

Figure 1: Check plots.

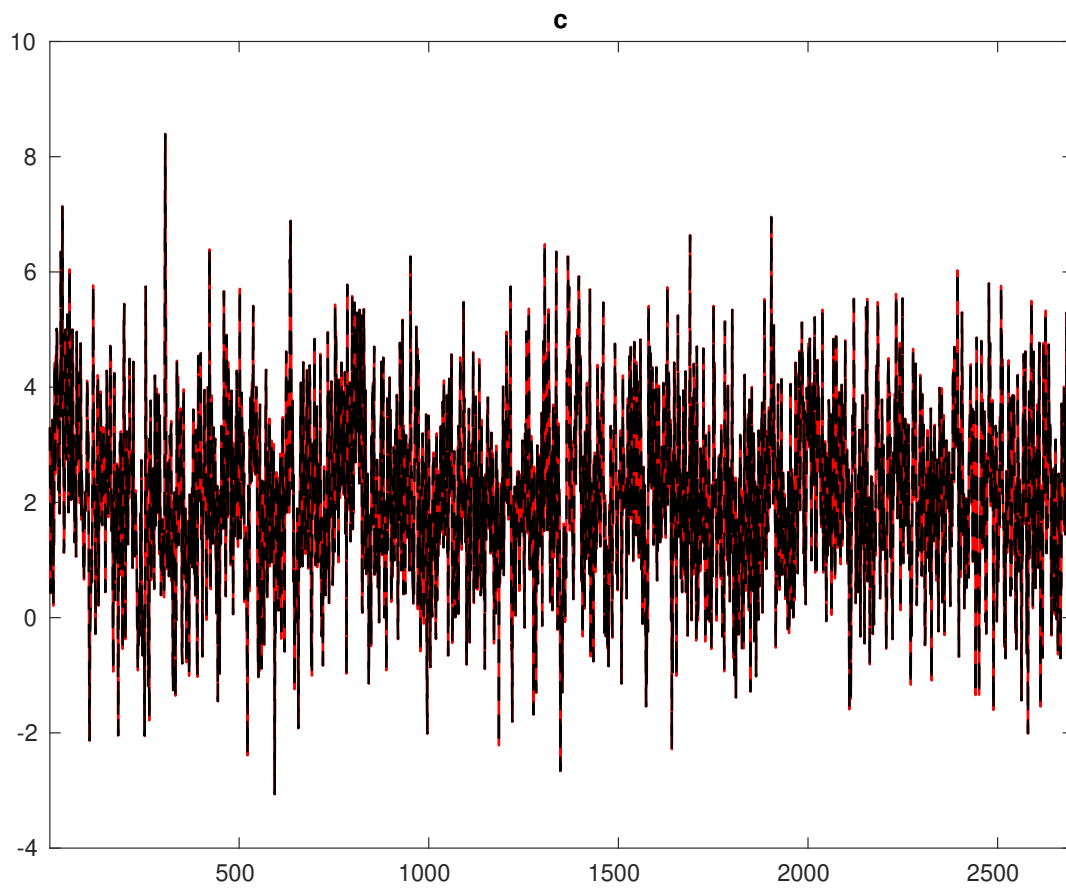


Figure 2: Historical and smoothed variables.

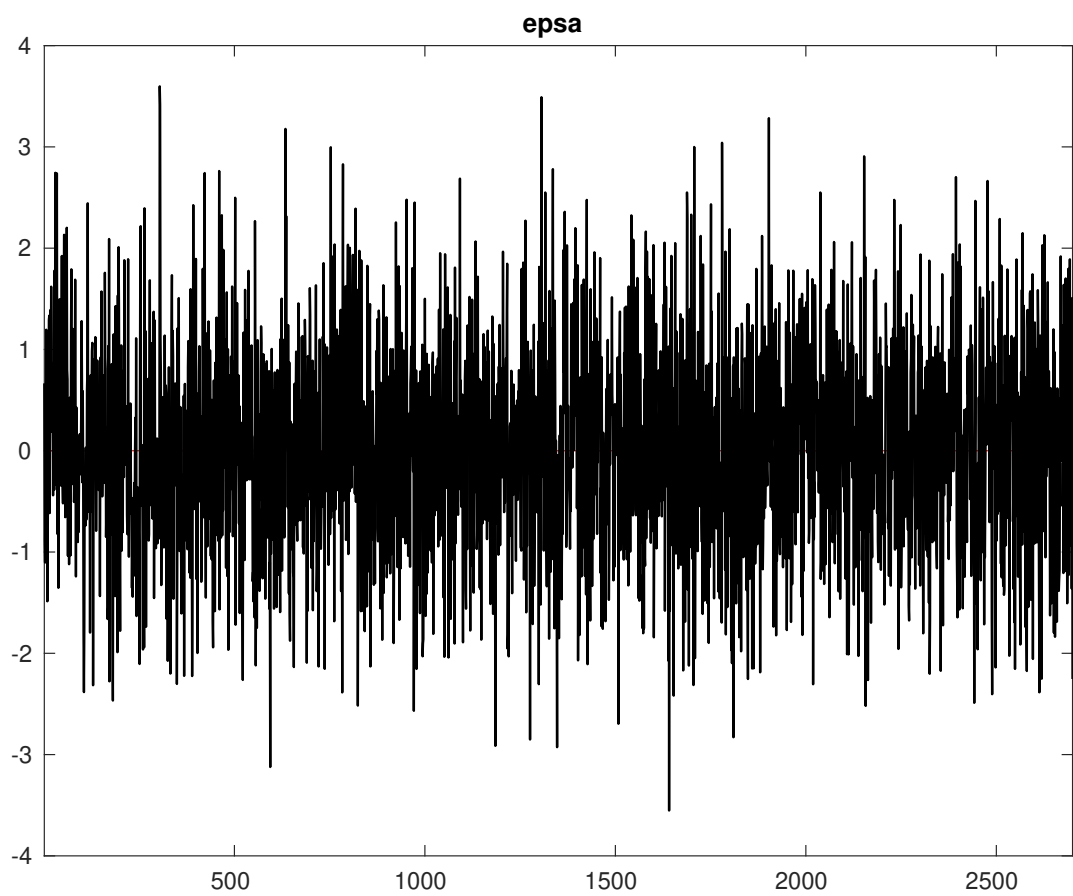


Figure 3: Smoothed shocks.

Table 1: MCMC Inefficiency factors per block

<i>Parameter</i>	<i>Block 1</i>	<i>Block 2</i>	<i>Block 3</i>	<i>Block 4</i>
α	389.853	358.072	350.244	287.766
r_A	75.719	65.148	63.164	71.410
δ	418.532	424.696	402.756	318.362
ρ_A	89.110	86.498	83.054	71.922
σ_A	248.332	228.402	207.512	244.290
θ	113.049	103.859	101.467	106.483
κ	449.317	455.720	383.850	460.091

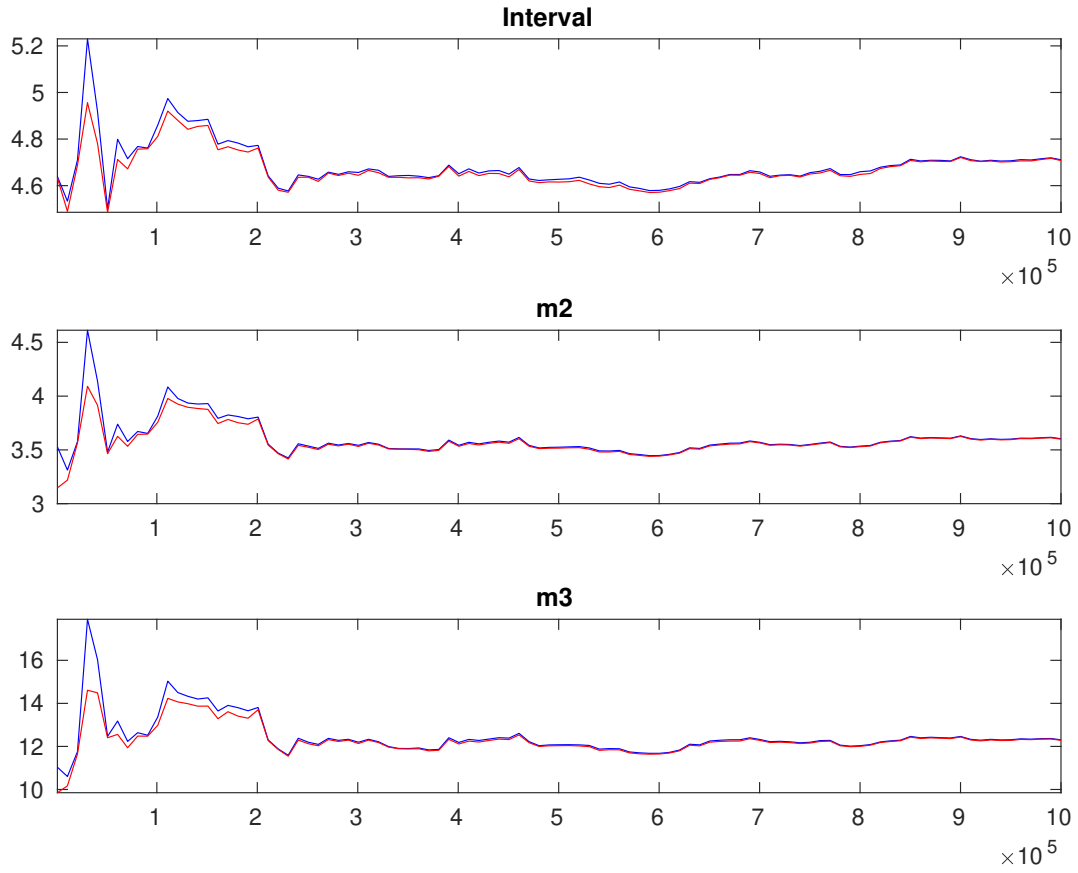


Figure 4: Multivariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments. The different parameters are aggregated using the posterior kernel.

Table 2: Results from Metropolis-Hastings (parameters)

		Prior			Posterior		
		Dist.	Mean	Stdev.	Mean	Stdev.	HPD inf HPD sup
α	norm		0.300	0.0500	0.308	0.0416	0.2398 0.3769
r_A	gamm		2.000	0.2500	1.999	0.2518	1.5758 2.3991
δ	unif		0.500	0.2887	0.026	0.0127	0.0057 0.0453
ρ_A	beta		0.500	0.1000	0.506	0.0170	0.4773 0.5333
σ_A	invga		0.600	2.0000	0.558	0.0482	0.4797 0.6367
θ	gamm		1.500	0.7500	1.484	0.7409	0.3729 2.5963
κ	gamm		2.000	1.5000	2.495	1.5529	0.2004 4.7636

Table 3: Results from posterior maximization (parameters)

	Prior			Posterior	
	Dist.	Mean	Stdev	Mode	Stdev
α	norm	0.300	0.0500	0.2946	0.0410
r_A	gamm	2.000	0.2500	1.9676	0.2479
δ	unif	0.500	0.2887	0.0199	0.0111
ρ_A	beta	0.500	0.1000	0.5059	0.0170
σ_A	invg	0.600	2.0000	0.5744	0.0578
θ	gamm	1.500	0.7500	1.0900	0.6389
κ	gamm	2.000	1.5000	1.4928	1.1792

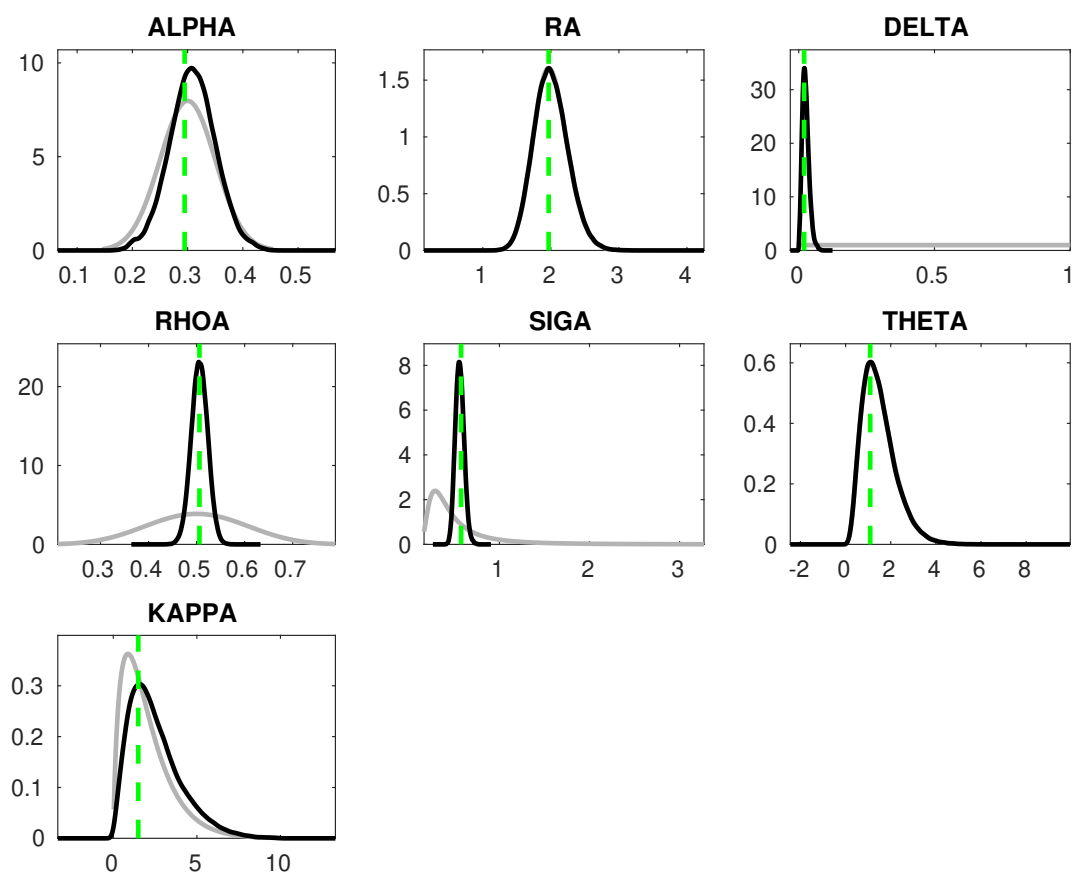


Figure 5: Priors and posteriors.

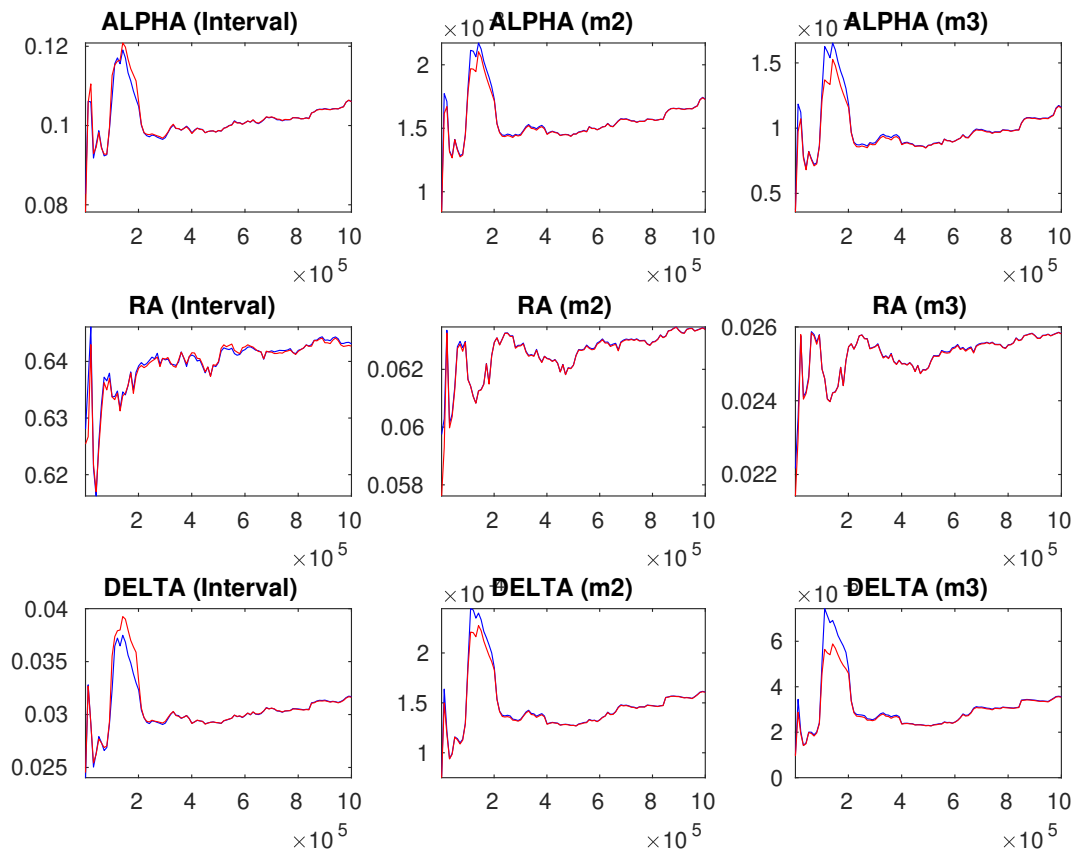


Figure 6: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

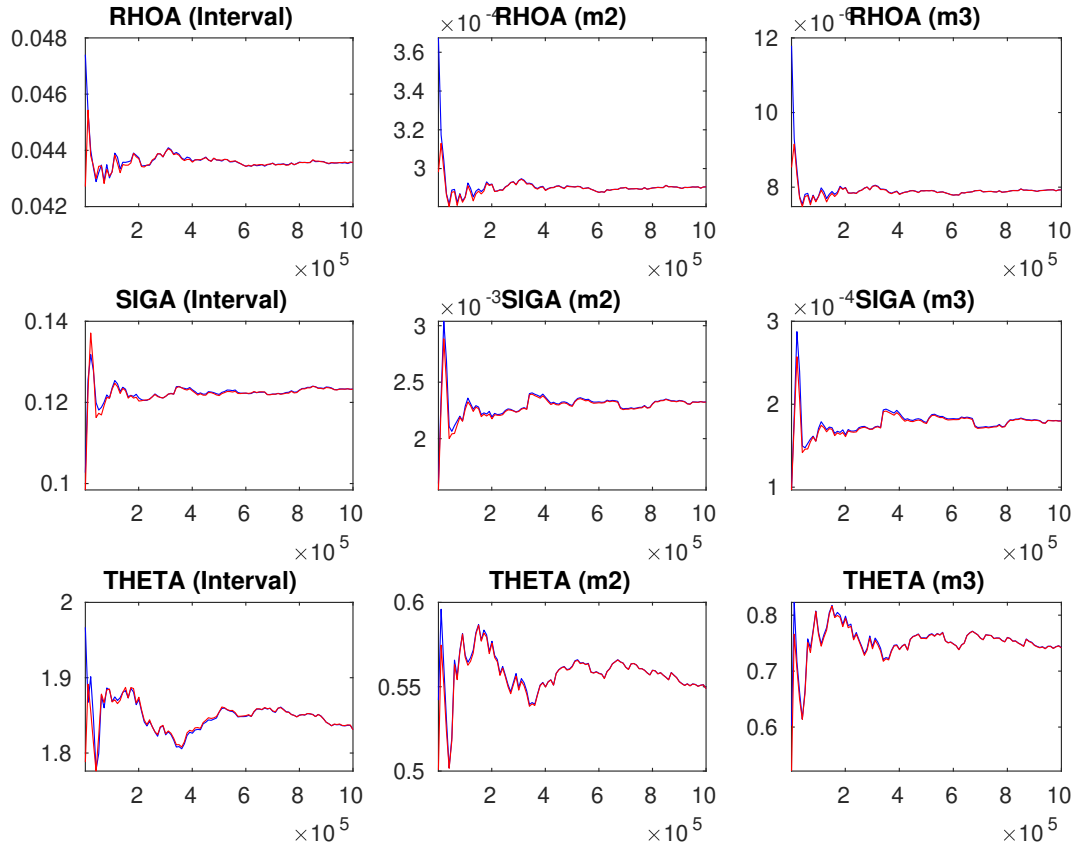


Figure 7: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third columns are respectively the criteria based on the eighty percent interval, the second and third moments.

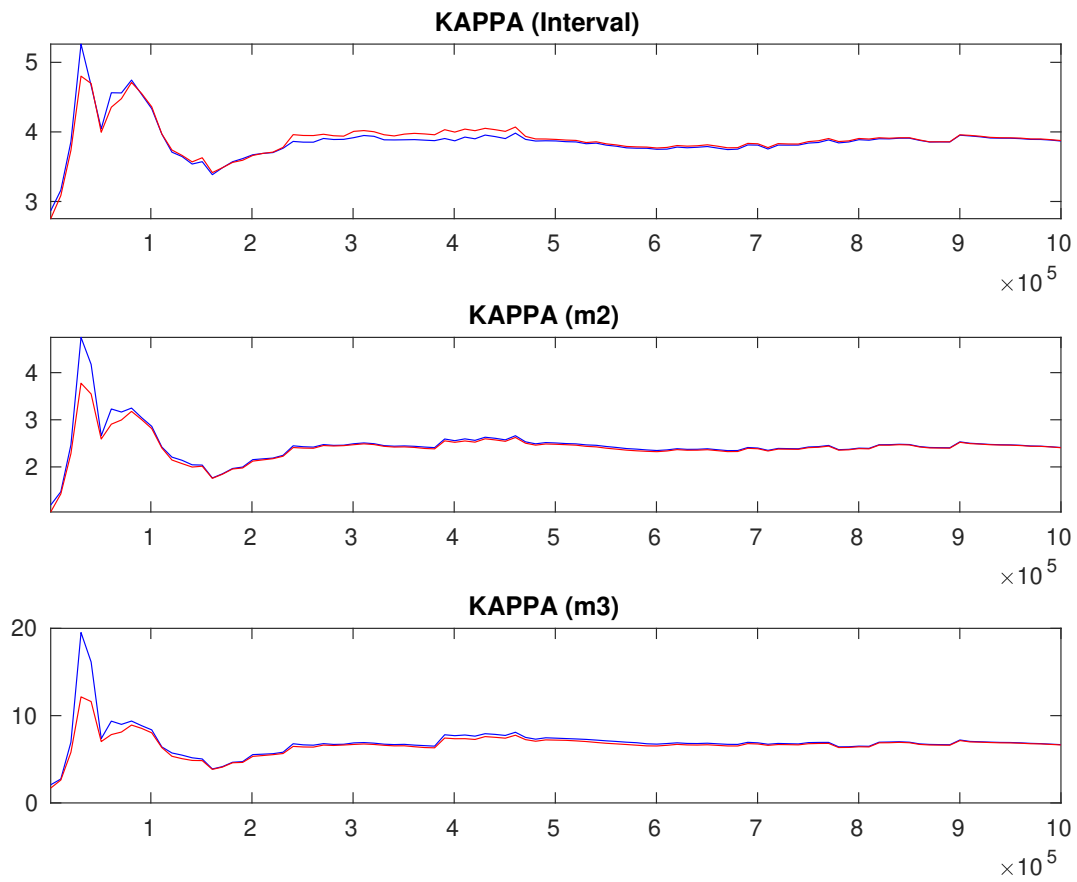


Figure 8: Univariate convergence diagnostics for the Metropolis-Hastings. The first, second and third rows are respectively the criteria based on the eighty percent interval, the second and third moments.