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National Report of ESTONIA

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Estonian Land Board

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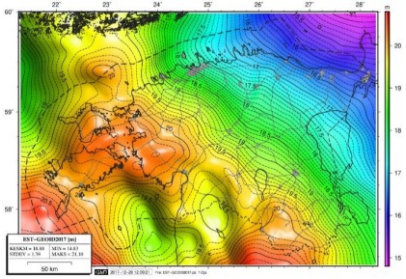
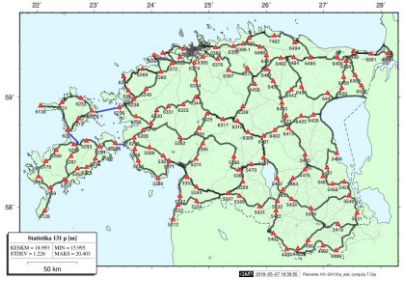
Geodetic system change 1.01.2018





- Height system **EH2000**
  - *Normaal Amsterdam Peil, e*poch 2000
- Gravity system **EG2000**
  - Based on international standards and Estonian absolute gravimetric points (7), epoch 2000
- Height correction surface **EST-GEOID2017**
  - Ellipsoidal heights EUREF-EST97, normal heights EH2000, och 2000
- Reconstruction of height network 2003-2016
  - Altogether 4 238 km levelling lines with 3144 benchmarks
  - and accuracy of heights ± 1.7 mm

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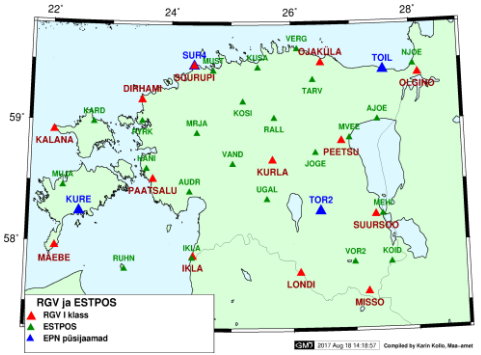
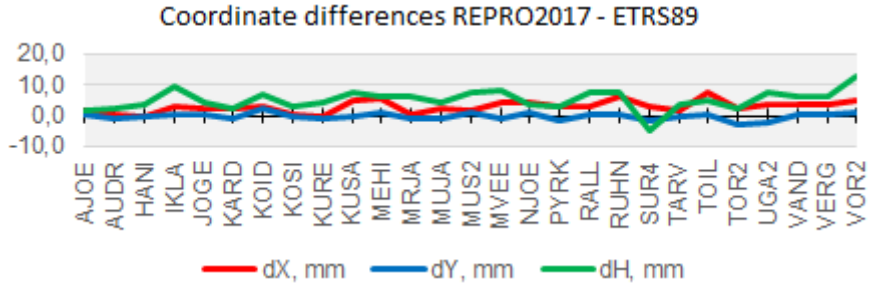
Re-measurements of I-order National Geodetic Network



- Two 72 hour sessions, 13 first class points
- 27 ESTPOS stations
- 11 fixed stations from
- Computations with Bernese 5.2



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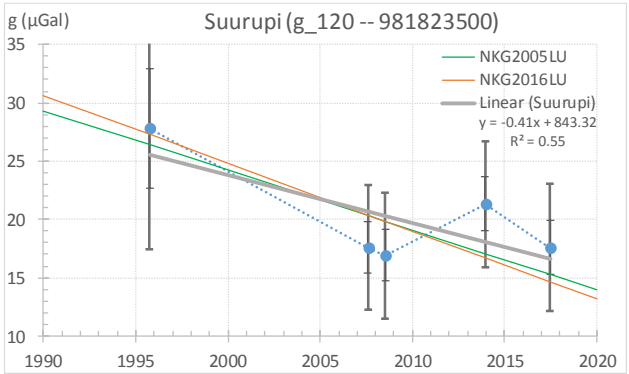
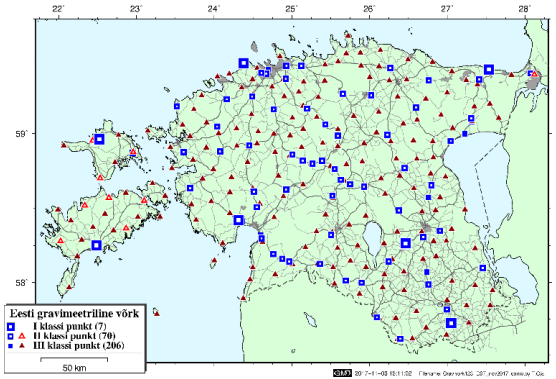
Absolute gravity in 2017

- FG5X-221 in Suurupi (19-22.06), Tõravere (26-29.06), Haanja (29.06-2.07) and Toila (2-5.07)
- FG5X-221 results: FGI (2017) Certificate of Calibration No 28/2017 – 31/2017





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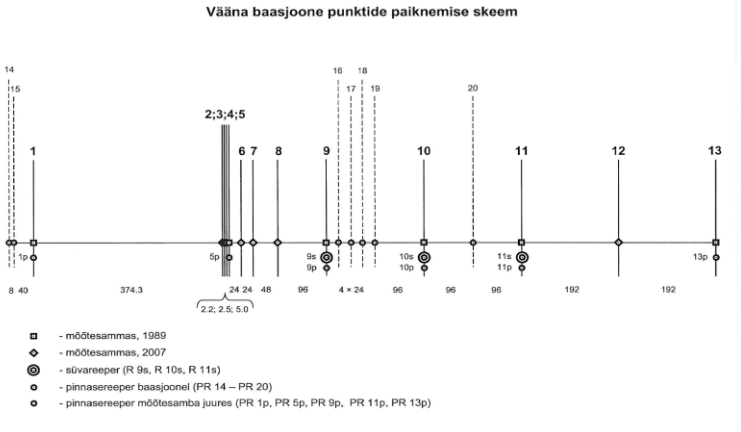
Reconstruction of Vääna baseline

- 13 observation pillars (6+7), length 1344 m
- 3 deep benchmarks and 13 ground benchmarks
- Reconstruction 2017
- Calibration Certificate (FGI)



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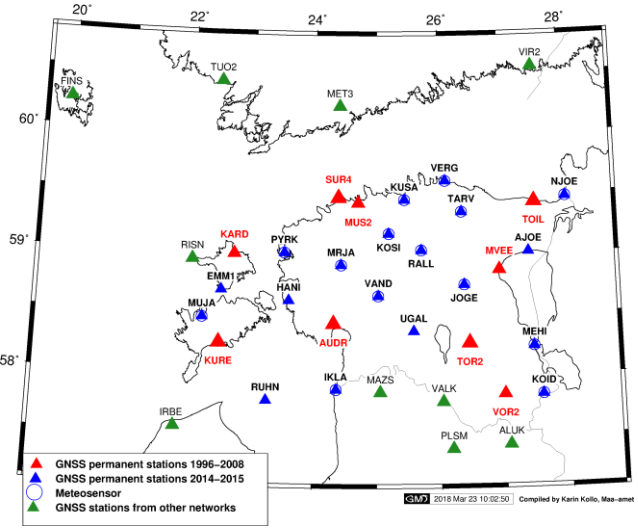
Estonian GNSS permanent station network (ESTPOS)



- 28 stations
- GPS+GLONASS+GALILEO
- All stations have same equipment
- 14 stations with meteosensors
- Reconstruction 2014-16, Estonian-Swiss cooperation program

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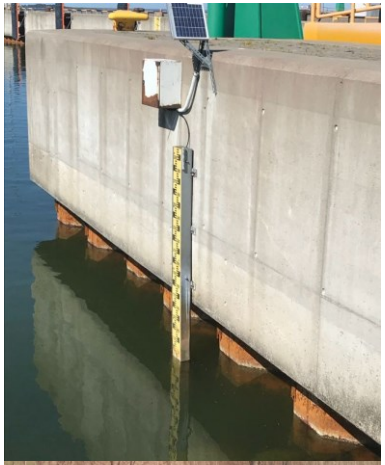
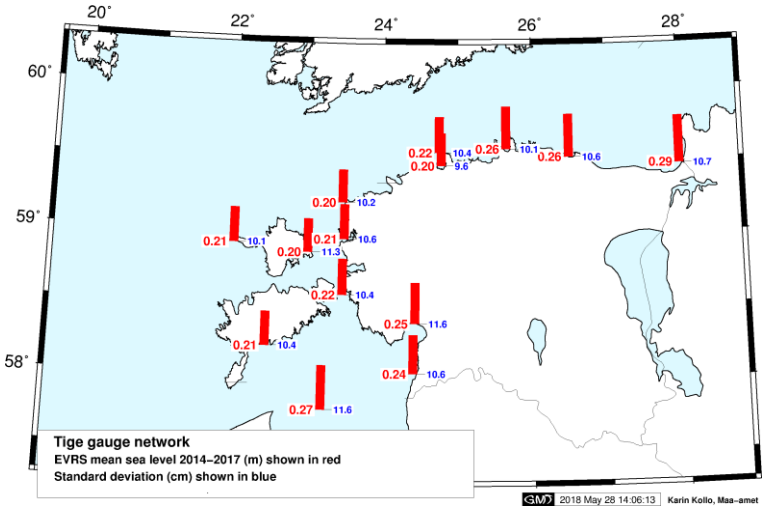
Tide gauge network



- to estimate mean sea level for coastline mapping
- to specify connections of tide gauges to the levelling network



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Inspection of geodetic marks

- Questionnare proceed to understand needs of surveyors
- This year maintenance works for ~ 50 geodetic points from I and II order National Geodetic Network

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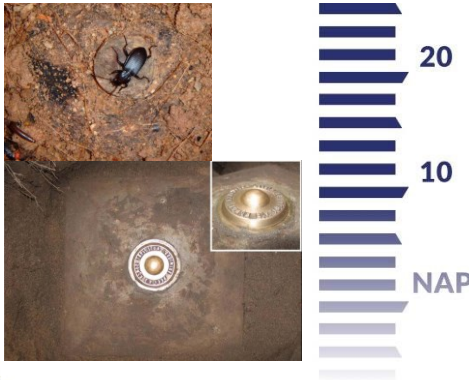
Thank you!



Additional information:
www.maaamet.ee
geoportaal.maaamet.ee

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