}$	$100\theta_{\mathrm{D}}$	$0.16132^{+0.00063}_{-0.00061}$
c_{100}	$1.00058^{+0.00078}_{-0.00078}$	$y_{220}^{ m SPT}$	$1.025^{+0.047}_{-0.044}$	$z_{ m eq}$	3362^{+120}_{-110}
c_{217}	$0.9975^{+0.0026}_{-0.0026}$	Ω_{Λ}	$0.692^{+0.030}_{-0.032}$	$100\theta_{\mathrm{eq}}$	$0.820^{+0.022}_{-0.022}$
$\xi^{ ext{tSZ} imes ext{CIB}}$	< 0.821	$\Omega_{ m m}$	$0.308^{+0.032}_{-0.030}$	$r_{\rm drag}/D_{ m V}(0.57)$	$0.0719^{+0.0018}_{-0.0017}$
$A^{ m kSZ}$	$5.24^{+4.0}_{-4.5}$	σ_8	$0.823^{+0.025}_{-0.024}$	H(0.57)	$0.0003102^{+0.0000034}_{-0.0000032}$
eta_1^1	$0.4^{+1.1}_{-1.1}$	$z_{ m re}$	$11.1_{-2.1}^{+2.1}$	$D_{\rm A}(0.57)$	1387^{+31}_{-31}

 $\bar{\chi}_{\text{eff}}^2 = 10594.58; R - 1 = 0.01425$

$base_r_planck_BICEPxKECK_lowl_lowLike$ 2.3

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02210	$0.02207^{+0.00056}_{-0.00053}$	c_{100}	1.00056	$1.00058^{+0.00077}_{-0.00078}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8328	$1.829^{+0.025}_{-0.025}$
$\Omega_{ m c} h^2$	0.1191	$0.1190^{+0.0052}_{-0.0051}$	c_{217}	0.99638	$0.9964^{+0.0027}_{-0.0027}$	Age/Gyr	13.808	$13.812^{+0.094}_{-0.096}$
$100\theta_{\rm MC}$	1.04136	$1.0413^{+0.0012}_{-0.0012}$	$oldsymbol{\xi^{tSZ imes CIB}}$	0.01	_	z_*	1090.17	$1090.2_{-1.0}^{+1.0}$
au	0.0892	$0.089^{+0.027}_{-0.024}$	$A^{ m kSZ}$	0.0	_	r_*	144.88	$144.9^{+1.2}_{-1.1}$
$n_{ m s}$	0.9656	$0.963^{+0.014}_{-0.014}$	eta_1^1	0.56	$0.5^{+1.1}_{-1.1}$	$100\theta_*$	1.04158	$1.0415^{+0.0012}_{-0.0012}$
$\ln(10^{10}A_{ m s})$	3.0869	$3.085^{+0.051}_{-0.046}$	Ω_{Λ}	0.6895	$0.689^{+0.030}_{-0.032}$	$z_{ m drag}$	1059.21	$1059.1_{-1.1}^{+1.2}$
$r_{0.05}$	0.108	$0.112^{+0.063}_{-0.060}$	$\Omega_{ m m}$	0.3105	$0.311^{+0.032}_{-0.030}$	$r_{ m drag}$	147.64	$147.7^{+1.2}_{-1.1}$
A_{100}^{PS}	161	165^{+100}_{-100}	σ_8	0.8271	$0.825^{+0.025}_{-0.024}$	$k_{ m D}$	0.14010	$0.1400^{+0.0012}_{-0.0012}$
A_{143}^{PS}	55.8	52^{+30}_{-30}	$z_{ m re}$	11.02	$11.0^{+2.2}_{-2.1}$	$100\theta_{\mathrm{D}}$	0.16122	$0.16126^{+0.00065}_{-0.00066}$
A_{217}^{PS}	120.6	107^{+30}_{-30}	r_{10}	0.0508	$0.053^{+0.032}_{-0.030}$	$z_{ m eq}$	3374	3372^{+120}_{-110}
$A_{143}^{ m CIB}$	4.69	_	H_0	67.59	$67.6^{+2.3}_{-2.3}$	$100\theta_{\mathrm{eq}}$	0.8179	$0.818^{+0.023}_{-0.022}$
$A_{217}^{ m CIB}$	25	28^{+20}_{-10}	$r_{0.002}$	0.101	$0.105^{+0.063}_{-0.059}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07170	$0.0717^{+0.0018}_{-0.0017}$
$A_{143}^{ m tSZ}$	5.34	_	$10^{9}A_{\rm s}$	2.191	$2.19_{-0.11}^{+0.11}$	H(0.57)	0.00031007	$0.0003100^{+0.0000035}_{-0.0000033}$
$r_{143 imes217}^{ ext{PS}}$	0.893	> 0.736	$\Omega_{ m m} h^2$	0.14184	$0.1418^{+0.0049}_{-0.0048}$	$D_{\rm A}(0.57)$	1388.1	1389^{+31}_{-31}
$r_{143 imes217}^{ ext{CIB}}$	0.179	< 0.796	$\Omega_{ m m} h^3$	0.09587	$0.0958^{+0.0012}_{-0.0011}$			
$\gamma^{ ext{CIB}}$	0.538	$0.53^{+0.25}_{-0.25}$	$Y_{ m P}$	0.244858	$0.24484^{+0.00024}_{-0.00024}$			

Best-fit $\chi^2_{\text{eff}} = 9812.07$; $\bar{\chi}^2_{\text{eff}} = 9829.61$; R-1=0.01320 χ^2_{eff} : CMB - lowlike_v222: 2013.60 BICEPxKECKfudge: 2.23 commander_v4.1_lm49: -3.62 CAMspec_v6.2TN_2013_02_26_dist: 7799.85

2.4 $base_r_planck_BICEPxKECK_lowl_lowLike_highL$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02209	$0.02209^{+0.00053}_{-0.00053}$	$A_{148}^{\mathrm{PS,ACT}}$	10.28	$10.5^{+1.2}_{-1.2}$	r_{10}	0.0487	$0.051_{-0.030}^{+0.033}$
$\Omega_{ m c} h^2$	0.1192	$0.1191^{+0.0052}_{-0.0052}$	$A_{218}^{\mathrm{PS,ACT}}$	76.2	77^{+9}_{-9}	H_0	67.55	$67.6^{+2.4}_{-2.3}$
$100\theta_{\rm MC}$	1.04132	$1.0413^{+0.0012}_{-0.0012}$	$A_{95}^{ m PS,SPT}$	7.41	$7.68^{+3.0}_{-2.9}$	$r_{0.002}$	0.097	$0.102^{+0.065}_{-0.060}$
au	0.0892	$0.090^{+0.026}_{-0.026}$	$A_{150}^{\mathrm{PS,SPT}}$	9.83	$10.1_{-1.0}^{+1.0}$	$10^{9}A_{\rm s}$	2.185	$2.19_{-0.11}^{+0.11}$
$n_{ m s}$	0.9609	$0.961^{+0.014}_{-0.014}$	$A_{220}^{\mathrm{PS,SPT}}$	73.0	74^{+9}_{-9}	$\Omega_{ m m} h^2$	0.14190	$0.1418^{+0.0050}_{-0.0049}$
$\ln(10^{10}A_{ m s})$	3.084	$3.084^{+0.050}_{-0.050}$	$r_{95 imes150}^{ ext{PS}}$	0.787	> 0.681	$\Omega_{ m m} h^3$	0.09585	$0.0958^{+0.0011}_{-0.0011}$
$r_{0.05}$	0.106	$0.110^{+0.066}_{-0.061}$	$r_{95 imes220}^{ ext{PS}}$	0.540	$0.58^{+0.24}_{-0.23}$	$Y_{ m P}$	0.244855	$0.24485^{+0.00023}_{-0.00024}$
$A_{100}^{ m PS}$	204	208^{+100}_{-100}	$r_{150 imes220}^{ ext{PS}}$	0.9120	$0.937^{+0.048}_{-0.044}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8281	$1.827^{+0.025}_{-0.024}$
$A_{143}^{ m PS}$	71.0	71^{+20}_{-20}	$A_{ m dust}^{ m ACTs}$	0.427	$0.44^{+0.36}_{-0.39}$	Age/Gyr	13.811	$13.809^{+0.091}_{-0.092}$
$A_{217}^{ m PS}$	59.3	58^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	0.838	$0.84^{+0.39}_{-0.39}$	z_*	1090.19	$1090.2_{-0.98}^{+1.0}$
$A_{143}^{ m CIB}$	3.13	$3.25^{+1.7}_{-1.6}$	$y_{148}^{ m ACTs}$	0.9921	$0.993^{+0.014}_{-0.014}$	r_*	144.86	$144.9^{+1.2}_{-1.2}$
$A_{217}^{ m CIB}$	52.3	50^{+10}_{-10}	$y_{217}^{ m ACTs}$	1.0037	$1.006^{+0.026}_{-0.026}$	$100\theta_*$	1.04154	$1.0416^{+0.0012}_{-0.0012}$
$A_{143}^{ m tSZ}$	4.51	< 5.13	$y_{148}^{ m ACTe}$	0.9885	$0.989^{+0.014}_{-0.014}$	$z_{ m drag}$	1059.21	$1059.2^{+1.0}_{-1.1}$
$r_{143 imes217}^{ ext{PS}}$	0.813	$0.82^{+0.15}_{-0.14}$	$y_{217}^{ m ACTe}$	0.9623	$0.965^{+0.020}_{-0.020}$	$r_{ m drag}$	147.63	$147.7^{+1.2}_{-1.2}$
$r_{143 imes217}^{ ext{CIB}}$	0.9999	> 0.843	$y_{95}^{ m SPT}$	0.9849	$0.985^{+0.040}_{-0.037}$	$k_{ m D}$	0.14010	$0.1401^{+0.0012}_{-0.0013}$
$\gamma^{ ext{CIB}}$	0.661	$0.64^{+0.16}_{-0.16}$	$y_{150}^{ m SPT}$	0.9854	$0.989^{+0.019}_{-0.019}$	$100\theta_{\mathrm{D}}$	0.16122	$0.16124^{+0.00063}_{-0.00060}$
c_{100}	1.00059	$1.00058^{+0.00077}_{-0.00076}$	$y_{220}^{ m SPT}$	1.0172	$1.025^{+0.047}_{-0.043}$	$z_{ m eq}$	3376	3373^{+120}_{-120}
c_{217}	0.99735	$0.9974^{+0.0026}_{-0.0026}$	Ω_{Λ}	0.6890	$0.689^{+0.031}_{-0.033}$	$100\theta_{\mathrm{eq}}$	0.8176	$0.818^{+0.023}_{-0.022}$
$\mathbf{\xi^{tSZ imes CIB}}$	0.002	< 0.855	$\Omega_{ m m}$	0.3110	$0.311^{+0.033}_{-0.031}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07167	$0.0717^{+0.0018}_{-0.0018}$
$A^{ m kSZ}$	2.06	$5.25^{+4.0}_{-4.4}$	σ_8	0.8246	$0.824^{+0.024}_{-0.025}$	H(0.57)	0.00031000	$0.0003101^{+0.0000035}_{-0.0000032}$
$\frac{\beta_1^1}{2}$	0.40	$0.3^{+1.1}_{-1.1}$	$z_{ m re}$	11.02	$11.0_{-2.1}^{+2.2}$	$D_{\rm A}(0.57)$	1388.8	1388^{+31}_{-32}

Best-fit $\chi^2_{\text{eff}} = 10516.32$; $\bar{\chi}^2_{\text{eff}} = 10553.70$; R - 1 = 0.01054 χ^2_{eff} : CMB - lowlike_v222: 2013.62 BICEPxKECKfudge: 2.38 commander_v4.1_lm49: -2.41 CAMspec_v6.2TN_2013_02_26_dist: 7809.99 actspt_2013_01: 692.68

$base_r_planck_BICEP_lowl$ 2.5

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02216	$0.02205^{+0.00063}_{-0.00062}$	c_{100}	1.00058	$1.00058^{+0.00076}_{-0.00077}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8282	$1.826^{+0.029}_{-0.028}$
$\Omega_{ m c} h^2$	0.1180	$0.1184^{+0.0059}_{-0.0057}$	c_{217}	0.99631	$0.9964^{+0.0027}_{-0.0027}$	Age/Gyr	13.793	$13.81^{+0.11}_{-0.11}$
$100\theta_{\rm MC}$	1.04147	$1.0414^{+0.0013}_{-0.0013}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.38	_	z_*	1089.99	$1090.2^{+1.2}_{-1.2}$
au	0.114	$0.097^{+0.069}_{-0.069}$	$A^{ m kSZ}$	0.0	_	r_*	145.12	$145.1^{+1.3}_{-1.3}$
$n_{ m s}$	0.9703	$0.966^{+0.018}_{-0.017}$	eta_1^1	0.51	$0.5^{+1.1}_{-1.1}$	$100\theta_*$	1.04170	$1.0416^{+0.0013}_{-0.0013}$
$\ln(10^{10}A_{ m s})$	3.134	$3.10^{+0.13}_{-0.13}$	Ω_{Λ}	0.6962	$0.693^{+0.034}_{-0.038}$	$z_{ m drag}$	1059.28	$1059.1^{+1.3}_{-1.2}$
$r_{0.05}$	0.154	$0.161^{+0.070}_{-0.068}$	$\Omega_{ m m}$	0.3038	$0.307^{+0.038}_{-0.034}$	$r_{ m drag}$	147.86	$147.9^{+1.2}_{-1.2}$
A_{100}^{PS}	166	162^{+100}_{-100}	σ_8	0.8441	$0.830^{+0.050}_{-0.049}$	$k_{ m D}$	0.13991	$0.1398^{+0.0012}_{-0.0012}$
$A_{143}^{ m PS}$	60.1	53^{+30}_{-30}	$z_{ m re}$	13.0	$11.5^{+5.8}_{-6.4}$	$100\theta_{ m D}$	0.16118	$0.16132^{+0.00072}_{-0.00069}$
$A_{217}^{ m PS}$	123.2	108^{+30}_{-30}	r_{10}	0.0735	$0.077^{+0.038}_{-0.036}$	$z_{ m eq}$	3349	3356^{+130}_{-130}
$A_{143}^{ m CIB}$	5.40	_	H_0	68.08	$67.8^{+2.8}_{-2.7}$	$100\theta_{\mathrm{eq}}$	0.8228	$0.821^{+0.026}_{-0.025}$
$A_{217}^{ m CIB}$	23	28^{+20}_{-10}	$r_{0.002}$	0.149	$0.154^{+0.073}_{-0.071}$	$r_{ m drag}/D_{ m V}(0.57)$	0.07208	$0.0720^{+0.0021}_{-0.0020}$
$A_{143}^{ m tSZ}$	3.48	_	$10^{9}A_{\rm s}$	2.296	$2.22_{-0.30}^{+0.29}$	H(0.57)	0.00031072	$0.0003103^{+0.0000042}_{-0.0000038}$
$r_{143 imes217}^{ ext{PS}}$	0.932	> 0.744	$\Omega_{ m m} h^2$	0.1408	$0.1411^{+0.0055}_{-0.0053}$	$D_{\rm A}(0.57)$	1381.7	1385_{-36}^{+36}
$r_{143 imes217}^{ ext{CIB}}$	0.016	< 0.785	$\Omega_{ m m} h^3$	0.09585	$0.0957^{+0.0011}_{-0.0011}$			
$\gamma^{ ext{CIB}}$	0.567	$0.53^{+0.24}_{-0.25}$	$Y_{ m P}$	0.244883	$0.24484^{+0.00027}_{-0.00028}$			

Best-fit $\chi^2_{\rm eff} = 7839.08$; $\bar{\chi}^2_{\rm eff} = 7855.92$; R-1=0.01280 $\chi^2_{\rm eff}$: CMB - BICEP2: 39.93 commander_v4.1_lm49: -0.25 CAMspec_v6.2TN_2013_02_26_dist: 7799.39

r+Alens3

3.1 $base_r_Alens_planck_BICEP_lowl_lowLike$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02279	$0.02269^{+0.00074}_{-0.00073}$	$\gamma^{ ext{CIB}}$	0.552	$0.52^{+0.24}_{-0.25}$	$Y_{ m P}$	0.245155	$0.24511_{-0.00031}^{+0.00031}$
$\Omega_{ m c} h^2$	0.1131	$0.1135^{+0.0061}_{-0.0058}$	c_{100}	1.00059	$1.00059^{+0.00078}_{-0.00077}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8102	$1.808^{+0.028}_{-0.026}$
$100\theta_{\rm MC}$	1.04229	$1.0422^{+0.0014}_{-0.0014}$	c_{217}	0.99613	$0.9963^{+0.0026}_{-0.0027}$	Age/Gyr	13.683	$13.70_{-0.13}^{+0.13}$
au	0.0862	$0.085^{+0.026}_{-0.024}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.995	_	z_*	1088.79	$1089.0^{+1.3}_{-1.3}$
$A_{ m L}$	1.385	$1.36^{+0.26}_{-0.24}$	$A^{ m kSZ}$	0.01	< 8.44	r_*	145.92	$145.9_{-1.3}^{+1.2}$
$n_{ m s}$	0.9829	$0.979^{+0.018}_{-0.017}$	eta_1^1	0.39	$0.3^{+1.1}_{-1.1}$	$100\theta_*$	1.04245	$1.0424^{+0.0014}_{-0.0013}$
$\ln(10^{10}A_{ m s})$	3.0683	$3.064^{+0.050}_{-0.048}$	Ω_{Λ}	0.7266	$0.723^{+0.035}_{-0.036}$	$z_{ m drag}$	1060.39	$1060.2^{+1.4}_{-1.4}$
$r_{0.05}$	0.171	$0.172^{+0.074}_{-0.073}$	$\Omega_{ m m}$	0.2734	$0.277^{+0.036}_{-0.035}$	$r_{ m drag}$	148.48	$148.5^{+1.2}_{-1.2}$
A_{100}^{PS}	126	141^{+100}_{-100}	σ_8	0.8008	$0.800^{+0.029}_{-0.029}$	$k_{ m D}$	0.13973	$0.1397^{+0.0013}_{-0.0012}$
$A_{143}^{ m PS}$	57.2	46^{+20}_{-20}	$z_{ m re}$	10.40	$10.3^{+2.1}_{-2.1}$	$100\theta_{\mathrm{D}}$	0.16062	$0.16073^{+0.00079}_{-0.00072}$
A_{217}^{PS}	120.9	107^{+30}_{-30}	r_{10}	0.0862	$0.086^{+0.042}_{-0.041}$	$z_{ m eq}$	3247	3255^{+130}_{-130}
$A_{143}^{ m CIB}$	3.06	< 15.8	H_0	70.67	$70.4_{-3.0}^{+3.0}$	$100\theta_{\mathrm{eq}}$	0.8444	$0.843^{+0.027}_{-0.027}$
$A_{217}^{ m CIB}$	21	25^{+10}_{-10}	$r_{0.002}$	0.173	$0.173^{+0.084}_{-0.081}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07395	$0.0738^{+0.0023}_{-0.0023}$
A_{143}^{tSZ}	5.41	_	$10^{9}A_{\rm s}$	2.151	$2.14^{+0.11}_{-0.10}$	H(0.57)	0.00031494	$0.0003145^{+0.0000051}_{-0.0000048}$
$r_{143 imes217}^{ ext{PS}}$	0.992	> 0.739	$\Omega_{ m m} h^2$	0.1365	$0.1369^{+0.0055}_{-0.0053}$	$D_{\rm A}(0.57)$	1347.1	1351^{+40}_{-38}
$\frac{r_{143\times217}^{\text{CIB}}}{r_{143\times217}^{\text{CIB}}}$	0.004	< 0.734	$\Omega_{\rm m}h^3$	0.09649	$0.0963^{+0.0013}_{-0.0012}$			

Best-fit $\chi^2_{\text{eff}} = 9840.99$; $\bar{\chi}^2_{\text{eff}} = 9861.55$; R-1=0.01689 χ^2_{eff} : CMB - lowlike_v222: 2013.20 BICEP2: 36.02 commander_v4.1_lm49: -5.58 CAMspec_v6.2TN_2013_02_26_dist: 7797.35

3.2 $base_r_Alens_planck_BICEP_lowl_lowLike_highL$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02265	$0.02264^{+0.00065}_{-0.00065}$	$A_{148}^{\mathrm{PS,ACT}}$	10.52	$10.7^{+1.2}_{-1.1}$	H_0	70.19	$70.3^{+2.8}_{-2.7}$
$\Omega_{ m c} h^2$	0.1139	$0.1138^{+0.0056}_{-0.0056}$	$A_{218}^{\mathrm{PS,ACT}}$	76.7	77^{+9}_{-9}	$r_{0.002}$	0.159	$0.166^{+0.081}_{-0.074}$
$100\theta_{\rm MC}$	1.04217	$1.0422^{+0.0014}_{-0.0013}$	$A_{95}^{ m PS,SPT}$	7.62	$8.08^{+3.1}_{-3.0}$	$10^{9}A_{\rm s}$	2.130	$2.14^{+0.11}_{-0.098}$
au	0.0822	$0.084^{+0.025}_{-0.024}$	$A_{150}^{\mathrm{PS,SPT}}$	10.16	$10.4^{+1.0}_{-1.0}$	$\Omega_{ m m} h^2$	0.1372	$0.1371^{+0.0052}_{-0.0052}$
$A_{ m L}$	1.357	$1.35^{+0.23}_{-0.21}$	$A_{220}^{\mathrm{PS,SPT}}$	73.5	75^{+9}_{-9}	$\Omega_{ m m} h^3$	0.09633	$0.0963^{+0.0012}_{-0.0012}$
$n_{ m s}$	0.9748	$0.975^{+0.016}_{-0.015}$	$r_{95 imes150}^{ ext{PS}}$	0.813	> 0.684	$Y_{ m P}$	0.245096	$0.24509^{+0.00027}_{-0.00027}$
$\ln(10^{10}A_{ m s})$	3.0588	$3.062^{+0.049}_{-0.047}$	$r_{95 imes220}^{ ext{PS}}$	0.569	$0.57^{+0.22}_{-0.22}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8071	$1.806^{+0.026}_{-0.026}$
$r_{0.05}$	0.162	$0.167^{+0.073}_{-0.069}$	$r_{150 imes220}^{ ext{PS}}$	0.9075	$0.933^{+0.048}_{-0.045}$	Age/Gyr	13.705	$13.70^{+0.11}_{-0.11}$
A_{100}^{PS}	179	188^{+100}_{-100}	$A_{ m dust}^{ m ACTs}$	0.422	$0.43^{+0.36}_{-0.39}$	z_*	1089.03	$1089.0^{+1.2}_{-1.1}$
$A_{143}^{ m PS}$	63.3	63^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	0.833	$0.84^{+0.39}_{-0.39}$	r_*	145.81	$145.9_{-1.2}^{+1.2}$
$A_{217}^{ m PS}$	52.4	50_{-20}^{+20}	$y_{148}^{ m ACTs}$	0.9954	$0.997^{+0.015}_{-0.014}$	$100\theta_*$	1.04233	$1.0424^{+0.0013}_{-0.0013}$
$A_{143}^{ m CIB}$	3.48	$3.31^{+1.7}_{-1.6}$	$y_{217}^{ m ACTs}$	1.0079	$1.011_{-0.026}^{+0.027}$	$z_{ m drag}$	1060.12	$1060.1_{-1.3}^{+1.2}$
$A_{217}^{ m CIB}$	53.8	51^{+10}_{-10}	$y_{148}^{ m ACTe}$	0.9922	$0.993^{+0.014}_{-0.014}$	$r_{ m drag}$	148.41	$148.5^{+1.2}_{-1.2}$
$A_{143}^{ m tSZ}$	5.18	< 5.25	$y_{217}^{ m ACTe}$	0.9658	$0.969^{+0.021}_{-0.020}$	$k_{ m D}$	0.13971	$0.1396^{+0.0012}_{-0.0012}$
$r_{143 imes217}^{ ext{PS}}$	0.799	$0.80^{+0.17}_{-0.16}$	$y_{95}^{ m SPT}$	0.9935	$0.993^{+0.040}_{-0.038}$	$100\theta_{ m D}$	0.16076	$0.16078^{+0.00067}_{-0.00065}$
$r_{143 imes217}^{ ext{CIB}}$	0.9999	> 0.839	$y_{150}^{ m SPT}$	0.9939	$0.997^{+0.020}_{-0.019}$	$z_{ m eq}$	3264	3260^{+120}_{-120}
$\gamma^{ ext{CIB}}$	0.680	$0.67^{+0.16}_{-0.16}$	$y_{220}^{ m SPT}$	1.0236	$1.031^{+0.047}_{-0.044}$	$100\theta_{\mathrm{eq}}$	0.8407	$0.842^{+0.027}_{-0.025}$
c_{100}	1.00060	$1.00059_{-0.00076}^{+0.00078}$	Ω_{Λ}	0.7215	$0.722^{+0.031}_{-0.033}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07362	$0.0737^{+0.0022}_{-0.0020}$
c_{217}	0.99721	$0.9973^{+0.0026}_{-0.0026}$	$\Omega_{ m m}$	0.2785	$0.278^{+0.033}_{-0.031}$	H(0.57)	0.00031411	$0.0003143^{+0.0000046}_{-0.0000043}$
$\mathbf{\xi^{tSZ imes CIB}}$	0.000	< 0.707	σ_8	0.7982	$0.799^{+0.028}_{-0.027}$	$D_{\rm A}(0.57)$	1353.4	1353^{+36}_{-36}
$A^{ m kSZ}$	0.27	< 7.57	$z_{ m re}$	10.12	$10.3^{+2.0}_{-2.1}$			
$oldsymbol{eta_1^1}$	0.15	$0.1^{+1.1}_{-1.1}$	r_{10}	0.0795	$0.083^{+0.041}_{-0.038}$			
Best-fit v^2	$_{\rm r} = 10546$	$31: \bar{v}^2_{cr} = 10585.0$	$7 \cdot R - 1 = 0.0$	01848		1		

Best-fit $\chi^2_{\text{eff}} = 10546.31$; $\bar{\chi}^2_{\text{eff}} = 10585.07$; R - 1 = 0.01848 χ^2_{eff} : CMB - lowlike_v222: 2013.46 BICEP2: 36.43 commander_v4.1_lm49: -4.38 CAMspec_v6.2TN_2013_02_26_dist: 7812.21 actspt_2013_01: 688.55

$base_r_Alens_planck_BICEPxKECK_lowl_lowLike$ 3.3

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02269	$0.02259^{+0.00074}_{-0.00072}$	$\gamma^{ ext{CIB}}$	0.517	$0.52^{+0.23}_{-0.25}$	$Y_{ m P}$	0.245115	$0.24507^{+0.00031}_{-0.00030}$
$\Omega_{ m c} h^2$	0.1146	$0.1150^{+0.0062}_{-0.0059}$	c_{100}	1.00056	$1.00059^{+0.00077}_{-0.00078}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8166	$1.814^{+0.028}_{-0.026}$
$100\theta_{\rm MC}$	1.04201	$1.0420^{+0.0014}_{-0.0014}$	c_{217}	0.99626	$0.9963^{+0.0027}_{-0.0027}$	Age/Gyr	13.708	$13.72^{+0.12}_{-0.13}$
au	0.0863	$0.086^{+0.026}_{-0.024}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.92	_	z_*	1089.03	$1089.2^{+1.3}_{-1.3}$
$A_{ m L}$	1.304	$1.27_{-0.23}^{+0.25}$	$A^{ m kSZ}$	0.0	_	r_*	145.60	$145.6^{+1.3}_{-1.3}$
$n_{ m s}$	0.9785	$0.975^{+0.017}_{-0.017}$	eta_1^1	0.46	$0.3^{+1.1}_{-1.1}$	$100\theta_*$	1.04219	$1.0422^{+0.0013}_{-0.0013}$
$\ln(10^{10}A_{ m s})$	3.0720	$3.070^{+0.051}_{-0.047}$	Ω_{Λ}	0.7180	$0.715^{+0.036}_{-0.037}$	$z_{ m drag}$	1060.28	$1060.1_{-1.4}^{+1.4}$
$r_{0.05}$	0.111	$0.114^{+0.068}_{-0.066}$	$\Omega_{ m m}$	0.2820	$0.285^{+0.037}_{-0.036}$	$r_{ m drag}$	148.18	$148.2^{+1.2}_{-1.2}$
A_{100}^{PS}	129	146^{+100}_{-100}	σ_8	0.8068	$0.806^{+0.030}_{-0.029}$	$k_{ m D}$	0.13997	$0.1399^{+0.0012}_{-0.0012}$
$A_{143}^{ m PS}$	56.4	47^{+30}_{-20}	$z_{ m re}$	10.47	$10.4^{+2.1}_{-2.1}$	$100\theta_{ m D}$	0.16065	$0.16078^{+0.00077}_{-0.00073}$
$A_{217}^{ m PS}$	122.8	107^{+30}_{-30}	r_{10}	0.0537	$0.055^{+0.036}_{-0.034}$	$z_{ m eq}$	3281	3287^{+140}_{-130}
$A_{143}^{ m CIB}$	0.2	< 16.3	H_0	69.94	$69.7^{+3.0}_{-3.0}$	$100\theta_{\mathrm{eq}}$	0.8375	$0.836^{+0.027}_{-0.027}$
$A_{217}^{ m CIB}$	21	26^{+10}_{-10}	$r_{0.002}$	0.108	$0.111^{+0.072}_{-0.067}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07337	$0.0732^{+0.0023}_{-0.0022}$
$A_{143}^{ m tSZ}$	5.95	_	$10^{9}A_{\rm s}$	2.159	$2.15_{-0.10}^{+0.11}$	H(0.57)	0.00031384	$0.0003135^{+0.0000050}_{-0.0000046}$
$r_{143 imes217}^{ ext{PS}}$	0.9995	> 0.742	$\Omega_{ m m} h^2$	0.1379	$0.1382^{+0.0057}_{-0.0054}$	$D_{\rm A}(0.57)$	1356.5	1360^{+40}_{-39}
$r_{143 imes217}^{ ext{CIB}}$	0.169	< 0.754	$\Omega_{ m m} h^3$	0.09647	$0.0963^{+0.0012}_{-0.0012}$			

Best-fit $\chi^2_{\text{eff}} = 9804.57$; $\bar{\chi}^2_{\text{eff}} = 9824.44$; R-1=0.01758 χ^2_{eff} : CMB - lowlike_v222: 2013.48 BICEPxKECKfudge: 1.81 commander_v4.1_lm49: -6.90 CAMspec_v6.2TN_2013_02_26_dist: 7796.19

3.4 $base_r_Alens_planck_BICEPxKECK_lowl_lowLike_highL$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02257	$0.02256^{+0.00067}_{-0.00067}$	$A_{148}^{\mathrm{PS,ACT}}$	10.47	$10.7^{+1.2}_{-1.1}$	H_0	69.61	$69.7^{+2.8}_{-2.8}$
$\Omega_{ m c} h^2$	0.1152	$0.1151^{+0.0059}_{-0.0056}$	$A_{218}^{\mathrm{PS,ACT}}$	76.7	77^{+9}_{-9}	$r_{0.002}$	0.100	$0.106^{+0.064}_{-0.063}$
$100\theta_{\rm MC}$	1.04195	$1.0420^{+0.0013}_{-0.0013}$	$A_{95}^{ m PS,SPT}$	7.53	$8.01^{+3.1}_{-2.9}$	$10^{9}A_{\rm s}$	2.144	$2.15_{-0.10}^{+0.11}$
au	0.0840	$0.085^{+0.025}_{-0.024}$	$A_{150}^{ m PS,SPT}$	10.09	$10.4^{+1.0}_{-1.0}$	$\Omega_{ m m} h^2$	0.1384	$0.1383^{+0.0055}_{-0.0052}$
$A_{ m L}$	1.276	$1.27^{+0.23}_{-0.23}$	$A_{220}^{\mathrm{PS,SPT}}$	73.6	75^{+9}_{-9}	$\Omega_{ m m} h^3$	0.09632	$0.0963^{+0.0012}_{-0.0012}$
$n_{ m s}$	0.9713	$0.971^{+0.016}_{-0.016}$	$r_{95 imes150}^{ ext{PS}}$	0.813	> 0.686	$Y_{ m P}$	0.245063	$0.24506^{+0.00027}_{-0.00028}$
$\ln(10^{10}A_{ m s})$	3.0653	$3.066^{+0.049}_{-0.048}$	$r_{95 imes220}^{ ext{PS}}$	0.564	$0.58^{+0.23}_{-0.22}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8124	$1.811^{+0.028}_{-0.026}$
$r_{0.05}$	0.105	$0.110^{+0.062}_{-0.062}$	$r_{150 imes220}^{ ext{PS}}$	0.9072	$0.934^{+0.047}_{-0.044}$	Age/Gyr	13.724	$13.72^{+0.11}_{-0.12}$
$A_{100}^{ m PS}$	184	193_{-100}^{+100}	$A_{ m dust}^{ m ACTs}$	0.411	$0.43^{+0.36}_{-0.39}$	z_*	1089.23	$1089.2^{+1.2}_{-1.2}$
$A_{143}^{ m PS}$	64.5	64^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	0.838	$0.84^{+0.39}_{-0.39}$	r_*	145.54	$145.6^{+1.2}_{-1.3}$
A_{217}^{PS}	53.7	52^{+20}_{-20}	$y_{148}^{ m ACTs}$	0.9951	$0.996^{+0.015}_{-0.014}$	$100\theta_*$	1.04214	$1.0421^{+0.0012}_{-0.0013}$
$A_{143}^{ m CIB}$	3.45	$3.30^{+1.7}_{-1.6}$	$y_{217}^{ m ACTs}$	1.0069	$1.011^{+0.027}_{-0.026}$	$z_{ m drag}$	1060.05	$1060.0_{-1.3}^{+1.3}$
$A_{217}^{ m CIB}$	53.4	51^{+10}_{-10}	$y_{148}^{ m ACTe}$	0.9916	$0.993^{+0.014}_{-0.014}$	$r_{ m drag}$	148.16	$148.2^{+1.2}_{-1.2}$
$A_{143}^{ m tSZ}$	5.05	< 5.23	$y_{217}^{ m ACTe}$	0.9654	$0.969^{+0.021}_{-0.020}$	$k_{ m D}$	0.13991	$0.1399^{+0.0012}_{-0.0012}$
$r_{143 imes217}^{ ext{PS}}$	0.800	$0.80^{+0.16}_{-0.15}$	$y_{95}^{ m SPT}$	0.9924	$0.992^{+0.041}_{-0.038}$	$100\theta_{ m D}$	0.16078	$0.16081^{+0.00071}_{-0.00067}$
$r_{143 imes217}^{ ext{CIB}}$	1.000	> 0.841	$y_{150}^{ m SPT}$	0.9926	$0.995^{+0.020}_{-0.019}$	$z_{ m eq}$	3291	3289_{-120}^{+130}
$\gamma^{ ext{CIB}}$	0.671	$0.66^{+0.16}_{-0.16}$	$y_{220}^{ m SPT}$	1.0229	$1.030^{+0.048}_{-0.044}$	$100\theta_{\mathrm{eq}}$	0.8351	$0.836^{+0.026}_{-0.026}$
c_{100}	1.00061	$1.00059^{+0.00078}_{-0.00077}$	Ω_{Λ}	0.7144	$0.714^{+0.035}_{-0.035}$	$r_{ m drag}/D_{ m V}(0.57)$	0.07315	$0.0732^{+0.0022}_{-0.0021}$
c_{217}	0.99720	$0.9973^{+0.0026}_{-0.0026}$	$\Omega_{ m m}$	0.2856	$0.286^{+0.035}_{-0.034}$	H(0.57)	0.00031324	$0.0003133^{+0.0000045}_{-0.0000042}$
$\xi^{ ext{tSZ} imes ext{CIB}}$	0.000	< 0.777	σ_8	0.8044	$0.804^{+0.029}_{-0.028}$	$D_{\rm A}(0.57)$	1361.0	1361^{+37}_{-37}
$A^{ m kSZ}$	0.61	< 7.82	$z_{ m re}$	10.32	$10.4^{+2.1}_{-2.2}$			
eta_1^1	0.19	$0.2^{+1.1}_{-1.1}$	r_{10}	0.0499	$0.053^{+0.032}_{-0.032}$			

Best-fit $\chi^2_{\text{eff}} = 10509.06$; $\bar{\chi}^2_{\text{eff}} = 10547.83$; R-1=0.02414 χ^2_{eff} : CMB - lowlike_v222: 2013.59 BICEPxKECKfudge: 1.99 commander_v4.1_lm49: -5.84 CAMspec_v6.2TN_2013_02_26_dist: 7810.35 actspt_2013_01: 688.93

4 r+mnu

$base_r_mnu_planck_BICEP_lowl_lowLike$ 4.1

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02207	$0.02192^{+0.00062}_{-0.00065}$	$\gamma^{ ext{CIB}}$	0.572	$0.53^{+0.24}_{-0.26}$	$Y_{ m P}$	0.244850	$0.24478^{+0.00027}_{-0.00029}$
$\Omega_{ m c} h^2$	0.1189	$0.1193^{+0.0057}_{-0.0054}$	c_{100}	1.00056	$1.00059^{+0.00078}_{-0.00078}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8332	$1.829^{+0.026}_{-0.025}$
$100\theta_{\rm MC}$	1.04142	$1.0411^{+0.0013}_{-0.0014}$	c_{217}	0.99638	$0.9965^{+0.0027}_{-0.0027}$	$\Omega_{ u}h^2$	0.00000	< 0.00857
au	0.0884	$0.089^{+0.027}_{-0.024}$	$\xi^{\mathrm{tSZ} imes \mathrm{CIB}}$	0.22	_	Age/Gyr	13.779	$13.93^{+0.35}_{-0.25}$
$\Sigma m_{ u} [{ m eV}]$	0.000	< 0.797	$A^{ m kSZ}$	0.0	_	z_*	1090.18	$1090.5^{+1.3}_{-1.3}$
$n_{ m s}$	0.9670	$0.962^{+0.016}_{-0.017}$	eta_1^1	0.58	$0.5^{+1.1}_{-1.1}$	r_*	144.94	$144.9^{+1.2}_{-1.3}$
$\ln(10^{10}A_{ m s})$	3.0856	$3.085^{+0.051}_{-0.046}$	Ω_{Λ}	0.697	$0.664^{+0.069}_{-0.094}$	$100\theta_*$	1.04161	$1.0415^{+0.0013}_{-0.0013}$
$r_{0.05}$	0.160	$0.166^{+0.074}_{-0.066}$	$\Omega_{ m m}$	0.303	$0.336^{+0.094}_{-0.069}$	$z_{ m drag}$	1059.17	$1058.8^{+1.2}_{-1.2}$
A_{100}^{PS}	175	169^{+100}_{-100}	σ_8	0.840	$0.785^{+0.080}_{-0.12}$	$r_{ m drag}$	147.71	$147.7^{+1.2}_{-1.3}$
$A_{143}^{ m PS}$	60.9	54^{+30}_{-30}	$z_{ m re}$	10.94	$11.1^{+2.2}_{-2.2}$	$k_{ m D}$	0.13999	$0.1399^{+0.0013}_{-0.0013}$
$A_{217}^{ m PS}$	123.1	108^{+30}_{-30}	r_{10}	0.0773	$0.080^{+0.039}_{-0.037}$	$100\theta_{\mathrm{D}}$	0.16127	$0.16140^{+0.00070}_{-0.00066}$
$A_{143}^{ m CIB}$	5.51	_	H_0	68.2	$65.7^{+5.0}_{-6.4}$	$z_{ m eq}$	3369	3374^{+130}_{-120}
$A_{217}^{ m CIB}$	24	29^{+20}_{-10}	$r_{0.002}$	0.154	$0.158^{+0.076}_{-0.073}$	$100\theta_{\mathrm{eq}}$	0.8187	$0.818^{+0.024}_{-0.024}$
$A_{143}^{ m tSZ}$	3.12	_	$10^{9}A_{\rm s}$	2.188	$2.19_{-0.11}^{+0.11}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07209	$0.0706^{+0.0034}_{-0.0042}$
$r_{143 imes217}^{ ext{PS}}$	0.921	> 0.738	$\Omega_{ m m} h^2$	0.1410	$0.1439^{+0.0093}_{-0.0080}$	H(0.57)	0.0003110	$0.0003068^{+0.0000078}_{-0.000010}$
$\frac{r_{143\times217}^{\text{CIB}}}{\frac{\text{Post ft.} 2}{\text{Post ft.} 2}}$	0.012	< 0.789	$\Omega_{ m m} h^3$	0.09612	$0.0945^{+0.0027}_{-0.0038}$	$D_{\rm A}(0.57)$	1380	1416^{+95}_{-71}

Best-fit $\chi^2_{\text{eff}} = 9852.33$; $\bar{\chi}^2_{\text{eff}} = 9872.47$; R-1=0.01214 χ^2_{eff} : CMB - lowlike_v222: 2013.30 BICEP2: 39.86 commander_v4.1_lm49: -0.93 CAMspec_v6.2TN_2013_02_26_dist: 7800.10

4.2 $base_r_mnu_planck_BICEP_lowl_lowLike_highL$

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\Omega_{ m b} h^2$	0.02207	$0.02200^{+0.00054}_{-0.00058}$	$A_{148}^{\mathrm{PS,ACT}}$	10.30	$10.5^{+1.2}_{-1.1}$	H_0	68.26	$66.6^{+4.0}_{-4.9}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\Omega_{ m c} h^2$	0.1186	$0.1189^{+0.0052}_{-0.0050}$	$A_{218}^{\mathrm{PS,ACT}}$	76.1	77^{+9}_{-9}	$r_{0.002}$	0.149	$0.156^{+0.074}_{-0.072}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$100\theta_{\rm MC}$	1.04141	$1.0413^{+0.0013}_{-0.0013}$	$A_{95}^{ m PS,SPT}$	7.39	$7.61_{-2.8}^{+3.0}$	$10^{9}A_{\rm s}$	2.183	$2.19_{-0.10}^{+0.11}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	au	0.0894	$0.090^{+0.026}_{-0.023}$	$A_{150}^{\mathrm{PS,SPT}}$	9.83	$10.1^{+1.0}_{-1.0}$	$\Omega_{ m m} h^2$	0.1407	$0.1428^{+0.0074}_{-0.0067}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\Sigma m_{ u} [{ m eV}]$	0.001	< 0.558	$A_{220}^{\mathrm{PS,SPT}}$	73.0	74^{+9}_{-9}	$\Omega_{ m m} h^3$	0.09606	$0.0951^{+0.0022}_{-0.0029}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$n_{ m s}$	0.9626	$0.961^{+0.014}_{-0.015}$	$r_{95 imes150}^{ ext{PS}}$	0.786	> 0.682	$Y_{ m P}$	0.244847	$0.24482^{+0.00023}_{-0.00026}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\ln(10^{10}A_{ m s})$	3.0835	$3.085^{+0.049}_{-0.045}$	$r_{95 imes220}^{ ext{PS}}$	0.543	$0.59^{+0.24}_{-0.23}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8260	$1.825^{+0.025}_{-0.024}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$r_{0.05}$	0.157	$0.165^{+0.071}_{-0.066}$	$r_{150 imes220}^{ ext{PS}}$	0.9127	$0.938^{+0.046}_{-0.045}$	$\Omega_{ u}h^2$	0.00001	< 0.00600
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	A_{100}^{PS}	199	208^{+100}_{-100}		0.427	$0.43^{+0.36}_{-0.39}$	Age/Gyr	13.779	$13.87^{+0.26}_{-0.19}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	A_{143}^{PS}	70.6	72^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	0.846	$0.84^{+0.39}_{-0.39}$	z_*	1090.16	$1090.3^{+1.2}_{-1.0}$
A_{217}^{CIB} 52.3 50_{-9}^{+10} y_{148}^{ACTe} 0.9885 $0.989_{-0.014}^{+0.014}$ z_{drag} 1059.13 $1059.0_{-1.2}^{+1.1}$ A_{143}^{tSZ} 4.62 < 5.08 y_{217}^{ACTe} 0.9619 $0.965_{-0.020}^{+0.021}$ r_{drag} 147.80 $147.8_{-1.2}^{+1.2}$ $r_{143 \times 217}^{PS}$ 0.817 $0.82_{-0.13}^{+0.15}$ y_{95}^{PT} 0.9853 $0.984_{-0.037}^{+0.040}$ k_D 0.13990 $0.1399_{-0.0012}^{+0.0012}$ $r_{143 \times 217}^{CIB}$ 1.000 > 0.849 y_{150}^{SPT} 0.9856 $0.988_{-0.019}^{+0.019}$ $100\theta_D$ 0.16129 $0.16133_{-0.00062}^{+0.0062}$ γ^{CIB} 0.662 $0.642_{-0.16}^{+0.16}$ y_{220}^{SPT} $1.0174_{-0.043}^{+0.047}$ z_{eq} 3363_{-110}^{+120}	A_{217}^{PS}	59.1	59_{-20}^{+20}	$y_{148}^{ m ACTs}$	0.9923	$0.993^{+0.015}_{-0.014}$	r_*	145.02	$145.0^{+1.2}_{-1.2}$
A_{143}^{tSZ} 4.62 < 5.08 y_{217}^{ACTe} 0.9619 $0.965_{-0.020}^{+0.021}$ r_{drag} 147.80 $147.8_{-1.2}^{+1.2}$ $r_{143 \times 217}^{PS}$ 0.817 $0.82_{-0.13}^{+0.15}$ y_{95}^{SPT} 0.9853 $0.984_{-0.037}^{+0.040}$ k_D 0.13990 $0.1399_{-0.0012}^{+0.0012}$ $r_{143 \times 217}^{CIB}$ 1.000 > 0.849 y_{150}^{SPT} 0.9856 $0.988_{-0.019}^{+0.019}$ $100\theta_D$ 0.16129 $0.16133_{-0.00062}^{+0.0066}$ γ^{CIB} 0.662 $0.642_{-0.16}^{+0.16}$ y_{220}^{SPT} 1.0174 $1.024_{-0.043}^{+0.047}$ z_{eq} 3363 3367_{-110}^{+120}	$A_{143}^{ m CIB}$	3.12	$3.24_{-1.6}^{+1.6}$	$y_{217}^{ m ACTs}$	1.0033	$1.006^{+0.027}_{-0.025}$	$100\theta_*$	1.04161	$1.0415^{+0.0012}_{-0.0012}$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$A_{217}^{ m CIB}$	52.3	50^{+10}_{-9}	$y_{148}^{ m ACTe}$	0.9885	$0.989^{+0.014}_{-0.014}$	$z_{ m drag}$	1059.13	$1059.0^{+1.1}_{-1.2}$
$m{r_{143 \times 217}^{CIB}}$ 1.000 > 0.849 $m{y_{150}^{SPT}}$ 0.9856 0.988 $^{+0.019}_{-0.019}$ 100 $ heta_{ m D}$ 0.16129 0.16133 $^{+0.00066}_{-0.00062}$ $m{\gamma^{CIB}}$ 0.662 0.64 $^{+0.16}_{-0.16}$ $m{y_{220}^{SPT}}$ 1.0174 1.024 $^{+0.047}_{-0.043}$ $m{z_{\rm eq}}$ 3363 3367 $^{+120}_{-110}$	$A_{143}^{ m tSZ}$	4.62	< 5.08	$y_{217}^{ m ACTe}$	0.9619	$0.965^{+0.021}_{-0.020}$	$r_{ m drag}$	147.80	$147.8^{+1.2}_{-1.2}$
$ \gamma^{\text{CIB}} $ 0.662 0.64 ^{+0.16} _{-0.16} $ \mathbf{y}_{220}^{\text{SPT}} $ 1.0174 1.024 ^{+0.047} _{-0.043} $ z_{\text{eq}} $ 3363 3367 ⁺¹²⁰ ₋₁₁₀	$r_{143 imes217}^{ ext{PS}}$	0.817	$0.82^{+0.15}_{-0.13}$	$y_{95}^{ m SPT}$	0.9853	$0.984^{+0.040}_{-0.037}$	$k_{ m D}$	0.13990	$0.1399^{+0.0012}_{-0.0012}$
	$r_{143 imes217}^{ ext{CIB}}$	1.000	> 0.849	$y_{150}^{ m SPT}$	0.9856	$0.988^{+0.019}_{-0.019}$	$100\theta_{\mathrm{D}}$	0.16129	$0.16133^{+0.00066}_{-0.00062}$
c_{100} 1 00057 1 00059 $^{+0.00078}$ Q_{Λ} 0 698 0 677 $^{+0.054}$ 100 θ 0 8199 0 819 $^{+0.022}$	$\gamma^{ ext{CIB}}$	0.662	$0.64^{+0.16}_{-0.16}$	$y_{220}^{ m SPT}$	1.0174	$1.024^{+0.047}_{-0.043}$	$z_{ m eq}$	3363	3367^{+120}_{-110}
1.00001 1.00001 1.00000 42A	c_{100}	1.00057	$1.00059^{+0.00078}_{-0.00080}$	Ω_{Λ}	0.698	$0.677^{+0.054}_{-0.067}$	$100\theta_{\mathrm{eq}}$	0.8199	$0.819^{+0.022}_{-0.022}$
$ c_{217} \qquad \qquad 0.99739 \qquad 0.9974^{+0.0026}_{-0.0026} \qquad \qquad 0.302 \qquad 0.323^{+0.067}_{-0.054} \qquad r_{\mathrm{drag}}/D_{\mathrm{V}}(0.57) \qquad 0.07217 \qquad \qquad 0.0712^{+0.0028}_{-0.0033} $	c_{217}	0.99739	$0.9974^{+0.0026}_{-0.0026}$	$\Omega_{ m m}$	0.302	$0.323^{+0.067}_{-0.054}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07217	$0.0712^{+0.0028}_{-0.0033}$
$\boldsymbol{\xi^{tSZ \times CIB}}$ 0.000 < 0.845 σ_8 0.836 0.801 $^{+0.062}_{-0.089}$ $H(0.57)$ 0.0003111 0.0003083 $^{+0.000066}_{-0.000008}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.000	< 0.845	σ_8	0.836	$0.801^{+0.062}_{-0.089}$	H(0.57)	0.0003111	$0.0003083^{+0.0000063}_{-0.0000080}$
A^{kSZ} 1.94 — z_{re} 11.01 11.1 $^{+2.1}_{-2.0}$ $D_{A}(0.57)$ 1379 1403 $^{+71}_{-56}$	$A^{ m kSZ}$	1.94	_	$z_{ m re}$	11.01	$11.1^{+2.1}_{-2.0}$	$D_{\rm A}(0.57)$	1379	1403_{-56}^{+71}
β_1^1 0.41 0.3 $^{+1.1}_{-1.1}$ r_{10} 0.0745 0.079 $^{+0.038}_{-0.037}$	$oldsymbol{eta_1^1}$	0.41	$0.3^{+1.1}_{-1.1}$	r_{10}	0.0745	$0.079^{+0.038}_{-0.037}$			

5 r+nnu

5.1 $base_r_nnu_planck_BICEP_lowl_lowLike$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02287	$0.02287^{+0.00086}_{-0.00080}$	$\gamma^{ ext{CIB}}$	0.510	$0.54^{+0.24}_{-0.26}$	$Y_{ m P}$	0.2594	$0.259^{+0.010}_{-0.0098}$
$\Omega_{ m c} h^2$	0.1322	$0.131^{+0.012}_{-0.011}$	c_{100}	1.00058	$1.00058^{+0.00076}_{-0.00078}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8825	$1.881^{+0.042}_{-0.044}$
$100\theta_{\rm MC}$	1.04024	$1.0403^{+0.0014}_{-0.0014}$	c_{217}	0.99653	$0.9966^{+0.0027}_{-0.0027}$	Age/Gyr	12.75	$12.80^{+0.72}_{-0.73}$
au	0.0984	$0.101^{+0.032}_{-0.029}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.00	_	z_*	1091.38	$1091.3_{-1.3}^{+1.4}$
$N_{ m eff}$	4.19	$4.14_{-0.86}^{+0.88}$	$A^{ m kSZ}$	7.56	_	r_*	136.0	$136.4_{-6.3}^{+6.2}$
$n_{ m s}$	1.0051	$1.006^{+0.034}_{-0.033}$	eta_1^1	0.73	$0.7^{+1.1}_{-1.1}$	$100\theta_*$	1.03968	$1.0398^{+0.0017}_{-0.0017}$
$\ln(10^{10}A_{ m s})$	3.132	$3.136^{+0.068}_{-0.066}$	Ω_{Λ}	0.7328	$0.731^{+0.038}_{-0.040}$	$z_{ m drag}$	1062.79	$1062.7_{-2.7}^{+2.9}$
$r_{0.05}$	0.176	$0.180^{+0.076}_{-0.075}$	$\Omega_{ m m}$	0.2672	$0.269^{+0.040}_{-0.038}$	$r_{ m drag}$	138.3	$138.8_{-6.5}^{+6.4}$
A_{100}^{PS}	159	195^{+100}_{-100}	σ_8	0.8653	$0.867^{+0.044}_{-0.042}$	$k_{ m D}$	0.1468	$0.1465^{+0.0052}_{-0.0049}$
$A_{143}^{ m PS}$	38	61^{+30}_{-30}	$z_{ m re}$	12.03	$12.2^{+2.5}_{-2.5}$	$100\theta_{\mathrm{D}}$	0.16368	$0.1635^{+0.0019}_{-0.0017}$
A_{217}^{PS}	98.2	104^{+40}_{-40}	r_{10}	0.0956	$0.099^{+0.049}_{-0.047}$	$z_{ m eq}$	3213	3219^{+150}_{-150}
$A_{143}^{ m CIB}$	10.2	_	H_0	76.3	$76.0^{+7.1}_{-7.1}$	$100\theta_{\mathrm{eq}}$	0.8507	$0.850^{+0.034}_{-0.031}$
$A_{217}^{ m CIB}$	34.9	33^{+20}_{-20}	$r_{0.002}$	0.193	$0.199^{+0.099}_{-0.095}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07419	$0.0741^{+0.0027}_{-0.0025}$
$A_{143}^{ m tSZ}$	9.96	_	$10^{9}A_{\rm s}$	2.292	$2.30^{+0.16}_{-0.15}$	H(0.57)	0.0003385	$0.000337^{+0.000022}_{-0.000022}$
$r_{143 imes217}^{ ext{PS}}$	0.860	> 0.725	$\Omega_{ m m} h^2$	0.1557	$0.155^{+0.012}_{-0.011}$	$D_{\rm A}(0.57)$	1250	1256^{+96}_{-97}
$\frac{r_{143\times217}^{\text{CIB}}}{\frac{\text{Post ft } \cdot \cdot ^2}{\text{Constant } \cdot \cdot ^2}}$	0.65	_	$\Omega_{ m m} h^3$	0.1189	$0.118^{+0.019}_{-0.018}$			

Best-fit $\chi^2_{\text{eff}} = 9847.28$; $\bar{\chi}^2_{\text{eff}} = 9865.60$; R-1=0.01327 χ^2_{eff} : CMB - lowlike_v222: 2013.33 BICEP2: 38.00 commander_v4.1_lm49: -6.69 CAMspec_v6.2TN_2013_02_26_dist: 7802.65

5.2 $base_r_nnu_planck_BICEP_lowl_lowLike_highL$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02265	$0.02273^{+0.00085}_{-0.00083}$	$A_{148}^{\mathrm{PS,ACT}}$	10.64	$10.5^{+1.2}_{-1.1}$	H_0	73.5	$74.0^{+6.6}_{-6.5}$
$\Omega_{ m c} h^2$	0.1281	$0.1281^{+0.0099}_{-0.0098}$	$A_{218}^{\mathrm{PS,ACT}}$	77.2	$76.5^{+8.4}_{-8.7}$	$r_{0.002}$	0.176	$0.184^{+0.091}_{-0.085}$
$100\theta_{\rm MC}$	1.04052	$1.0405^{+0.0014}_{-0.0013}$	$A_{95}^{ m PS,SPT}$	7.05	$7.40^{+2.9}_{-2.7}$	$10^{9}A_{\rm s}$	2.270	$2.29_{-0.15}^{+0.16}$
au	0.0973	$0.101^{+0.031}_{-0.030}$	$A_{150}^{\mathrm{PS,SPT}}$	10.05	$9.88^{+1.0}_{-0.98}$	$\Omega_{ m m} h^2$	0.1514	$0.151^{+0.010}_{-0.010}$
$N_{ m eff}$	3.82	$3.85^{+0.76}_{-0.70}$	$A_{220}^{\mathrm{PS,SPT}}$	74.4	74^{+9}_{-9}	$\Omega_{ m m} h^3$	0.1112	$0.112^{+0.016}_{-0.015}$
$n_{ m s}$	0.9917	$0.995^{+0.034}_{-0.033}$	$r_{95 imes150}^{ ext{PS}}$	0.838	> 0.682	$Y_{ m P}$	0.2549	$0.2552^{+0.0090}_{-0.0089}$
$\ln(10^{10}A_{ m s})$	3.122	$3.129^{+0.068}_{-0.068}$	$r_{95 imes220}^{ ext{PS}}$	0.634	$0.59^{+0.24}_{-0.24}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8683	$1.867^{+0.041}_{-0.043}$
$r_{0.05}$	0.169	$0.174^{+0.072}_{-0.070}$	$r_{150 imes220}^{ ext{PS}}$	0.9301	$0.939^{+0.047}_{-0.045}$	Age/Gyr	13.07	$13.04^{+0.67}_{-0.66}$
A_{100}^{PS}	226	226^{+100}_{-100}	$A_{ m dust}^{ m ACTs}$	0.431	$0.44^{+0.37}_{-0.39}$	z_*	1090.98	$1090.9_{-1.2}^{+1.2}$
A_{143}^{PS}	80.6	79^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	0.855	$0.85^{+0.39}_{-0.38}$	r_*	138.6	$138.5^{+5.7}_{-5.6}$
A_{217}^{PS}	66.6	65^{+20}_{-20}	$y_{148}^{ m ACTs}$	0.9885	$0.989^{+0.015}_{-0.015}$	$100\theta_*$	1.04022	$1.0402^{+0.0016}_{-0.0016}$
$A_{143}^{ m CIB}$	3.09	$3.20^{+1.6}_{-1.5}$	$y_{217}^{ m ACTs}$	1.0011	$1.002^{+0.027}_{-0.026}$	$z_{ m drag}$	1061.73	$1061.9_{-2.7}^{+2.8}$
$A_{217}^{ m CIB}$	47.9	49^{+10}_{-9}	$y_{148}^{ m ACTe}$	0.9847	$0.985^{+0.015}_{-0.014}$	$r_{ m drag}$	141.1	$141.0^{+5.9}_{-5.8}$
$A_{143}^{ m tSZ}$	2.52	< 4.76	$y_{217}^{ m ACTe}$	0.9600	$0.960^{+0.021}_{-0.020}$	$k_{ m D}$	0.14474	$0.1449^{+0.0047}_{-0.0044}$
$r_{143 imes217}^{ ext{PS}}$	0.822	$0.83^{+0.13}_{-0.12}$	$y_{95}^{ m SPT}$	0.9748	$0.977^{+0.040}_{-0.037}$	$100\theta_{\mathrm{D}}$	0.16286	$0.1629^{+0.0015}_{-0.0015}$
$r_{143 imes217}^{ ext{CIB}}$	1.000	> 0.855	$y_{150}^{ m SPT}$	0.9797	$0.981^{+0.020}_{-0.019}$	$z_{ m eq}$	3265	3255^{+160}_{-150}
$\gamma^{ ext{CIB}}$	0.602	$0.62^{+0.16}_{-0.16}$	$y_{220}^{ m SPT}$	1.0160	$1.019^{+0.047}_{-0.044}$	$100\theta_{\mathrm{eq}}$	0.8398	$0.842^{+0.034}_{-0.032}$
c_{100}	1.00056	$1.00058^{+0.00080}_{-0.00078}$	Ω_{Λ}	0.7194	$0.722^{+0.039}_{-0.043}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07335	$0.0736^{+0.0027}_{-0.0025}$
c_{217}	0.99749	$0.9975^{+0.0027}_{-0.0026}$	$\Omega_{ m m}$	0.2806	$0.278^{+0.043}_{-0.039}$	H(0.57)	0.0003293	$0.000331^{+0.000020}_{-0.000019}$
$\xi^{ ext{tSZ} imes ext{CIB}}$	0.37	_	σ_8	0.8548	$0.857^{+0.041}_{-0.041}$	$D_{\rm A}(0.57)$	1292	1287^{+92}_{-91}
$A^{ m kSZ}$	6.19	> 2.07	$z_{ m re}$	11.87	$12.1_{-2.5}^{+2.6}$			
$\frac{\beta_1^1}{P_{\text{out fit }} \gamma^2}$	0.55	$0.5_{-1.1}^{+1.1}$	r_{10}	0.0878	$0.091^{+0.045}_{-0.042}$			

Best-fit $\chi^2_{\text{eff}} = 10552.87$; $\bar{\chi}^2_{\text{eff}} = 10590.70$; R - 1 = 0.01434 χ^2_{eff} : CMB - lowlike_v222: 2013.46 BICEP2: 38.53 commander_v4.1_lm49: -4.89 CAMspec_v6.2TN_2013_02_26_dist: 7810.07 actspt_2013_01: 695.60

$base_r_nnu_planck_BICEPxKECK_lowl_lowLike$ 5.3

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02267	$0.02273^{+0.00089}_{-0.00089}$	$\gamma^{ ext{CIB}}$	0.538	$0.54^{+0.24}_{-0.26}$	$Y_{ m P}$	0.2554	$0.256^{+0.011}_{-0.010}$
$\Omega_{ m c} h^2$	0.1286	$0.129^{+0.012}_{-0.011}$	c_{100}	1.00058	$1.00058^{+0.00077}_{-0.00077}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8706	$1.873^{+0.045}_{-0.048}$
$100\theta_{\rm MC}$	1.04045	$1.0404^{+0.0015}_{-0.0014}$	c_{217}	0.99641	$0.9966^{+0.0028}_{-0.0027}$	Age/Gyr	13.03	$12.99^{+0.77}_{-0.77}$
au	0.0959	$0.099^{+0.031}_{-0.030}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.00	_	z_*	1091.03	$1091.0_{-1.3}^{+1.4}$
$N_{ m eff}$	3.86	$3.92^{+0.89}_{-0.87}$	$A^{ m kSZ}$	2.11	_	r_*	138.3	$138.0^{+6.6}_{-6.4}$
$n_{ m s}$	0.9933	$0.997^{+0.037}_{-0.036}$	eta_1^1	0.62	$0.6^{+1.1}_{-1.1}$	$100\theta_*$	1.04011	$1.0401^{+0.0019}_{-0.0018}$
$\ln(10^{10}A_{ m s})$	3.121	$3.128^{+0.070}_{-0.069}$	Ω_{Λ}	0.7209	$0.722^{+0.042}_{-0.044}$	$z_{ m drag}$	1061.88	$1062.1_{-2.9}^{+3.1}$
$r_{0.05}$	0.117	$0.123^{+0.067}_{-0.064}$	$\Omega_{ m m}$	0.2791	$0.278^{+0.044}_{-0.042}$	$r_{ m drag}$	140.8	$140.5^{+6.9}_{-6.7}$
A_{100}^{PS}	187	190^{+100}_{-100}	σ_8	0.8549	$0.859^{+0.044}_{-0.042}$	$k_{ m D}$	0.1450	$0.1453^{+0.0053}_{-0.0051}$
$A_{143}^{ m PS}$	35	59^{+30}_{-30}	$z_{ m re}$	11.75	$12.0_{-2.4}^{+2.6}$	$100\theta_{\mathrm{D}}$	0.16295	$0.1630^{+0.0018}_{-0.0018}$
A_{217}^{PS}	100.9	105^{+40}_{-40}	r_{10}	0.0599	$0.064^{+0.039}_{-0.037}$	$z_{ m eq}$	3259	3253^{+160}_{-170}
$A_{143}^{ m CIB}$	15.7	_	H_0	73.8	$74.3^{+7.5}_{-7.3}$	$100\theta_{\mathrm{eq}}$	0.8410	$0.843^{+0.036}_{-0.035}$
$A_{217}^{ m CIB}$	37.0	32^{+20}_{-20}	$r_{0.002}$	0.121	$0.129^{+0.080}_{-0.075}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07343	$0.0736^{+0.0029}_{-0.0028}$
$A_{143}^{ m tSZ}$	8.34	_	$10^{9}A_{\rm s}$	2.266	$2.28^{+0.16}_{-0.16}$	H(0.57)	0.0003303	$0.000332^{+0.000023}_{-0.000022}$
$r_{143 imes217}^{ ext{PS}}$	0.907	> 0.723	$\Omega_{ m m} h^2$	0.1520	$0.153^{+0.012}_{-0.011}$	$D_{\rm A}(0.57)$	1287	1282^{+100}_{-110}
$r_{143 imes217}^{ ext{CIB}}$	0.605	$0.50^{+0.37}_{-0.48}$	$\Omega_{ m m} h^3$	0.1121	$0.113^{+0.019}_{-0.018}$			

Best-fit $\chi^2_{\text{eff}} = 9809.30$; $\bar{\chi}^2_{\text{eff}} = 9827.25$; R-1=0.01844 χ^2_{eff} : CMB - lowlike_v222: 2013.53 BICEPxKECKfudge: 1.70 commander_v4.1_lm49: -7.33 CAMspec_v6.2TN_2013_02_26_dist: 7801.40

$base_r_nnu_planck_BICEPxKECK_lowl_lowLike_highL$ 5.4

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02256	$0.02263^{+0.00086}_{-0.00083}$	$A_{148}^{\mathrm{PS,ACT}}$	10.43	$10.5^{+1.2}_{-1.1}$	H_0	72.0	$72.5_{-6.3}^{+6.5}$
$\Omega_{ m c} h^2$	0.1259	$0.1264^{+0.0096}_{-0.0095}$	$A_{218}^{\mathrm{PS,ACT}}$	76.5	$76.6^{+8.5}_{-9.0}$	$r_{0.002}$	0.112	$0.120^{+0.077}_{-0.073}$
$100\theta_{\rm MC}$	1.04068	$1.0407^{+0.0014}_{-0.0014}$	$A_{95}^{ m PS,SPT}$	7.21	$7.48^{+3.0}_{-2.8}$	$10^{9}A_{\rm s}$	2.252	$2.27^{+0.16}_{-0.15}$
au	0.0958	$0.098^{+0.031}_{-0.029}$	$A_{150}^{\mathrm{PS,SPT}}$	9.88	$9.93^{+1.0}_{-0.99}$	$\Omega_{ m m} h^2$	0.1491	$0.150^{+0.010}_{-0.010}$
$N_{ m eff}$	3.62	$3.67^{+0.74}_{-0.67}$	$A_{220}^{\mathrm{PS,SPT}}$	73.5	74^{+9}_{-9}	$\Omega_{ m m} h^3$	0.1074	$0.109^{+0.016}_{-0.015}$
$n_{ m s}$	0.9845	$0.986^{+0.034}_{-0.031}$	$r_{95 imes150}^{ ext{PS}}$	0.810	> 0.681	$Y_{ m P}$	0.2525	$0.2530^{+0.0091}_{-0.0089}$
$\ln(10^{10}A_{ m s})$	3.114	$3.120^{+0.068}_{-0.066}$	$r_{95 imes220}^{ ext{PS}}$	0.583	$0.59^{+0.24}_{-0.23}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8594	$1.860^{+0.041}_{-0.044}$
$r_{0.05}$	0.113	$0.118^{+0.067}_{-0.066}$	$r_{150 imes220}^{ ext{PS}}$	0.9213	$0.939^{+0.047}_{-0.044}$	Age/Gyr	13.24	$13.20^{+0.67}_{-0.69}$
A_{100}^{PS}	219	223^{+100}_{-100}	$A_{ m dust}^{ m ACTs}$	0.426	$0.44^{+0.36}_{-0.39}$	z_*	1090.72	$1090.7_{-1.1}^{+1.2}$
$A_{143}^{ m PS}$	78.3	77^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	0.847	$0.85^{+0.39}_{-0.39}$	r_*	140.1	$139.8^{+5.8}_{-5.5}$
A_{217}^{PS}	64.8	64^{+20}_{-20}	$y_{148}^{ m ACTs}$	0.9893	$0.990^{+0.015}_{-0.015}$	$100\theta_*$	1.04051	$1.0405^{+0.0016}_{-0.0016}$
$A_{143}^{ m CIB}$	3.09	$3.23^{+1.6}_{-1.5}$	$y_{217}^{ m ACTs}$	1.0012	$1.003^{+0.027}_{-0.026}$	$z_{ m drag}$	1061.23	$1061.4_{-2.8}^{+2.8}$
$A_{217}^{ m CIB}$	50.0	49^{+10}_{-9}	$y_{148}^{ m ACTe}$	0.9855	$0.986^{+0.015}_{-0.014}$	$r_{ m drag}$	142.6	$142.3_{-5.8}^{+6.0}$
$A_{143}^{ m tSZ}$	3.46	< 4.89	$y_{217}^{ m ACTe}$	0.9598	$0.961^{+0.021}_{-0.020}$	$k_{ m D}$	0.14369	$0.1440^{+0.0046}_{-0.0046}$
$r_{143 imes217}^{ ext{PS}}$	0.821	$0.83^{+0.13}_{-0.13}$	$y_{95}^{ m SPT}$	0.9780	$0.979^{+0.040}_{-0.037}$	$100\theta_{\mathrm{D}}$	0.16239	$0.1624^{+0.0015}_{-0.0014}$
$r_{143 imes217}^{ ext{CIB}}$	1.000	> 0.849	$y_{150}^{ m SPT}$	0.9808	$0.983^{+0.020}_{-0.019}$	$z_{ m eq}$	3292	3286^{+150}_{-150}
$\gamma^{ ext{CIB}}$	0.632	$0.63^{+0.16}_{-0.16}$	$y_{220}^{ m SPT}$	1.0155	$1.020^{+0.047}_{-0.044}$	$100\theta_{\mathrm{eq}}$	0.8343	$0.836^{+0.033}_{-0.030}$
c_{100}	1.00058	$1.00058^{+0.00077}_{-0.00078}$	Ω_{Λ}	0.7126	$0.714^{+0.040}_{-0.042}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07294	$0.0731^{+0.0027}_{-0.0024}$
c_{217}	0.99742	$0.9974^{+0.0027}_{-0.0026}$	$\Omega_{ m m}$	0.2874	$0.286^{+0.042}_{-0.040}$	H(0.57)	0.0003246	$0.000326^{+0.000020}_{-0.000019}$
$\xi^{ ext{tSZ} imes ext{CIB}}$	0.16	_	σ_8	0.8476	$0.851^{+0.040}_{-0.038}$	$D_{\rm A}(0.57)$	1314	1309^{+92}_{-94}
$A^{ m kSZ}$	4.16	$5.82^{+4.1}_{-4.1}$	$z_{ m re}$	11.68	$11.9_{-2.3}^{+2.6}$			
$\frac{\beta_1^1}{P_{\text{out fit }} \gamma^2}$	0.53	$0.5_{-1.1}^{+1.1}$	r_{10}	0.0558	$0.059^{+0.038}_{-0.036}$			

Best-fit $\chi^2_{\text{eff}} = 10513.62$; $\bar{\chi}^2_{\text{eff}} = 10551.44$; R-1=0.02661 χ^2_{eff} : CMB - lowlike_v222: 2013.65 BICEPxKECKfudge: 1.88 commander_v4.1_lm49: -6.26 CAMspec_v6.2TN_2013_02_26_dist: 7809.47 actspt_2013_01: 694.81

$6 \quad \text{r+nnu+meffsterile} \\$

$6.1 \quad base_r_nnu_meffsterile_planck_BICEP_lowl_lowLike$

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{ m b} h^2$	$0.02274^{+0.00093}_{-0.00092}$	$\gamma^{ ext{CIB}}$	$0.54_{-0.26}^{+0.24}$	$10^9 A_{\rm s} e^{-2\tau}$	$1.879^{+0.042}_{-0.045}$
$\Omega_{ m c} h^2$	$0.131^{+0.011}_{-0.011}$	c_{100}	$1.00058^{+0.00078}_{-0.00079}$	$\Omega_{ u}h^2$	< 0.00627
$100\theta_{\rm MC}$	$1.0402^{+0.0015}_{-0.0014}$	c_{217}	$0.9966^{+0.0027}_{-0.0028}$	Age/Gyr	$12.94^{+0.78}_{-0.75}$
au	$0.099^{+0.031}_{-0.030}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	_	z_*	$1091.4_{-1.3}^{+1.3}$
$m_{ u,{ m sterile}}^{ m eff}$	< 0.530	$A^{ m kSZ}$	_	$\mid r_* \mid$	$136.7^{+6.0}_{-6.1}$
$N_{ m eff}$	$4.08^{+0.86}_{-0.86}$	eta_1^1	$0.7^{+1.1}_{-1.2}$	$100\theta_*$	$1.0398^{+0.0017}_{-0.0017}$
$n_{ m s}$	$1.001^{+0.037}_{-0.039}$	Ω_{Λ}	$0.710^{+0.056}_{-0.060}$	$z_{ m drag}$	$1062.4_{-3.0}^{+3.0}$
$\ln(10^{10}A_{ m s})$	$3.132^{+0.069}_{-0.069}$	$\Omega_{ m m}$	$0.290^{+0.060}_{-0.056}$	$r_{ m drag}$	$139.2^{+6.3}_{-6.4}$
$r_{0.05}$	$0.183^{+0.076}_{-0.076}$	σ_8	$0.826^{+0.071}_{-0.080}$	$k_{ m D}$	$0.1462^{+0.0051}_{-0.0051}$
A_{100}^{PS}	195^{+100}_{-100}	$z_{ m re}$	$12.1_{-2.7}^{+2.7}$	$100\theta_{\mathrm{D}}$	$0.1634^{+0.0018}_{-0.0018}$
A_{143}^{PS}	61^{+30}_{-30}	r_{10}	$0.0996^{+0.050}_{-0.048}$	$z_{ m eq}$	3235^{+160}_{-170}
A_{217}^{PS}	104_{-40}^{+40}	H_0	$73.8^{+8.0}_{-7.9}$	$100\theta_{\mathrm{eq}}$	$0.847^{+0.036}_{-0.033}$
$A_{143}^{ m CIB}$	_	$r_{0.002}$	$0.199^{+0.10}_{-0.097}$	$r_{\rm drag}/D_{ m V}(0.57)$	$0.0729^{+0.0035}_{-0.0034}$
$A_{217}^{ m CIB}$	34^{+20}_{-20}	$10^{9}A_{\rm s}$	$2.29^{+0.16}_{-0.15}$	H(0.57)	$0.000333^{+0.000022}_{-0.000022}$
$A_{143}^{ m tSZ}$	_	$\Omega_{ m m} h^2$	$0.157^{+0.012}_{-0.012}$	$D_{\rm A}(0.57)$	1286^{+110}_{-110}
$r_{143 imes217}^{ ext{PS}}$	> 0.720	$\Omega_{ m m} h^3$	$0.116^{+0.018}_{-0.018}$		
$\frac{r_{143\times 217}^{\text{CIB}}}{\bar{z}^2 - 9867}$	_	$Y_{ m P}$	$0.258^{+0.010}_{-0.0098}$		

 $\bar{\chi}_{\text{eff}}^2 = 9867.56; R - 1 = 0.02635$

$6.2 \quad base_r_nnu_meffsterile_planck_BICEP_lowl_lowLike_highL$

Parameter	95% limits	Parameter	95% limits	Parameter	95% limits
$\Omega_{ m b} h^2$	$0.02262^{+0.00086}_{-0.00082}$	eta_1^1	$0.5^{+1.1}_{-1.1}$	r_{10}	$0.091^{+0.047}_{-0.042}$
$\Omega_{ m c} h^2$	$0.127^{+0.010}_{-0.010}$	$A_{148}^{\mathrm{PS,ACT}}$	$10.4_{-1.1}^{+1.2}$	H_0	$72.2_{-6.6}^{+7.0}$
$100\theta_{\rm MC}$	$1.0405^{+0.0013}_{-0.0014}$	$A_{218}^{\mathrm{PS,ACT}}$	77^{+9}_{-9}	$r_{0.002}$	$0.183^{+0.094}_{-0.085}$
au	$0.099^{+0.033}_{-0.031}$	$A_{95}^{ m PS,SPT}$	$7.39_{-2.8}^{+2.9}$	$10^9 A_{\rm s}$	$2.27^{+0.17}_{-0.16}$
$m_{ u,{ m sterile}}^{ m eff}$	< 0.423	$A_{150}^{\mathrm{PS,SPT}}$	$9.86^{+1.0}_{-1.0}$	$\Omega_{ m m} h^2$	$0.152^{+0.011}_{-0.010}$
$N_{ m eff}$	$3.79_{-0.74}^{+0.70}$	$A_{220}^{\mathrm{PS,SPT}}$	74^{+9}_{-9}	$\Omega_{ m m} h^3$	$0.110^{+0.016}_{-0.014}$
$n_{ m s}$	$0.990^{+0.035}_{-0.033}$	$r_{95 imes150}^{ ext{PS}}$	> 0.682	$Y_{ m P}$	$0.2544^{+0.0091}_{-0.0086}$
$\ln(10^{10}A_{ m s})$	$3.124^{+0.073}_{-0.069}$	$r_{95 imes220}^{ ext{PS}}$	$0.60^{+0.24}_{-0.24}$	$10^9 A_{\rm s} e^{-2\tau}$	$1.864_{-0.041}^{+0.041}$
$r_{0.05}$	$0.174^{+0.075}_{-0.071}$	$r_{150 imes220}^{ ext{PS}}$	$0.939^{+0.047}_{-0.045}$	$\Omega_{\nu}h^2$	< 0.00514
A_{100}^{PS}	226^{+100}_{-100}	$A_{ m dust}^{ m ACTs}$	$0.44^{+0.37}_{-0.39}$	Age/Gyr	$13.16^{+0.65}_{-0.69}$
$A_{143}^{ m PS}$	80^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	$0.85^{+0.40}_{-0.39}$	z_*	$1091.0_{-1.2}^{+1.2}$
$A_{217}^{ m PS}$	66^{+20}_{-20}	$y_{148}^{ m ACTs}$	$0.989^{+0.015}_{-0.014}$	r_*	$138.9^{+5.5}_{-5.7}$
$A_{143}^{ m CIB}$	$3.23^{+1.6}_{-1.6}$	$y_{217}^{ m ACTs}$	$1.002^{+0.027}_{-0.026}$	$100\theta_*$	$1.0403^{+0.0016}_{-0.0016}$
$A_{217}^{ m CIB}$	49^{+10}_{-9}	$y_{148}^{ m ACTe}$	$0.985^{+0.014}_{-0.014}$	$z_{ m drag}$	$1061.6^{+2.8}_{-2.6}$
$A_{143}^{ m tSZ}$	< 4.82	$y_{217}^{ m ACTe}$	$0.960^{+0.020}_{-0.020}$	$r_{ m drag}$	$141.4^{+5.7}_{-6.0}$
$r_{143 imes217}^{ ext{PS}}$	$0.83^{+0.13}_{-0.12}$	$y_{95}^{ m SPT}$	$0.977^{+0.041}_{-0.037}$	$k_{ m D}$	$0.1446^{+0.0047}_{-0.0044}$
$r_{143 imes217}^{ ext{CIB}}$	> 0.852	$y_{150}^{ m SPT}$	$0.981^{+0.020}_{-0.019}$	$100\theta_{ m D}$	$0.1627^{+0.0016}_{-0.0015}$
$\gamma^{ ext{CIB}}$	$0.62^{+0.16}_{-0.16}$	$y_{220}^{ m SPT}$	$1.019^{+0.048}_{-0.044}$	$z_{ m eq}$	3264^{+140}_{-160}
c_{100}	$1.00058^{+0.00079}_{-0.00079}$	Ω_{Λ}	$0.706^{+0.051}_{-0.051}$	$100\theta_{\mathrm{eq}}$	$0.841^{+0.033}_{-0.029}$
c_{217}	$0.9975^{+0.0027}_{-0.0026}$	$\Omega_{ m m}$	$0.294^{+0.051}_{-0.051}$	$r_{\rm drag}/D_{ m V}(0.57)$	$0.0727^{+0.0031}_{-0.0029}$
$\mathbf{\xi}^{ ext{tSZ} imes ext{CIB}}$	_	σ_8	$0.825^{+0.062}_{-0.074}$	H(0.57)	$0.000327^{+0.000020}_{-0.000018}$
$A^{ m kSZ}$	> 2.08	$z_{ m re}$	$12.0_{-2.5}^{+2.7}$	$D_{\rm A}(0.57)$	1310_{-99}^{+95}

 $\bar{\chi}_{\text{eff}}^2 = 10592.68; R - 1 = 0.03164$

7 r+nnu+mnu

$base_r_nnu_mnu_planck_BICEP_lowl_lowLike$ 7.1

D .	D + C+	0504 11 11	D	D + C+	0504 11 11	D .	D (C)	0504 11 11
Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02280	$0.02278^{+0.00093}_{-0.00089}$	$\gamma^{ ext{CIB}}$	0.531	$0.54^{+0.25}_{-0.25}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8747	$1.881^{+0.044}_{-0.046}$
$\Omega_{ m c} h^2$	0.1298	$0.132^{+0.012}_{-0.012}$	c_{100}	1.00056	$1.00057^{+0.00078}_{-0.00077}$	$\Omega_{ u}h^2$	0.00000	< 0.00656
$100\theta_{\rm MC}$	1.04049	$1.0402^{+0.0014}_{-0.0014}$	c_{217}	0.99648	$0.9966^{+0.0027}_{-0.0028}$	Age/Gyr	12.87	$12.88^{+0.81}_{-0.82}$
au	0.0979	$0.100^{+0.031}_{-0.031}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.00	_	z_*	1091.09	$1091.4_{-1.4}^{+1.5}$
$\Sigma m_{ u} [{ m eV}]$	0.000	< 0.610	$A^{ m kSZ}$	2.98	_	r_*	137.3	$136.5_{-6.5}^{+6.3}$
$N_{ m eff}$	4.00	$4.12^{+0.93}_{-0.90}$	eta_1^1	0.66	$0.7^{+1.1}_{-1.1}$	$100\theta_*$	1.04002	$1.0398^{+0.0018}_{-0.0018}$
$n_{ m s}$	1.0002	$1.004^{+0.037}_{-0.036}$	Ω_{Λ}	0.733	$0.716^{+0.061}_{-0.070}$	$z_{ m drag}$	1062.34	$1062.5_{-2.9}^{+3.2}$
$\ln(10^{10}A_{ m s})$	3.127	$3.135^{+0.070}_{-0.066}$	$\Omega_{ m m}$	0.267	$0.284^{+0.070}_{-0.061}$	$r_{ m drag}$	139.8	$138.9^{+6.6}_{-6.8}$
$r_{0.05}$	0.173	$0.182^{+0.076}_{-0.074}$	σ_8	0.872	$0.841^{+0.083}_{-0.10}$	$k_{ m D}$	0.1457	$0.1464^{+0.0055}_{-0.0054}$
A_{100}^{PS}	172	197^{+100}_{-100}	$z_{ m re}$	11.92	$12.2^{+2.6}_{-2.5}$	$100\theta_{\mathrm{D}}$	0.16325	$0.1635^{+0.0020}_{-0.0018}$
$A_{143}^{ m PS}$	37	61^{+30}_{-30}	r_{10}	0.0921	$0.100^{+0.050}_{-0.047}$	$z_{ m eq}$	3231	3229^{+170}_{-160}
$A_{217}^{ m PS}$	100.4	104^{+40}_{-40}	H_0	75.6	75^{+9}_{-9}	$100\theta_{\mathrm{eq}}$	0.8470	$0.848^{+0.036}_{-0.034}$
$A_{143}^{ m CIB}$	13.6	_	$r_{0.002}$	0.186	$0.200^{+0.10}_{-0.095}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07423	$0.0733^{+0.0038}_{-0.0041}$
$A_{217}^{ m CIB}$	36.8	34^{+20}_{-20}	$10^{9}A_{\rm s}$	2.280	$2.30_{-0.15}^{+0.16}$	H(0.57)	0.0003352	$0.000335^{+0.000026}_{-0.000023}$
$A_{143}^{ m tSZ}$	9.50	_	$\Omega_{ m m} h^2$	0.1526	$0.157^{+0.013}_{-0.013}$	$D_{\rm A}(0.57)$	1262	1275_{-120}^{+120}
$r_{143 imes217}^{ ext{PS}}$	0.891	> 0.716	$\Omega_{ m m} h^3$	0.1154	$0.117^{+0.020}_{-0.019}$			
$r_{143 imes217}^{ ext{CIB}}$	0.633	$0.53^{+0.38}_{-0.45}$	$Y_{ m P}$	0.2571	$0.258^{+0.011}_{-0.010}$			

Best-fit $\chi^2_{\text{eff}} = 9847.24$; $\bar{\chi}^2_{\text{eff}} = 9867.19$; R-1=0.02005 χ^2_{eff} : CMB - lowlike_v222: 2013.31 BICEP2: 38.14 commander_v4.1_lm49: -6.07 CAMspec_v6.2TN_2013_02_26_dist: 7801.85

7.2 $base_r_nnu_mnu_planck_BICEP_lowl_lowLike_highL$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02273	$0.02269^{+0.00090}_{-0.00085}$	eta_1^1	0.57	$0.5^{+1.1}_{-1.1}$	r_{10}	0.0873	$0.091^{+0.044}_{-0.043}$
$\Omega_{ m c} h^2$	0.1280	$0.1280^{+0.0095}_{-0.0094}$	$A_{148}^{\mathrm{PS,ACT}}$	10.55	$10.4^{+1.2}_{-1.1}$	H_0	74.4	$73.1_{-7.1}^{+7.1}$
$100\theta_{\mathrm{MC}}$	1.04057	$1.0405^{+0.0014}_{-0.0013}$	$A_{218}^{\mathrm{PS,ACT}}$	77.0	$76.5^{+8.4}_{-8.8}$	$r_{0.002}$	0.176	$0.184^{+0.088}_{-0.086}$
au	0.0999	$0.101^{+0.030}_{-0.028}$	$A_{95}^{ m PS,SPT}$	7.16	$7.36_{-2.7}^{+2.9}$	$10^{9}A_{\rm s}$	2.281	$2.29_{-0.14}^{+0.16}$
$\Sigma m_{ u} [{ m eV}]$	0.000	< 0.384	$A_{150}^{\mathrm{PS,SPT}}$	9.95	$9.87^{+1.0}_{-0.99}$	$\Omega_{ m m} h^2$	0.1507	$0.152^{+0.010}_{-0.0099}$
$N_{ m eff}$	3.84	$3.82^{+0.75}_{-0.67}$	$A_{220}^{\mathrm{PS,SPT}}$	74.0	74^{+9}_{-9}	$\Omega_{ m m} h^3$	0.1121	$0.111^{+0.016}_{-0.014}$
$n_{ m s}$	0.9940	$0.993^{+0.033}_{-0.032}$	$r_{95 imes150}^{ ext{PS}}$	0.823	> 0.682	$Y_{ m P}$	0.2552	$0.2549^{+0.0089}_{-0.0087}$
$\ln(10^{10}A_{ m s})$	3.127	$3.129^{+0.066}_{-0.064}$	$r_{95 imes220}^{ ext{PS}}$	0.610	$0.60^{+0.24}_{-0.23}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8682	$1.867^{+0.039}_{-0.042}$
$r_{0.05}$	0.168	$0.174^{+0.073}_{-0.067}$	$r_{150 imes220}^{ ext{PS}}$	0.9264	$0.940^{+0.046}_{-0.045}$	$\Omega_{ u}h^2$	0.00000	< 0.00412
A_{100}^{PS}	225	226^{+100}_{-100}	$A_{ m dust}^{ m ACTs}$	0.431	$0.44^{+0.36}_{-0.39}$	Age/Gyr	13.01	$13.10^{+0.70}_{-0.69}$
$A_{143}^{ m PS}$	80.3	79^{+20}_{-20}	$A_{ m dust}^{ m ACTe}$	0.850	$0.85^{+0.39}_{-0.39}$	z_*	1090.89	$1090.9_{-1.2}^{+1.2}$
A_{217}^{PS}	66.5	65^{+20}_{-20}	$y_{148}^{ m ACTs}$	0.9885	$0.989^{+0.015}_{-0.014}$	r_*	138.5	$138.7^{+5.5}_{-5.5}$
$A_{143}^{ m CIB}$	3.08	$3.22^{+1.6}_{-1.5}$	$y_{217}^{ m ACTs}$	1.0007	$1.002^{+0.027}_{-0.026}$	$100\theta_*$	1.04021	$1.0403^{+0.0017}_{-0.0016}$
$A_{217}^{ m CIB}$	48.6	49^{+10}_{-9}	$y_{148}^{ m ACTe}$	0.9848	$0.985^{+0.014}_{-0.014}$	$z_{ m drag}$	1061.92	$1061.8^{+2.9}_{-2.7}$
$A_{143}^{ m tSZ}$	2.93	< 4.76	$y_{217}^{ m ACTe}$	0.9596	$0.960^{+0.020}_{-0.020}$	$r_{ m drag}$	141.0	$141.2^{+5.8}_{-5.8}$
$r_{143 imes217}^{ ext{PS}}$	0.823	$0.83^{+0.13}_{-0.13}$	$y_{95}^{ m SPT}$	0.9754	$0.977^{+0.040}_{-0.037}$	$k_{ m D}$	0.14489	$0.1448^{+0.0046}_{-0.0044}$
$r_{143 imes217}^{ ext{CIB}}$	1.000	> 0.860	$y_{150}^{ m SPT}$	0.9796	$0.981^{+0.020}_{-0.019}$	$100\theta_{\mathrm{D}}$	0.16286	$0.1628^{+0.0014}_{-0.0015}$
$\gamma^{ ext{CIB}}$	0.609	$0.62^{+0.16}_{-0.16}$	$y_{220}^{ m SPT}$	1.0153	$1.019^{+0.046}_{-0.043}$	$z_{ m eq}$	3254	3263^{+160}_{-150}
c_{100}	1.00058	$1.00058^{+0.00077}_{-0.00077}$	Ω_{Λ}	0.728	$0.713^{+0.051}_{-0.055}$	$100\theta_{\mathrm{eq}}$	0.8422	$0.841^{+0.033}_{-0.031}$
c_{217}	0.99751	$0.9975^{+0.0026}_{-0.0026}$	$\Omega_{ m m}$	0.272	$0.287^{+0.055}_{-0.051}$	$r_{\rm drag}/D_{\rm V}(0.57)$	0.07387	$0.0731^{+0.0032}_{-0.0032}$
$\mathbf{\xi}^{ ext{tSZ} imes ext{CIB}}$	0.27	_	σ_8	0.869	$0.844^{+0.063}_{-0.075}$	H(0.57)	0.0003313	$0.000329^{+0.000021}_{-0.000019}$
$\frac{A^{kSZ}}{P_{k+1}C_{$	5.31	> 2.13	$z_{ m re}$	12.05	$12.1_{-2.4}^{+2.5}$	$D_{\rm A}(0.57)$	1280	1299^{+110}_{-100}

Best-fit $\chi^2_{\text{eff}} = 10552.16$; $\bar{\chi}^2_{\text{eff}} = 10591.62$; R - 1 = 0.02413 χ^2_{eff} : CMB - lowlike_v222: 2013.59 BICEP2: 38.39 commander_v4.1_lm49: -5.09 CAMspec_v6.2TN_2013_02_26_dist: 7809.73 actspt_2013_01: 695.45

8 r+nrun+omegak

8.1 $base_r_nrun_omegak_planck_BICEP_lowl_lowLike_BAO$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02236	$0.02243^{+0.00065}_{-0.00063}$	$r_{143 imes217}^{ ext{CIB}}$	0.347	< 0.834	$\Omega_{ m m} h^3$	0.09590	$0.0960^{+0.0043}_{-0.0040}$
$\Omega_{ m c} h^2$	0.1183	$0.1183^{+0.0056}_{-0.0058}$	$\gamma^{ ext{CIB}}$	0.542	$0.54^{+0.24}_{-0.25}$	$Y_{ m P}$	0.244969	$0.24500^{+0.00027}_{-0.00027}$
$100\theta_{\rm MC}$	1.04147	$1.0416^{+0.0013}_{-0.0013}$	c_{100}	1.00059	$1.00058^{+0.00076}_{-0.00077}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8363	$1.838^{+0.029}_{-0.027}$
au	0.1032	$0.105^{+0.032}_{-0.032}$	c_{217}	0.99639	$0.9966^{+0.0027}_{-0.0027}$	Age/Gyr	13.801	$13.80^{+0.22}_{-0.22}$
Ω_K	-0.0005	$-0.0007^{+0.0061}_{-0.0059}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.00	_	z_*	1089.76	$1089.7^{+1.2}_{-1.1}$
$n_{ m s}$	0.9602	$0.961^{+0.016}_{-0.017}$	$A^{ m kSZ}$	8.09	_	$\mid r_* \mid$	144.88	$144.8^{+1.2}_{-1.2}$
$dn_{ m s}/d\ln k$	-0.0253	$-0.027^{+0.018}_{-0.019}$	eta_1^1	0.66	$0.7^{+1.1}_{-1.1}$	$100\theta_*$	1.04167	$1.0418^{+0.0013}_{-0.0012}$
$\ln(10^{10}A_{ m s})$	3.117	$3.122^{+0.065}_{-0.059}$	Ω_{Λ}	0.6937	$0.694^{+0.019}_{-0.019}$	$z_{ m drag}$	1059.78	$1059.9_{-1.3}^{+1.3}$
$r_{0.05}$	0.188	$0.199^{+0.081}_{-0.080}$	$\Omega_{ m m}$	0.3068	$0.307^{+0.017}_{-0.018}$	$r_{ m drag}$	147.55	$147.5_{-1.2}^{+1.2}$
A_{100}^{PS}	175	186^{+100}_{-100}	σ_8	0.8286	$0.830^{+0.030}_{-0.029}$	$k_{ m D}$	0.14040	$0.1405^{+0.0013}_{-0.0013}$
$A_{143}^{ m PS}$	44	56^{+30}_{-30}	$z_{ m re}$	12.09	$12.2^{+2.5}_{-2.4}$	$100\theta_{\mathrm{D}}$	0.16089	$0.16083^{+0.00076}_{-0.00072}$
A_{217}^{PS}	104.3	102^{+40}_{-40}	r_{10}	0.105	$0.115^{+0.059}_{-0.056}$	$z_{ m eq}$	3362	3363^{+120}_{-130}
$A_{143}^{ m CIB}$	8.12	_	H_0	67.86	$67.9_{-1.5}^{+1.5}$	$100\theta_{\mathrm{eq}}$	0.8210	$0.821^{+0.024}_{-0.024}$
$A_{217}^{ m CIB}$	29	32^{+20}_{-20}	$r_{0.002}$	0.204	$0.22^{+0.11}_{-0.11}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07180	$0.0718^{+0.0012}_{-0.0011}$
$A_{143}^{ m tSZ}$	4.88	_	$10^{9}A_{\rm s}$	2.257	$2.27^{+0.15}_{-0.14}$	H(0.57)	0.0003104	$0.0003105^{+0.0000055}_{-0.0000050}$
$r_{143 imes217}^{ ext{PS}}$	0.870	> 0.712	$\Omega_{ m m} h^2$	0.1413	$0.1414^{+0.0052}_{-0.0054}$	$D_{\rm A}(0.57)$	1384.6	1384^{+26}_{-26}

Best-fit $\chi^2_{\text{eff}} = 9849.26$; $\bar{\chi}^2_{\text{eff}} = 9868.12$; R-1=0.04829 χ^2_{eff} : BAO - DR11CMASS: 2.43 DR11LOWZ: 0.42 CMB - lowlike_v222: 2013.70 BICEP2: 39.31 commander_v4.1_lm49: -7.80 CAM-spec_v6.2TN_2013_02_26_dist: 7801.20

9 r+omegak

9.1 $base_r_omegak_planck_BICEP_lowl_lowLike_BAO$

Parameter	Best fit	95% limits	Parameter	Best fit	95% limits	Parameter	Best fit	95% limits
$\Omega_{ m b} h^2$	0.02220	$0.02215^{+0.00057}_{-0.00057}$	$\gamma^{ ext{CIB}}$	0.534	$0.53^{+0.24}_{-0.26}$	$Y_{ m P}$	0.244900	$0.24488^{+0.00025}_{-0.00026}$
$\Omega_{ m c} h^2$	0.1170	$0.1169^{+0.0053}_{-0.0051}$	c_{100}	1.00057	$1.00057^{+0.00076}_{-0.00079}$	$10^9 A_{\rm s} e^{-2\tau}$	1.8236	$1.820^{+0.025}_{-0.024}$
$100\theta_{\rm MC}$	1.04162	$1.0416^{+0.0012}_{-0.0012}$	c_{217}	0.99629	$0.9964^{+0.0027}_{-0.0027}$	Age/Gyr	13.867	$13.87^{+0.21}_{-0.22}$
au	0.0922	$0.092^{+0.026}_{-0.024}$	$\xi^{ ext{tSZ} imes ext{CIB}}$	0.14	_	z_*	1089.85	$1089.9_{-1.0}^{+1.1}$
Ω_K	-0.0018	$-0.0018^{+0.0059}_{-0.0055}$	$A^{ m kSZ}$	0.0	_	$\mid r_* \mid$	145.34	$145.4^{+1.2}_{-1.2}$
$n_{ m s}$	0.9712	$0.969^{+0.015}_{-0.014}$	eta_1^1	0.58	$0.5^{+1.1}_{-1.1}$	$100\theta_*$	1.04184	$1.0418^{+0.0012}_{-0.0012}$
$\ln(10^{10}A_{ m s})$	3.0878	$3.085^{+0.049}_{-0.046}$	Ω_{Λ}	0.6960	$0.696^{+0.017}_{-0.019}$	$z_{ m drag}$	1059.32	$1059.2_{-1.2}^{+1.2}$
$r_{0.05}$	0.166	$0.171^{+0.072}_{-0.072}$	$\Omega_{ m m}$	0.3058	$0.306^{+0.017}_{-0.016}$	$r_{ m drag}$	148.07	$148.2^{+1.1}_{-1.1}$
A_{100}^{PS}	145	160^{+100}_{-100}	σ_8	0.8209	$0.819_{-0.026}^{+0.027}$	$k_{ m D}$	0.13972	$0.1396^{+0.0012}_{-0.0012}$
$A_{143}^{ m PS}$	58.5	52^{+20}_{-20}	$z_{ m re}$	11.18	$11.1^{+2.1}_{-2.0}$	$100\theta_{ m D}$	0.16118	$0.16125^{+0.00068}_{-0.00063}$
A_{217}^{PS}	122.1	106^{+30}_{-30}	r_{10}	0.0809	$0.084^{+0.040}_{-0.039}$	$z_{ m eq}$	3327	3323^{+120}_{-110}
$A_{143}^{ m CIB}$	2.54	_	H_0	67.63	$67.6^{+1.5}_{-1.4}$	$100\theta_{\mathrm{eq}}$	0.8271	$0.828^{+0.023}_{-0.023}$
$A_{217}^{ m CIB}$	24	28^{+20}_{-10}	$r_{0.002}$	0.161	$0.166^{+0.078}_{-0.076}$	$r_{\rm drag}/D_{ m V}(0.57)$	0.07175	$0.0718^{+0.0011}_{-0.0011}$
$A_{143}^{ m tSZ}$	6.21	_	$10^{9}A_{\rm s}$	2.193	$2.19_{-0.10}^{+0.11}$	H(0.57)	0.0003089	$0.0003088^{+0.0000052}_{-0.0000051}$
$r_{143 imes217}^{ ext{PS}}$	0.909	> 0.734	$\Omega_{ m m} h^2$	0.13987	$0.1397^{+0.0050}_{-0.0048}$	$D_{\rm A}(0.57)$	1390.3	1391^{+24}_{-25}
$r_{143 imes217}^{ ext{CIB}}$	0.12		$\Omega_{ m m} h^3$	0.09459	$0.0945^{+0.0041}_{-0.0038}$			

Best-fit $\chi^2_{\text{eff}} = 9855.17$; $\bar{\chi}^2_{\text{eff}} = 9873.75$; R-1=0.04939 χ^2_{eff} : BAO - DR11CMASS: 2.51 DR11LOWZ: 0.45 CMB - lowlike_v222: 2013.41 BICEP2: 39.80 commander_v4.1_lm49: -2.44 CAMspec_v6.2TN_2013_02_26_dist: 7801.44