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CPD

9, C346–C347, 2013

Interactive Comment

## 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 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

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