



National Report of Germany

W. Söhne, G. Liebsch, J. Ihde, D. Thaller

Federal Agency for Cartography and Geodesy (BKG)



Modernization of GREF – German integrated geodetic reference network

- New station Rantum (RANT)
- Rebuilding of station Sassnitz (SASS)

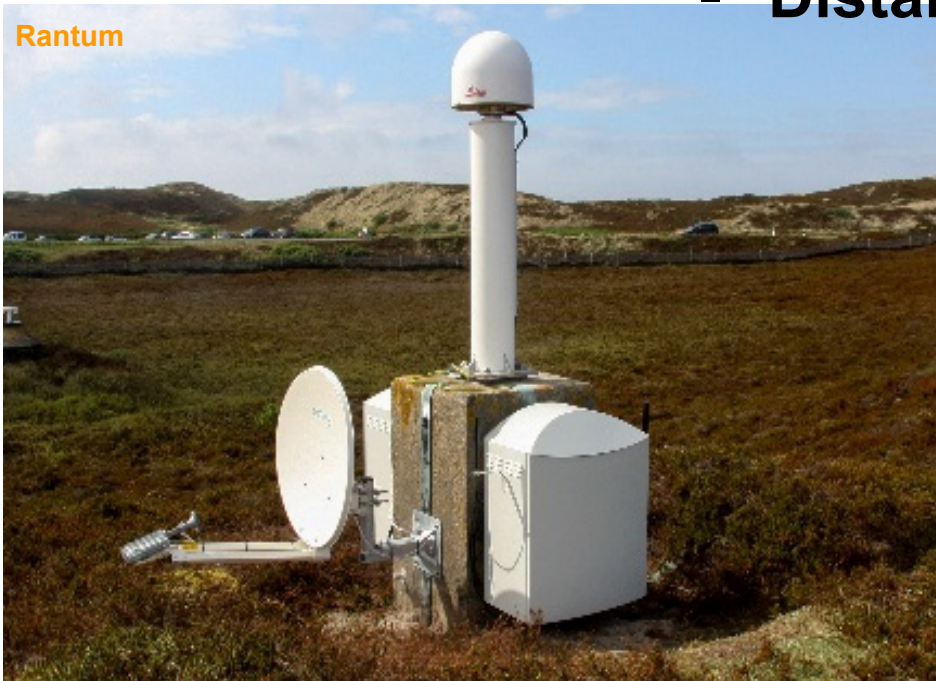


● GPS + GLO

● GPS + GLO + GAL

Modernization of GREF – German integrated geodetic reference network

- New station on the island of Sylt: Rantum (RANT) to replace Hoernum station (HOE2) → building sold to private
- Distance ~ 5 km



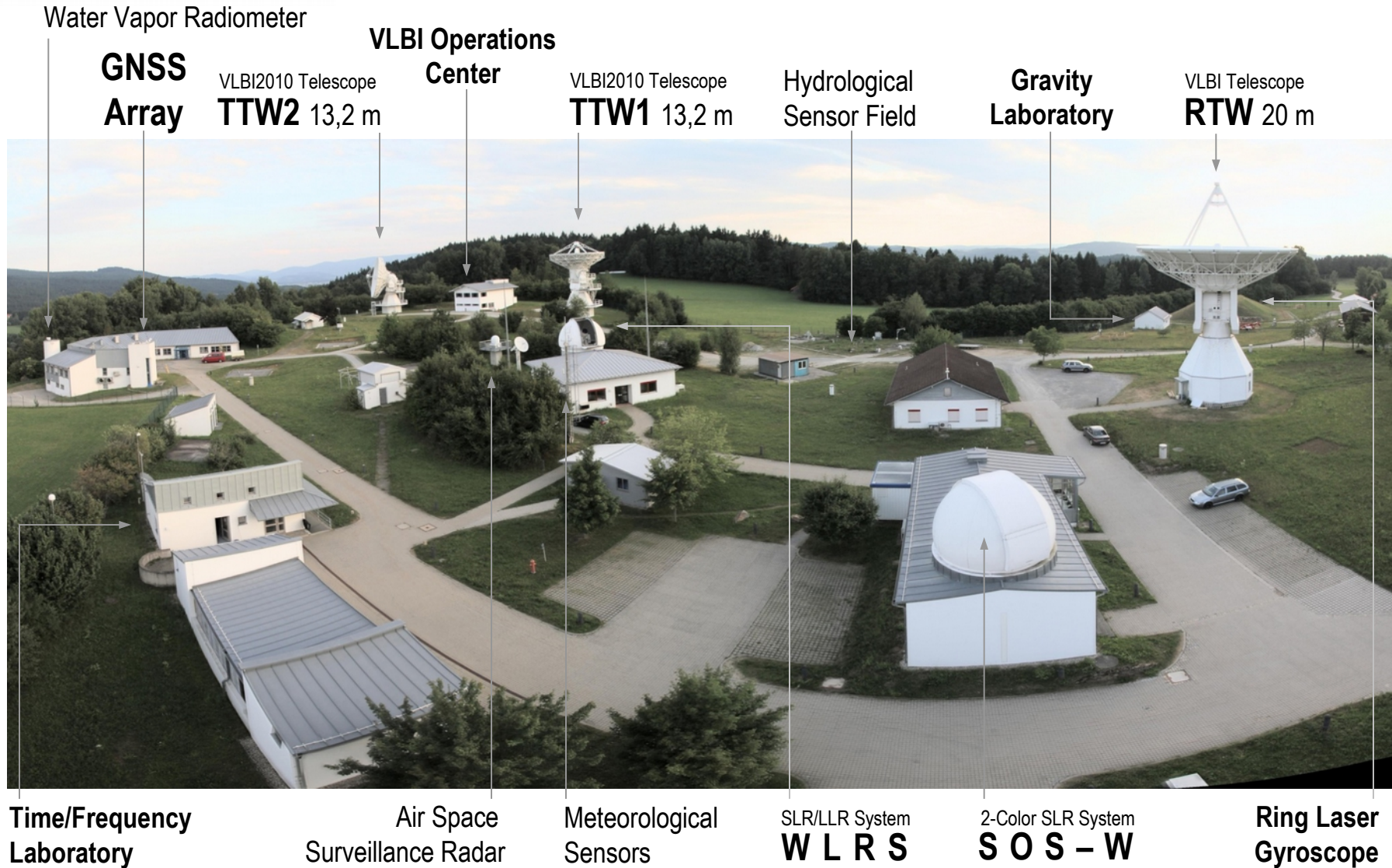
Modernization of GREF – German integrated geodetic reference network

- **Rebuilding of IGS and EPN station Sassnitz (SASS): new deep pillar in the inner harbor → delayed due to delay in construction work for the pier**





Geodetic Observatory Wettzell



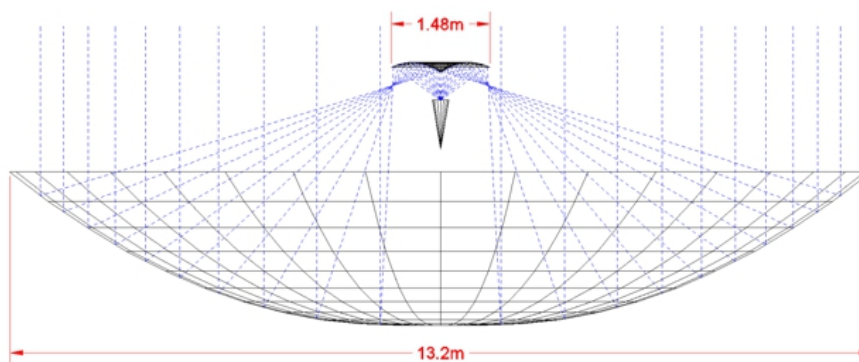


Geodetic Observatory Wettzell

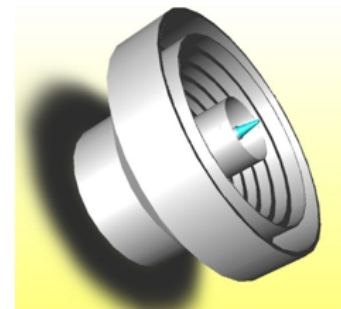
TWIN Telescopes TTW1 and TTW2



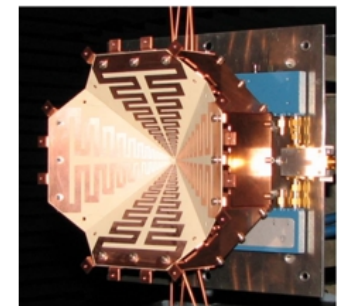
- 2 identische Radioteleskope
- Hauptreflektor: 13.2m
- Oberflächengüte: <0.2 mm rms
- ALMA-Montierung
- Subreflektor mit Hexapod-Montierung und Ringfokus-Optik
- Breitband-Feed (2 .. 18 GHz)
- Geschwindigkeiten: Az. 12°/s, Elev. 6°/s
- 27 Bit Encoder (0.01 arc sec)



Ringfokus-Optik



Triband-Feed
(S-, X-, Ka-Band)



'Eleven'-Feed
(2 ... 11 GHz)

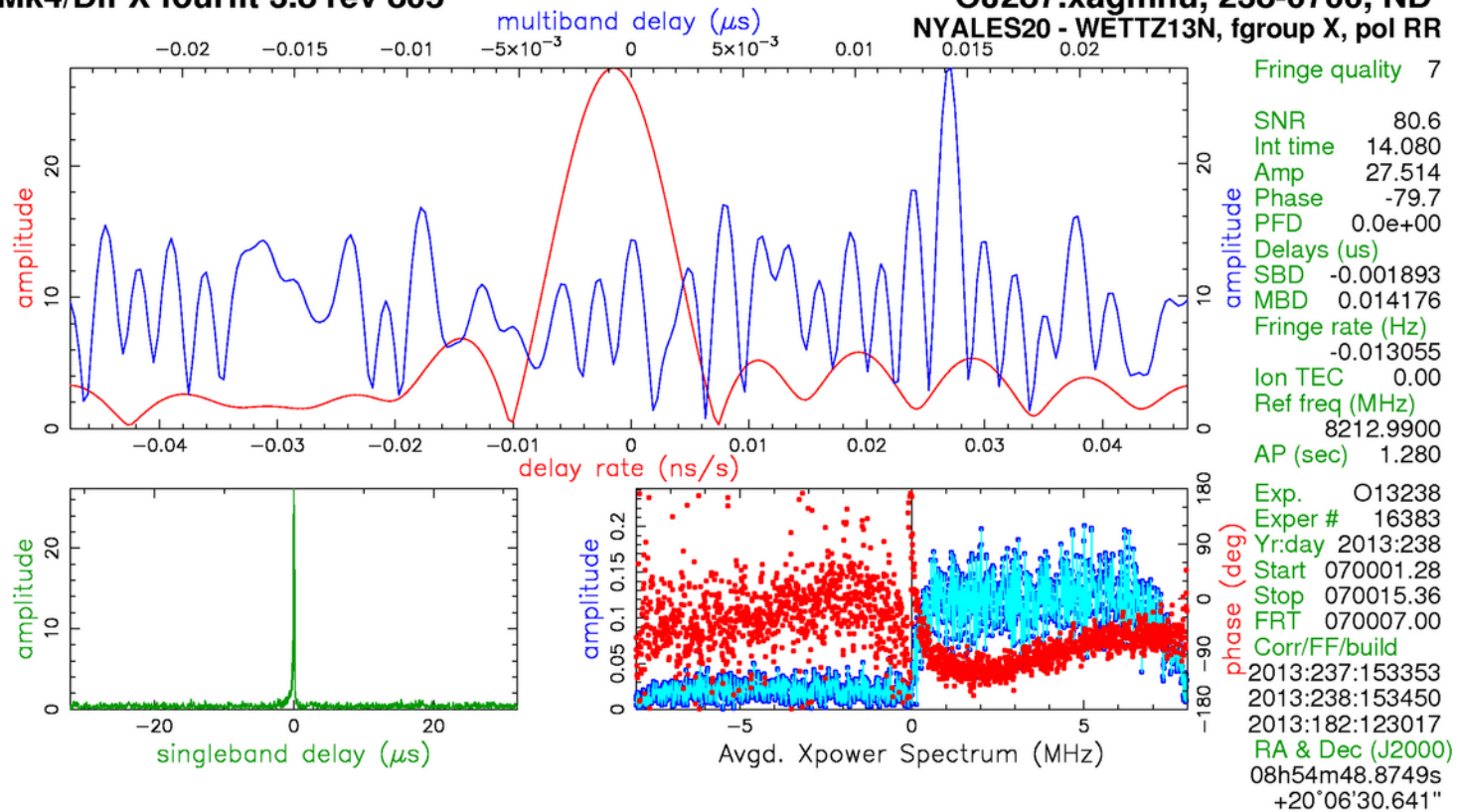


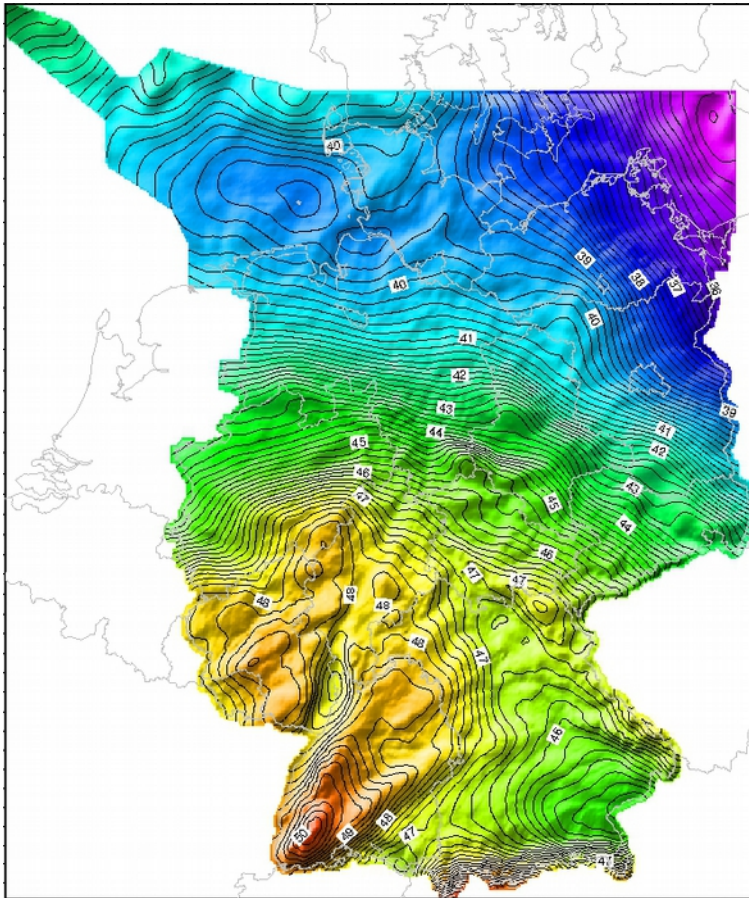
Geodetic Observatory Wettzell

First successful correlation between TTW1 and Ny-Alesund 26-08-2013

Mk4/DiFX fourfit 3.8 rev 805

OJ287.xagmhu, 238-0700, ND
NYALES20 - WETTZ13N, fgrouP X, pol RR





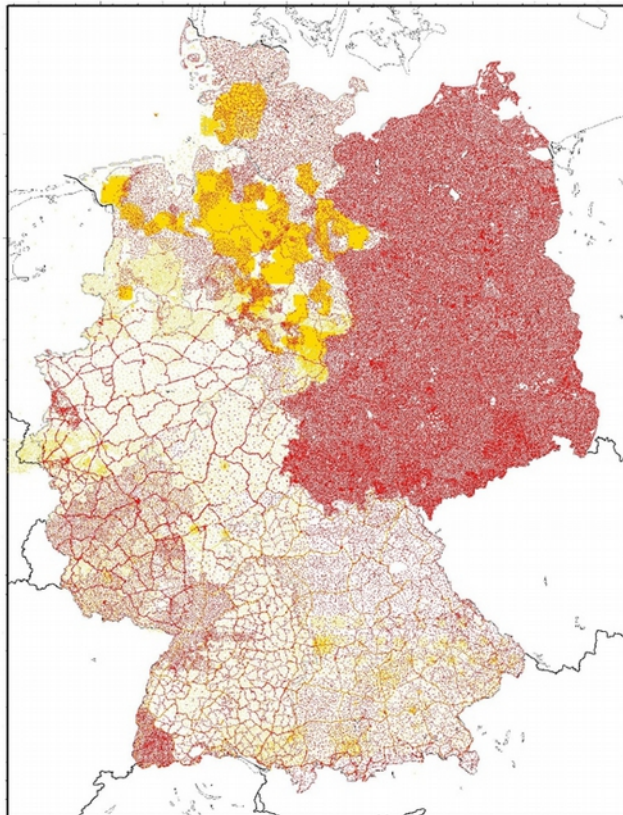
- Current version GCG2011 (from January 2012)
- Combination of two solutions (IfE, BKG)
- Next version: GCG2016 (to be consistent to new realizations for height (DHHN2016) and preference frame (ETRS89/DREF91, realization 2016))



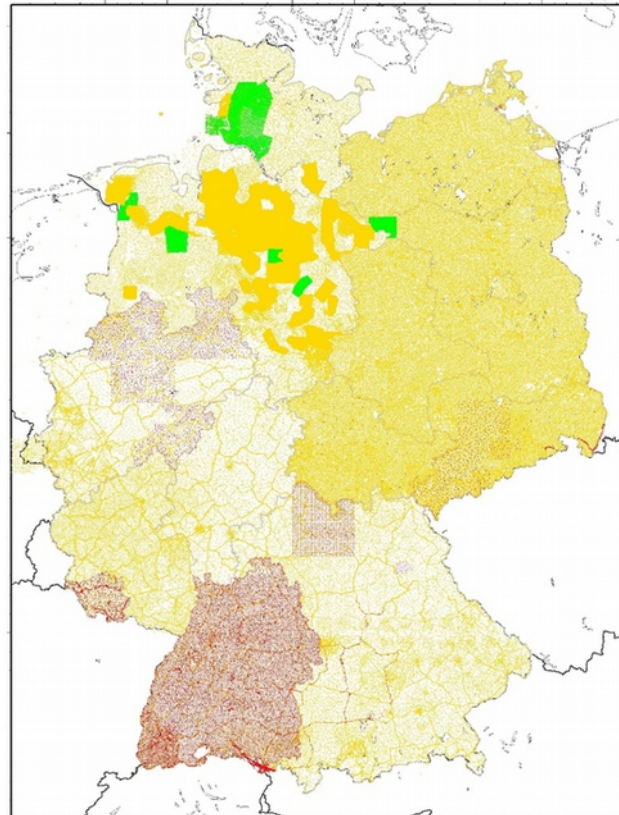
German Combined Quasigeoid

Improvement of gravimetric data basis

Status 2010



Changes since 2010



Erdöl-/Erdgasindustrie

Landesvermessung
(BW, NRW, BY, SL,
SA)



German Combined Quasigeoid Improvement of gravimetric data basis



- Sea gravimetry together with GFZ and BSH (Lake Konstanz, Baltic Sea)
- Gravimetry in the North Sea tidal area (Wadden Sea) together with German State „Schleswig-Holstein“