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Authors' response letter: egusphere-2026-79

9 September 2026

Bastian Ott, ERSU

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Dear Gabriele Messori, dear anonymous reviewer #2,

We would like to sincerely thank you for recommending publication and for the last round of minor comments, which again were helpful and rather constructive. As suggested, the formatting of the figures was further improved and some smaller amendments were made to facilitate uptake and comprehension in the broader scientific community.

All changes to the manuscript are marked via track changes. If the reviewer prefers to work with .docx instead of .pdf files of the manuscript, please do not hesitate to contact us. Please also see a summary of relevant changes made to the manuscript below. We are confident that the manuscript now fully meets the high standards of Earth System Dynamics and are looking forward to your feedback.

Sincere regards,
Bastian Ott, Jonathan Donges, and Johan Rockström

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List of all relevant changes made to the manuscript

Abstract

- The abstract was partly rewritten based on the reviewer's suggestions in order to increase clarity and to facilitate understanding without relying too much on unnecessary jargon. The distinction between Holocene-like climate and anthropogenic climate change is still in the abstract as it is important for the framing and as requested by the other reviewer.
- More nuanced language is used when estimates are subject to uncertainty

Introduction

- Some sentences were clarified and simplified. Unnecessary complicated concepts like "fossil-fuel based metabolism" were paraphrased
- The formatting of Fig. 1 was aligned with the other figures
- Numerous small linguistic improvements

Outline and methods

- Slightly shortened, clarified, and simplified

Section 1

- Only some minor linguistic improvements

Section 2

- At the beginning of the section, a short explanation was added for the classification logic of multifunctional examples of climate adaptation such as buildings as this might be important context for readers
- Slightly shortened and simplified (especially the part on ozone depletion)
- More nuanced language is used when estimates are subject to uncertainty (e.g., initial/first-order instead of lower-bound estimate)
- Fig. 3-5 were further improved (especially the formatting of grid lines) and aligned with each other
- Numerous minor linguistic improvements

Section 3

- Some parts were simplified and shortened. Some additional sources were added to make the approximations more straightforward and easier to follow
- Numerous minor linguistic improvements

Discussion and conclusion

- Some sentences were clarified and simplified (e.g., on modelling ODS emissions) and unnecessary complicated concepts (such as World-Earth models) were paraphrased
- The order of some sentences was slightly rearranged to facilitate better understanding
- Fig. 6 was slightly improved (formatting of grid lines etc.)
- More nuanced language is used when estimates are subject to uncertainty (e.g., initial/first-order instead of lower-bound estimate)
- Numerous minor linguistic improvements

References

- All references were thoroughly checked again