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 WMAP Cosmological Parameters

Model: wcdm

Data: wmap9+bao

|                                |  |                           |                                 |
|--------------------------------|--|---------------------------|---------------------------------|
| $10^9 \Delta_{\mathcal{R}}^2$  | $2.44 \pm 0.11$                                    | $H_0$                     | $68.3 \pm 2.8 \text{ km/s/Mpc}$ |
| $\ell(\ell + 1)C_{220}/(2\pi)$ | $5740^{+35}_{-34} \mu\text{K}^2$                   | $d_A(z_{\text{eq}})$      | $14159 \pm 113 \text{ Mpc}$     |
| $d_A(z_*)$                     | $13993^{+114}_{-115} \text{ Mpc}$                  | $D_v(z = 0.57)/r_s(z_d)$  | $13.49 \pm 0.13$                |
| $\eta$                         | $(6.16 \pm 0.14) \times 10^{-10}$                  | $k_{\text{eq}}$           | $0.01009 \pm 0.00031$           |
| $\ell_{\text{eq}}$             | $141.1 \pm 3.3$                                    | $\ell_*$                  | $302.47 \pm 0.64$               |
| $n_b$                          | $(2.531 \pm 0.056) \times 10^{-7} \text{ cm}^{-3}$ | $n_s$                     | $0.969 \pm 0.013$               |
| $\Omega_b$                     | $0.0486 \pm 0.0045$                                | $\Omega_b h^2$            | $0.02254 \pm 0.00050$           |
| $\Omega_c$                     | $0.249^{+0.015}_{-0.016}$                          | $\Omega_c h^2$            | $0.1157^{+0.0043}_{-0.0044}$    |
| $\Omega_\Lambda$               | $0.703^{+0.020}_{-0.019}$                          | $\Omega_m$                | $0.297^{+0.019}_{-0.020}$       |
| $\Omega_m h^2$                 | $0.1382 \pm 0.0042$                                | $r_s(z_d)$                | $151.8 \pm 1.2 \text{ Mpc}$     |
| $r_s(z_d)/D_v(z = 0.106)$      | $0.3373 \pm 0.0092$                                | $r_s(z_d)/D_v(z = 0.2)$   | $0.1845 \pm 0.0038$             |
| $r_s(z_d)/D_v(z = 0.35)$       | $0.1112^{+0.0014}_{-0.0015}$                       | $r_s(z_d)/D_v(z = 0.44)$  | $0.09147 \pm 0.00098$           |
| $r_s(z_d)/D_v(z = 0.54)$       | $0.07739 \pm 0.00074$                              | $r_s(z_d)/D_v(z = 0.57)$  | $0.07415 \pm 0.00070$           |
| $r_s(z_d)/D_v(z = 0.6)$        | $0.07125 \pm 0.00067$                              | $r_s(z_d)/D_v(z = 0.73)$  | $0.06153 \pm 0.00059$           |
| $r_s(z_*)$                     | $145.3 \pm 1.1$                                    | $R$                       | $1.735 \pm 0.015$               |
| $\sigma_8$                     | $0.821 \pm 0.058$                                  | $\sigma_8 \Omega_m^{0.5}$ | $0.447 \pm 0.024$               |
| $\sigma_8 \Omega_m^{0.6}$      | $0.396 \pm 0.020$                                  | $A_{\text{SZ}}$           | $< 2.0 \text{ (95\% CL)}$       |
| $t_0$                          | $13.804^{+0.095}_{-0.094} \text{ Gyr}$             | $\tau$                    | $0.087 \pm 0.013$               |
| $\theta_*$                     | $0.010386 \pm 0.000022$                            | $\theta_*$                | $0.5951 \pm 0.0013^\circ$       |
| $\tau_{\text{rec}}$            | $283.0^{+2.3}_{-2.2}$                              | $t_{\text{reion}}$        | $454 \pm 64 \text{ Myr}$        |
| $t_*$                          | $374656^{+3911}_{-3855} \text{ yr}$                | $w$                       | $-0.98 \pm 0.14$                |
| $z_d$                          | $1020.6 \pm 1.1$                                   | $z_{\text{eq}}$           | $3308 \pm 101$                  |
| $z_{\text{rec}}$               | $1088.40 \pm 0.79$                                 | $z_{\text{reion}}$        | $10.5 \pm 1.1$                  |
| $z_*$                          | $1091.26 \pm 0.85$                                 |                           |                                 |

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