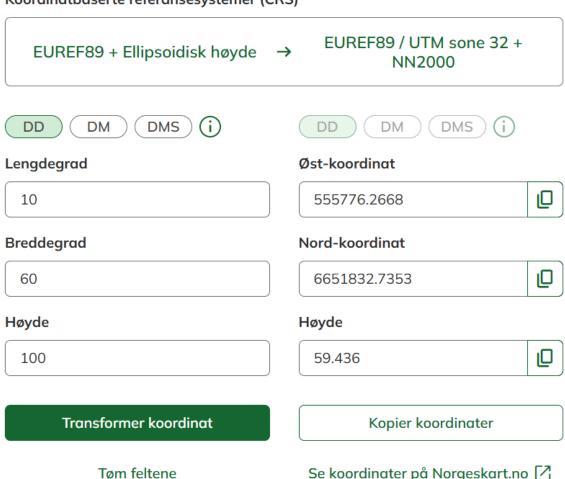




Koordinatbaserte referansesystemer (CRS)



Web-Based Coordinate Transformation Service

- Built on PROJ and utilizes GDAL
- Supports transformation of single coordinates or bulk data from files
- Compatible with a wide range of formats, including CSV ("free format")
- Covers the most commonly used reference frames and coordinate systems in Norway
- Designed to be an easy-to-use and intuitive tool accessible to everyone

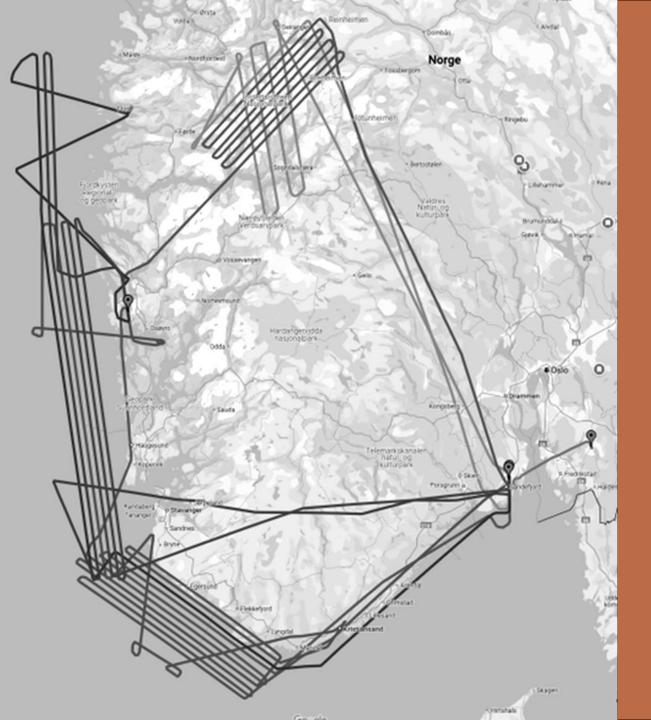


SLR

SLR Installation Timeline – Ny-Ålesund Earth Observatory

- **2024** Gimbal and telescope assembly installed
- 2024 SLR telescope position included in the annual local tie Survey
- **2025** Laser system scheduled for installation
- **2026** SLR system fully operational
- 2026 Ny-Ålesund Earth Observatory becomes a core geodetic station with all four space geodetic techniques co-located





Airborne gravity

Two main regions surveyed:

- Svalbard Approximately coverage of two-thirds of the island
- Western Norway, including Jostedalsbreen glacier
 - Approx 6,000 km of dedicated flight lines

Focus areas:

- Geoid-related challenges
- Unusual coastal currents requiring verification
- Jostedalsbreen a region with missing gravity data

White paper on a two-frame approach

Basic Concept

- Geodetic infrastructure is monitored in a global reference frame (IGS/ITRF), while spatial data is managed in the regional static frame EUREF89.
- Requires models for both continental motion and intraplate deformation.
- Permanent GNSS stations are tracked daily in ITRF and have fixed coordinates at a defined epoch.
- CRS transformations follow standardized routines using the PROJ system.
- The data-sharing platform stores data in EUREF89 but can be imported/exported in global or regional frames.

