

## Author's Response

Thank you for submitting your revised manuscript and carefully following the recommendations by the reviewer. The only remaining issue is the title of the manuscript. As a compromise, I propose the following title:

Reconstructing geographical boundary conditions for palaeoclimate modelling during the Cenozoic

This title would acknowledge that your approach is specifically adapted to the Cenozoic, as you note in your reply.

AC: The suggested title is a good compromise; it has been changed in the new manuscript. No further changes to the text have been made, so adding another marked-up version seems unnecessary.

The supplementary material now contains:

- A folder with the original .tex files and everything used to compile the .pdf, including the original figures;
- A ReadMe file with detailed instructions on how to reproduce the procedure;
- All of the files required in the workflow presented, as well as the Matlab scripts needed to carry it out;
- Some additional figures showing the 38Ma reconstruction using a stereographic projection.