

## Interactive comment on "Arctic hydroclimate variability during the last 2000 years – current understanding and research challenges" by Hans W. Linderholm et al.

## D.s Kaufman

darrell.kaufman@nau.edu

Received and published: 5 May 2017

The PAGES Data Stewardship Integrative Activity seeks to advance best practices for sharing data generated and assembled as part of all PAGES-related activities. As part of this activity, a team of reviewers has been constituted for the "Climate of the Past 2000 years" Special Issue. The data team is reviewing the data handling within each of the CP-Discussion papers in relation to the CP data policy and current best practices. The team has identified essential and recommended additions for each paper, with the goal of achieving a high and consistent level of data stewardship across the 2k Special Issue. We recognize that an additional effort will likely be required to meet the high level of data stewardship envisaged, and we appreciate dedication and contribution of the

C.

authors. This includes the use of Data Citations (see example in supplement). 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,

2k Special Issue Data Review Team (Darrell Kaufman, Nerilie Abram, Belen Martrat, Raphael Neukom, Scott St. George) and ex-officio team members (Marie-France Loutre, Lucien von Gunten)

Essential additions for this paper:

- (1) Table 1: Add Data Citations for all of the proxy datasets listed in this table and shown in Fig 11. For those data not already in a public repository, submit essential metadata and data, and add the corresponding Data Citations.
- (2) Table 2: List the proxy climate time series shown in Figs 8, 9, and 10, along with a corresponding Data Citations. Add the original publication citations for each record in Table 2 (like in Table 1).
- (3) Submit the time series of the resulting hydroclimate composites (Figs 14, 16 and 19) for archival and include the data citation.

Possibly essential, depending on source of the data:

(4) If the data shown in Fig 6 are based on chronologies already archived and easily accessible in the ITRDB, then all is well. If instead the chronologies from the ITRDB were detrended or otherwise modified by the authors, then those new chronologies must be submitted for archival as part of this study. Either way, please clarify the data methods used to create Fig 6.

## Recommended:

(5) Contrary to what is shown in Table 2, many of the records appear to have been

taken from Ljungqvist et al.'s global compilation. Essential metadata that are needed for intelligent reuse of the data in new synthesis are missing from the Ljungqvist et al. compilation, which undermines a primary goal of the PAGES data stewardship activity. We strongly encourage the authors to use the opportunity of this synthesis paper to start with the original datasets and to submit a more complete set of metadata for archival. We note that the Ljungqvist et al. dataset is truncated at 850 AD (the time frame considered in their study). For the current study, the full time series should be used and archived.

Please also note the supplement to this comment: http://www.clim-past-discuss.net/cp-2017-34/cp-2017-34-SC1-supplement.pdf

Interactive comment on Clim. Past Discuss., doi:10.5194/cp-2017-34, 2017.