



National Report of Estonia 2011

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Permanent Reference Stations

- Analysis of time series
- SINEX files to EUPOS Combination Centre
- Check commercial GNSS stations

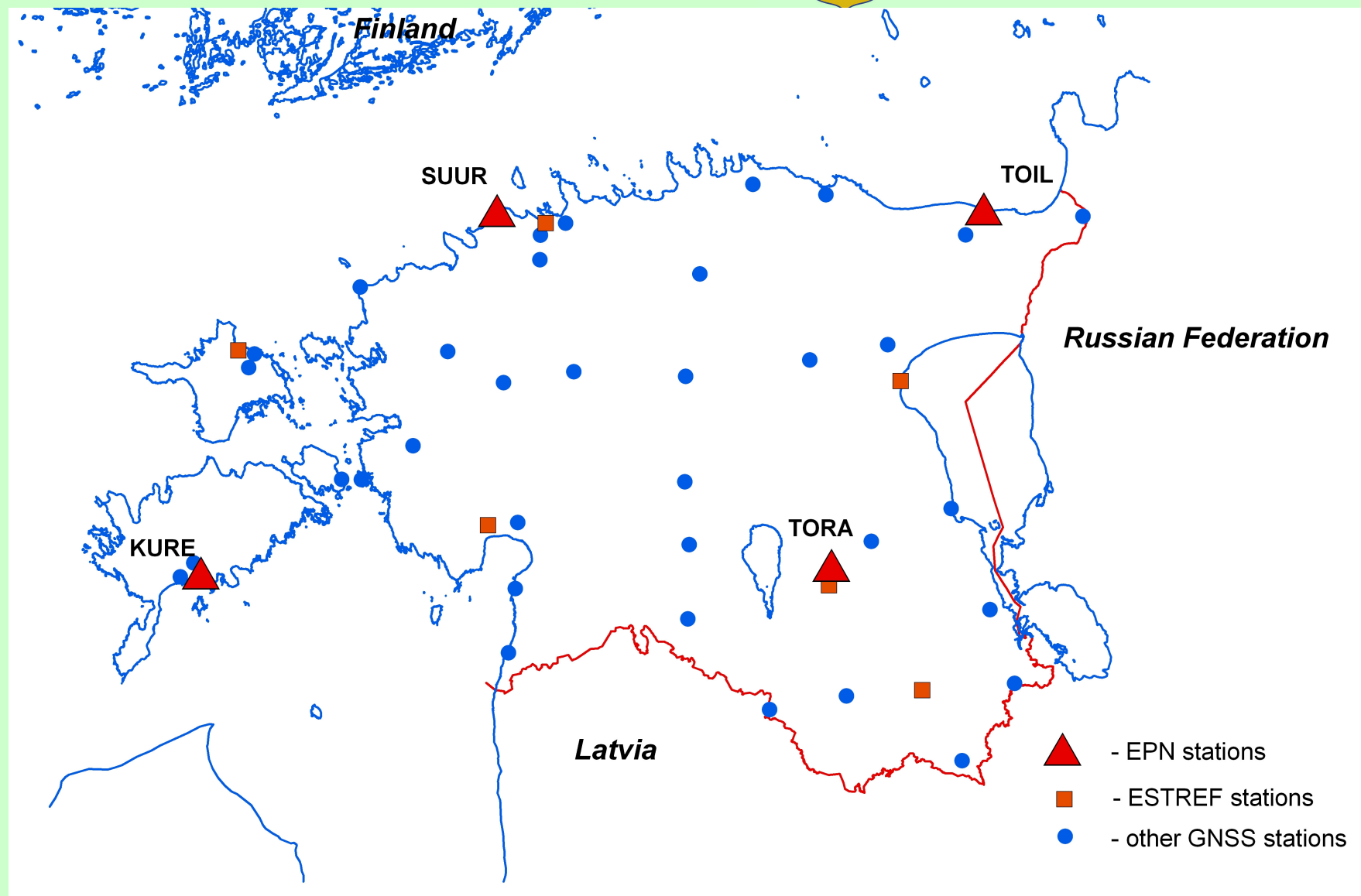


Fig. 1. GNSS Stations Network



I order levelling

- 379 km have been levelled in year 2010.
- The inner consistency of measurements:
 - random and systematic errors are $= 0.18 \text{ mm } \sqrt{\text{km}}$, $\sigma = 0.03 \text{ mm km}$

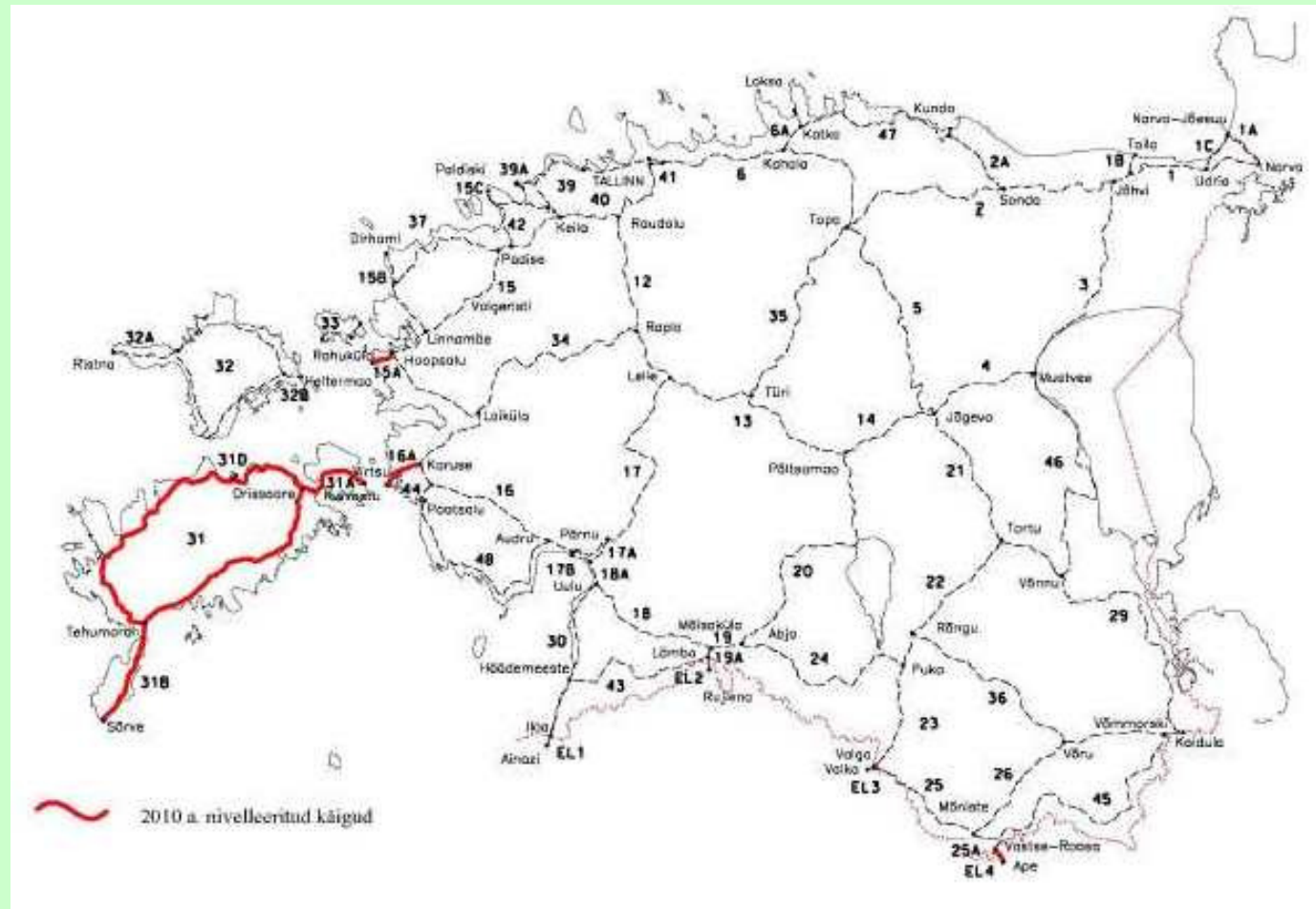


Fig. 2. The I order Levelling Network



- The field works are expected to be finished in year 2012
 - In 2011, 6 additional lines will be monumented
 - In 2012 Levelling the last lines (400 km)
 - In 2012 Adjustment of whole network



- Project “Precise sea level measurements in Väinameri” has continuing in cooperation with the Marine Systems Institute (Tallinn University of Technology) and Estonian University of Life Sciences
 - The observations period (February 2009 – July 2010),
 - Loop 253 km
 - Misclosure 17 mm
 - Need for additional observations



Fig. 3. Sea level measurements



Gravity activities

- Densification of network in SW-Estonia and Central-Estonia in year 2010 - 300 points
- No measurements on the ice
- New gravimetrical geoid was calculated

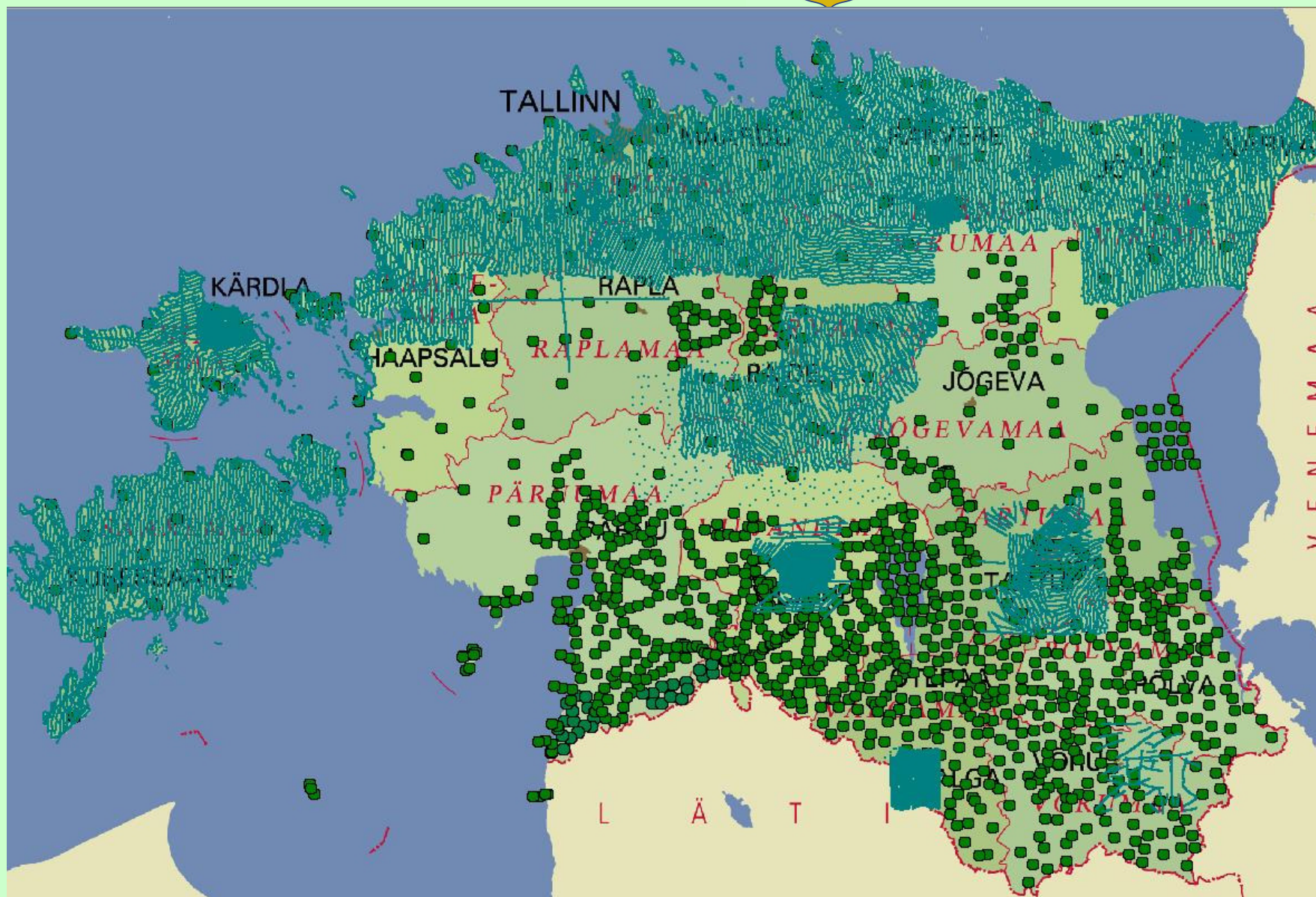


Figure 4. Densification of gravity network



Local networks

- Only replacement of destroyed points
- 255 points destroyed



Inventory

- In East-Estonia 500 points
- Measurement distance from ground
- Photography



Legislation

- On 17 February 2011, Spatial Data Act was adopted, which creates basis for the implementation of INSPIRE directive in Estonia



Thank you for the attention!