

NCGN

NKG Combined Geodetic Network

A Pilot project of the Nordic Geodetic Commission



NKG Structure

- Presidium
- 4 Working groups
 - Geodetic infrastructures
 - Geodynamics
 - Reference frames, positioning and navigation
 - Geoid and height systems
- Projects are established under WGs by approval of the presidium
- Data archives, joint projects existed for a long time (an example Nordic geoid models, uplift models, ...)

NCGN proposal

- Subtitle and reasoning to do this:
Understanding the sea level variation of the Baltic Sea.
- To achieve the goal we need
 - to observe absolute land uplift rates (GNSS time series)
 - to utilize existing networks of repeated precise levelling
 - to have a unified height system in the area
 - to observe long sea level time series
 - to understand and model land uplift
 - to understand gravity changes
 - to understand GIA models

NCGN proposal

Working groups are contributing the following things:

WG of Geodetic Infrastructure: C-GNSS networks, local ties, old and new techniques

WG of Geoid and Height systems: levelling databases, gravity databases, geoid models, tide gauges

WG of Reference Frames, Positioning and Navigation: definition of reference frames, transformations between frames

WG of Geodynamics: Make uplift models available, crustal deformation, sea level changes

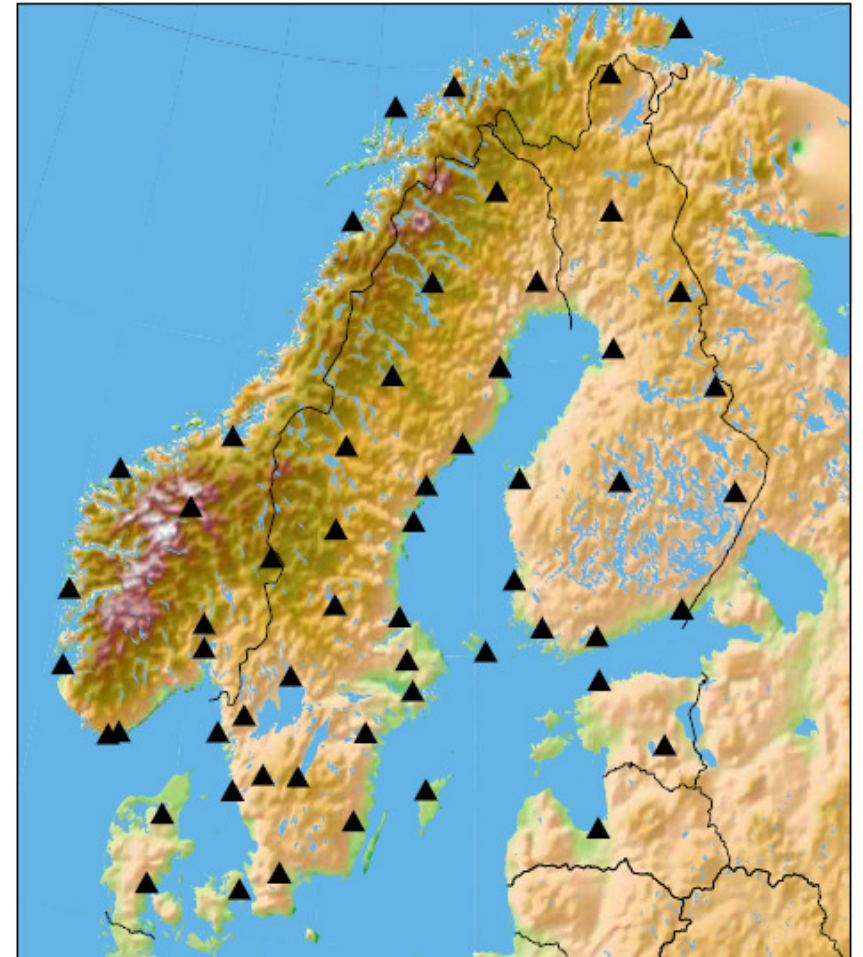
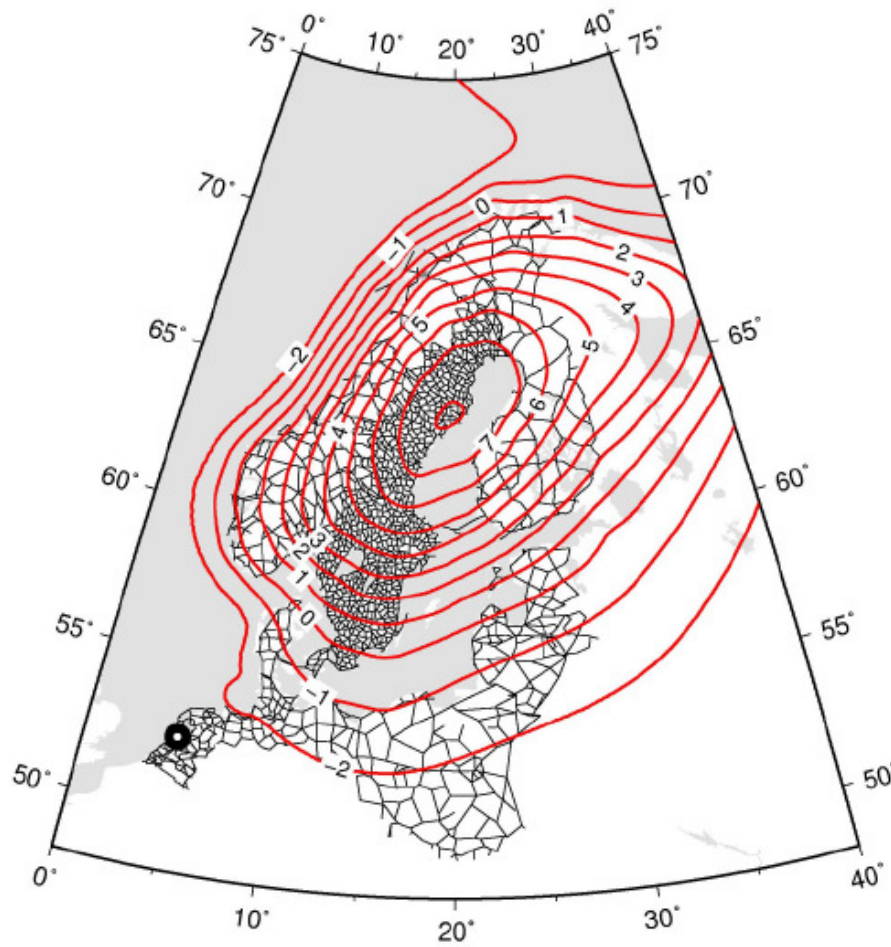
NCGN proposal

Outcome /Deliverable

- 1) Establishing the project web page on the NKG site
- 2) Establishing and maintenance of links to existing NKG data archives (metadata base) and other useful sites to give users an access to the existing data sets
- 3) Maintenance of existing data bases by respective working groups; urge groups to establish and maintain missing databases and to allow access to the data
- 4) Development of the web page as the ultimate goal towards a portal of Nordic Geodetic Observing System
- 5) Make available links and publications on GIA and related material; software to make necessary computations

NCGN proposal

- Discussed in the NKG Presidium meeting 4.10.
- Accepted as a project of NKG
- Web page and contributions of WGs to be established



NORDIC GEODETIC COMMISSION

NORDISKA KOMMISSIONEN FÖR GEODESI

PRIMARY LINKS

- Home
- NKG Presidium
 - Presidium Members
 - Minutes of Presidium Meetings
 - Gallery
- Working Group of Geodetic Infrastructure
- Working Group of Geodynamics
- Working Group of Geoid and Height Systems
- Working Group of Reference Frames, Positioning and Navigation
- NKG General Assembly
- NKG Summer Schools
- NKG Data Banks
- NKG Archives
- Links
 - National Authorities
 - Universities and Organizations
 - Other links

NORDIC GEODETIC COMMISSION



The Nordic Geodetic Commission - founded in 1953 - is an association of geodesists from Denmark, Finland, Iceland, Norway and Sweden. Its purpose is to give the members possibilities of fruitful gatherings and mutual exchange of professional views and experiences. The NKG is recognized and supported by a number of Nordic organizations, such as the Director Generals of the Nordic Mapping Authorities. (See [bylaws](#))

In order to forward its vision, the Commission arranges general meetings every 4 years, and summer schools also every 4 years, in one of the Nordic countries as the host. NKG is managed by a Presidium and the actual work is done in Working groups and Working group projects.

The NKG has the following Working groups:

WG of Geodynamics

WG of Geodetic Infrastructure

WG of Geoid and Height systems

WG of Reference Frames, Positioning and Navigation