Climate of the Past Discussions

Clim. Past Discuss., author comment AC7
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Reply on EC2

Tamara Pico et al.

Author comment on "Was there a glacial outburst flood in the Torngat Mountains during Marine Isotope Stage 3?" by Tamara Pico et al., Clim. Past Discuss., https://doi.org/10.5194/cp-2021-132-AC7, 2022

We thank the editor, two reviewers, and four community comment authors for their positive and constructive comments in regard to the submitted manuscript.

In responding to these reviews, we have noted how we will revise the manuscript to improve the clarity of our arguments. In particular, we have performed additional calculations to explore the uncertainty on estimated lake volume, we have created a new figure contextualizing the sample location, and we have added text to provide additional geomorphic observations for glacial lake shoreline evidence. Furthermore, we have added text describing alternate interpretations of our dataset. We will incorporate all minor text edit suggestions made by the reviewers. We believe incorporating these comments in this revision will strengthen our manuscript.

Our study relies on legacy data from a 2003 field expedition, and we do not have data from additional shoreline sites or paired cosmogenic isotopes. We nevertheless pushed forward with publishing these data to draw attention to this work, and to highlight the exciting potential for several facets of Quaternary work, including constraining the configuration of pre-LGM ice sheets, understanding glacial inception, as well as quantifying the timing and amount of freshwater release into the North Atlantic. We have stressed in our current study that attaining such information will be the focus of future field studies.

In the following, we address each of the comments raised in the reviews and provide a detailed listing of the associated revisions to the text. We intersperse the reviewers' comments (black font) with our responses (in italic black font). Line numbers correspond to the original submitted version of the manuscript.