NAUTILOS Citizen Science App

Marco Tampucci¹, Eva Chatzinikolaou², Kleoniki Keklikoglou², Gabriele Pieri¹

- 1. Institute of Information Science and Technologies, National Research Council of Italy
- 2. Institute of Marine Biology, Biotechnology and Aquaculture, Hellenic Centre for Marine Research (HCMR), Greece

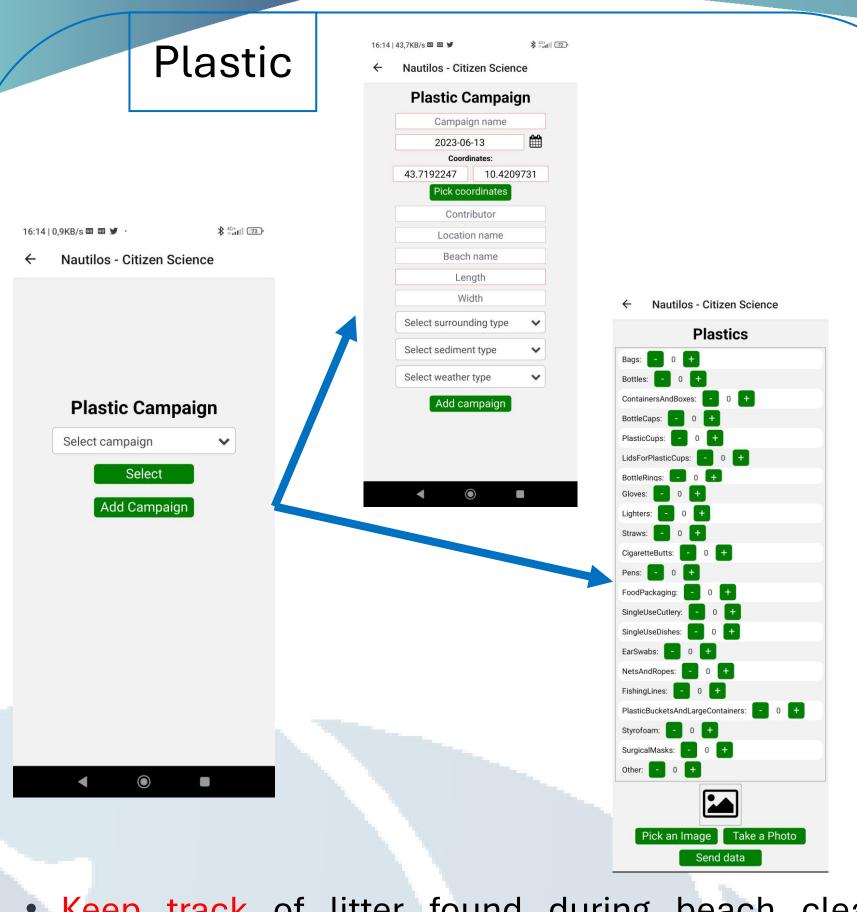












Diver Campaign

- Performed by diver
- To test and use sensors, developed within Nautilos, during diving activities
- Keep track of several values measured with Nautilos sensors

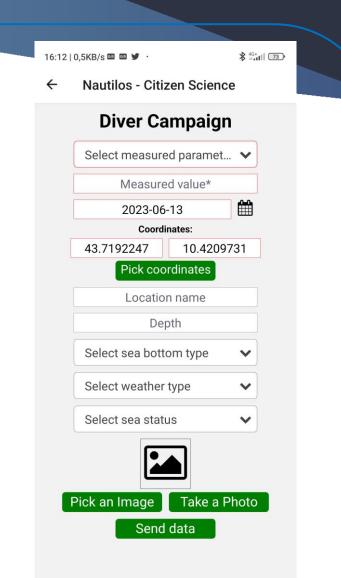
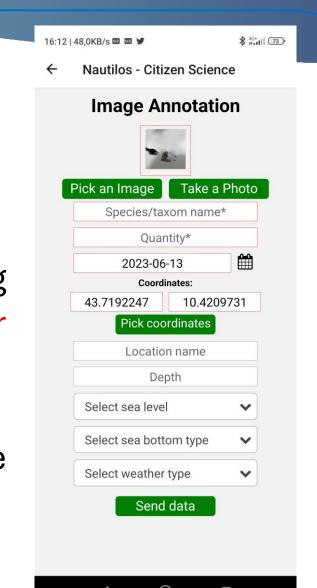


Image Annotation

- Performed by diver
- Photos taken during diving activities containing flora and/or fauna
- Reporting species depicted in the photo

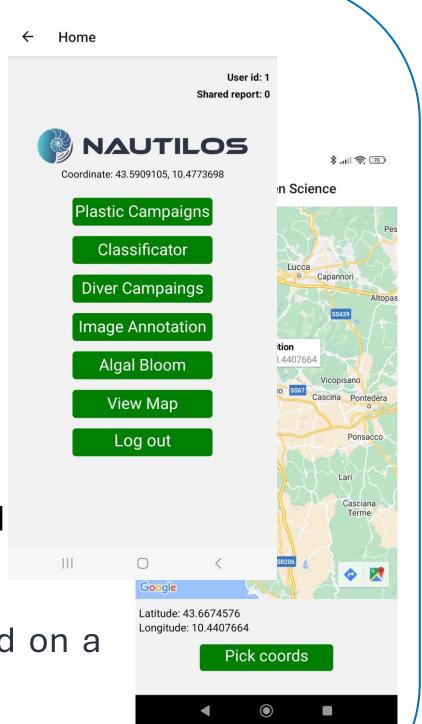


Keep track of litter found during beach clean-up campaign

Compliant with EMODNet guidelines & vocabularies

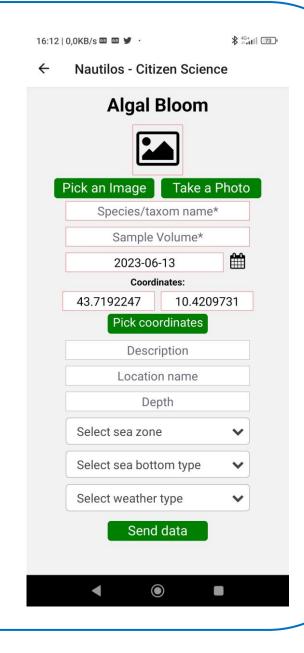
Nautilos Citizen Science App

- Developed with React Native framework
- Platform independent
- Manages several different scenarios
- Modular and easy extendable
- Data are exchanged through a set of dedicated RESTful APIs
- Previously stored data can be viewed displaced on a map



Algal Bloom

- Integration of algawarning tool able to recognize presence of algal blooming in water samples
- Pictures of the analyzed water sample
- Reporting recognized species and their quantity

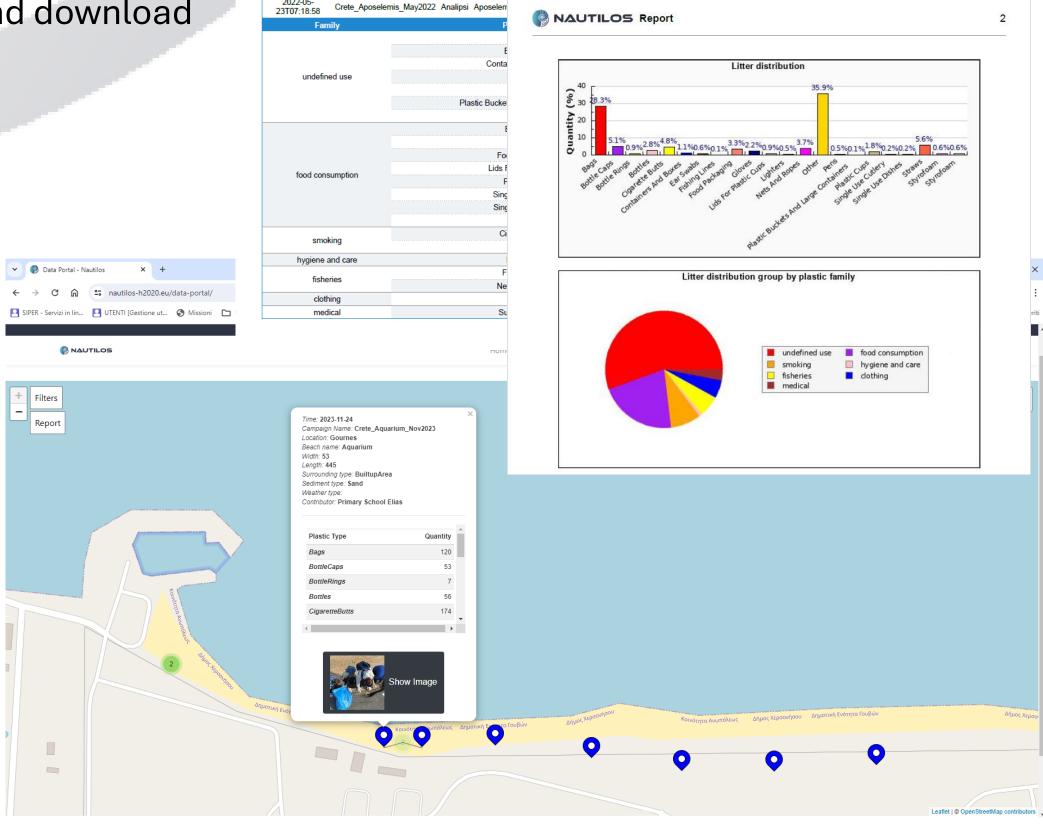


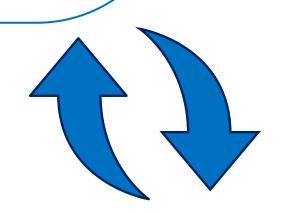
Nautilos Web Portal

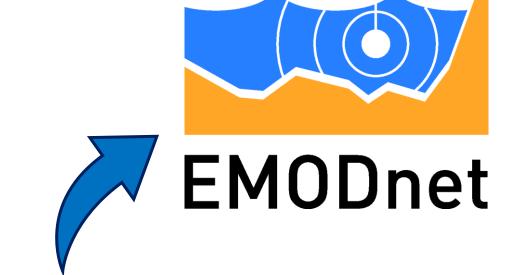
- View one or more datasets simultaneously
- Data representation based on geographical information
- Different way to render data (with marker color defined by values assumed by selected features)

NAUTILOS Report

- Filter data depending on their features
- PDF report generation and download
- Live charts plotting







Nautilos Data server

- Data gathering and retrieval operation performed through RESTful APIs
- Data can be downloaded in different formats (HTML table, JSON, GeoJSON, etc.)
- Data harmonization and integration

Each scenario is managed in separate datasets

ERDDAP

Citizen Science in real world

