

Author's response

A point-by-point response to the reviews can be found on EGU sphere Discussion: <https://egusphere.copernicus.org/preprints/2023/egusphere-2023-757/>

We provided a revised manuscript and revised supplement. Both files have been uploaded, including a track-changes file (latexdiff). Below we will highlight the main changes:

- The title of the manuscript has been changed,
- The order of the paragraphs in the Introduction has been changed, and some context previously in the Discussion was moved to the Introduction,
- The mean winter climate results have been updated to include mean precipitation response, and previous figures 2-4 have been merged into two figures.
- The modes of variability have been renamed (i.e. NPac-z is now just NPO),
- The results include a new subsection where the link between tropical convection and North Pacific jet and SLP variability is explained (includes some new results and dynamical explanation),
- The Discussion has been changed such that it is clearer what is interpretation based on the results presented in the manuscript, and what is discussion related to literature,
- Some interpretation of the results has been removed from the Discussion, and replaced by a discussion based on the new results in section 3.3.3,
- The discussion includes a new subsection briefly discussing the results of a simulation with mid-Pliocene boundary conditions and 560ppm CO₂, related to the additivity of responses to the mid-Pliocene boundary conditions and to elevated CO₂,
- The discussion includes a section on model performance in light of the reanalysis and compared to the PlioMIP2 ensemble,
- All figures have been changed to increase visibility and readability,
- The supplementary material has been updated with some additional results.

We believe that this revised manuscript is an improvement of the previous version. We hope that the reviewers and editor will consider the revised manuscript for publication in WCD.