The Netherlands

National Report

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NCG TU Delft Dienst der Hydrografie Rijkswaterstaat kadaster

GNSS stations and data

- GNSS Data Center (RINEX & NTRIP)* launched 2019
- Co-location: (off-shore) tide gauges, InSAR, levelling
- 5 CAT mounts ready to install
- CRS validation of GNSS services (presentation of L. Huisman)

* http://gnss-data.kadaster.nl/ & http://ntrip.kadaster.nl:2101/

TU Delft zero baseline

1 Leica AR25.R3 antenna with 10 receivers:

Name	Receiver type	Provider	Connected to external 10 MHz frequency
DLF100NLD	Trimble NetR9	TU Delft	Yes
DLF500NLD	Septentrio PolaRx5e	Kadaster	Yes
DLF600NLD	Leica GR50	Kadaster	Yes
DLF700NLD	Topcon Net-G5	06-GPS	Yes
DLF800NLD	Javad TRE_3_4 Delta	Wiener Netze	No
DLF900NLD	Trimble Alloy	Kadaster	Yes
DLFV00NLD	Ublox Zed-F9P	GEOpinie	No
DLFV01NLD	Ublox M8T	GEOpinie	No
DLFV02NLD	Allystar TAU1302	GEOpinie	No
DLFV03NLD	Septentrio Mosaic	Kadaster	No

real-time data (manufacturer binary and RTCM3) available from TU Delft NTRIP caster

http://gnss1.tudelft.nl:2101/ (contact: L. Huisman)

CRS transformations

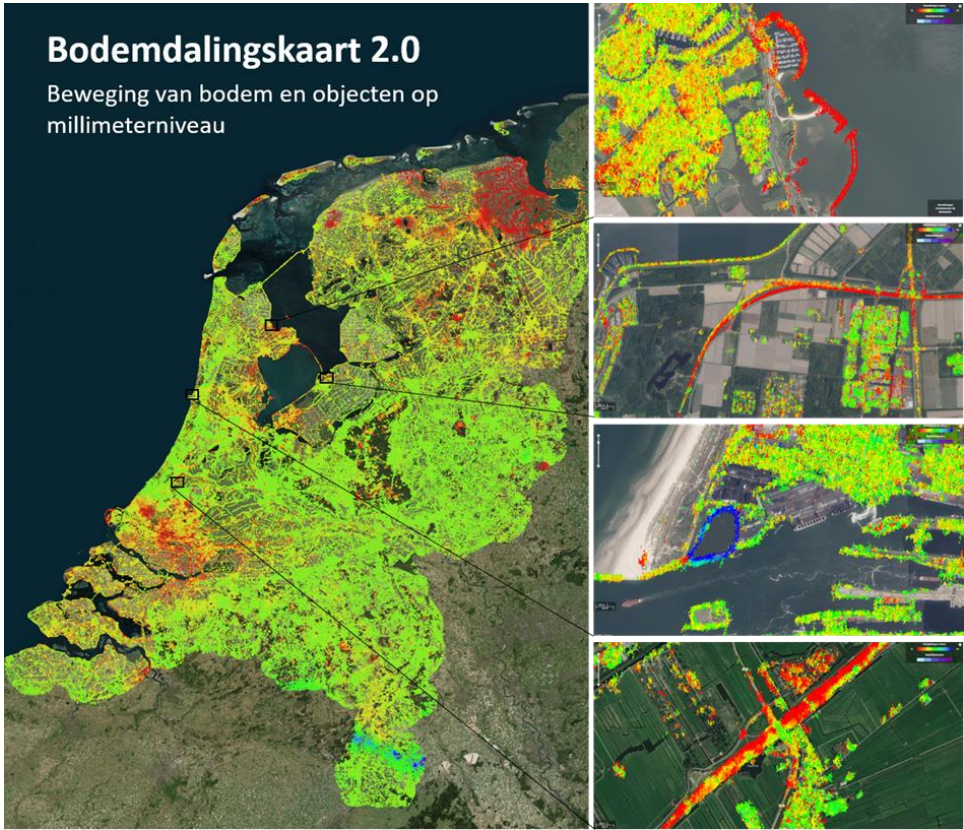
- National projected CRS to ETRF2000(R14): RDNAPTRANS2018
  - New method conform ISO and EPSG
  - Updated geoid: NLGEO2018
  - Transformation API
- Lowest Astronomical Tide model updated: NLLAT2018
- Projected island CRS to ITRF2014 of 2 Caribbean islands
  - St. Eustatius & Saba

https://www.nsgi.nl/

Launch of updated subsidence map

Initiative of Netherlands Centre for Geodesy and Geo-information

Surface and object motion map
300 m cells up to individual points



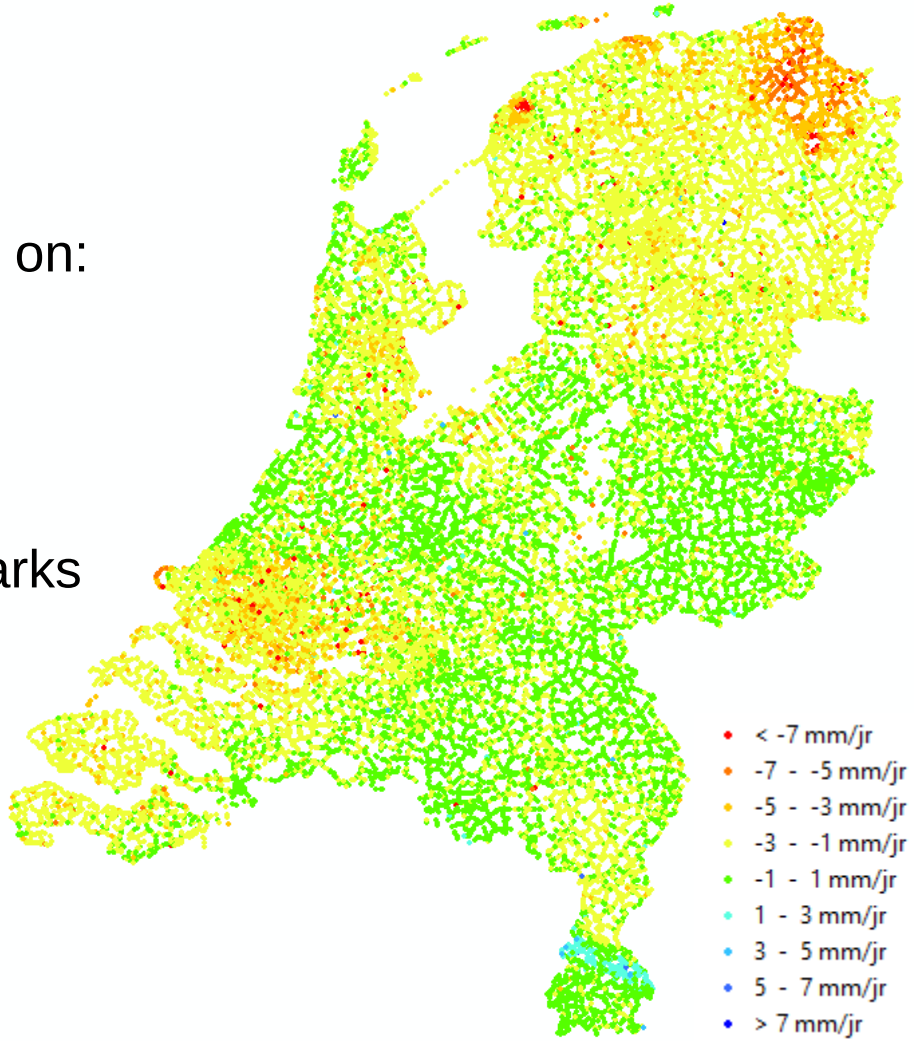
https://bodemdalingskaart.nl/en-us/

Height

Levelling of NAP benchmarks based on:

- Height deformation from InSAR
- Timespan since last levelling

GNSS and levelling of NAP benchmarks for RDNAPTRANS2018 verification due to height trend in ETRF2000



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