

## ***Interactive comment on “GeoChronR – an R package to model, analyze and visualize age-uncertain paleoscientific data” by Nicholas P. McKay et al.***

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Received and published: 16 November 2020

Thank you to the reviewer for these comments. Please find reviewer comments in *italics* and authors' responses in **bold**.

*This ms is clearly written and makes a convincing case for standardizing paleo data for subsequent compilation studies. It shows a range of very helpful developments in compiling and compiling multiple records, enabling much more informed analyses than currently available. It is high time for the paleo-community to stop neglecting chronological uncertainties. I hope that this initiative will be taken up and used to make more robust paleoclimatic inferences.*

C1

*Pending just the addition of a few references, I suggest accepting this manuscript for publication.*

**We thank the reviewer for their constructive comments, and respond to specific suggestions below.**

*On p2, please also cite some earlier papers on comparisons between records that take into account chronological uncertainties: doi:10.1177/0959683607075857 doi:10.1016/j.quascirev.2008.07.009 doi:10.1016/j.quascirev.2010.11.012*

**We will better reference the discussion of earlier work on chronological uncertainty, thank you for the suggestions of additional papers.**

*For the comparison of Hulu and GISP2, it might also be useful to cite doi:10.1002/jqs.1330 which calculates 'event probabilities' within time-windows for individual records, and then calculates probabilities for synchronous reactions between two records as the product of these probabilities for each time window.*

**Agreed. We will add discussion of this paper in our expanded discussion of the Hulu/GISP2 comparison.**

*For section 5.4, a citation to a recent compilation paper in Science might also be helpful here: doi:10.1126/science.aay5538.*

**Thank you for the suggestion, we will add discussion of this paper.**

*Details p16 line 5, significant caption Fig. 8: the median*

**We will fix these typos.**

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Interactive comment on Geochronology Discuss., <https://doi.org/10.5194/gchron-2020-25>, 2020.

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