

Didier Roche's comment highlighted a miscommunication issue with respect to the inclusion of this study into PMIP4. As detailed below, we believe this issue has been resolved and this study should be an integral part of PMIP4.

I have read the manuscript and find this an effort of interest. However, I find the link to the fourth phase of the PMIP project (PMIP4) confusing at the very least.

We have now clarified the link to PMIP in the revised text.

The manuscript presented is the result of a work from a PAGES working group but is not endorsed by the PMIP4 effort nor by the deglaciation working group of PMIP4 to my knowledge. Nonetheless, the authors are presenting it as a "protocol for PMIP4 transient simulations" (title) which is incorrect. Furthermore, it has requested and apparently been granted the access to the PMIP4 Special Issue (interjournal CP/GMD).

This arose from an earlier miscommunication, which we apologise for, and has now been cleared up. We can confirm that the T2 protocol is endorsed by PMIP4 and by the deglaciation working group and therefore that the title and use of the CP/GMD special issue is appropriate. We will be transferring the manuscript to GMD since we have been made aware that this is a more appropriate journal for the experiment protocol.

Abstract: *'Here, as part of the PAGES-PMIP working group on Quaternary Interglacials, we propose a protocol to perform transient simulations of the penultimate deglaciation to complement the PMIP4 effort.'* which clearly indicates that the proposed protocol is not a PMIP4 one but a complement.

For clarification this has been amended to *'Here, as part of the PAGES-PMIP working group on Quaternary Interglacials, we propose a protocol to perform transient simulations of the penultimate deglaciation under the auspices of PMIP4.'*

Text body: *'We thus propose to extend the PMIP4 working group on the last deglaciation to include the penultimate deglaciation and thus create a DeglaMIP working group.'* This proposal has not been discussed in the PMIP4 deglacial WG to my knowledge. It is thus rather peculiar to see this aspect claimed here.

Again, we apologise for the miscommunication. The tentative proposal was discussed and agreed at the PMIP4 Stockholm meeting (September 2017) and has since been circulated and agreed within the whole deglaciation working group.

'To facilitate the transient simulations of TII, we are providing a combined ice-sheet forcing (available on the PMIP4 portal), in which all different ice-sheets are merged.' and *'Data availability. All the forcing files as well as the paleo-data described in the manuscript will be available on the PMIP4 website [link to PMIP] upon publication.'* are further confusing since forcing on the PMIP4 portal should be restricted to PMIP4 protocol data.

The above responses address this confusion and we reiterate here that the experiment is PMIP4 endorsed and therefore it is appropriate to use the PMIP4 portal.

Overall, I find that neglecting as such to clearly state what the status of this particular protocol is with regard to the official PMIP4 protocol is confusing for most climate modeling groups. I therefore think that the current manuscript should make clear that:

- 1. the present protocol is **not** a PMIP4 endorsed protocol. This should be made crystal clear in the text, the manuscript should not be part of the inter-journal SI and the title should be modified to reflect that.*
- 2. the present protocol is to be seen as complementary to PMIP4 and indeed as stated, as a potential bridge between different PMIP4 aspects. It should not be hosted on the same PMIP4 webpages or at the very least if no alternatives can be found, the pages should very clearly explain that the files are hosted by PMIP but not endorsed by PMIP (still confusing I think).*

We have clarified that the protocol is a PMIP4 protocol and changed the confusing wording (i.e. removing reference to the experiment complementing PMIP4 experiments and instead stating that it is a PMIP4 experiment); see responses above. As such the article will be part of the inter-journal SI, the current title remains appropriate (although we have added a version number), and the protocol details and boundary condition data will be hosted on the PMIP4 website. We hope that this response clears up any confusion on these issues.