

WMAP Cosmological Parameters

Model:  $\Lambda$ cdm+nrel

Data: wmap9+spt+act

$10^9 \Delta_{\mathcal{R}}^2$	$2.35 \pm 0.10$	$H_0$	$75.5^{+4.2}_{-4.3}$ km/s/Mpc
$N_{\text{eff}}$	$3.89 \pm 0.67$	$A_{\text{clustered}}$	$< 13$ (95% CL)
$A_{\text{Poisson}}^{\text{ACT}}$	$14.1 \pm 2.6$	$A_{\text{Poisson}}^{\text{SPT}}$	$> 15$ (95% CL)
$\ell(\ell+1)C_{220}/(2\pi)$	$5759 \pm 34 \mu\text{K}^2$	$d_A(z_{\text{eq}})$	$13560^{+520}_{-521}$ Mpc
$d_A(z_*)$	$13404^{+514}_{-515}$ Mpc	$D_v(z=0.57)/r_s(z_d)$	$12.72^{+0.42}_{-0.41}$
$\eta$	$(6.21 \pm 0.13) \times 10^{-10}$	$k_{\text{eq}}$	$0.01022 \pm 0.00039$
$\ell_{\text{eq}}$	$136.8 \pm 3.0$	$\ell_*$	$302.54 \pm 0.56$
$n_b$	$(2.550 \pm 0.055) \times 10^{-7} \text{ cm}^{-3}$	$n_s$	$0.985^{+0.018}_{-0.019}$
$\Omega_b$	$0.0401 \pm 0.0039$	$\Omega_b h^2$	$0.02270 \pm 0.00049$
$\Omega_c$	$0.220 \pm 0.018$	$\Omega_c h^2$	$0.125^{+0.011}_{-0.010}$
$\Omega_\Lambda$	$0.740 \pm 0.020$	$\Omega_m$	$0.260 \pm 0.020$
$\Omega_m h^2$	$0.148 \pm 0.011$	$r_s(z_d)$	$145.4 \pm 5.8$ Mpc
$r_s(z_d)/D_v(z=0.106)$	$0.364 \pm 0.015$	$r_s(z_d)/D_v(z=0.2)$	$0.1986 \pm 0.0077$
$r_s(z_d)/D_v(z=0.35)$	$0.1190 \pm 0.0043$	$r_s(z_d)/D_v(z=0.44)$	$0.0975 \pm 0.0034$
$r_s(z_d)/D_v(z=0.54)$	$0.0822 \pm 0.0027$	$r_s(z_d)/D_v(z=0.57)$	$0.0787 \pm 0.0026$
$r_s(z_d)/D_v(z=0.6)$	$0.0755 \pm 0.0024$	$r_s(z_d)/D_v(z=0.73)$	$0.0650 \pm 0.0020$
$r_s(z_*)$	$139.2 \pm 5.5$	$R$	$1.716 \pm 0.014$
$\sigma_8$	$0.844^{+0.031}_{-0.032}$	$\sigma_8 \Omega_m^{0.5}$	$0.430^{+0.022}_{-0.023}$
$\sigma_8 \Omega_m^{0.6}$	$0.376 \pm 0.022$	$A_{\text{SZ}}$	$< 1.3$ (95% CL)
$t_0$	$13.02 \pm 0.55$ Gyr	$\tau$	$0.087 \pm 0.014$
$\theta_*$	$0.010384 \pm 0.000019$	$\theta_*$	$0.5950 \pm 0.0011$ °
$\tau_{\text{rec}}$	$271 \pm 10$	$t_{\text{reion}}$	$430 \pm 70$ Myr
$t_*$	$359856^{+13686}_{-13795}$ yr	$z_d$	$1021.7 \pm 1.7$
$z_{\text{eq}}$	$3178 \pm 90$	$z_{\text{rec}}$	$1089.16^{+0.89}_{-0.90}$
$z_{\text{reion}}$	$10.7 \pm 1.2$	$z_*$	$1091.83 \pm 0.79$