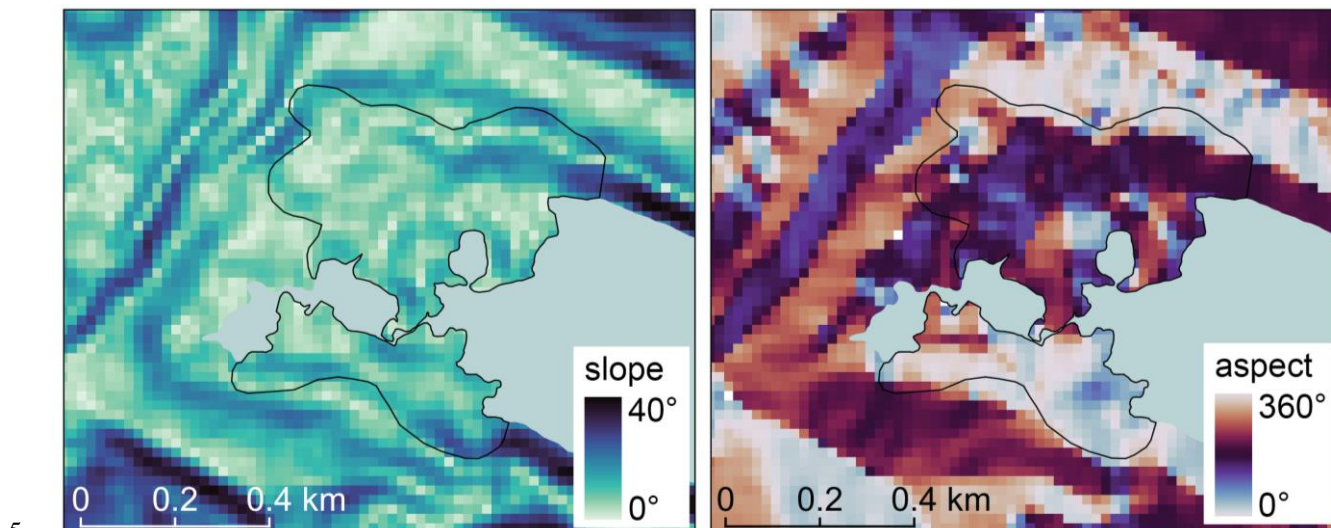
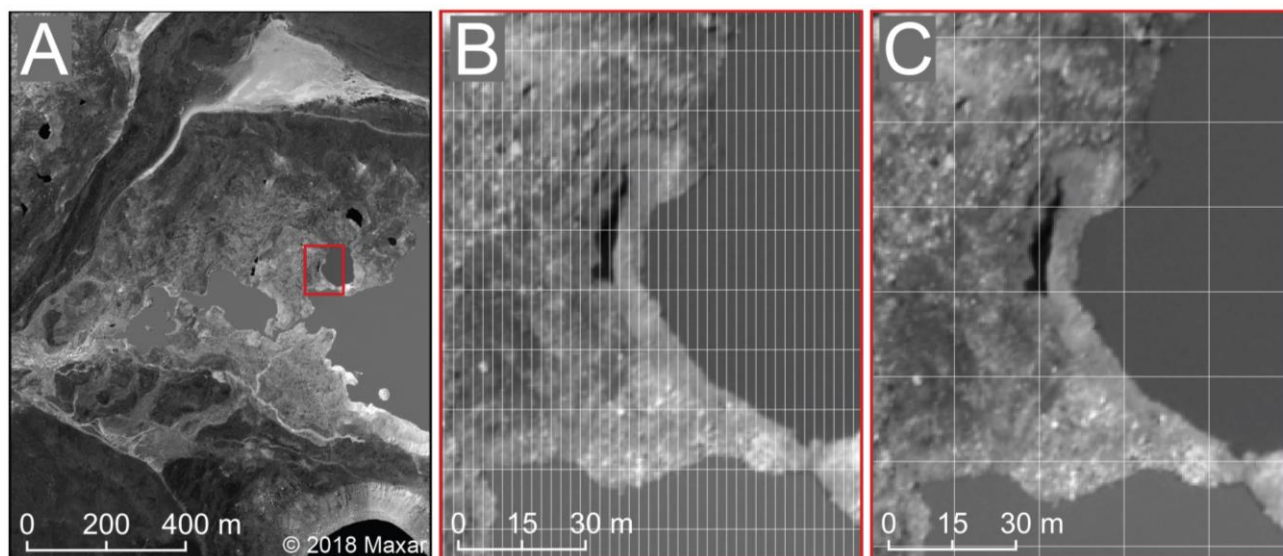
Supplementary Material

Quantifying degradation of the Imja Lake moraine dam with fused InSAR and SAR feature tracking time series

George Brencher, Scott T. Henderson, David E. Shean

5

Supplemental Fig. 1. Slope (A) and aspect (B) of the Imja Lake moraine dam from the COP30 composite digital elevation model prepared from TSX/TDX scenes acquired between 2011 and 2015 (European Space Agency, 2022).

Supplemental Fig. 2. Resolution of Sentinel-1 products over the Imja Lake moraine dam. (A) WorldView-1 panchromatic orthoimage from June 19, 2018 with 0.53-m ground sample distance. (B) Detail of pond and lake margin denoted by red box in A, with 14.1 by 2.3 m grid overlaid showing native Sentinel-1 single-look complex (SLC) azimuth and range resolution, respectively. (C) Same as B, with 20 by 20 m grid showing the resolution of our combined interferometric synthetic aperture radar (InSAR) and feature tracking product.

10