EuroGOOS Tide Gauges Task Team

Terms of Reference (2 February 2018)

1. As a European Tide Gauge Network assist in the standardization of tide gauge operations, data and applications of a multi-purpose network, based on GLOSS and ICG/NEAMTWS and other user requirements, and fulfilling the following basic needs:
    a. Sea level trends, variability and climate change;
    b. Sea level related hazards warning systems (storm surge, tsunamis);
    c. Validation of numerical models and forecasts;
    d. Comparison with altimetry and geodetic data;
    e. Determination of coastal Mean Dynamic Topography to contribute to the unification of different height systems;
    f. Fulfill the requirements of operational users.
2. Contribute to the development of the European Ocean Observing System (EOOS) with the identification of duplication and/or gaps on the geographical coverage and on the existing sea level data portals in Europe.
3. Promote the integration of tide gauge networks in ongoing and future European initiatives and identify relevant products required by sea level users.
4. Act as a link between national agencies of tide gauge operators and data providers, the EuroGOOS Regional Operational Oceanographic Systems (ROOS) data portals, and as the European component in GLOSS.
5. Promote research and tests of new sea level monitoring technologies.
6. Promote the recovery of historical data and related studies relevant for Europe including North African countries.
7. Acknowledge existing data portals and ensure data availability according to the different applications. Assure delivery of tide gauge data to the ROOS data portals.
8. Promote the co-localization and use of additional instrumentation relevant for sea level applications such as ocean bottom pressure sensors, land movement monitoring stations (GNSS), atmospheric parameters, or tsunami sensors.
9. Ensure the implementation of new requirements on sea level quality control and data processing.

10. Provide recommendations (from operators to end-users) on:

   - Data structure, format and dissemination (interoperability of datasets);
   - Quality control procedures;
   - Validation procedures;
   - Technological solutions;
   - Complementary instrumentation (through interaction with other groups, e.g. GNSS).

11. Collaborate with the altimetry community for a better understanding of altimeter and tide gauge data calibration.
12. Be a framework for:

   - Collation of a single database describing the in-situ monitoring equipment and its status across Europe;
   - Sharing success stories and difficulties including analysis of the funding strategies and importance placed on this work in the different countries;
   - Providing and exchanging open source tools (data analysis, applications…);
   - Promoting the installation and/or inclusion of further stations from Northern Africa;
   - Promoting scientific synergies for key questions;
   - Promotion of joint proposals through networking (e.g. create synergies between different local consortium INTERREGs…).