

Editor's comments

We are very grateful to the editor for the in-depth reading of our manuscript and for all the efforts he put in the review of our work. We present below our detailed answer to the discussed points. The editor's comments appear in orange and our responses appear in blue.

EC0: We must address one technical matter, however, before formal acceptance. As noted by the publisher, the length of your manuscript exceeds the "brief communication" extent quite a bit, especially with the addition of new panels/figure in the revision. My advice and requests would be as follows.

AEC0: The length of the manuscript exceeds indeed the specified size. We did our best to shorten it without losing any information or clarity.

EC1: Please go through the text carefully and delete redundant sentences or words. No significant text parts, of course, but every text typically has room for shortening. Ask the native speakers in the author team to shorten some unnecessarily long expressions.

AEC1: Each paragraph has been revised and rewritten more effectively in order to reduce their size to the minimum possible.

EC2: Go through your references. Especially those cited only one time in the text could be candidates for deletion.

AEC2: We believe that none of our references can be removed, as those cited only once are either data sources or references implemented at the suggestion of the referees.

EC3: Remove the appendix and put the two figures in a supplement (and then refer to Figure S1 and S2 in your main text). Note that in TC an appendix (= part of the main manuscript) is not the same as a supplement (= separate file containing supplementary material). Your response to one reviewer sounded to me as if you equate the two.

AEC3: There was indeed confusion. We removed the appendix figures and added them as assets for the manuscript as supplementary figures.

Editorial team's comment

We are grateful to the editorial team of The Cryosphere for all their contributions to our work. We present below our detailed answer to the discussed point. The Editorial team's comments appear in **orange** and our responses appear in **blue**.

ETC1: Please ensure that the colour schemes used in your maps and charts allow readers with colour vision deficiencies to correctly interpret your findings. Please check your figures using the Coblis – Color Blindness Simulator (<https://www.color-blindness.com/coblis-color-blindness-simulator/>) and revise the colour schemes accordingly with the next file upload request. -> Fig. 3

AETC1: We apologize if our color scheme is confusing for colorblind people. Since this issue was already pointed out in a previous editorial team comment, we added, on the first correction of the manuscript, small pictograms on the figure 3 (square, dot & triangle) allowing readers to understand the figure without using the color scheme.