

Interactive comment on “Brief communication: Unabated wastage of the Juneau and Stikine icefields (southeast Alaska) in the early 21st century” by Etienne Berthier et al.

R. McNabb (Referee)

robert.mcnabb@geo.uio.no

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Summary

In this manuscript, the authors have investigated the source of an apparent slowdown in the mass loss of the Juneau and Stikine Icefields, Alaska, by comparing multiple studies and data sources, re-processing the data used in a consistent fashion. They contend that the source of the signal seen is due to the use of the SRTM C-band DEM by two studies, Melkonian and others (2014) and Melkonian and others (2016), and not due to an actual slowing in the rate of mass loss for the glaciers studied. The

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authors show that the unknown penetration depth of the SRTM C-Band radar signal into snow and ice causes a significant underestimation of elevation lowering, and therefore volume and mass losses for the two icefields. I think that the methods described in the manuscript are sound, and the results well-presented and reasonable. As such, I have only minor comments on the manuscript, otherwise recommending that it be accepted for publication in The Cryosphere.

Minor comments

- **I. 85:** Does this mean less than 0.5% of the icefield, after processing the DEMs and masking clouds, blunders, etc.?
- **I. 88:** Why the RGI v5.0, rather than v6.0?
- **I. 132:** Make sure the minus sign is on the same line as the number.
- **I. 134:** It's not clear to me what you mean by “statistically different for the JIF” - can you elaborate on this?
- **I. 181:** “for both datasets”
- **Table 1:** It might be good to plot these data, perhaps as a supplemental figure, to ease the comparison of the values and mesh with your opening discussion statement.
- **I. 271:** I'm not sure what this sentence is meant to be saying - it seems like you stopped mid-thought while writing it.