Project Title:	ECOPOTENTIAL: IMPROVING FUTURE ECOSYSTEM BENEFITS THROUGH EARTH OBSERVATIONS
Project number:	641762
Project Acronym:	ECOPOTENTIAL
Proposal full title:	IMPROVING FUTURE ECOSYSTEM BENEFITS THROUGH EARTH OBSERVATIONS
Type:	Research and innovation actions
Work program topics addressed:	SC5-16-2014: "Making Earth Observation and Monitoring Data usable for ecosystem modelling and services"

Report on

Deliverable No: D10.2

ECOPOTENTIAL Virtual Laboratory

Due date of deliverable:	30 November 2016
Actual submission date:	15 December 2016
Version:	1.0
Main Authors:	Stefano Nativi (CNR), Paolo Mazzetti (CNR), Mattia Santoro (CNR)

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 641762

Project ref. number	**641762**
Project title	**ECOPOTENTIAL: IMPROVING FUTURE ECOSYSTEM BENEFITS THROUGH EARTH OBSERVATIONS**

Deliverable title	ECOPOTENTIAL Virtual Laboratory
Deliverable number	D10.2
Deliverable version	1.0
Contractual date of delivery	30 November 2016
Actual date of delivery	15 December 2016
Online access	http://ecovrp.geodab.eu/ecopotential-vrp/home/index-dev.html
Diffusion	Public
Nature of deliverable	Other
Workpackage	10
Partner responsible	P1-CNR
Author(s)	Stefano Nativi (CNR), Paolo Mazzetti (CNR), Mattia Santoro (CNR)
Editor	Carmela Marangi (CNR)
Approved by	
EC Project Officer	Gaëlle Le Bouler

Abstract	This document contains the link to the ECOPOTENTIAL Virtual Laboratory for the H2020 ECOPOTENTIAL project. The system architecture has been described in the project Deliverable “D10.1 Design of the ECOPOTENTIAL Virtual Laboratory”.

This project has received funding from the *European Union’s Horizon 2020 research and innovation programme* under grant agreement No 641762

Co-funded by the
European Union

Table of Contents

Co-funded by the European Union

1. Executive summary

The present document contains the link to the first prototype of the ECOPOTENTIAL Virtual Laboratory Platform (VLP).

The VLP is a service-based platform which serves as a virtual (i.e. online distributed) and open laboratory to study ecosystems and ecosystem services. It ensures the open and interoperable access to data and knowledge and it is fully integrated in GEOSS. The ECOPOTENTIAL Virtual Laboratory Platform is deployed and operated in a cloud based infrastructure and will constitute the main communication portal of ECOPOTENTIAL with the broader scientific and user community. The platform will contribute to the development of and access to a full set of Copernicus data and information services defined within the project context. The generated products will contribute to other relevant European and international programmes, including INSPIRE, ESFRI, the NSF Earth Cube initiative, the RDA (Research Data Alliance) Brokering IG, and the Belmont Forum.

The architecture of the GEO Ecosystem Virtual Laboratory, already described in the report “D10.1 Design of the ECOPOTENTIAL Virtual Laboratory”, is based on a set of principles currently shared in the scientific research communities, with particular reference to the GEO initiative, including GEOSS Data Sharing Principles, GEOSS Data Management Principles and GEOSS Architecture Principles. For greater flexibility, ECOPOTENTIAL adopts an agile methodology allowing rapid development in response to new requirements and it is continuously enriched by the tools, data and knowledge generated within the project.

According to the implementation plan presented in D10.1, the first prototype of the ECOPOTENTIAL VLP is a Metadata Platform providing metadata harmonization and data access from heterogeneous data sources. It actually includes a proof-of-concept of functionalities planned in future releases, such as the possibility to run ECOPOTENTIAL workflows on selected datasets.

Co-funded by the European Union

2. First release of the Virtual Laboratory Platform

The first release and prototype of the platform is available at the following link

http://ecovrp.geodab.eu/ecopotential-vrp/home/index-dev.html

The content of the platform will be continuously updated and an advanced version will be released at the beginning of 3rd year. The final release is planned during year 4.

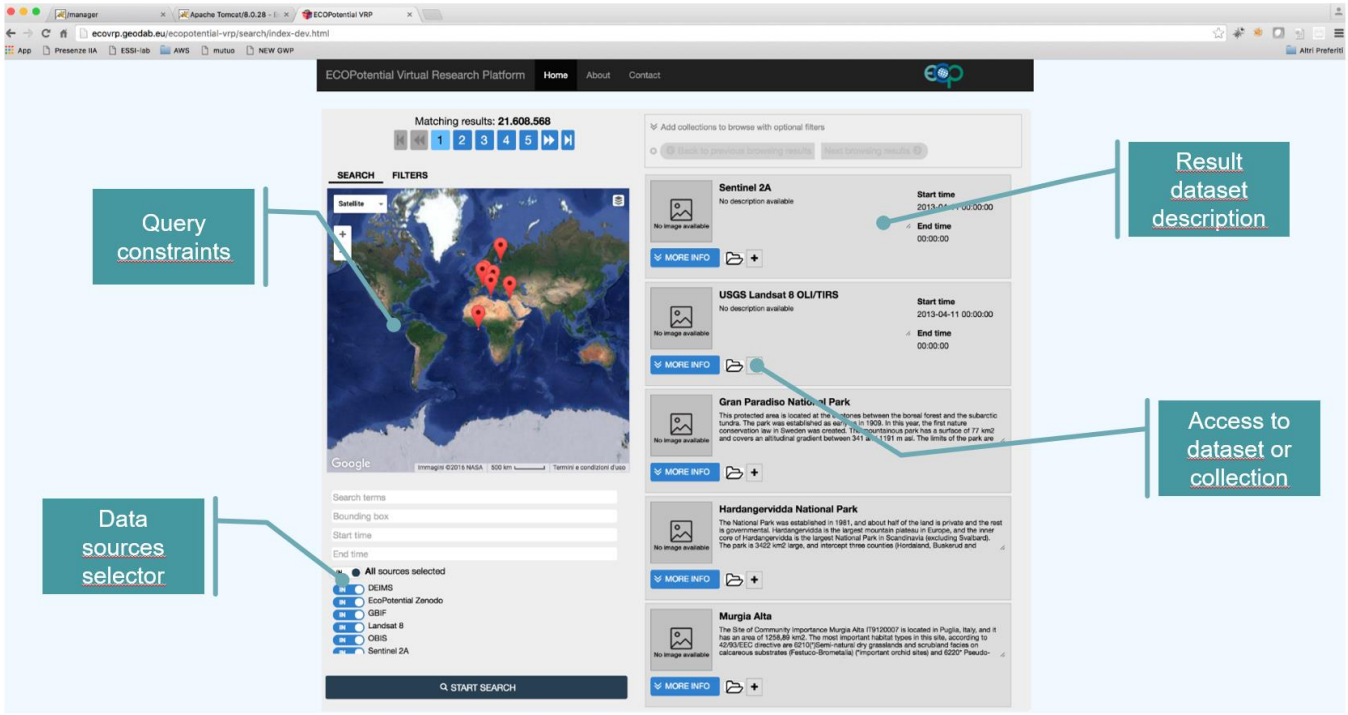

Figure 1 ECOPOTENTIAL Virtual Laboratory Platform: the Data Portal

Co-funded by the
European Union

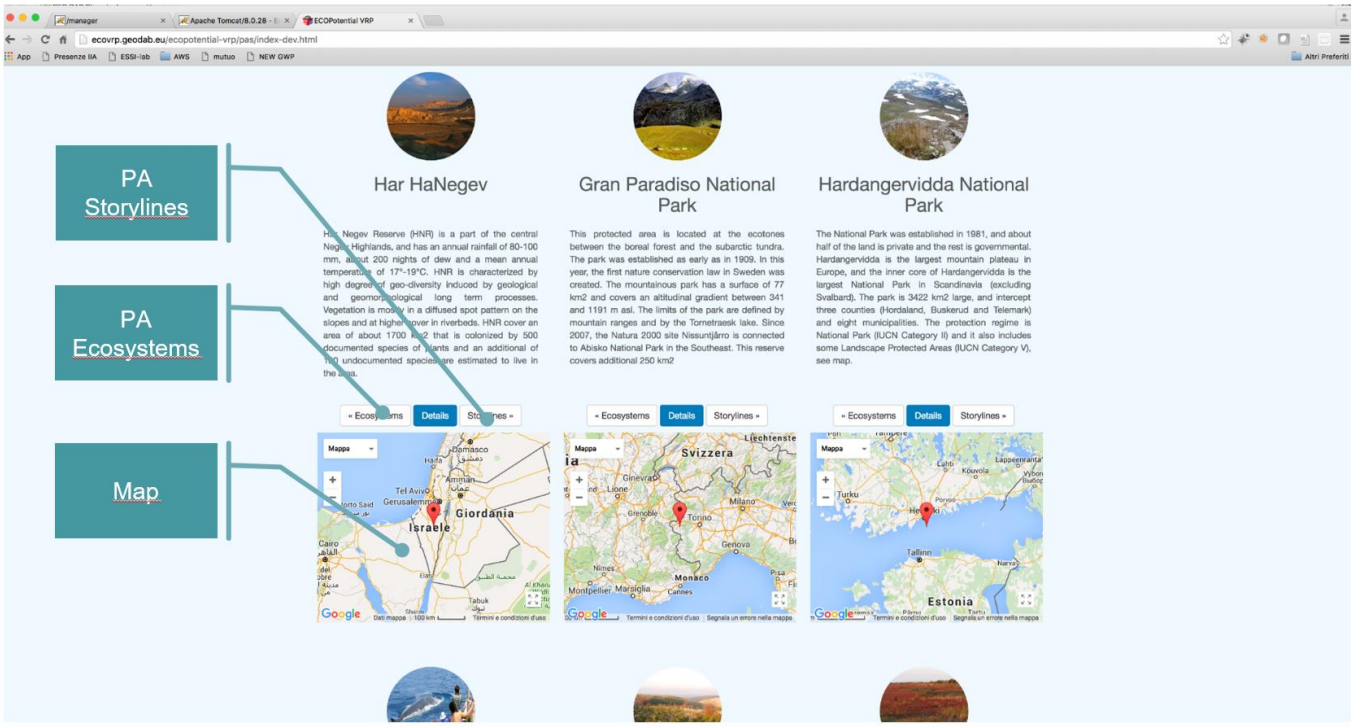

Figure 2 ECOPOTENTIAL Virtual Laboratory Platform: information on Protected Areas (PAs)

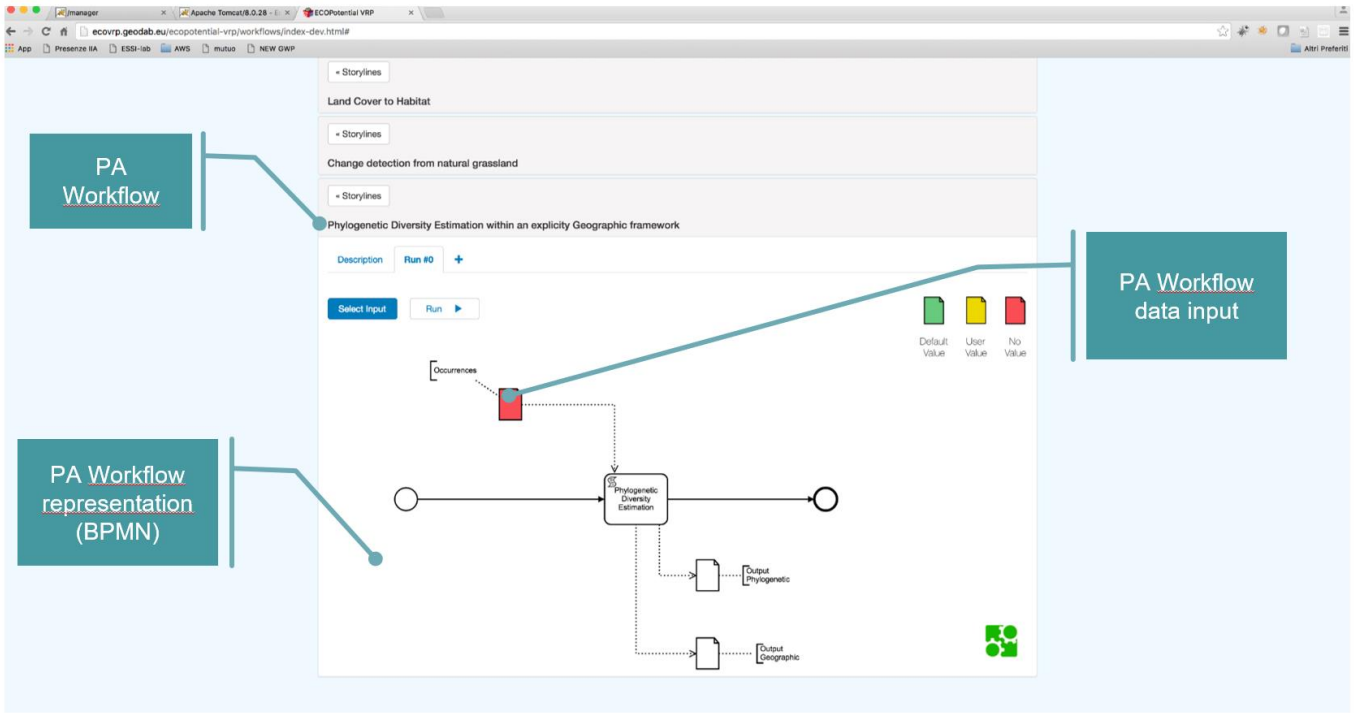

Figure 3 ECOPOTENTIAL Virtual Laboratory Platform: executing Workflows for PA Storylines