

Dear Dr. Bonneau,

Thank you very much for the insightful comment and for sharing the work of Antropova et al.

For Lake 1, the grounding line information is indeed very relevant. We will add it to the revised manuscript. We digitized Figure 12 in the Antropova et al. paper and compared the grounding line positions with our lake outline. Our quick result (as shown in the attached screenshot; the grounding line colors correspond to those used in Figure 12b) indicates that the lake area, identified by its drainage event in 2016, is very close to the grounding line (HL_{LW}) in 2011. Based on ERS-2 data, the lake was located in the grounded zone of 2011, and some potential activities can be identified using SAR interferometry (as shown in the second attached screenshot, Figure 5b from Antropova et al., with the lake location labeled by a red square). We do not have the grounding line information from 2016; however, the lake was likely still within the grounded zone, as it would be challenging to depict a mechanism that lowered the ice surface elevation by ~20 m within one year if the ice had already achieved flotation.

Thank you for sharing the ocean mooring data. It is exciting to see such a temporal correlation between the Lake 3a-c drainage events and the thermal anomaly from nearby ocean water! A detailed analysis of individual lake(s) might be beyond the scope of this manuscript, but the subglacial lakes in Milne glacier are worth a follow-up project to understand the lake dynamics based on various data sets. We will be in touch to discuss future plans!

Whyjay Zheng (on behalf of the authors)



