

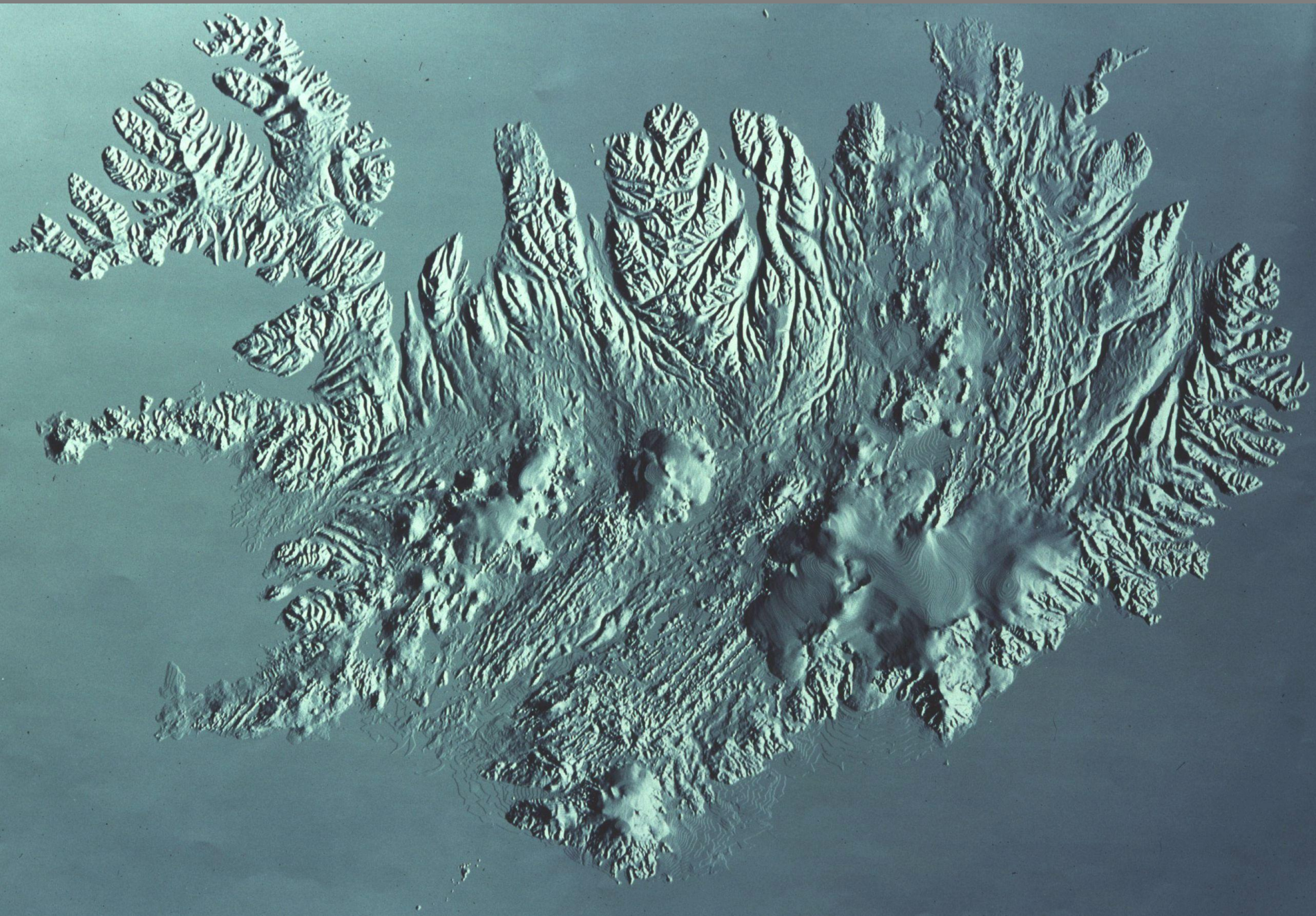
Glacial erosion processes 2



Glacial erosion processes 2

Glacial erosional processes and resulting landforms

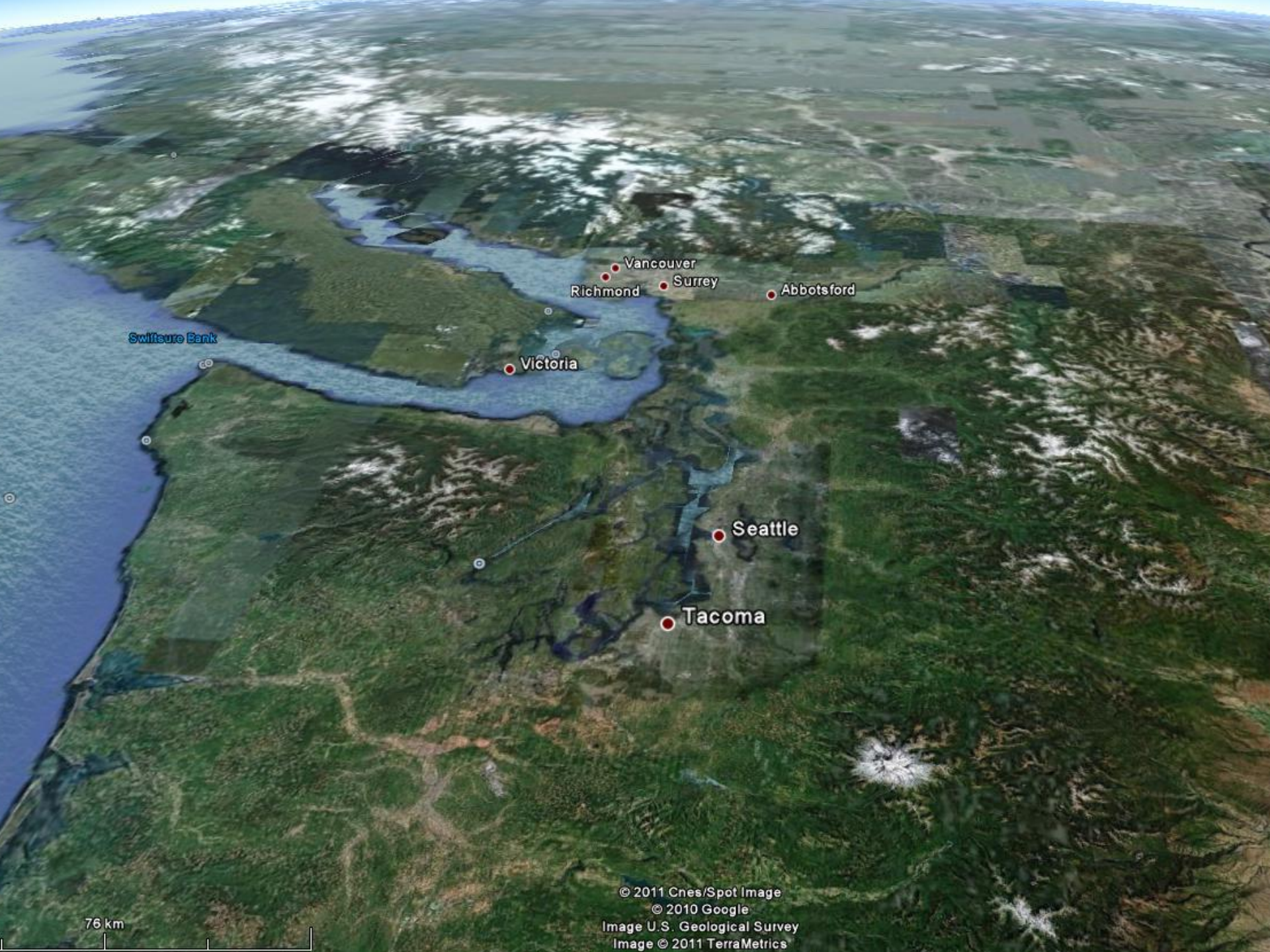
Glacial landsystems as evidence for glacial erosion processes







The glacial buzzaw



Vancouver
Richmond Surrey Abbotsford

Swifere Bank

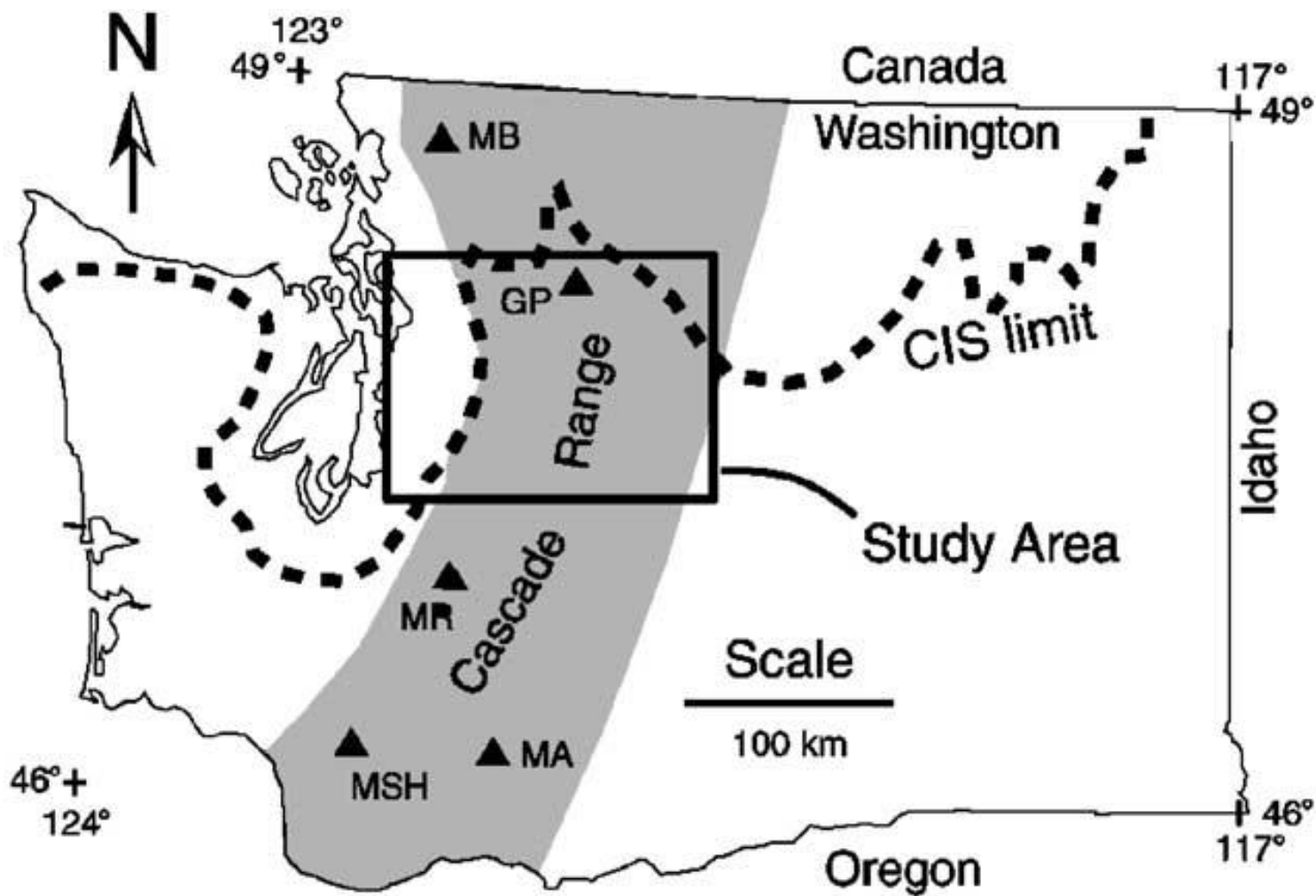
Victoria

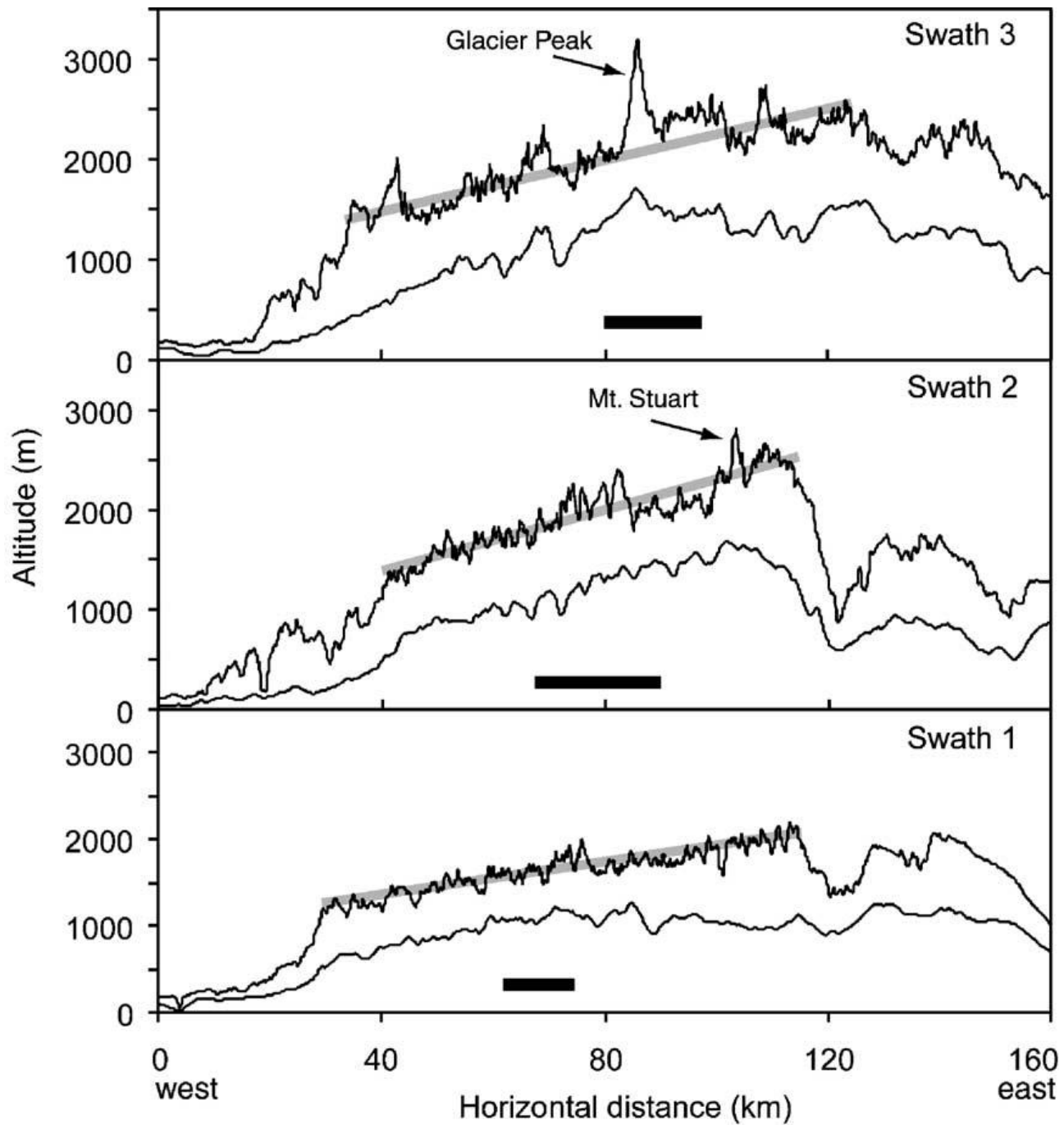
Seattle

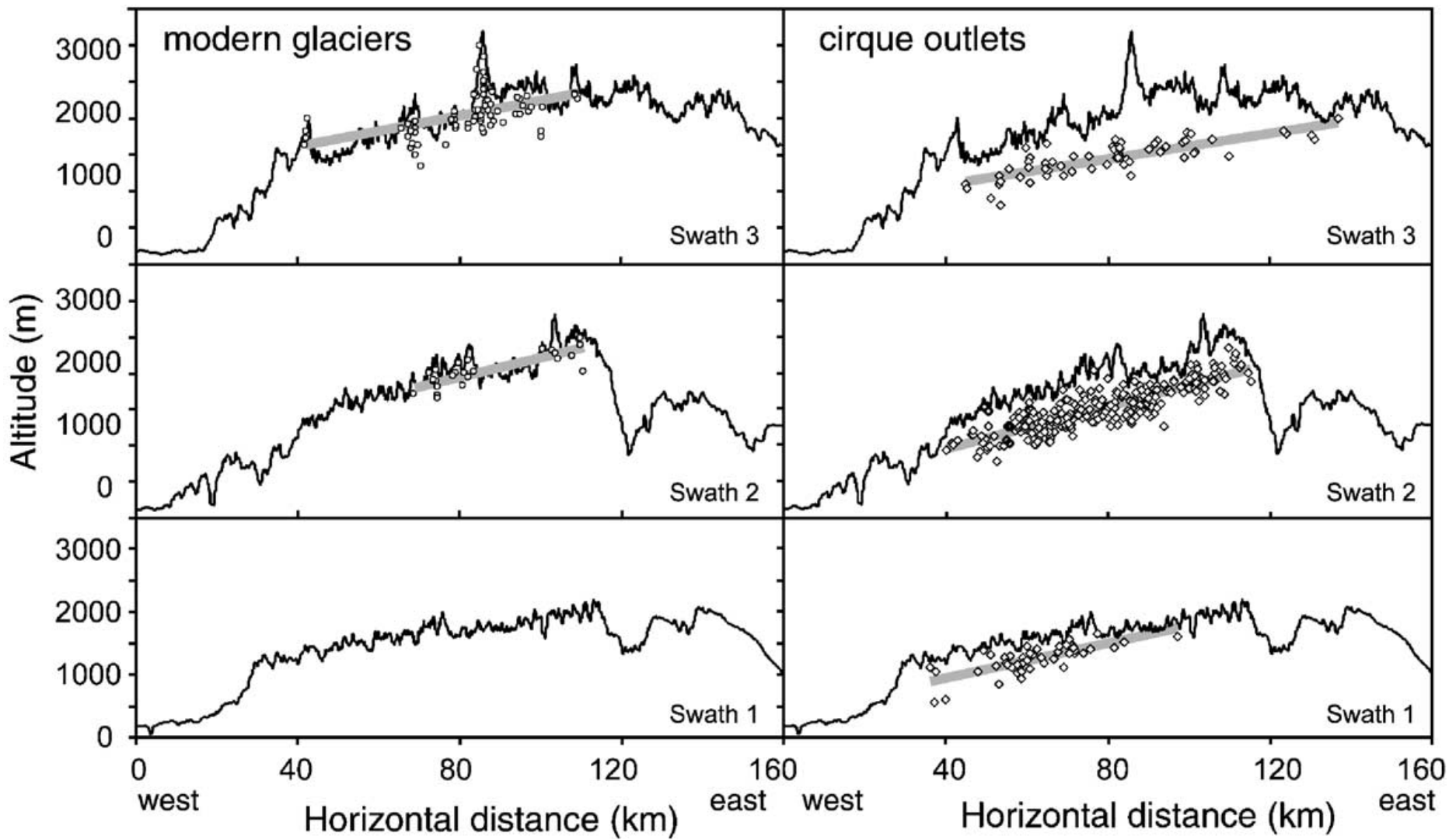
Tacoma

76 km

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Image U.S. Geological Survey
Image © 2011 TerraMetrics







Areal scouring



Areal scouring





Sichelwannen



Roches moutonne'es

The strandflat



Strandflat

Craig and tail



Crag and tail



Kaldbak



Edinburgh Castle, Scotland, on crag and tail. Royal Mile extends along tail to left. Ice flow was upper right to lower left.

Rock drumlins



Drumlins

Skuvoy



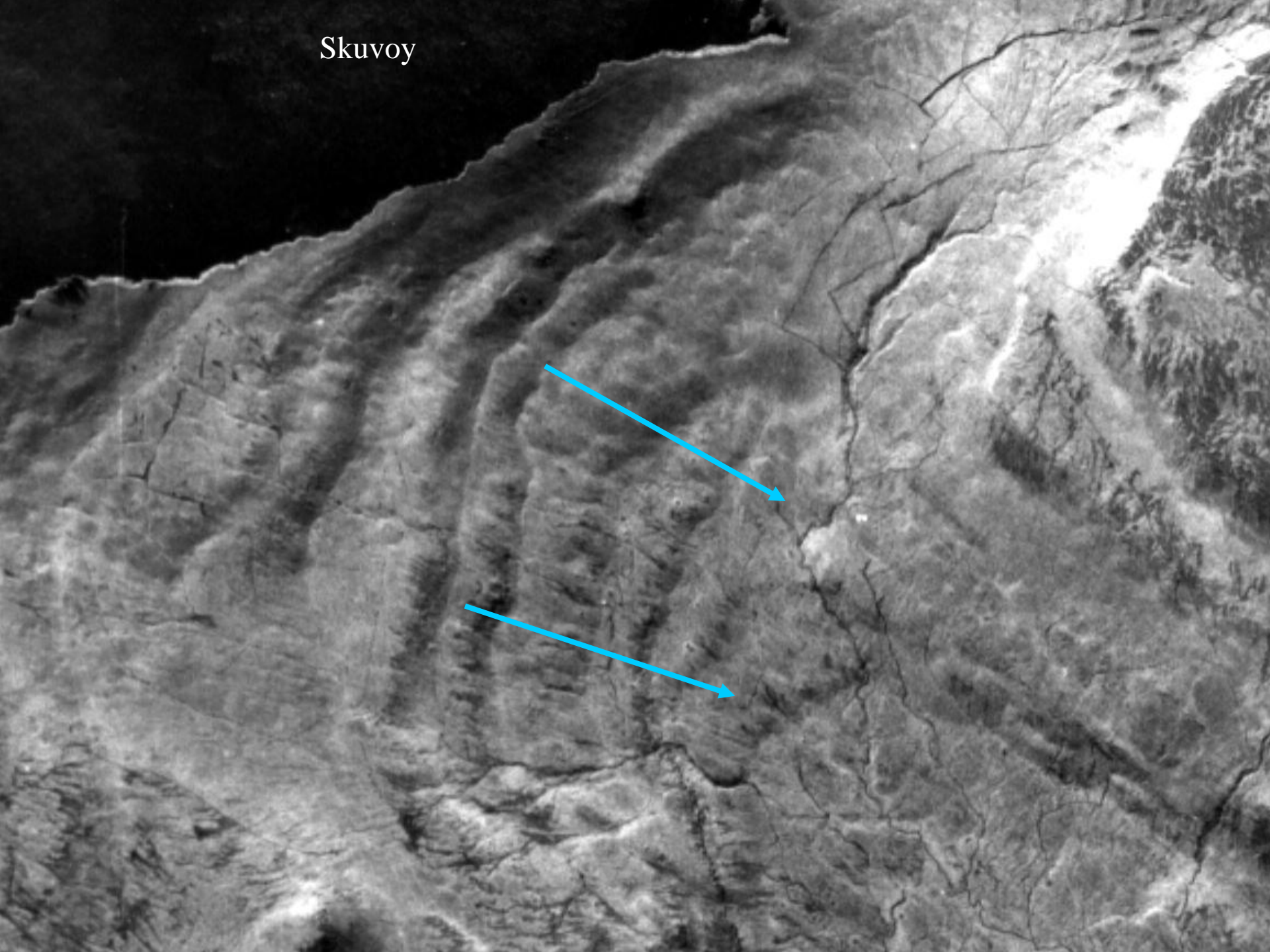
Ice flow



Sandoy

Nolsoy

Skuvoy





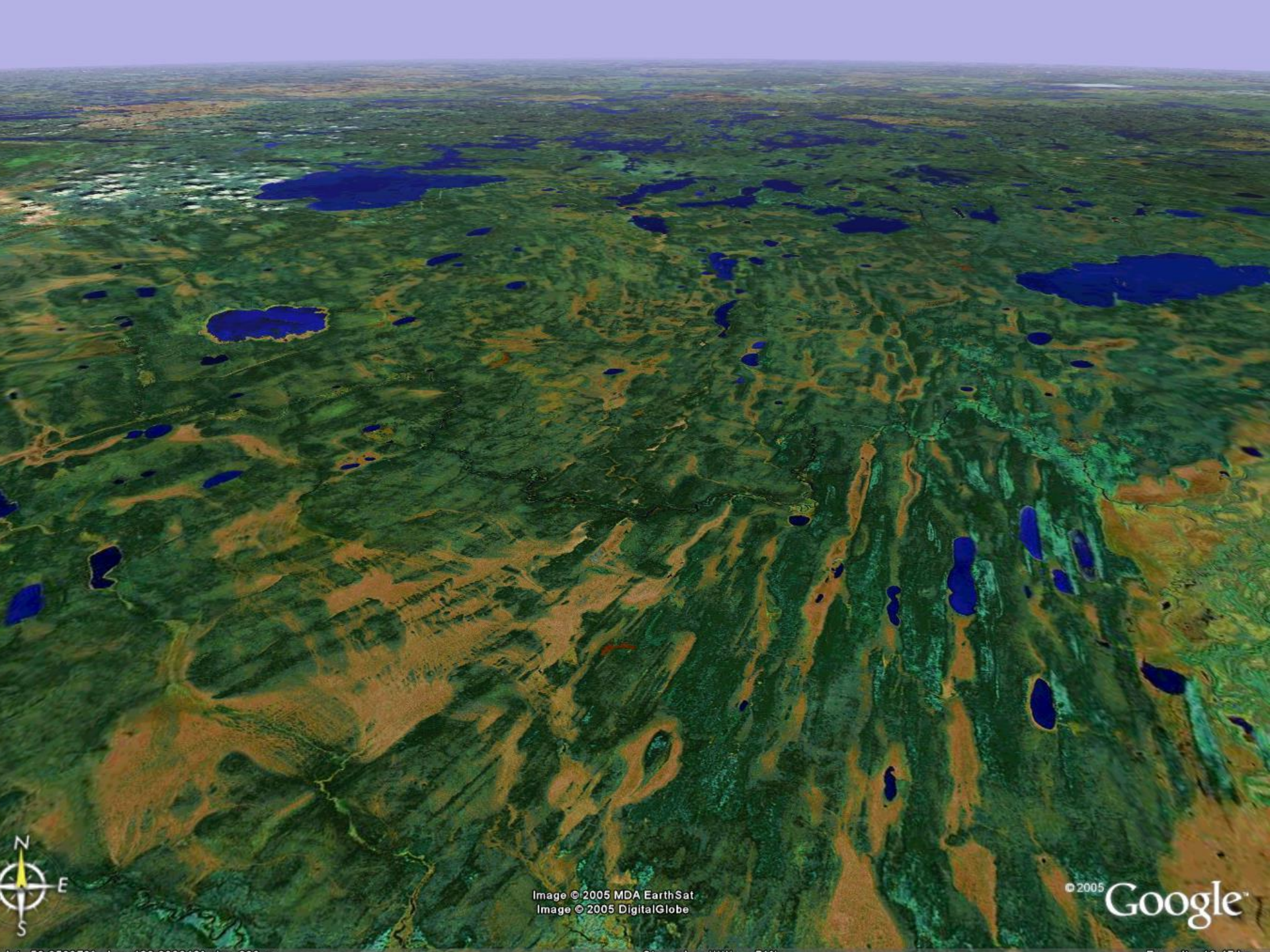


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Cirque valleys

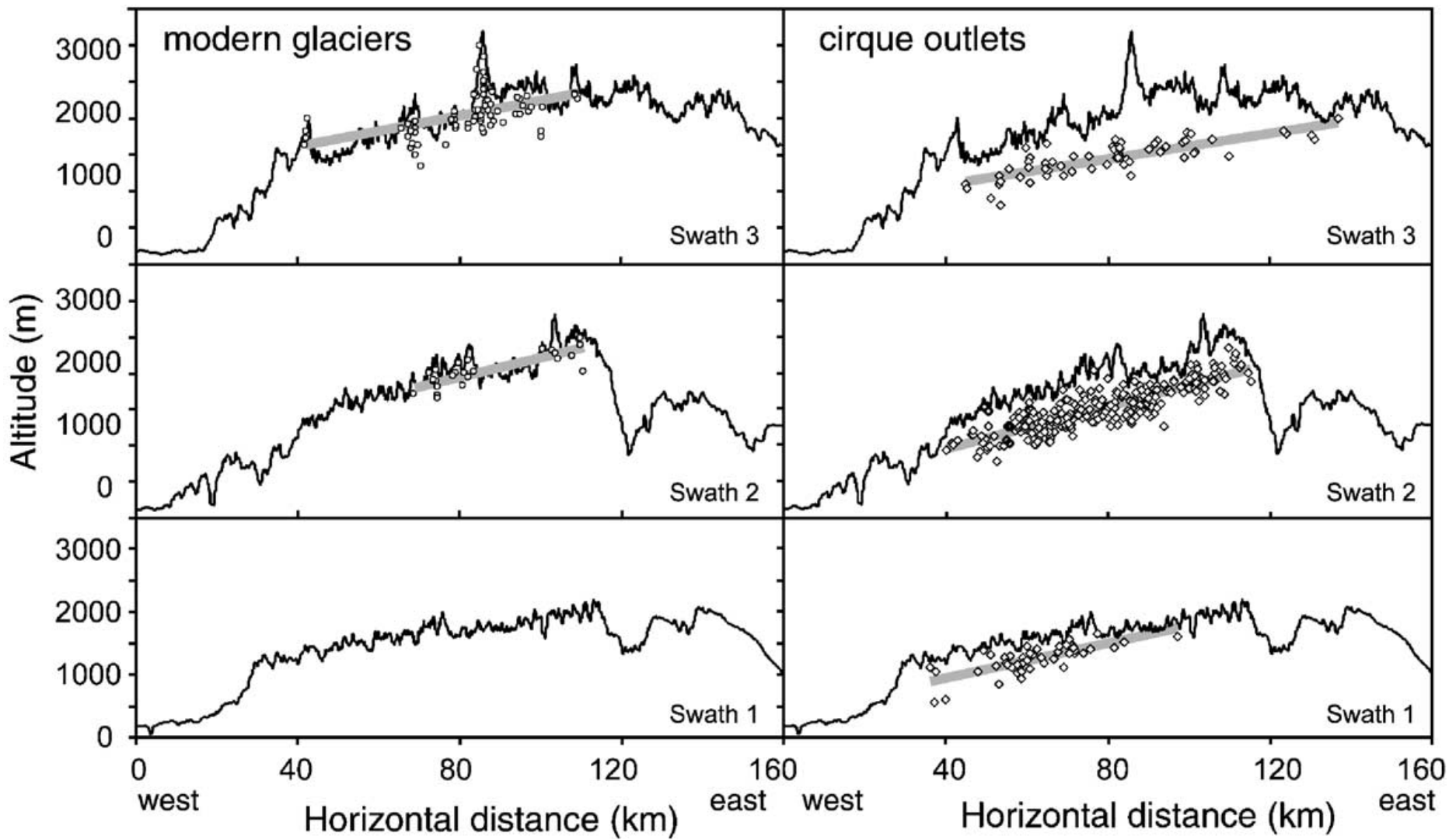




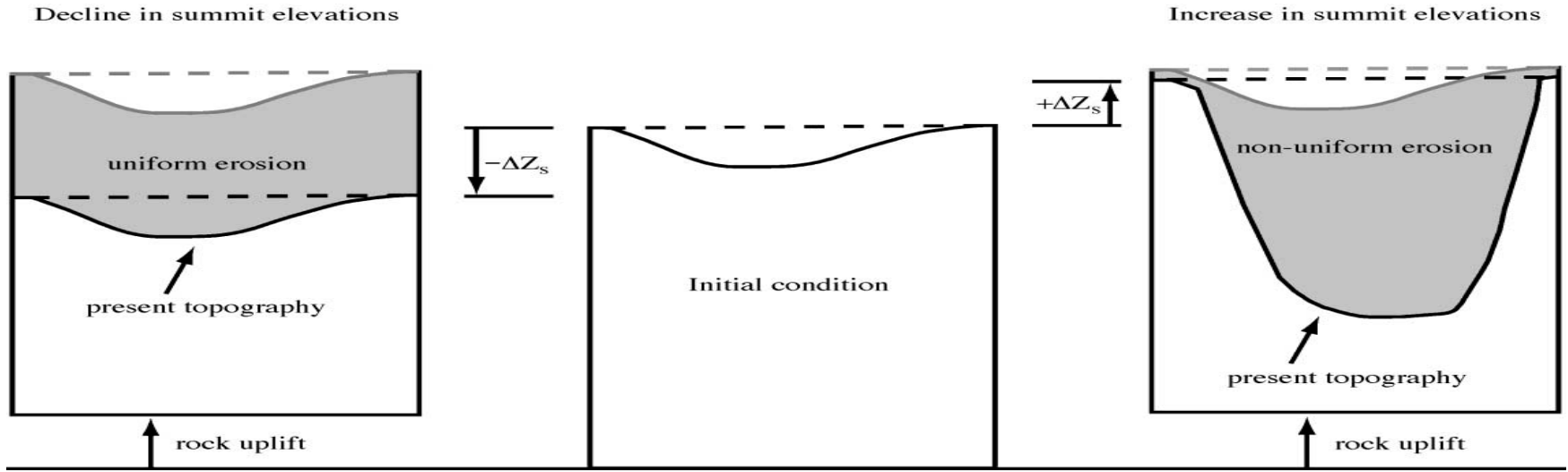








Trough valleys



Two cases of mountain erosion, both leading to the same amount of isostatic uplift. The central panel represents the initial landscape.



Glacial fjord valley



Glacial valley





Oppdal, Norway



Image © 2006 MDA EarthSat
Image © 2006 DigitalGlobe

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Go

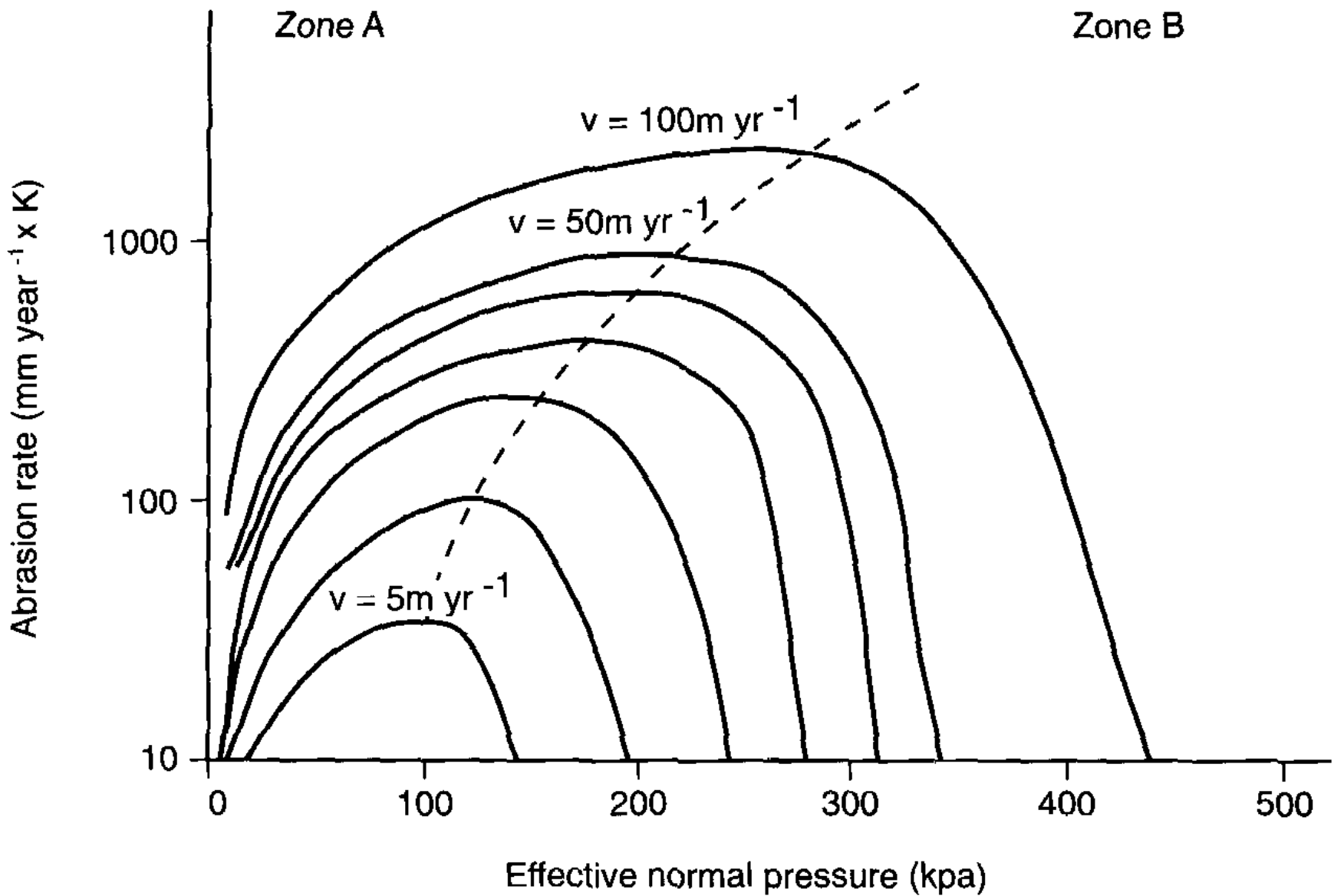


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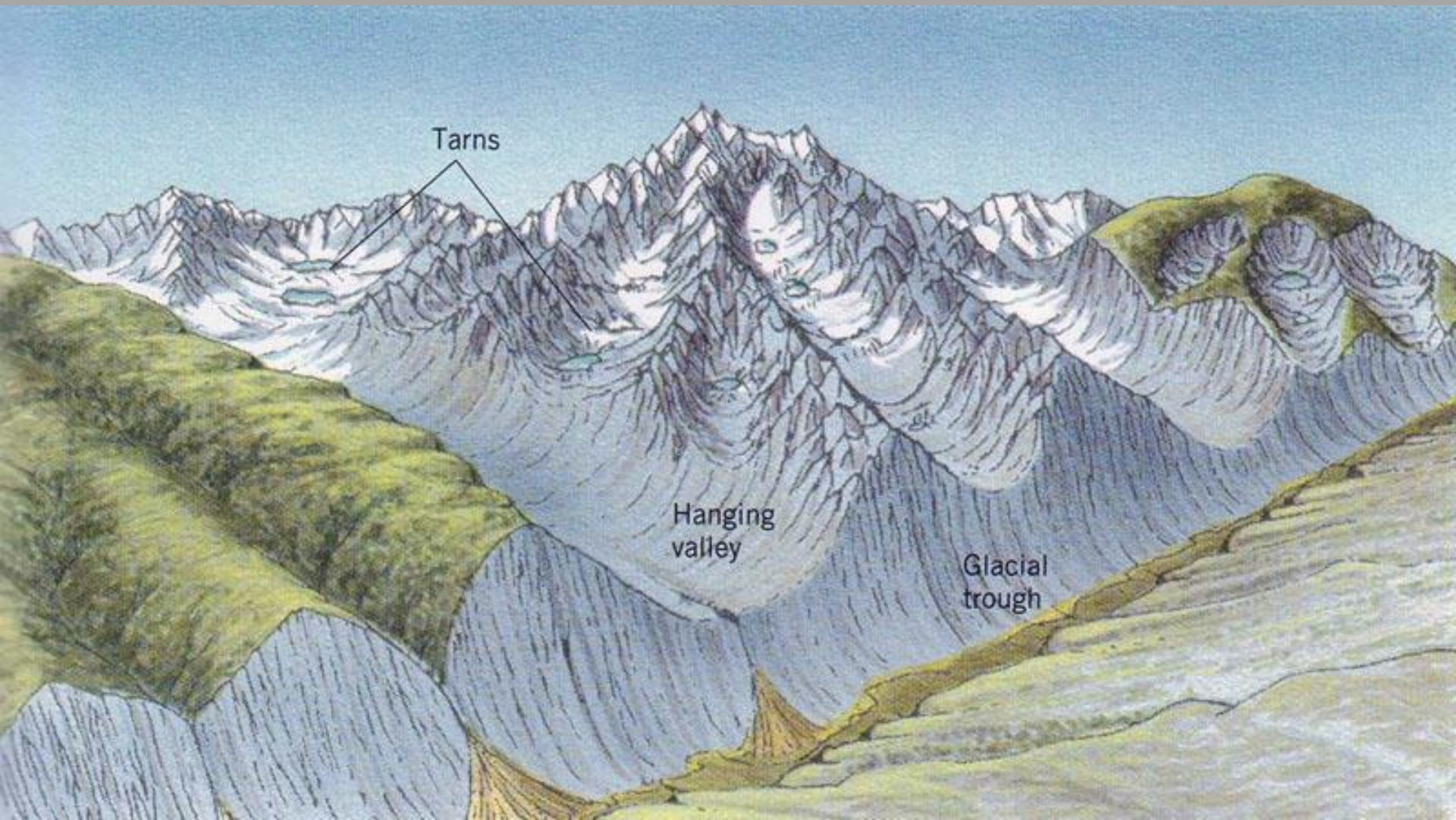
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Effective basal normal pressure and glacial erosion



Hanging valleys



The typical textbook illustration: The result of glacial erosion



Hanging valleys

Trimlines and nunataqs



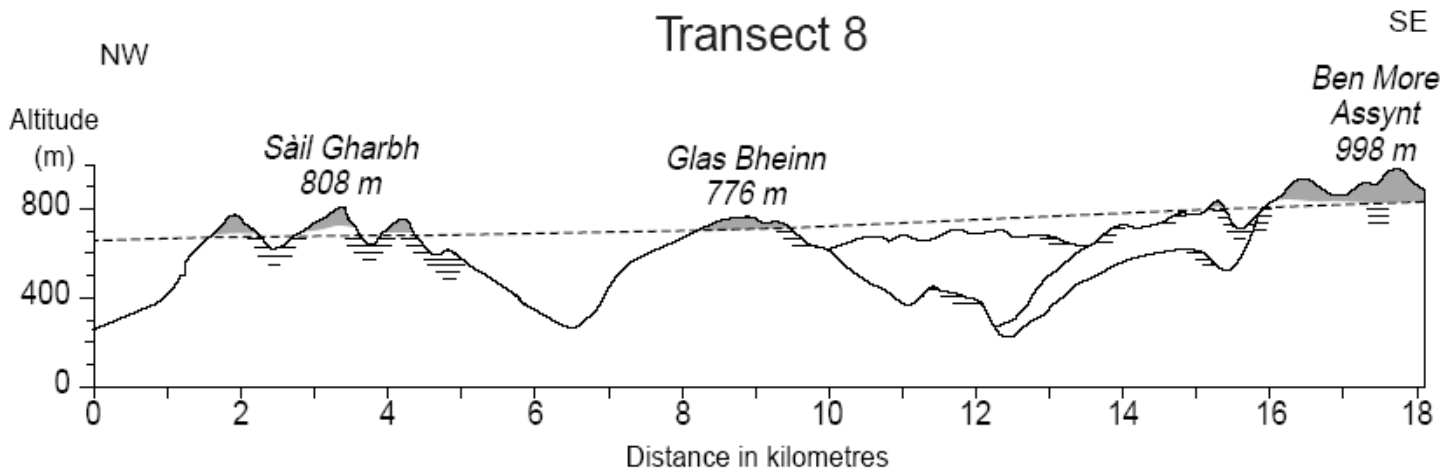
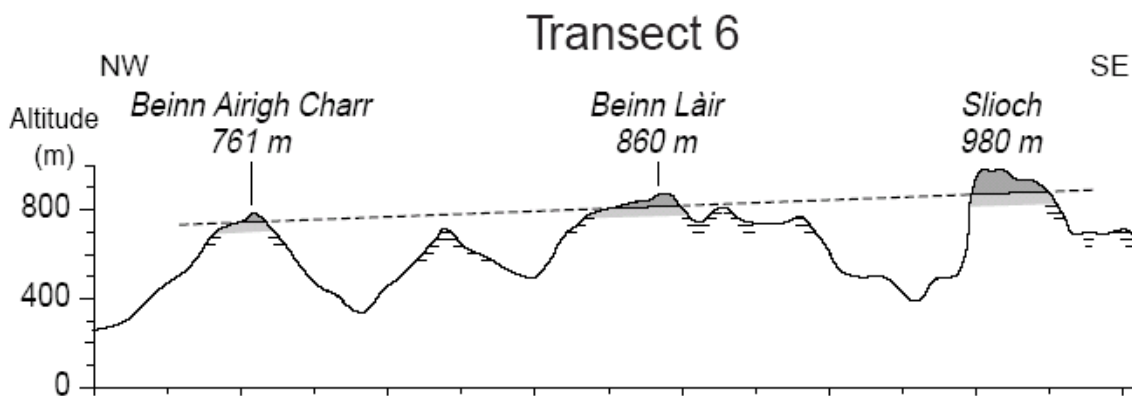
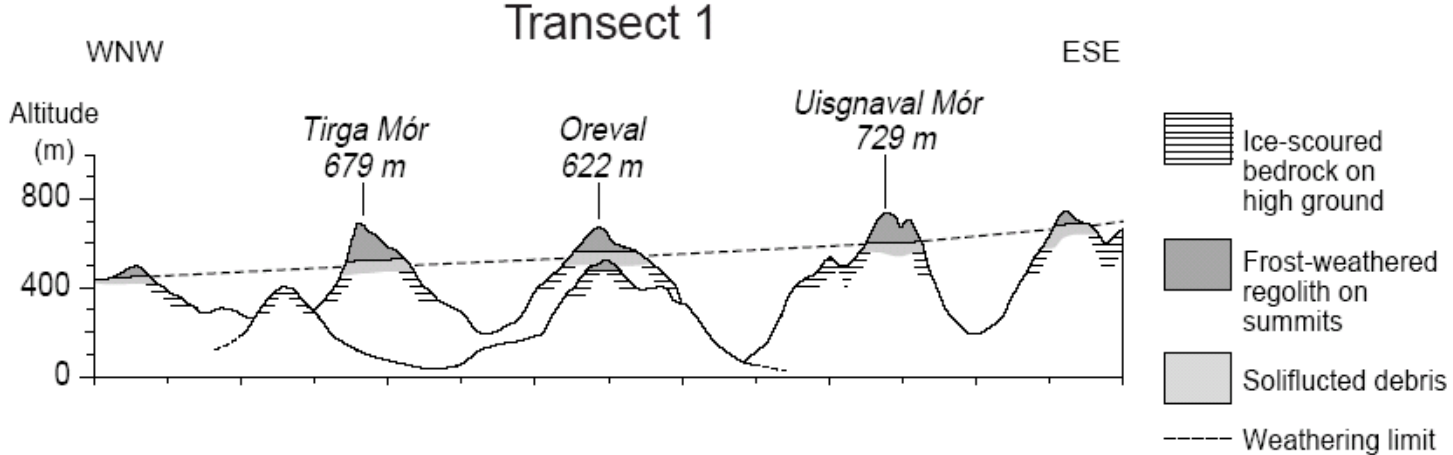






Glacial trimline

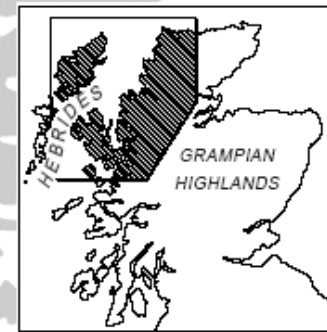
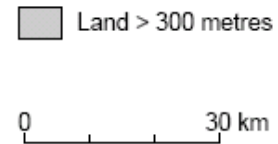


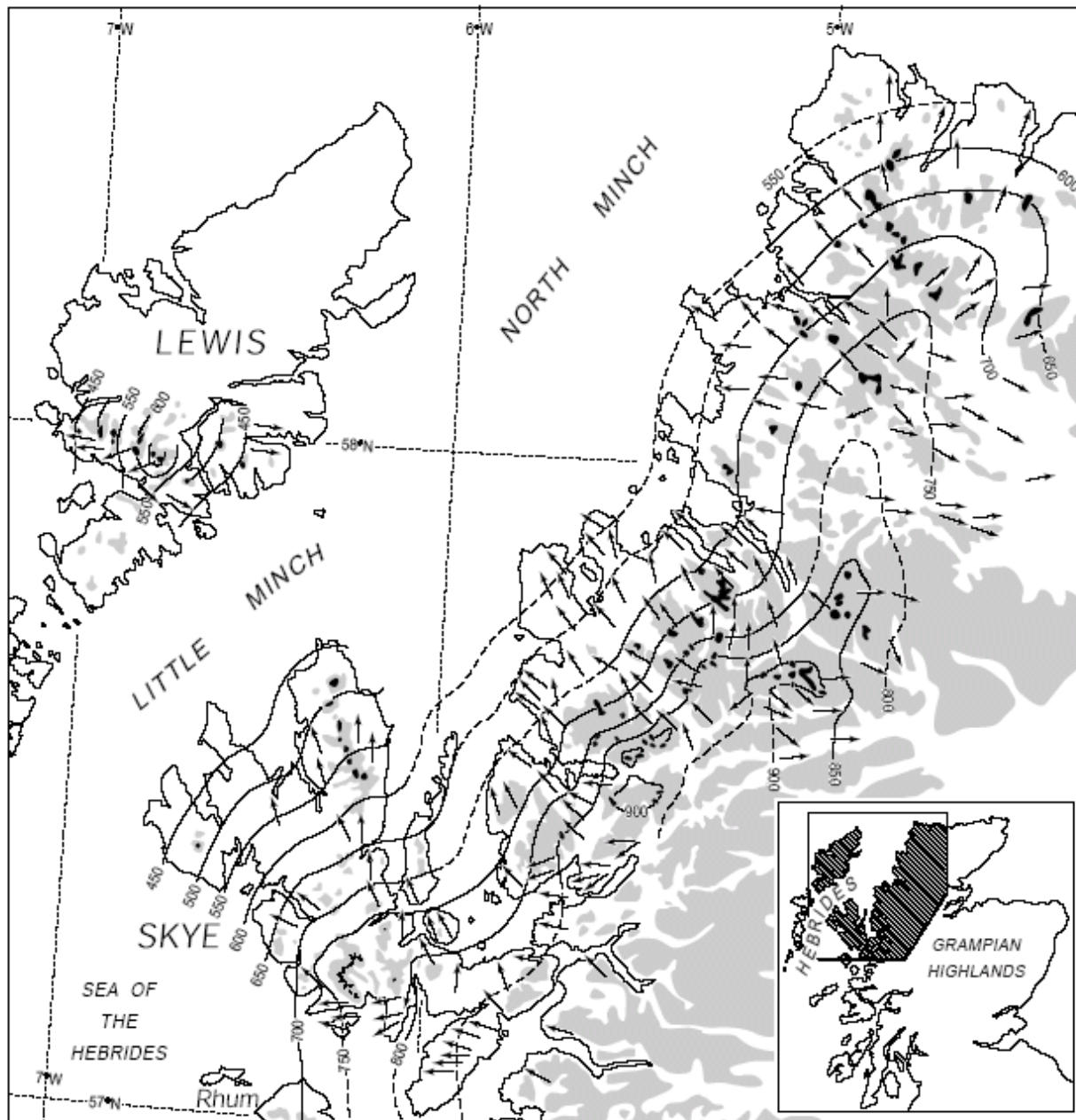




- ▲ Mountains with high-level weathering limit
- Mountains with glacially eroded summits
- Mountains on which only the minimum altitude of glacial erosion was detected

- 3 — Flowline transect
- AT An Teallach
- ST The Storr





Land > 300 metres

Former nunataks

Former ice surface contours (m):

800 — Interpolated

700 - - - Inferred

Direction of ice movement

0 30 km

Paraglacial processes





Rockslide at Fåbergsstølen, Jostedal



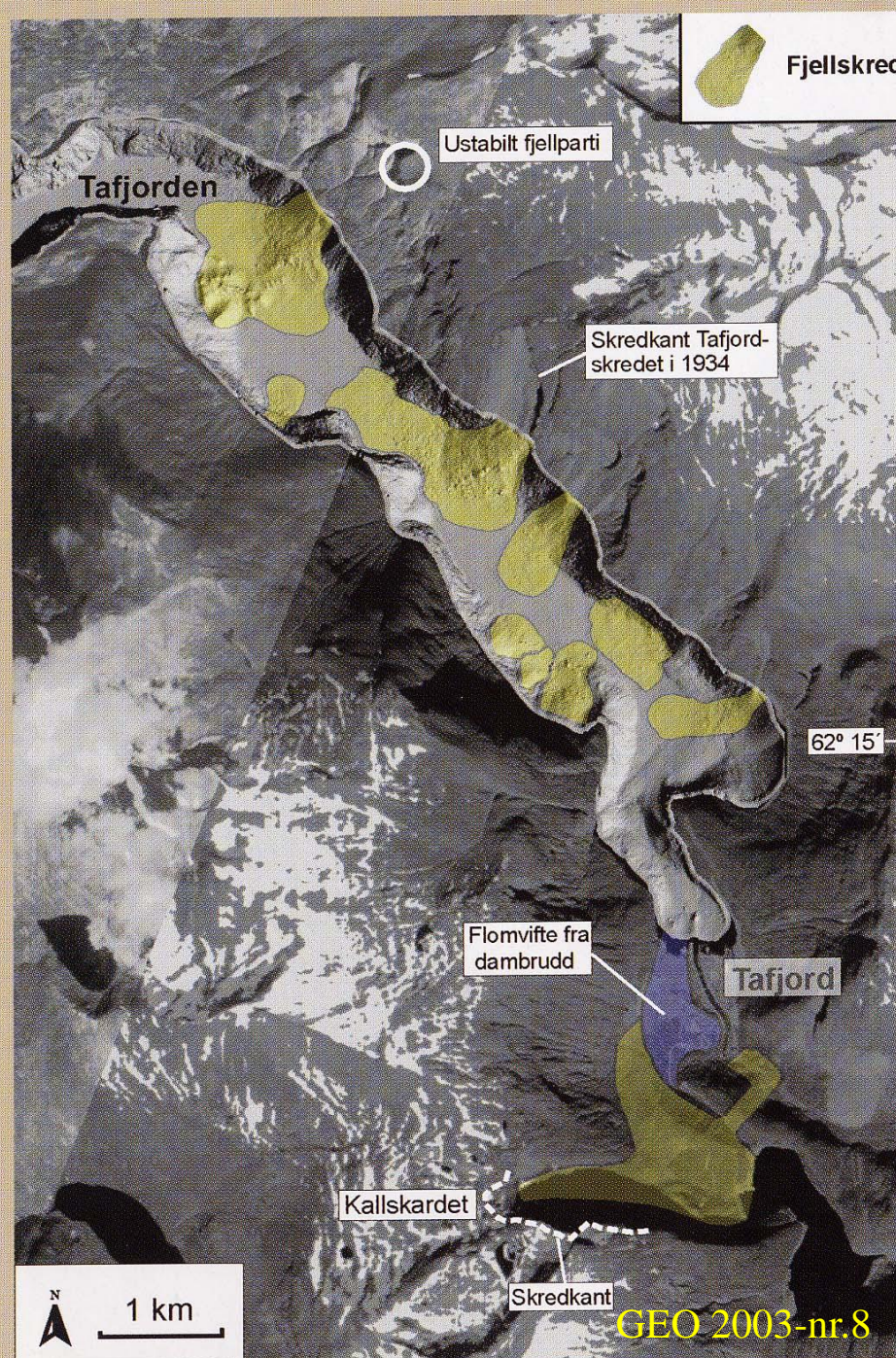
Rock slides ?



Photo: Ketil Isaksen



Tafjord i Møre og Romsdal. Satellittfoto viser utglidningene i de bratte fjellssidene, og det detaljerte batymetriske kartet viser at det ligger mange store fjellskred på fjordbunnen.



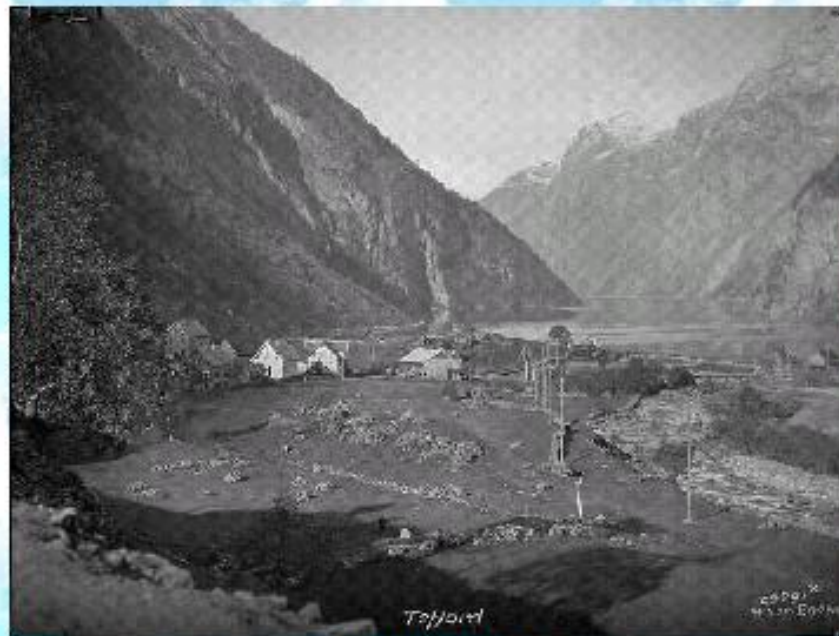
Tafjordulykka 7. april 1934

Natt til laurdag 7. April 1934 hende i Tafjorden ei av dei verste naturkatastrofene nokon gong i Noreg. Då losna Langhammaren, ei stor fjllblokk på nordsida av Tafjorden og reiv med seg Heggurda som låg under hammaren. Ein rekna med at ca. 3 millionar kubikkmeter stein fall ned i fjorden. Dei opp til 64 meter høge bølgiene som reiste seg , sopa med seg alt som kom i vegen, hus og menneske. I alt miste 40 menneske livet 23 i Tafjord og 17 i Fjørå. Et par atfunne ur hadde stansa på 03.10 ulukkesnatta.



Tafjord





Tafjord 1926



Tafjord 1934

Next: Glacial transport