

WMAP Cosmological Parameters

Model: Λ cdm

Data: wmap9

$10^9 \Delta_{\mathcal{R}}^2$	2.43 ± 0.11	H_0	$38 < H_0 < 84 \text{ km/s/Mpc (95\% CL)}$
$\ell(\ell+1)C_{220}/(2\pi)$	$5747 \pm 35 \mu\text{K}^2$	$d_A(z_{\text{eq}})$	$14168 \pm 122 \text{ Mpc}$
$d_A(z_*)$	$14016 \pm 119 \text{ Mpc}$	$D_v(z=0.57)/r_s(z_d)$	$14.9_{-2.2}^{+2.3}$
η	$(6.16 \pm 0.14) \times 10^{-10}$	k_{eq}	0.01002 ± 0.00033
ℓ_{eq}	$140.4_{-3.6}^{+3.5}$	ℓ_*	$302.43_{-0.65}^{+0.66}$
n_b	$(2.531 \pm 0.057) \times 10^{-7} \text{ cm}^{-3}$	n_s	0.969 ± 0.014
Ω_b	$0.032 < \Omega_b < 0.151 \text{ (95\% CL)}$	$\Omega_b h^2$	0.02253 ± 0.00051
Ω_c	$0.16 < \Omega_c < 0.80 \text{ (95\% CL)}$	$\Omega_c h^2$	0.1147 ± 0.0046
Ω_k	$-0.037_{-0.042}^{+0.044}$	Ω_k	$-0.212 < \Omega_k < 0.021 \text{ (95\% CL)}$
Ω_Λ	$0.22 < \Omega_\Lambda < 0.79 \text{ (95\% CL)}$	Ω_m	$0.19 < \Omega_m < 0.95 \text{ (95\% CL)}$
$\Omega_m h^2$	$0.13 < \Omega_m h^2 < 0.14 \text{ (95\% CL)}$	Ω_{tot}	$1.037_{-0.044}^{+0.042}$
Ω_{tot}	$0.98 < \Omega_{\text{tot}} < 1.21 \text{ (95\% CL)}$	$r_s(z_d)$	$152.1 \pm 1.3 \text{ Mpc}$
$r_s(z_d)/D_v(z=0.106)$	$0.306_{-0.064}^{+0.063}$	$r_s(z_d)/D_v(z=0.2)$	$0.168_{-0.033}^{+0.032}$
$r_s(z_d)/D_v(z=0.35)$	0.102 ± 0.018	$r_s(z_d)/D_v(z=0.44)$	0.085 ± 0.014
$r_s(z_d)/D_v(z=0.54)$	0.072 ± 0.011	$r_s(z_d)/D_v(z=0.57)$	0.069 ± 0.010
$r_s(z_d)/D_v(z=0.6)$	$0.0662_{-0.0099}^{+0.0097}$	$r_s(z_d)/D_v(z=0.73)$	$0.0575_{-0.0079}^{+0.0078}$
$r_s(z_*)$	145.6 ± 1.2	R	1.732 ± 0.016
σ_8	$0.804_{-0.030}^{+0.032}$	$\sigma_8 \Omega_m^{0.5}$	0.51 ± 0.11
$\sigma_8 \Omega_m^{0.6}$	0.47 ± 0.12	A_{SZ}	$< 2.0 \text{ (95\% CL)}$
t_0	$14.8 \pm 1.5 \text{ Gyr}$	τ	0.087 ± 0.014
θ_*	0.010388 ± 0.000022	θ_*	$0.5952 \pm 0.0013^\circ$
τ_{rec}	283.5 ± 2.4	t_{reion}	$462_{-68}^{+67} \text{ Myr}$
t_*	$375533_{-4179}^{+4189} \text{ yr}$	z_d	1020.5 ± 1.1
z_{eq}	3285 ± 108	z_{rec}	1088.33 ± 0.81
z_{reion}	10.4 ± 1.1	z_*	1091.19 ± 0.89