Interactive comment on “Influence of orbital forcing and solar activity on water isotopes in precipitation during the mid and late Holocene” by S. Dietrich et al.

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This paper is important, because it shows that the complex information (about precipitation and 18O) derived from continental climate archives may have a feasible physical explanation. Or may be, the other way round, it shows a way how climate models may be modified to account for the puzzling, short term variability of Holocene continental winter climate as seen in continental archives. The good news is that models and archives are coming closer to each other. This success has certainly a seed in the very good collaboration in the DAPHNE Project.

Certainly, this paper is not meant to be the end of the story, but is just a first good hint. As expected, modellers are left with many open questions and uncertainties, which will have to be solved in future. Those studying archives are strongly suggested to determine if their samples contain summer or winter signals. They should not be mixed up.

Not being a modeller, I can hardly suggest modifications to the modelling procedure. My impression is that this paper is very well written.

The abstract is (very) carefully written. The discussion of the results reads more interesting. I wonder if the authors could add some more of this information in the abstract. Obviously, taking into account for the uncertainties of the model.