

Supplementary Materials for

Basal channels drive active surface hydrology and transverse ice shelf fracture

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- fig. S1. Custom Nansen Ice Shelf surface DEM components.

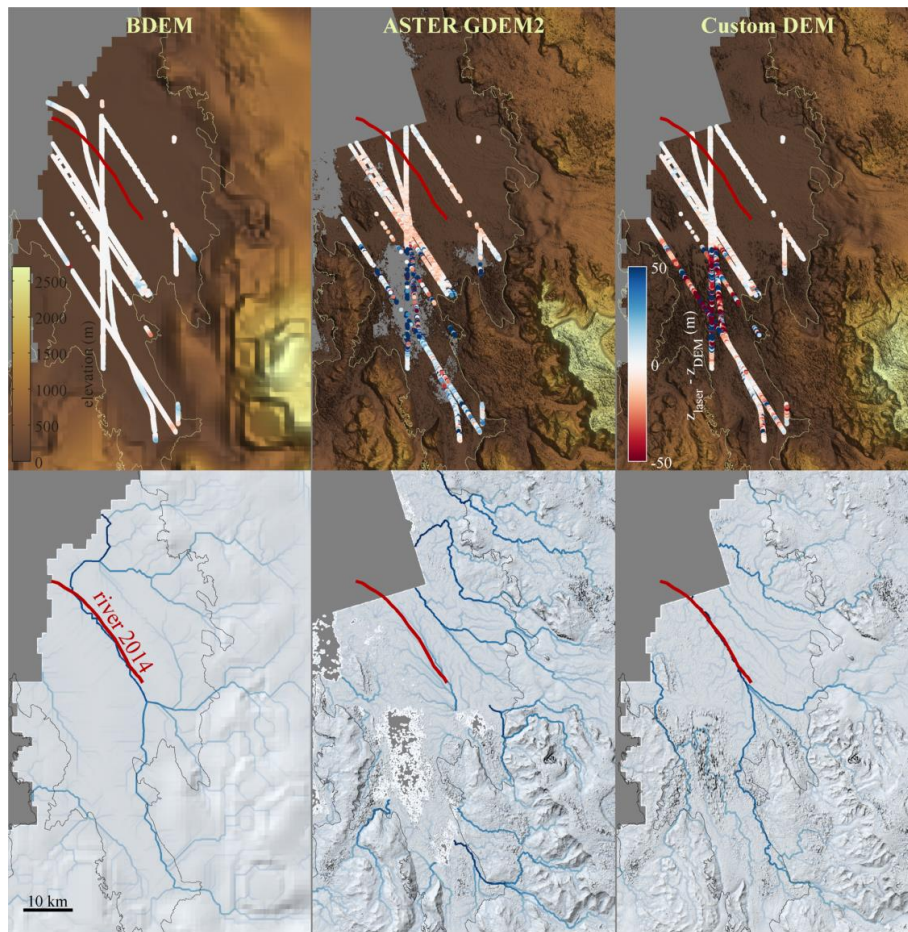


fig. S1. Custom Nansen Ice Shelf surface DEM components. The primary components of our custom DEM for Nansen Ice Shelf are the 1 km BDEM which contributes topographic features longer than ~ 4250 m, and the 1 arc-second ASTER GDEM2 which contributes features whose characteristic wavelength exceed ~ 4250 m. The upper panels show surface elevation in brown tones and the difference between laser altimetry and interpolated DEM values in a polar colormap. Lower panels show flow accumulation for each DEM predicted by TopoToolbox-2. The location of the surface river observed in 2014 appears as a red line in all panels.