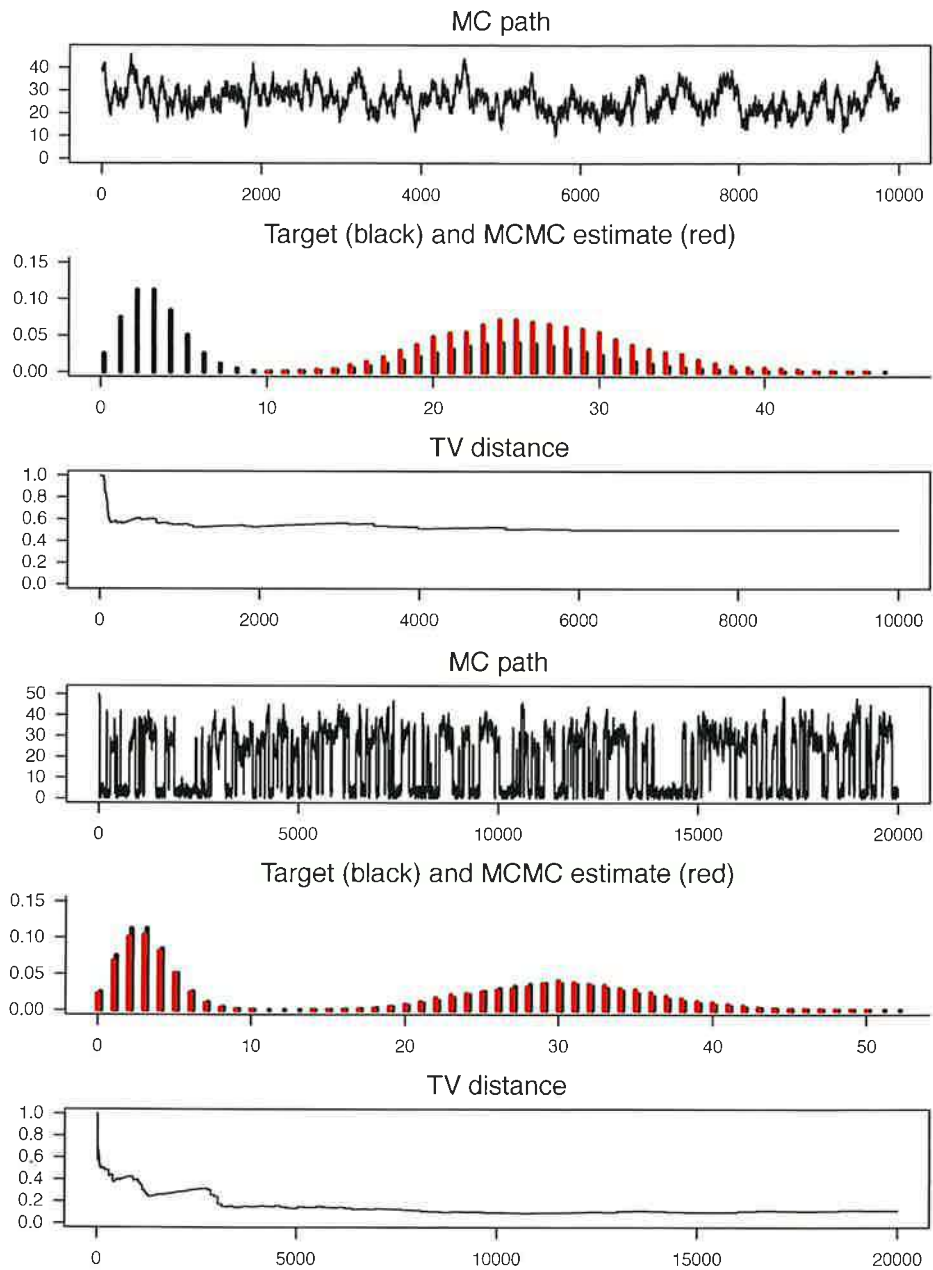


Top: the RW-MH seems to have converged. Bottom: a comparison of chains with different starting points reveals it has not.



Top: RW-MH trapped near a local maximum and unable to efficiently explore the state space (note the possible interpretation as a *quasi stationary distribution*). Bottom: a mixed kernel  $P = cP' + (1 - c)P''$  with  $P'$  a RW-MH and  $P''$  an independent MH with a fixed Geometric proposal allows the chain (on average once every  $1/(1-c)$  steps) to jump farther and overcome valleys between local maxima. The different *mixing*, i.e. the different way of exploring the space, is evident from the MC path.