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WMAP Cosmological Parameters

Model:  $\Lambda$ cdm+yhe

Data: wmap9+h0

$10^9 \Delta_{\mathcal{R}}^2$	$2.350 \pm 0.088$	$H_0$	$71.8 \pm 1.7 \text{ km/s/Mpc}$
$\ell(\ell+1)C_{220}/(2\pi)$	$5759 \pm 34 \mu\text{K}^2$	$d_A(z_{\text{eq}})$	$14254^{+176}_{-177} \text{ Mpc}$
$d_A(z_*)$	$14090^{+177}_{-178} \text{ Mpc}$	$D_v(z=0.57)/r_s(z_d)$	$13.03 \pm 0.24$
$\eta$	$(6.26 \pm 0.13) \times 10^{-10}$	$k_{\text{eq}}$	$0.00973 \pm 0.00037$
$\ell_{\text{eq}}$	$137.0 \pm 3.6$	$\ell_*$	$302.2 \pm 1.2$
$n_b$	$(2.572 \pm 0.052) \times 10^{-7} \text{ cm}^{-3}$	$n_s$	$0.979 \pm 0.015$
$\Omega_b$	$0.0445 \pm 0.0017$	$\Omega_b h^2$	$0.02290^{+0.00046}_{-0.00047}$
$\Omega_c$	$0.215 \pm 0.018$	$\Omega_c h^2$	$0.1104 \pm 0.0051$
$\Omega_\Lambda$	$0.741 \pm 0.020$	$\Omega_m$	$0.259 \pm 0.020$
$\Omega_m h^2$	$0.1333 \pm 0.0050$	$r_s(z_d)$	$152.9 \pm 1.5 \text{ Mpc}$
$r_s(z_d)/D_v(z=0.106)$	$0.3557 \pm 0.0095$	$r_s(z_d)/D_v(z=0.2)$	$0.1938 \pm 0.0048$
$r_s(z_d)/D_v(z=0.35)$	$0.1161 \pm 0.0026$	$r_s(z_d)/D_v(z=0.44)$	$0.0951 \pm 0.0020$
$r_s(z_d)/D_v(z=0.54)$	$0.0802 \pm 0.0015$	$r_s(z_d)/D_v(z=0.57)$	$0.0768 \pm 0.0014$
$r_s(z_d)/D_v(z=0.6)$	$0.0737 \pm 0.0013$	$r_s(z_d)/D_v(z=0.73)$	$0.0634 \pm 0.0010$
$r_s(z_*)$	$146.5 \pm 1.4$	$R$	$1.715 \pm 0.013$
$\sigma_8$	$0.808^{+0.039}_{-0.038}$	$\sigma_8 \Omega_m^{0.5}$	$0.412 \pm 0.032$
$\sigma_8 \Omega_m^{0.6}$	$0.360^{+0.031}_{-0.030}$	$A_{\text{SZ}}$	$< 2.0 \text{ (95\% CL)}$
$t_0$	$13.68^{+0.12}_{-0.13} \text{ Gyr}$	$\tau$	$0.093 \pm 0.014$
$\theta_*$	$0.010398 \pm 0.000042$	$\theta_*$	$0.5957 \pm 0.0024^\circ$
$\tau_{\text{rec}}$	$285.8 \pm 3.3$	$t_{\text{reion}}$	$457^{+80}_{-81} \text{ Myr}$
$t_*$	$379516^{+4726}_{-4749} \text{ yr}$	$Y_{\text{He}}$	$< 0.40 \text{ (95\% CL)}$
$z_d$	$1021.0 \pm 1.1$	$z_{\text{eq}}$	$3190^{+121}_{-120}$
$z_{\text{reion}}$	$10.7 \pm 1.3$	$z_*$	$1090.32 \pm 0.79$

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