

Interactive comment on “A spatio-temporal reconstruction of sea-surface temperatures in the North Atlantic during Dansgaard-Oeschger events 5–8” by Mari F. Jensen et al.

PAGES Data Review Team

darrell.kaufman1@gmail.com

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The PAGES Data Stewardship Integrative Activity seeks to advance best practices for sharing the data generated and assembled as part of all PAGES-related activities. The CP Special Issue, “PAGES Young Scientists Meeting 2017” is part of this PAGES activity. The co-editors of the Special Issue are reviewing the data availability within each of the CP-Discussion papers in relation to the CP data policy (https://www.climate-of-the-past.net/about/data_policy.html) and current best practices. The editor team is making recommendations for each paper, with the goal of achieving a high and consistent level of data stewardship across the Special Issue. We recognize that an additional effort

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will likely be required to meet the high level of data stewardship envisaged, and we appreciate the dedication and contribution of the authors. This includes the use of Data Citations (see example below). Authors are also strongly encouraged to deposit significant code into a suitable repository and to cite it using a Data Citation.

We ask authors to respond to our comments as part of the regular open interactive discussion. If you have any questions about PAGES Data Stewardship principles, please contact any of us directly. Best wishes for the success of your paper.

YSM Special Issue editor team

D.S. Kaufman, M.F. Loutre, M.N. Evans, S.C. Fritz, C. Tabor, H. Plumpton, R. Barnett, Y. Zhang, E. Razanatsoa, and E. Dearing Crampton Flood

For this paper: (1) Research input data – selected 14 marine sediment cores (a) Include Data Citations or URL or doi links (not just bibliographic references) for the foraminifera assemblages behind each of the 14 proxy records listed in Table 1. (b) Submit the new SST reconstructions, including estimates of uncertainty, to a public repository. If the assemblage data have not been archived before, the authors should work with the data generators to obtain a Data Citation with a persistent identifier (URL or doi) for the dataset. (c) Add a Data Citation or URL link for access to the SST calibration dataset. It is not discoverable through the currently cited Kucera et al., 2005 paper.

(2) Research input data – climate model simulations Deposit the essential climate model simulations that have not already been archived into a trusted data repository and include the link or citation in Table 2. For CCSM4 simulations, please add a sentence to the Data Availability section with instructions on how to access the data.

(3) Research output data – SST field reconstructions Apart from the new site-level SST reconstructions (above Comment 1), the primary contribution of this study is the

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spatially distributed SST reconstruction over the North Atlantic as illustrated at time slices using different model simulations in Figs 7-9. For intelligent reuse of such primary results, please submit to a public repository the gridded SST values over the reconstruction domain at some reasonable time step (including DI-8 and DS-9).

(4) Research output data – other climate variables In addition to the SST field reconstruction (above), this study includes an analysis of other climate variables that are linked to SST, namely sea-ice cover and AMOC. We encourage the authors to deposit these datasets, which were used to draw conclusions about these climate variables along with the SST field reconstruction.

What is a “Data Citation”? Data Citations track the provenance of a dataset giving credit to the data generator; this is in addition to any references to publications where the data are described. Data Citations are used in the text (or tables) alongside and in the same way as publication citations. In the Reference list, they include: Creators, Title, Repository, Identifier, Submission Year. More information about Data Citations is here: <<https://www.datacite.org/mission.html>> Here is an example of text and corresponding citations (using CP punctuation style):

“The PAGES2k Consortium (2017a) assembled a large global dataset of temperature-sensitive proxy records (PAGES2k Consortium, 2017b). Among the records is the paleo-temperature reconstruction from Laguna Chepical (de Jong et al., 2016), which was described by de Jong et al. (2013).”

References

de Jong, R., von Gunten, I., Maldonado, A., and Grosjean, M.: Late Holocene summer temperatures in the central Andes reconstructed from the sediments of high-elevation Laguna Chepical, Chile (32° S), *Climate of the Past*, 9, 1921-1932, 2013.

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PAGES 2k Consortium: A global multiproxy database for temperature reconstructions of the Common Era, *Scientific Data*, 4,170088, 2017a.

PAGES 2k Consortium: A global multiproxy database for temperature reconstructions of the Common Era, version 2.0.0, figshare, <https://figshare.com/s/d327a0367bb908a4c4f2>, 2017b.

Interactive comment on *Clim. Past Discuss.*, <https://doi.org/10.5194/cp-2017-103>, 2017.

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