

Interactive comment on “A statistical method to validate reconstructions of late-glacial relative sea level – Application to shallow water shells rated as low-grade sea-level indicators” by Milena Latinović et al.

Anonymous Referee #2

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The authors present work on a new statistical approach in using sea level indicators derived from shells in the Hudson Bay region as a validation for their GIA model - German Paleo-Climate Modelling Initiative PalMod

While I can't comment on their statistical techniques, I noticed one major flaw in their approach. In calibrating radiocarbon ages of the shells the authors used the northern hemisphere terrestrial calibration curve - they are marine shells. They should be using the marine calibration curve and related to this would be the effects of marine reservoir corrections - surely this would impact the results and mean a reanalysis is necessary.

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From a writing perspective, the manuscript would benefit greatly from an improvement to the text. Notably, the descriptions of the indicative meaning of a sea level indicator used to create sea level index points/limiting constraints. I think there is some confusion here or at least it is not made clear.

The introduction, in particular, could do with re-writing - there is a lot of unnecessary information and the goals of the paper should be made clearer, earlier on.

Further comments and suggestions are provided in the annotated pdf.

Please also note the supplement to this comment:

<https://www.clim-past-discuss.net/cp-2018-50/cp-2018-50-RC2-supplement.pdf>

Interactive comment on Clim. Past Discuss., <https://doi.org/10.5194/cp-2018-50>, 2018.

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