

Interactive comment on “A Global Compilation of U-series Dated Fossil Coral Sea-level Indicators for the Last Interglacial Period (MIS 5e)” by Peter M. Chutcharavan and Andrea Dutton

Anonymous Referee #1

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General Comments: The manuscript is well written, well structured and of an overall appropriate length. In my eyes, it is a very useful compilation for researchers working on this topic, but it will also be of value to workers not very familiar with the details of the topic. The way the methods, results and interpretations are presented is concise, but provides sufficient details on the individual aspects. I was able to follow the reasoning of the authors and the explanations for their approach as well as the implications for future research. Compilations like this one will always be important and help make data more approachable to researchers.

Following the guidelines provided for reviewers, I think the data is of high quality, the

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paper is appropriate to explain the database provided and I did not find any problems with the database itself. The length and structure of the article are appropriate, the language is consistent and precise and figures and tables are correct and of high quality. Overall, I would rate this manuscript "excellent" and think it deserves publication.

Specific Comments: The only specific comment I have is related to chapter 2.2. In lines 138 - 139, the wording could be improved. The way it is now could suggest that 238U is ingrowing, which is not the case. Maybe this could be made clearer. In addition, I feel like one or two references should be added, providing a reader with sources for more information about the method.

Technical Corrections: A short list of typos/inconsistencies: L. 90: "seeking" L. 124 - 125: It is not entirely clear to me what exactly was back-calculated. L. 158: Maybe add a reference to the respective chapter here. L. 180, l. 209: Reference to "Fig. 1" is wrong, this should be Fig. 3. L. 323: I think there is a word missing between "comparison" and "modern". L. 344: "because of GIA effects..." L. 373: not sure if I missed it, but I think the abbreviation "DT" was not defined L. 375: "topography may affect interpretations" L. 378: "GMSL", not "GSML" Throughout Chapter 3, it was sometimes inconsistent, when the authors chose to write out the numbers ("seven") or use numerals ("7"). Similarly, abbreviations (for instance "LIG") were sometimes used, sometimes not. L. 505: "Curaçao" L. 667 and l. 671: Is it "Esat (1999)" or "Esat et al. (1999)"?

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