



MAA- JA RUUMIAMET

National report Estonia 2026



Jaanus Metsar

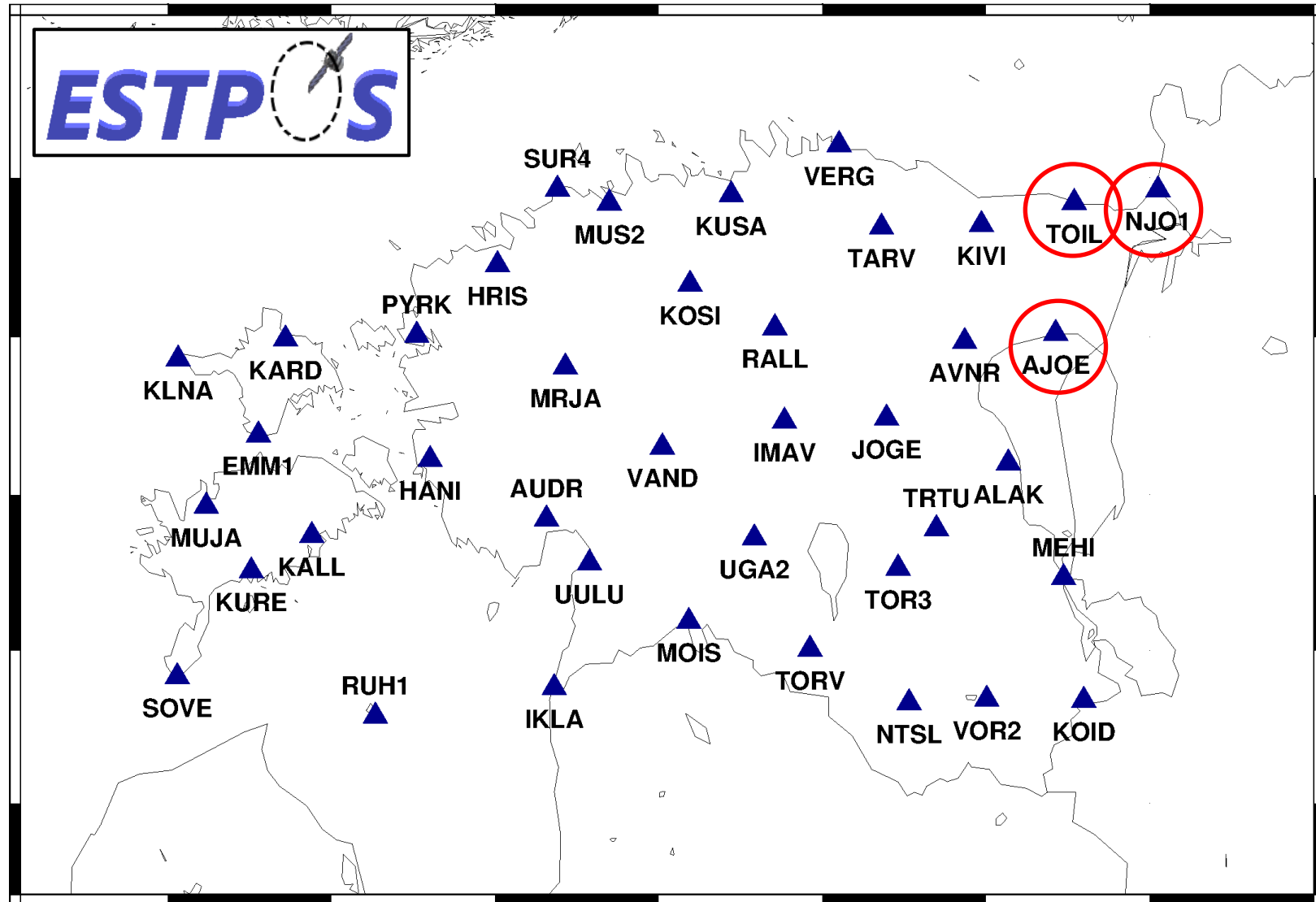


Official stuff

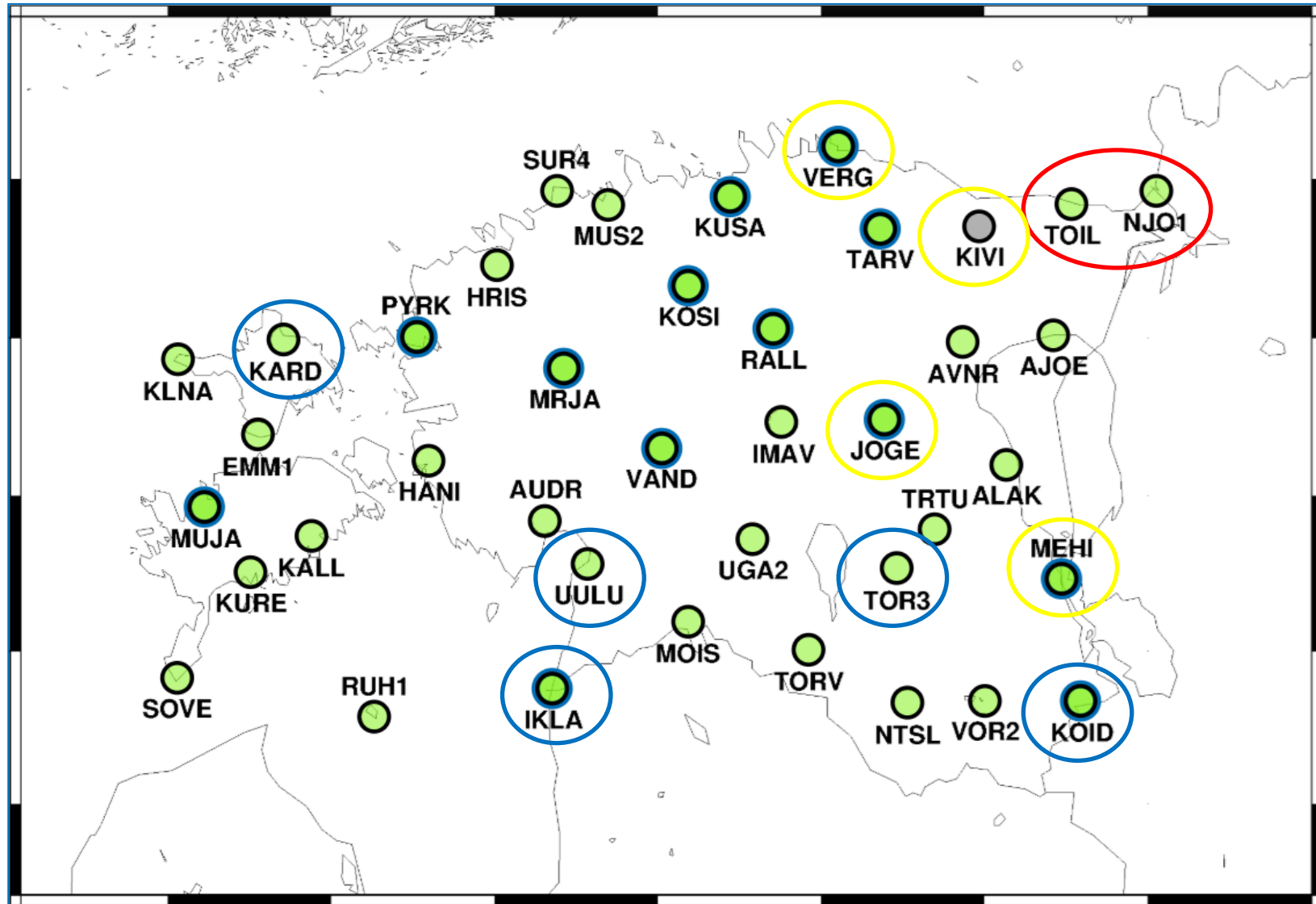
- Maa- ja Ruumiamet – Estonian Land and Spatial Development Board.
- Department of Geodesy and Remote sensing (last year it was Department of Geodesy and Aerial survey).
- Service-based management – since september 2025.
- Geodesy service - „Ensuring the existence and use of the geodetic system“. Mostly via ESTPOS (active points) and Geodetic Point Database (passive points).
- Service manager – Jaanus Metsar. Deals with the day-to-day stuff of the service and with the development of the service.
- Department head – Karin Kollo. „Leader of the people“.
- Geodesy – 6 persons (including Jaanus and Karin).



- Network upgrade finished in april 2025 (RePowerEU funding).
- 40 stations:
 - Leica GR50 and AR25.
- Need to find new locations for 3 stations:
 - GNSS jamming in TOIL and NJO1.
 - Site building owner changes in AJOE and we need to move out.
- Working towards paid services from 01.09.2026:
 - ESTPOS RTCM streams to everyone (free test period until 31.08.2026).
 - RTK service (only governmental institutions).
- Real time data no more shared to EPN casters (KURE, SUR4, TOIL and TOR3).

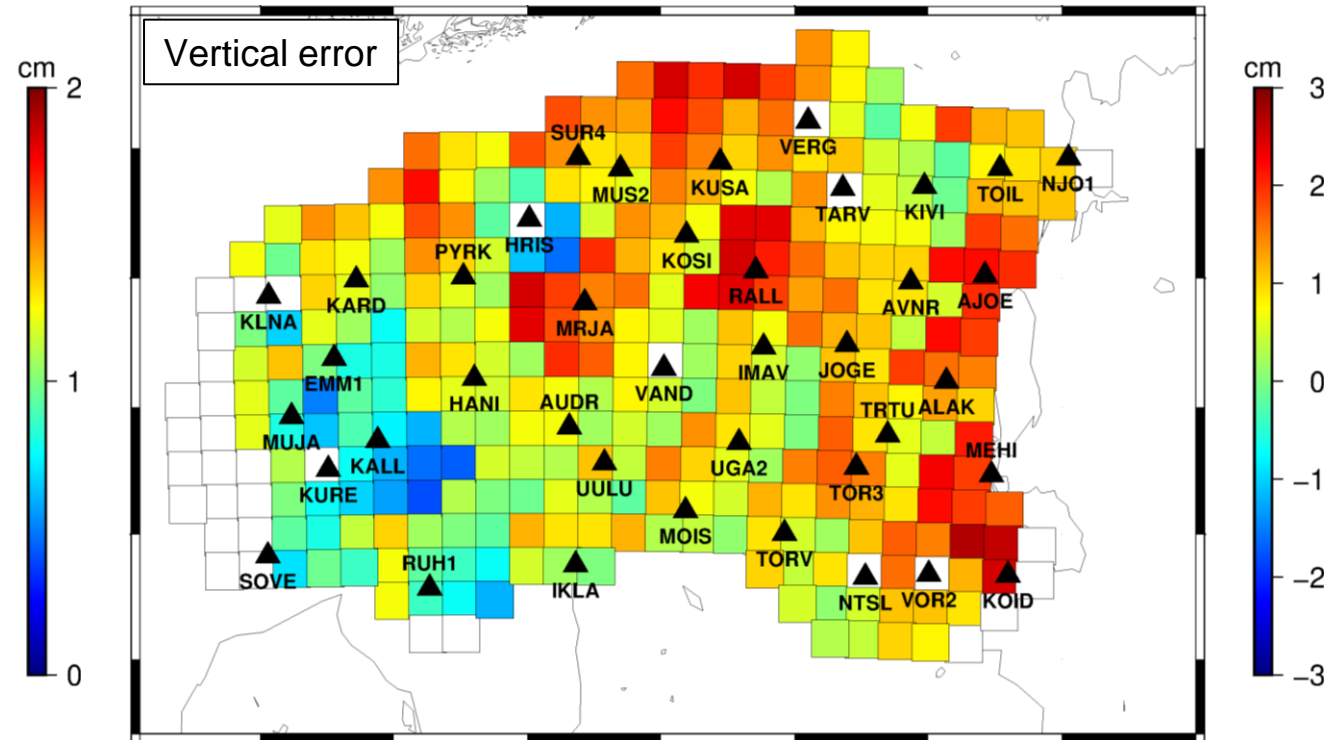
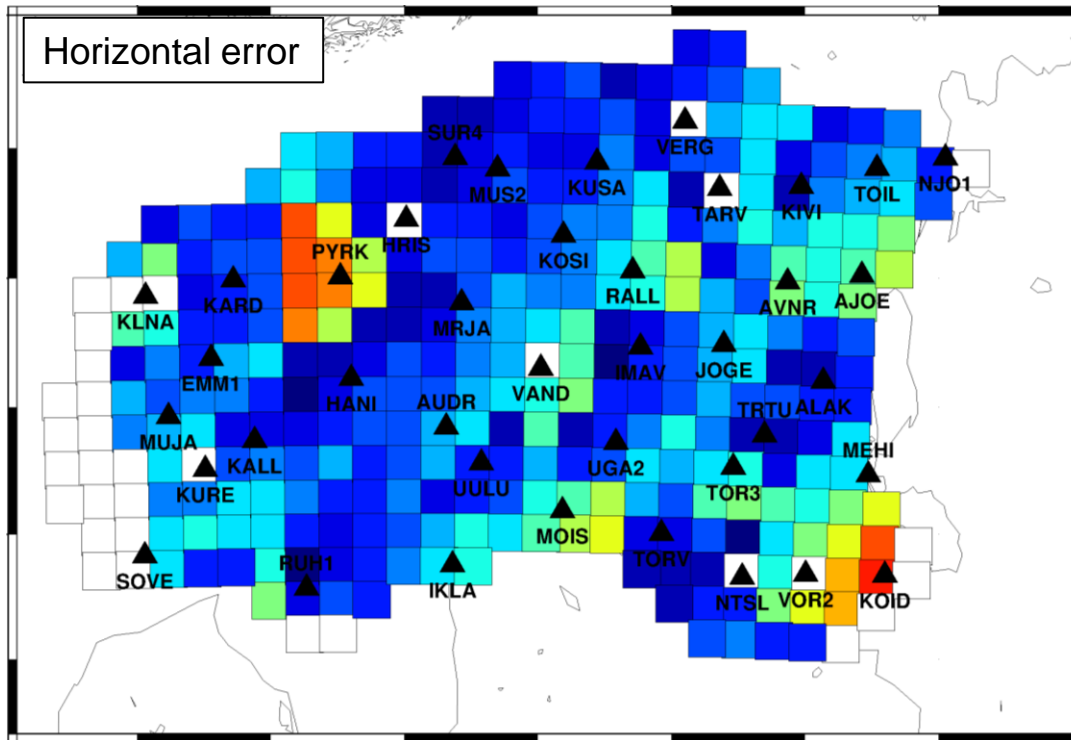


- Interference detection website (just Google ESTPOS).
- Almost real time -> last hour.
- 1 hour delay -> last 30 days.
- Graphs about:
 - Number of satellites.
 - SNR.
 - Multipath.
 - PDOP, GDOP.
 - Cycle slips.
 - Ratio of observations.
- Spoofing detection from RTCM data? Very high SNR and pseudoranges?



Using the GridCheck method to check the accuracy of the ESTPOS Network

First run and preliminary results



*For the white rectangles a final position was not computed by Bernese. Need to change configuration or grid?



Other stuff

- Geodetic Point Database: public survey ongoing to collect user feedback. Possibly some changes will be made based on the survey results (not showing old and most likely not very accurate geodetic points and their data anymore).
- Re-measurement of national I-order geodetic points: 12 points, static GNSS, autumn 2026.
- Re-measurement of national II-order geodetic points: 199 points, static GNSS, sometime in 2027 hopefully (if we can manage).
- Inventory of national densification network points: over 3000 points. Many are already destroyed. Just to get a clear picture of what is still usable and what is not.

