

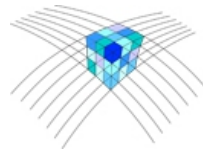
National Report of the Netherlands

EUREF 2014, Vilnius, June 3-7, 2014

Pieter van Waarden (Rijkswaterstaat)

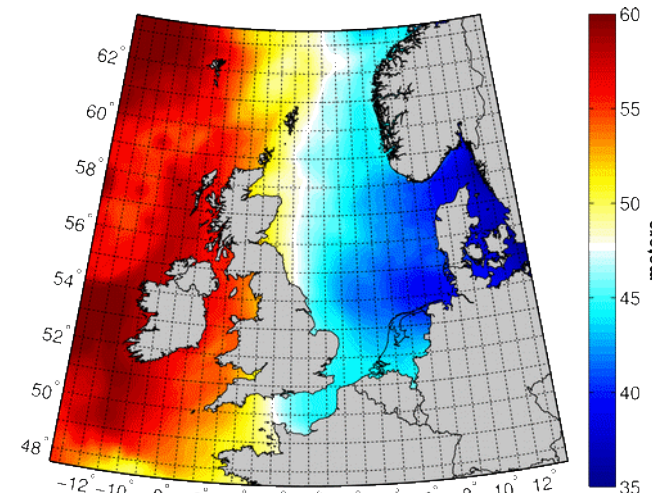
Hans van der Marel (Delft University of Technology)

Lennard Huisman (Kadaster)

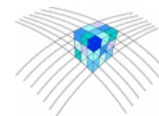


Geodetic Infrastructure of the Netherlands

- National Geodetic Infrastructure by :
Cadastre, Min. of Infrastructure and Environment, Navy, Delft University
- Common projects
 - AGRS.NL operation, control & maintenance
 - 1st order gravity measurements
 - Vertical Reference Frame for the Netherlands Mainland, Wadden Islands and Continental Shelf
 - Reconnaissance to phase out *stelsel van de Rijksdriehoeksmeting* (RD)
 - PCTTRANS 5 transformation software

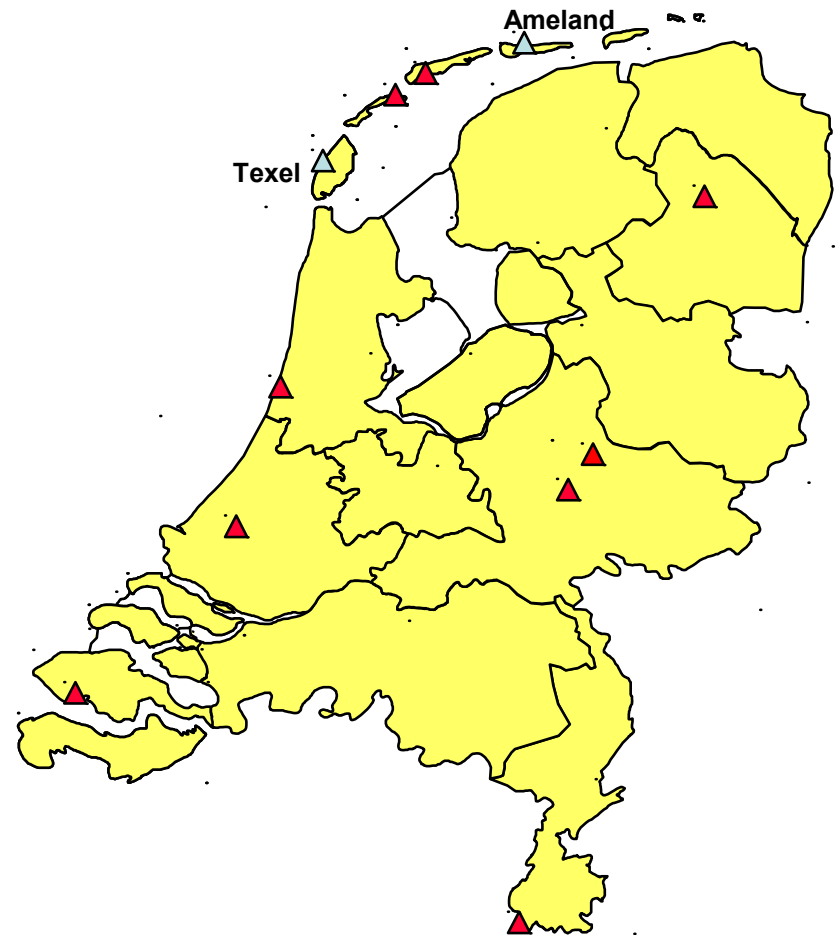


Official collaboration Geodetic Infrastructure

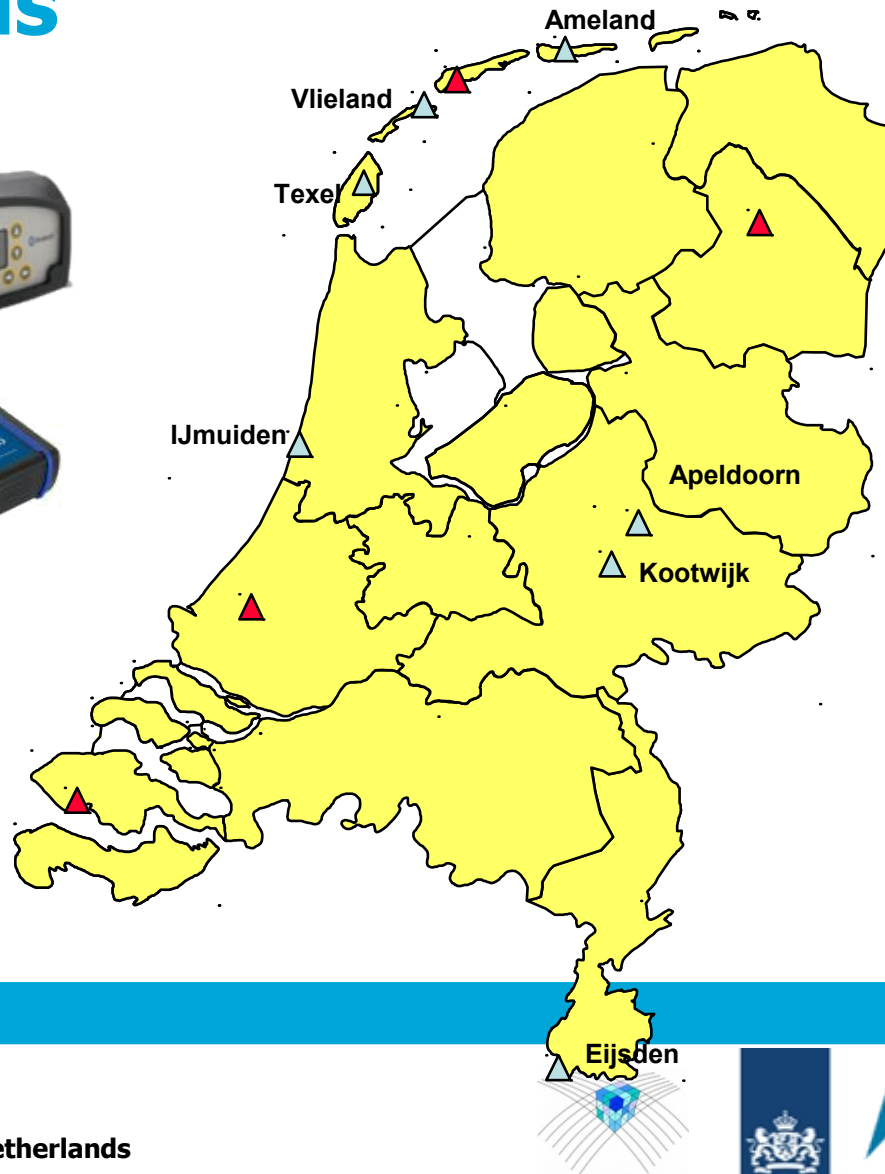


New stations on islands

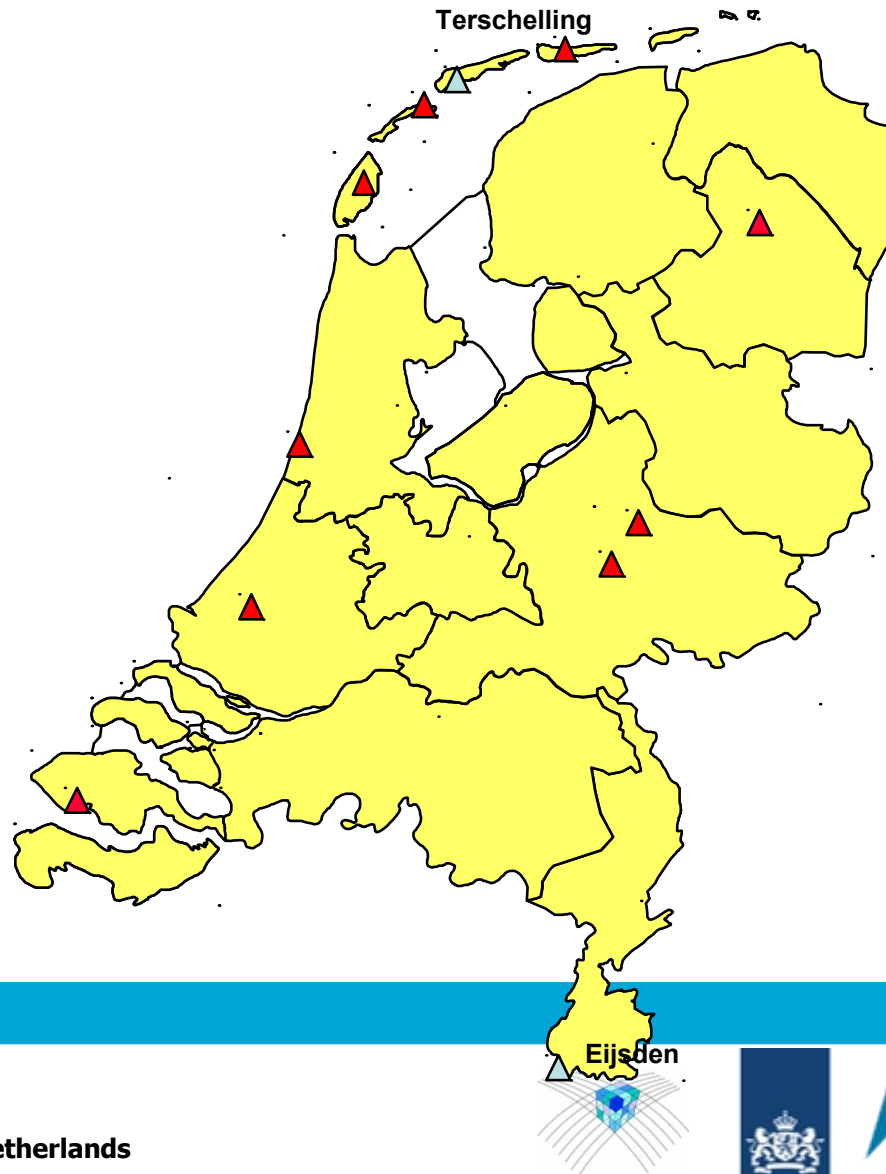
- Receivers on Islands
 - TXE2
 - Tide gauge
 - Gravity (?)
 - First order height benchmark
 - AMEL
 - First order height benchmark



Triple frequency receivers and antennas



Contribution to euref-ip

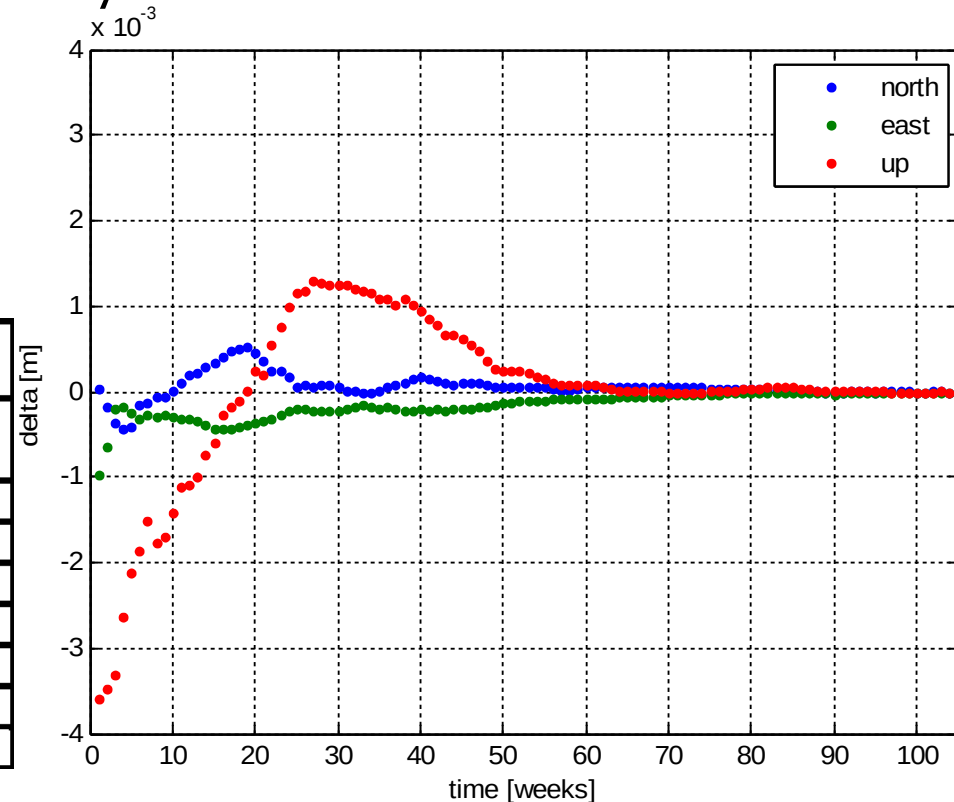


Antenna changes: Convergence of coordinates

- Convergence of cumulated weekly solutions for previous antenna changes

Station	Year of jump		
DELF	2000		
TERS	2000		
ELIS	2000		

Figure: DELF comparison to two year combined solution



Antenna changes: Effect of mount on calibration

- 50 mm stainless steel mount
- Calibration with and without mount
- Simulation and static/kinematic processing (BSW5.0)



	S			
	H			
Simulation				
BSWstatic				
BSWkinematic				

New ETRS89 coordinates for AGRS.NL

GNSS – local time series

- Antenna change (APEL)
 - 2014 expected: EIJS, IJMU, TERS, VLIS
- New station (KOS1)
 - 2014 expected: DLF1, AMEL, TXE2
- Tilting station: TERS



Local time series



GNSS time series (ETRF2000)



- Strategy to deal with above coordinate changes:
Helmert transformation to epoch 2010.5

Thank you for your attention

