

Response to Anonymous Referee #2

We would like to thank the reviewers for their helpful comments. We have made major revisions to this paper to make it easier to read as well as added 3 additional years of radar-derived depth data that were processed during the review process. The additional data does not change the major points of the paper but it does update the depth numbers. Specific details to comments are given below.

The paper presents new results concerning the observation of supraglacial lakes during winter from airborne observations. There has been much emphasis on the importance of such lakes on the Greenland hydrological system but most (all to my knowledge) efforts have been focusing on summertime and no study has been presenting results concerning those lakes that might eventually persist (and include liquid water) from one summer season to another. In this regard, the paper is extremely interesting and the topic discussed deserves attention.

We agree. This is the first paper to fully document and map persistent water in supraglacial lakes.

Still, there are two major issues that should be considered for the paper in its current form. First, the style of the paper is not appropriate. Sometimes the reader has the feeling that they just cut and paste information concerning previous studies or hypotheses without a logical order, with sentences in many cases lacking of structure. It is very hard to read the paper and understand what the authors are discussing without being distracted by the lack of style and poor structure. This is surprising, considering that the authors have an established publication record and high reputation in their field. It appears that the authors contributed with different sections to the paper but there was little effort in trying to combine their contributions into a single, organic document. This is a major flaw because I don't think it meets the basic standards of a peer-reviewed publication and it does obscure the innovative nature of the discovery reported here.

We have revised the paper substantially to address this comment by largely rewriting the paper with a focus on flow and readability. Specifically the Introduction and Background sections were revised as well as the Results and Discussion for better voice and readability.

The second major point is that the authors could have explored the data sets more in detail and that work is required for current figures and tables to meet the standards for The Cryosphere.

We have added additional analysis of the datasets as well as included 3 more years of radar-derived depth data. The number of figures has been reduced and we believe the figures meet the standards for The Cryosphere.

For example, what is the point of having the conclusions as they are now ? they don't mention anything that is not speculative. I think the other reviewer did a good job in identifying issues associated with the manuscript and I would encourage the authors to consider those suggestions for the re-submission of the manuscript.

We have addressed and included almost all of Reviewer's 1 suggestions to improve the manuscript.

At this point, considering the considerable re-structuring necessary for the paper (to my opinion), I don't feel to provide specific details on typos and other minor issues. I would strongly encourage the authors to revise the manuscript to produce a more readable submission that improves style, readability and, eventually, focuses on a deeper analysis of the data. The content of this paper can be a great contribution to the cryospheric literature and will have impact (positive) on future studies. But, it really lacks of the basis to be published as is.

We look forward to the reviewer's specific comments on the revised paper as we too feel this work is a strong contribution to Cryospheric literature.