



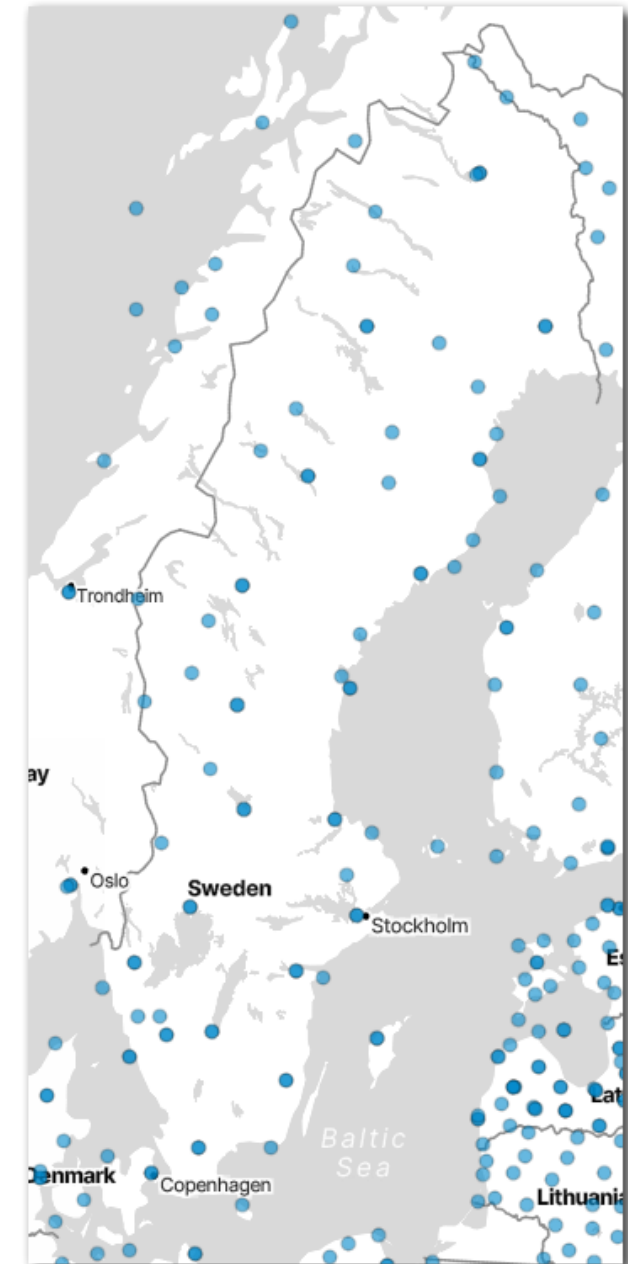
NATIONAL REPORT OF SWEDEN

– GEODETIC ACTIVITIES AT LANTMÄTERIET
EUREF SYMPOSIUM, 24–26 JUNE 2025



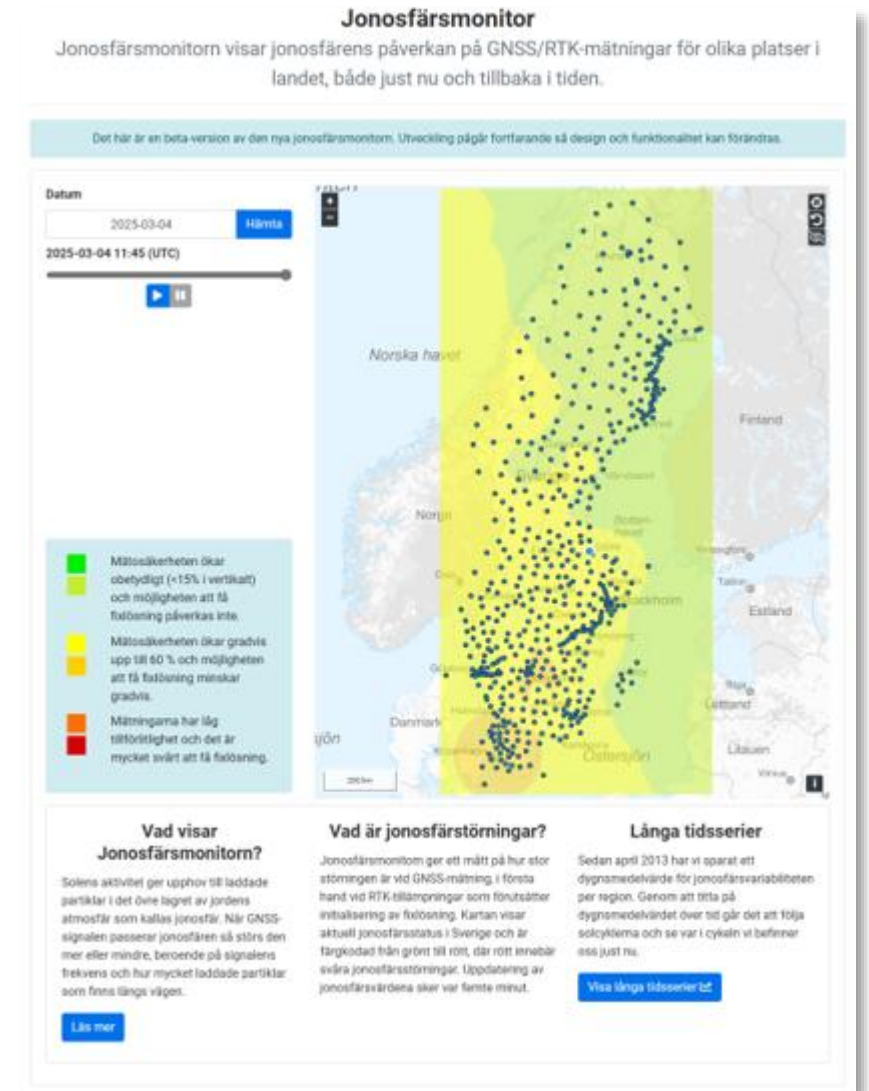
EXTENDED CONTRIBUTION TO EPOS AND EPN

- Since September 2024, Lantmäteriet and SWEPOSTM has contributed an additional ~40 EPND stations to EPOS, in addition to the 28 EPN stations already included
- Since May, NKG AC started to deliver ultrarapid solutions to EPN
 - A subset of stations from NRT processing of the SWEPOS network → solution contains EPN and EPND stations in Sweden
 - Currently being validated by EPN AC Coordinator



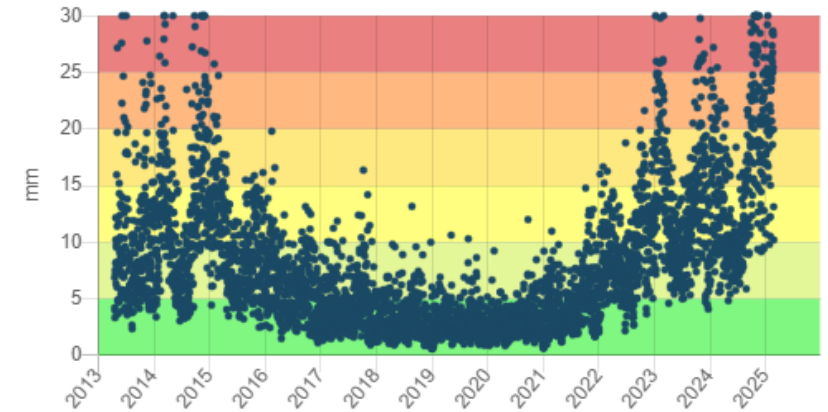
IMPROVEMENT OF SWEPOS IONOSPHERE MONITOR

- Network RTK relies on interpolation of atmospheric errors
- Improvements include
 - Increased spatial resolution
 - Support for GNSS constellations other than GPS
 - Service access via an API, in addition to website presentation
- Beta version released in December 2024
 - Interactive map of interpolated variability over Sweden
 - Replay of ionospheric variability for any day
 - Long time series stretching back to 2013 (see next slide)

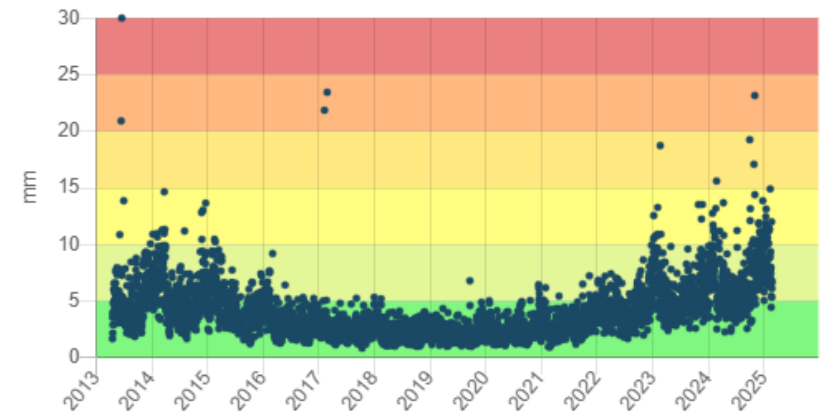


IMPROVEMENT OF SWEPOS IONOSPHERE MONITOR

- Milestone 2 (2025)
 - Web API
 - Time series for any day and location in Sweden
 - Total Electron Content (TEC) and Rate Of TEC Index (ROTI)
- Milestone 3 (2025–2026)
 - Notification to users about high ionospheric variability
 - Prediction of variability
- Likely in 2026
 - Total Electron Content (TEC) and Rate Of TEC Index (ROTI)



Time series for northern Sweden



Time series for southern Sweden

DIGITAL DOCUMENTATION OF BENCHMARK INVENTORY

- Systematic inventory of benchmarks of the national height control network, ~1500 points/year
- Documentation is since 2024 completely digital – from sketch map to database to survey marker datasheet
 - No production stoppage or major technical issues
 - Some lessons learnt for future development



REVIEW OF NATIONAL BORDER WITH NORWAY COMPLETED

- Bilateral project with Norway, 2020–2024
 - Border markers renovated
 - Border markers surveyed → improved digital representation of the border line
 - Border line cleared from trees and shrubs
- Each national border commission is responsible for half of the border line – the other one checking the result



A GEODESY STRATEGY FOR 2026–2035

- Important tool for showing the direction of Lantmäteriet's geodesy activities
- Internal workshops and reach-out activities as input to the strategy work
- Presentation by Martin Lidberg this afternoon!



THANKS FOR YOUR ATTENTION!

Tina Kempe et al.

Geodata Division

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