

Interactive comment on “Projected changes in US erosivity” by M. Biasutti and R. Seager

Anonymous Referee #2

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General comments:

Downscaled RCP8.5 climate simulations (21 simulations) are used to assess the future rainfall erosivity over the US at the end of the century, in response to the acceleration of the water cycle. Several approaches are used in order to assess the epistemic uncertainty. On the other hand, the uncertainty from climate models (using the 21 simulations) is rather superficially addressed in Figs. 10-12. The paper is well written but some improvements are needed before publication.

Particular comments:

- Title: Should be more specific (e.g. "Projected changes in US rainfall erosivity").
- Tables: Many experiments are performed and the paper is not easy to read. A Table summarizing the experiments, the corresponding equations and Figures would be very

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helpful.

- P. 1471, L. 26-27: In the end, are your results valid for crops only ? Please clarify.
- P. 1476 (Section 2.1): The considered future period (2079–2099) is only given in the caption of Fig. 10. It should be mentioned here.
- P. 1479, L. 28 ("625 grid points"): Not mentioned before. Why 625 grid points ?
- P. 1488, L. 16-18: I am not convinced, because your analysis of the uncertainty from climate models is rather superficial.
- Figures: Figure 3 is cited in the text after Fig. 4. Figures 6, 8, and 9 are not cited in the text. Are these figures useful ? Uncommented figures should be removed.
- Conclusions: To what extent could this work be performed in other places of the globe ?

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