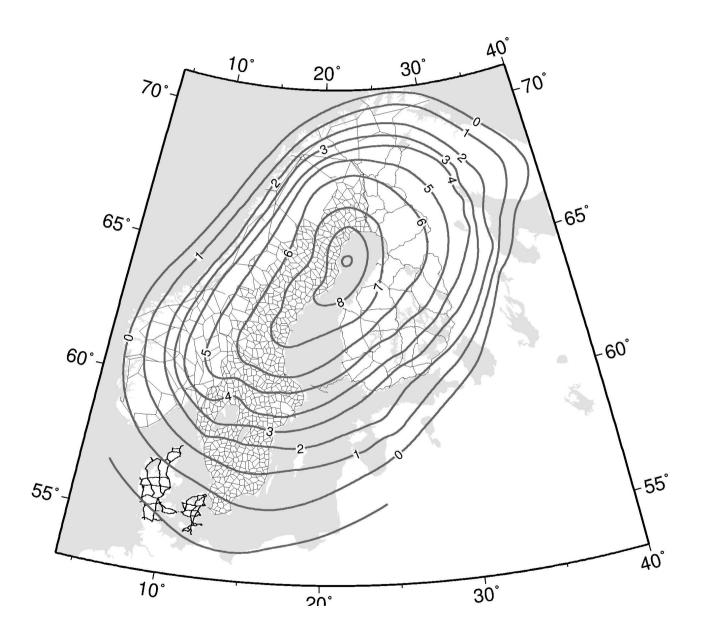
Joint adjustment of the Nordic levelling networks: Status report

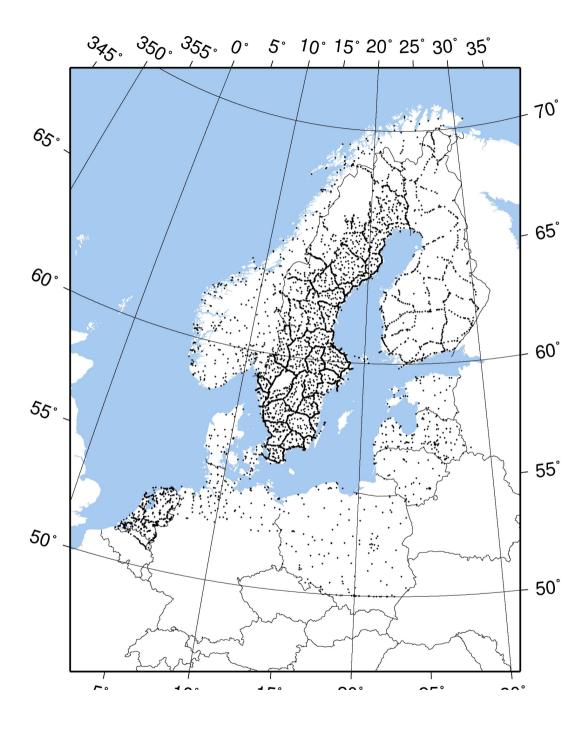
Jaakko Mäkinen (2), Karsten Engsager (1), Veikko Saaranen (2), Runar Svensson (4), Olav Vestøl (3)

(1) National Survey and Cadastre, Denmark, (2) Finnish Geodetic Institute, (3) Norwegian Mapping Authority, (4) Swedish National Land Survey

Levelling networks of the Nordic countries

Postglacial Rebound (PGR) in mm/yr relative to MSL (Ekman 1996).





Baltic Ring

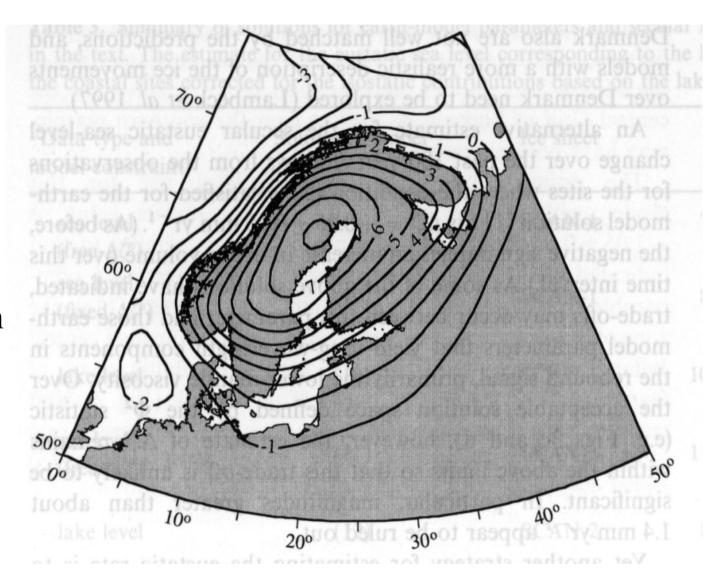
PGR models used

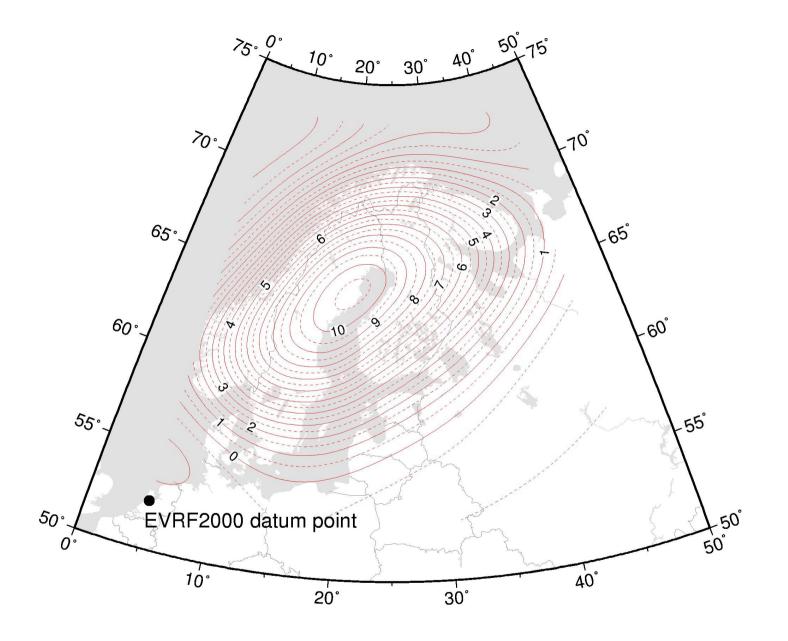
Lambeck, Smither, Ekman, Geophys. J. Int. (1998).

Vertical rates from a model of Glacial Isostatic Adjustment (GIA), tuned to TG rates provided by Ekman (1996).

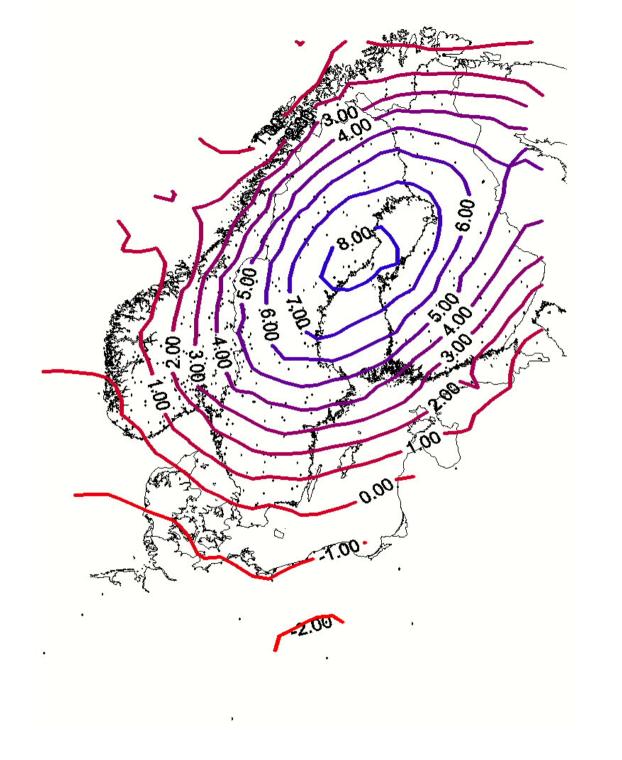
Rates relative to MSL in mm/yr

Standard model in the reductions so far



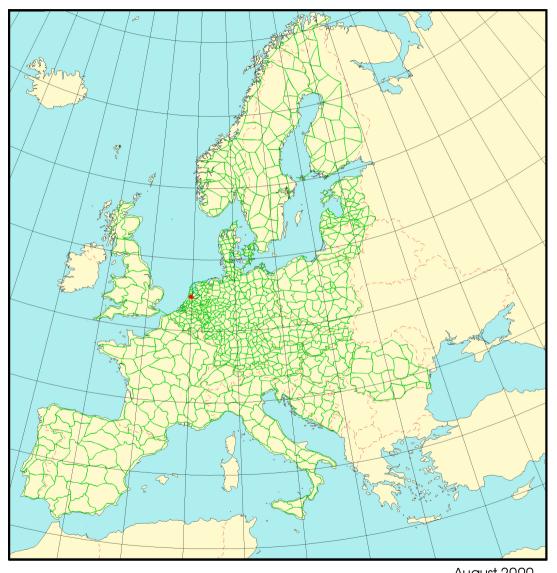


Postglacial rebound rates relative to the geoid by Milne et al. (2001). GIA model fitted to 3-D velocities at permanent GPS sites of the **BIFROST** project.



Olav Vestöl (October 2004), mm/yr relative to MSL.

Uplift map collocated from observed rates only: repeated precise levelling, tide gauges, permanent GPS.



August 2000

We use "nonorthodox" connections:

- (i) oceanographic levelling (ii) GPS/geoid
- (1) Across the Aland sea (2) Across the Gulf of Finland