PAN-EUROPEAN INFRASTRUCTURE
FOR OCEAN & MARINE DATA
MANAGEMENT

SeaDataNet Products

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Definition of SeaDataNet products (1/2)

- **Collections of observations data**
  - Aggregated data set
    - 1 NetCDF file, several zipped ODV files
  - Aggregation criterions
    - Per region (i.e. "Sea Basins" defined in Dow)
    - Per parameter
    - Per instrument (differences in accuracy and resolution)
    - Per year
  - Include
    - All available data within SeaDataNet
    - With "Open Access" or "SDN Licence"

Definition of SeaDataNet products (2/2)

- ## Interpolated fields
  - From SeaDataNet "Collections of Observations"
    Some non public data may be added if documented
    (from SeaDataNet consortium : national holdings + ?)

  - One field per region / per parameter (P021)

  - Fixed grid, constant resolution in lat and lon

  - Fixed depth according to the regions

    (harmonization of upper layers?)

  - Annual analyses mandatory,
    other temporal resolution optional (depending on data availability)

  - 1 NetCDF file per interpolated field

Associated documentation and products access

- **Products must be described in product catalogue (ISO 19139 standard to be Inspire compliant)**

- **For "Collections of Observations"**
  - One map with location of observations at surface accessible via product catalogue
  - Several maps per depth (optionnal)?

- **For "Interpolated fields"**
  - Maps with interpolated field at the different depths accessible via OceanBrowser
  - Maps with estimated error?

- **Downloadable from Ocean Brower and Product Catalogue**
  - Under SeaDataNet license for registered users
  - Repository at ULG?

SeaDataNet

Priorities for products

- **First : Collections of observation data**

  "SeaDataNet is data management oriented"

  – Collections must be fully harmonized and compliant with SeaDataNet procedures
  quality (flags), format, …

  – Collections must demonstrate the "SeaDataNet data collection"
  in relationship with EMODNET?

  – (1) T, S,   (2) O2, Chlorophyl,   (3) Nutrients   (4) PH, PCO2, …. ?

  – Only one release required (with an update for (1)?)

- **Secondly : "Interpolated fields"**

  – Main objective : to assess the quality of collections of observed data

  – Validation of interpolated fields may be not fully complete (if documented)
  ➔ to be delegated to associated projects

SeaDataNet

Technical implementation for data aggregation

- User interface available now is not efficient for data aggregation at large scale
  - No more 500 results / request

- A new query processor is required
  - Definition of request with specific user's interface (for product managers)
  - Processing of the request in batch mode **"no limit in quantity of data"** even if elapsed time long
  - Back office development is started at Maris "request broker" based on existing monitoring system
  - User interface to be defined and developed (criterions, …)
  - Available by the end of this year?
    → definition of interface before end of october

- ODV to assemble retrieved data from all data centres

Collaboration with MyOcean?

- **SeaDataNet services must fit users' needs**
- Operational Oceanography is one the major users' community of SeaDataNet (especially for T & S)
- MyOcean is very interested by SeaDataNet products
  (historical data : climatologies, model validation , hindcast, …,)

- However :
  - Schedule of MyOcean2 is different from SeaDataNet one
                    in-situ data must be ready at beginning of next year
  - SeaDataNet products are available under SeaDataNet licence
  - SeaDataNet products include only data from SeaDataNet partnership
  - MyOcean requires data from worldwide data sources
    - Global scale
    - International countries are active in seas adjacent to Europe
    - ➔ **MyOcean will have to add other data from international sources to SeaDataNet products**

Possible ways for collaboration

- **High priority for SeaDataNet to deliver collections of T&S data**
  feasible if batch mode request broker is available for the end of this year?

- Can SeaDataNet and MyOcean collaborate for quality checks? (quality procedures are similar…)

- Can MyOcean collaborate on validation of interpolated fields?

- SeaDataNet products delivered under SeaDataNet licence

- Products with non European data sources delivered under a common license?

- Products access procedures can be the same (product catalogue, Ocean Browser, user registration, …)