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Supplement of

Ground-penetrating radar imaging reveals glacier's drainage network in 3D

Gregory Church et al.

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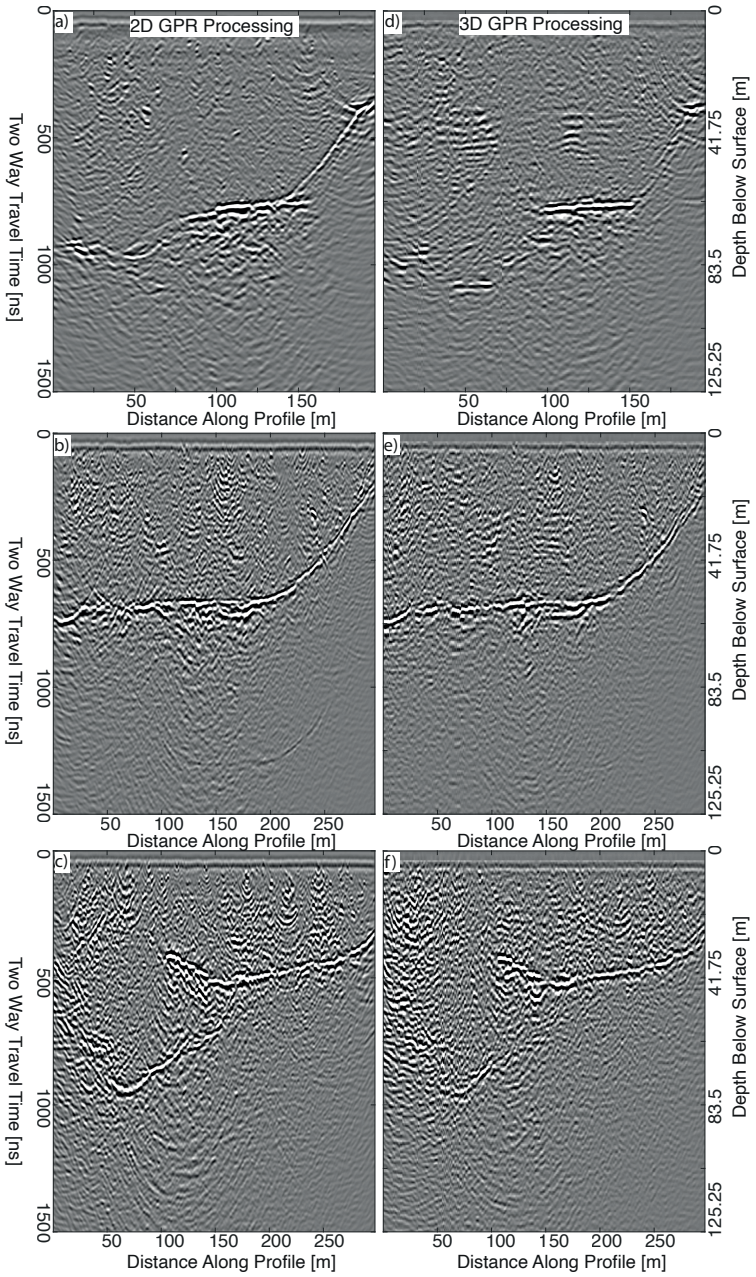

Figure S1. Additional 2D v. 3D GPR processing comparisons.)a-c) GPR processed using 2D workflow. d)-f) GPR processed using 3D workflow of lines a-c.

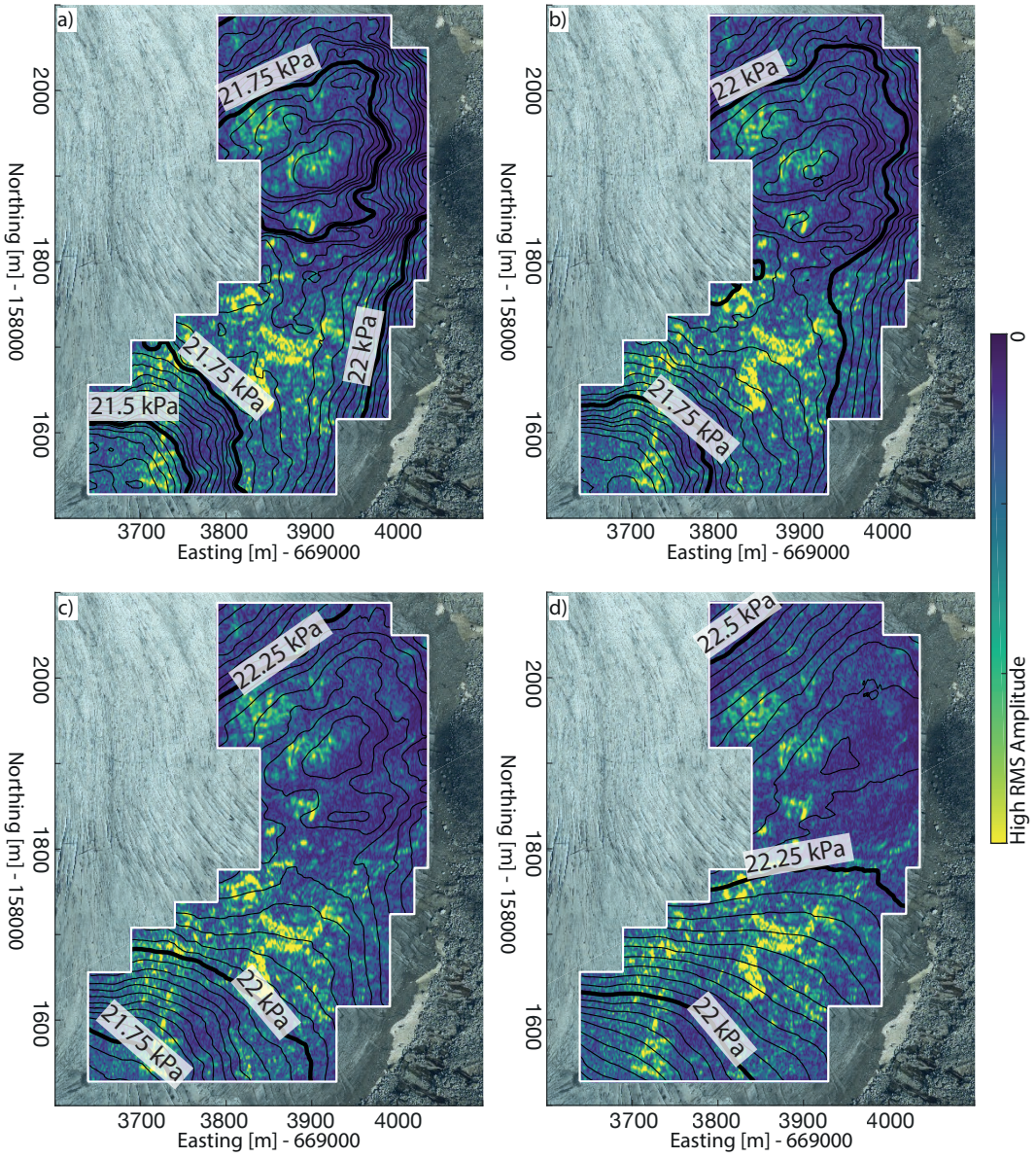

Figure S2. Map view of the extracted basal root-mean squared amplitude within a ± 1 m window. Contours represent hydraulic potential where water pressure is a) 25% of overburden thickness b) 50% of overburden thickness c) 75% of overburden thickness and d) 95% of overburden thickness. Orthophoto was provided by Swiss Federal Office of Topology: Reproduced by permission of swisstopo (JA100120), ©2020 swisstopo (JD100042)

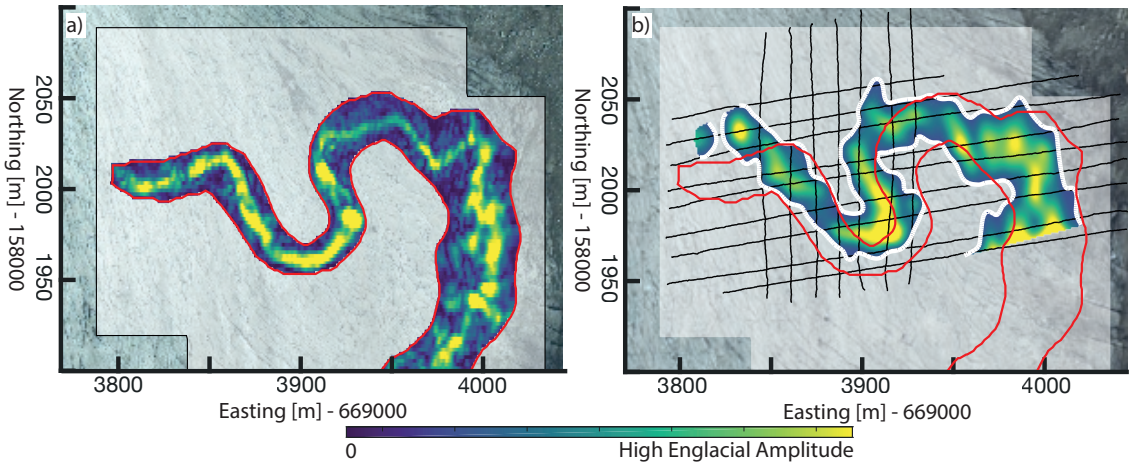

Figure S3. Extracted amplitudes and reflectivities from a) 3D GPR data processing using 2020 GPR 3D data and b) 2D GPR acquisition and processing from (Church et al., 2019) using 2018 GPR 2D data. Red line in a) and b) represents the outline of the englacial conduit network detected in the 3D GPR processing. Orthophoto was provided by Swiss Federal Office of Topology: Reproduced by permission of swisstopo (JA100120), ©2020 swisstopo (JD100042)

References

Church, G., Bauder, A., Grab, M., Rabenstein, L., Singh, S., and Maurer, H.: Detecting and characterising an englacial conduit network within a temperate Swiss glacier using active seismic, ground penetrating radar and borehole analysis, Annals of Glaciology, 60, 193–205, https://doi.org/10.1017/aog.2019.19, 2019.