Tide Gauge Task Team

EuroGOOS General Assembly
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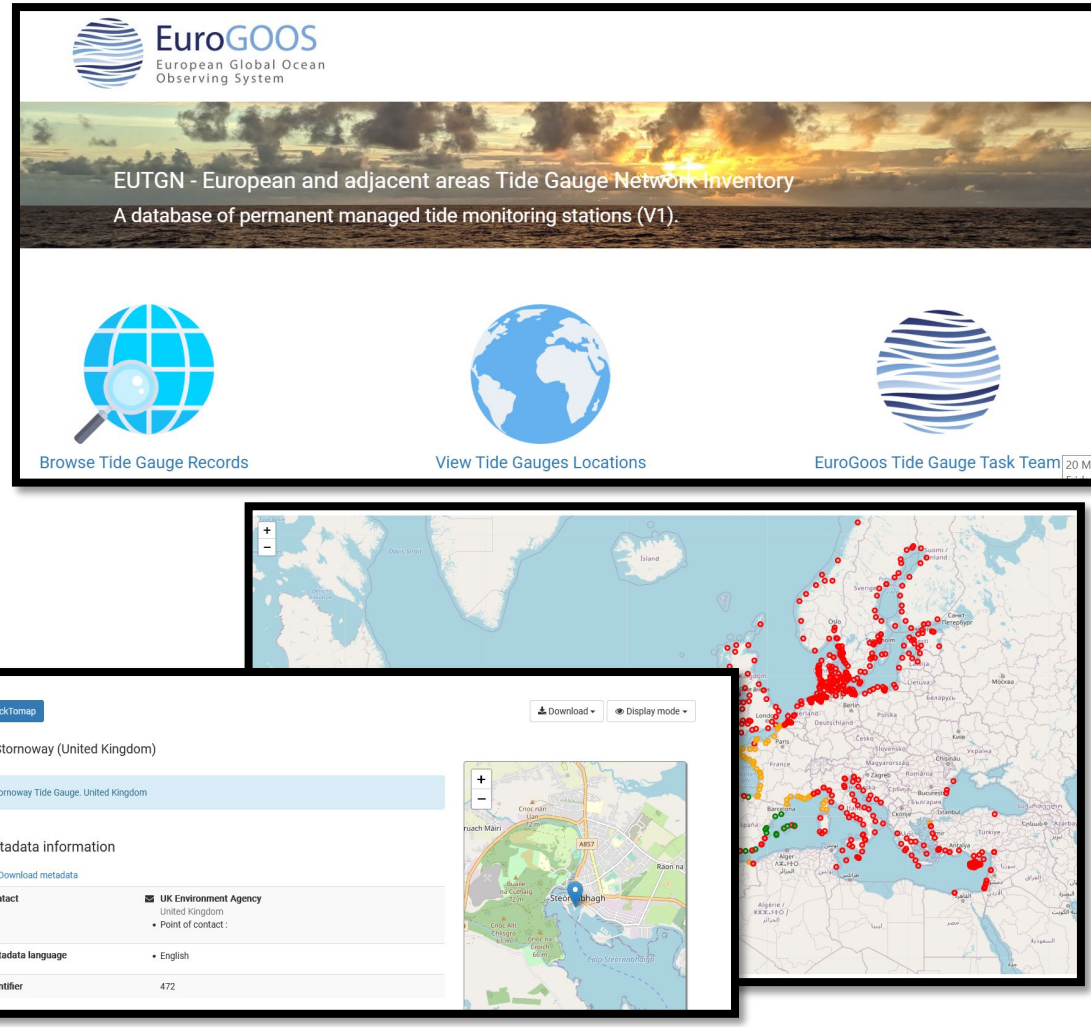
With thanks to Begoña Pérez Gómez (ex-chair)

Strategy 2030: main achievements (last year)

Tide Gauge Inventory (http://eutgn.marine.ie/)

- Led by the Marine Institute, Ireland
- Funded by the EuroSea project
- A online live, managed metadata catalogue to register all permanent tide gauges deployed in European and adjacent coastlines
- Released for population by tide gauge operators
- Supplements tide gauge data portals, providing metadata to ensure that data are fit for users' purposes
- Supports goals of stimulating communities of practice and co-ordination and integration of observing systems

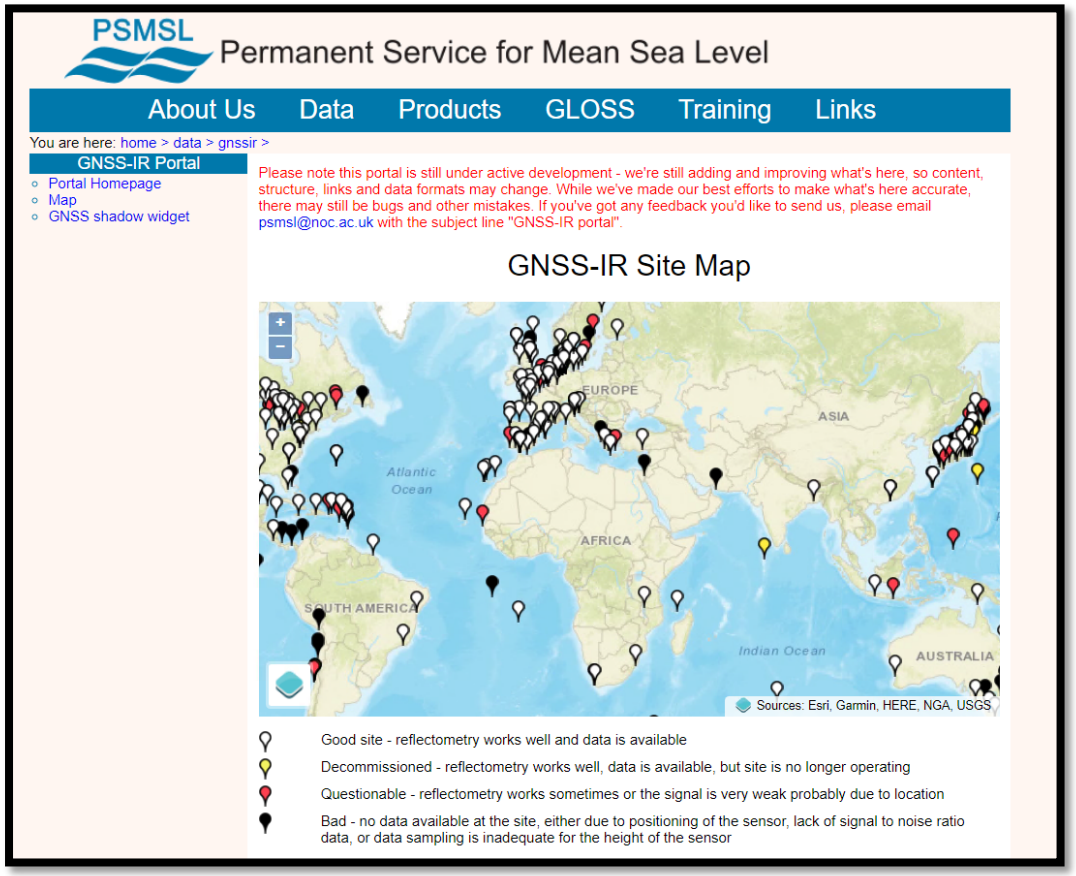


Tide Gauge Task Team

Strategy 2030: main achievements (last year)

New sea level data portal
(https://psmsl.org/data/gnssir/map.php)

- Led by the National Oceanography Centre (UK)
- Funded by the EuroSea project
- Uses global navigation satellite system-interferometric reflectometry (GNSS-IR), which allows sea level to be measured from systems designed for vertical land motion
- Contains data from almost 400 GNSS stations globally
- Some records extend back 15 years
- Multi-purpose instrumentation supports co-ordination and integration of observing systems

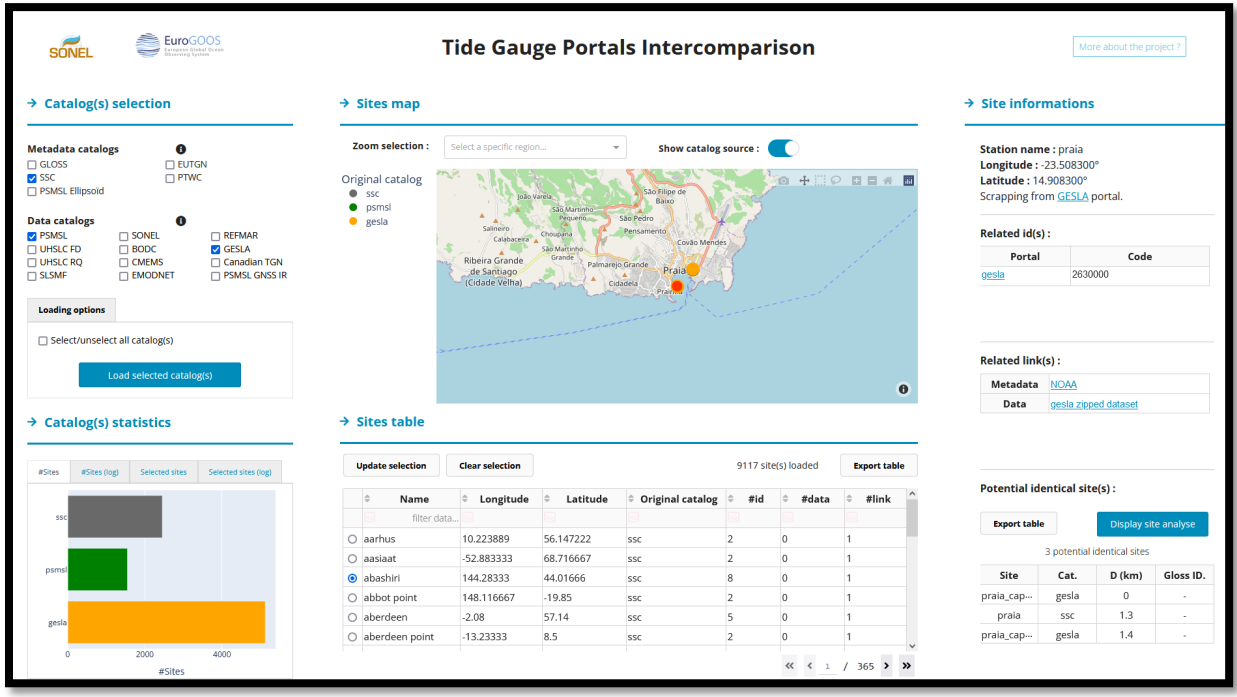


Strategy 2030: main achievements (last year)

Analysis of gaps/duplicity of data portals

https://www.sonel.org/tgcat/

- Led by CNRS-SONEL
- Funded by the EuroSea project
- Cross-comparison of 12 data portals and 5 metadata catalogues
- IOC/UNESCO Sea Level Station metadata catalogue is the most complete
- Large variability data portal content. Few stations appear in all portals and some appear in one portal only.
- Content of data portals and metadata catalogues summarised in a web-based tool



- Allows operators to address gaps and duplicities in networks
- Supports co-ordination and integration of observing systems

Strategy 2030: main achievements (last year)

CMEMS Sea Level Reprocessed product (due Nov 22)

- TGTT members are part of the team working on this
- Canvassed and summarised community opinions on the needs of coastal and local modellers in relation to tide gauge data to inform this work
- Supports integration of ocean observing systems and stimulating communities of practice

What are the roles of the TT in the European Landscape?(2022-2027)

- Tide gauges are long-established technology, so there are multiple national, regional and global stakeholders and networks, with varied applications and inconsistent data processing and distribution methods
- Primary governing body is IOC's GLOSS (Global sea level observing system), which pre-dates European governance bodies
- National operators often are not linked to their IOC country representatives
- Commercial operators not obliged to share data or comply with standards
- We do not aim to replace existing governance structures, but to improve co-ordination/collaboration to address the above

What are the roles of the TT in the European Landscape?(contd)

TGTT actions to improve co-ordination and collaboration:

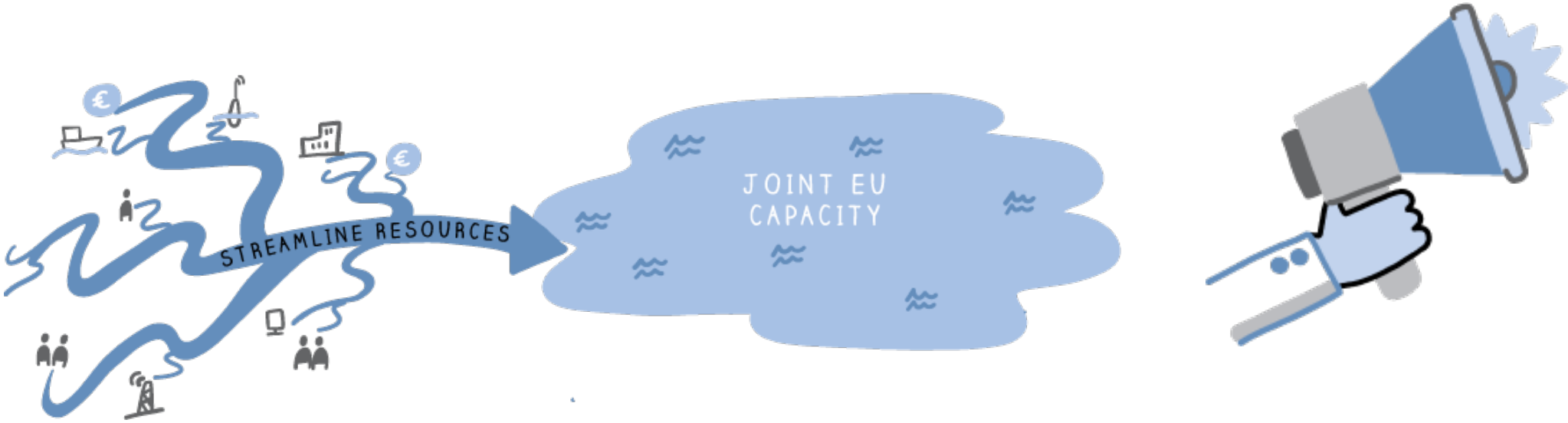
- Revisit and populate the metadata inventory tool in cooperation with network operators and Copernicus Marine Service and EMODnet physics
- Promote the use of the data gaps/duplicities tool to encourage TG operators to address the issues (infill gaps and eliminate duplicities)
- Work with GLOSS, the International GNSS Service (IGS) and GNSS data aggregators to improve the interoperability of the GNSS-IR sea level portal
- 2nd EuroSea Tide Gauge Network Workshop (Spring 2023) focused on quality control and data processing, including training
- Work with global/regional data centres to implement recommendations of TG data flow strategy
- Identify information gaps to incorporate into Ocean Best Practices

EuroSea

How are you linking up with RI and EOOS over the next five years? (2022-2027)

- TGTT will build on already-established links to satellite altimetry and modelling communities to develop mutually helpful strategies, infrastructure (e.g. GNSS-IR for cal/val), data standardisation (ERDAP servers)
- TGTT is building links with DATAMEQ WG on which we have representation and continues to work via TGTT Technical WG on site/station definition, unique IDs and minimum metadata/common vocabularies in a European and global context
- The TGTT has representatives in the following ROOS:
  NOOS, MONGOOS, BOOS and will work to identify a representative in **IBIROOS**
- TGTT draws its membership from/has links to national operators, EMODnet, CMEMS, JERICO-RI as well as GLOSS data centres. We are participating in and organising mechanisms to improve integration and co-ordination of technology, infrastructure and data provision between all of these stakeholders in a European and global context

EuroGOOS
European Global Ocean Observing System



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