

## Luc Beaufort

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Objet: CP-2023-80 author response

12/04/2024

Dear Erin McClymont,

Thank you for evaluating our response to the reviewers' comments on our manuscript CP-2023-80.

Please find attached the revised manuscript and the track-change file. We carefully addressed all the corrections requested by the two reviewers. Throughout the process, we made adjustments to our response in two instances:

- -We agreed with reviewer 1 that it would be important to include a new figure illustrating the evolution of solar radiation during a precession cycle. Instead, we created a new Figure 2 depicting the declination of the sun and the position of the perihelion overlaid on a map of the simulated sea surface temperatures by latitudes. We believe this provides a clearer demonstration of the relationship between radiation and sea surface temperatures.
- -We ultimately decided not to implement the changes proposed by Reviewer 1 regarding the original Figures 3 and 4 in their technical comments. We believe that incorporating these changes would have significantly complicated the discussion.

We have addressed all other requested changes and greatly appreciate the precision and helpfulness of the two reviews.

We hope you will find our revisions satisfactory.

Thank you for your time in editing this work.

Best regards,

Luc Beaufort and Anta Sarr