



MAA-AMET

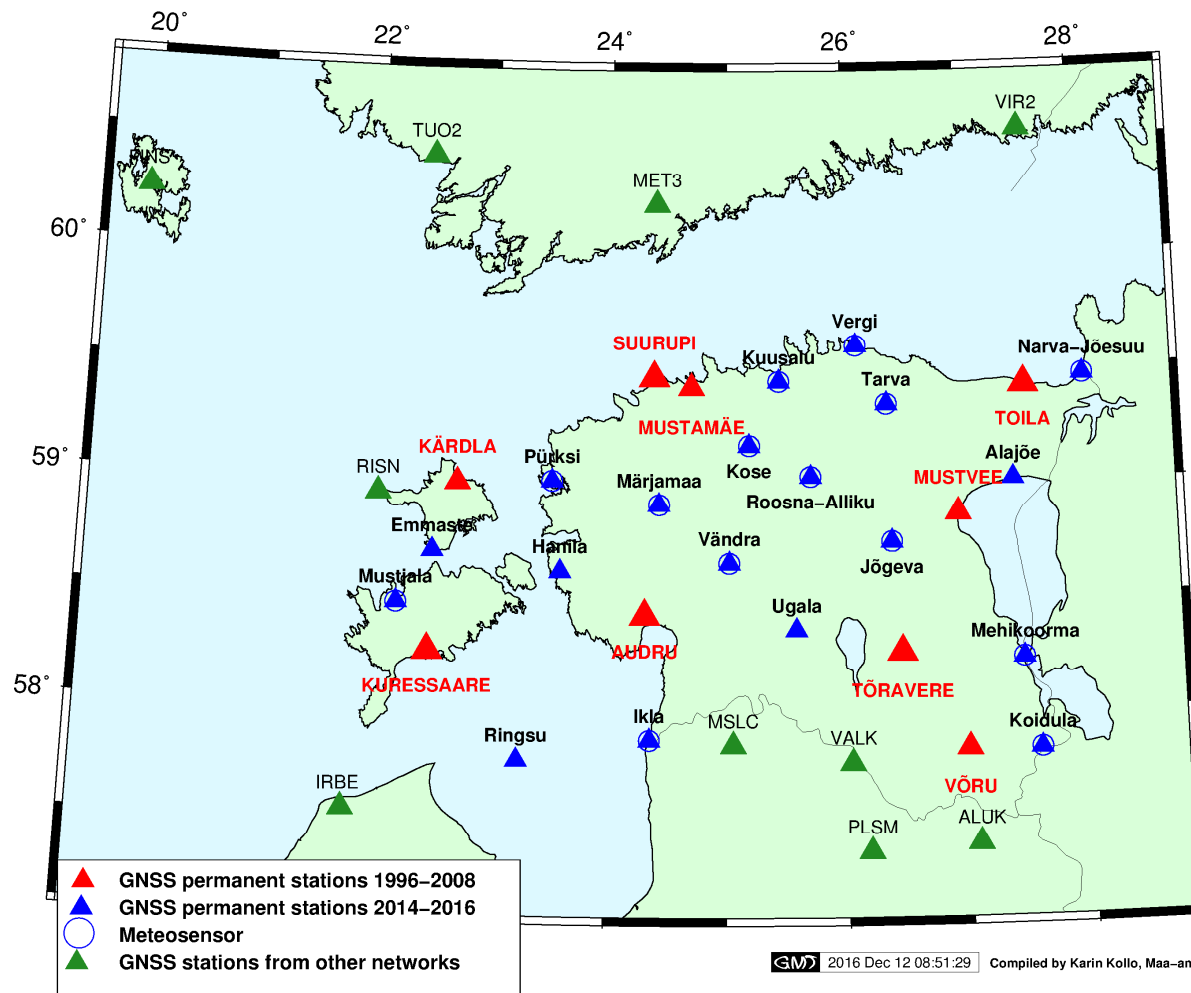
National report: Estonia

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Estonian Land Board

18.05.2017

GNSS permanent stations



- 28 stations
- RINEX 3 – January 2017
- Reprocessing of CORS data 2006-2016

2016 Dec 12 08:51:29 Compiled by Karin Kollo, Maa-amet

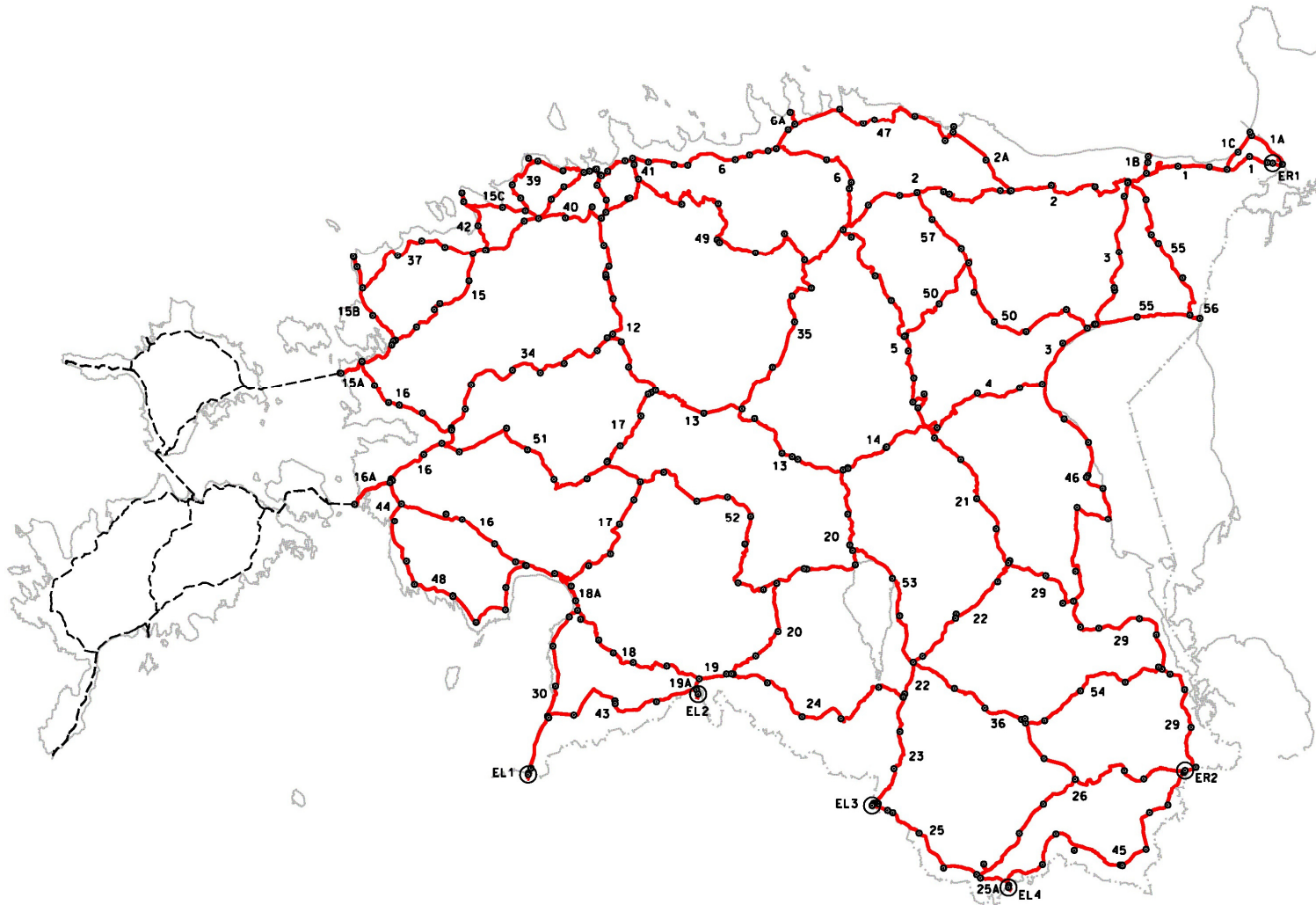


EESTI-ŠVEITSI KOOSTÖÖPROGRAMM
ESTONIAN-SWISS COOPERATION PROGRAMME

Height network

- Reconstruction 2003 – 2016
- Levelling lines ca 4300 km, benchmarks ca 3100, distance between benchmarks approx 1.4 km, 47% new benchmarks
- Connections to islands together with EULS and TTÜ in six harbours
- Connection to Latvia (4 levelling lines)
- Difference in heights 0.23 kgal*mm

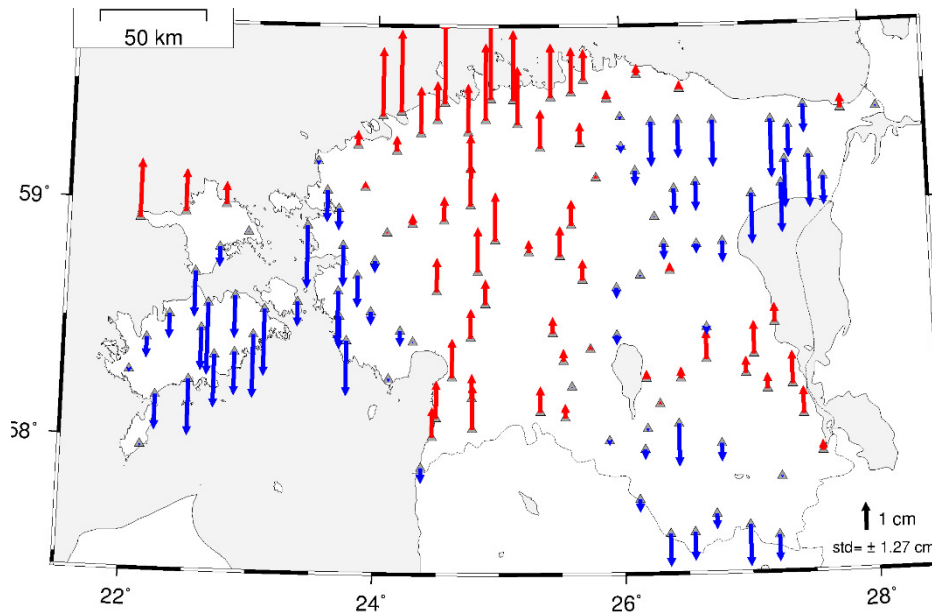
Height network



Geoid

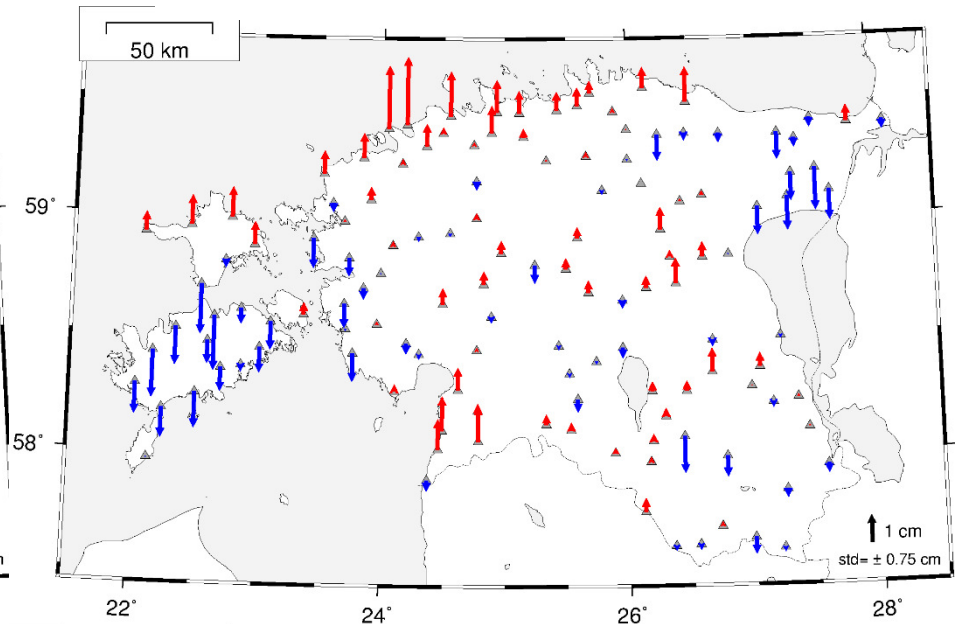
GG models vs GNSS/lev (132 p) 1-par.fit

NKG2015_qgeoid_final by J. Ågren
std = ± 13 mm



2016-12-13 15:13:58 NR45-FIT2-NKG2015qgeoid_Poly-D01r-res.ps(by T.Oja)

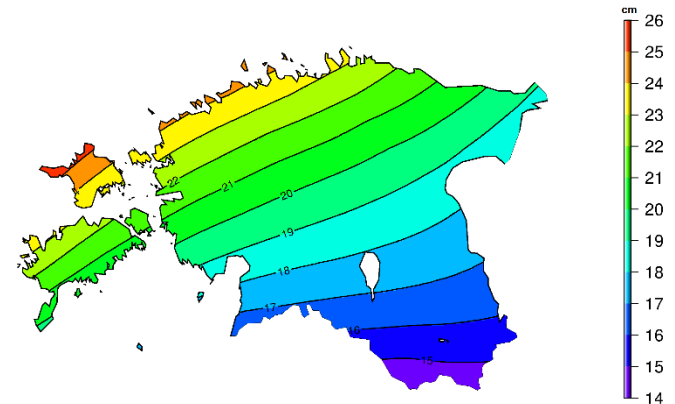
2017_qgeoid by S.Märdla
std = ± 8 mm



2017-02-17 14:20:38 GG-nr53_FIT2_DATA-H_Poly-D01r-res.ps(by T.Oja)

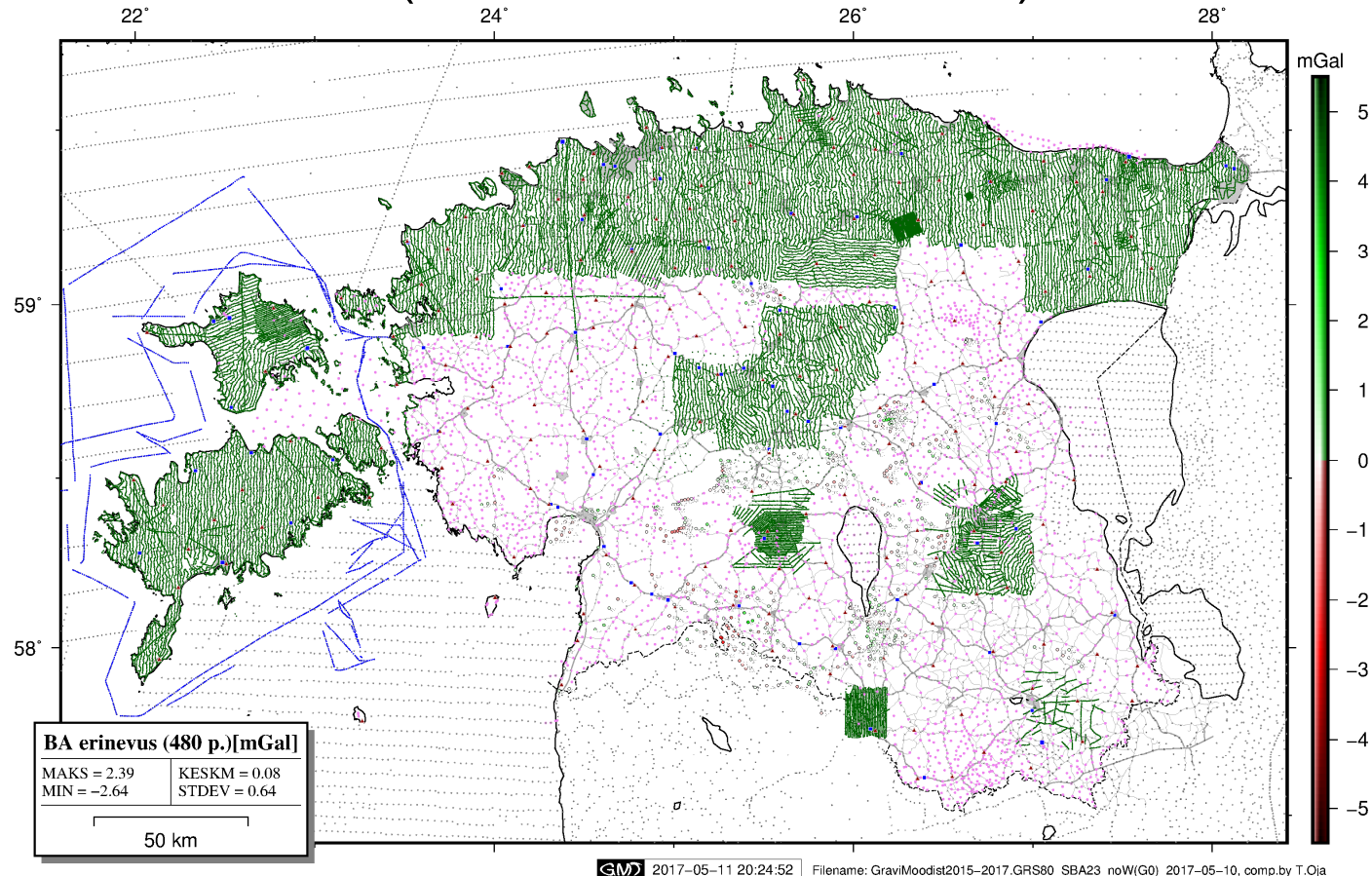
Height and Gravity system

- New height system
 - EVRS realisation EVRF2007 → EH2000
- New gravity system
 - EG2000
- New geoid and fitted geoid model
- Epoch 2000
- 1st of January 2018



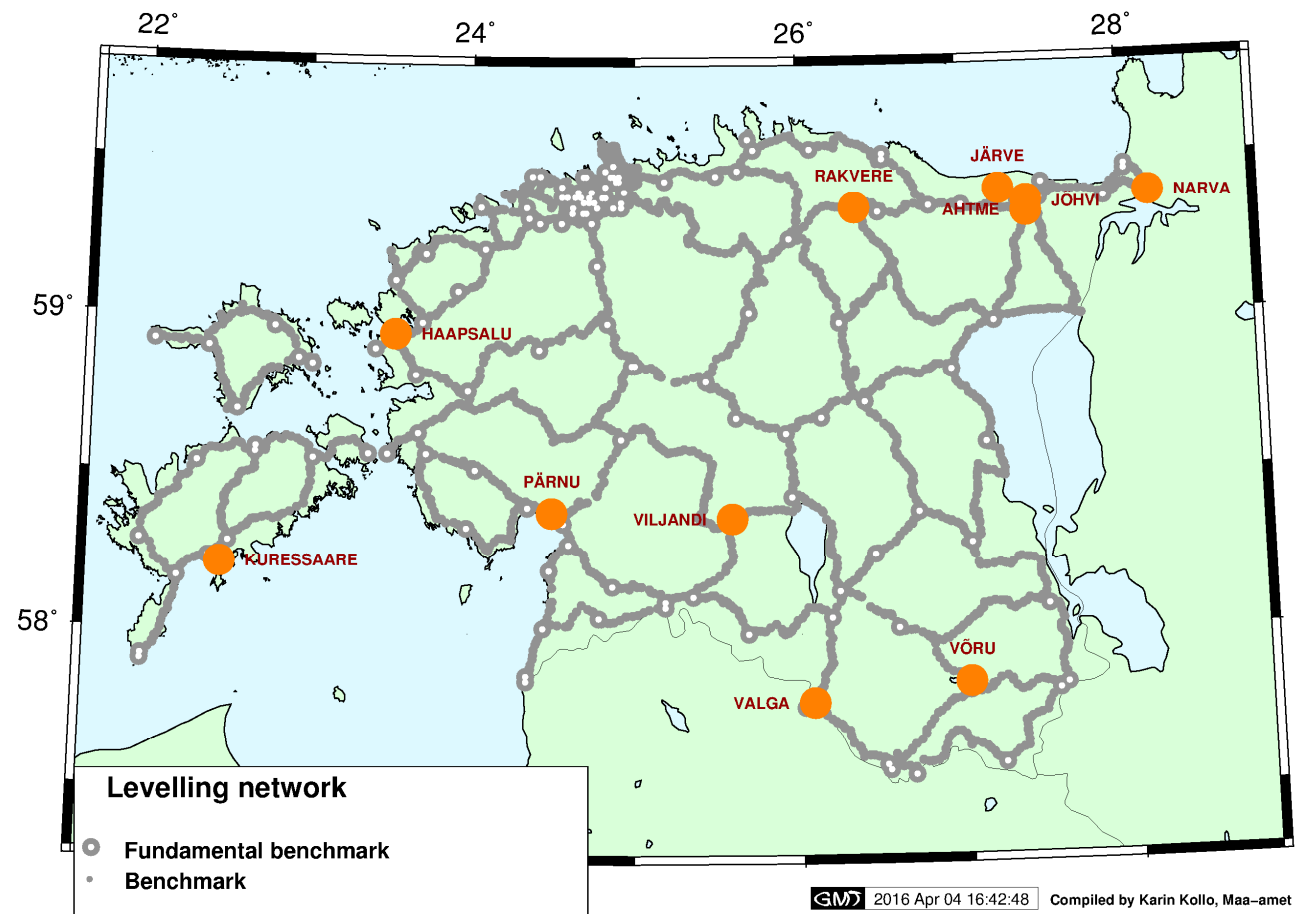
Gravity surveys in 2016-2017

- Checking historical data (Gulf of Riga, Lake Peipsi)
- Empty gaps (swamps, areas without roads, border zones)
- Coastal areas (~ 5 km from the coast)



Geodetic networks in municipalities

- In 2014-2016 height network was reconstructed in 10 towns



Future

- New height system in 2018
- Reconstruction of Vääna calibration baseline in 2016-17
- Re-measurement of I-order network in August 2017
- Reconstruction of geodetic networks in smaller towns in 2017-2019
- Sea-gravity measurements (FAMOS)



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Thanks!

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