

The Cryosphere Discuss., author comment AC1 https://doi.org/10.5194/tc-2021-181-AC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on CC1

Christian J. Taubenberger et al.

Author comment on "Brief communication: Preliminary ICESat-2 (Ice, Cloud and land Elevation Satellite-2) measurements of outlet glaciers reveal heterogeneous patterns of seasonal dynamic thickness change" by Christian J. Taubenberger et al., The Cryosphere Discuss., https://doi.org/10.5194/tc-2021-181-AC1, 2021

We appreciate the reviewer's comment and we plan to address it by (1) altering the title of our manuscript to better represent our conclusions and (2) improve our references to previous work. As cited by the reviewer, there has been previous work on measuring seasonal surface elevation changes over the ice sheets and over glaciers and ice caps. Our study builds on previous work by leveraging the 91-day repeat cycle of ICESat-2 to aggregate data over small regions (2 km x 2 km bounding boxes) and, thus, obtain seasonal measurements over a representative sample (34 glaciers) of Greenland's narrow outlets (~5 km width). We will take the reviewer's comment into consideration along with the referee comments and we will revise the manuscript to reference the papers that are cited in the comment, being more specific about what is novel in our method.