

Interactive comment on “Bayesian parameter estimation and interpretation for an intermediate model of tree-ring width” by S. E. Tolwinski-Ward et al.

J. Guiot (Editor)

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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

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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 σ_{2w}
- 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

Interactive comment on Clim. Past Discuss., 9, 615, 2013.