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Hydrology and Earth System Sciences
Discussions

Interactive comment on "Identifying robust bias adjustment methods for extreme precipitation in a pseudo-reality setting" *by* Torben Schmith et al.

Anonymous Referee #3

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Overall comment

Overall, I recommend a better embedding of the manuscript in the current literature, both in introduction (e.g. much work has been done on comparing different bias correction methods, which could be included) and the section 5.1 could easily be expanded.

I also would like to see expansion on why different methods give different results. There seems to be no analysis or discussion of what features of different methods contribute to greater or lesser skill. In my view the manuscript would be improved if this were addressed.

Minor comments

105-106: It is true that future model performance cannot be tested directly. However,

split-sample testing is probably the best tool we have for this, particularly when a suspected climate change signal is present in recent historical data.

Figure 2,3: I find the colour scale used in these figure inappropriate. Yes, extreme precipitation events are projected to increase, but the scale make the increases look quite alarming. A percentage scale, and/or scale starting at zero would be more appropriate.

372-373, this sentence describing relative errors is a little unclear, I would suggest writing "Relative errors from the OBS method are in the range of 20%-40%" or similar.

395 and elsewhere: I'd use "percentiles" rather than "fractiles", e.g. 95th percentile rather than 0.95 fractile

The writing is generally of a high quality, but with a few corrections needed, such as:

48: "GCMs are"

182: "statistics are"

I recommend a thorough proofread to catch any other corrections

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