Obstacles and successes with operational OC data services

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POSEIDON
routing optimisation for the journey of ships, saving them time and fuel on local and international routes.

**Target customers**
Core customers: B2B
Secondary customers: B2C

Weather routing optimization considering any operational constraint.

Provide quantitative information.

Perform autonomous re-planning.

Near Real Time update into ECDIS (Electronic Chart Display and Information System).

Increased fuel saving from 3% to 10%.

**Market size**
2300 million dollars (USD) worldwide.
470 million dollars (USD) in Europe.

GLAUCUS
end-to-end system to help fisheries to identify best fishing grounds and optimise their fishing plan.

**Fishing grounds identification** and the best time to fish in them over time.

**Optimal fishing plan generation** including route to navigate through the seas, between fishing grounds and/or to the ports.

Minimize the navigation time between fishing grounds and/or ports.
Needs of users

- Accurate final product with high spatial and temporal resolution.
- Reduced latency to data access for NRT and forecast.
- Redundancy of the data dissemination channels.
- Optimized data volume.
- Minimize the service outage.

- Intermediate users
  - Continuous training and updates in new products.
  - Access to harmonized historical time series.
    - AI usage oriented.
Gaps and obstacles

- A lot of end users – i.e. fisheries – don’t know about the data.
- Limited access to historical data.
- Data formats need to be popularized.
- Continues training for intermediate users.
- Higher data resolution will be appreciated.
- Data dissemination not fully adapted to large size of the data.
- Difficulties to produce subdatasets in some services.
Some answers for key questions (I)

User requirements

- Requirements for Intermediate users based on strict Service Level Agreement with end users.
  - Data quality, availability.
  - Service responsibilities.
- Open data as enabler of new economy.

Approaches, techniques and/or tools

- Centralized services and data access. Cloud computing and data. Copernicus DIAS platforms as an example.
- Web based quick data visualization tools.
- Tools to easily convert data formats.
Some answers for key questions (II)

Scientist, developers and users together

- Data events
  - Data science meetups
  - Hackathons
  - Data applications competitions
    - IOCS 2021 developers challenges
- Join the developers community through their channels.
  - Repositories, Conferences (PyCon, ..)
- Production of training material along the learning chain
  - Data access video tutorials,
  - Cooperation with other disciplines in the data usage
Q&A

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