Interconnecting ocean time series efforts and frameworks



Ocean Time-Series data frameworks

- Fixed platforms (moorings)
- Moving platforms (Gliders, Floats, Ship-based)
- Biology
- Physics
- Biogeochemistry













Ocean Time-Series data frameworks

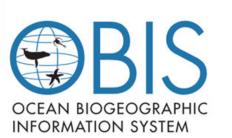
EMODnet

European Marine Observation and Data Network

- Individual
- National
- International









COCEANOGRAPHY & MARINE METEOROLOGY

Jobc Japan Oceanographic Data Center 日本海洋データセンター





CCI

open data portal



Where is Wally?

Ship-based

Floats

Glider

- Many data repositories, most not unique to ship based time series data
- Data partitioned across databases
- Most are individual data bases; some TS in centralized national repositories

 Have dedicated data repositories nationally and internationally Individual largely, but moving towards centralized repositories

Mooring

- Have dedicated data repositories nationally and internationally
- Many individual deployments not necessarily integrated into larger repositories



Is any of this interconnected?

- Break between data types; separation by discipline
- Multiple data sources; submission fatigue
- Unstandardized Metadata
- Where to get the data? (issue for modelers)

G7 Future of the Seas and Ocean WG

Action 3 objective: seamlessly link data collected from the new observations with existing but under-exploited marine data such that they can be quickly and widely located, shared, compared and interoperated (including blue cloud approaches).

Action 3 activities:

- Generate list of national and international data repositories for the different platforms
- G7 data management workshop: Interoperability and the development of common standards
- Generate list of national and international data repositories for the different platforms in Action 1 (plus animal telemetry and satellites)
- Integration: in-situ observations, satellite observations and models ocean reanalyses, analyses and forecasts from global to regional and coastal scales.

Ocean Time-Series data frameworks

The Ocean Data Interoperability Platform (ODIP) organizes international workshops to foster the development of common standards and develop prototypes to evaluate and test selected potential standards and interoperability solutions.



Issues at the heart of connecting data frameworks

- Activities happen in a vacuum
- Database proliferation
- Vocabulary inconsistency
- Metadata inconsistency
- Lack of planning from the ground up
- Lack of funding for data management in grants
- Lack of understanding (at national and international levels) of where data needs to go!
- Few (None?) of these 'frameworks' consider stakeholders