Response to the editor comments

We thank the editor for the final constructive comments on our manuscript. We have addressed the points raised by the editor and here provide a brief summary of the changes, including an explanation to subsequent changes to the manuscript. ("EC" stands for "editor comment", "AR" for "authors response".)

1 Answers to the editor's comments and changes to the final version of the manuscript

5 **EC:** "A few of the revisions are not well written. [...]"

AR: We changed the phrasing at places and in the way the editor suggested it, although in one case we are confident that the phrasing was already correct.

2 Additional minor changes to the manuscript

10 We corrected some minor typos.

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In the last paragraph of section 2.2.2 we changed "[...] this then results in an overall positive bias in the global cross-validation result." to "[...], moving the globally applied t^* to a warmer climate period then results in an overall positive bias in the global cross-validation result." to make more clear what was meant with "this" in the previous version.

In the beginning of section 3.1.1 we adjusted the numbers of modeled glaciers, because in the previous version we did not subtract the glaciers in the Greenland periphery that are marked as 'CL2 (strongly connected)' in the Randolph Glacier Inventory (RGI), which we did exclude from our results in the course of the reviews.

In the Conclusions (section 5) we changed the phrasing slightly (in addition to the comments of the editor) to make it clearer.