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Wing-Le Chan,
Editor, *Climate of the Past*

Wing,

I apologize for the delay in returning this manuscript to you. While the changes were minor and accomplished very quickly, getting in touch with all co-authors for approval of changes was difficult.

We have resubmitted our manuscript after making minor revisions suggested by the reviewers. I summarize those changes below. The USGS has its own review process and the manuscript was also seen and reviewed by Thomas Cronin and Michael Toomey of the USGS Reston Office. The USGS has approved the manuscript.

I need to point out that we added three authors: Jerry Mitrovica, Robert Moucha and Alessandro Forte. I did not realize how large a role they played in the development of our new palaeogeography directed by David Rowley. All three have been involved in the revision and I believe their input greatly enhances the PRISM4 reconstruction.

Our sea level equivalent is based upon the ice volume estimates we use. These are in agreement with our new palaeogeography. Some of us felt our sea level equivalent being very close to the Miller et al. (2012) estimate was worth pointing out. Others of us do not believe the Miller et al. estimate is comparable since they did not use a dynamic topography correction. We revised the sea level section and removed the inference that our sea level estimate is comparable to Millet et al. (2012).

All four reviewers indicated a different map projection and possibly a polar view would be helpful. We switched to a Robinson projection wherever possible and also added north and south polar views to the maps in Figure 3.

We accepted all the minor text corrections suggested by the reviewers.

Reviewer 1 noted we did not use the new palaeogeography in figure 8; This has been corrected and we now use the new palaeogeography for all figures.

In response to the question about sea ice we have added the PRISM3 monthly sea ice

cover maps to the supplement.

Reviewer 2 suggested a different heading for section 3.4 and we adopted the new heading.

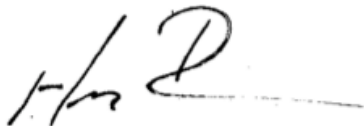
We added a table of soil albedo values to the supplement.

Reviewer 2 and one USGS reviewer asked about the high resolution PRISM4 time series work. As an example of the types of data we are generating we have included in the Supplement faunal census data and a number of palaeoenvironmental proxies developed for ODP Site 982.

We have increased the quality of Figure 6 and all the figures wherever possible.

We hope you find our revision acceptable for publication.

Best,



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