The Cryosphere Discussions

The Cryosphere Discuss., author comment AC2
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Reply on RC2

Rajashree Tri Datta and Bert Wouters

Author comment on "Supraglacial lake bathymetry automatically derived from ICESat-2 constraining lake depth estimates from multi-source satellite imagery" by Rajashree Tri Datta and Bert Wouters, The Cryosphere Discuss., https://doi.org/10.5194/tc-2021-4-AC2, 2021

We would like to thank the reviewer for their time and attention. We have addressed concerns in the order these were presented. Original critique is *italicized* with the answers directly below in the attached document.

The primary concerns related to the lack of evidence for sub-surface ice layers, which have addressed by examining the texts suggested, providing an in-depth clarification of our reasoning, but also making the limitations of the *Watta* algorithm much more explicit. The second major concerns related to the repeatability of the work; we will accordingly be releasing the matlab code and providing specific boundaries for lakes, spots, and imagery IDs (not requested by the reviewer, but should ease the process for users) within Supplemental information.

Thank you for your time.

Sincerely,

Rajashree Tri Datta & Bert Wouters

Please also note the supplement to this comment:
https://tc.copernicus.org/preprints/tc-2021-4/tc-2021-4-AC2-supplement.pdf