

Belmont Forum

E-INFRASTRUCTURES & DATA MANAGEMENT

Collaborative Research Action

ECOPotential

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Scoping Workshop

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ECO POTENTIAL DESCRIPTION

ECOPOTENTIAL is a large European-funded H2020 project that focuses its activities on a targeted set of internationally recognised Protected Areas, blending Earth Observations from remote sensing and field measurements, data analysis and modelling of current and future ecosystem conditions and services.

ECOPOTENTIAL considers cross-scale geosphere-biosphere interactions at regional to continental scales, addressing long-term and large-scale environmental and ecological challenges.

ECOPOTENTIAL focuses its activities and pilot actions on a targeted set of internationally recognised Protected Areas in Europe, European Territories and beyond. These Protected Areas include mountain, arid and semi-arid, and coastal and marine ecosystems



E-INFRASTRUCTURES & DATA MANAGEMENT

In ECOPotential, geospatial information is organized to be useful for the protected areas participating in the project.

High Resolution satellite data 10-30 meters

Sentinel 2, Landsat, SPOT

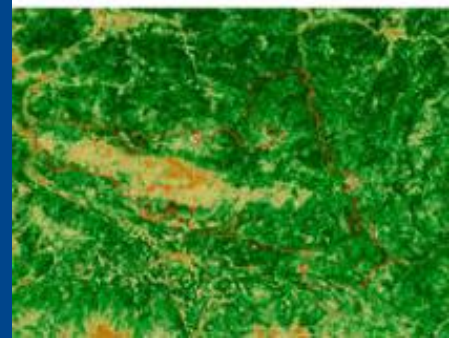
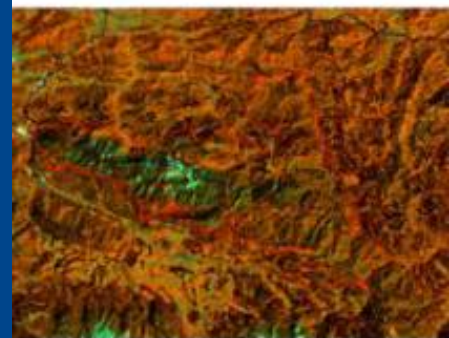
Downloading, geometrical and atmospheric correction

High level products are calculated and delivered

E.g Land cover, LAI, Biomass, Temperature...

Connection to Essential Biodiversity Variables and Modeling

Building a Virtual Laboratory: a data processing facility on top of a data repository (and data visualization)



E-INFRASTRUCTURE AND DATA MANAGEMENT ISSUES

Download Sentinel data is new (and has issues)

- Package of Sentinel makes difficult to extract an area.

Organizing the high level results in a data repository

Connecting with in-situ data is not easy

Very High Resolution satellite data is expensive

Metadata generation and data quality documentations is an issue.

Models for data processing are difficult to collect, describe and reuse. Processing facilities are heterogeneous.

Integrated in GEOSS

EXPECTATIONS FROM E-I&DM CALL

A easier to use infrastructure for getting High resolution satellite data that can be shared by all projects with the same needs.

A organization of the geospatial data (including in-situ) and processes that uses the EV concept (in particular the EBV)

A common language for describing models to transform data into higher level products and processing platform that can be shared

Current processing platforms are not easy to use (Terradue) or are not based on standard formats and languages (Google Earth engine).

