

Update on Belgian tide gauge operations

NSHC Tidal Working Group 26
6-7 February 2024

- New LAT surface project
- Observations at tide gauge location Ostend

New LAT surface project

- Start november 2024
- Running time 2 years
- BEHO is in charge of the contract
- Ugent is contractor
- NGI and Flanders Hydraulics offer support

Previous Belgian LAT projects

- LAT-v10-BCP-NA2007-interpol-200m
- G2LAT project (finished 2010)
- BLAST (finished 2012)

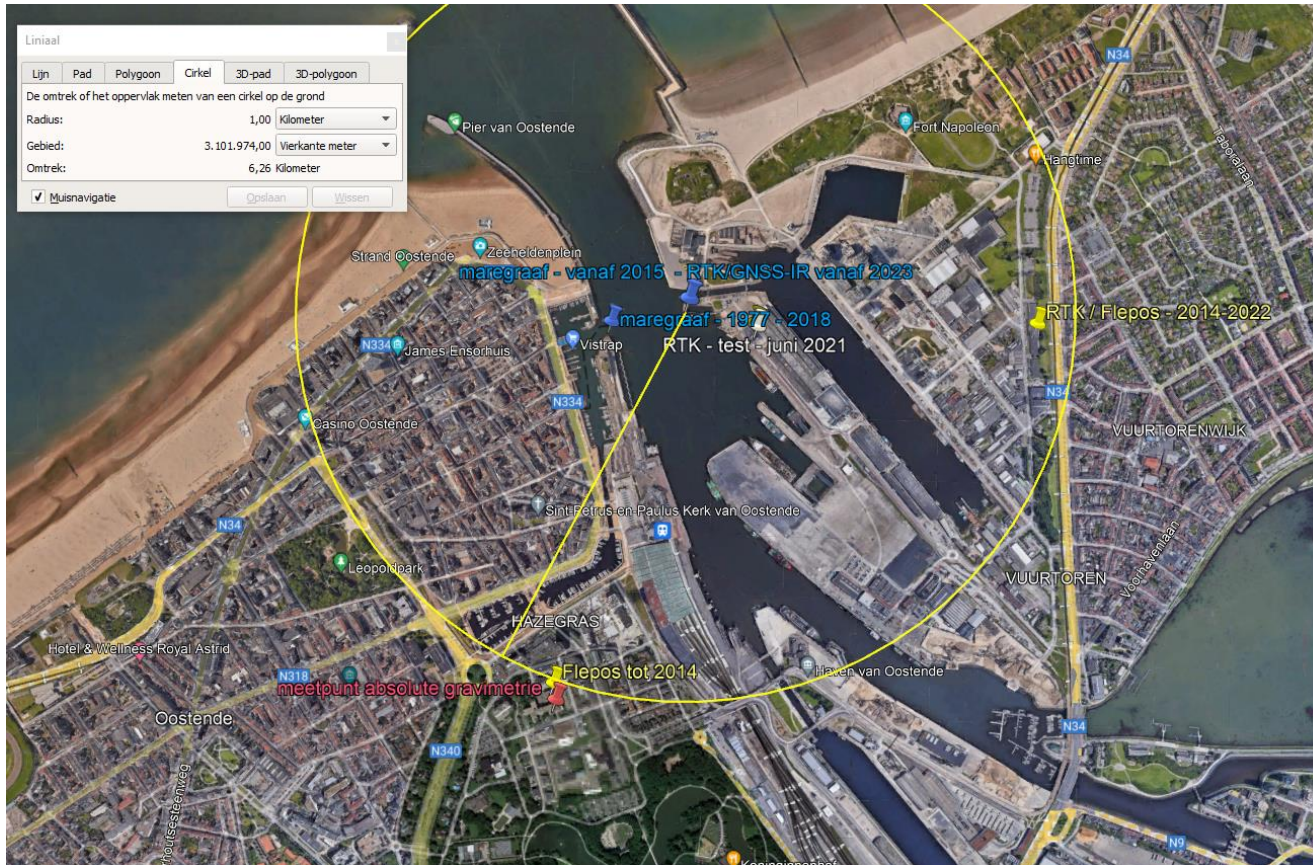
LAT project

- changed inputs
 - Updated geoids (HBg18, Also Dutch and French updates)
 - Change in tide registrations :
 - Fully analog, digital as a final step
 - Fully digital
 - Off shore tidal level registrations
 - Hydrometeo platforms – long series , a few fixed locations
 - Adcp measurements – short series , 20+ locations
 - GNSS Tide level buoys – short series – few locations
 - Satellite data
 - Gravity data
 - GNSS data at fixed locations
 - Ship based GNSS, IMU measurements

LAT project

- Current issues
 - Impact of change between previous analog registrations and current digital registrations
 - “slight differences” noticeable
 - Impact on further results needs to be assessed/quantified.
 - More to come

Observations at tide gauge location Ostend



Tide gauge (2 locations since 1977)

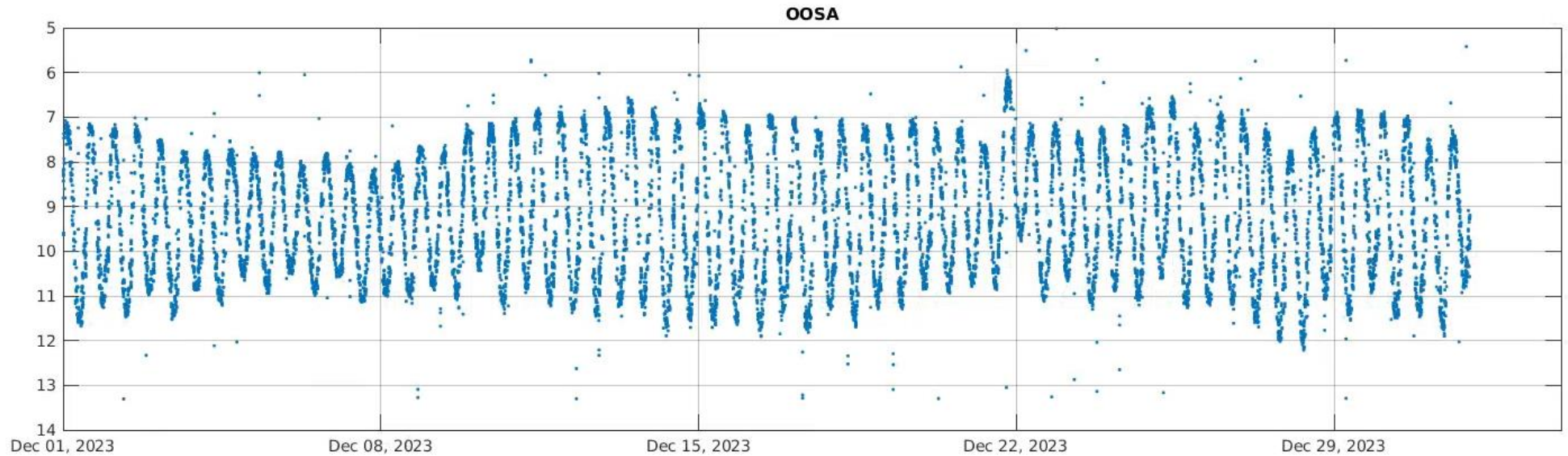
RTK gnss location (3 locations since 2003)

Gravimetry : annual measurements since 1996

GNSS-IR at tide gauge locations starts 2024

Observations at tide gauge location Ostend

- GNSS-IR observations first results



- Questions