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

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Reducing data loss in paleo-environmental sciences
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Most articles published today that report paleo-environmental data do not include ready access to the underlying data and essential metadata. This doesn’t need to be the norm. The infrastructure is in place to store, access, attribute credit and reanalyze data, and open data policies are already established by funders, journals, reposito-ries and professional scientific organizations. Accelerating the transition to open data
sharing will require more support, training and models of sound data stewardship. In addition, we need community endorsed guidelines to: (1) determine which data and metadata are essential to archive; (2) know which repositories, standards and format to use; (3) apply best practices when using third-party data and software; and (4) protect first-use rights. As journal data policies switch from ‘recommended’ to ‘required’, editors and authors need consistent guidelines and channels to connect directly to organized communities of international specialists who can provide responsive guidance and quality control at the valuable publication stage. It will take a major effort and, most importantly, a commitment to shift standard practices to those that reduce data casualties. The practices won’t be perfect at the outset, but they are necessary steps. By working together, we can harness more power from our data resources, and we can do it sooner.

The lessons learnt from the PAGES2k open data implementation project, including this interactive discussion, are presently being applied to the PAGES Young Scientist Meeting special issue of this journal. The compendium features articles by early career researchers (ECRs) and is co-edited by a team of ECRs in consultation with senior co-editors. Like the PAGES2k special issue, each article presents a different use-case for determining how to implement data policies. For readers interested in the types and level of guidance provided to authors, the latest data review comment is here, and all data review comments are available through CP’s interactive discussions for both special issues.

From my experience with the PAGES YSM special issue, ECRs are eager to practice open data principles. Rather than speaking for them, however, I have asked the new PAGES Early-Career Network for suggestions to improve PAGES’ open data policy in ways that would promote career development in the short term, and maximize the scientific benefits of data in the long term. I look forward to their response.

With the close of the interactive discussion, I am grateful to the PAGES2k special issue
editorial team\(^1\) for their valued input, including the extensive deliberations over how to implement open data principles, and over our replies to the comments on this technical note. I am grateful to those who contributed to this interactive discussion, including its spin-offs on blogs and twitter. And, I thank the many journal editors, data repositories, and program managers who have encouraged this activity for their leadership in safeguarding and enhancing our data assets.


\(^1\)Nerilie Abram, Michael N. Evans, Pierre Francus, Hugues Goosse, Hans Linderholm, Marie-France Loutre, Belen Martrat\(^\ast\), Helen V. McGregor, Raphael Neukom, Scott St. George\(^\ast\), Chris Turney, and Lucien von Gunten

(*data reviewers in addition to the official co-editors of the special issue)