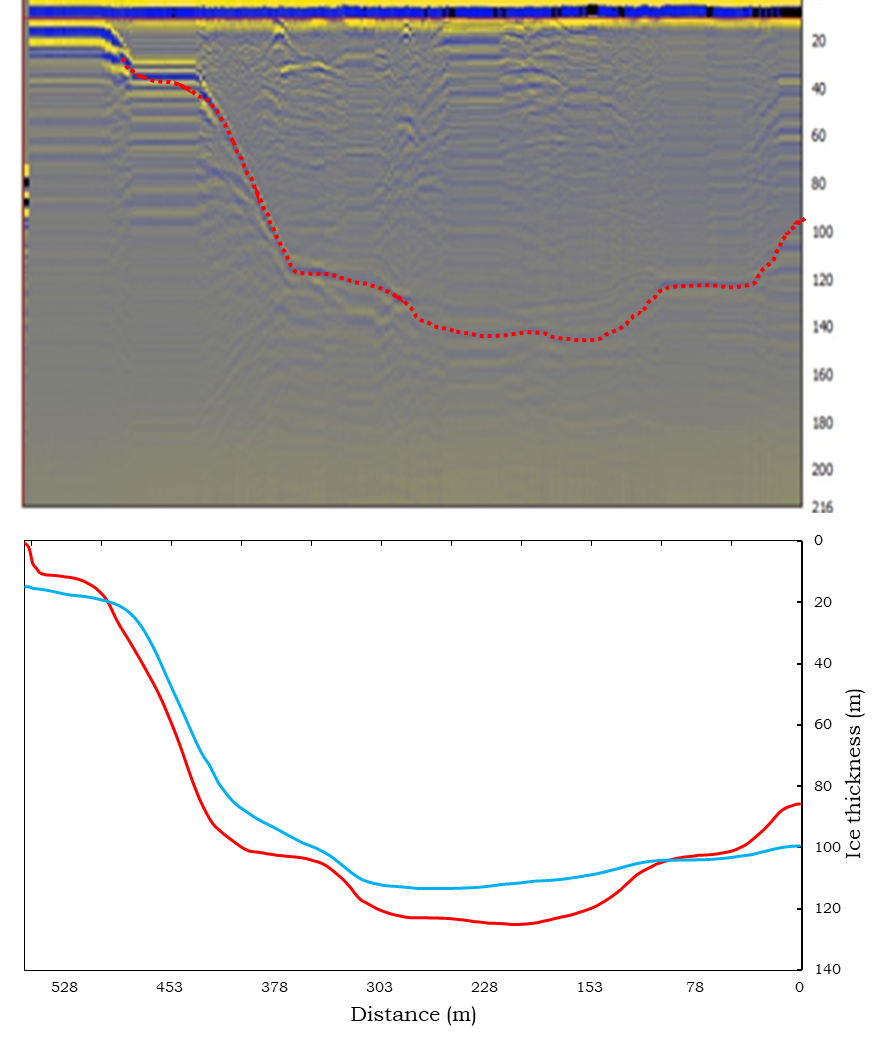
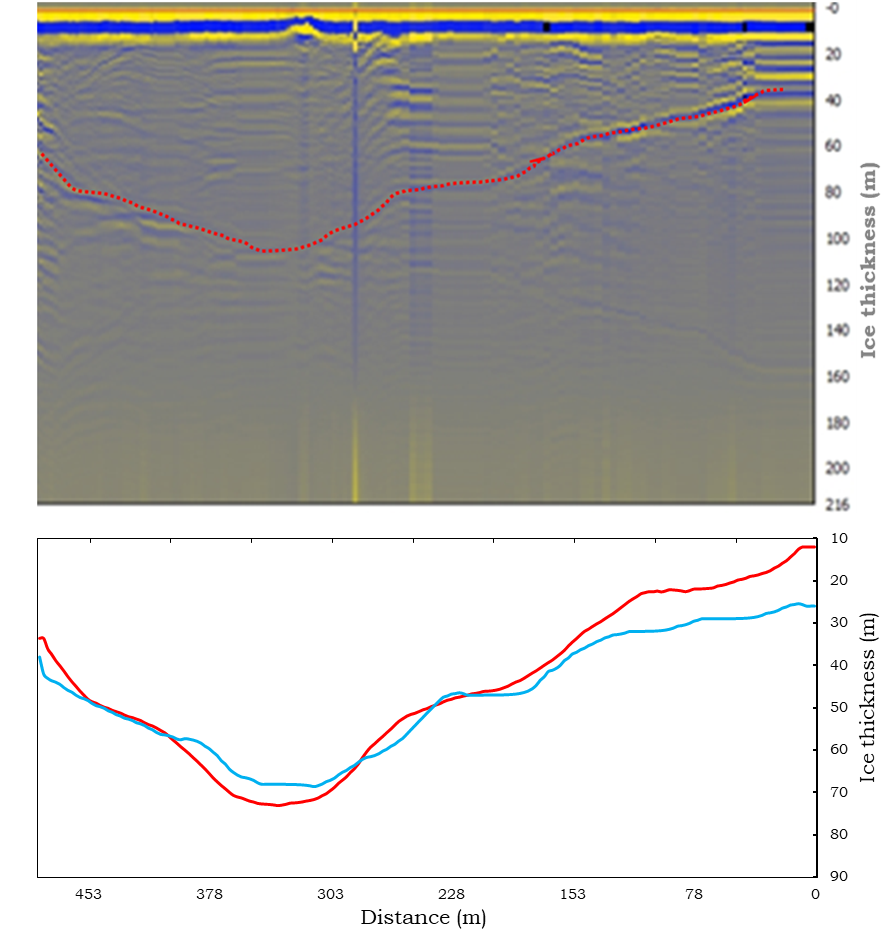
**Supplementary**

**Glacier thickness and volume estimation in the Upper Indus Basin using modelling and ground penetrating radar measurements**

Shakil Ahmad Romshoo, Tariq Abdullah, Ummer Ameen and Mustafa Hameed Bhat



**Fig S1:** Radargrams of various GPR profile 1 (KP1) of the Kolahoi Glacier surveyed in August, 2018.



**Fig S2:** Radargrams of various GPR profile 2 (MP2) of the Machoi Glacier surveyed in August, 2018.



**Fig S3:** Comparison of the glacier volume estimates from the present study with previous studies over the study region.

\**The volume estimates are only available for the Drass sub-basin.*

*\*\*The volume estimates based on volume-areas scaling (V-A scaling) have been calculated based on the volume-area scaling approach by Bahr and others, (1997).*