

WMAP Cosmological Parameters

Model: lcdm+run+tens

Data: wmap9+spt+act+bao+h0

|                                   |   |                                   |                                 |
|-----------------------------------|---|-----------------------------------|---------------------------------|
| $10^9 \Delta_{\mathcal{R}}^2$     | $2.17 \pm 0.14$                                     | $H_0$                             | $69.45 \pm 0.84$ km/s/Mpc       |
| $A_{\text{clustered}}$            | $< 13$ (95% CL)                                     | $A_{\text{Poisson}}^{\text{ACT}}$ | $13.4 \pm 2.7$                  |
| $A_{\text{Poisson}}^{\text{SPT}}$ | $> 14$ (95% CL)                                     | $\ell(\ell+1)C_{220}/(2\pi)$      | $5760 \pm 33$ $\mu\text{K}^2$   |
| $d_A(z_{\text{eq}})$              | $14115_{-69}^{+70}$ Mpc                             | $d_A(z_*)$                        | $13948 \pm 70$ Mpc              |
| $dn_s/d \ln k$                    | $-0.040 \pm 0.016$                                  | $D_v(z = 0.57)/r_s(z_d)$          | $13.37 \pm 0.12$                |
| $\eta$                            | $(6.17 \pm 0.10) \times 10^{-10}$                   | $k_{\text{eq}}$                   | $0.01014 \pm 0.00015$           |
| $\ell_{\text{eq}}$                | $141.4 \pm 1.5$                                     | $\ell_*$                          | $301.92 \pm 0.39$               |
| $n_b$                             | $(2.533 \pm 0.042) \times 10^{-7}$ $\text{cm}^{-3}$ | $n_s$                             | $1.075 \pm 0.046$               |
| $n_t$                             | $> -0.058$ (95% CL)                                 | $\Omega_b$                        | $0.04676_{-0.00096}^{+0.00095}$ |
| $\Omega_b h^2$                    | $0.02255_{-0.00038}^{+0.00037}$                     | $\Omega_c$                        | $0.2414 \pm 0.0091$             |
| $\Omega_c h^2$                    | $0.1164 \pm 0.0020$                                 | $\Omega_\Lambda$                  | $0.7118 \pm 0.0099$             |
| $\Omega_m$                        | $0.2882 \pm 0.0099$                                 | $\Omega_m h^2$                    | $0.1389_{-0.0021}^{+0.0020}$    |
| $r$                               | $< 0.47$ (95% CL)                                   | $r_s(z_d)$                        | $151.61_{-0.73}^{+0.74}$ Mpc    |
| $r_s(z_d)/D_v(z = 0.106)$         | $0.3421_{-0.0043}^{+0.0044}$                        | $r_s(z_d)/D_v(z = 0.2)$           | $0.1869 \pm 0.0022$             |
| $r_s(z_d)/D_v(z = 0.35)$          | $0.1124 \pm 0.0012$                                 | $r_s(z_d)/D_v(z = 0.44)$          | $0.09237 \pm 0.00089$           |
| $r_s(z_d)/D_v(z = 0.54)$          | $0.07806 \pm 0.00069$                               | $r_s(z_d)/D_v(z = 0.57)$          | $0.07478 \pm 0.00064$           |
| $r_s(z_d)/D_v(z = 0.6)$           | $0.07183 \pm 0.00060$                               | $r_s(z_d)/D_v(z = 0.73)$          | $0.06195 \pm 0.00046$           |
| $r_s(z_*)$                        | $145.14 \pm 0.61$                                   | $R$                               | $1.7340 \pm 0.0060$             |
| $\sigma_8$                        | $0.823 \pm 0.015$                                   | $\sigma_8 \Omega_m^{0.5}$         | $0.442 \pm 0.013$               |
| $\sigma_8 \Omega_m^{0.6}$         | $0.390 \pm 0.012$                                   | $A_{\text{SZ}}$                   | $< 1.4$ (95% CL)                |
| $t_0$                             | $13.723 \pm 0.064$ Gyr                              | $\tau$                            | $0.093 \pm 0.014$               |
| $\theta_*$                        | $0.010405 \pm 0.000014$                             | $\theta_*$                        | $0.59619 \pm 0.00078$ $^\circ$  |
| $\tau_{\text{rec}}$               | $282.6 \pm 1.1$                                     | $t_{\text{reion}}$                | $426_{-62}^{+61}$ Myr           |
| $t_*$                             | $373990_{-1775}^{+1795}$ yr                         | $z_d$                             | $1020.75 \pm 0.89$              |
| $z_{\text{eq}}$                   | $3325 \pm 49$                                       | $z_{\text{rec}}$                  | $1088.42 \pm 0.60$              |
| $z_{\text{reion}}$                | $11.0 \pm 1.2$                                      | $z_*$                             | $1091.30 \pm 0.52$              |