

Obstacles and successes with operational OC data services

Mario Castro de Lera

mario.castro.delera@deepblueglobe.eu

10/04/2019



Deep Blue Globe

Intermediate/End User view

IOCS 2019 – BUSAN -

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.

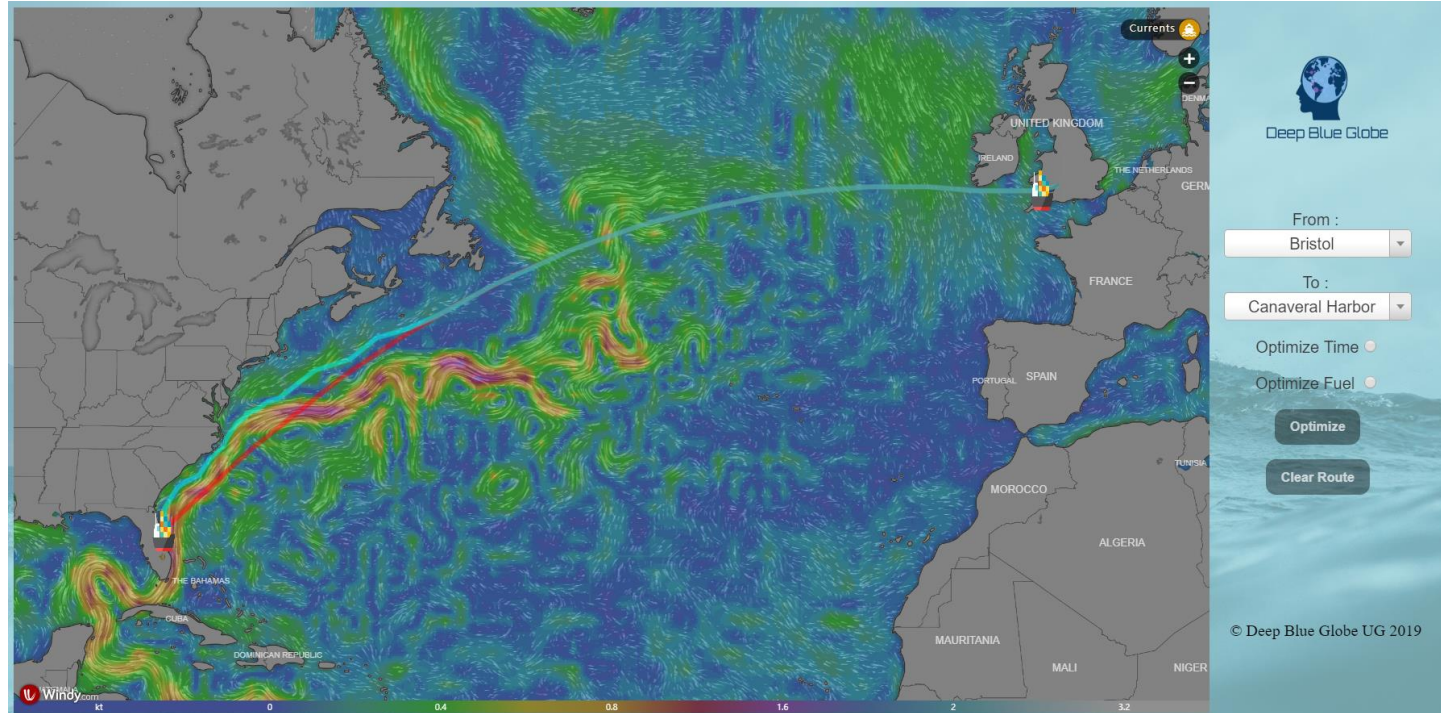
Perform autonomous re-planning.

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

Mario Castro de Lera

mario.castro.delera@deepblueglobe.eu

10/04/2019

IOCS 2019 – BUSAN -