Contents

1. Navigation

The 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.

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.

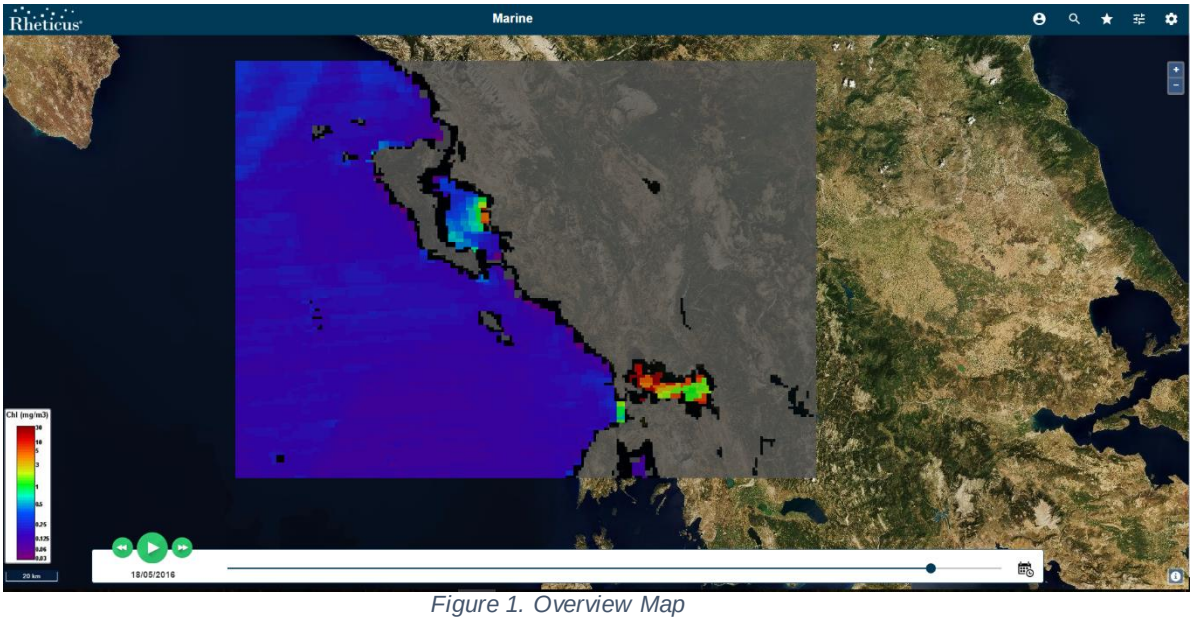


Figure 1. Overview Map

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.

At the top of the overview map is the menu that contains the settings and filters, while at the bottom lies a slide bar that lets you browse maps in a period of time defined by the user.

1.2. History

The history 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, weekly, 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 2. Time Panel

1.3. 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.

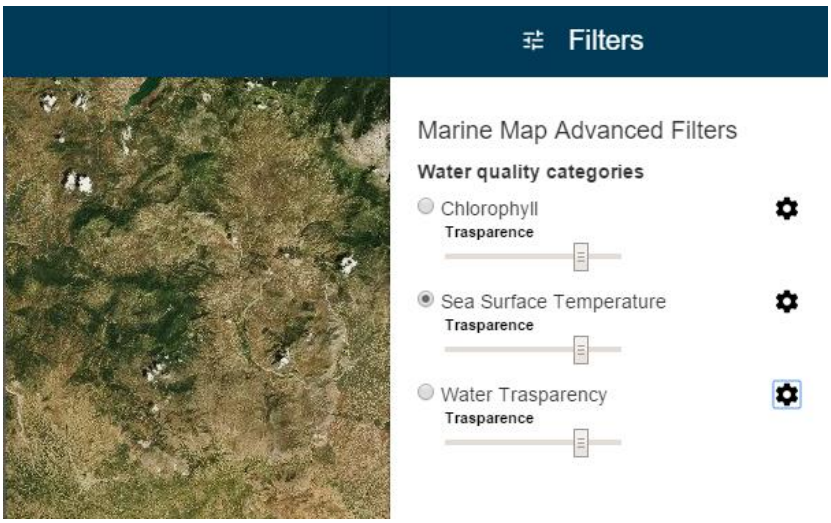


Figure 3. Filters

The user is able to:

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

1.4. 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 Albanian).
- Choose the Basemap (OpenStreetMap or Satellite Base Map).
- Go to the search catalog.
- Go to the help section.

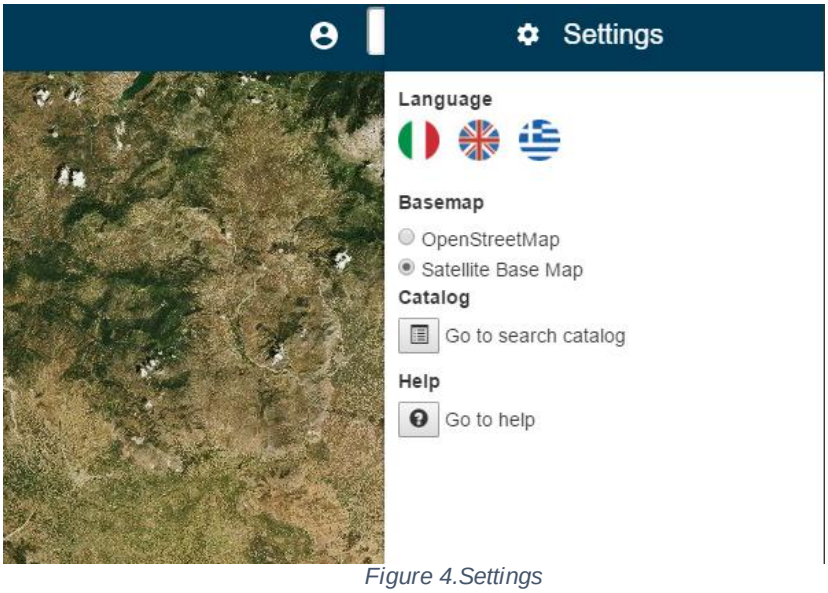


Figure 4.Settings

2. Search

The user is able 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.

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.

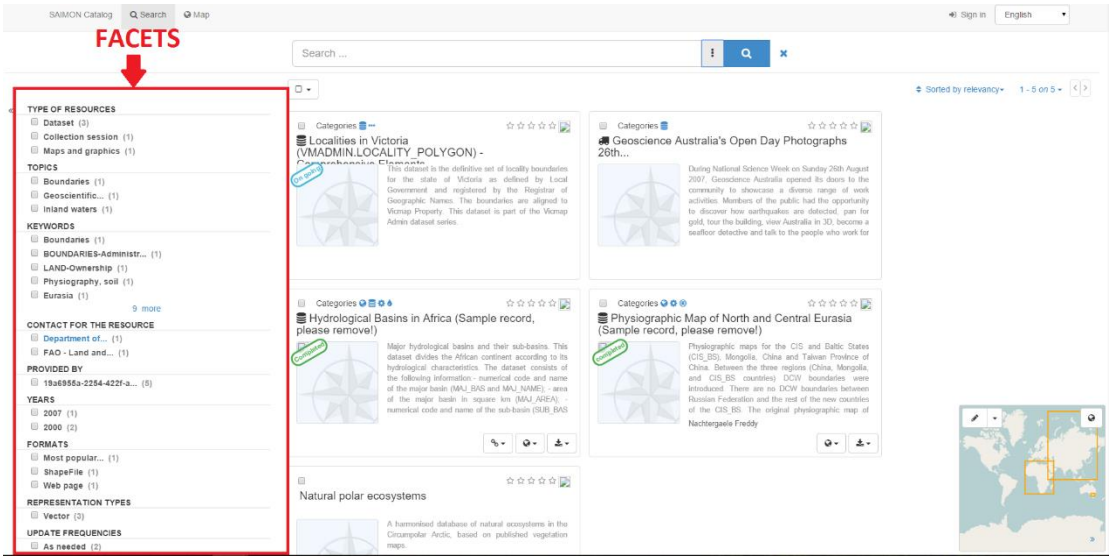


Figure 5.Faceted Search Functionality

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.

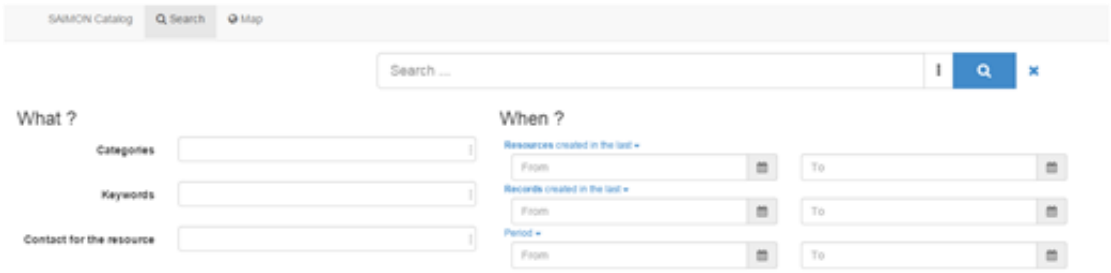


Figure 2. Search Form

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 6. Map

2.3.Results

The output result of an example query performed by the user. In the specific example, the results that contain the word “Chlorophyl” 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.

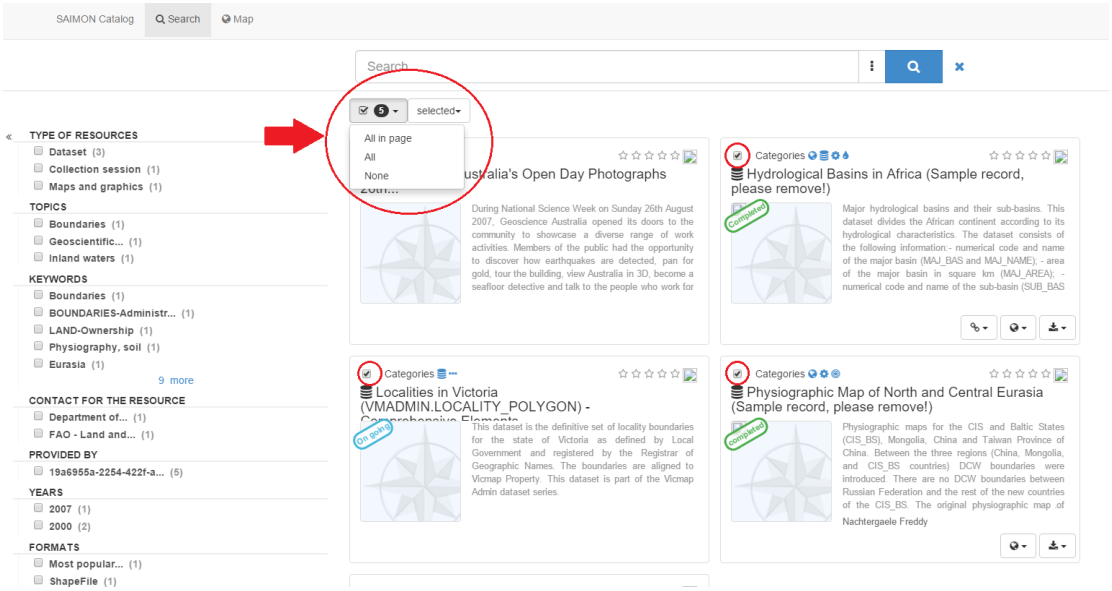


Figure 7. Selecting all the results

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.

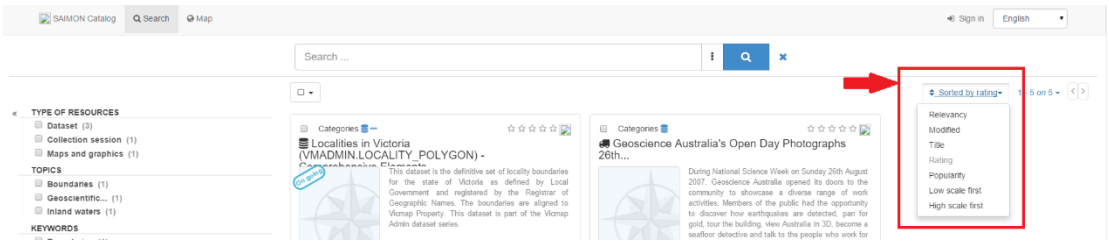


Figure 8. Sorting the set of results

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.

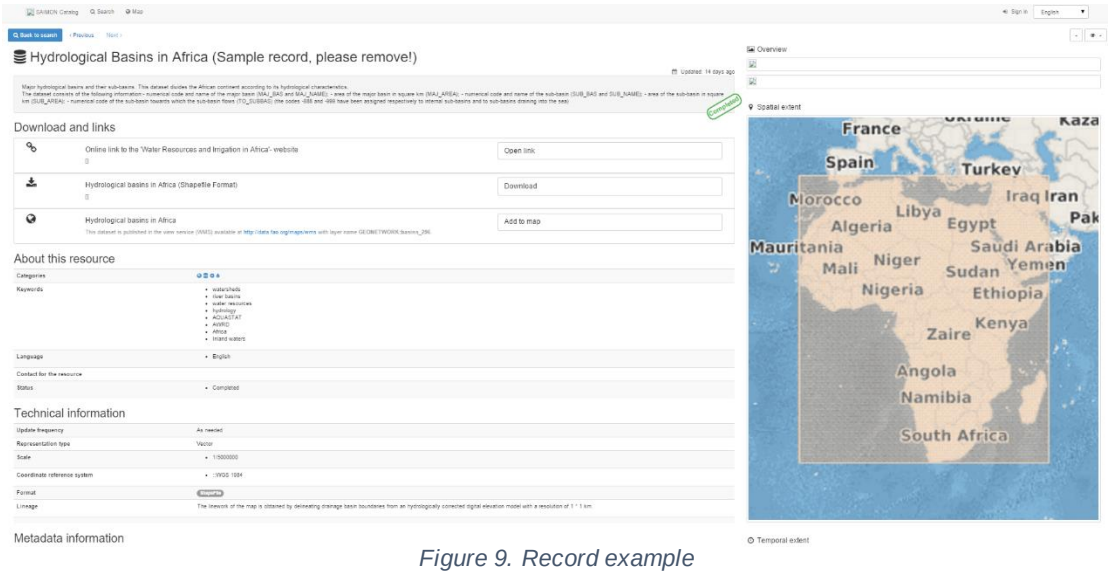


Figure 9. Record example

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.

3. Download

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

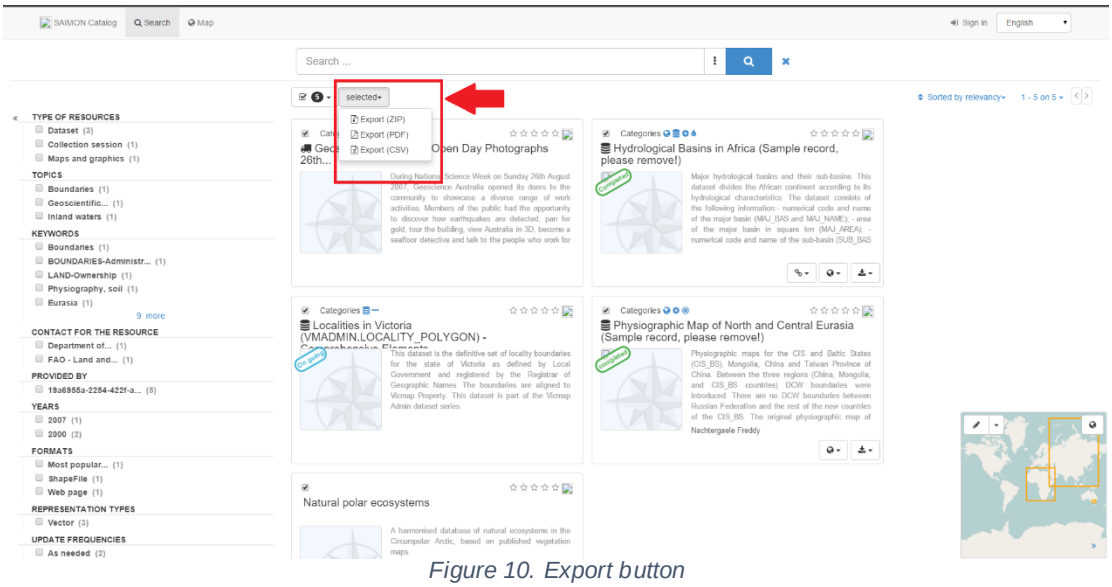
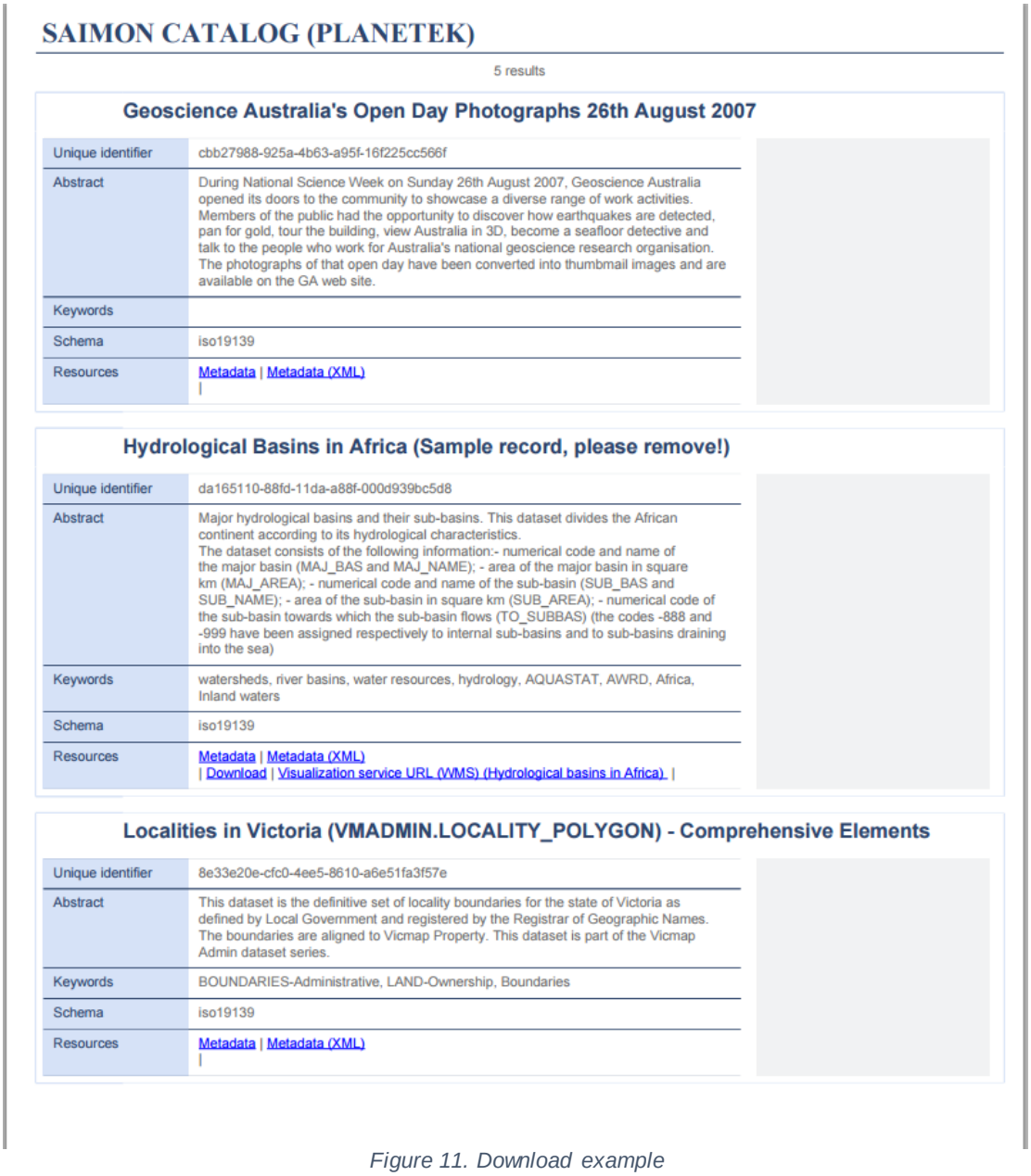


Figure 10. Export button

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.



SAIMON CATALOG (PLANETEK)

5 results

Geoscience Australia's Open Day Photographs 26th August 2007

Unique identifier	cbb27988-925a-4b63-a95f-16f225cc566f
Abstract	During National Science Week on Sunday 26th August 2007, Geoscience Australia opened its doors to the community to showcase a diverse range of work activities. Members of the public had the opportunity to discover how earthquakes are detected, pan for gold, tour the building, view Australia in 3D, become a seafloor detective and talk to the people who work for Australia's national geoscience research organisation. The photographs of that open day have been converted into thumbmail images and are available on the GA web site.
Keywords	
Schema	iso19139
Resources	Metadata | Metadata (XML) |

Hydrological Basins in Africa (Sample record, please remove!)

Unique identifier	da165110-88fd-11da-a88f-000d939bc5d8
Abstract	Major hydrological basins and their sub-basins. This dataset divides the African continent according to its hydrological characteristics. The dataset consists of the following information:- numerical code and name of the major basin (MAJ_BAS and MAJ_NAME); - area of the major basin in square km (MAJ_AREA); - numerical code and name of the sub-basin (SUB_BAS and SUB_NAME); - area of the sub-basin in square km (SUB_AREA); - numerical code of the sub-basin towards which the sub-basin flows (TO_SUBBAS) (the codes -888 and -999 have been assigned respectively to internal sub-basins and to sub-basins draining into the sea)
Keywords	watersheds, river basins, water resources, hydrology, AQUASTAT, AWRD, Africa, Inland waters
Schema	iso19139
Resources	Metadata | Metadata (XML) | Download | Visualization service URL (WMS) (Hydrological basins in Africa) |

Localities in Victoria (VMADMIN.LOCALITY_POLYGON) - Comprehensive Elements

Unique identifier	8e33e20e-cfc0-4ee5-8610-a6e51fa3f57e
Abstract	This dataset is the definitive set of locality boundaries for the state of Victoria as defined by Local Government and registered by the Registrar of Geographic Names. The boundaries are aligned to Vicmap Property. This dataset is part of the Vicmap Admin dataset series.
Keywords	BOUNDARIES-Administrative, LAND-Ownership, Boundaries
Schema	iso19139
Resources	Metadata | Metadata (XML) |

Figure 11. Download example