

Pegaso Project

People for Ecosystem based Governance
in Assessing Sustainable development of
Ocean and coast

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Pegaso map viewer workshop

WP3

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www.pegasoproject.eu



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Part 1 – Overview

Using the Map Viewer basic functions

The Atlas is a component of the Pegaso SDI and is hosted in the web portal www.pegasoproject.eu, where other components such as the catalogue and the Atlas are.

1. Go to **Pegaso web portal** and under Geoportal section click on the Viewer icon.
2. The general layout of the viewer is composed by:
 - a. A screen where layers are shown,
 - b. A set of basic tools to navigate on the upper part of the screen,
 - c. A set of pre-loaded layers with its legend (table of contents),
 - d. A tool to search places and layers,
 - e. An *ad hoc* tool to show and visualise featured layers, indicators results among others.

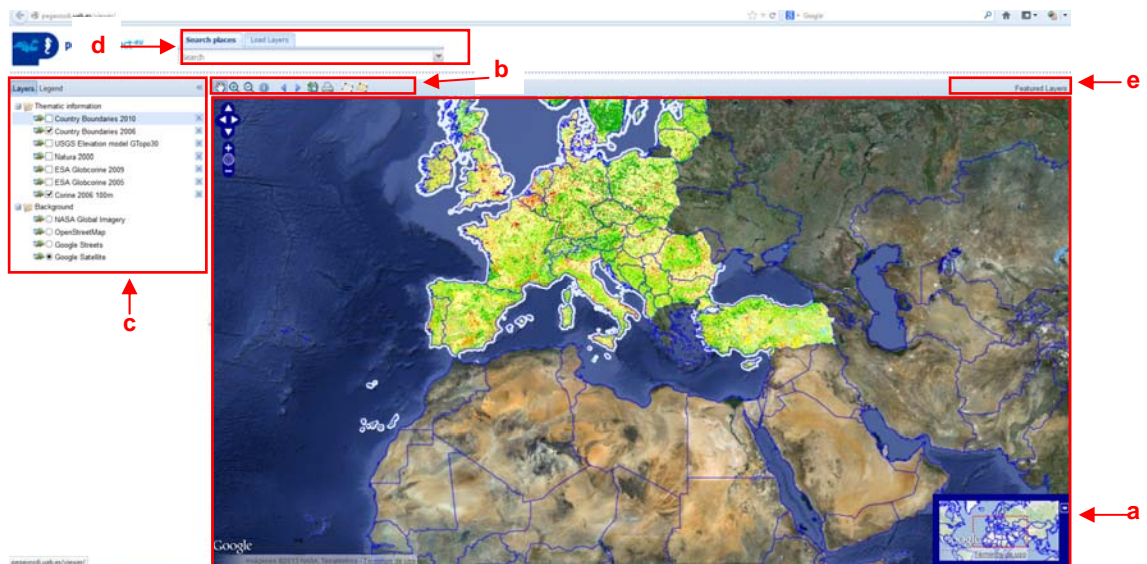


Figure 1. Overview of the Pegaso mapviewer

3. **Navigation tools:** those tools allow the user to zoom in and out the maps, to move maps using the pan tool (hand icon), to go back and next to previous views (arrows icon), to get info about the layers (*i* icon), to get the full extent of the layers (world icon), and to measure distances and areas.

- a. Let's see how they work



4. The **pre-loaded layers** are background and thematic layers displayed to help visualisation of results.
 - a. *Thematic layers* are country boundaries, Topo elevation model, Natura 2000 protected sites, Glob Corine 2005-2009 and Corine Land Cover, whereas *background layers* are NASA and Google layers.
 - b. Thematic layers can be selected or unselected clicking on the box, also deleted by clicking on the crossed box, based on needs.
 - c. Background layers can be selected, just one by time.

- d. The layers can be move up and down of the table just by clicking on them and with the mouse pressed moving up or down.
- e. For each thematic layer a legend can be visualised by clicking in the *Legend* button.

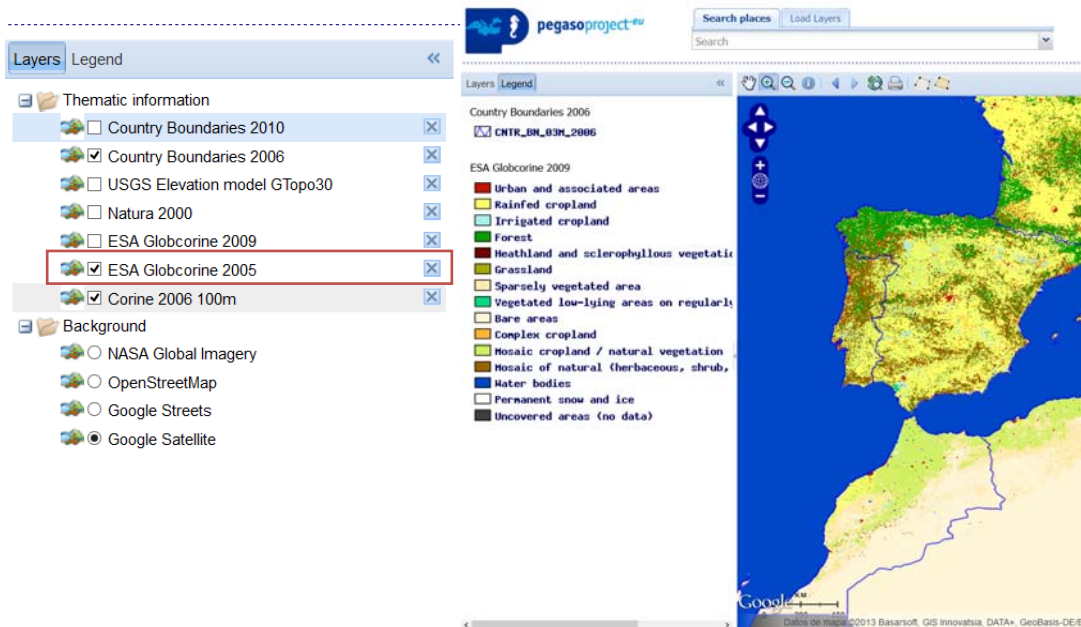
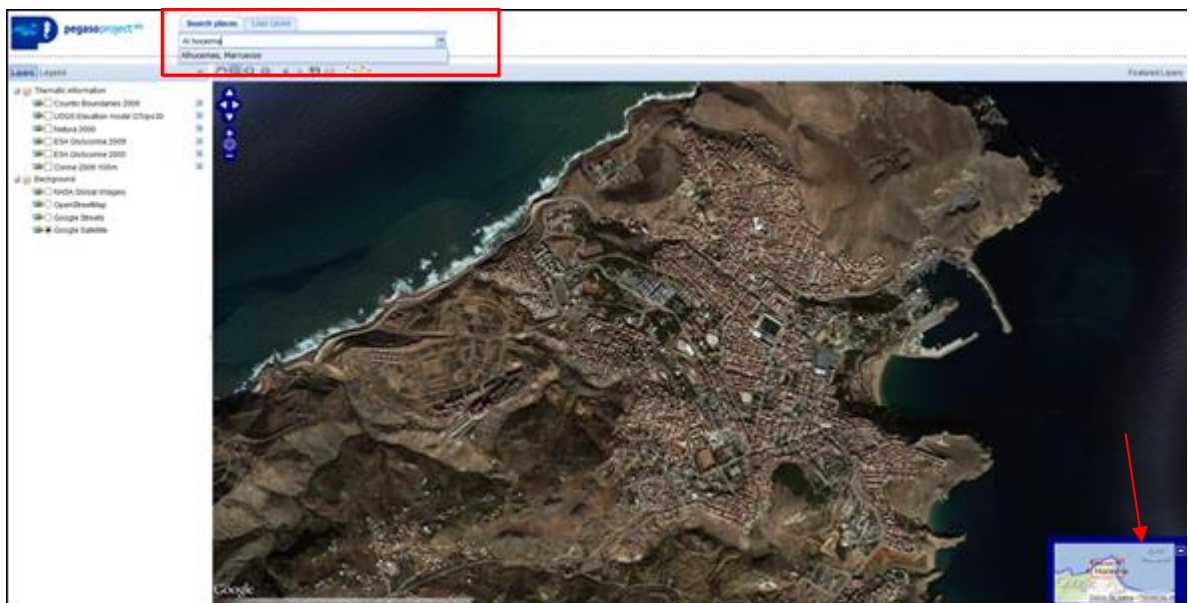


Figure 2. Screenshot of the thematic layers and legend associated.

5. The **Searching tool** allows finding places on the map by zoom in and also has the option to search layers on the Catalogue.
 - a. Let's write Al Hoceima in the text box of search places tool, the tools shows us the coincidence with the name and zoom to the area.
 - b. The down left corner show a situation map

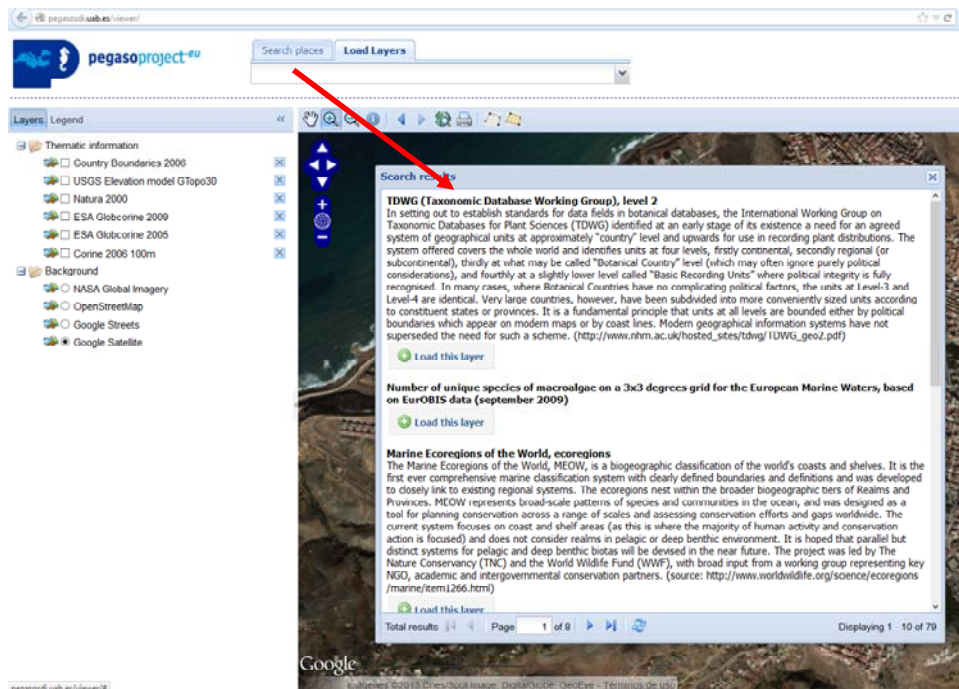


- c. Then click on the different background layers to see the differences: Satellite, Google Streets, OSM.

Part 2 – Loading layers

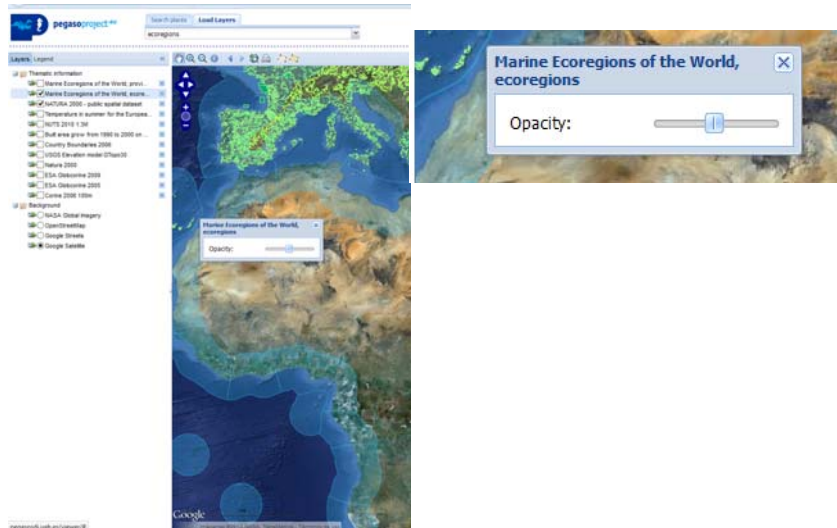
Using the Map Viewer and the catalogue

1. The map viewer it's a very complex tool, not only a viewer but rather a part of the Pegaso spatial data infrastructure, and thus is connected to a data catalogue (where the spatial information is stored).
2. To access the catalogue through the Pegaso map viewer we can use the **Load layers tool** which is connected to it and could search for any data stored on Pegaso SDI.
3. Let´s see how it works:
 - a. If we make an empty search on the **Load layers tool**, we will receive a box with all the layers available on the catalogue.



- b. We can select any out of the 79 layers by clicking on the *Load this layer* button.
- c. Using the arrows we can move among the pages to search the desirable layer to display.
- d. The Load layers tools also allow searching for a specific layer, for example type: **Build area, Natura 2000, ecoregions** and see what layers match the search.
- e. Display some of the findings.

- For any layer, by clicking on the layer in table of contents, the visualisation could be customized by changing the transparency of the layer.
- Click on the layer and move the bar scale to define the transparency percentage.



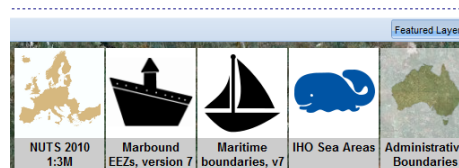
Using the Featured Layers tool

This tool has been implemented to show the results of Pegaso such as the LEAC, indicators, IRA and relevant layers for Pegaso project. This tool will be updated as the project will provide more results.



Currently, is made of four different buttons:

- Administrative boundaries:** the most relevant boundaries considered in the project.



2. **Protected Areas** button refers to Natura 2000 areas.
3. **Land Cover**: both Corine Land Cover (2006, 2000 and 1990) and GlobCorine from ESA (2005 and 2009)



4. **Indicators**, currently empty, it will consist on the layers resulting from the indicators calculation at local and regional scale.

For example, let's click on the **Administrative Boundaries** and then on the Maritime Boundaries v7 from Featured Layers tool.

- a. The layer appears automatically in the table of contents and from them we can click on the legend to see the meaning of the colours and also use the navigation tools to better visualise.

Part 3 – The Information tool

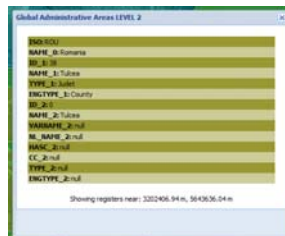
Using the Information tool on Layers

The information tool provides the data associated to the layer by clicking on the specific feature. It provides additional information to the legend.

1. Let's displayed the Natura 2000 layer from the Featured layer tool.
2. Now, using the Search place tool go to Delta del Ebro or to Danube delta or any other Natura Site.
3. Once zoom in, select in the Table of contents the layer from which we want information (in our case (Natura 2000 areas) and then click on the info tool to see the information related.
4. If selecting other layer the info tool will provide back the info related to the layer selected.

Exercise 1. Load the Global Administrative Boundaries Level 2 and NUTS 2010 and the Red Natura 2000.

- a. In the same area (Ebro, Danube or any other) click on the *info tool* and see the differences in the information provided by the tool in base of the layer.



- b. Now, load Ramsar layer (which is a point and polygon layer) by searching in the **Load layer tool**.

- i. **Go to the Adriatic coast** and click in any of the Ramasar sites to see the info related. **What are the differences in using the info tool?**

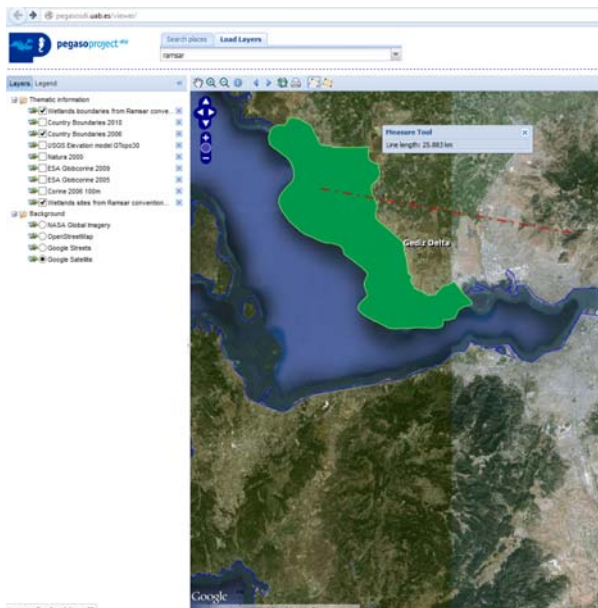




Using the Measure tool on Layers

The measure tool can be used in combination with other any tool but is desirable to use it in very specific areas.

Exercise 2. Zoom to Gediz Delta (Turkey)

- Using the search place tool to look for the place
- Using the info tool click on the Ramsar site and get the info related. This info is linked to external Ramsar database that could be visited (open in a new window).
- Play with transparency on Ramsar layers.



- Let's use the measure tool by measuring some parcels on Gediz Delta 
- To see how the measure distances tool works, first load the RWDB2 Ports and Harbours (using the load layer tool).
- Find the Izmir port and using the measure distance tool measure the distance between the Gediz Delta Ramsar site to Izmir harbour. 

Part 4- Indicators and cases

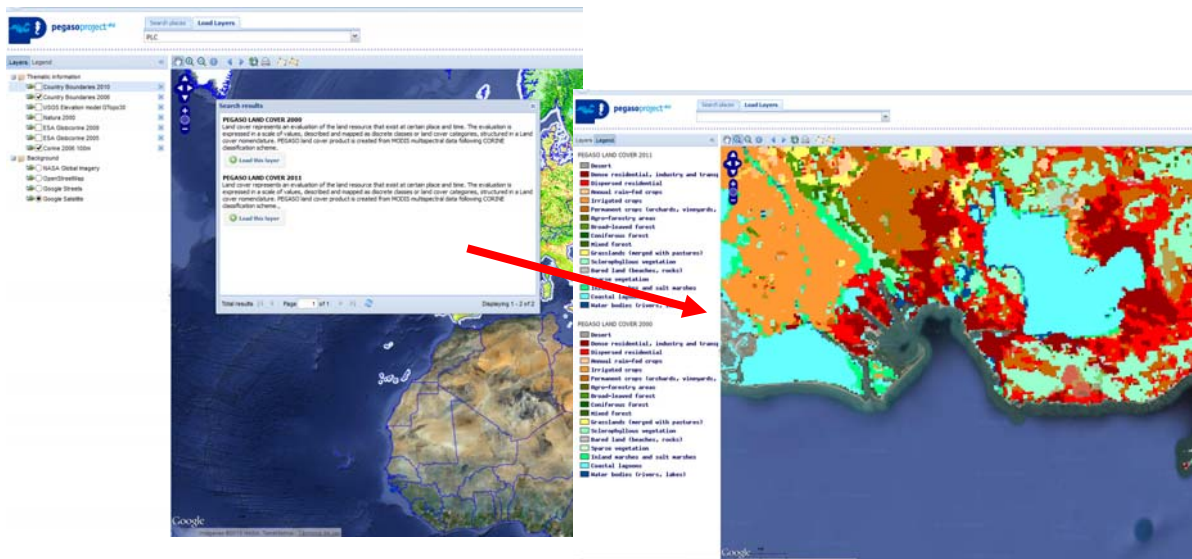
Loading some Pegaso results

From now we have seen some of the functionalities and tools that have been implemented in the SDI to consult and display spatial information such as land cover, Protected Sites, Administrative boundaries, etc. However, the added value of the SDI is its capacity to display Pegaso products in order to support management decisions and policy. In this sense, we are going to analyse spatially the results of the *build up* indicator at regional and local scale.

Exercise 1. LEAC build up indicator

Some results of LEAC methodology has been produced and transformed into services to be shown in the Pegaso viewer. These layers are password accessed until they will be finished.

1. Search the layers using the **Load layers tool** and by typing **PLC (Pegaso Land Cover)**.
2. You will need to write username and password to load both layers. PLC 2000 y PLC 2011.
- 3.



4. Let's zoom to the Bouches of Rhone to see the layers and the legend associated.
5. Using the transparency tool compare the changes in land uses in the coastal areas.
 - a. Disperse residential growth and coastal lagoons decrease areas...
 - b. We can compare this LEAC results with layers such as Natura 2000. Later on this layer could be compare with indicators' result at local scale.