planetek
italia

Rheticus®

Marine

USER GUIDE

Contents

1. GIS browsing

Rheticus® Marine services “WebGIS” is based on a Content Management System (Content Management System - GeoCMS) capable of managing geographical information. It is responsible for the issuing of geographic layers and information, which are visualised through a digital data display window (Viewer). The Web Client allows you to describe, search, visualize and acquire data. Practically, it is a public space for the overview and data recovery. The system has been designed to offer a user-friendly interface (user interface) through which end-users can view spatial data with cartographic background and to "submit" questions in order to visualize their descriptive data.

Through the WebGIS system, end users can consult the cartographic data in an interactive way. They can navigate through the map at different scales and locations in order to seek and identify areas of interest.

The user may select the viewing range of the maps with the corresponding buttons.

Below, a brief description of the main features of “WebGis” module.

1.1. Overview Map

An Overview Map is available which allows the determination of the region of interest relative to the region and easily browse it. The illustration below gives an example of an overview map.

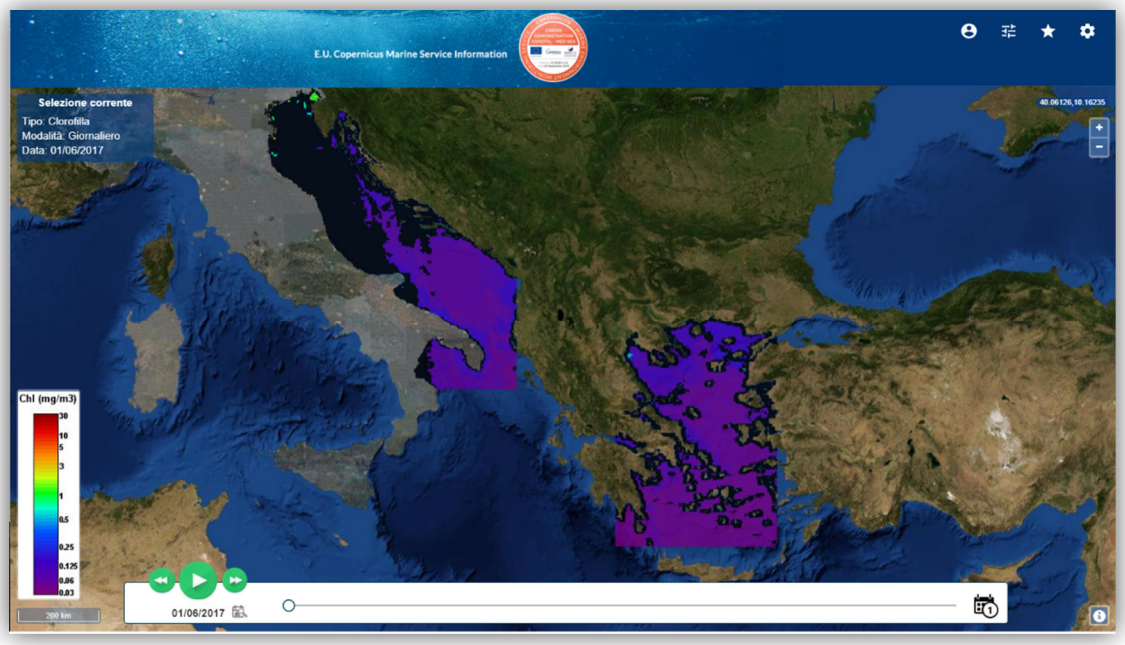


Figure 1. Overview Map

The default map that is displayed to the end user when it connects to the WebGIS system, presents the map background of the “Area Of Interest”.

1.2. Main tool bar

At the top/right of the overview map is plased a menu bar that contains the settings and filters:

- Login/Logout / sign in
- Filter
- My areas
- Settings

At the bottom lies a slide bar that lets you browse maps in a period of time defined by the user.

1.3. Login/Logout and Sign up

Pressing the icon the user can enter the system as registrated user or sign up on it.

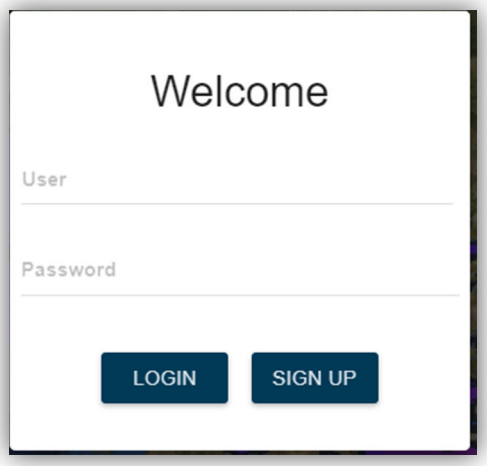


Figure 2. Login / Logout

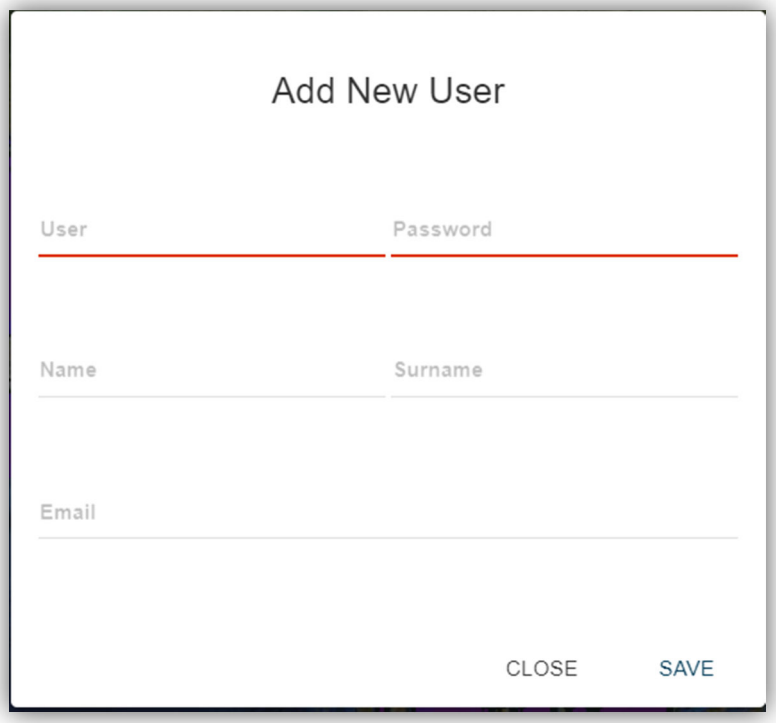


Figure 3. Sign up form

1.4. Filters

The user can access the filters of the system through the menu above the overview map. This gives to the user the possibility to choose among the filtered maps that are offered. It also allows us to manage the display of maps and mapping levels.

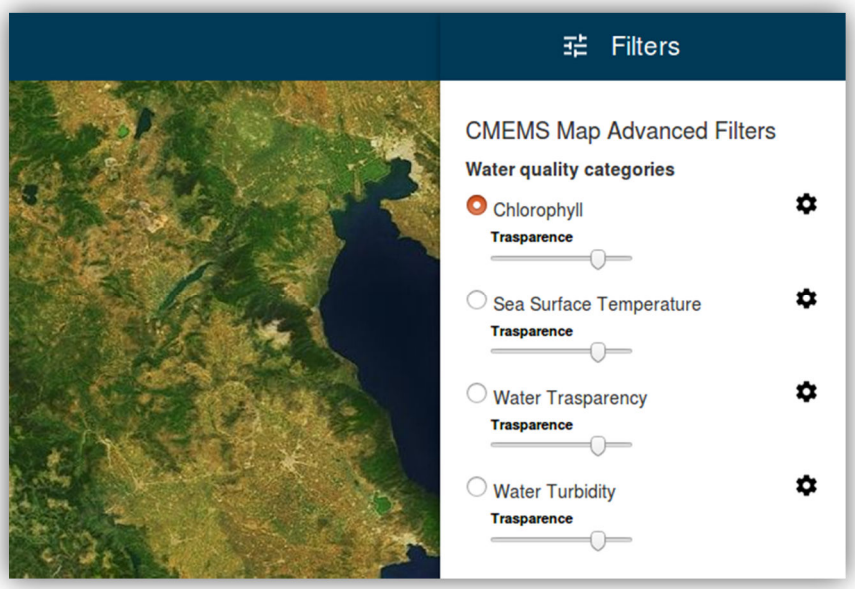


Figure 4. Filters menu

The user is able to:

- Display Chlorophyll-a, SST, WT or TUR maps.
- Manage the transparency of the displayed map.
- Delete a cartographic product of the viewing window.

1.5. My Areas

The user can select one of the two areas of interest. The map will change the extent according on it.

Figure 5. My areas list

1.6. Settings

The user can also have access to the settings of the overview Map.

- Choose the language of the user interface. The system supports a multilingual user interface (English, Greek and Italian).
- Choose the Basemap (OpenStreetMap or Satellite Base Map).
- Go to the search catalog (*see the following sections for details about search and download capabilities*).
- Go to the help section.

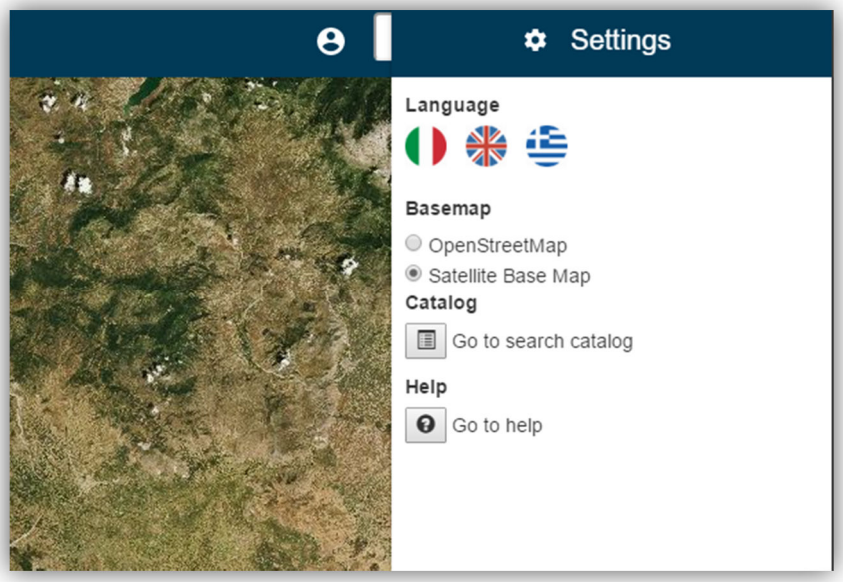


Figure 6. Settings menu

1.7. On demand processing request (only logged users)

Logged users can require a on demand processing request, simply selecting the following icon :

After pressed, a new window will be shown , including all the required parameters to insert:

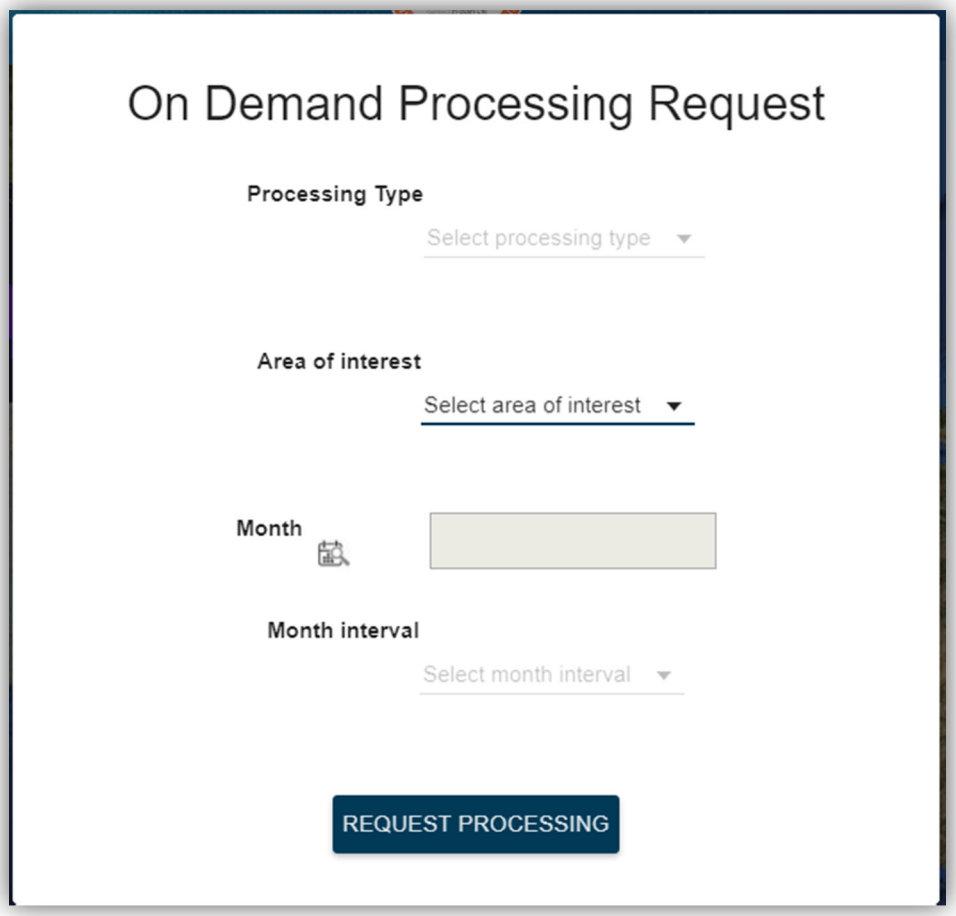
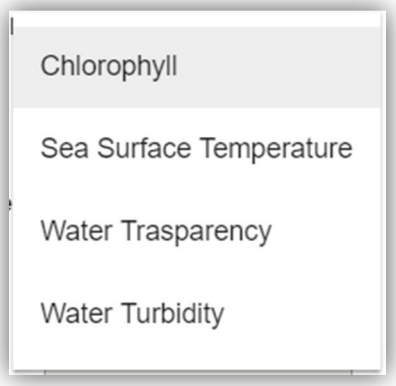


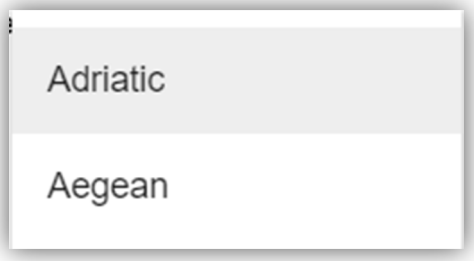
Figure 7.On Demand processing request form

The user can insert the following parameters :

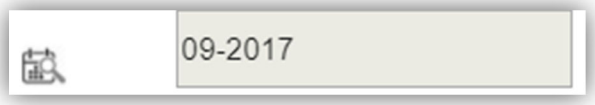
Processing type : the type of processing to submit on data.



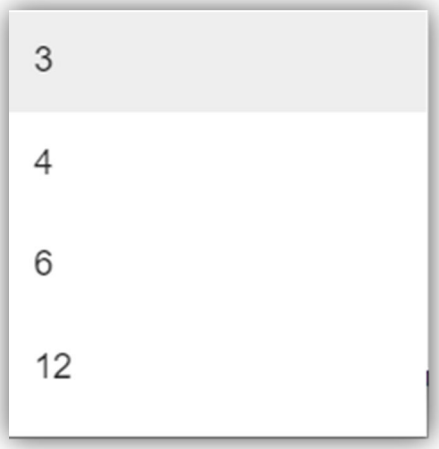
Area of interest : one of the two area of interest of the project



Month and year : the starting date of the required processing



Month interval : the grouping interval



after the confirmation, a new message will inform the correct activities perfomed.

1.8. Time Panel

The Time Panel allows the user to browse maps for different points of time covering the same area. This enables the user to discover changes of a phenomenon in a certain period of time. This function uses a time parameter to display data of different periods.

The following figure shows the slider bar and its control buttons:

1. Using the slide bar or the Calendar, the user can select the time period for which it is interested (daily, 10-days, monthly).
2. Using the control buttons the user can see the changes during a selected period of time, for which the user is interested.

Figure 8. Time Panel

2. Metadata Catalog and Data Access

Rheticus® Marine services “Catalog” allows the user to perform combined queries against all Metadata through a flexible web interface.

The system includes a search form that allows users to display the search results on the map. By submitting the search form, the user starts a request for finding information in the data directory.

The results of this search process are displayed on a web page, either as alphanumeric, or as areas on the map. The user has the possibility to resume the search or to optimize its results, starting from the cached results without opening any extra web pages: the search form is next to the map with the selected values, while the search results that are displayed on map change dynamically whenever the selected values change.

Below, a brief description of the main features of “Catalog” component.

2.1. Faceted Search Functionality

Faceted search is a technique for accessing information organized according to a faceted classification system, allowing users to explore a collection of information by applying multiple filters. The Search Facets are displayed on the left part of the screen and the user is able to filter the Search by selecting the Type of the resource, Topic, Keywords, Contacts, Year and Format.

Through the use of the Search Facets a User is able to perform quick and easy filtering.

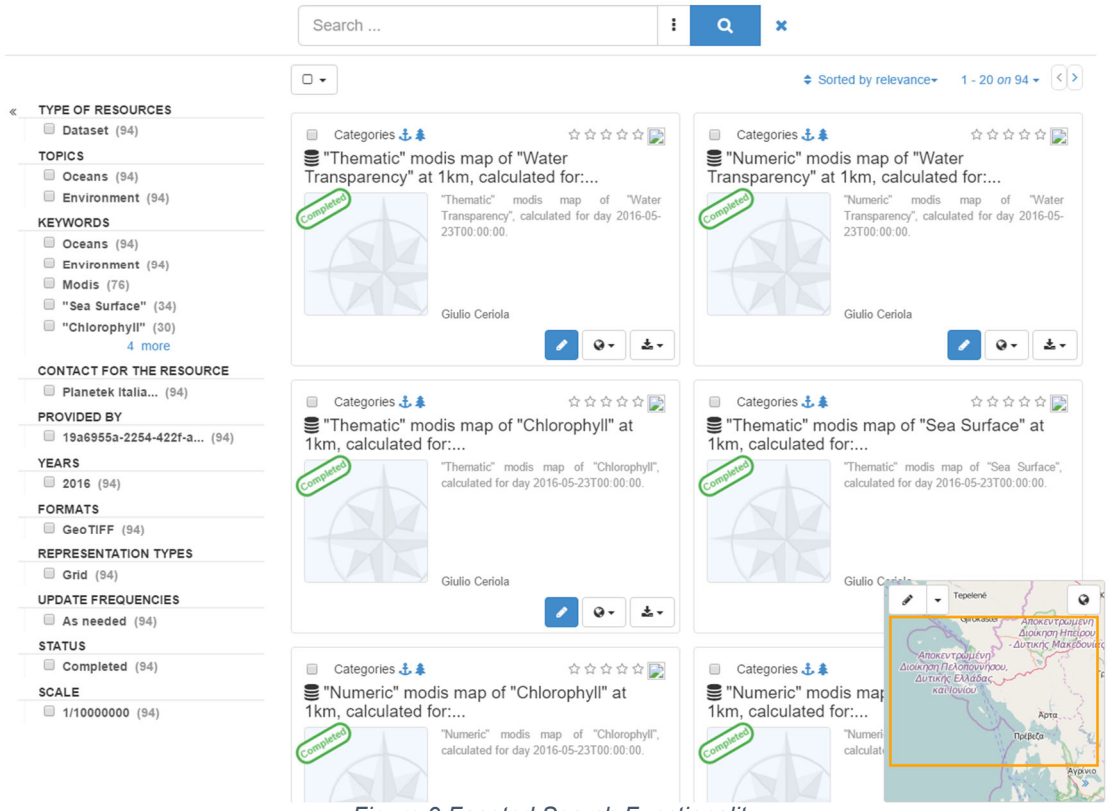


Figure 9.Faceted Search Functionality

2.2. Advanced Search

The search results can be refined through the functions of the «Advanced» search form, which allows users to further restrict the search by adding several criteria such as content type, keywords, publication date, etc.

If the user changes the area of interest which is indicated in the basic cartographic search form, the options for the parameters «Advanced» will be maintained so that the map will focus on the region of interest where the search results will be presented on the same search criteria set.

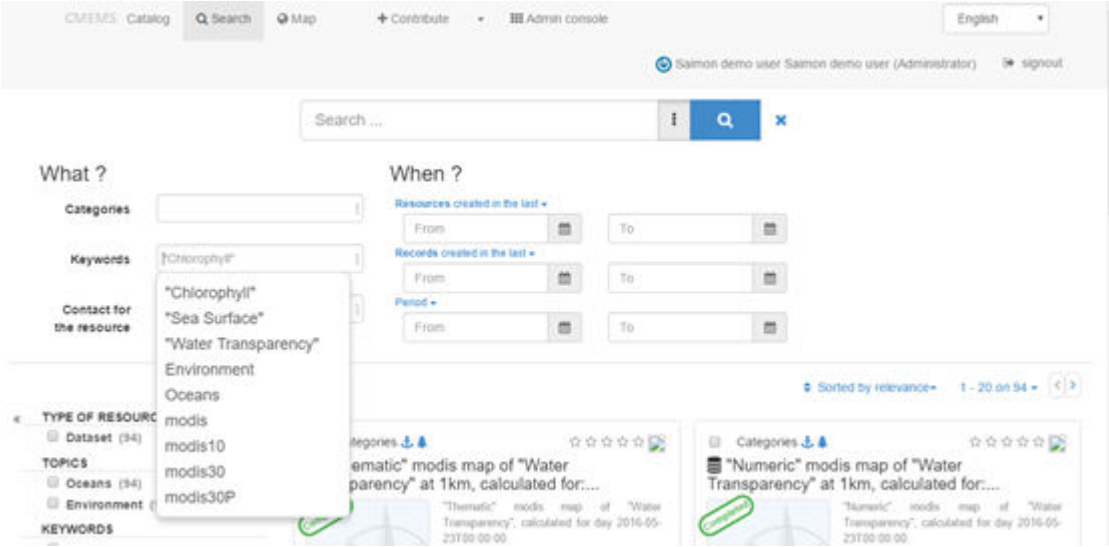


Figure 10. Advanced Search Functionality

As shown, the user can combine the following search criteria:

- alphanumeric criteria, identifying text or keywords (*What?*),
- temporal criteria for the selection of the time period (*When?*), and
- geographical criteria, by designing the area of interest directly on the map.

Figure 11. Map

2.3. Results

The output result of an example query performed by the user. In the following figure, the results that contain the word “Chlorophyll” are displayed. We can also see an icon over the set of results, that upon clicking it opens a dropdown list for selecting more than one results.

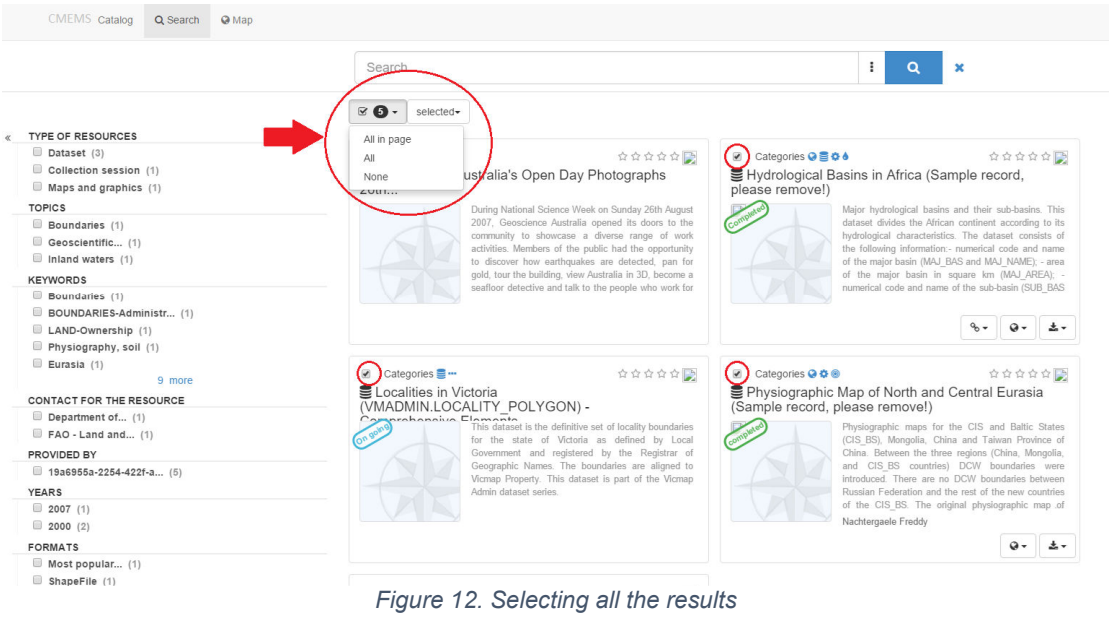


Figure 12. Selecting all the results

Sorting is also feasible by clicking on the Sorting icon and choosing one of the options that are provided. The Sorting may be based on relevancy, title, rating, popularity, last modified, low scale and high scale fitting.

Figure 13. Sorting the set of results

The total number of records is displayed on the top of the results set while at the right of the page there is a pagination bar that helps us navigate through the results.

The user can view the record details by clicking on the desired record.

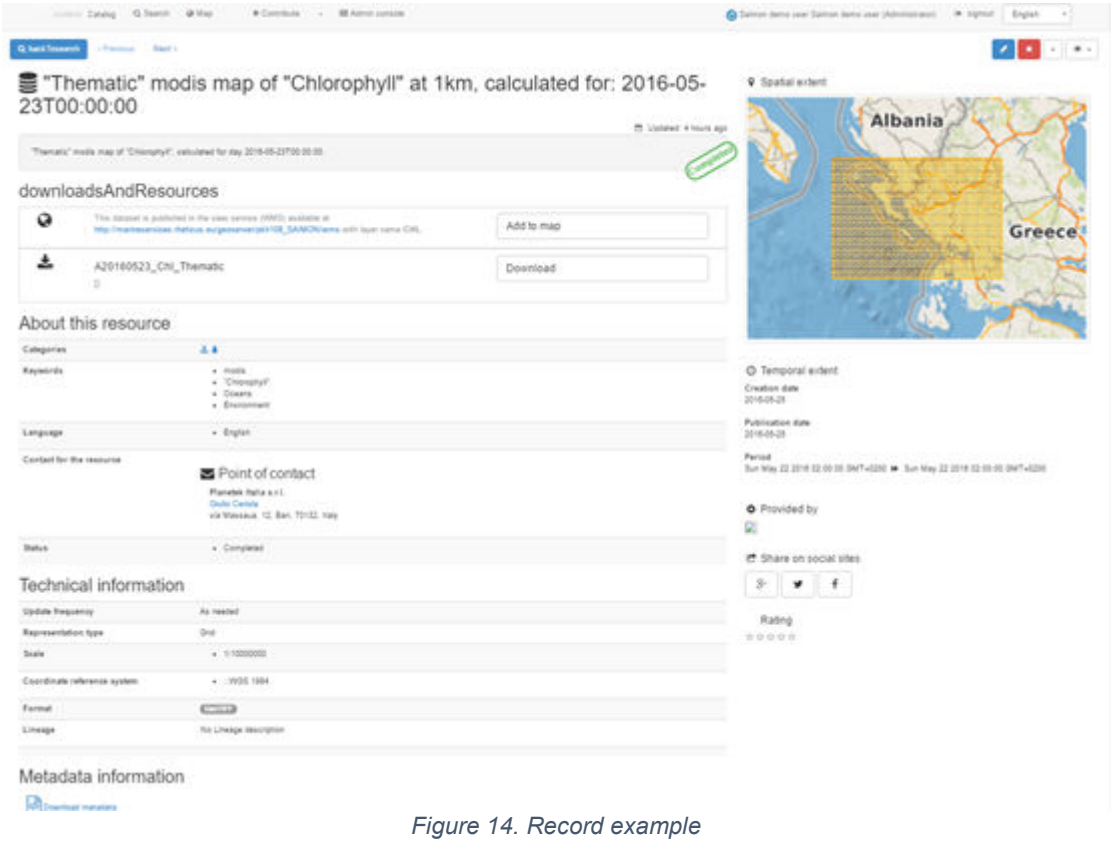


Figure 14. Record example

A new page will open containing information related to the selected resource. Those may be technical information, metadata information, and other general information. External links and download links are also provided.

2.4. Data Download

All the selected results or a subset of them can be exported as pdf, csv, or zipped files.

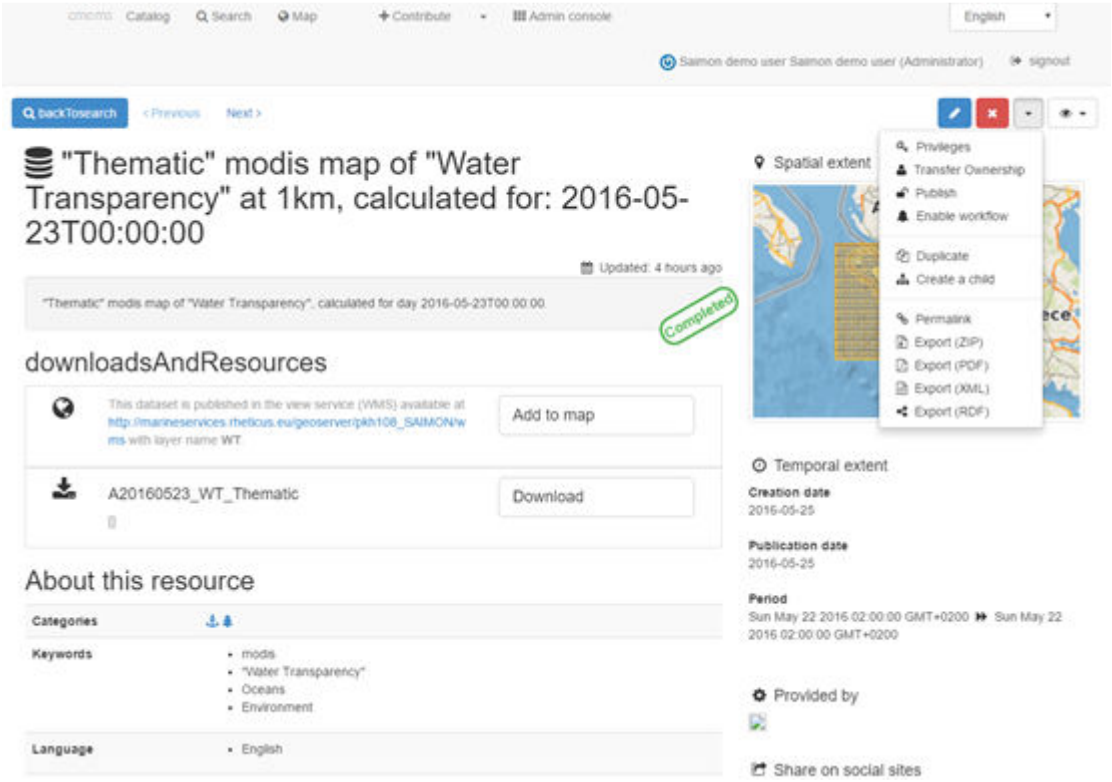


Figure 15. Export button

There are two options for exporting publications. Either you can choose to export all the results in the displayed page or all the results by clicking the button, which is located on the top right corner. Alternatively you can choose the publications you want to export and click on the export button. If no publications are selected then the button remains disabled.

The record details can be exported as a csv file or as pdf file. The example below is a record exported as a pdf file.

"Thematic" modis map of "Water Transparency" at 1km, calculated for: 2016-05-23T00:00:00

Metadata

File identifier	79c7c54d-3045-403b-b31e-883c1d8244f2
Metadata language	English
Character Set	UTF8
Scope code	Dataset
Hierarchy level name	Dataset
Metadata standard name	ISO 19115:2003/19139
Metadata standard version	1.0

Contact

General

Individual name	Giulio Ceriola
Organisation name	Planetek Italia s.r.l.
Role code	Point of contact

Address

Delivery point	via Massaua, 12
City	Bari
Postal code	70132
Country	Italy
Electronic mail address	ceriola@planetek.it

Reference System Information

Identifier

Unique resource identifier	WGS 1984

Data identification

Abstract	"Thematic" modis map of "Water Transparency", calculated for day 2016-05-23T00:00:00.
Progress	Completed
Spatial Representation Type	Grid
Language	English
Character Set	UTF8

Citation

Title	"Thematic" modis map of "Water Transparency" at 1km, calculated for: 2016-05-23T00:00:00
Creation	25-05-2016 11:58:23
Publication	25-05-2016 11:58:23
Presentation form	Digital map

Point of contact

General

Individual name	Giulio Ceriola
Organisation name	Planetek Italia s.r.l.
Role code	Point of contact

Address

Delivery point	via Massaua, 12
City	Bari
Postal code	70132
Country	Italy
Electronic mail address	ceriola@planetek.it

Maintenance information

Maintenance Frequency	As needed

Descriptive keywords

No Thesaurus Name

modis
"Water Transparency"

Spatial resolution

Resolution

Equivalent scale

Representative fraction

Denominator	10000000

Topic category

Oceans
Environment

Extent

Temporal element

Temporal Extent

Extent

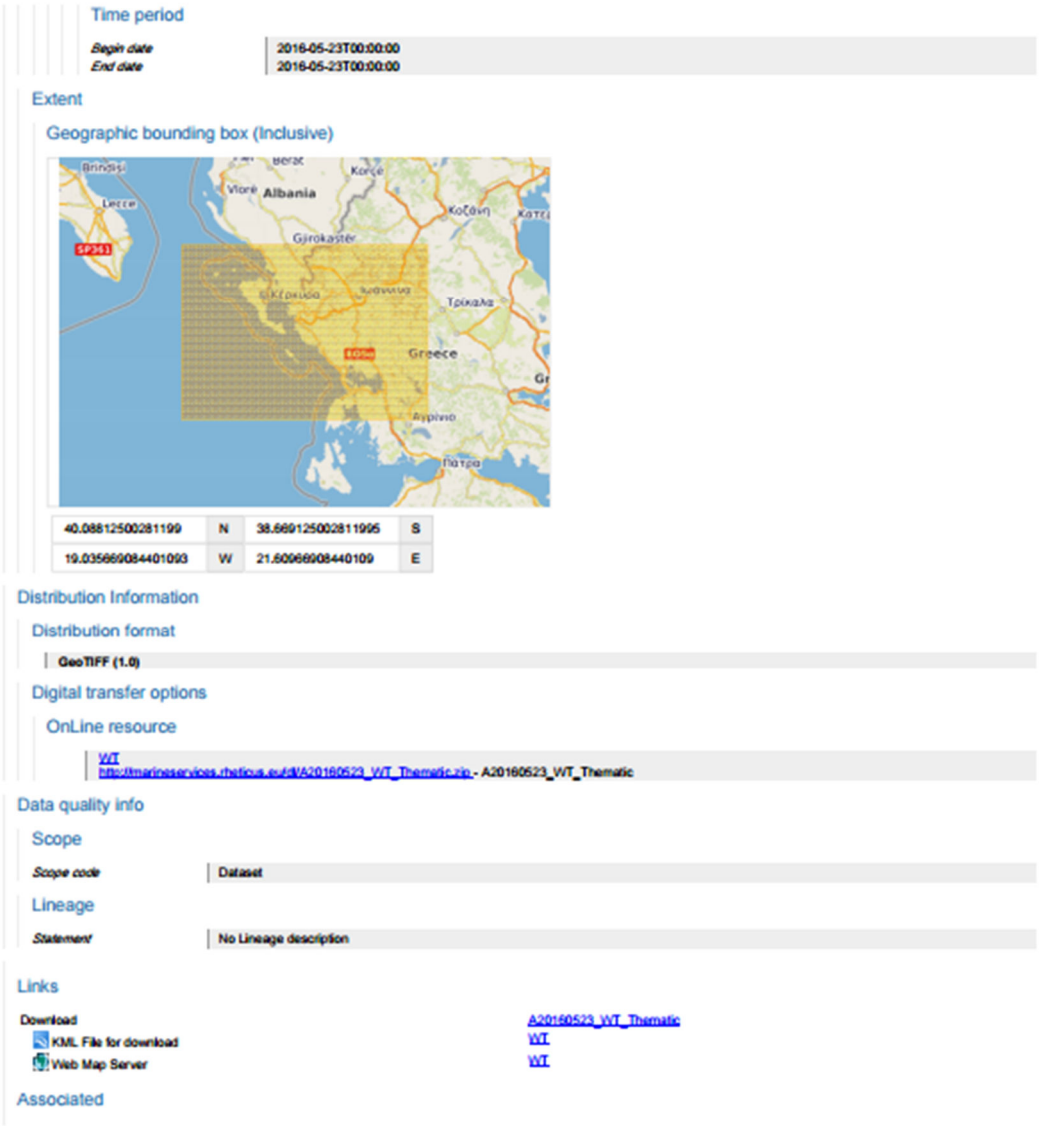


Figure 16. Download example