

Supplementary Material for “Differentiated uniformization: A new method for inferring Markov chains on combinatorial state spaces including stochastic epidemic models”

Kevin Rupp^{*1}, Rudolf Schill^{*†1}, Jonas Süskind^{*1}, Peter Georg², Maren Klever³, Andreas Lösch¹,
Lars Grasedyck³, Tilo Wettig², Rainer Spang^{†1}

¹*Department of Statistical Bioinformatics, University of Regensburg, 93040 Regensburg, Germany*

²*Department of Physics, University of Regensburg, 93040 Regensburg, Germany*

³*Institut für Geometrie und Praktische Mathematik, RWTH Aachen University, 52062 Aachen, Germany*

^{*}These authors contributed equally.

[†]Correspondence: Rudolf.Schill@klinik.uni-regensburg.de, Rainer.Spang@klinik.uni-regensburg.de

1 Convergence Diagnostics March

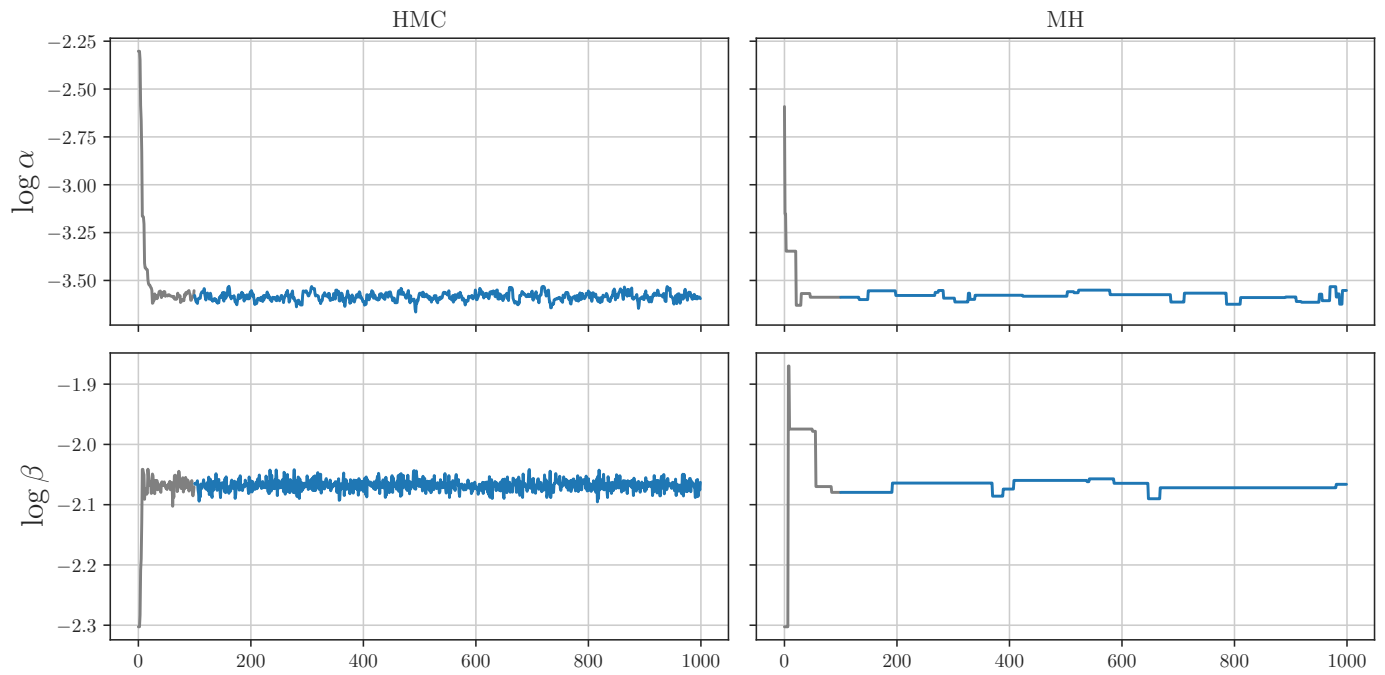


Figure S1: Marginal trace plots of α and β for March in a single representative chain for the HMC sampler and MH sampler. The first 200 sample points are discarded as burn-in and shown in grey.

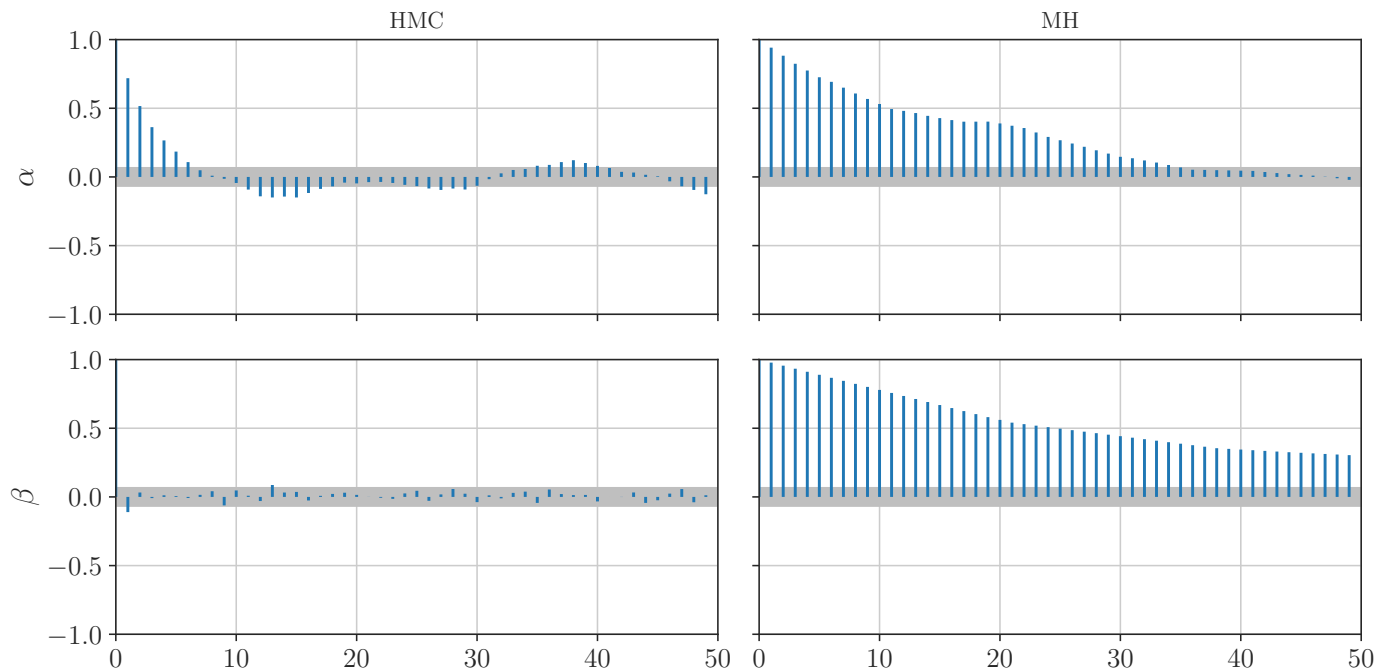


Figure S2: Marginal autocorrelation plots of α and β for March for the HMC sampler and MH sampler.

2 Convergence Diagnostics April

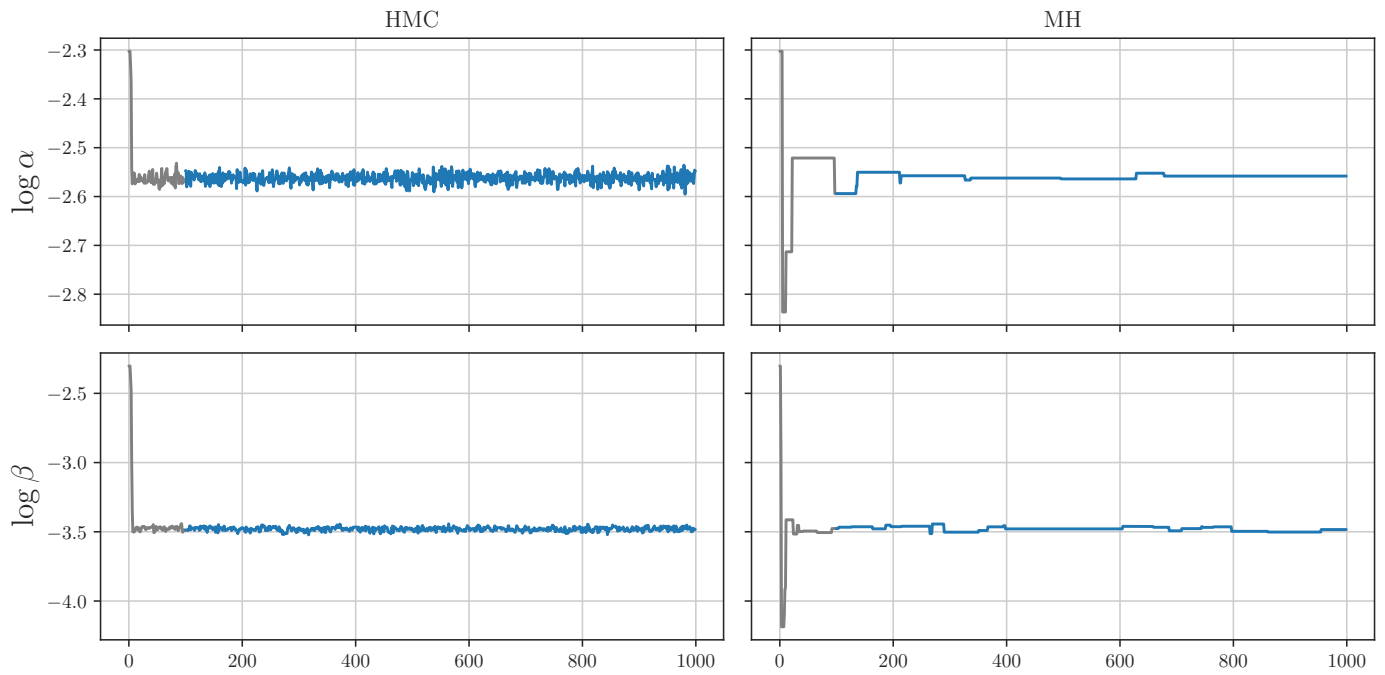


Figure S3: Marginal trace plots of α and β for April in a single representative chain for the HMC sampler and MH sampler. The first 200 sample points are discarded as burn-in and shown in grey.

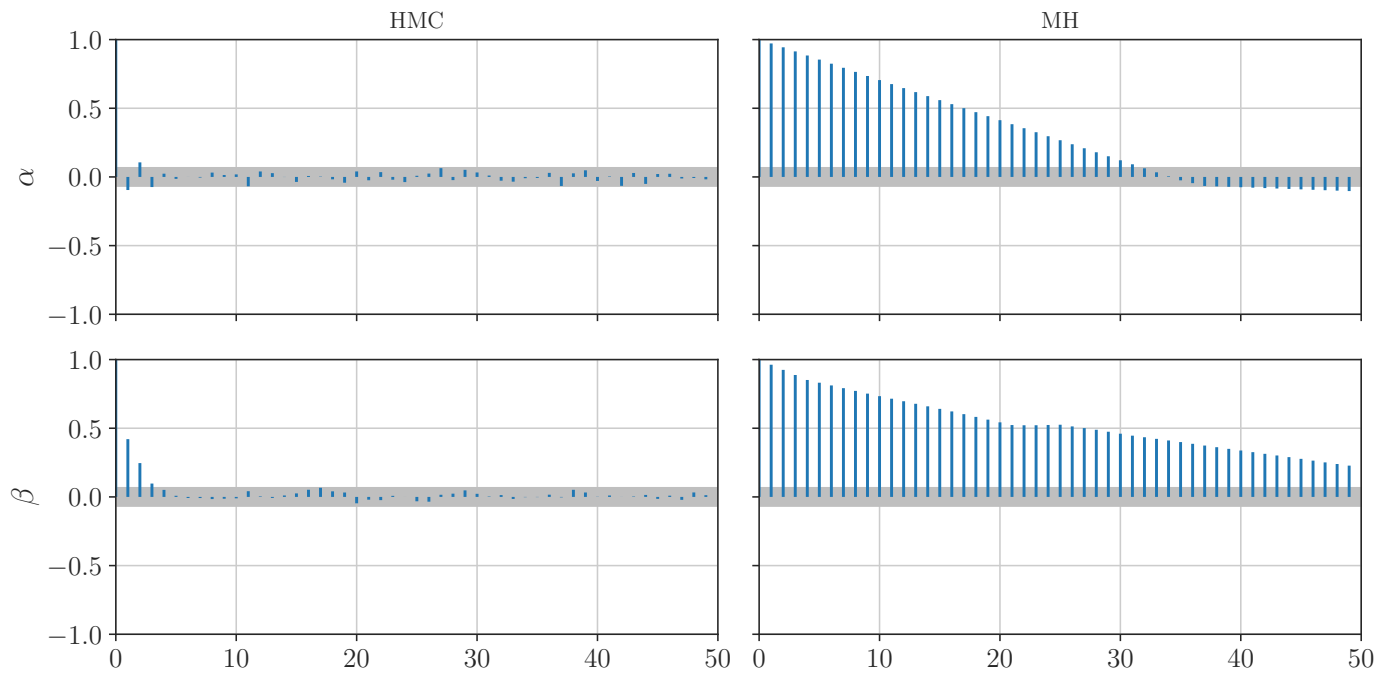


Figure S4: Marginal autocorrelation plots of α and β for April for the HMC sampler and MH sampler.

3 Convergence Diagnostics May

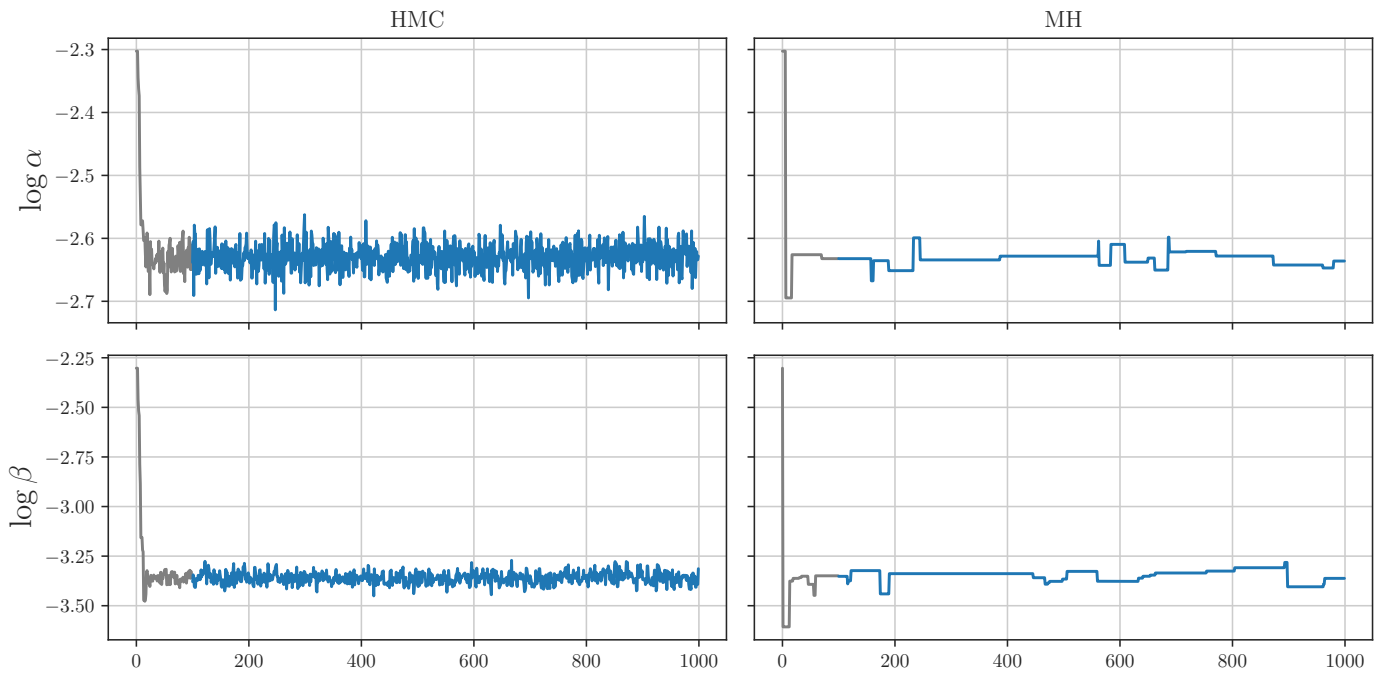


Figure S5: Marginal trace plots of α and β for May in a single representative chain for the HMC sampler and MH sampler. The first 200 sample points are discarded as burn-in and shown in grey.

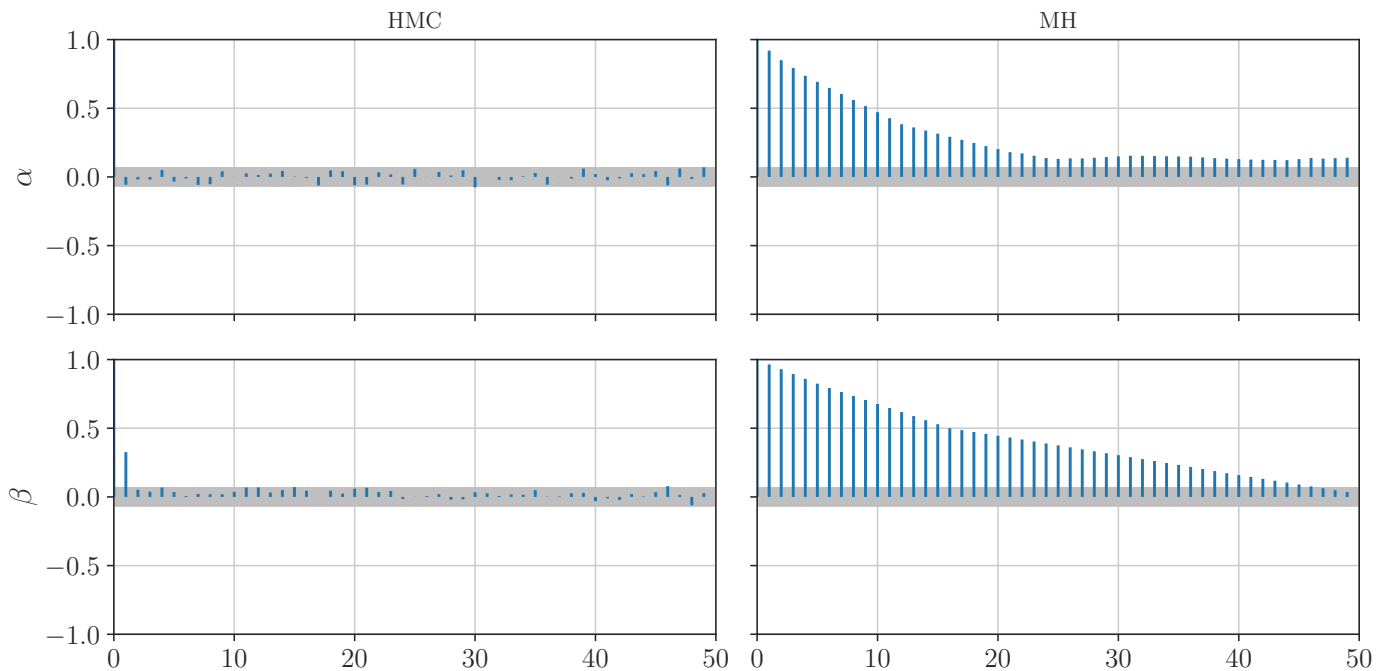


Figure S6: Marginal autocorrelation plots of α and β for May for the HMC sampler and MH sampler.

4 Convergence Diagnostics June

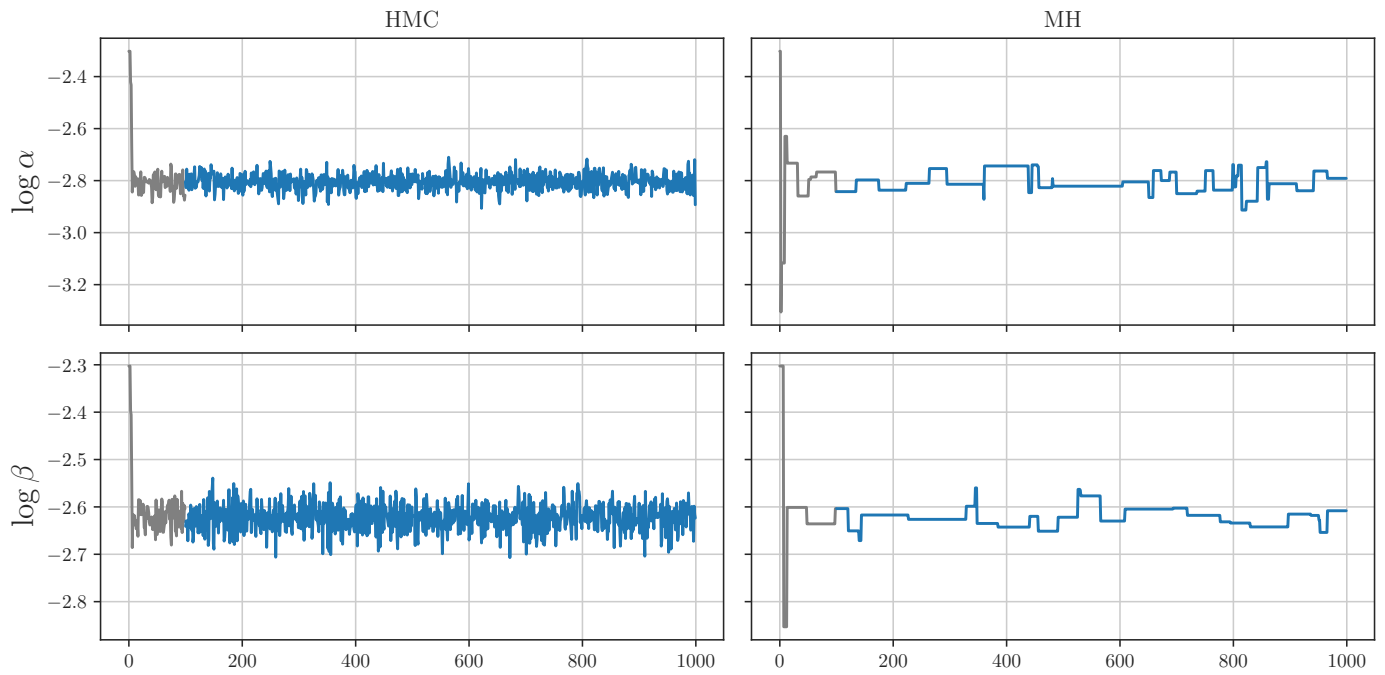


Figure S7: Marginal trace plots of α and β for June in a single representative chain for the HMC sampler and MH sampler. The first 200 sample points are discarded as burn-in and shown in grey.

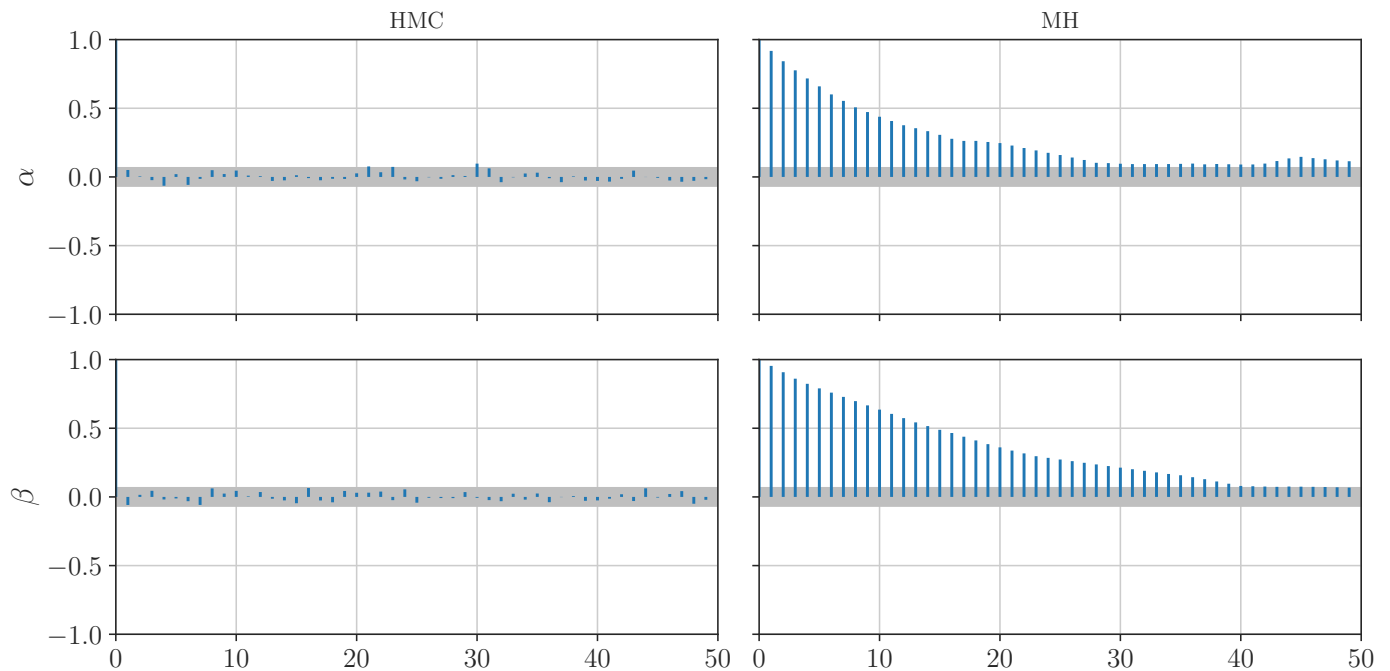


Figure S8: Marginal autocorrelation plots of α and β for June for the HMC sampler and MH sampler.

5 Convergence Diagnostics July

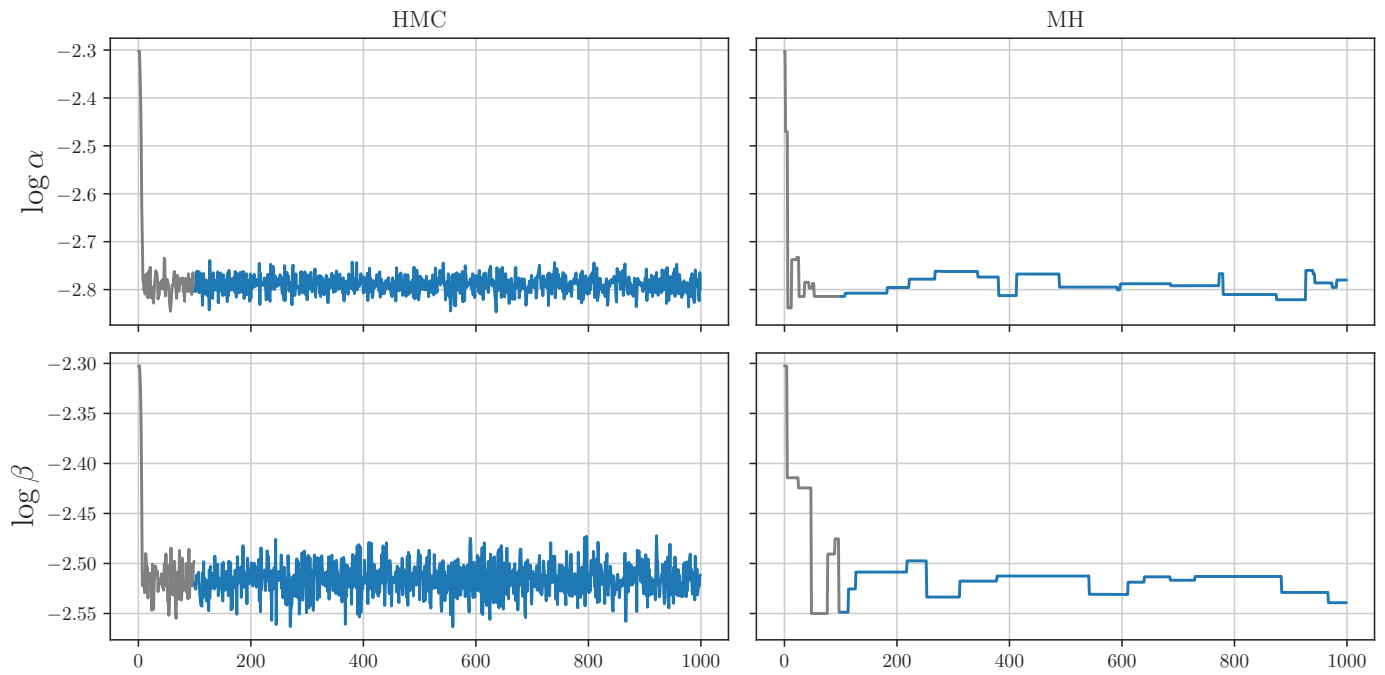


Figure S9: Marginal trace plots of α and β for July in a single representative chain for the HMC sampler and MH sampler. The first 200 sample points are discarded as burn-in and shown in grey.

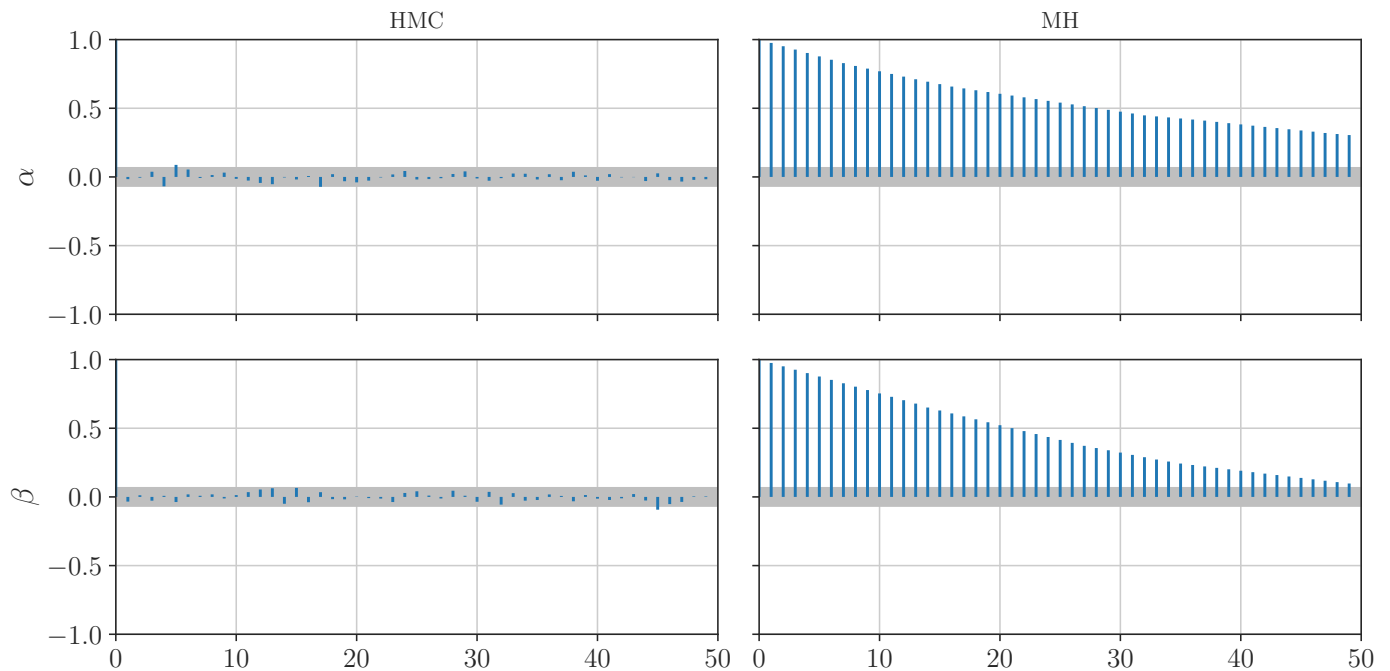


Figure S10: Marginal autocorrelation plots of α and β for July for the HMC sampler and MH sampler.

6 Convergence Diagnostics August

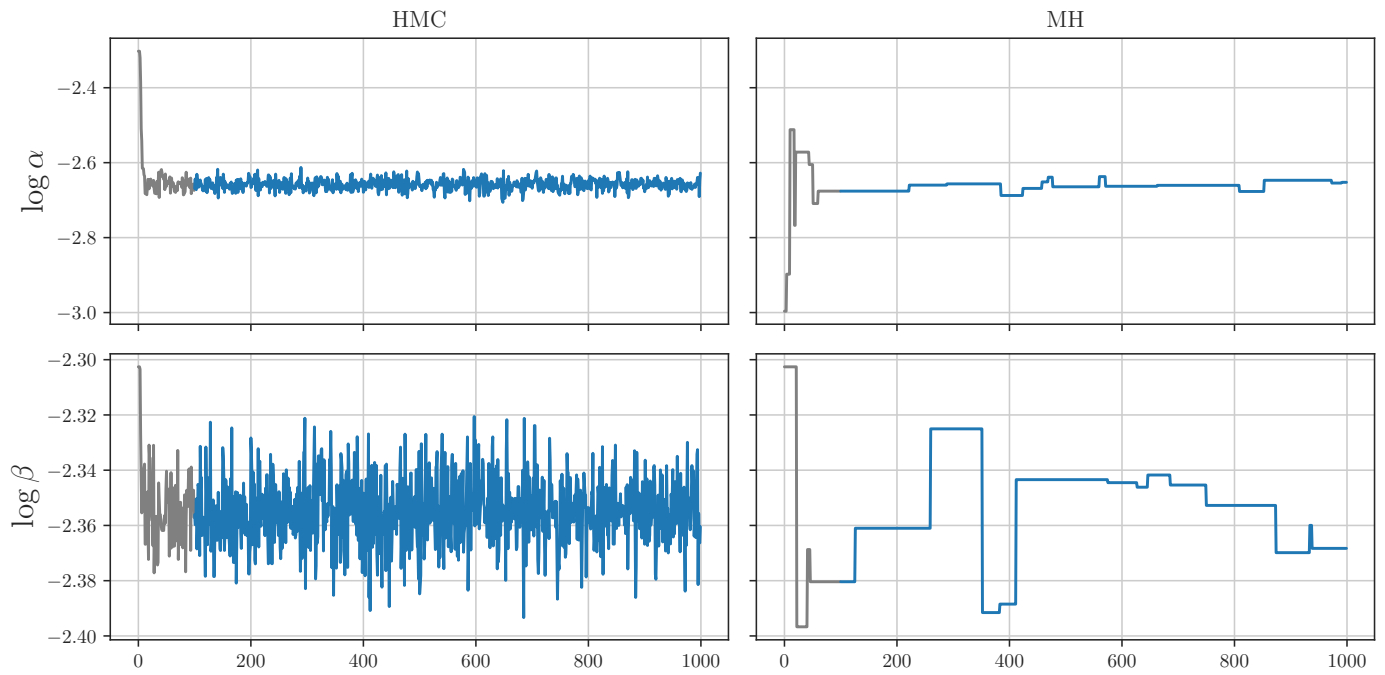


Figure S11: Marginal trace plots of α and β for August in a single representative chain for the HMC sampler and MH sampler. The first 200 sample points are discarded as burn-in and shown in grey.

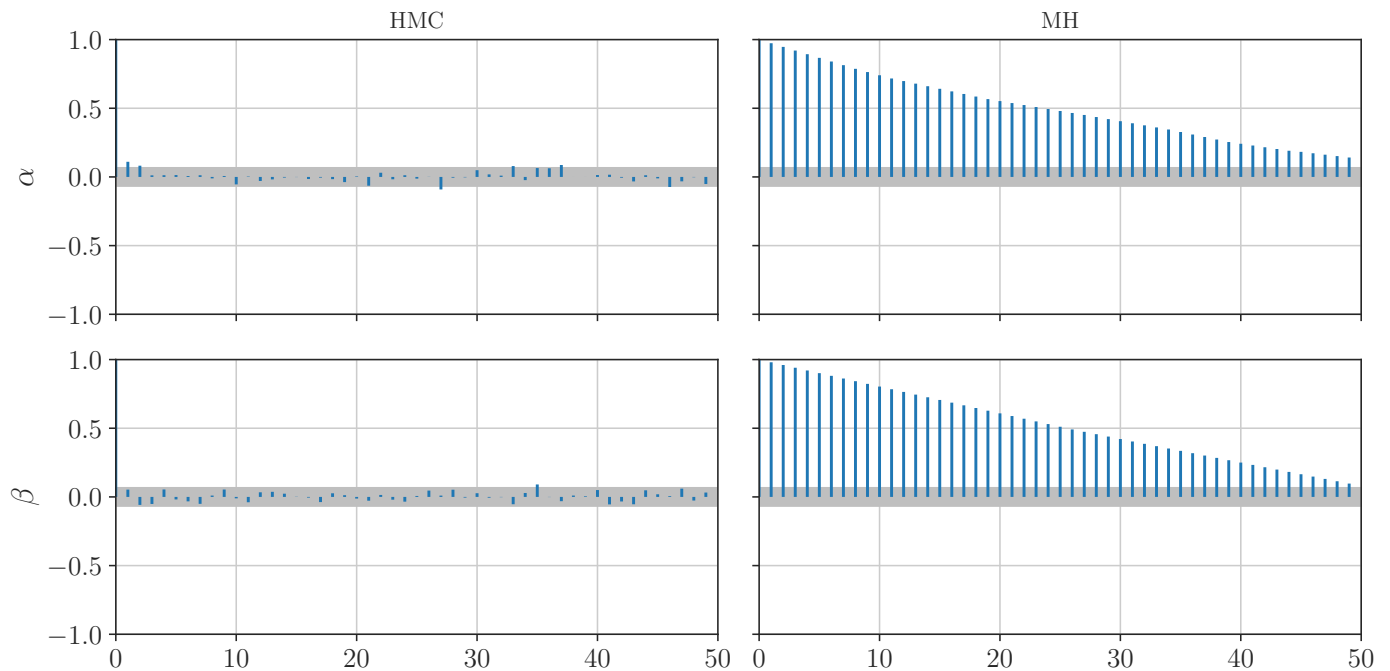


Figure S12: Marginal autocorrelation plots of α and β for August for the HMC sampler and MH sampler.