EMODnet Physics

10th EMODnet TWG Meeting & 15th Steering Committee Joint Session
September 2021

Patrick Gorringe,
Antonio Novellino

www.emodnet-physics.eu

EMODnet Physics Team

- EMODnet Physics 4 contract started 26/08/2021

  Core Team: ETT, SMHI, MARIS, IFREMER, ICES

  partners

  - JCOMMOPS → platform networks asset mapping, unique id, international collaboration (OceanGliders, Global HFR, AniBOS,..)
  - UKRI BODC → Sea Level + Standard Vocabs
  - CMCC → Sea Level
  - CTN → under water noise – MED and Black Sea
  - CNR ISMAR → river, turbidity
  - VLIZ → sea level + centralization
  - UNIGE DICCA → Wave
  - CISC – BEC → Salinity
  - AZTI → new platform/parameters (X Radar, wave from HFR, beach cameras)

  And experts e.g. Borsani (TG NOISE chair), Campuzano (River), … WOC and DLTM (events for private sector) …

Status update

- Ongoing work to complete the re-organization of datasets in ERDDAP

- Ongoing work on platform page (angular to improve reactiveness/performances of the pages), platform network products (HFR, Glider, Sea Mammals, TG), D11 Noise (monitoring sites)

- New/updated products (since last SC+TWG):
    - EP_MAP_SLEV_003, 004, 005, 007 – sea level
    - EP_MAP_TSMA_001 – total suspender matter
    - EP_MAP_xAOD_001 – annual observation density (number of in situ recording[1] days per grid 1°x 1° cell) – x = T (temperature), S (salinity), ...
    - EP_MAP_xxAN_001, 002, 003 – temperature (TEAN) and salinity (PSAN) monthly anomalies with past 10, 20, 30 years as reference period
    - EP_ERD_XXXX_MINMAXMEAN – monthly timeseries of the max, min and average of recorded parameters

- Participation to online events:
    - CMEMS INSTAC, SOOS, COINS (Arctic), AniBOS, EuroGOOS ROOSs, Ocean Decade
    - H2020 projects (EuroSEA, JERICO S3/DS, NAUTILOS, SOCHIC, ...)

- Final report and deliverables (submitted 25/08/2021)
    - 108 HD requests (Aug 2019 – Aug 2021)
    - 134 events (44 organized)
    - Users type: 59% Academia, 19% Business (increasing trend), 11% Gov, 7% other, 4% NGO

1) only in situ data that do not require any authentication

EMODnet
European Marine
Observation and
Data Network

Cross-Thematic Interactions (since last SC+TWG)

- Ingestion + Chemistry
  - Real time interoperability
  - **Citizen Science oriented actions** (including Jamboree 2021)
    - OD11 **The uptake of data by citizen scientists, aggregators and end-users: successes, challenges and gaps in the dataflow**
- Human Activities + Biology
  - Open actions on water noise from vessels on selected species
- PACE - Support for asset mapping (WP3, WP5)

External interactions

EU level:

- TG NOISE (+ ICES member, and CTN permanent attender), AB QUITESEAS (CTN coordinator),
- CMEMS INSTAC, GRDC, **Copernicus IN SITU, COINS consortium, coordinated by EUMETNET (Arctic)**, European Polar Board, T-MEDNet,….
- EuroGOOS: TWG, DATAMEQ WG, Task Teams (ferrybox, HFR, gliders, tide gauge), **ROOSs**
- H2020 Projects: SDC, EuroSEA, JERICO S3/DS, SO-CHIC, NAUTILOS, BlueCloud, ENVRI.FAIR, **ODYSSEA**…

Global level:

- SOOS, SAON, NOAA (ERDDAP), WMO WGs (WIS, WISC), IOC (Ocean Decade, GOOS, OceanOPS, IODE), AniBOS, OceanGliders, Educational Passages, ICES, **Ocean Race**, Bering Data Collective

National: mainly where core team are (COVID) **Sweden**

Future Outlook

- Keep **identifying** and connecting **new data** sets
  - a number of key areas (more data from research vessels, gliders, polar regions and from the Black Sea
  - focus on improved data harmonization and access

- Keep producing and updating data **products**

- Continue to actively participate and organise events

- Continue to **support** activities on **platform** level (HFR, FB, tide gauge, fishy data) where Physics identifies, together with platform operators, tasks that can make a **big impact for a small investment**

- Keep **bringing communities together** to address data issues and hence increase the data shared

- Include **forecast** information to enhance the user experience**?**

- Identify new emerging data sources e.g. **citizen science**

- This has, and will continue to, contributed to making available of some of the most exhaustive in situ marine data collections (e.g. sea level, temperature and salinity in the water column, sea surface currents etc.)
  - Benefits key European infrastructures and projects (CMEMS-INSTAC, SeaDataNet network of NODCs, EuroSEA, JERICOS3, etc.) also benefit from these "unlocking" and coordination actions

EMODnet
European Marine
Observation and
Data Network
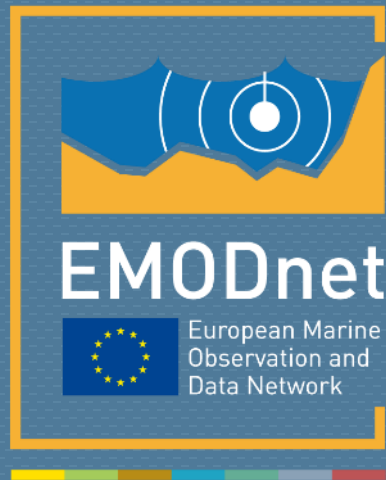
@EMODnet
www.emodnet.eu

Your gateway to marine data in Europe

3 Work packages, 93 deliverables, to fulfill 9 tasks:

- Maintain and improve a common method of access to data held in repositories

- Construct products from one or more data sources that provide users with information about the distribution and quality of parameters in time and space

- Develop procedures for machine-to-machine connections to data and data products

- Contribute data, data products and content to a central portal that allows users to find, view and download data and data products

- Contributing content to dedicated spaces in Central Portal

- Ensure the involvement of regional sea conventions

- Contribute to the implementation of EU legislation and broader initiatives for open data

- Monitor quality/performance and deal with user feedback

- Maintain the existing thematic web portal for a maximum of six months from the start of the projects

The collaboration with EMODnet Ingestion is important and crucial for keep linking new and more sources

EMODnet
European Marine
Observation and
Data Network