

Technical corrections to manuscript TC-2022-78:  
High-resolution imaging of supraglacial hydrological features on the  
Greenland Ice Sheet with NASA's Airborne Topographic Mapper (ATM)  
instrument suite

Dear Dr. Sørensen,

Thank you for your very positive assessment of our submitted manuscript. We have made all requested changes listed below. The changes are recorded via tracked changes in the submitted MS Word document.

***"For items other than units of time or measure, use words for cardinal numbers less than 10; use numerals for 10 and above (e.g. three flasks, seven trees, 6 m, 9 d, 10 desks)." Please revise where required. I noticed a few in sect 2 'Data sets', but there might be more.***

We apologize for the oversight. We have found and corrected three instances in Section 2. We did not find any other occurrences elsewhere in the manuscript that needed correction.

***Line 76: insert comma after 'Spring campaigns'***

We have inserted the missing comma.

***Line 451 -> in a pressurized...***

We have changed the sentence accordingly.

***[3] I think that the flow chart is okay to keep in the Appendix. I would rephrase the sentence in line118-119 slightly to: "(...) and the process of deriving geolocated water depth estimates (...)"***

We have changed the sentence accordingly.

***Also, I would suggest to make the caption for Figure 3B a little more elaborate.***

We have expanded the caption to "Flow diagram summarizing both the image-based processing steps discussed in this section and the process of deriving geolocated water depth estimates from lidar data discussed in Section 4."

***[4] This was an important point made by the referee, and I think that your revisions are addressing it well. In your reply to the question "What is the typical error or bias introduced by picking the peaks of the Gaussian fit rather than the direct waveform peaks?" you provide information/arguments that might be relevant to also include in your manuscript. I leave it to you to decide if you can integrate it into the text.***

Thank you for the opportunity to include this information in the manuscript. Since we don't discuss using the maximum in the manuscript, we feel adding it might only add confusion. We also feel that the known improvement in time resolution between centroid/Gaussian tappers vs

maximum is textbook knowledge that does not belong into a scientific publication. We therefore prefer not to include this information in the manuscript.

We have already addressed the two remarks from Copernicus editorial staff regarding color schemes used in our figures and a copyright statement for Figure 3. Our response to both remarks is detailed in the previous revision and we therefore see no need for action on our end unless Copernicus editorial staff objects to our previous response.

We are looking forward to seeing the manuscript published in The Cryosphere.

Best regards,

Michael Studinger