

**Table S1.** Source data used in the analyses.

Dataset	Date	Purpose	Source
1970 DEM	Summer 1970	Elevation change; glacier front position	Norwegian Polar Institute (NPI)
Landsat 5	2.8.1990	Glacier front position	Sentinel Hub EO browser
NPI shapefiles	Summer 1990	Glacier front position	Norwegian Polar Institute (NPI)
Landsat 7	28.8.2000	Glacier front position	Sentinel Hub EO browser
Landsat 5	12.8.2006	Glacier front position	Sentinel Hub EO browser
Landsat 5	28.6.2009	Glacier front position	Sentinel Hub EO browser
Landsat 7	11.9.2010	Glacier front position	Sentinel Hub EO browser
Landsat 7	26.7.2011	Glacier front position	Sentinel Hub EO browser
Landsat 7	5.7.2012	Glacier front position	Sentinel Hub EO browser
Landsat 8	24.8.2013	Glacier front position	Sentinel Hub EO browser
Landsat 8	22.8.2014	Glacier front position	Sentinel Hub EO browser
ArcticDEM	Averaged to 2017 *	Elevation change	Polar Geospatial Data Center
Sentinel-2	20.8.2017	Glacier limits for DEM mask	Sentinel Hub EO browser
Sentinel-2	5.8.2019	Glacier front position	Sentinel Hub EO browser

\* best fitness to 2017 when comparing to the glacier front positions