

AUTHOR'S RESPONSE

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Evolution of continental temperature seasonality from the Eocene greenhouse to the Oligocene icehouse - A model-data comparison

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Rouen, January 13th, 2022

Dear Dr. Alberto Reyes and reviewer,

We sincerely thank you for your feedback (and for having worked on the evaluation of our manuscript both during summer and Christmas vacations).

We have modified the abstract by changing the sentence:

" Our simulations suggest that MATR changes across the EOT reflect the combined effects of pCO₂ decrease, Antarctic glaciation and increased continentality, which result in zonal to regional climate responses."

by

" Our simulations suggest that pCO₂ lowering alone is not sufficient to explain the seasonality evolution described by the data through the EOT, but rather that the combined effects of pCO₂, AIS formation, and increased continentality provide the best data-model agreement."

That's better, thank you for this suggestion.

Have a nice day and thank you again,

Bests,

Agathe, on behalf of all co-authors