NET4mPLASTIC
Integrated Software Platform
www.net4mplastic.net

INDEX

1 NET4mPLASTIC Integrated Software Platform: main objectives

As part of the NET4mPLASTIC Project, a software web-GIS platform with time and spatial information has been developed to approach an integrated view of the micro and macro plastics distributions in the Adriatic Sea.

This web application is useful for:
- display data related to the forecast of seasonal distribution of microplastics;
- upload and display results of specific microplastic monitoring campaigns;
- upload and display results of laboratory analysis;
- upload and display data related to the microplastic (marine litter);
- notify eventual critical forecast of microplastic distribution to the stakeholders.

2 Stakeholders to whom the Integrated Platform is addressed

Two different groups of stakeholders can benefit in using the software platform for the integrated data collection on micro and macro plastic:
- Internal stakeholders, within the Net4mPlastic partnership, and other third party already connected with the Project partnership (e.g. Legambiente, AIPO – "Agenzia Interregionale per il fiume Po, Federcoopesca").

External stakeholders, not yet involved within the NET4mPLASTIC Project, who may consider this tool useful for their administrative, managerial or professional activities. This category might include:
- Fishing associations;
- Marine transport associations;
- Coast Guards;
- Non-governmental organizations related to the environment protection;
- National and international development agencies;
- National governments associations or national, regional and local authorities;
- Research organizations;
- Groups with specific weather, climatic or geographic interests (e.g. tourists).

3 Functionalities made available by the Integrated Platform

The functionalities provided by the software platform include:

- The visualization on a web-GIS map of the prediction model data related to meteo-marine conditions of the latest 5 years in specific Adriatic Sea areas (test sites areas of the Net4mPlastic project);
- The visualization on a web-GIS map of the seasonal trend of microplastic coastal distributions and related main sources;
- The uploading and visualization of survey campaigns data related to the collection of beach and sea surface micro and macro plastic data, and chemical-physical parameter of sea water;
- The uploading and visualization of laboratory data analysis results;
- The export of all data indicated above in excel or text format;
- The visualization of georeferenced pictures of macroplastic (marine litter);
- The production of a periodical bulletin indicating eventual critical conditions of microplastic coastal distribution.

4   Integrated Platform Guidelines

The user-friendly Platform home page shows the following menu pages:

- *Drone – OBU data*, where all the data available regarding the marine drone integrated system and On-Board Unit surveys are displayed;
- *Data*, where users can find all the selected data deriving from the Marche Region - ISMAR oceanographic model;
- *Plastic Index*, that includes all the data related to plastic concentration deriving from the numerical model and the related index elaborated within the Project;
- *Lab Data Analysis*, a repository that comprises all the survey campaigns data collected during the Project;
- *Sea Sentinel*, where all the georeferenced pictures related to marine litter collected by the Project stakeholders are stored and displayed in a web-GIS map;
- *Project Info and Contacts*.

On the lower right corner of the home page, users can find the indication "*Link to Interactive Map: EU Projects concerning Marine Litter*".
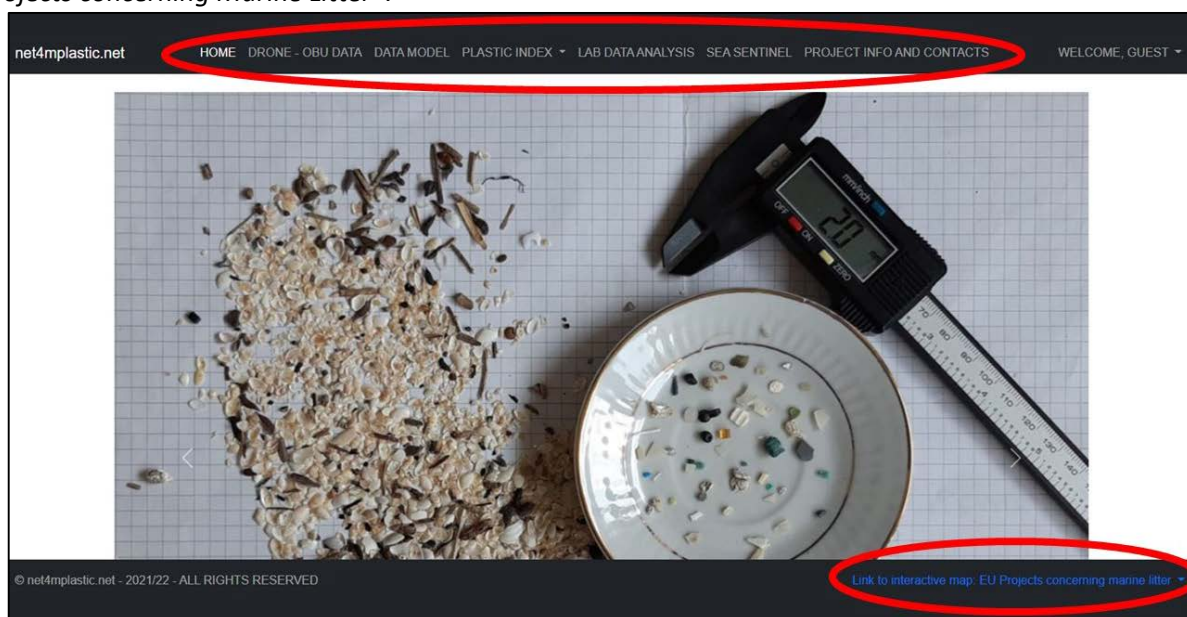

Main navigation menu location

By clicking on the menu on top page is possible to navigate through all the site contents.

All the different pages are composed by interactive maps, data tables and XY graph data,composed as following:

- Search/query bar section, located in the upper left corner of the page, showing the data selection;
- Maps section, showing the point of interests;
- Table section, showing the requested value in table format;
- Graph section, showing the requested value in XY graph format.

Below is shown an example of a sub-section.
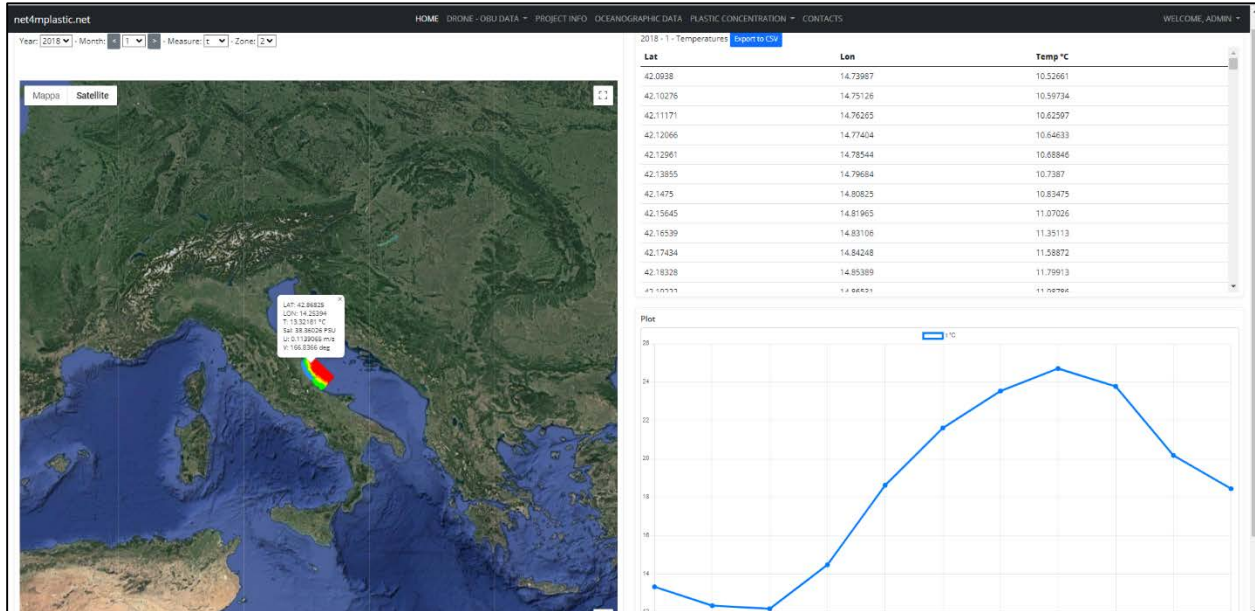
Example of Oceanographic data page

The Search/Query bar is detailed in the picture below.

Example of Search/Query bar

Users can select the following parameters to have them displayed, in the related drop down menu:
- Years' data;
- Months' data (1-12 = January to December);
- Measure (t = temperature, sal = salinity, u = current speed, v = current direction);
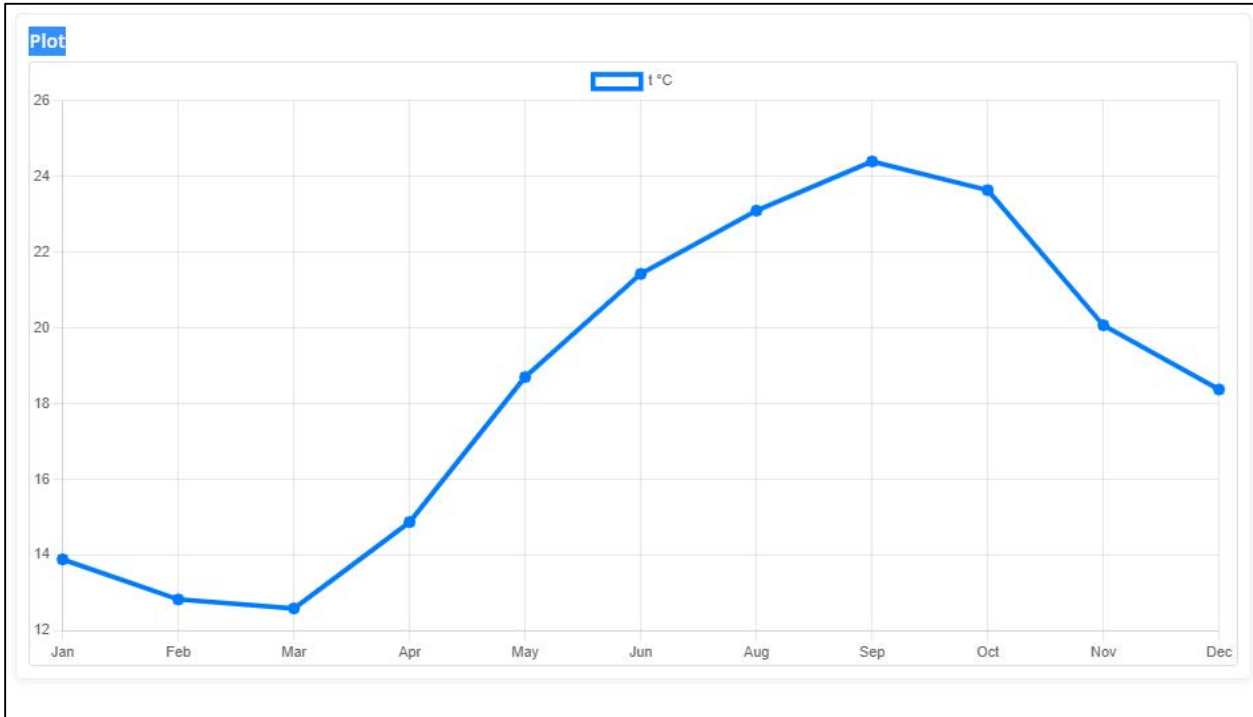- Zone (1 to 4, the project zones).

After the selection, data will be automatically loaded on the Map and Table.

Below is shown a detail of the Map view.
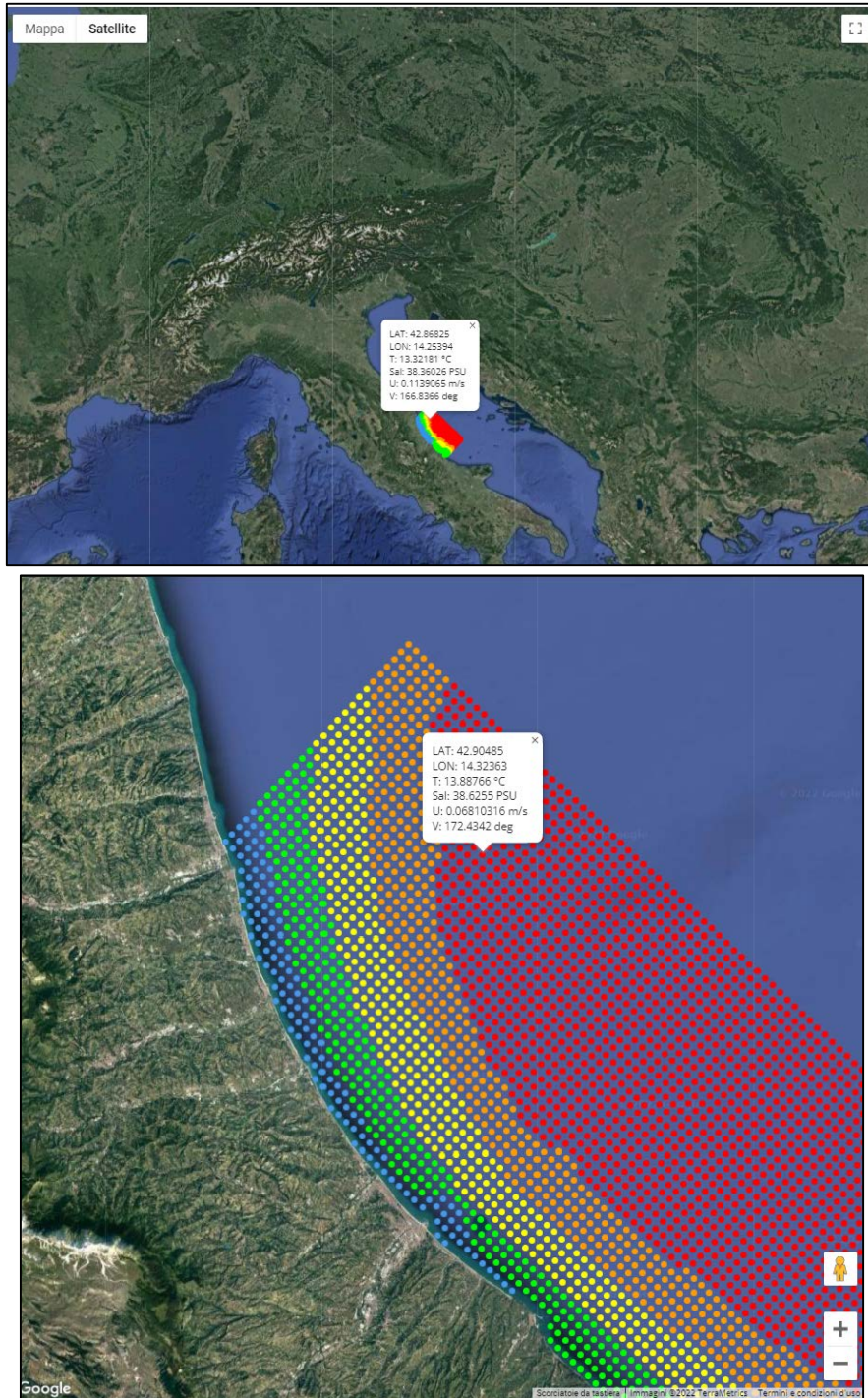
Map view detail - zoomed in and out

Below are shown an example of a XY Graph view and a Table view.

Example of XY Graph View for a selected point

Example of Table view for all the set of geographical points, in this case 2018 – 1, equal to January 2018.