Reponses to Editor

We are grateful to the editor for his/her careful reading of the revised manuscript and his/her thoughtful comments. With a pleasure of editor's decision (publish subject to minor revisions), we have followed all suggestions in all cases, and provide below a point-by-point response to the editor. This feedback has helped us improve and clarify the manuscript. We also corrected some English mistakes we found.

1. Please indicate the version number of Homme to which the version of the TLM you are documenting applies. You could do this in the title (Eg Homme v42) or in the introduction.

> **Authors' response**: The version information of HOMME cannot be found in the literatures and codes. We have also contacted HOMME developers provided in website (www.homme.ucar.edu) but have not get any further information yet. Thus, we refer the webpage of HOMME (i.e., www.homme.ucar.edu) in the introduction.

2. The abstract now makes it clear that the TLM is only for the SE version of Homme, but this is not so clear at the point at which you describe Homme itself. Please make it explicit in the first paragraph of S2.1 that you are only considering the SE version.

> **Authors' response**: We have added a sentence in the first paragraph of section 2.1 as "Among the various horizontal discretization methods within HOMME, the TLM development is targeted for CG method in this study.".

3. On page 6, do you really mean version 0.1?

> **Authors' response**: During the procedure for TL development, the initial version was internally defined as 0.1. Because this information is not necessary, however, this is removed in the draft and figure caption 3.

There are also still quite a few English mistakes in the manuscript, but hopefully these will be picked up at the copy-editing stage.