

NATIONAL REPORT OF SWEDEN – GEODETIC ACTIVITIES IN SWEDEN 2022–2026

20TH NKG GENERAL ASSEMBLY, VILNIUS, 14–17 SEPTEMBER 2026

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LANTMÄTERIET



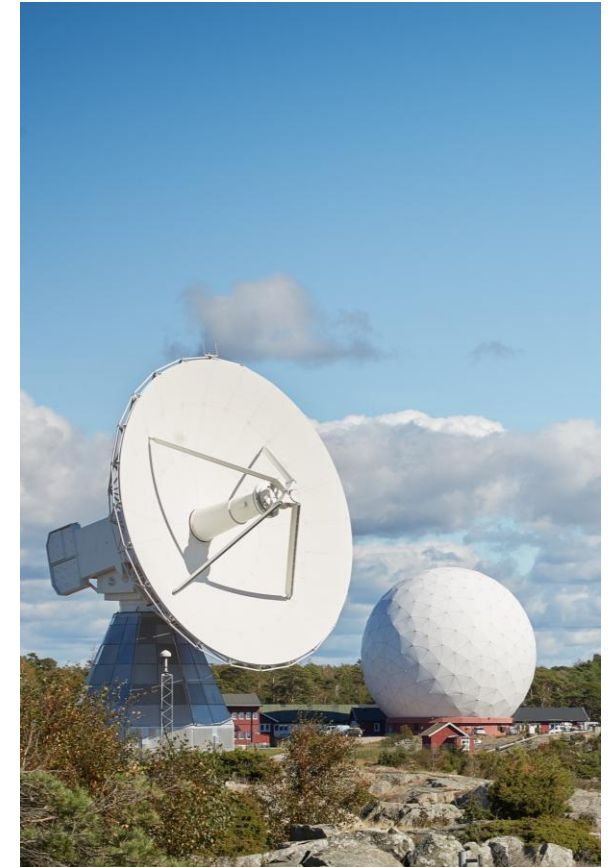
ORGANISATIONS

- Lantmäteriet, the Swedish mapping, cadastral and land registration authority
 - Department for Geodetic infrastructure
 - Approximately 50 employees
 - Head: Martin Lidberg
 - New strategy for geodesy for 2026–2035
- Universities
 - Chalmers University of Technology, Göteborg
 - KTH Royal Institute of Technology, Stockholm
 - University of Gävle



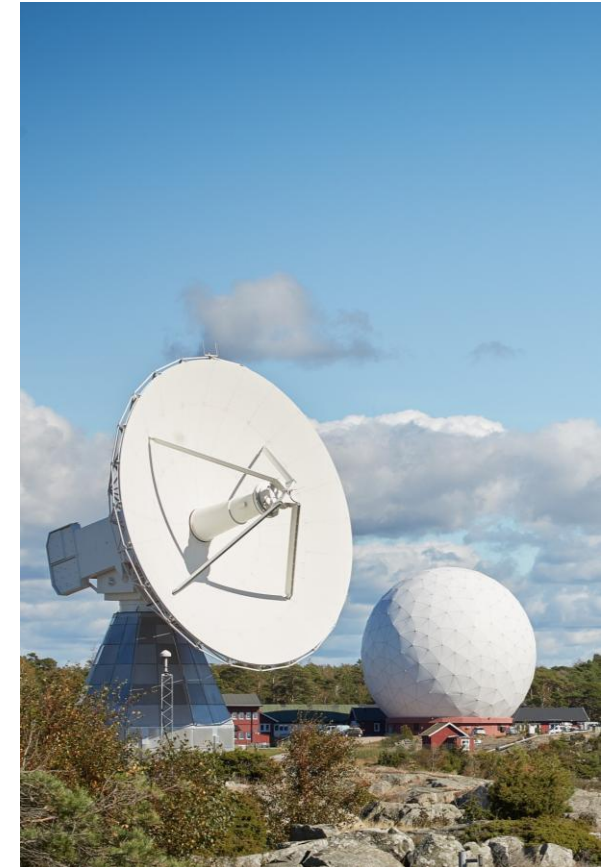
CHALMERS UNIVERSITY OF TECHNOLOGY

- Space Geodesy and Geodynamics unit in the Onsala Space Observatory division
- Since 2026 in the Department of Physics and Astronomy
- Space Geodesy and Geodynamics unit:
 - 1 full professor + 1 professor + 1 assoc. professor + 1 adj. professor + 1 aff. professor
 - 1 adj. docent + 1 senior research engineer + 1 research specialist
 - 4 PhD students in geodynamics, GNSS, geodetic VLBI and VLBI for geodesy and astrometry
- Teaching in bachelor, master and PhD courses



CHALMERS UNIVERSITY OF TECHNOLOGY

- Research in, e.g. VLBI for geodesy and astrometry, GNSS, gravimetry, sea level, atmospheric water vapour and altimetry
- Active in various working groups of IAG and daughter organisations
- Partner of United Nations Global Geodetic Center of Excellence (UN-GGCE)
- Active in ESA Genesis mission



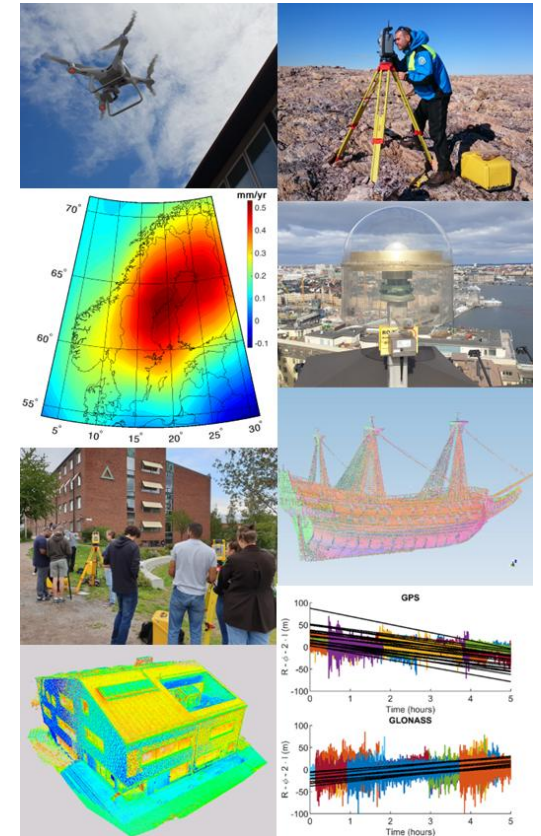
KTH ROYAL INSTITUTE OF TECHNOLOGY

- Division of Surveying – Geodesy, Land Law and Real Estate Planning
 - 19 employees
 - Geodesy group: 1 professor, 2 lecturers, 1 researcher, 2 PhD students
- Courses in bachelor, master and PhD programmes
- Research in the areas of precise GNSS positioning, geodetic infrastructure, laser scanning and BIM



KTH ROYAL INSTITUTE OF TECHNOLOGY

- Organised the conference “KTH Surveying day” in 2023, 2025 and 2026
- Jingbin Liu recruited as lecturer in Geodesy in 2024
- Two PhD students under recruitment
- Integration of BIM and 3D GIS for sustainable cadastre, PhD project
- Project “Reference Network in the Air 2.0”, cooperation with Trafikverket (Swedish Transport Administration), Lantmäteriet and RISE
- New project with Trafikverket and RISE: Efficiency Improvement of Track Measurements



UNIVERSITY OF GÄVLE

- Department of Computer and Geospatial Sciences
- Educational programmes
 - First cycle programmes (180 credits)
 - Bachelor in Land Surveying: Real Estate Law and Land Use
 - Bachelor in Land Surveying: Mapping and Surveying Technology
 - Second cycle programmes
 - 5-years master in Geospatial Data and Positioning Technology (300 credits)
 - One-year master in GIS and Applied Geography (60 credits)
 - Two-years master in Geospatial Information Science (120 credits)
 - Third cycle programmes
 - PhD in Geospatial Information Science (240 credits)
 - Applied geodesy, remote sensing, GIS, geomatics
- 2 full professors, 2 associate professors and 3 lectures in geodesy and land surveying engineering



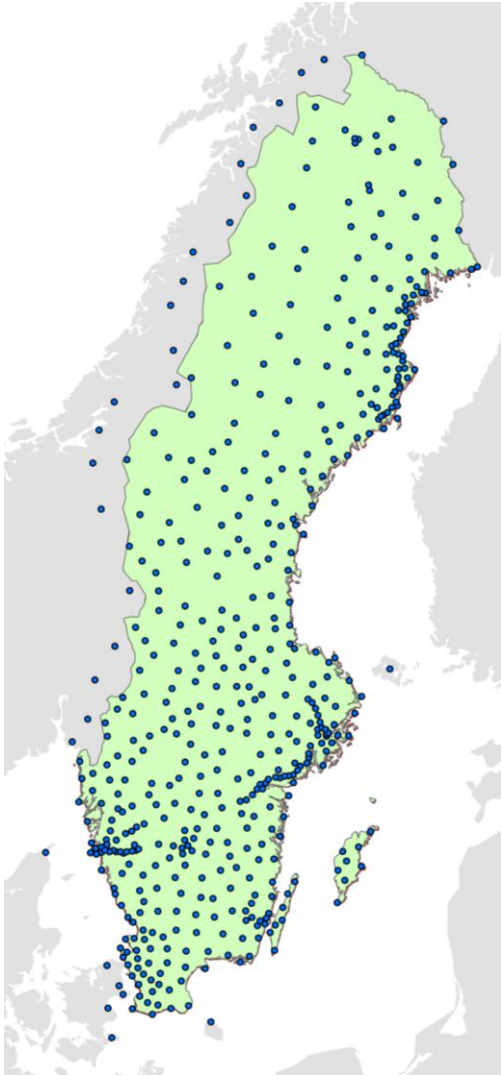
Education area: Engineering and civil engineering

UNIVERSITY OF GÄVLE



- Research primarily focused on:
 - Applied geodesy and physical geodesy (reference frames, height systems and land uplift modelling)
 - Earth Observation, satellite geodesy and gravimetry (geoscience related studies and InSAR)
 - Geodetic surveying engineering, precise positioning and structural health and deformation monitoring
 - Mobile mapping systems and multi-sensor integration
 - Geospatial information science (BIM and GeoAI)
- 4 active PhD students (2022–2026)
 - Physical geodesy, airborne photogrammetry, satellite gravimetry (GRACE) and mass transportation and GNSS Interferometric Reflectometry (GNSS-IR)

LANTMÄTERIET – SWEPOS



- 516 GNSS reference stations (476 in 2022)
 - 72 Class A, 422 Class B and 22 Class C
- $\approx 13,000$ network RTK users ($\approx 8,500$ in 2022)
 - Beidou available since 29 February 2024

LANTMÄTERIET – SWEPOS



- Installation of SAR reflectors co-located with the 21 fundamental SWEPOS stations
 - Both passive reflectors (corner reflectors) and active transponders
 - Support in the development of Swedish ground motion service
- Tool developed for GNSS data quality monitoring and detection of GNSS disturbances
- Enhanced ionospheric monitoring and new service for the influence on GNSS surveying
- Completely new version of SWEPOS Post Processing Service



LANTMÄTERIET – SOME FURTHER MAIN ACTIVITIES

- Several projects on GNSS (PPP and network RTK) for autonomous vehicles and mass-market applications
- Extended contribution of GNSS data to EPOS and EPN
- Increased gravity data set
- GIA modelling studies and velocity field determination
 - EuVeM2022 has been released
- Further developed versions of the transformation software Gtrans
- Tools developed for digitally documentation of fieldwork for geodetic infrastructure maintenance



LANTMÄTERIET – REVIEW OF THE NATIONAL BOUNDARY SWEDEN-NORWAY 2020–2024



QUESTIONS?

Thank you for your attention!

National Report of Sweden – geodetic activities in Sweden 2022–2026

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20th NKG General Assembly, Vilnius, 14–17 September 2026



TACK! VI FINNS PÅ...

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