gmd-2024-98 manuscript 'Robust handling of extremes in quantile mapping - "Murder your darlings"' by Berg et al.

[GMD - Review criteria (geoscientific-model-development.net)](#) :

1. Does the paper address relevant scientific modelling questions within the scope of GMD? Does the paper present a model, advances in modelling science, or a modelling protocol that is suitable for addressing relevant scientific questions within the scope of EGU?

Yes, it suggested and important fix to the MIDAS method, and the comments made are relevant for a wide range of bias-correction methods that deal with extremes and the problem of extrapolating these.

2. Does the paper present novel concepts, ideas, tools, or data?

Yes.

3. Does the paper represent a sufficiently substantial advance in modelling science?

Yes - important for climate adaptation efforts worldwide.

4. Are the methods and assumptions valid and clearly outlined?

Yes. The paper is directed at people who know what bias corrections are and who appreciate the special problem at the extremes, but is spot on for this audience.

5. Are the results sufficient to support the interpretations and conclusions?

Yes.

6. Is the description sufficiently complete and precise to allow their reproduction by fellow scientists (traceability of results)? In the case of model description papers, it should in theory be possible for an independent scientist to construct a model that, while not necessarily numerically identical, will produce scientifically equivalent results. Model development papers should be similarly reproducible. For MIP and benchmarking papers, it should be possible for the protocol to be precisely reproduced for an independent model. Descriptions of numerical advances should be precisely reproducible.

Yes. The updated MIADAS code is available online.

7. Do the authors give proper credit to related work and clearly indicate their own new/original contribution?

Yes.

8. Does the title clearly reflect the contents of the paper? The model name and number should be included in papers that deal with only one model.

Well, maybe stick 'MIdAS' in there somewhere, but that could mar the nice title!

9. Does the abstract provide a concise and complete summary?

Yes.

10. Is the overall presentation well structured and clear?

Yes.

11. Is the language fluent and precise?

Yes - a few typos etc noted in this review.

12. Are mathematical formulae, symbols, abbreviations, and units correctly defined and used?

NA.

13. Should any parts of the paper (text, formulae, figures, tables) be clarified, reduced, combined, or eliminated?

No. Sweet and short is fine.

14. Are the number and quality of references appropriate?

Yes.

15. Is the amount and quality of supplementary material appropriate? For model description papers, authors are strongly encouraged to submit supplementary material containing the model code and a user manual. For development, technical, and benchmarking papers, the submission of code to perform calculations described in the text is strongly encouraged.

The updated code is available online, so that's fine.