Clim. Past Discuss., https://doi.org/10.5194/cp-2017-157-AC5, 2018 © Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.



## Interactive comment on "Technical Note: Open-paleo-data implementation pilot – The PAGES 2k special issue" by Darrell Kaufman and PAGES 2k special-issue editorial team

Darrell Kaufman and PAGES 2k special-issue editorial team

darrell.kaufman@nau.edu

Received and published: 7 April 2018

We thank the reviewer for putting our data stewardship activity in context of the widespread push to implement open data practices and for recognizing the value of our community based effort to trial such practices as part of the publication process. In our revisions, we will place our implementation project into this broader context by pointing out some of the major initiatives that now underway and expanding across the earth sciences to promote open data principles. Prominent among these is the "Enabling FAIR Data<sup>1</sup>" project, an international effort that is moving forward earnestly,

C<sub>1</sub>

with many Earth science journals pledging to shift from open data policies that are 'recommended' to those that are 'required.'

We agree that our statement, "publication is the ideal stage of a project for concerted data management" is only partly correct; sound data management starts with the design of the study and continues throughout the lifecycle of a research project. This point was also expressed in the comments by Bothe, Simpson and Williams. We will rewrite this statement to put the publication step into a larger context. We maintain that publication is a critical, high-value stage for data stewardship and we will strengthen our assertion by adding the following points to the manuscript:

- (1) As stated by the reviewer, "Publication is a stage when compliance with leading practices or standards can be enforced..." While a comprehensive solution includes incentives and support, as well as enforcement, only funders and publishers have real power to require open data policies.
- (2) Although preparing data for archival as soon as they are generated is ideal in many situations, publication is the final pragmatic point in a study to transfer the data to a repository. Familiarity with the data and the incentive to archive them often fade following publication as researchers move on to new projects.
- (3) Authors striving to enhance the impact and visibility of their publications are receptive to input from peer reviewers and editors who can help guide authors toward making their data more easily discoverable and reusable.
- (4) For many studies, especially in paleoclimatology, the value of the underlying data is strongly related to their interpretation. The most important data and metadata are typically those that are associated with a publication that describes them. Peer review also can aid the interpretation and can help authors to identify the essential metadata. Encoding peer-reviewed expert knowledge into an archived dataset is not possible prior to publication, but is necessary to facilitate the intelligent reuse of the data.

<sup>&</sup>lt;sup>1</sup>http://www.copdess.org/home/enabling-fair-data-project

(5) Most paleoclimate studies compare their results with those from related study areas or data types. Most often in paleosciences, the digital data from the previously published studies are not available through public repositories. If the comparison with previous studies is the basis for a major conclusion, such as for a synthesis study, the authors of the succeeding publication can serve as data stewards by facilitating the transfer of data from previous publications to a public repository, with credit given to the original data generator. As part of this data rescue effort, authors can attach relevant metadata to valued previously published datasets to enable their discoverability and intelligent reuse.

Interactive comment on Clim. Past Discuss., https://doi.org/10.5194/cp-2017-157, 2017.