

We would like to thank the reviewers for their further constructive feedback and appreciate their contribution to improving the article. Please see below for answers to the specific points raised in the reviewer comments. Reviewer comments are listed in italics and our responses are shown in bold font.

Reviewer 1

Maybe the author can clarify in the figure 4 caption under which time frame the “sensitivity” on x axis in Figure 4 was calculated, I guess based on data from the start of the simulation to the point of CO2 doubling? For one pixel the sensitivity might change under time under warming.

Reply: We have clarified in the figure 4 caption that the time frame under which the sensitivity was calculated is up to a doubling of CO2.

Reviewer 2

Lines 48-49. This remark seems a bit out of place in the introduction. I would suggest moving it to the section 2.2 as a justification for the abrupt detection algorithm used in this study.

Reply: As suggested lines 48-49 have been moved to section 2.2.

Table 1. Consider linking the references to the specific models. Also for the column “fire simulated”, why is the information missing for NorCPM1, TaiESM1 and SAM0-UNICON? At least based on one reference using these models (<https://www.nature.com/articles/s41558-021-01027-4>), this information seems to be available.

Reply: We have added the missing information into the “fire simulated” column using the suggested reference. With regards to linking references to specific models, this makes the table less clear and harder to read so we have left the references in the table caption, though they are organised in the order they are used within the table.

I suggest the authors use a permanent server with DOI for the code version using in this study (e.g., Zenodo), and link the DOI to the paper prior to the publishing.

Reply: A DOI has been included for the code used within the study.