

## Appendix 2

**Table A2:** Posterior summaries, including the mean, standard deviation, 95% credibility interval (highest density interval),  $\hat{R}$ , and effective sample size. Descriptions of parameters can be found in Table 1.

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parameter	mean	sd	95 CI	Rhat	ESS
$\log(\mu_y^A)$	3.87	0.03	(3.81, 3.93)	1.02	626
$\sigma_y^A$	0.2	0.01	(0.17, 0.22)	1.02	772
$\mu_y^R$	9.31	2.07	(5.26, 13.31)	1.02	699
$\sigma_y^R$	4.84	0.93	(3.11, 6.52)	1.00	1792
$y_\infty$	83.8	1.01	(81.91, 85.87)	1.02	325
$k$	1.06	0.05	(0.97, 1.16)	1.02	412
$C$	1.08	0.08	(0.92, 1.24)	1.02	1450
$t_s$	-0.71	0.02	(-0.74, -0.67)	1.02	687
$\sigma^G$	2.37	0.19	(2, 2.73)	1.02	423
$\beta_1$	0.00535	0.00092	(0, 0.02364)	1.01	1052
$\beta_2$	0.00053	0.00092	(0, 0.00246)	1.01	1252
$\beta_3$	0.00051	0.00089	(0, 0.00232)	1.01	1652
$\beta_4$	0.00259	0.00413	(0, 0.01142)	1.01	1537
$\beta_5$	0.00139	0.00262	(0, 0.0065)	1.05	1726
$\alpha$	4.32	4.26	(0, 13.08)	1.00	2374
$\beta_\alpha$	0.34	0.23	(0.04, 0.79)	1.01	1450
$\beta_\theta$	96.06	37.2	(27.15, 149.99)	1.00	8277
$\alpha_1^o$	4.14	0.38	(3.39, 4.87)	1.01	1003
$\alpha_2^o$	3.33	0.81	(1.75, 4.98)	1.00	7165
$\alpha_3^o$	4.22	0.55	(3.16, 5.32)	1.02	785
$\alpha_\alpha^o$	32.95	12.15	(10.04, 50)	1.00	13276

(continued)

parameter	mean	sd	95 CI	Rhat	ESS
$\alpha_\theta^o$	8.56	3.29	(1.86, 14.33)	1.00	7378
$h_F^{max}$	0.00029	2e-05	(0.00026, 0.00032)	1.00	3843
$h_M^{max}$	0.00044	7e-05	(3e-04, 0.00059)	1.01	919
$h_S^{max}$	0.00448	0.00037	(0.00377, 0.00523)	1.00	6779
$h_F^k$	0.36	0.14	(0.18, 0.63)	1.01	1957
$h_S^k$	0.33	0.06	(0.23, 0.44)	1.00	4777
$h_F^0$	38.72	2.74	(33.57, 43.93)	1.01	912
$h_S^0$	46.47	1.66	(43.32, 49.78)	1.01	1665
$h_M^A$	45.02	0.65	(43.77, 46.29)	1.01	1458
$h_M^\sigma$	6.47	0.36	(5.77, 7.19)	1.00	15761
$\lambda^A$	330	28	(278, 385)	1.01	2542
$\lambda_1^R$	551	188	(254, 932)	1.01	816
$\lambda_2^R$	44	9	(28, 61)	1.00	3894
$\lambda_3^R$	1109	257	(669, 1624)	1.01	1072
$\lambda_4^R$	56	22	(20, 98)	1.00	2221
$\mu_\lambda^R$	430.84	503.27	(1.01, 1199.38)	1.01	7028
$\mu_\sigma^R$	1096.65	973.43	(199.61, 2839.83)	1.01	5651

**Figure A2:** Trace plots of posterior samples. Colors refer to separate chains. Descriptions of parameters can be found in Table 1.

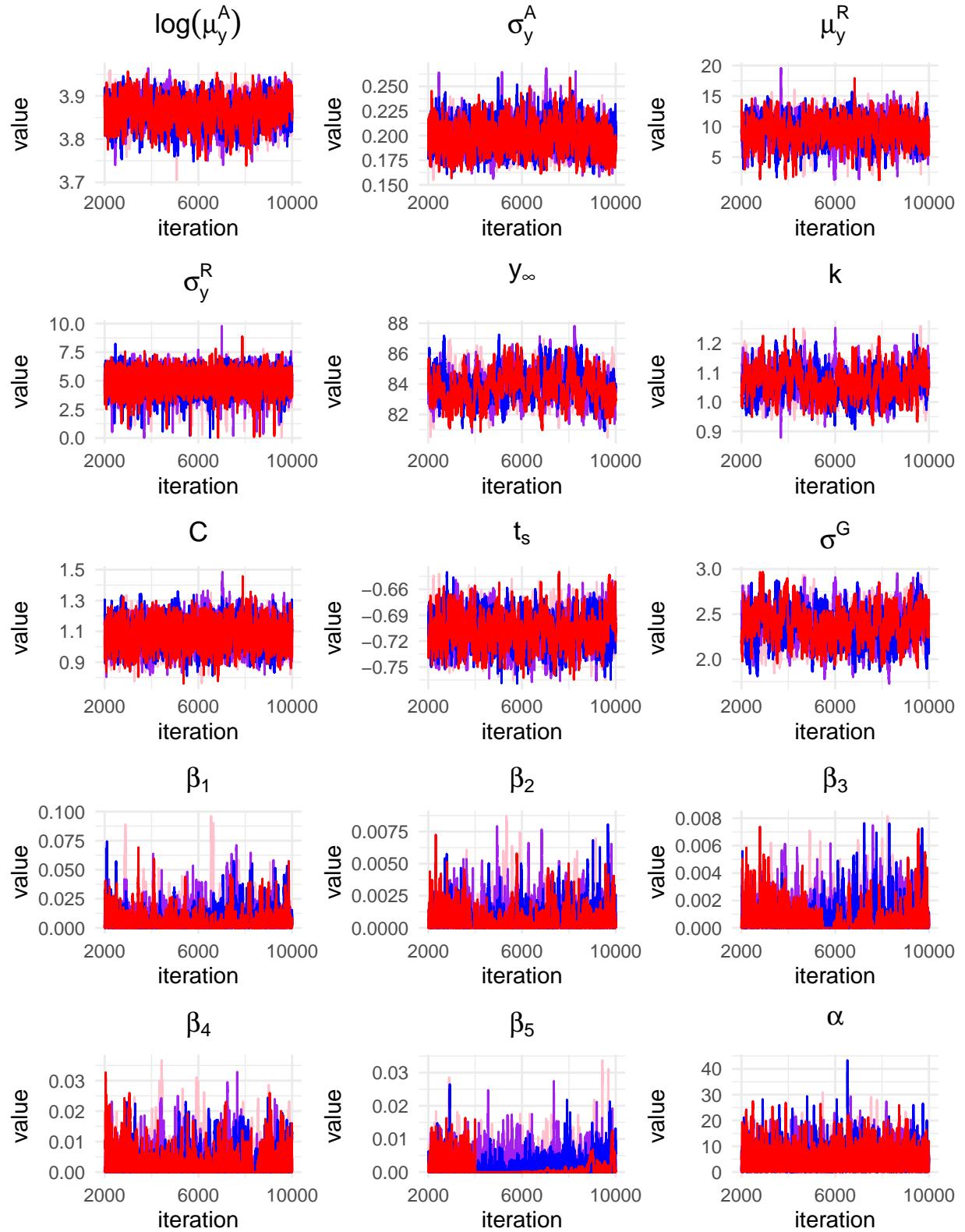


Figure A2 continued.

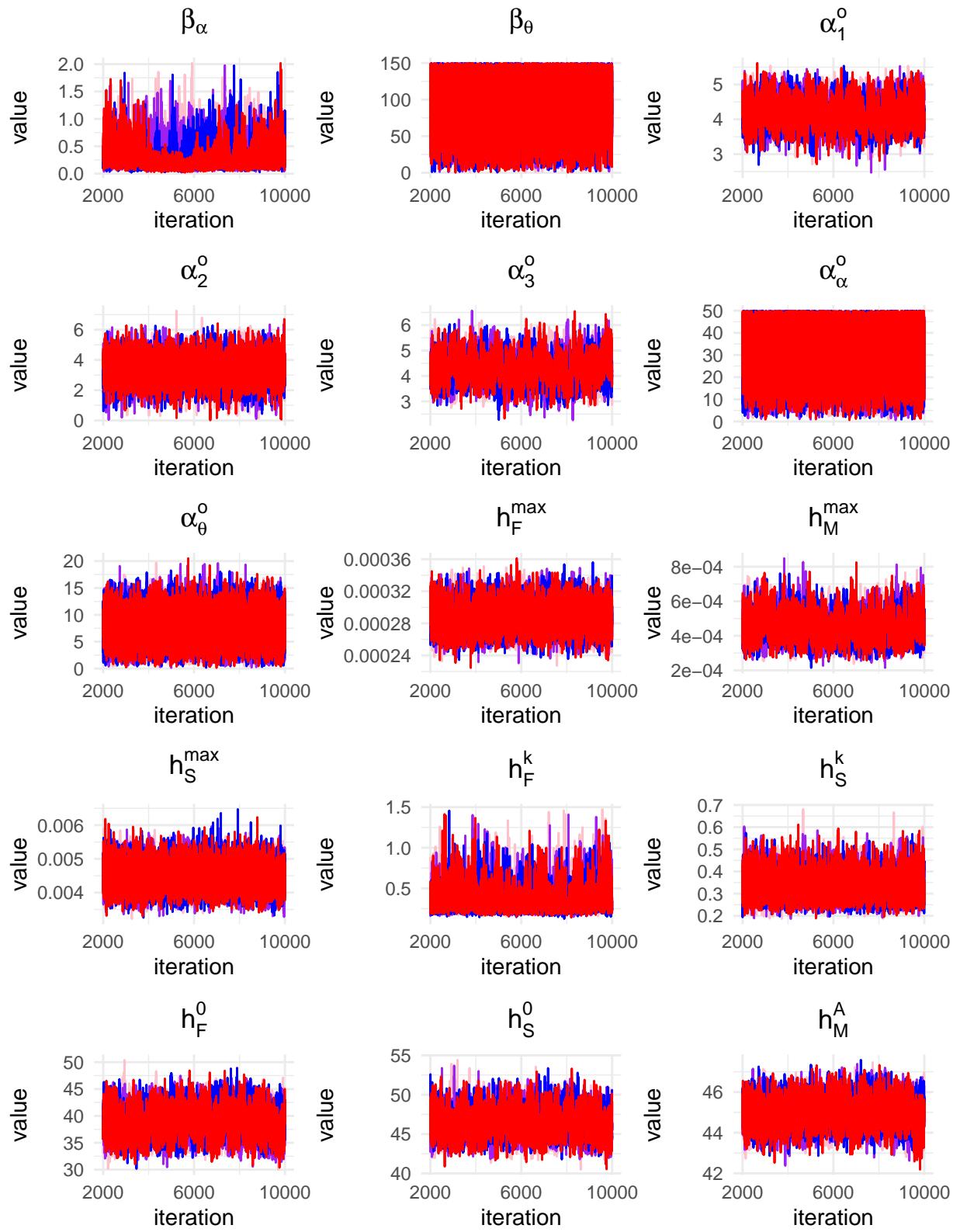


Figure A2 continued.

