

**Reply on Referee's technical comments on cp-2021-129, "Simulated range of mid-Holocene precipitation changes to extended lakes and wetlands over North Africa" Specht et al.**

We want to thank Chris Brierley for his valuable and precise comments on the revised manuscript version. In the following, we will answer to these comments point-by-point.

I accept that "Saharan heat low" is a legitimate meteorological term, but I still think that a short explanation or citation for it would be helpful on L49 – for readers who are e.g. palaeoceanographers.

**Answer:** We added a brief explanation to L49 with 2 citations from literature.

You need to reconsider your data availability statement. It currently only discusses the availability of the data inputs for the simulations – rather than the outputs. You must provide at least provide the data that is plotted in your figures.

**Answer:** We added a link to the section "data availability" that makes the relevant data available for the readers. This includes a description of the model version, the boundary conditions, the run scripts, and the output data used in our study. Unfortunately, this additionally link is not visible in the latexdiff version for some reason.

I have also spotted minor changes that might be worth implementing before typesetting:  
- L9. I suggest that "the isohyets of" is removed. This technical term adds little to the sentence, but may put off potential readers.

**Answer:** We removed the term as suggested.

- Figure 2. Can you add something about the 200 mm/year reference line to the figure caption, please.

**Answer:** We made the requested addition to the figure caption.

- Figure 3. This is a lovely figure now, but the caption needs to editing. It currently leaves the identification of the various runs to panels e)-g). Can you also explain the black line in the hovmuller as that is important to your conclusions. Smooth -> smoothed.

**Answer:** We extended the description in the caption and we explained the meaning of the black line in plot a-d. We also changed "smooth" to "smoothed".

- L180. Lake Chad -> Lake Chad

**Answer:** We changed lake Chad to Lake Chad.