NAUTILOS Data Management Infrastructure

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NAUTILOS
https://nautilos-h2020.eu

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NAUTILOS Project (New Approach to Underwater Technologies for Innovative, Low-cost Ocean observation) is an H2020 project devoted to fill-in marine observation and modelling gaps for chemical, biological and deep ocean physics variables through the development of a new generation of cost-effective sensors and samplers.

Data generated within the NAUTILOS project are meant to be highly complementary to the existing observing systems and thus with high impact and value for any NAUTILOS stakeholder.

One specific goal of the project is to facilitate interoperability towards stakeholders (e.g. National Oceanographic Data Centres and thematic and international data assembly repositories, **EMODnet**, **SeaDataNet**, **Copernicus Marine Environmental Monitoring Services**)

The project has organized data management according to a workflow that makes its data as ready as possible. This includes the adoption and application of standardized and harmonized standards and formats
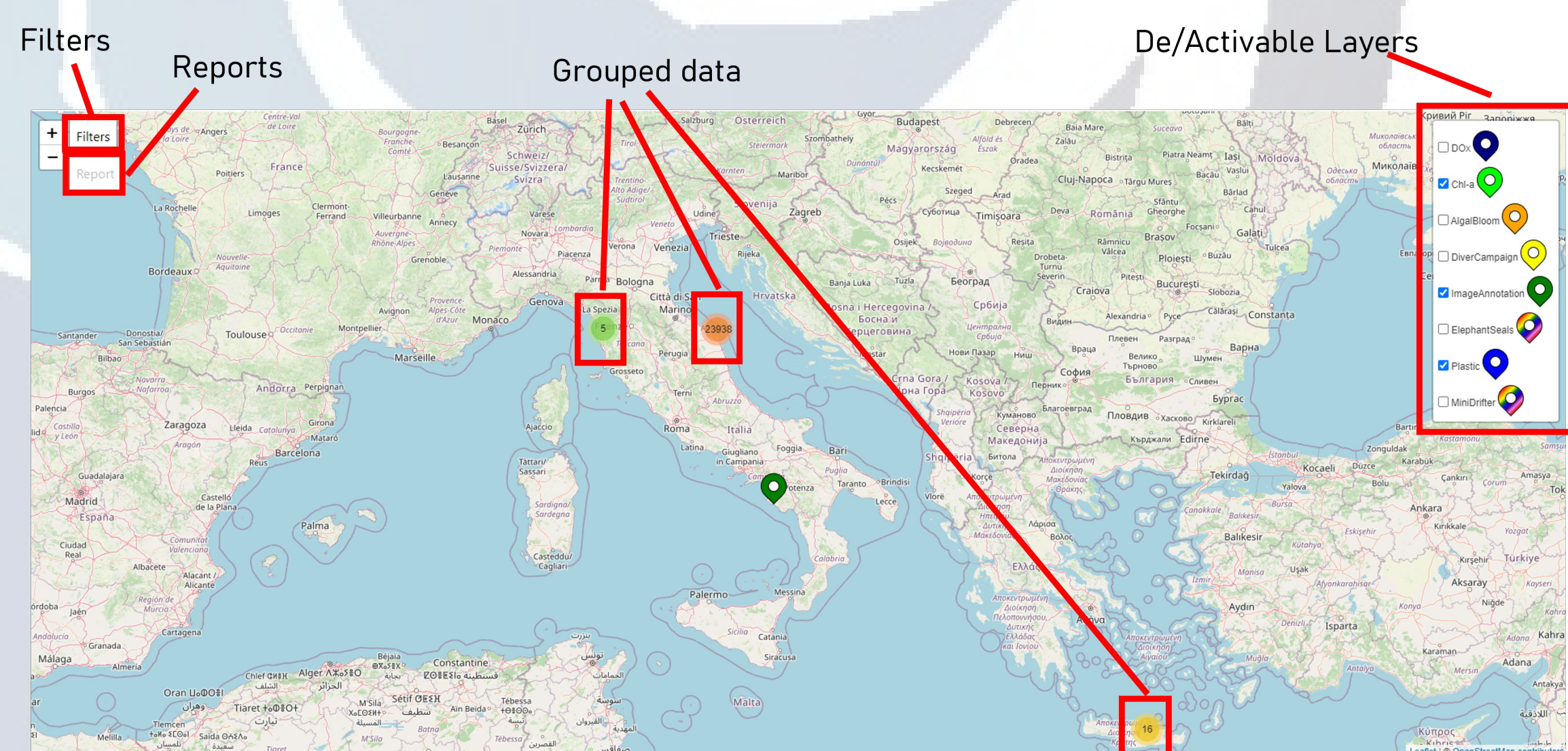

Processing flow
Production flow
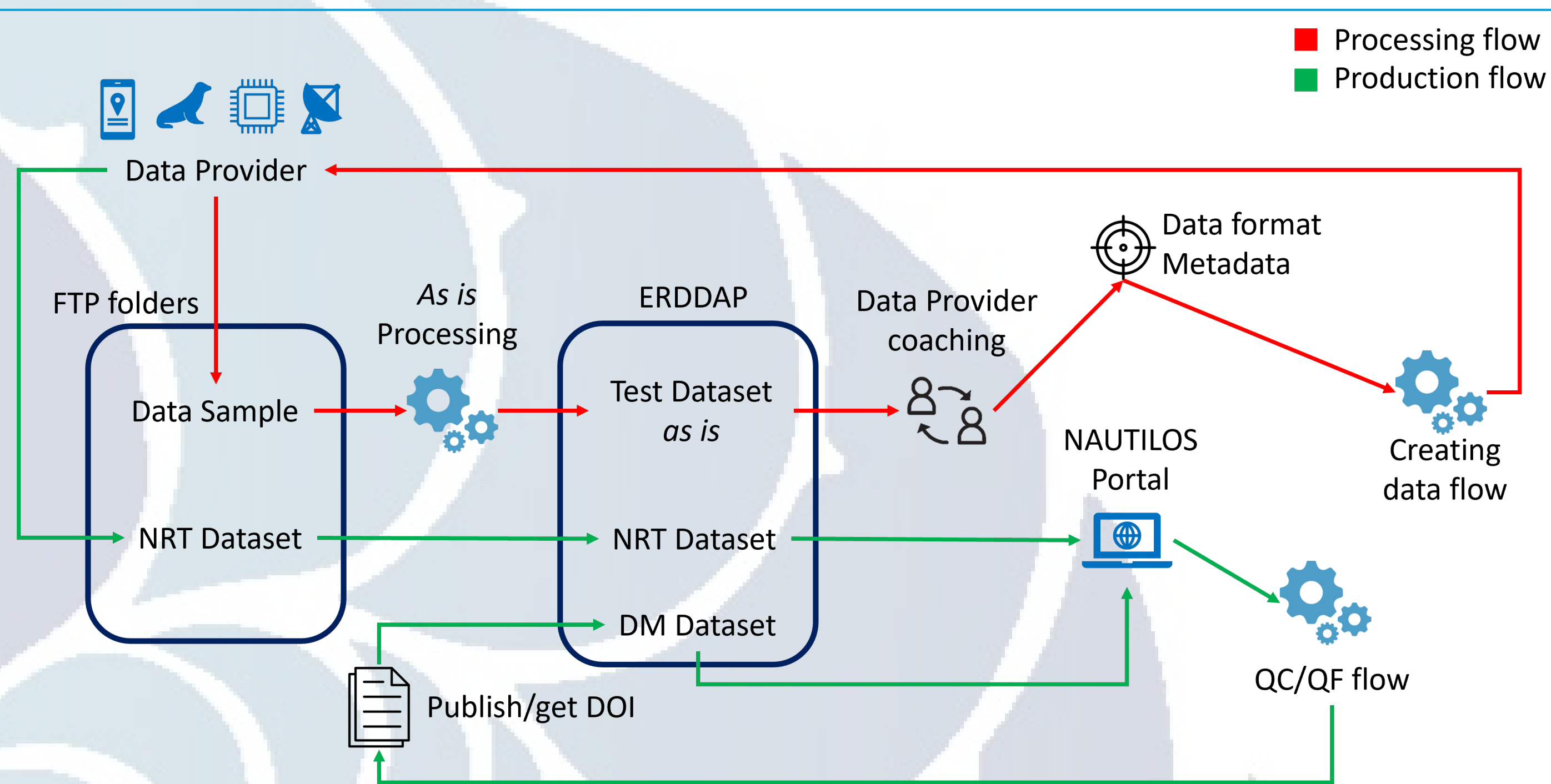
The BACK-END

NAUTILOS infrastructure is organized with a data layer designed to manage data and data products, a service layer to organize them to offer the services, and an application layer i.e., the end-user interface (and features) to access and use the developed and provided services
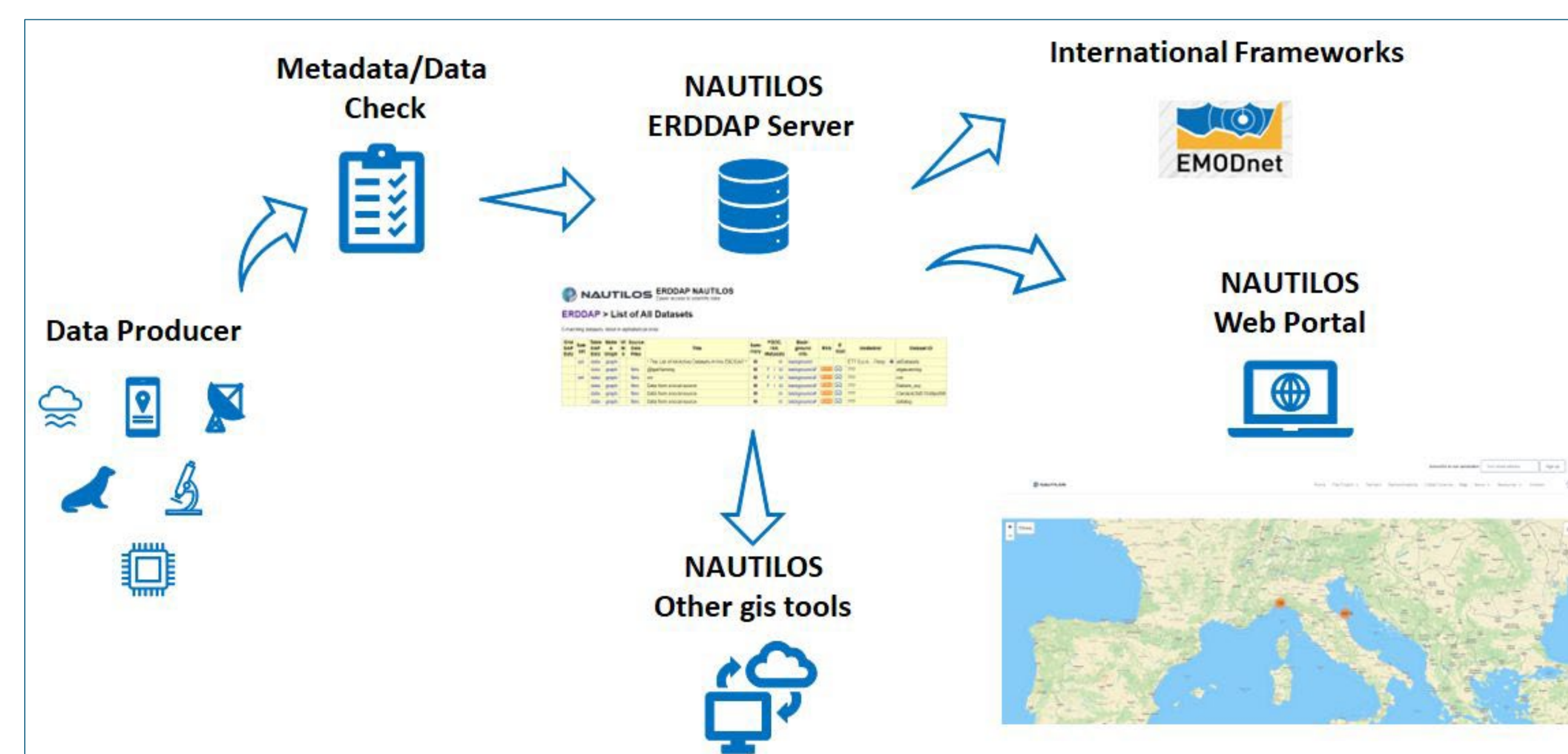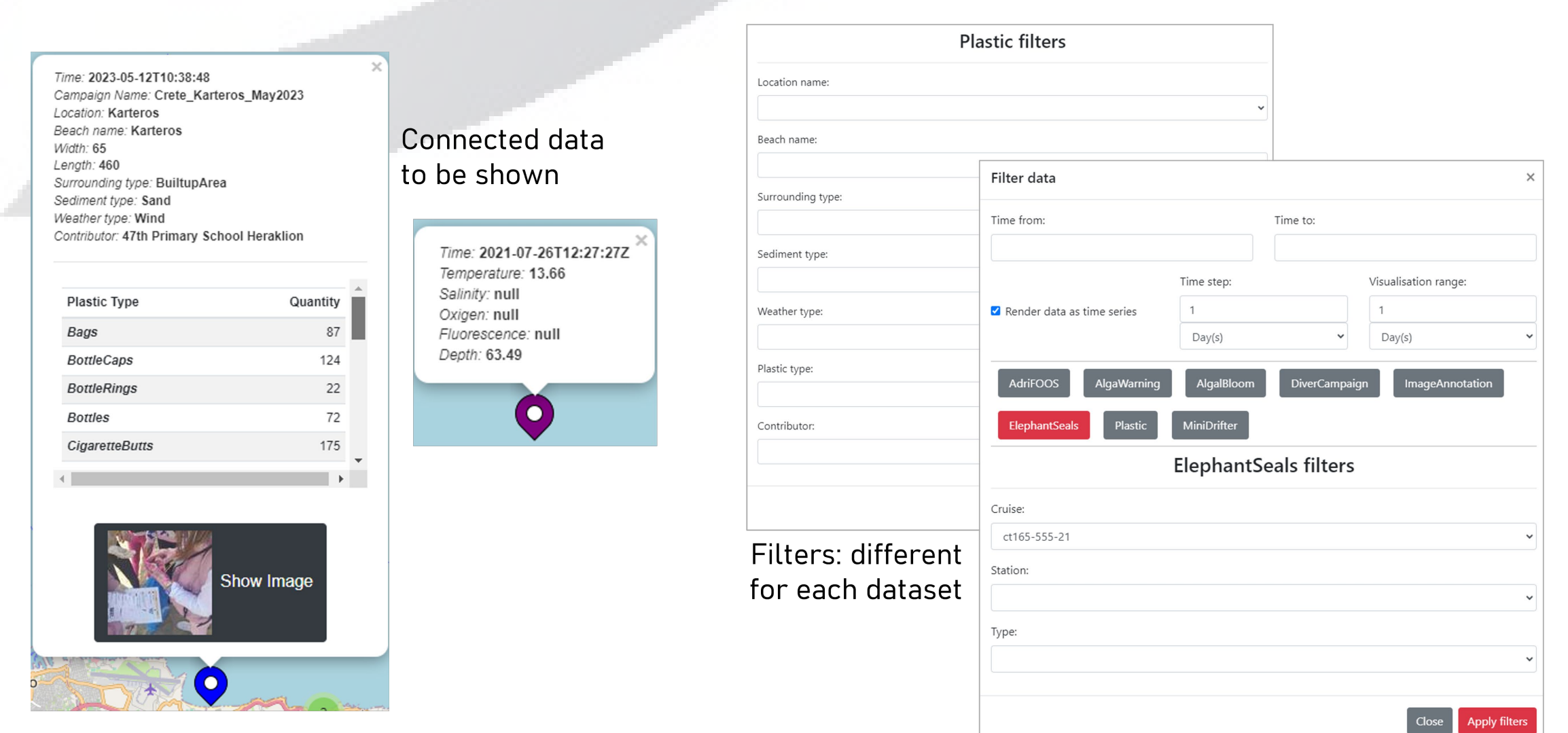

Data management FRONT-END

NAUTILOS Front-end is based on a web portal providing an end-to-end data and information management, search, discovery and access system. The portal implements a WebGIS viewer with a dynamic map that provides the user with zooming and panning features, as well as with features to include and select data and data-products.

Filters
Reports
Grouped data
De/Activable Layers

Each dataset is enriched with metadata, and tools are integrated to pre-view these metadata contents.

Geo-localised punctual data

Data series

The front-end also provides several functionalities to filter the data and change their rendering behaviour. For each dataset, the front-end provides a set of dedicated options that can be used to filter data to be shown.

Connected data to be shown

Filters: different for each dataset
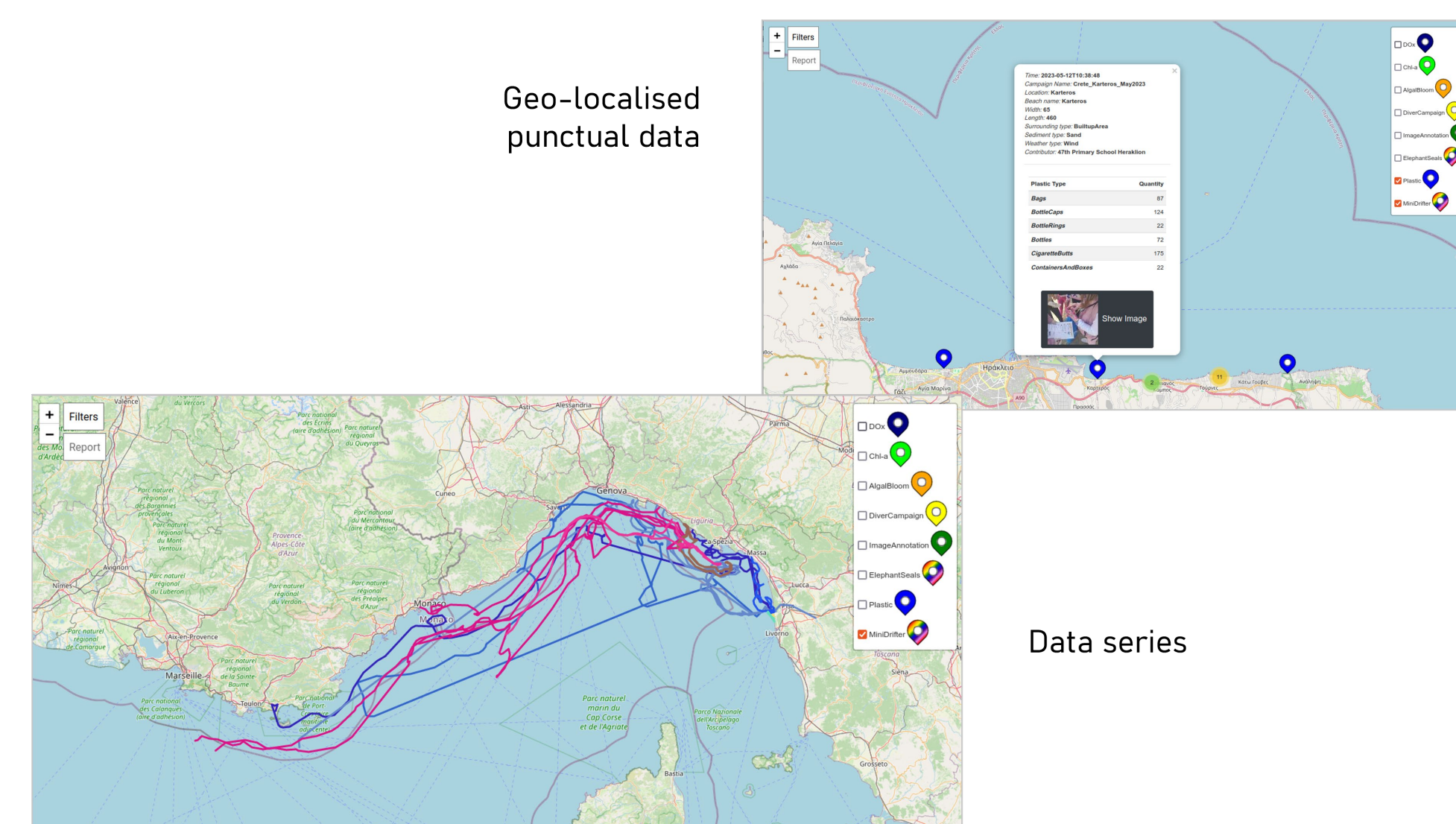
Reports, statistics and charts can be produced and downloaded

Plastic collection campaign

Algal Bloom