



NATIONAL REPORT OF SWEDEN

– GEODETIC ACTIVITIES AT LANTMÄTERIET

EUREF SYMPOSIUM, 26-28 MAY 2021

LANTMÄTERIET



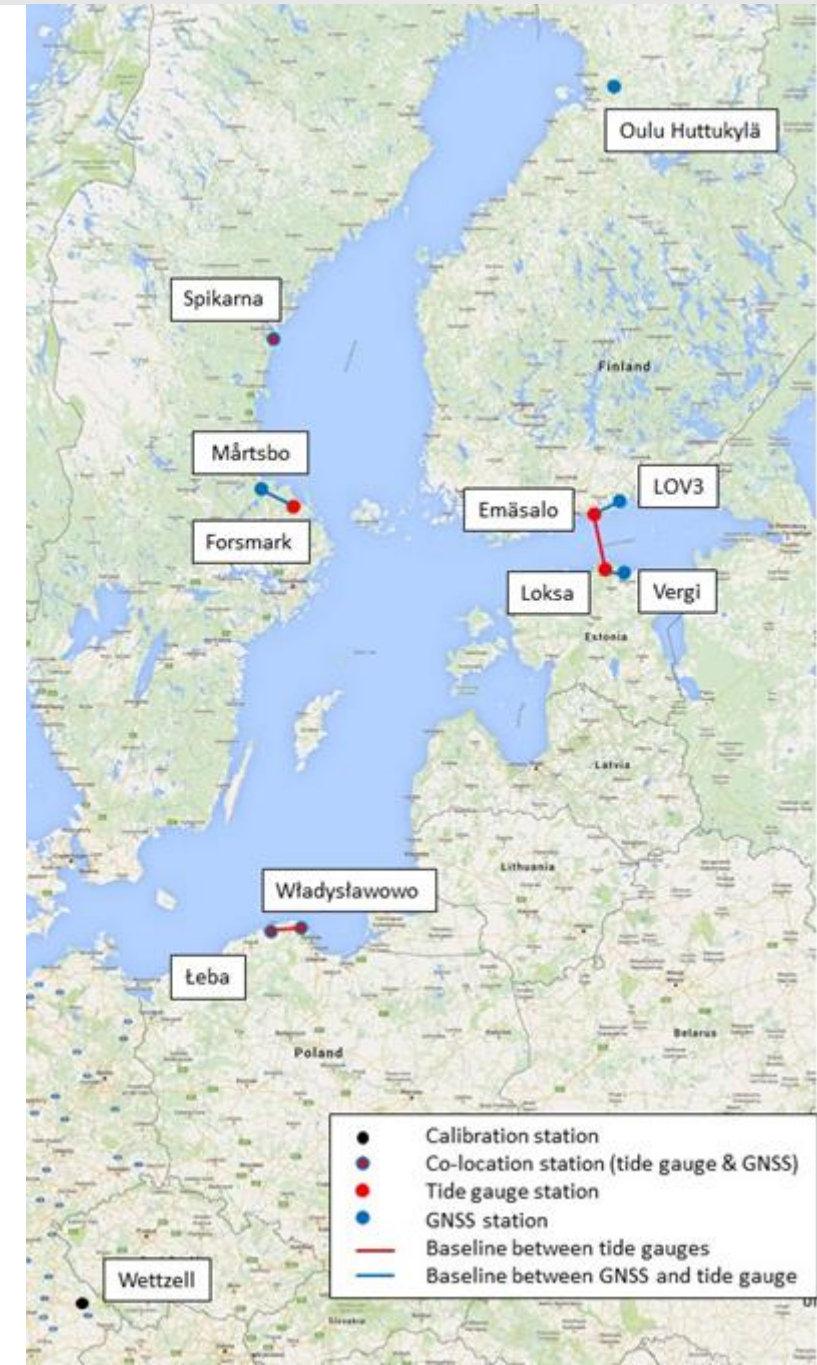
GEODETTIC SAR & InSAR

Geodetic SAR project

- Investigate the possibility to connect tide gauges and national height systems around the Baltic Sea by means of absolute positioning by SAR, using active transponders

Introduction of national ground motion service

- Based on the same platform as the Norwegian service
- The geodetic infrastructure in Sweden will be complemented with some 20 passive corner reflectors, co-located with SweposTM stations



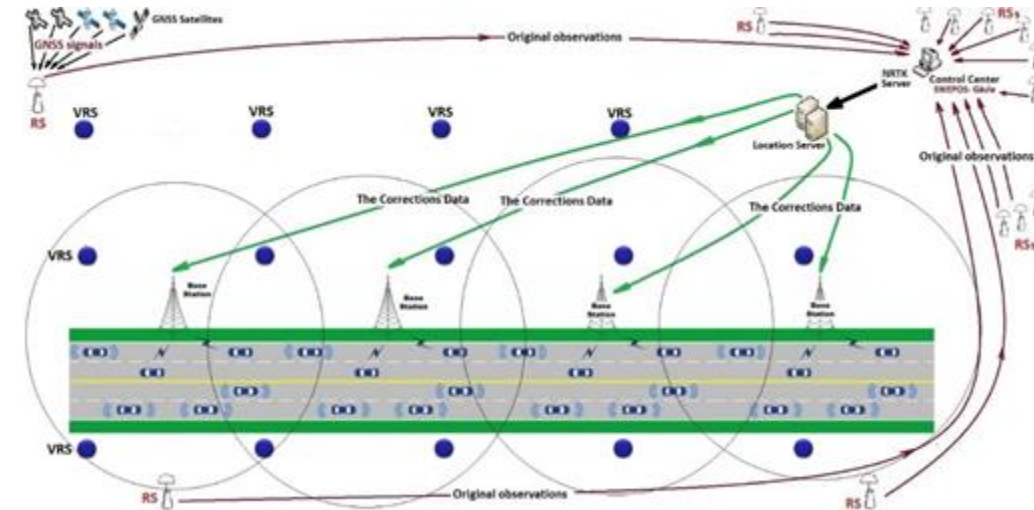
NETWORK RTK FOR MASS-MARKET APPLICATIONS

Several projects testing the possibilities to use network RTK for mass-market applications, e.g.

- NPAD – Network RTK Positioning for Automated Driving
 - Proposes to use a grid of fixed VRSs
 - Correction data from Swepos™ for the VRS grid provided in broadcast mode through the cellphone network
- PNK4UTM – Positioning, Navigation and Communication for Unmanned Aerial Traffic Management
 - Long-term purpose: Significantly improve the functionality of the cellphone network and positioning services to implement unmanned aerial traffic management

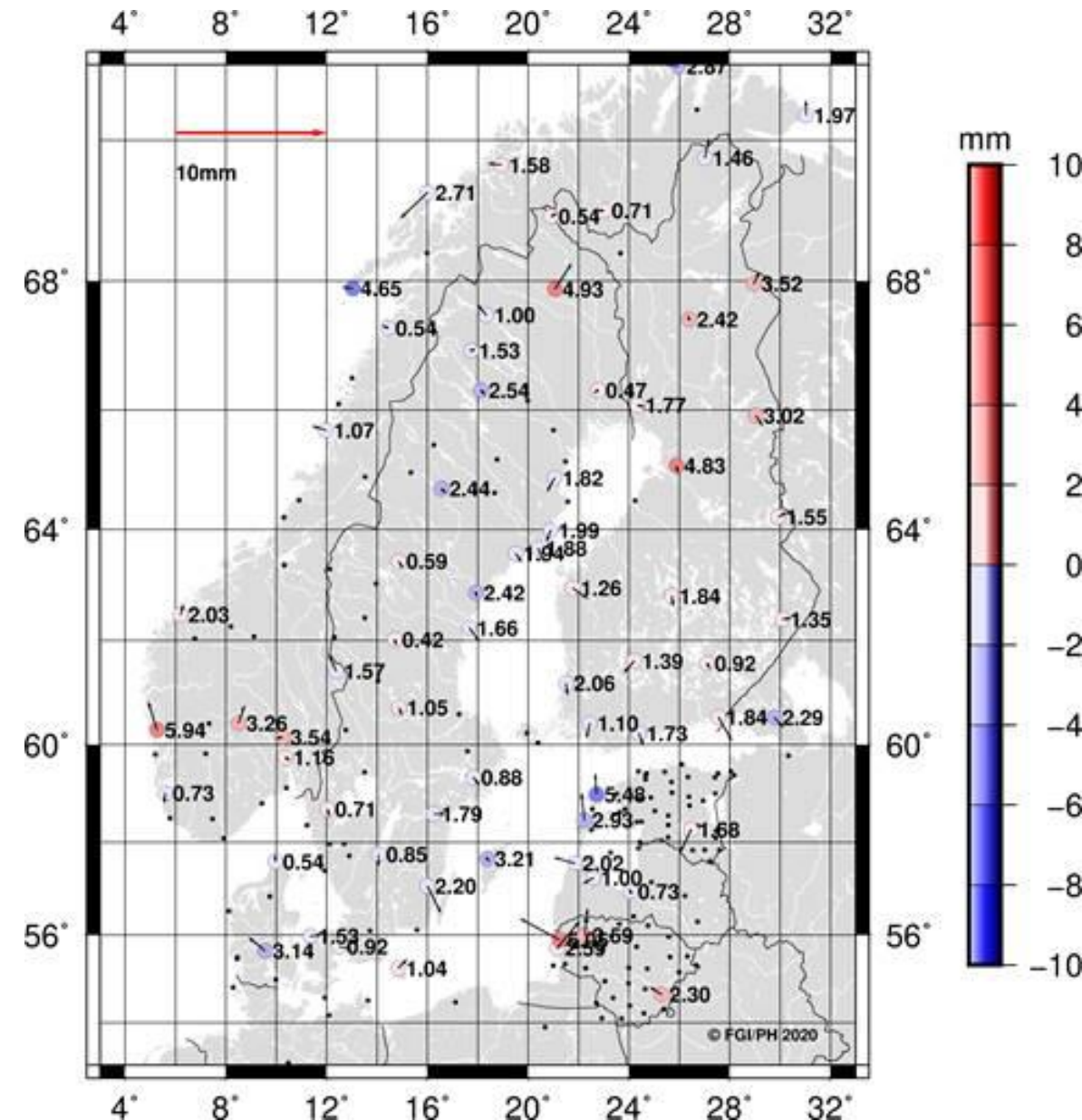
Swepos improvement

- High Availability solution implemented to fulfill requirements for mass-market with new user groups



TRANSFORMATION ITRF2014 – SWEREF 99

- New transformation developed in cooperation within the Nordic Geodetic Commission (NKG)
- Based on the concept in (Häkli et al. 2016) and the NKG_RFI7vel land uplift model
- Available e.g. in the PROJ transformation library



ONSALA SPACE OBSERVATORY

- Geodetic VLBI activities now financed by Lantmäteriet
- Agreement between Chalmers University of Technology and Lantmäteriet to be signed just now



REVIEW OF NATIONAL BORDER WITH NORWAY

Bilateral project with Norway, 2020-2024

- Sweden responsible for northern part
 - Survey and renovate border markers
 - Clear border line from trees and shrubs
- ... in a sometimes challenging environment



THANKS FOR YOUR ATTENTION!

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