

Response to Jessica Scheick:

Thank you very much for your thorough reading and assessment of this manuscript. We adopted most (15) of your suggestions for the final polish and explained the remaining 5.

General Comments:

The authors have done a great job addressing the comments from both reviewers and the online discussion. Issues with clarity in the first draft, including misused and ambiguous terms and inexplicit assumptions, were addressed. The investigation and methodology are now understandable to readers unfamiliar with the project (the questions contained in the overview comments were intended to summarize the main ideas of some of the line corrections and provide a set of key motivating questions to keep in mind during revisions from the perspective of someone unfamiliar with the study, not discredit the scientific merit). The additional discussion elements and improved clarity effectively connect previous results to this investigation, making this a robust contribution to the iceberg literature. Several added details greatly contribute to the study's reproducibility, though I would encourage the authors to consider adopting FAIR (Findable, Accessible, Interoperable, Reusable) practices for their code and data. With a few additional technical clarifications and corrections, this manuscript will be ready for publication.

The use of Oxford commas is still inconsistent (it appears that they're not used in lists of "items" (e.g. size, shape and area) but are used for lists of "ideas" (e.g. a said x, b said y, and c said z). Line 471 is different between the track changes and revised versions, which I did not compare in other cases and may explain the inconsistencies throughout.

Oxford commas should be consistent now.

Specific Line comments:

Line 34: add "influence" or "enhance" before "melting" to keep the list consistent.

Done

Line 59: remove "for example"

Done

Line 89+: Excellent – This paragraph now clearly captures the motivations for your investigation and sets the tone for the work presented in the rest of the manuscript.

Thank you.

Line 141: images, not imagery

Done

Line 145: Perhaps "... to apply the orbital and radiometric corrections provided with the imagery." This will convey to the reader the information provided in the author comments.

Done

Line 157: "To estimate the uncertainty of our delineations, we buffer the polygons by the source imagery pixel width... and calculate the resulting differences in area." It sounds like a vector operation was applied (buffering), but the current phrasing suggests a raster operation (shrink/expand by pixels), which would require use (perhaps implicitly by the software) of a kernel.

Done

Line 159: uncertainties are missing units

The units are % in both cases.

Figure 2: is north up or to the left in panel b?

Panel b is in polar stereographic projection (with 0 degrees longitude up).

Line 188: was there a particular temporal threshold you used (perhaps I missed it in the text earlier?).

Yes, we mention it in lines 252-253.

Line 215: I'd suggest making this even more explicit: "When outliers and crevasses are excluded..."

We added this.

Line 250: remove quotes ("colocated")

Done

Line 258: remove I (colocated)

Done

Fig. 3: could you use one of the clearer images as a background?

The clearer images have a longer temporal offset to the altimetry data and therefore we used the image shown in Figure 3 for colocation, but the clear images helped to identify the shape of the iceberg in this image.

Line 315: remove "large"

Done

Line 317: I suggest "manually delineated icebergs" or "deriving iceberg outlines". Delineation implies outlines.

Done

Line 353: pre- and post-calving might be clearer terminology than "new overpasses".

Done

Line 376: consider using parentheses instead of dashes so it's easy to tell at a glance that 3.3 is positive and not negative.

Done

Line 391: Do you mean the "mean change in height due to firn densification is..."? Otherwise, the units should be kg/m³ per year to represent a change in density.

Done

Figure 7: The scale bar for panels a through l greatly exceeds the actual range of the data. The y axis in panel m is scaled appropriately, as the authors note.

We chose the scale bar for a-l to be symmetrical around zero, as it is a common choice to plot zero change white and positive or negative changes in red and blue respectively.