

The Nordic Geodetic Observing System (NGOS)

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L A N T M Ä T E R I E T



Nordic Geodetic Commission

- Knowledge-sharing and co-operation
- No funding
- National geodetic networks historically individual.
- Also within countries, responsibility spread out (e.g. tide gauges)
- Turning point at the moment with ETRS89 and EVRS.

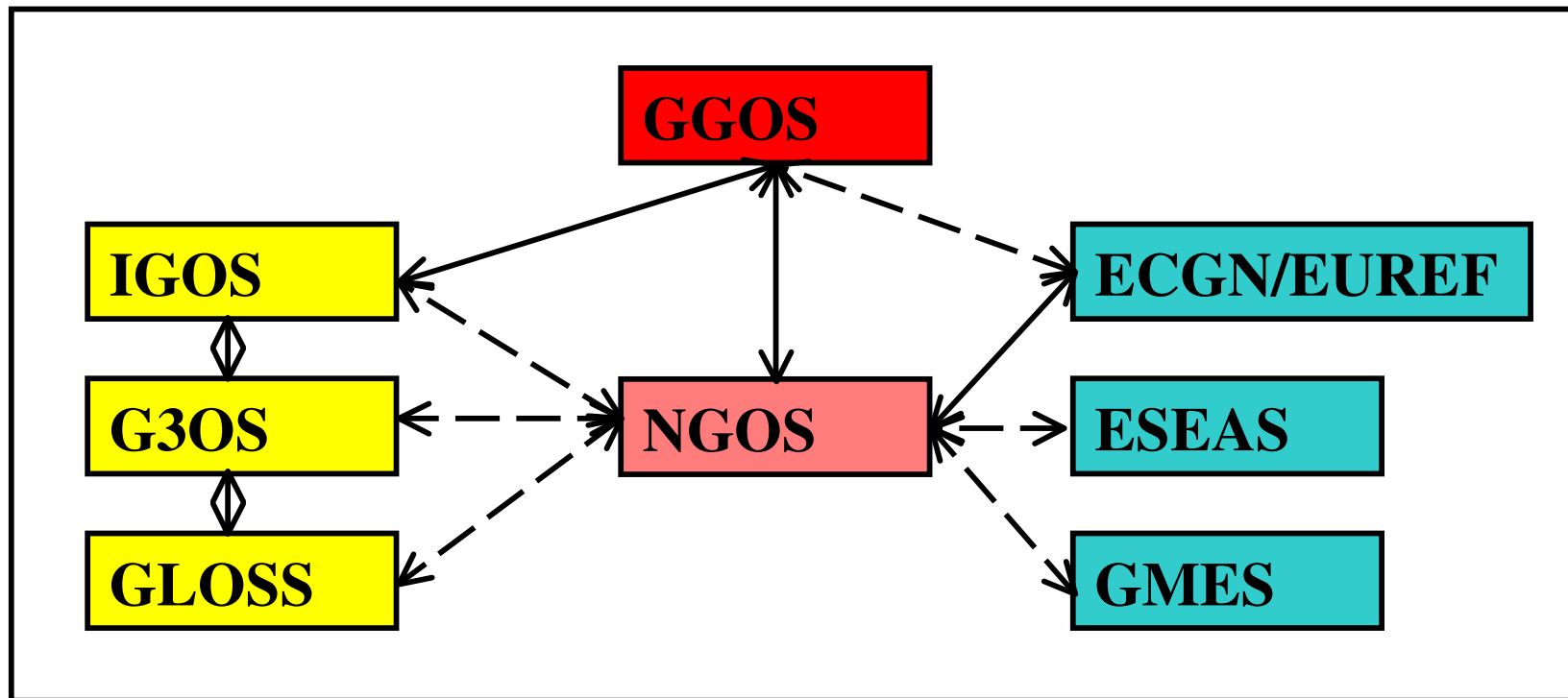


NGOS

- A task force from the Presidium of the Nordic Geodetic Commission (NKG)
- The Nordic Geodetic Observing System (NGOS) integrates fundamental geodetic techniques for the longterm observation of Earth system parameters
- NGOS is a regional implementation and densification of the GGOS



NGOS connections



IGOS = Integrated Global Observing Strategy
G3OS = Global Climate/Ocean/Terrestrial Observing System
GLOSS = Global Sea Level Observing System
ECGN = European Combined Geodetic Network
ESEAS = European Sea Level Service
GMES = Global Monitoring for Environment and Security

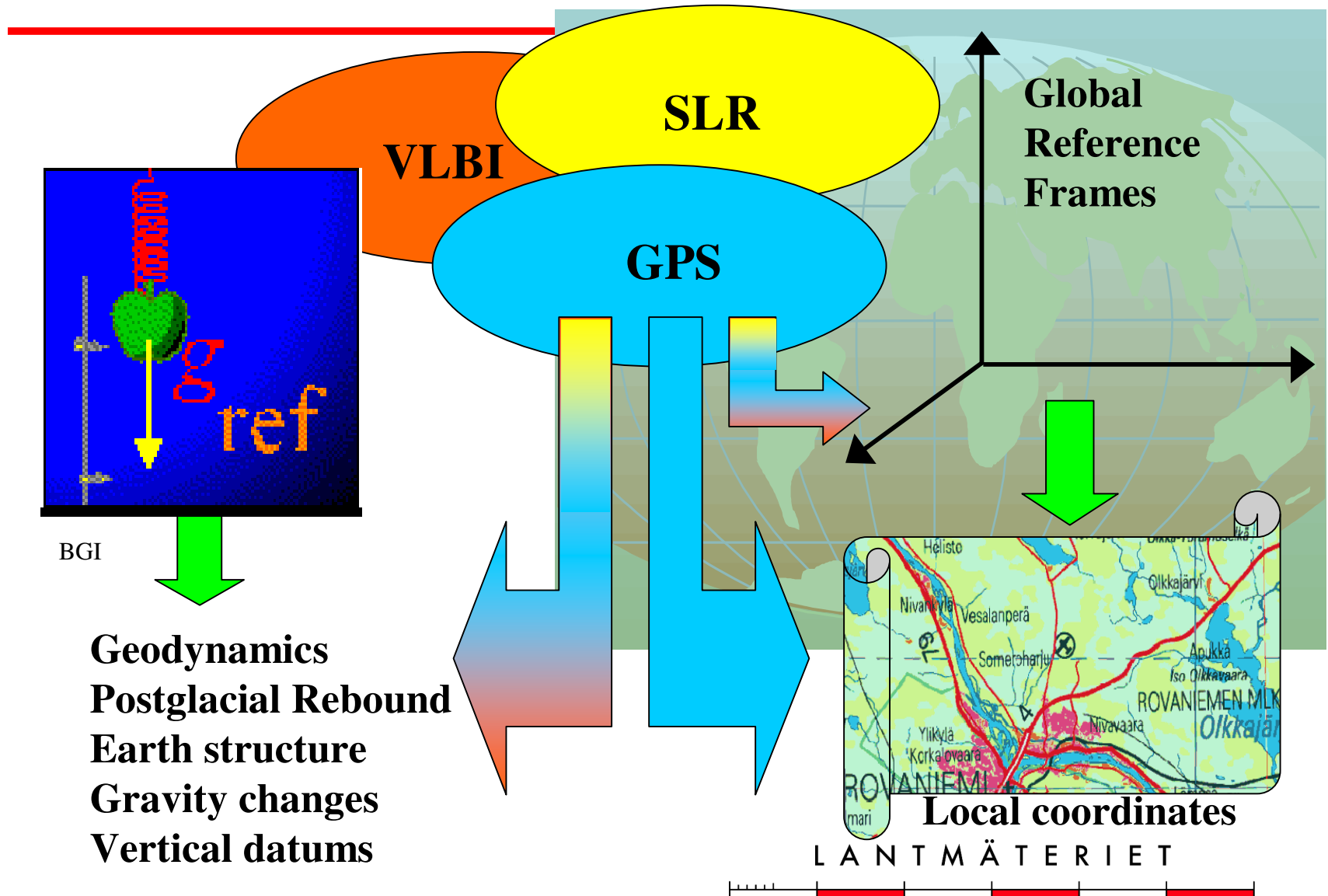


NGOS / Objectives

- Co-ordination of the design of a Nordic Geodetic Observing System (NGOS) and the Nordic contribution to the Global (or European) Observing system(s)
- For the Nordic countries, a main focus will be on crustal motion, dynamics of glaciated areas and sea level.



Multi-technique sites

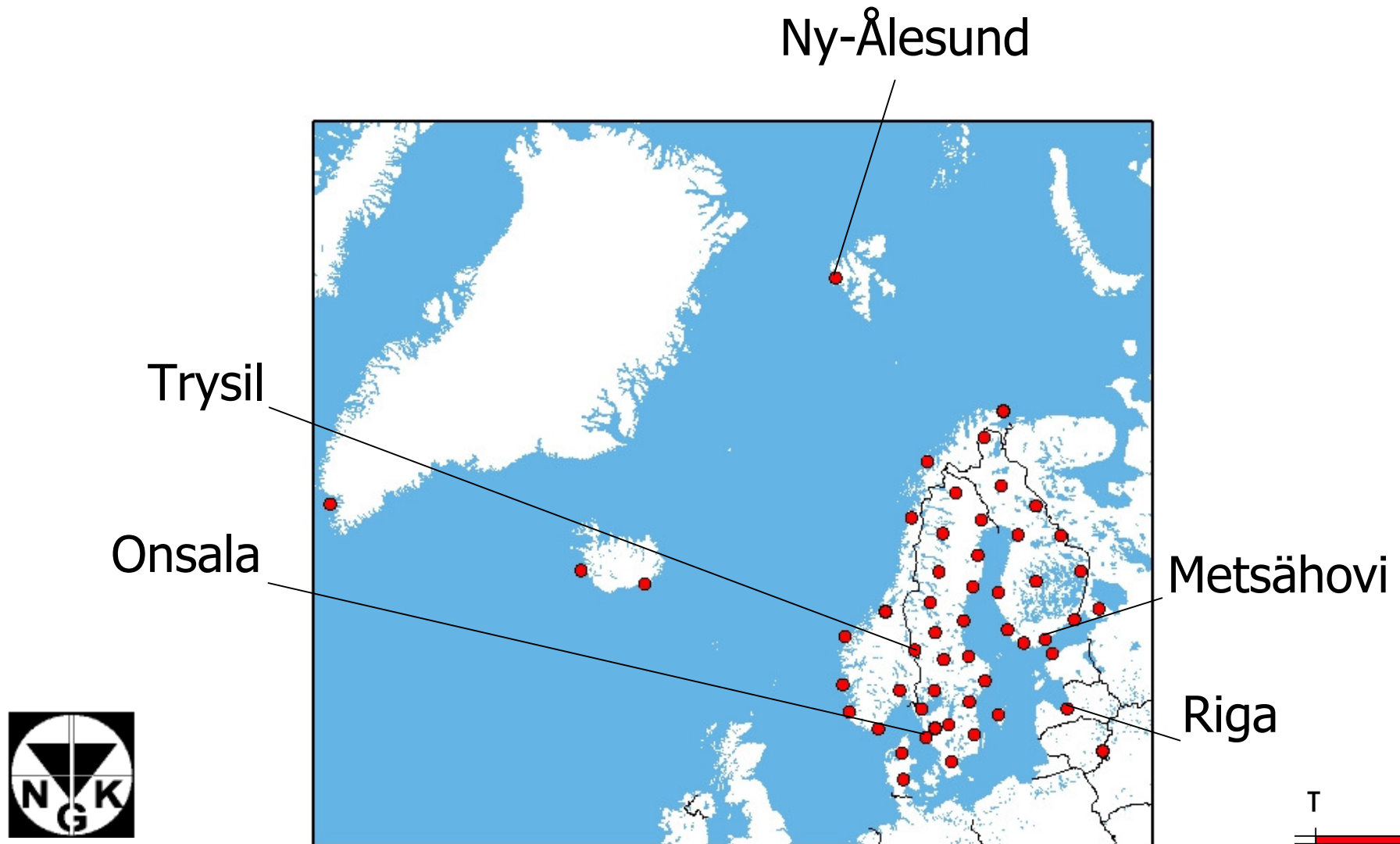


NGOS / Geographic extent

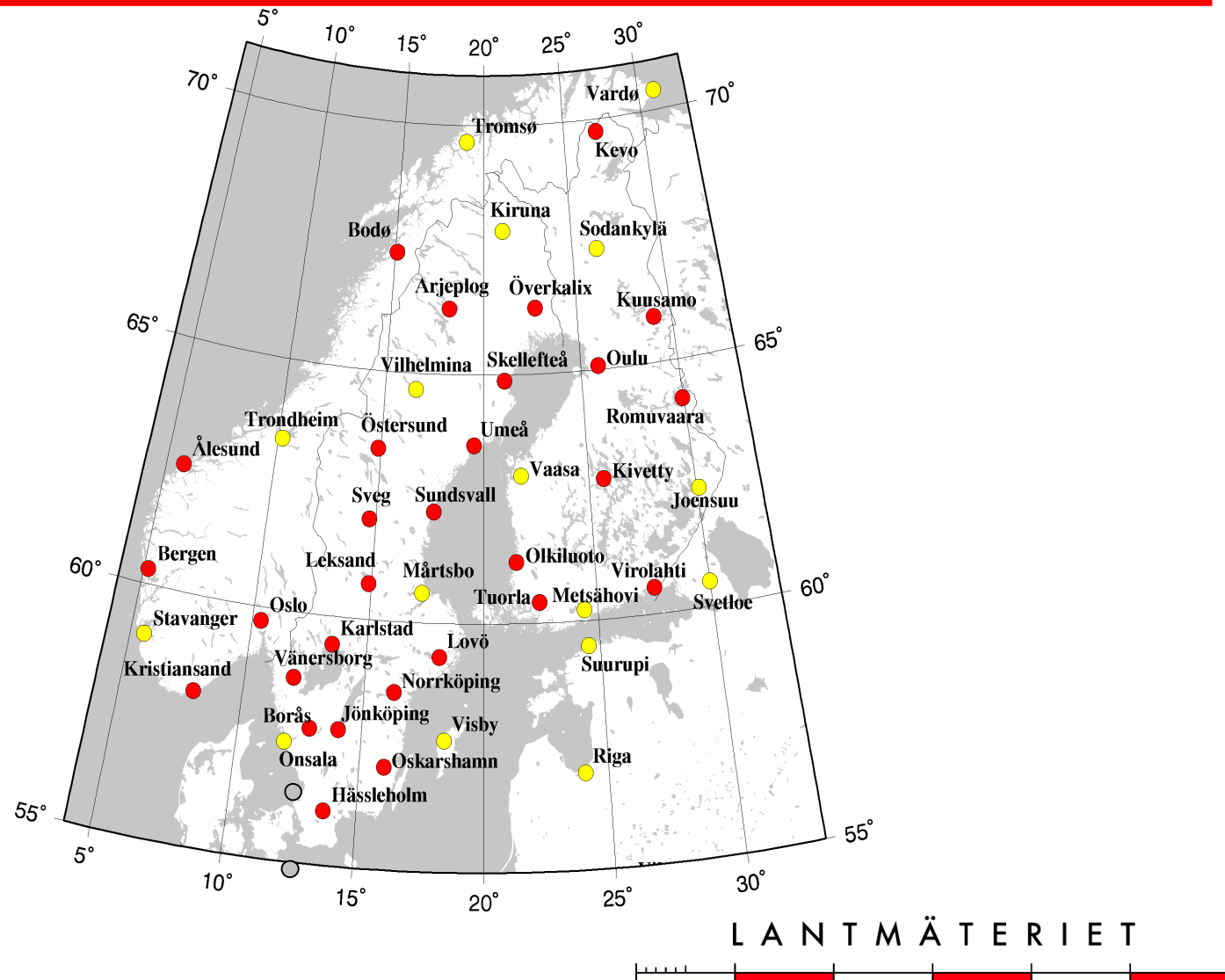
Formerly and presently ice covered areas of the Northern hemisphere, primarily Northern Europe and Greenland



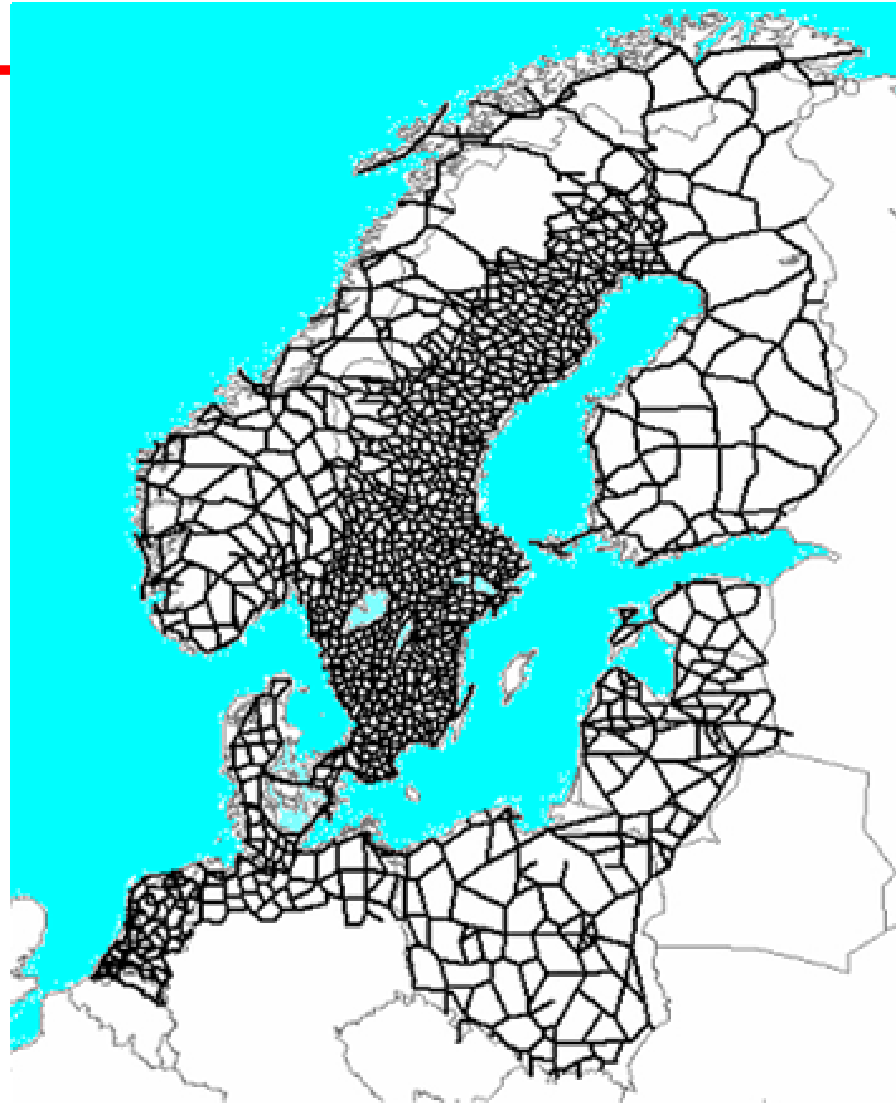
NGOS / “Super stations”



Nordic Permanent GPS Network



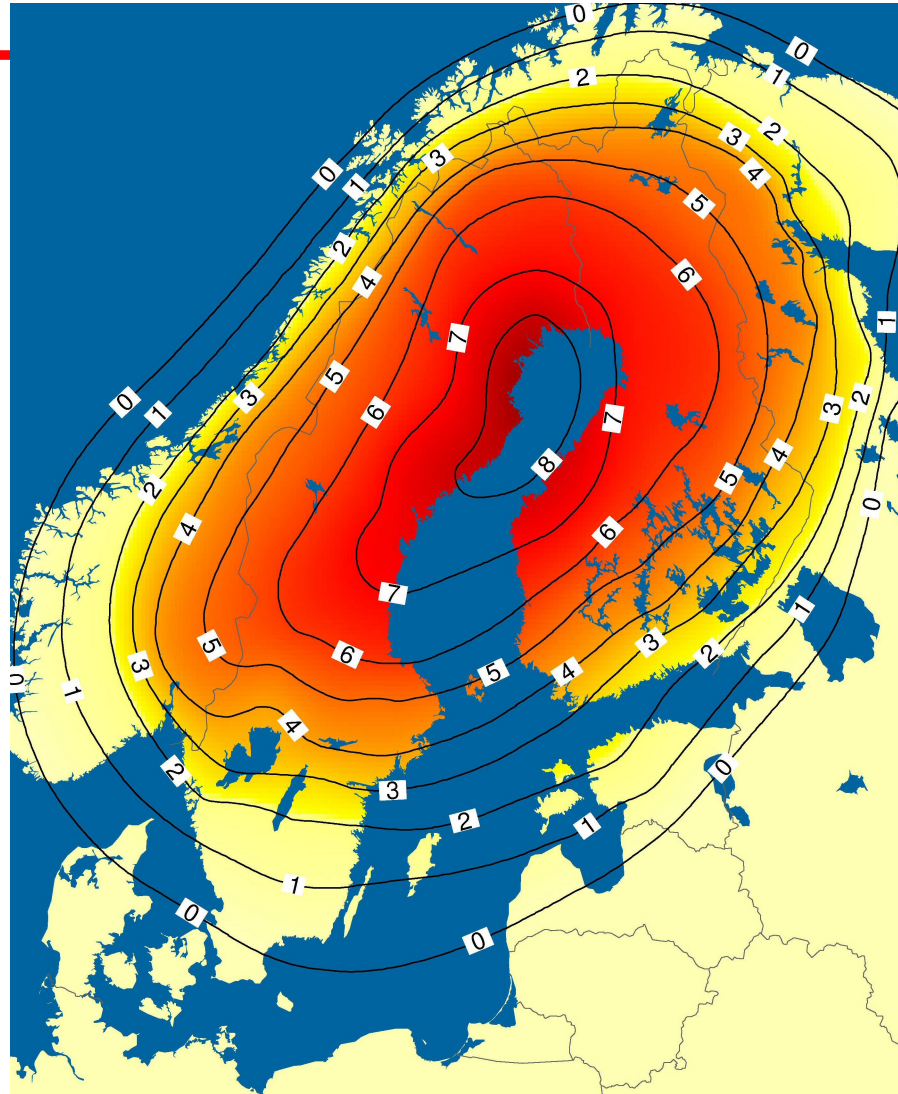
Nordic Height Block



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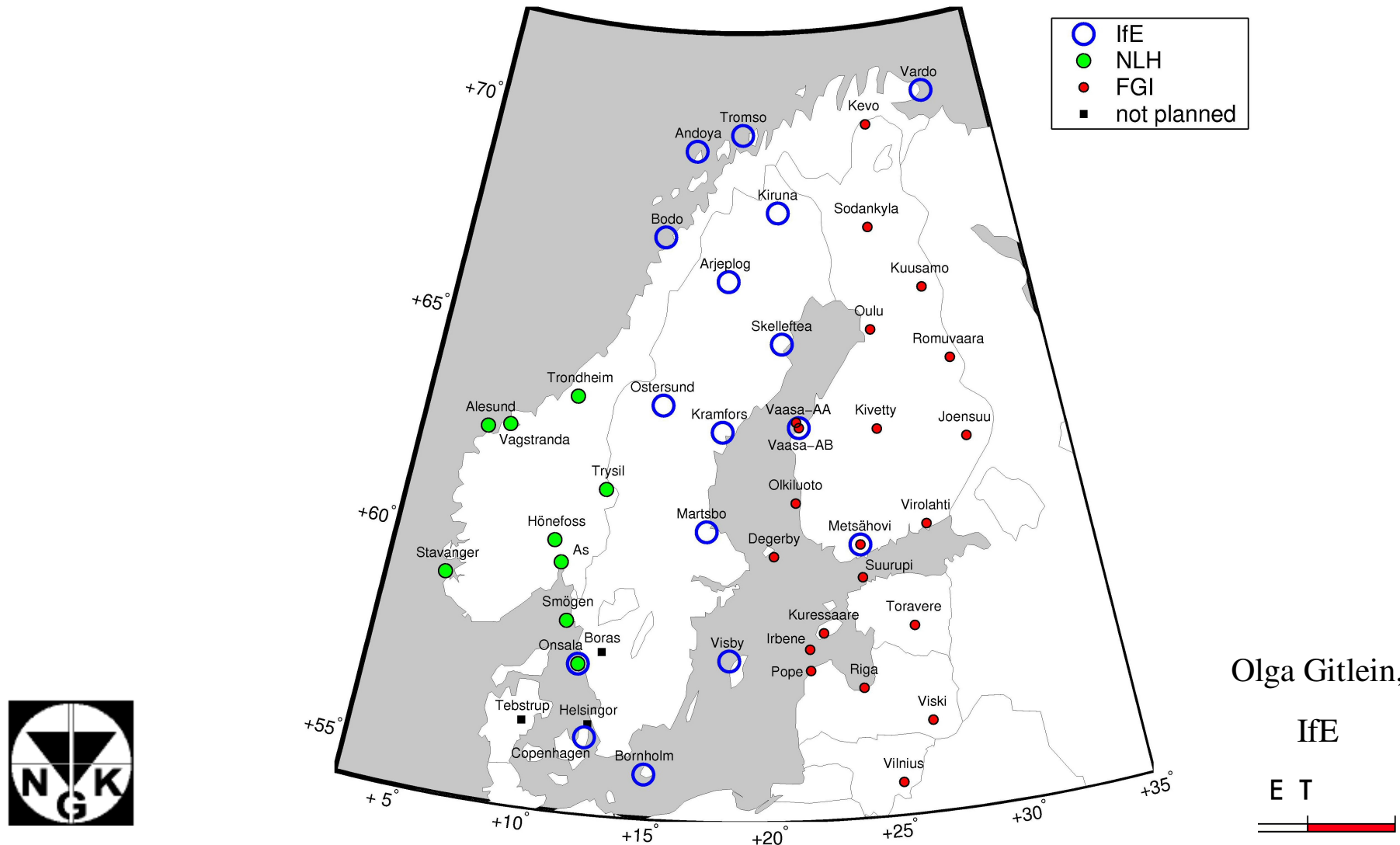
Postglacial rebound



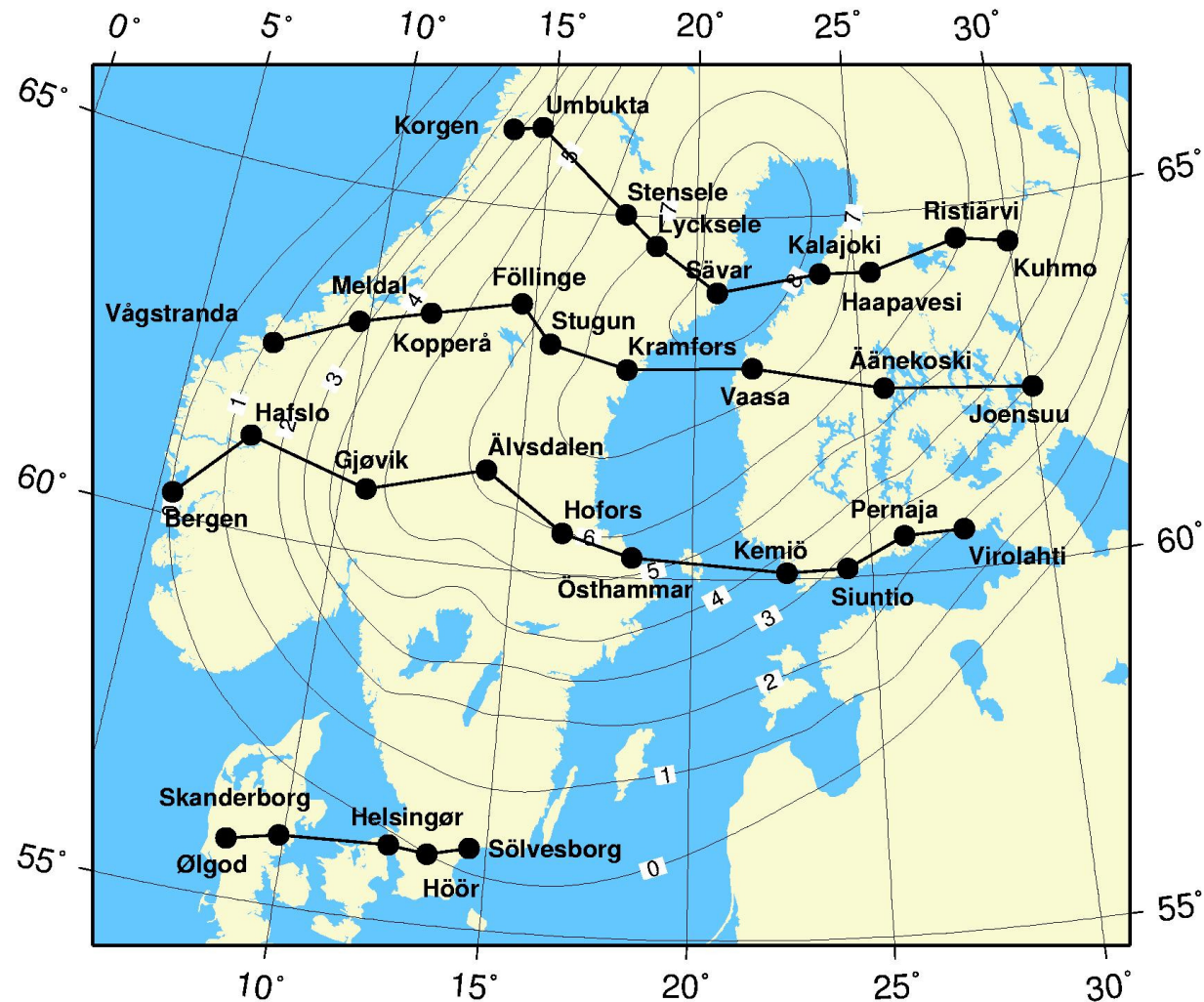
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Absolute gravimetry plan 2004



Land uplift gravity lines



Conclusions

- General principles outlined
- Special focus on crustal motion, dynamics of glaciated areas and sea level.
- Final selection of points still to do, ECGN + AG sites + Selection of permanent GNSS stations a good start
- Multi-technique at sites
- NGOS data access, data archive and products to focus on.

