

WMAP Cosmological Parameters

Model: lcdm+nrel

Data: wmap9

$10^9 \Delta_{\mathcal{R}}^2$	2.38 ± 0.11	H_0	$76.3^{+9.5}_{-8.9}$ km/s/Mpc
N_{eff}	> 1.7 (95% CL)	$\ell(\ell + 1)C_{220}/(2\pi)$	5744 ± 35 μK^2
$d_A(z_{\text{eq}})$	13177^{+1488}_{-1552} Mpc	$d_A(z_*)$	13025^{+1469}_{-1531} Mpc
$D_v(z = 0.57)/r_s(z_d)$	$12.83^{+0.74}_{-0.76}$	η	$(6.20 \pm 0.14) \times 10^{-10}$
k_{eq}	0.0108 ± 0.0012	ℓ_{eq}	139.0 ± 3.8
ℓ_*	$303.5^{+1.9}_{-2.0}$	n_b	$(2.546 \pm 0.056) \times 10^{-7}$ cm^{-3}
n_s	0.988 ± 0.027	Ω_b	$0.0404^{+0.0092}_{-0.0095}$
$\Omega_b h^2$	0.02267 ± 0.00050	Ω_c	0.239 ± 0.025
$\Omega_c h^2$	$0.141^{+0.039}_{-0.036}$	Ω_Λ	0.720 ± 0.026
Ω_m	0.280 ± 0.026	$\Omega_m h^2$	$0.164^{+0.039}_{-0.036}$
$r_s(z_d)$	141 ± 17 Mpc	$r_s(z_d)/D_v(z = 0.106)$	0.359 ± 0.023
$r_s(z_d)/D_v(z = 0.2)$	0.196 ± 0.012	$r_s(z_d)/D_v(z = 0.35)$	$0.1178^{+0.0072}_{-0.0071}$
$r_s(z_d)/D_v(z = 0.44)$	$0.0967^{+0.0058}_{-0.0057}$	$r_s(z_d)/D_v(z = 0.54)$	$0.0817^{+0.0049}_{-0.0047}$
$r_s(z_d)/D_v(z = 0.57)$	$0.0782^{+0.0046}_{-0.0045}$	$r_s(z_d)/D_v(z = 0.6)$	$0.0751^{+0.0044}_{-0.0043}$
$r_s(z_d)/D_v(z = 0.73)$	$0.0647^{+0.0038}_{-0.0037}$	$r_s(z_*)$	135^{+16}_{-17}
R	1.728 ± 0.016	σ_8	$0.875^{+0.084}_{-0.081}$
$\sigma_8 \Omega_m^{0.5}$	$0.463^{+0.051}_{-0.050}$	$\sigma_8 \Omega_m^{0.6}$	$0.407^{+0.047}_{-0.046}$
A_{SZ}	< 2.0 (95% CL)	t_0	$12.8^{+1.4}_{-1.5}$ Gyr
τ	0.089 ± 0.014	θ_*	$0.010351^{+0.000066}_{-0.000067}$
θ_*	0.5931 ± 0.0038 $^\circ$	τ_{rec}	263^{+31}_{-32}
t_{reion}	396^{+102}_{-103} Myr	t_*	347950^{+41811}_{-43524} yr
z_d	$1022.0^{+2.2}_{-2.4}$	z_{eq}	3236 ± 123
z_{reion}	11.2 ± 1.5	z_*	$1093.1^{+3.1}_{-2.9}$