

The authors have given a revised manuscript detailing the detection and monitoring of subglacial lakes using a combination of ICESat-2 data and the ArcticDEM. Overall, the manuscript is improved from its previous iteration, with text and figures that are easier to understand. I do have a few suggestions and clarifying questions that I would like to see addressed before it is ready for publication:

Page 3, Line 67: Small nitpick, but I suggest being specific here and noting that ATL06 measures land ice height.

Page 3, Line 79: Since you are using ATL03 to identify supraglacial lakes, I suggest giving the full name of the product (Geolocated Photon Data) and giving a bit more detail on what is in ATL03 data.

Page 3, Line 88: Just to make sure, these published subglacial lakes were found using the ArcticDEM?

Page 4, Lines 103-104: How was it determined if other factors caused the elevation anomalies? I imagine that it could be difficult to distinguish between lakes and rough topography.

Page 4, Line 107: ICESat-2, not ICESat. Also, what exactly was corrected from the DSMs, and using what metadata?

Page 5, Line 134: If you define ATL06 on Page 3, Line 67, then it will not be needed here.

Page 6, Line 170: 2 km (spacing)

Figure 1: I am assuming that “pt” refers to the pair tracks, but what do the numbers indicate?

Figure 3: I notice that stable lakes are generally found either on the eastern part of the ice sheet or on the northern margin. Is this a coincidence? I would like to see the authors’ interpretation.

Figure S3: It is interesting that a large lake was found, but I am not sure what unique information is provided by this figure. Was the drainage rate (or lack thereof, looking at 2013-2017) surprising for a lake that large? If not, then I would consider removing this figure.

Figure S4: There is a caption here, but no figure. Is the figure missing, or was it removed?