

Replies to Reviewer #1

Thank you very much for your comments. The reviewer has one minor concern as follows.

The authors have done a good job of responding to all of my comments satisfactorily, and I recommend the manuscript for publication. I have only one minor comment on this version:

I think it is a little misleading to readers not to mention that the model used in this study (CESM1) is the same as that used in the Su et al. (2018) study, particularly given line 79 in the introduction: "More sensitivity experiments using different models are needed", which to me suggests that that is what has been done here, and that this study therefore confirms the result in another model, which is not correct.

Responses: Thank you very much for this suggestion. In the revision, line 79 “More sensitivity experiments using different models are needed” is changed to “More coupled modelling studies are needed”.

In addition, in section 2 “Model and experiments”, line 148-150, we add “Su et al. (2018) have done the similar sensitivity experiment in which topography within the region of 20°-60°N and 60°-140°E at altitude higher than 200 m is set to 200 m, using the CESM version 1.0.5. This is slightly different from our experiments.”