National report Norway, GLOSS GE XVIII

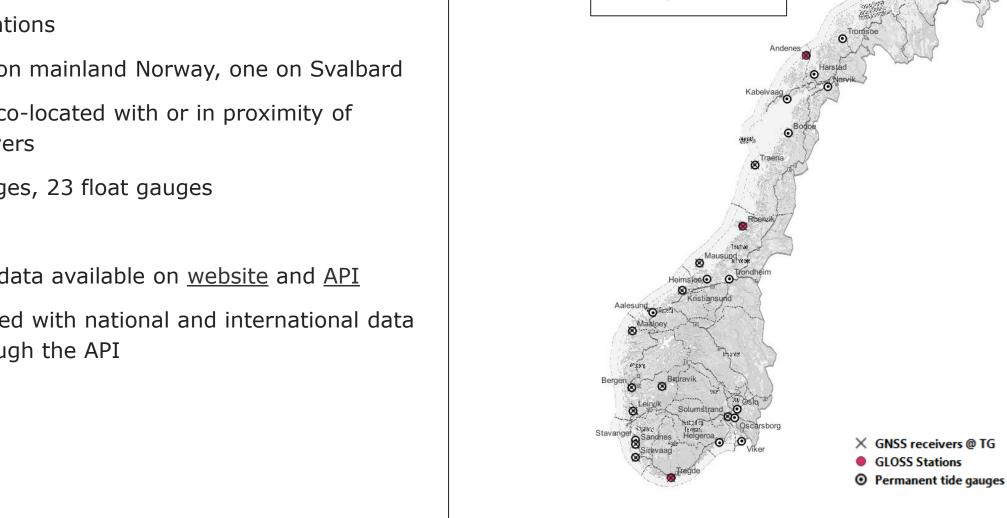
Oda R. Ravndal, Norwegian Mapping Authority





Permanent tide gauge network

- Status per March 2025
- 5 GLOSS stations
- 29 stations on mainland Norway, one on Svalbard
- 16 stations co-located with or in proximity of **GNSS** receivers
- 7 radar gauges, 23 float gauges
- Water level data available on website and API
- Data is shared with national and international data portals through the API



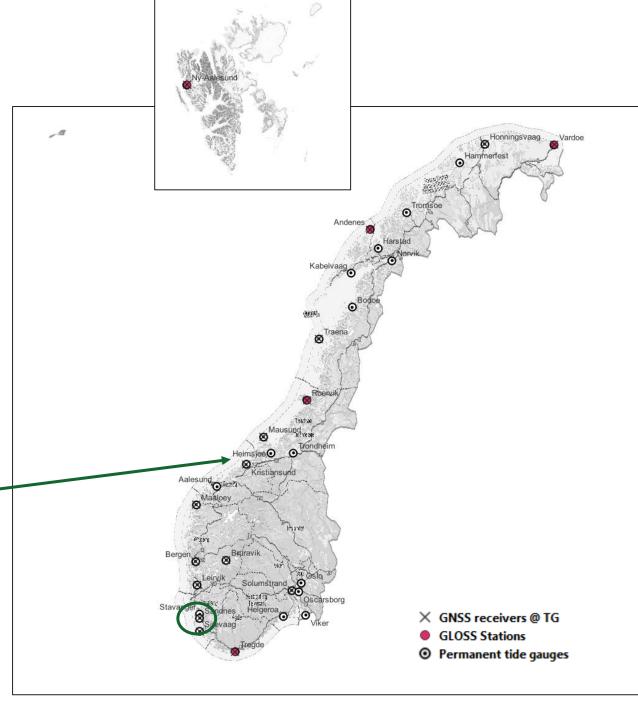


Changes to the network

Changes:

- Sandnes temporarily out of service
- Kristiansund moved





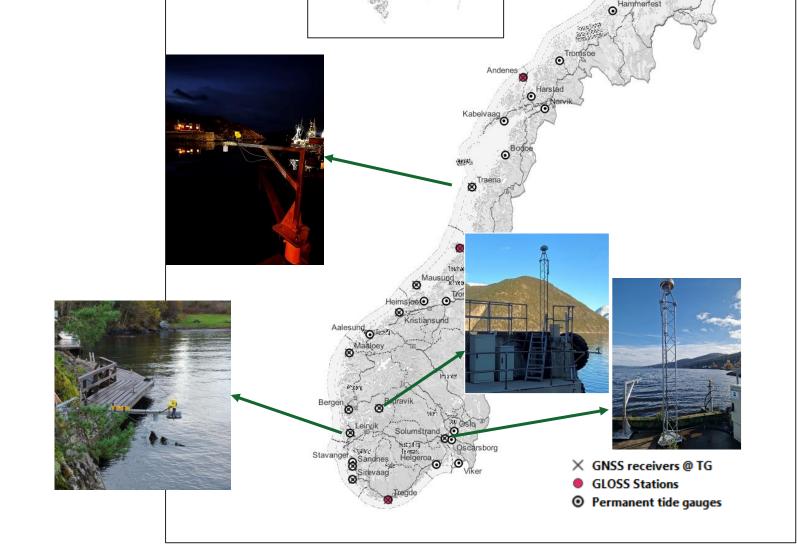
Changes to the network

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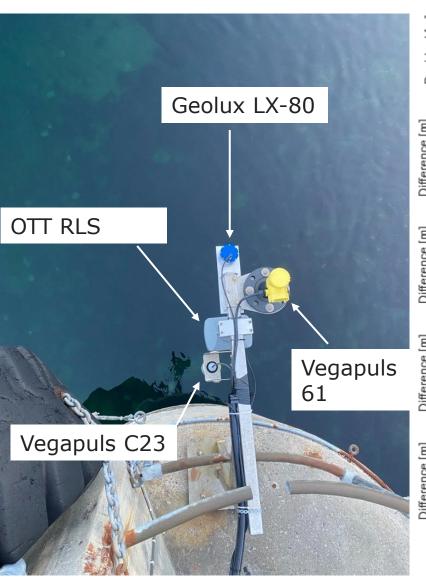
4 new stations since 2022

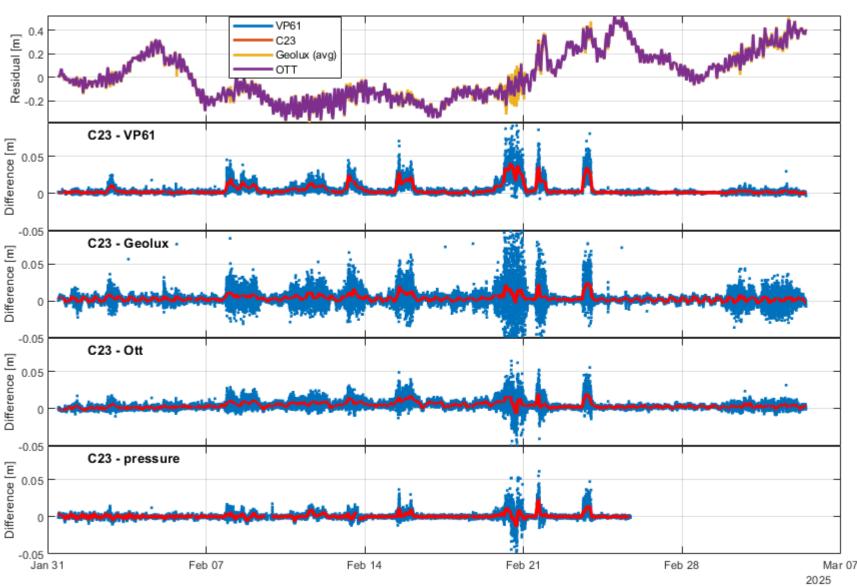
- Solumstrand (2023)
- Leirvik (2022)
- Bruravik (2022)
- Træna (2023)





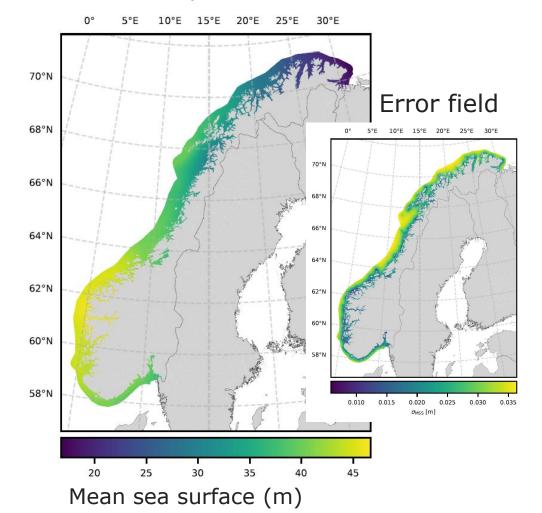
Radar testing



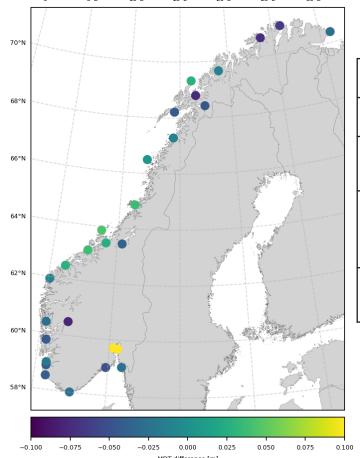


Vertical separation models and SWOT altimetry

The Norwegian separation models were updated in 2024 with more tide gauge measurements and refined computational methods

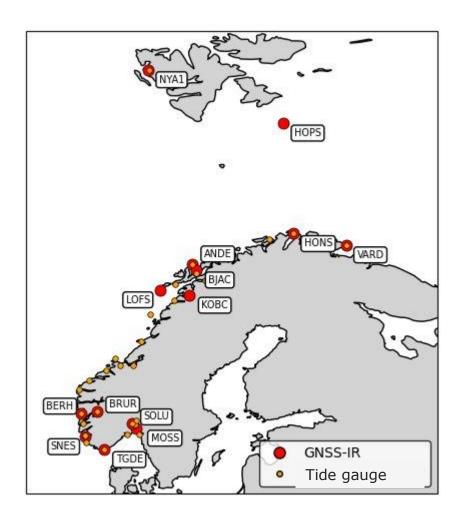


Promising agreement has been found between mean dynamic topography from SWOT altimetry and tide gauges along the Norwegian coast

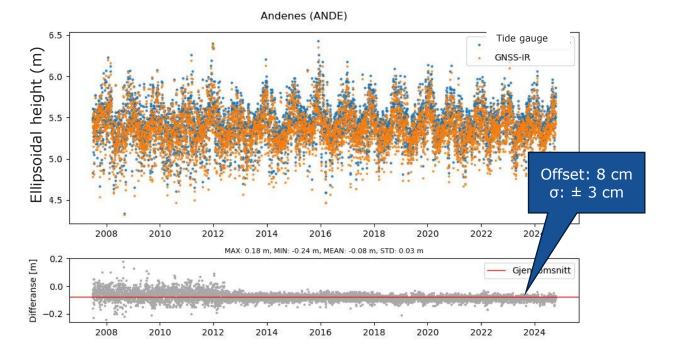


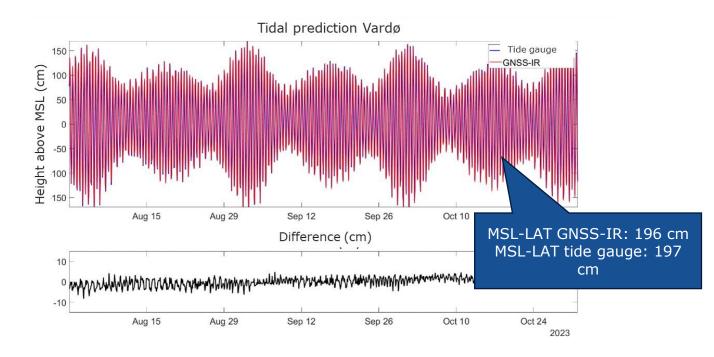
Min [cm]	-7.9
Max [cm]	4.4
Mean [cm]	-2.2±0.7
Std. dev [cm]	3.6
Correlation	0.80

GNSS-IR









New report on sea level rise and extremes

NORSK KLIMASERVICESENTER

Regional sea-level change at 2100

Sea-Level Rise and Extremes in Norway:

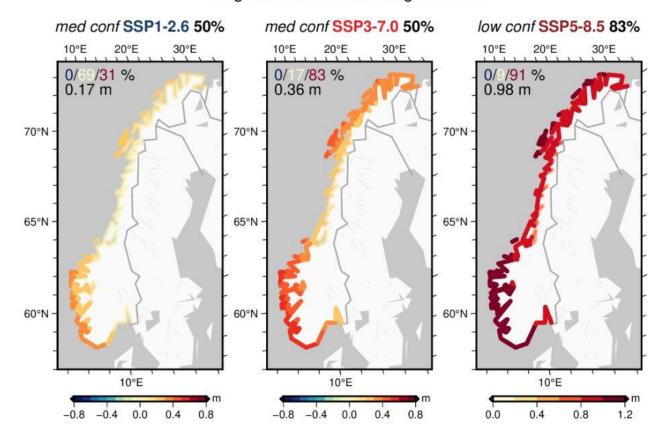
NCCS report 1/2024

Observations and Projections Based on IPCC AR6



M.J.R. Simpson, A. Bonaduce, H.S. Borck, K. Breili, Ø. Breivik, O.R. Ravndal and K. Richter







Report available: <u>Sea-Level Rise and Extremes in Norway - miljodirektoratet.no</u> Scenarios available from <u>Se havnivå</u> Inundation maps available from Se havnivå i kart

Data archeology

Simple inventory

Application to the National Archives of Norway

Proper storing in NMAs headquarters

Scanning

Digitizing

Delivery of digital and physical media to National Archives



