Response to PAGES Data Review Team – Climate of the Past

For this paper:

All papers submitted to "Climate of the Past" must include a Data Availability section that details the location of the data that were used as input to the study, including previously published data that were used for comparison purposes, and the data that were generated by the study.

Input Data (used for analyses) – Data citations are needed for all time-series data that were used in this study. Add a column to Table S1 to list the persistent identifier (doi or URL from NOAA-Paleo) for each record. We recommend that Table S1 be moved to the main text so that data generators are acknowledged more prominently. Change the "researcher" column in Table S1 to "reference" and include the bibliographic citation in the References. If the data are not already available in long-standing data repositories, then we ask the authors to work with the data generators (if possible) to rescue the data and transfer them along with essential metadata to a data repository (NOAA-Paleo, PANGEA, or other registered at re3data.org). Once curated in a pubic repository, each dataset will be assigned a persistent identifier, which is then cited in this paper to credit the original data generators, in addition to the bibliographic reference.

The suggested changes were made to the table and it has been moved to the main text out of the supplement. All relevant doi/url were added to each record where possible. Some data sets were received directly from the author and not available in an online data repository. Attempts are being made to make the data available to all.

In this study, the input data were modified for some records to adjust the age scale, and all time series were interpolated at 2-kyr intervals. To enable others to reproduce the primary results of this study, and to avoid losing this excellent compilation of proxy data, please transfer this entire modified dataset to a public repository, along with basic metadata for each record. The compilation should include the data and bibliographic citations for each of the constituent records, and the package (with its own persistent identifier) should be attributed to the authors of this study as an outcome of this synthesis.

The input data for our analysis were compiled into a single file with metadata descriptions and proper references, and uploaded to Pangaea. The data set is currently being checked and processed.

Input Data (used for comparison) - Please cite and reference the source of the insolation curves shown in Figs. 1a,b,c, 14a. Because these data are used to compare rather than generate the primary outcome comes of the study, we suggest that a bibliographic reference to the data would suffice, although the authors are encouraged to include a data citation in addition. If, however, the time series were generated by the authors using online software, then both the data behind the calculator and the developer of the software should be cited.

The insolation curves were calculated using the Analyseries program and is now referenced in the bibliography as:

Paillard, D., Labeyrie, L., and Yiou, P.: Macintosh program performs time-series analysis, Eos Trans. AGU, 77, 1996.

Proper citations have also been added to the figure captions.

Output Data (analytical) – Please prepare and upload to a registered data repository all of the data and metadata resulting from the primary analyses in the manuscript. This includes the time series of record stacks (Fig. 9), and derived temperature gradients (Fig. 12). Once assigned a persistent identifier (doi or URL from NOAA-Paleo), include the data citation for these files in the manuscript. Most data repositories use landing pages that collect the individual data files under a single identifier.

The input data for our analysis were compiled into a single file with metadata descriptions and proper references, and uploaded to Pangaea. The data set is currently being checked and processed.

Output Data (statistical) – For the results of the statistical analyses including PCs (Fig. 4, 6b, 7, 8, 13a) spectral analyses (Figs. 3, 5) and d13C contour plots (Figs. 11, 15), please ensure that the statistical packages that were used to produce the plots are cited and fully referenced in the manuscript with sufficient details so that the plots could be replicated in future. We encourage the authors to upload the results of the statistical analyses to a repository (as above), but leave it to them to determine the likely future utility of the digital result of the statistical analyses relative to the effort involved to curate them.

We note that the ARAND software package for our statistical analyses has been cited as:

"Howell, P., Pisias, N. G., Ballance, J., Baughman, J., and Ochs, L.: ARAND Time-Series Analysis Software, Brown University, Providence, RI, 2006."

Ocean Data View that was used to create the contour plots is now cited as:

"Schlitzer, Reiner: AWI's Oecan Data View (ODV), Alfred Wegener Institute for Polar and Marine Research, 4.5.0."