Dear authors,

I think that both reviewers agree on the importance of your paper, but both underline some shortcuts that it is necessary to remove. A few of them are:

1) the necessity to be more explicit with the temporal and spatial correlations: taking both into account is really an important point
2) the definition of the priors
3) the number of samples for the MCMC algorithm, is there convergence? how is it checked?
4) a better taking into account of previous literature on MCMC calibration with tree-rings and overall a better explanation of the context of calibration
5) the validation of the method in a Bayesian framework, the ability to estimate sigma2w
6) evidence that the method better fits data with posterior medians than with prior medians (or with a more standard method)
7) the effect of noise and uncertainties on the estimation of parameters
8) a better evaluation of the limits of the method
9) in the conclusion, some discussion on future planned work is necessary

I am expecting now that you post a point by point reply to the comments of the reviewers and a new version where you clearly state the changes you made.

With my best regards

Joel