



Ålfotbreen: Bjarne Kjølmoen



# Hva skjer med breene i Norge?



Liss M. Andreassen  
Breforsker, Oslo, 21. mars 2025





**1872**  
Knud  
Knudsen



878. PARTI FRA BRIGSDALSBRÆEN, OLDEN I NORDFJORD. K. K. B.





NVE



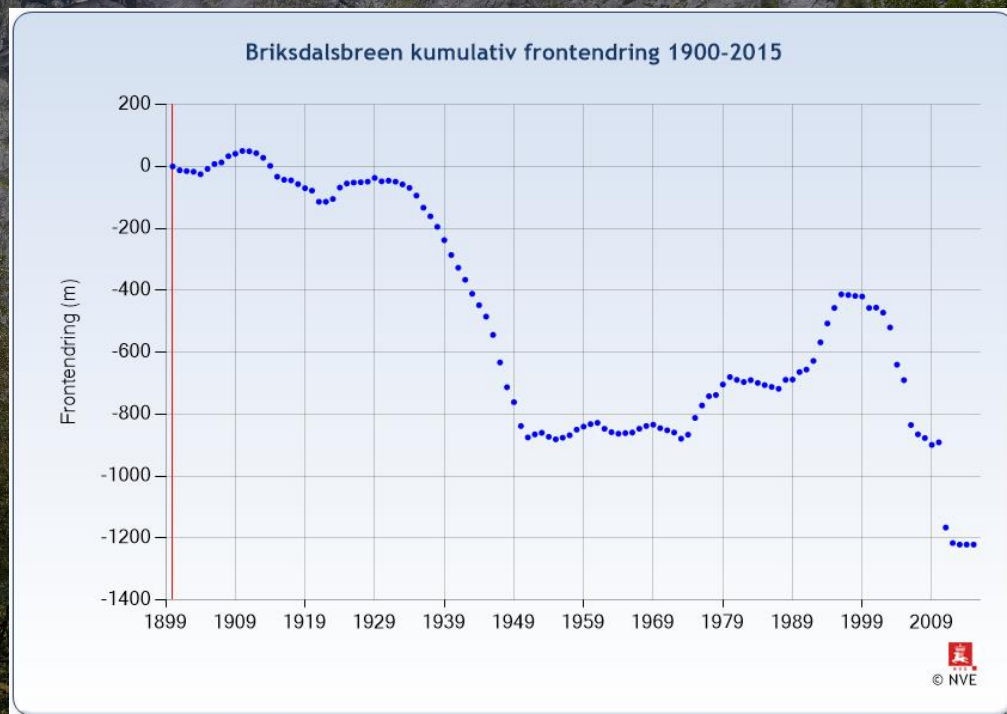
**2024**  
Mark  
Reysoo







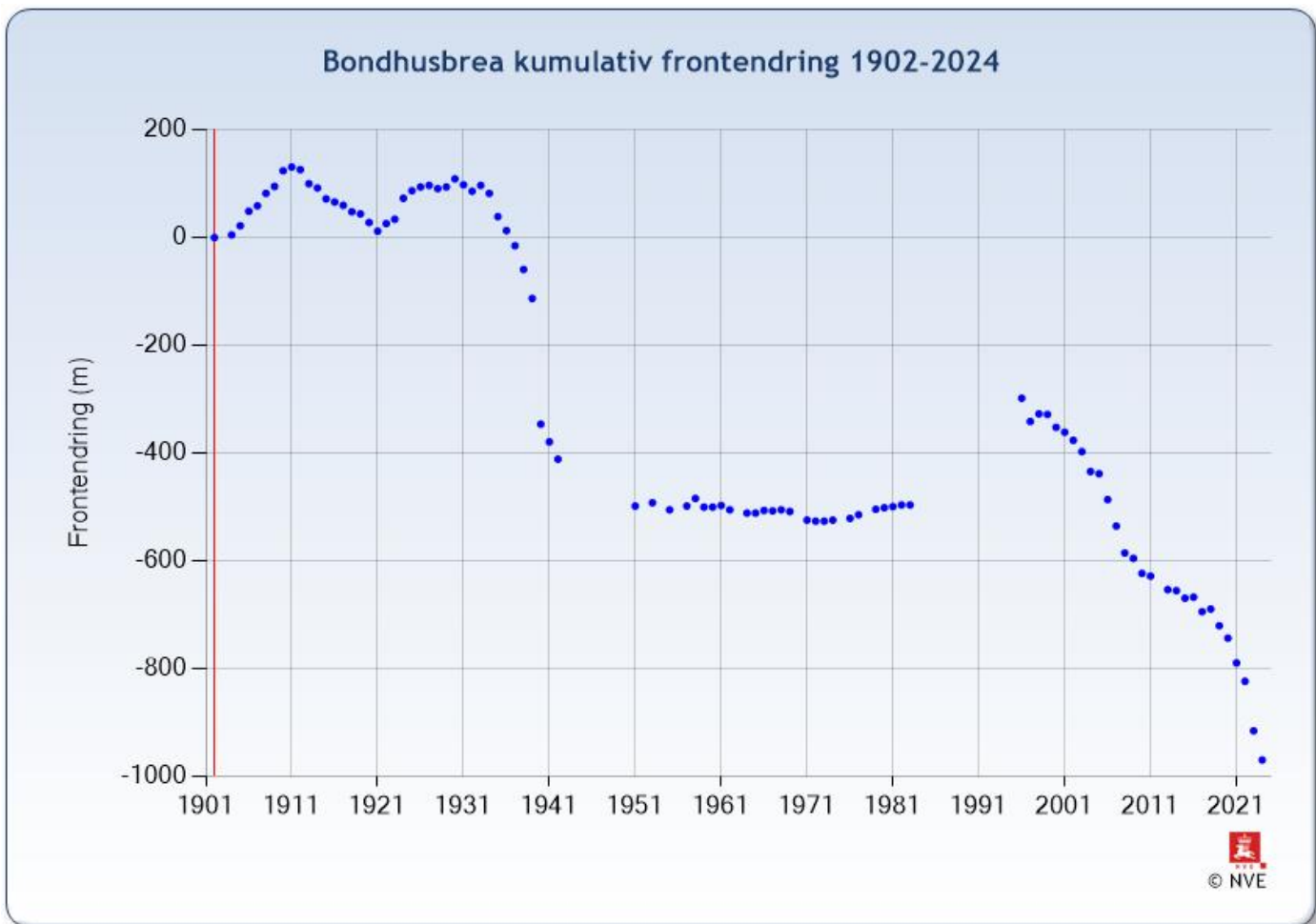
**2024**  
Mark  
Reysoo



[glacier.nve.no/Glacier/viewer/CI/no/nve/ClimateIndicatorInfo/2316?name=Briksdalsbreen](https://glacier.nve.no/Glacier/viewer/CI/no/nve/ClimateIndicatorInfo/2316?name=Briksdalsbreen)



# Bondhusbrea



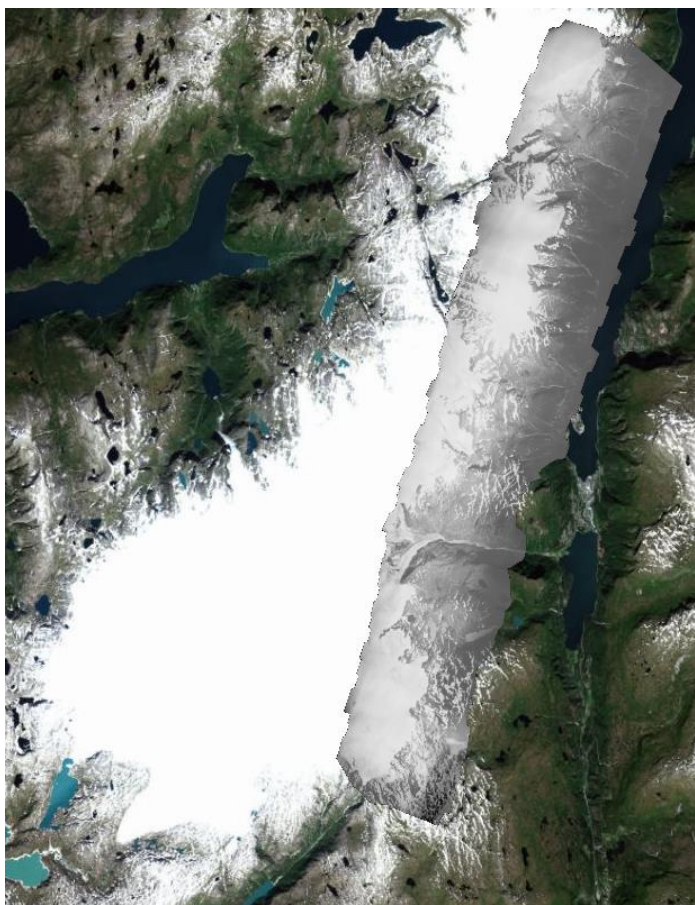
[glacier.nve.no/Glacier/viewer/CI/no/nve/ClimateIndicatorInfo/3133?name=Bondhusbrea](https://glacier.nve.no/Glacier/viewer/CI/no/nve/ClimateIndicatorInfo/3133?name=Bondhusbrea)

Knud Knudsen/Isaac Dawson

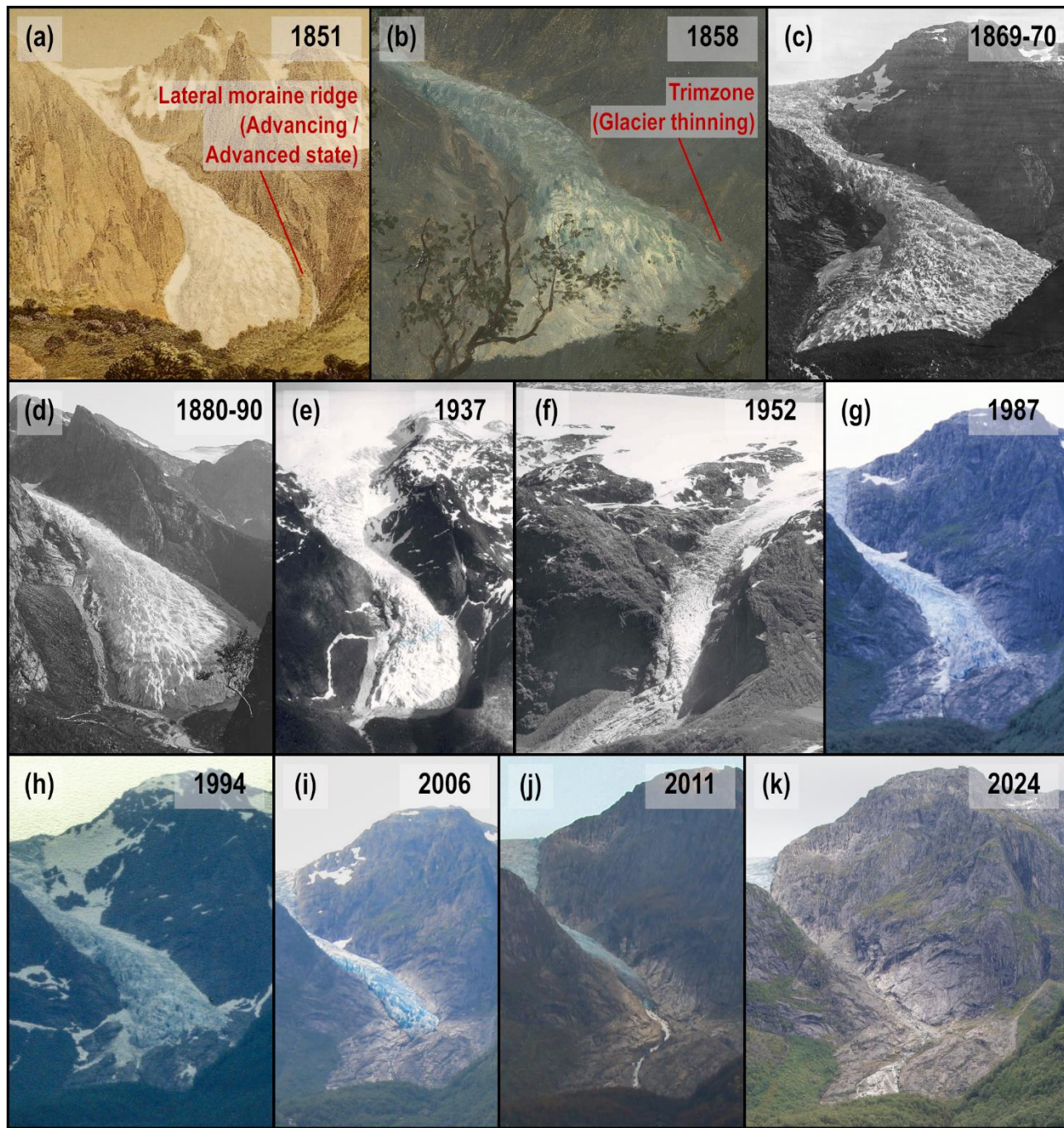




- Paintings and photos
- Aerial photos  
norgebilder.no – new & historical



1937: norgebilder.no

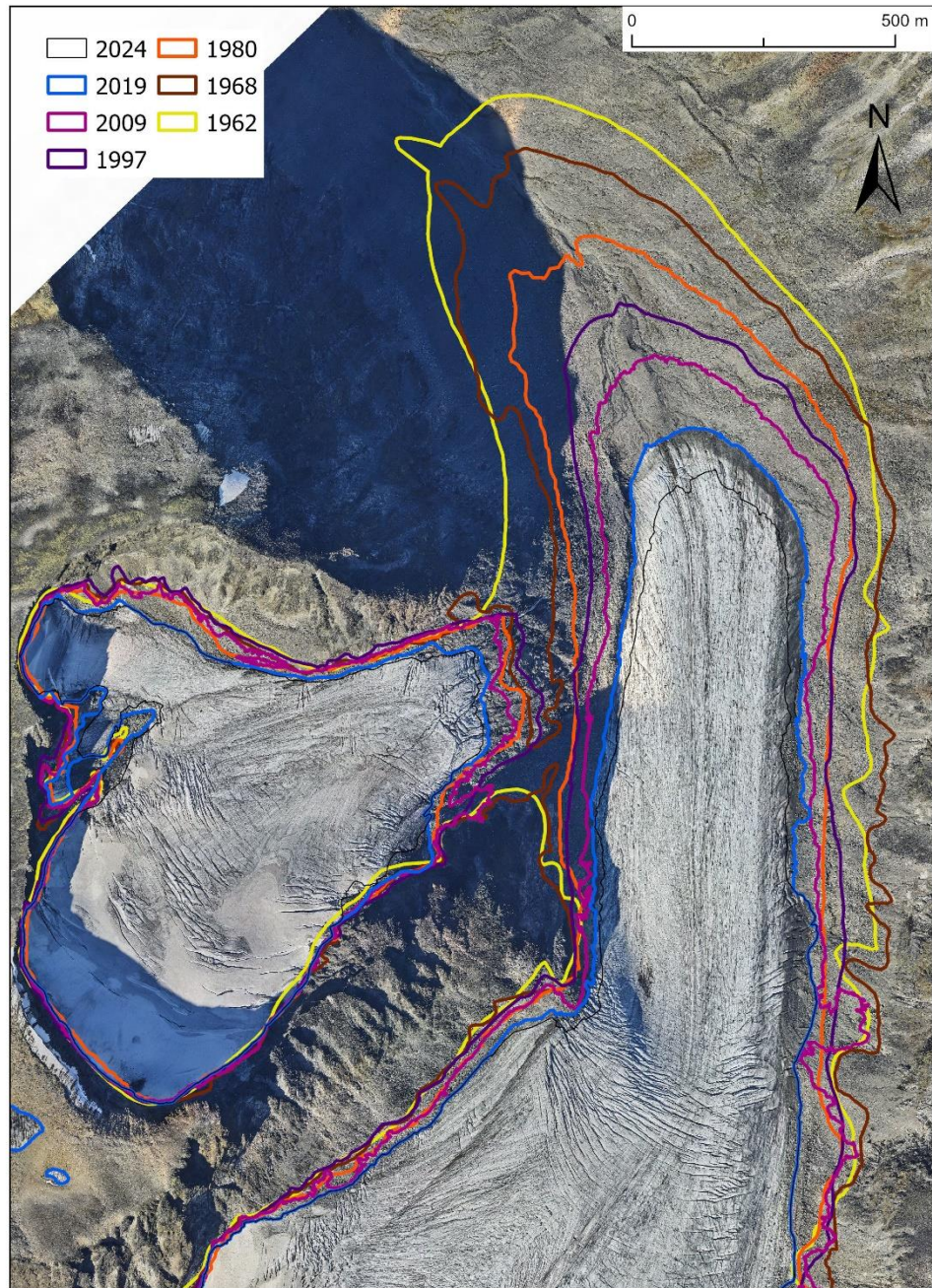
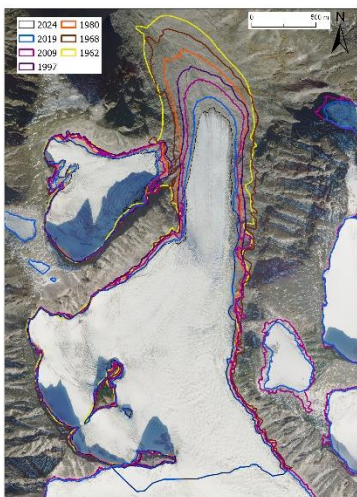


Weber, Andreassen, Boston, Tvede in prep.

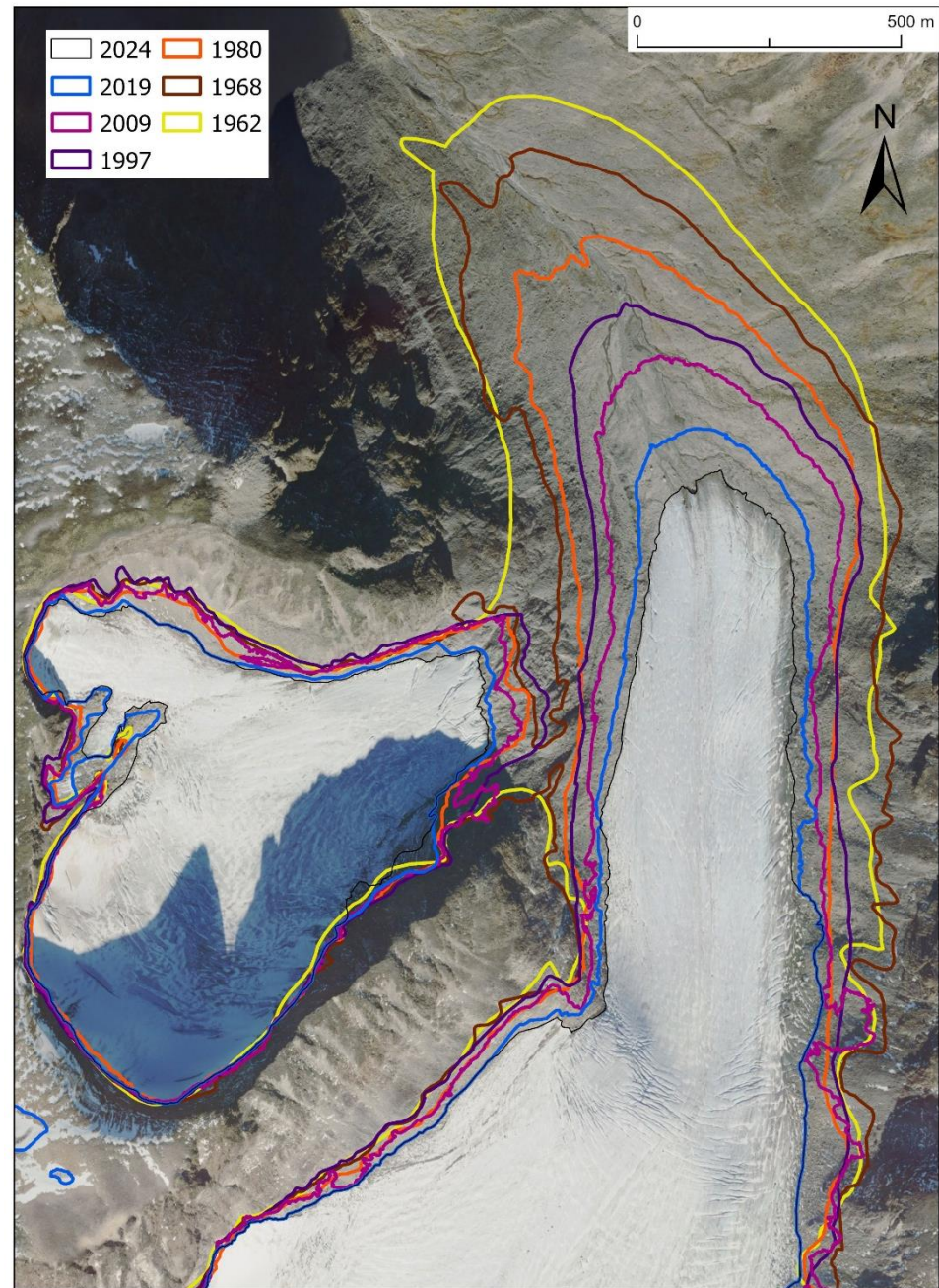




# Hellstugubreen



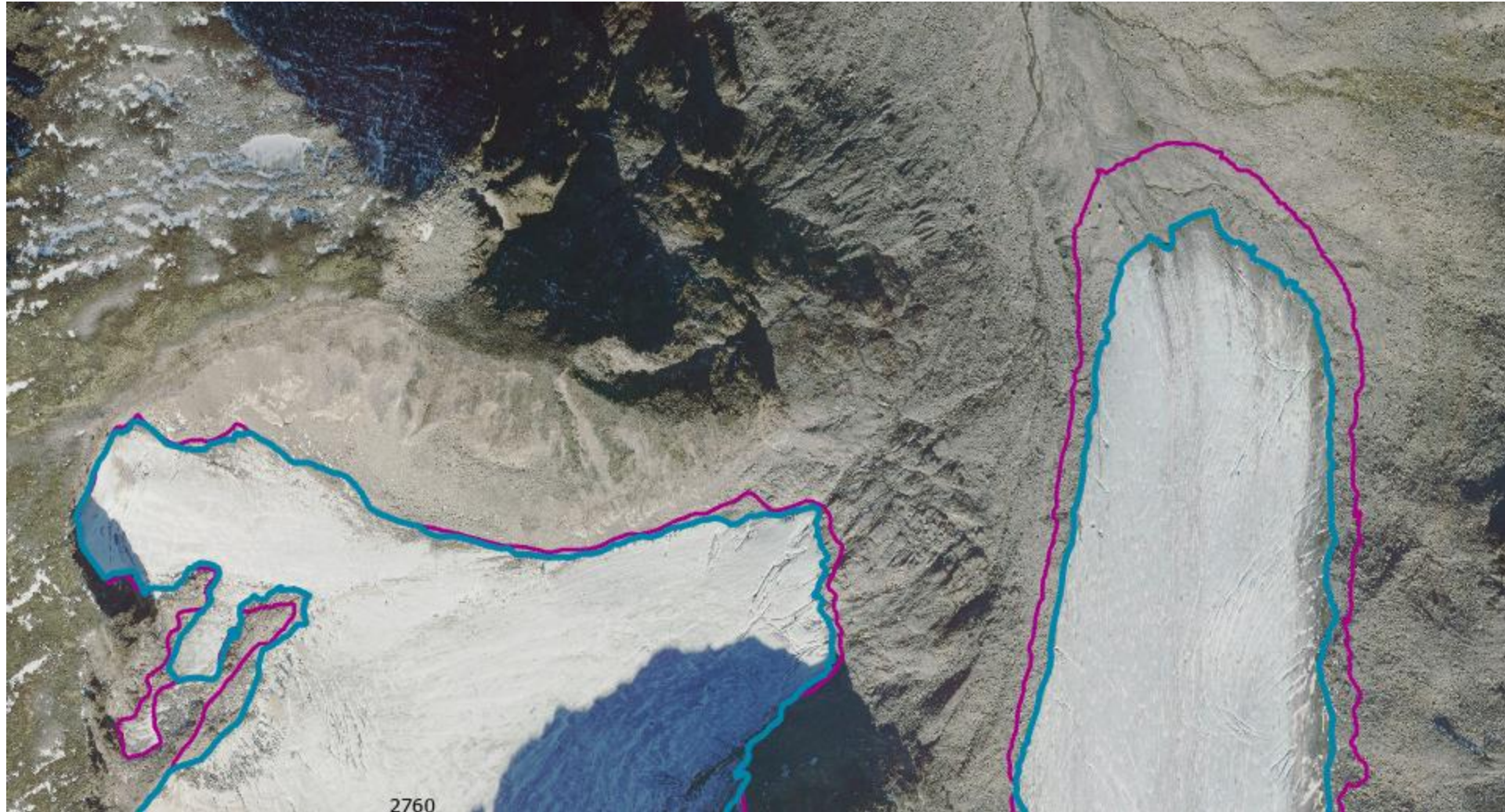
2019: NVE



2024: norgebilder.no



# Glacier landscape is changing 2019 - 2024





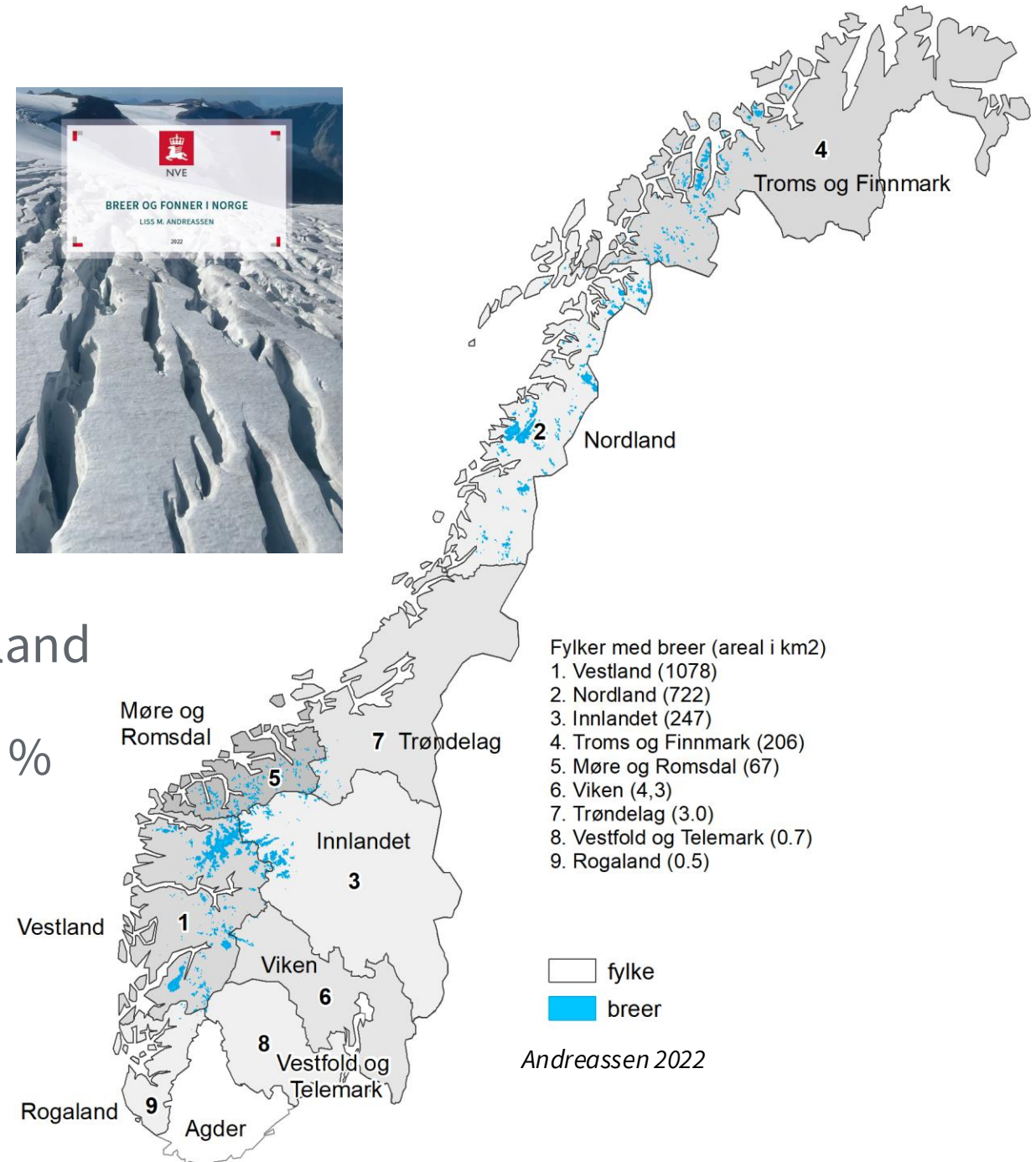
# Breer og fonner i Norge



- Areal: 2300 km<sup>2</sup> (0.7 % av landareal)
- 40 % areal i nord, 60 % i sør
- Sterk nedbørgradient - vest -> øst
- Breer konsentrert i Vestland & Nordland
- Jostedalsbreen (458 km<sup>2</sup> i 2019) ~20 %



Nigardsbreen. Hallgeir Elvehøy, 2019.





# Little Ice Age extents

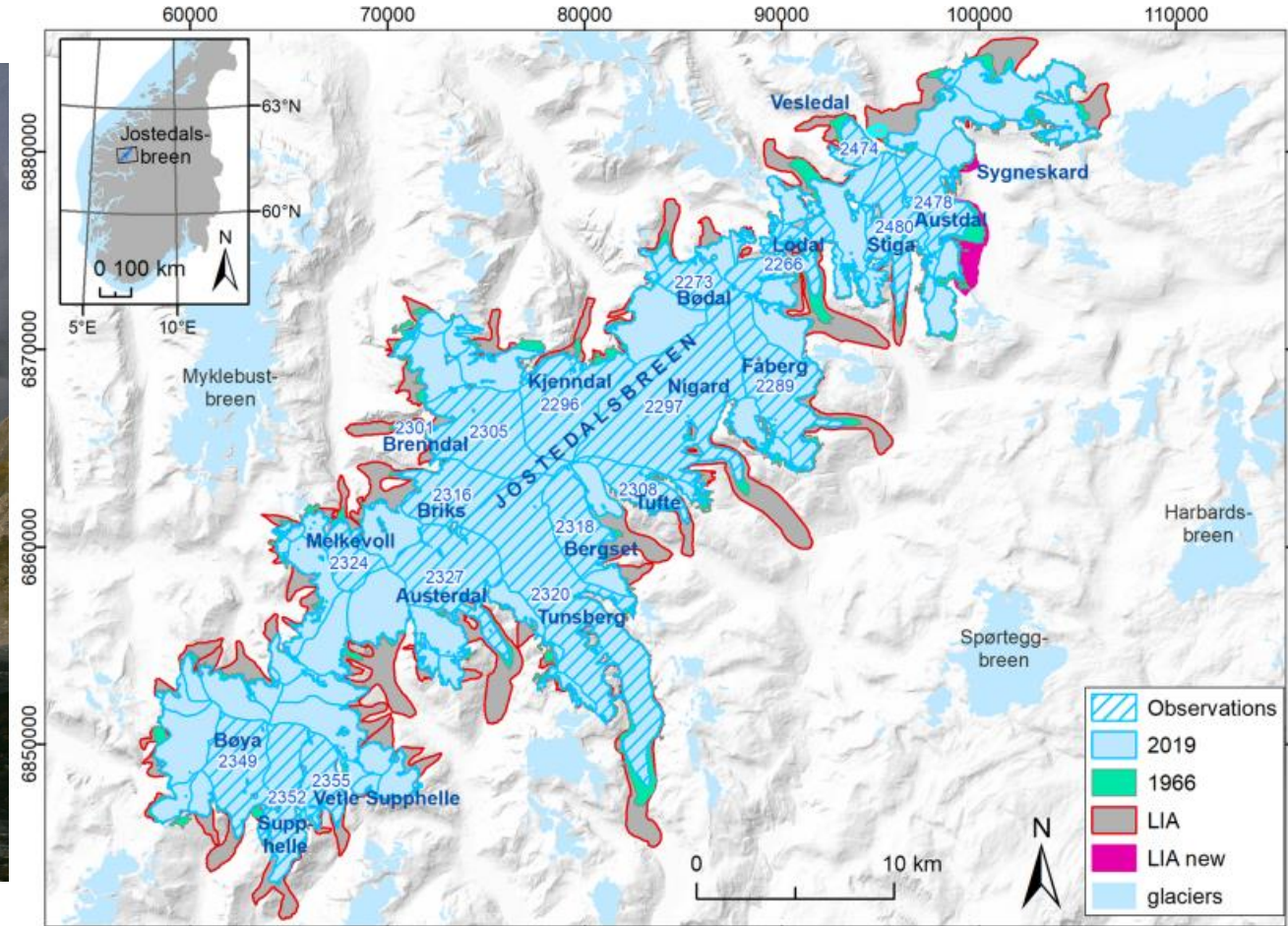


- Cold time period 1400 to early 1900
- More precipitation
- Advancing glaciers

➤ Maximum extents Norway ~1740 -1900\*



*Nigardsbreen i Jostedalen ødela gårdene Mjølver og Nigard, maksimum i 1748.  
Nigardsbreen (1846), Knud Baade*





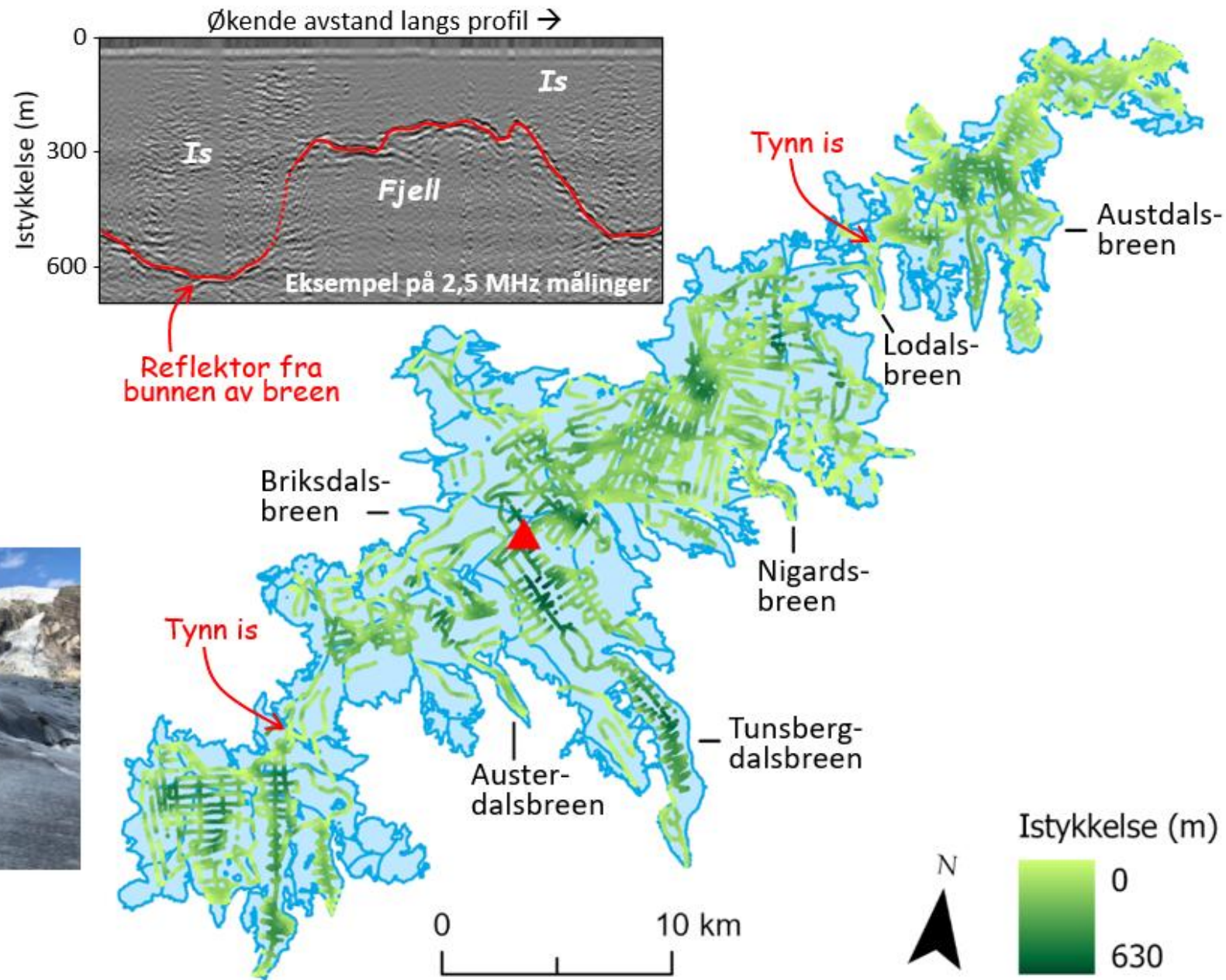


# Istykkelse

- Tykkest is målt ~630 m
- Gjennomsnitt: ~154 m



Kjetil Melvold. Mette Gillespie

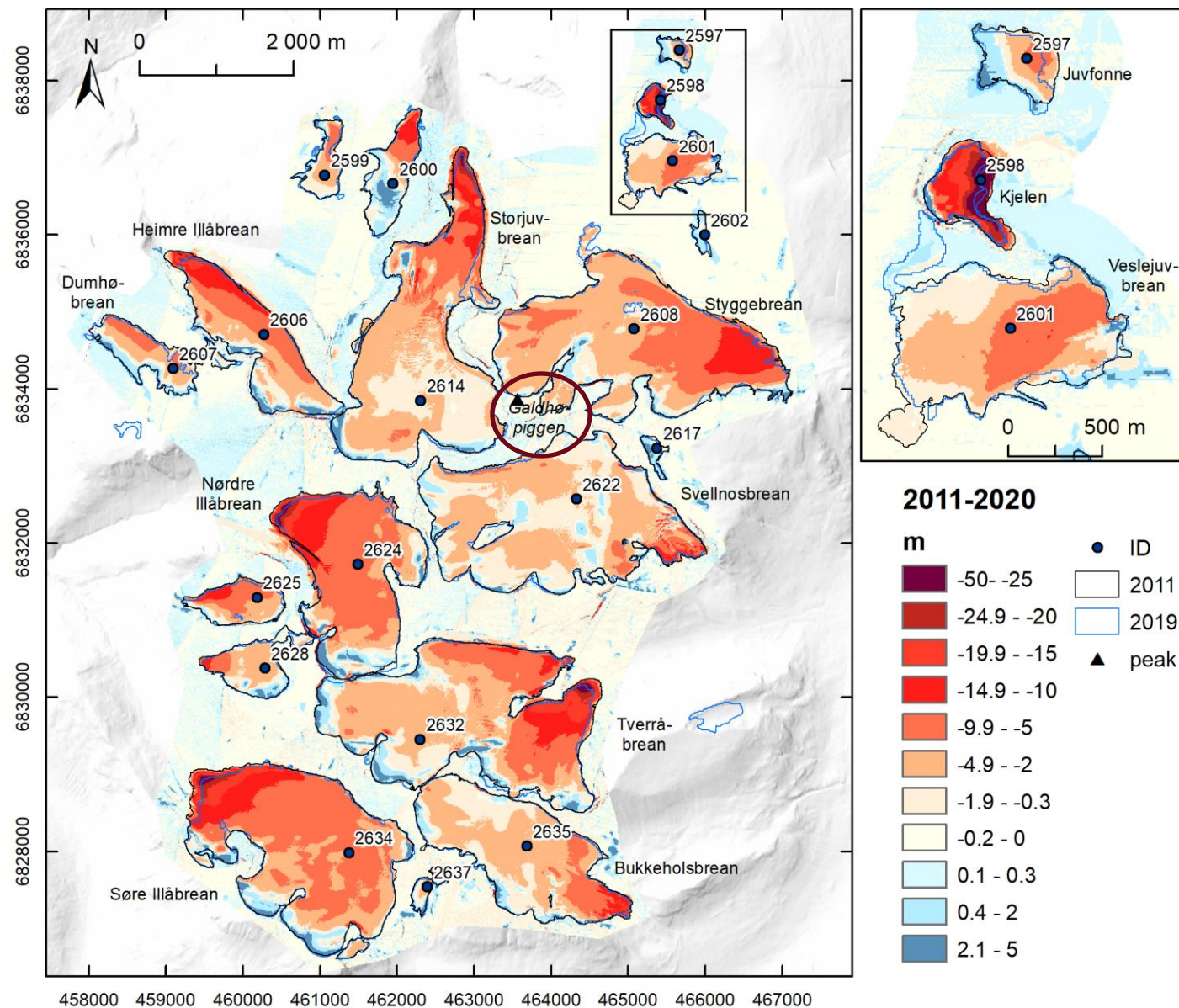






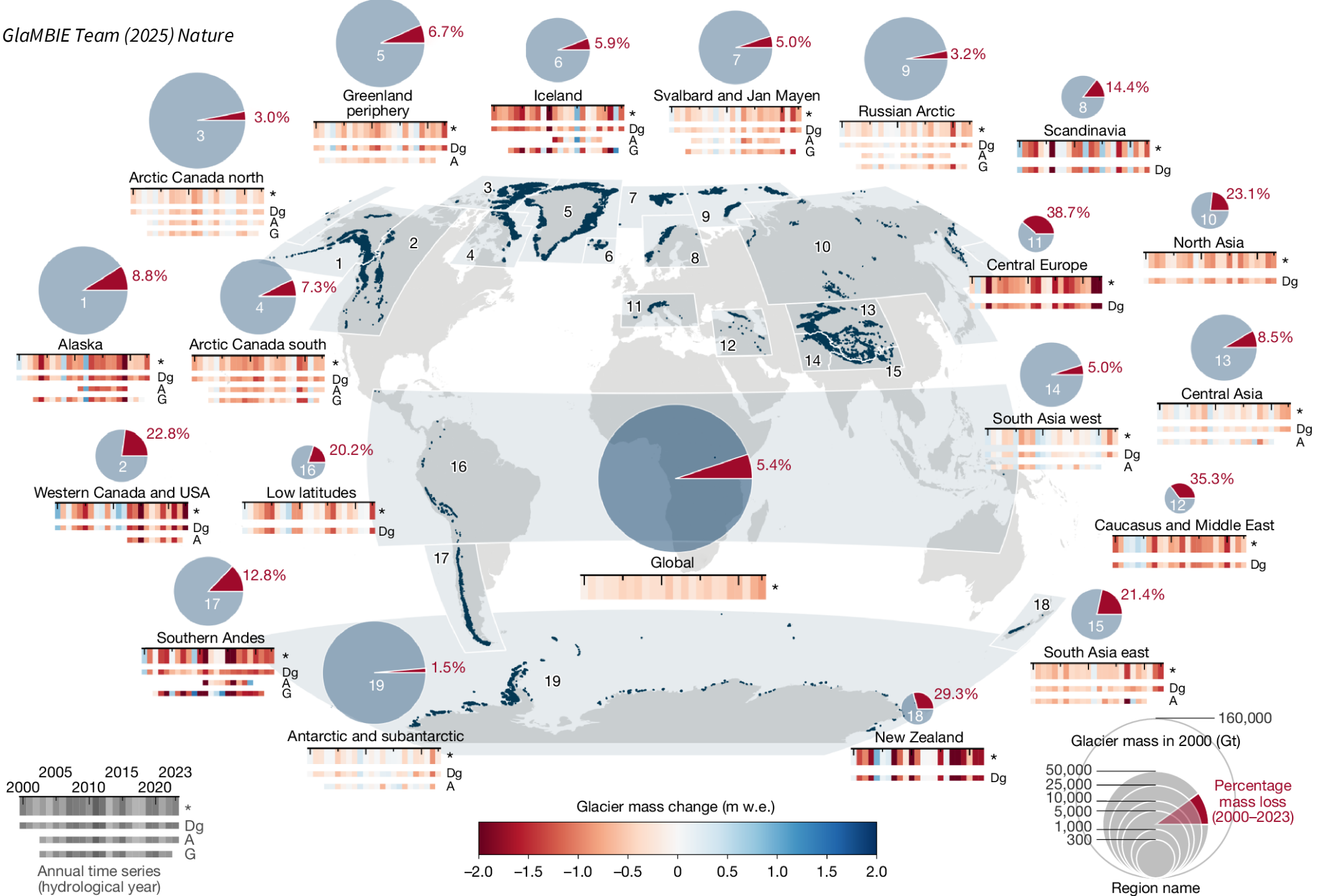
# Repertert kartlegging -> høydeendringer

- Differansekart fra to høydemodeller (m)
- 19 breer
  - Areal -4%
  - Høydeendring: -4,2 m



Andreassen in prep.







# Glacier mass balance - gain or loss in glacier mass



*Jostein Aasen, Hallgeir Elvehøy*

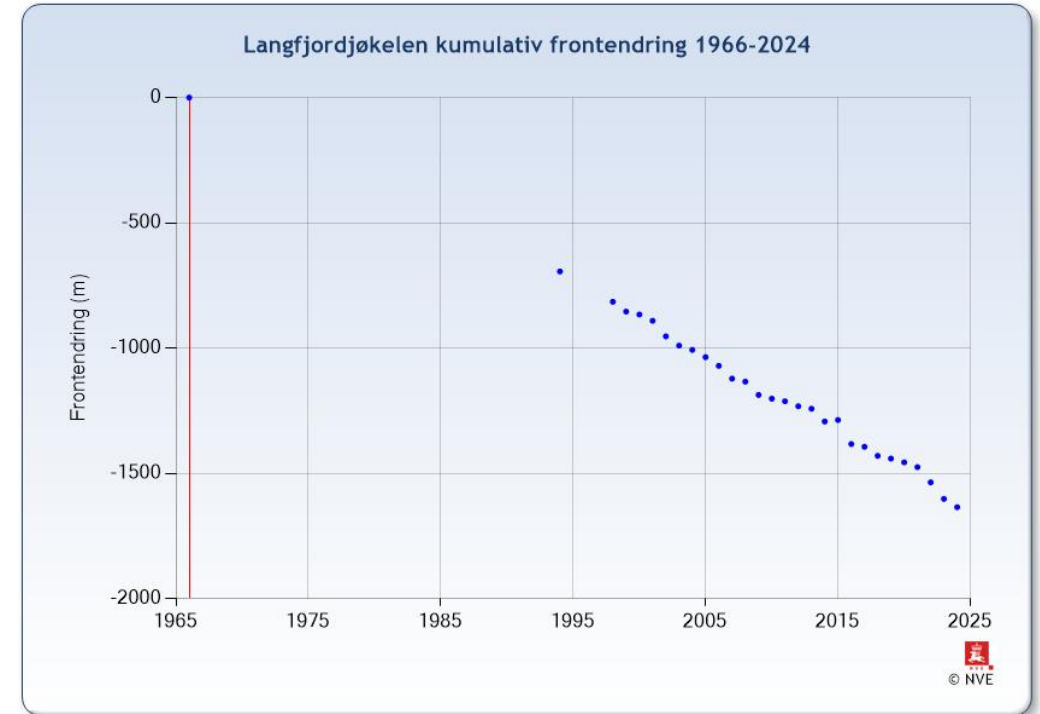
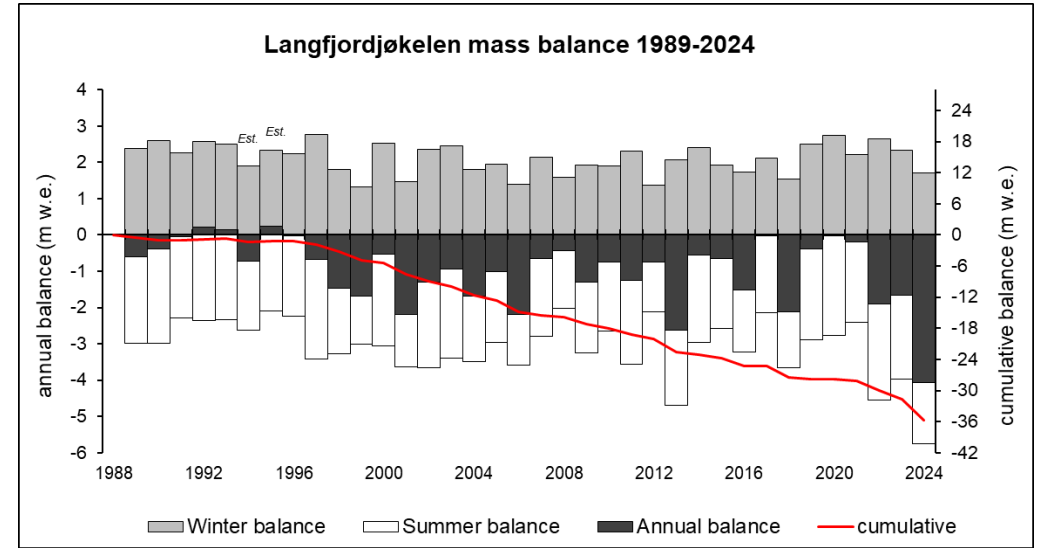




# Langfjordjøkelen Breen som minker mest

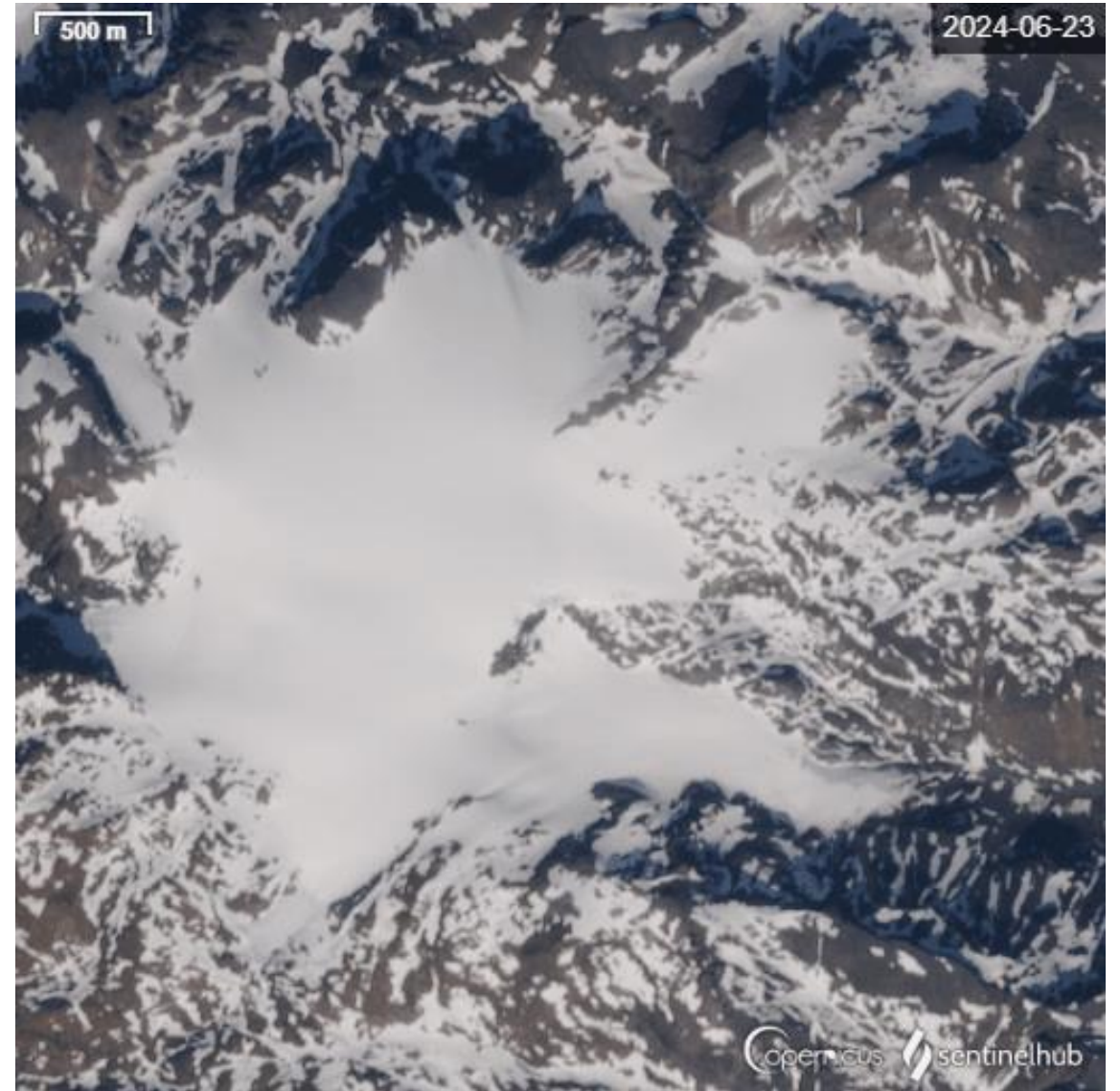


Langfjordjøkelen 19. august 2022  
Bjarne Kjølmoen

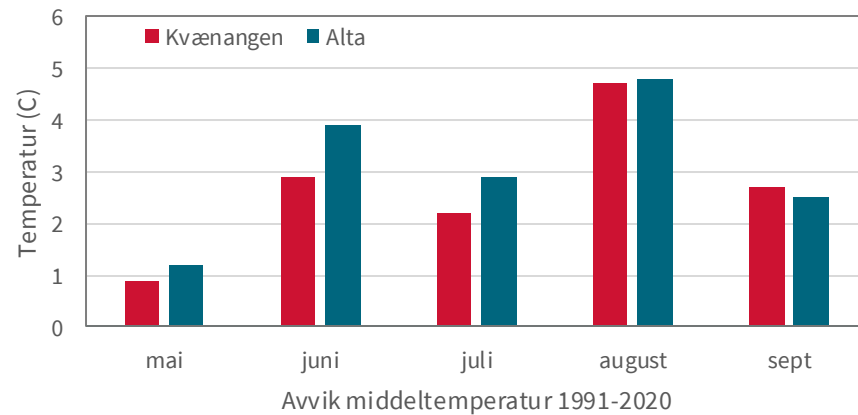




# Rekordunderskudd i 2024



## Vest-Finnmark



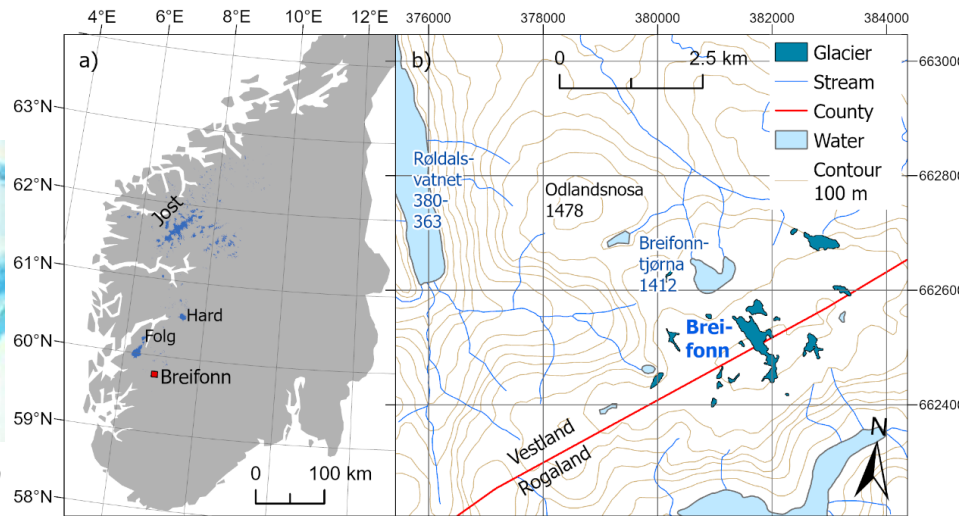




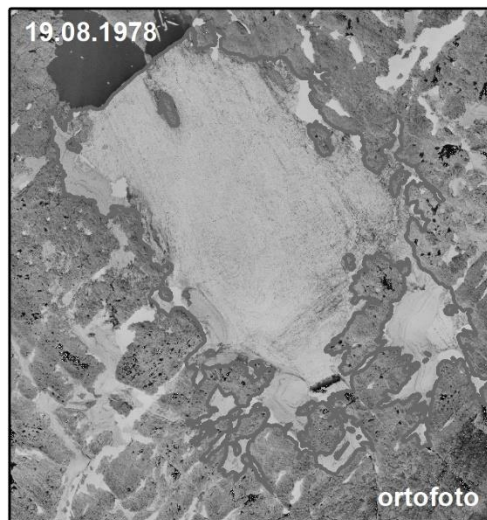
# Breifonn



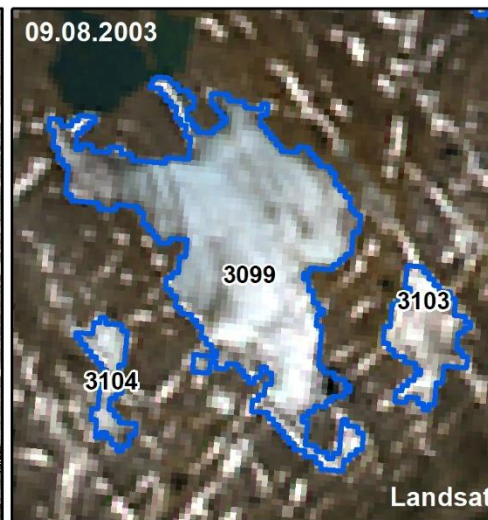
Østrem m.fl. 1969



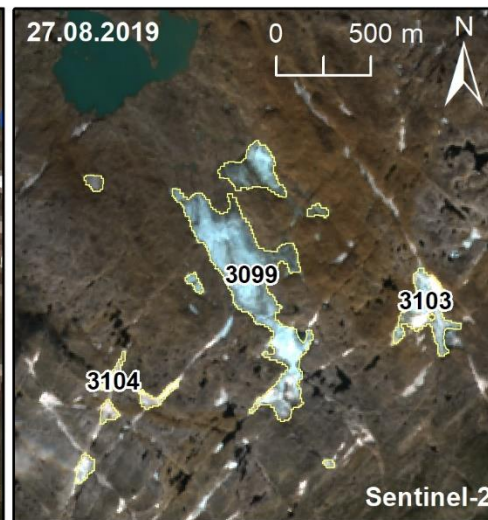
August 2024, Liss M. Andreassen



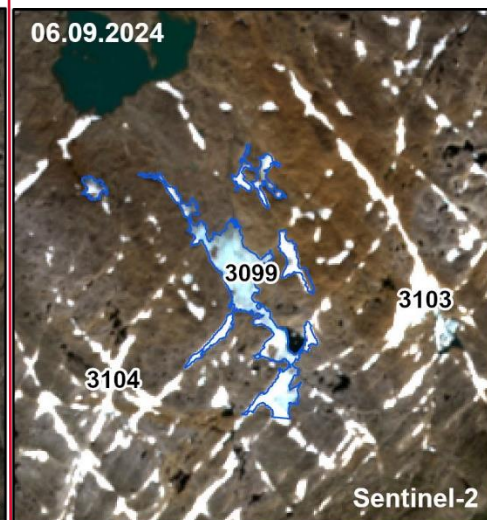
2.55 km<sup>2</sup>



1.65 (1.37) km<sup>2</sup>



0.42 (0.26) km<sup>2</sup>



0.23 (0.18) km<sup>2</sup>



Aug. 2024, Hrafnhildur Hannesdóttir

Andreassen 2022

Breifonn: norsk kandidat på Global Glacier Casualty List



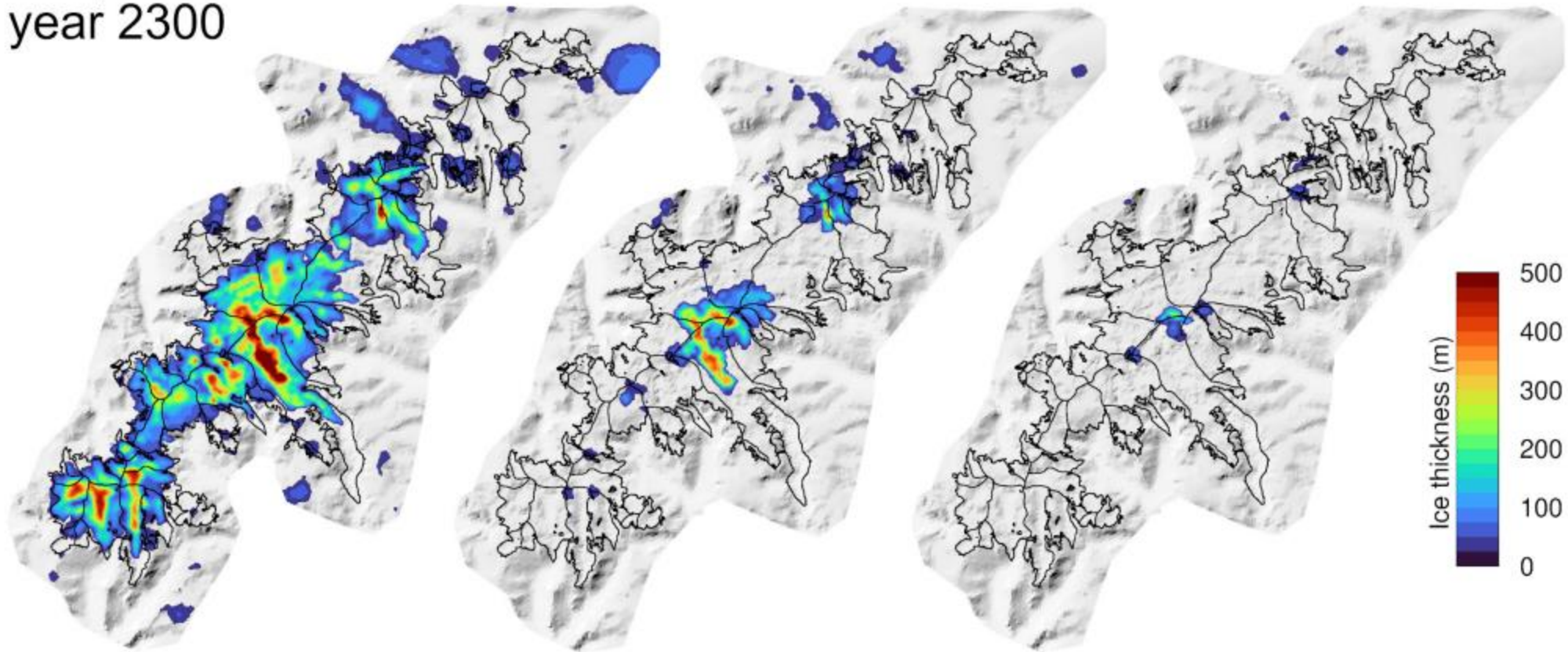
# Hva skjer med breene framover?

Maps for  
year 2300

(a) CommitNow

(b) Commit4.5

(c) Commit8.5







## Breåret 2025



2025  
International  
Year of Glaciers'  
Preservation

- 21 March World Day of Glaciers & 22 March World Water Day
- UN Decade of Action for Cryospheric Sciences 2025-2034

<https://www.un-glaciers.org/en/homepage>



<https://www.nve.no/bre>

**NÅR  
BRØKING  
ISEN  
THE ICE  
BRYT**

Norwegian Mountain Center, Lom  
Opning 5th of June 2025