

GMD review round 2

The authors have addressed my comments remarkably well with the following exceptions:

We thank the reviewer for their swift response and again for the thorough assessment of our manuscript. We are happy that our changes have addressed the reviewer's comments to their satisfaction. Below are our answers to the remaining issues.

On behalf of all co-authors,

Konstantin Gregor

- my comment on "There is unfortunately also little recognition of proper software development in academia [and little funding for software development]" is still valid for the first part of the sentence. The existence of high-profile journals like GMD or JAMES contradicts the author's statement.

This is true. We adapted the first part:

Although proper software development is gaining increasing recognition in academia through dedicated journals such as Geoscientific Model Development or Journal of Advances in Modeling of Earth Systems, securing adequate funding continues to be a challenge [...]

- I. 35: "which" has been duplicated

We removed it.

- the authors have still not corrected the confusion between the GCP (which is a Global Research Project of Future Earth and a research partner of the World Climate Research Programme) and its actions like the GCB, the GMB, and the GNOB. Most authors know that very well and I am surprised that they have left this confusion in the text despite my comment. The models here are only about GCP's GCB, not about the GCP in general. Note that this mistake even affects the new title.

Thank you for pointing this out! I don't know how that slipped again. Of course, it's the models from the GCB not GCP! We changed it in all places, including the title. The main adaption is the following, which is now also the single remaining mention of the Global Carbon Project:

The GCB (Friedlingstein et al., 2023), produced by the international research initiative "Global Carbon Project", is an annual report which offers detailed analyses of the carbon cycle and informs the assessment reports of the Intergovernmental Panel on Climate Change [...]

- Section A1.8 is out of scope as it is. My initial comment on this subject was truncated because the review website misinterpreted my text. Apologies for not spotting this.

We removed some details and reworded the section to focus on the validation aspect, such that it now fits better to the purpose of this appendix as stated in A1: “In the following, we list some notable examples of model testing, validation, and visualization [...]”.