

What to do with curved distributions in MCMC

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Curved posterior distributions come up quite often in practice when running Monte Carlo Markov Chains (MCMC) on complex models. They can go undetected, and even if they are detected, often people just ignore them because there's very little guidance on how to deal with them in practice. If the distribution is particularly difficult, results may unknowingly be quite biased. So, I thought it would be useful to discuss what I would personally do (as an MCMC person) if I found that some of the posterior distributions from my MCMC sample were curved/L-shaped/difficult. There will be a lot of pretty pictures.

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