



ECOPOTENTIAL

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www.ecopotential-project.eu

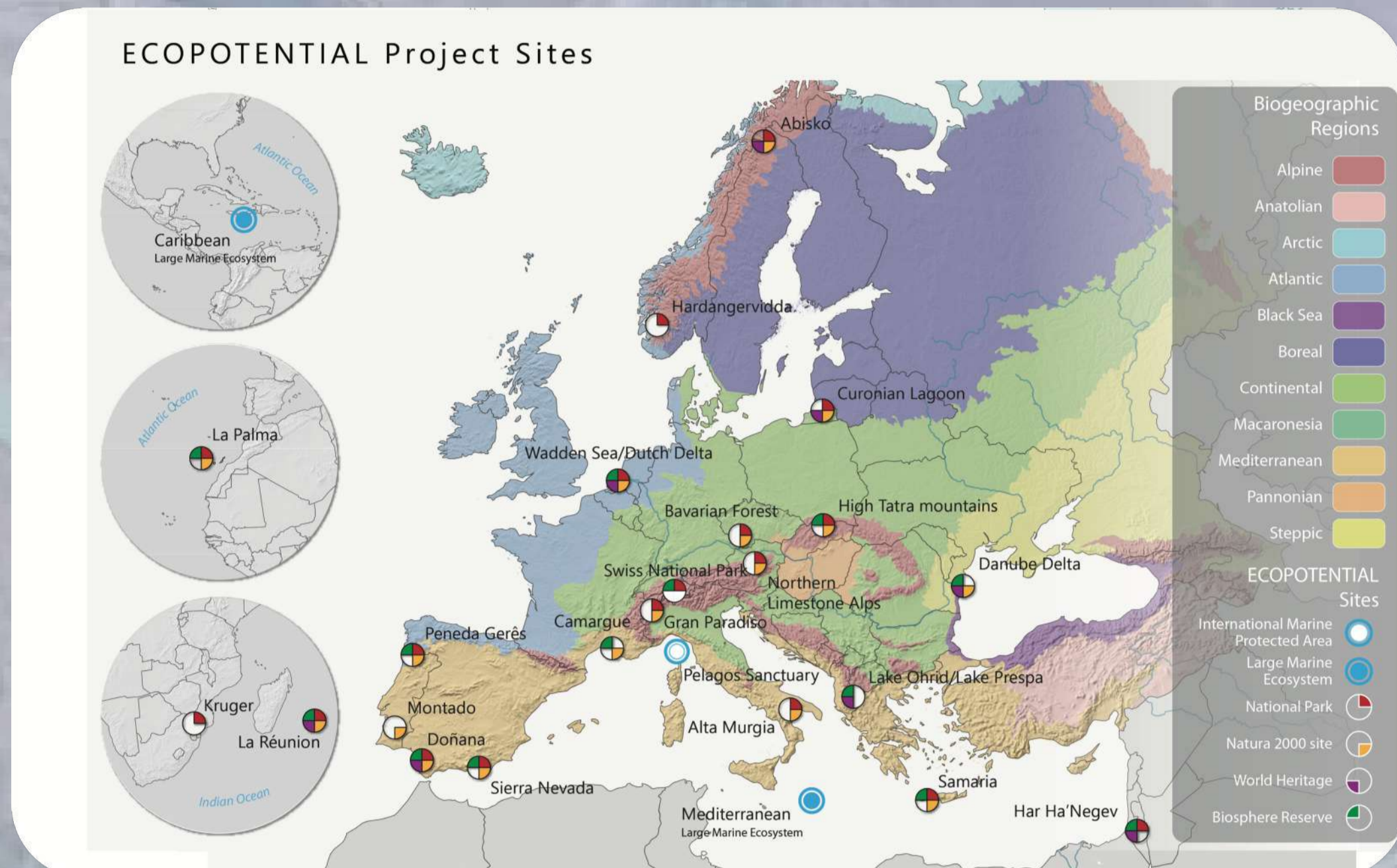


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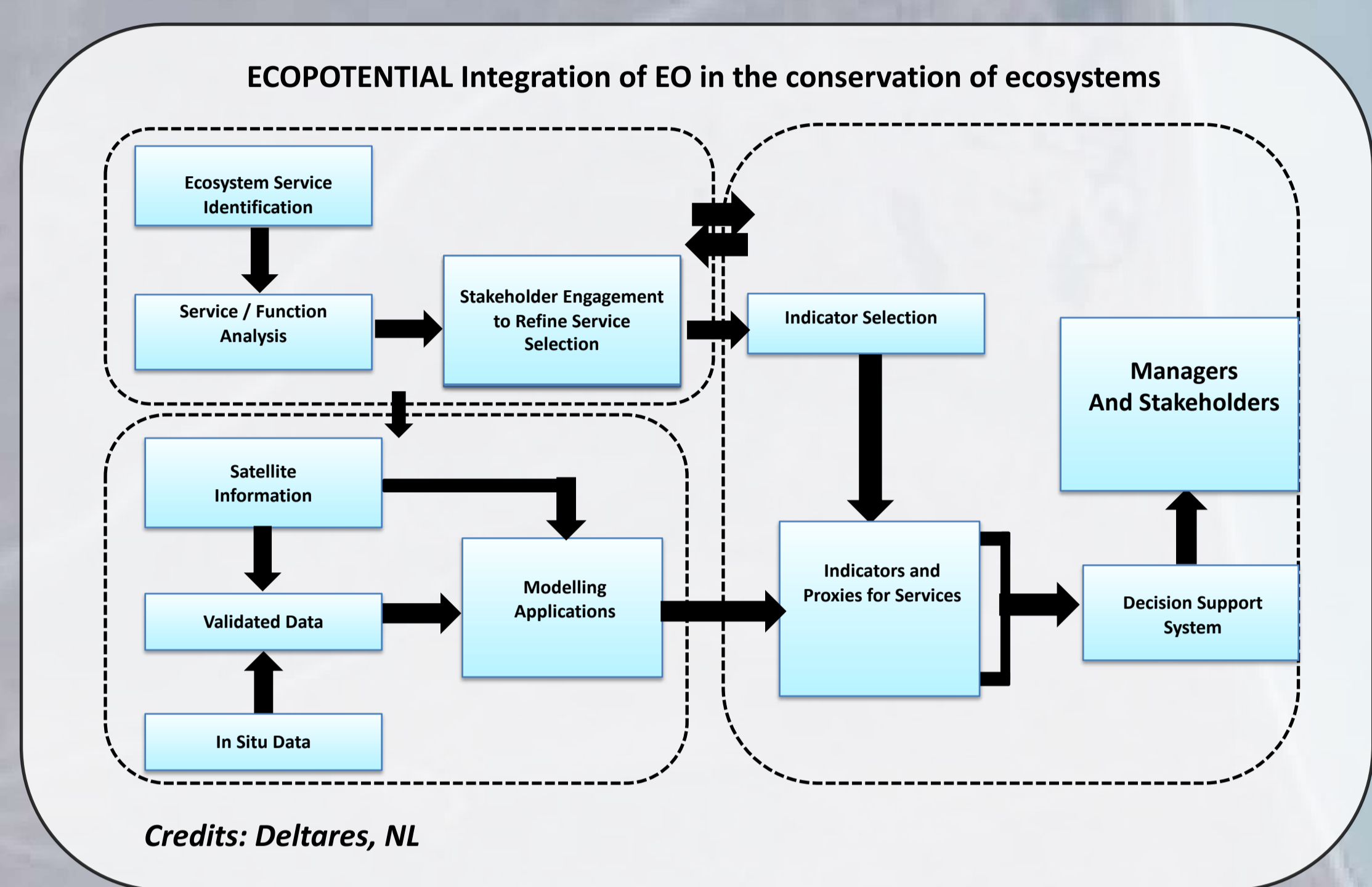
ECOPOTENTIAL: Using Earth Observation to Protect Natural Landscapes

@ECOPOTENTIALprj EcoPotentialProject www.Ecopotential-Project.eu

ECOPOTENTIAL improves the capability of monitoring and modelling ecosystems and ecosystem services. A targeted set of Protected Areas (PAs) act as open labs for building the knowledge base necessary to face the challenge of global change. A major asset of the ECOPOTENTIAL's approach is to enhance the capacity of predicting the state and temporal evolution of ecosystems through focussing on the integration of modelling techniques with EO data, both remote and in-field.



WHAT IS ECOPOTENTIAL?



The goal is to improve our knowledge on ecosystem functioning and complexity and to predict ecosystem changes in key PAs. ECOPOTENTIAL develops and applies a range of EO-data based conceptual, correlative and process-based models on mountains, arid and coastal/marine ecosystems and it prototypes online data services for ecosystem indicators and potential supply of ecosystem services using data-assimilation. Data, models and services are available on a Virtual Lab Platform.

INTEGRATING PROTECTED AREAS

ECOPOTENTIAL works on 25 protected areas covering all the European biogeographic regions, plus a few non-European ecosystems, over a broad range of habitats, ecosystems and landscapes, including wetlands, arid and mountain ecosystems.

Existing EO data (Copernicus, NASA, Euro-CORDEX, data provided by Protected Areas..) are used for processing EO products and maps and for monitoring and modelling ecosystem functions and services.

INTEGRATING DATA

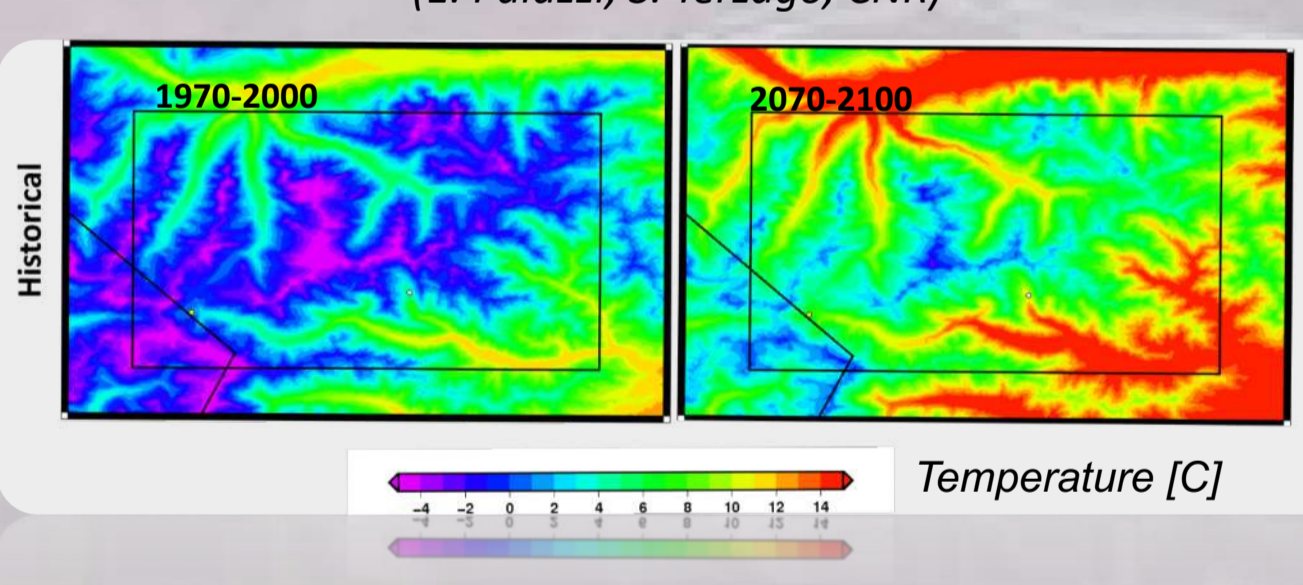


Produced datasets are available according to the FAIR principles of the EU INSPIRE directive: **DEIMS DATABASE:** <https://data.lter-europe.net/deims/> - **PA FROM SPACE:** <http://maps.ecopotential-project.eu/> - **ECOPOTENTIAL REPOSITORY** - <http://pumalab.isti.cnr.it/index.php/en/eu-h2020-project-ecopotential-en>

Surface air temperature in Gran Paradiso National Park (data downloaded from a Regional Climate Model) (E. Palazzi, S. Terzago, CNR)

INTEGRATING APPROACHES

The ecological challenges are approached using a variety of tools and models to assess current and future ecosystem conditions, addressing long-term and large-scale ecological challenges and providing concrete products for improving Protected Areas management. **Future Climate projections and past and future changes in PAs are estimated.**



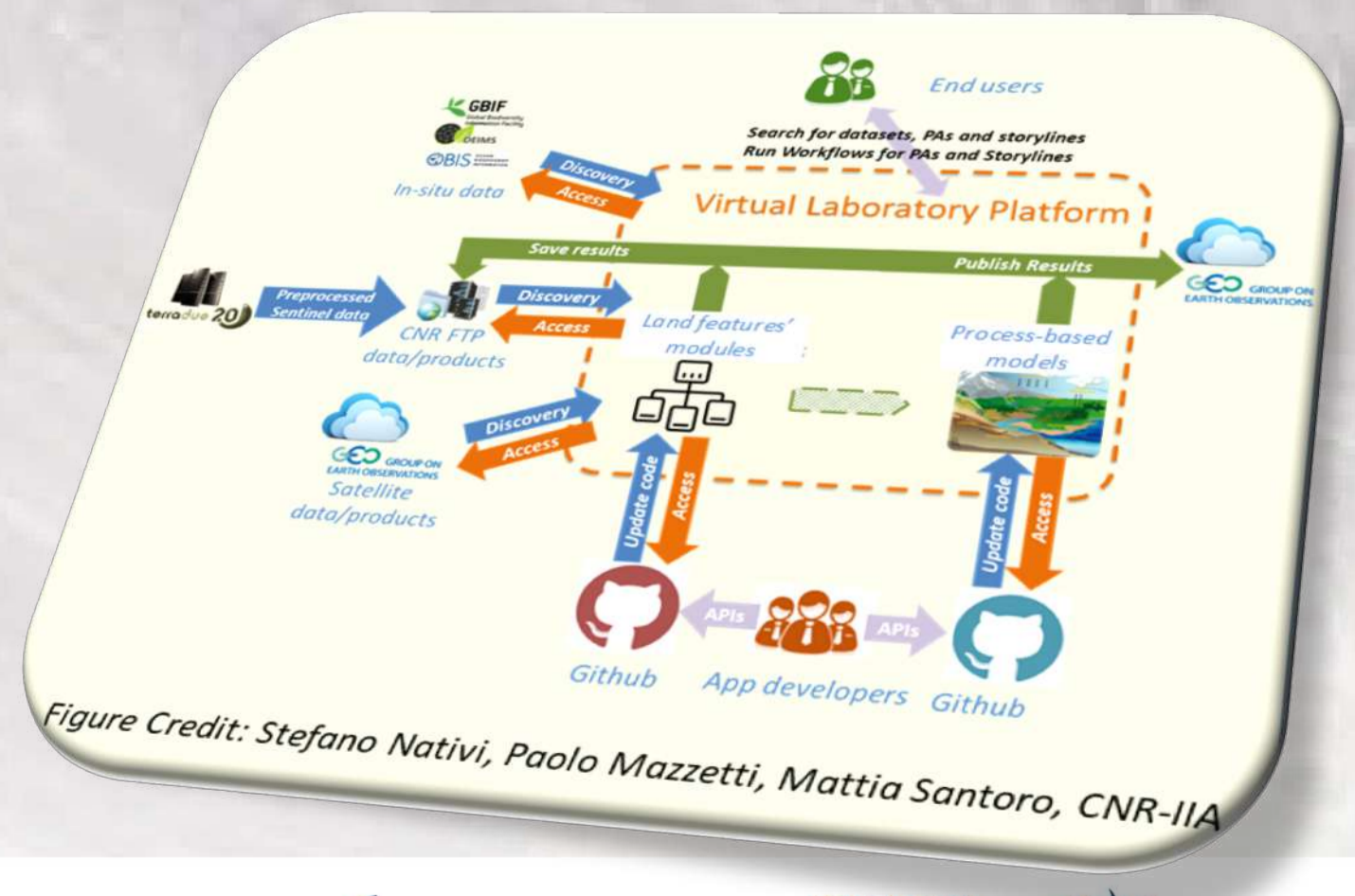
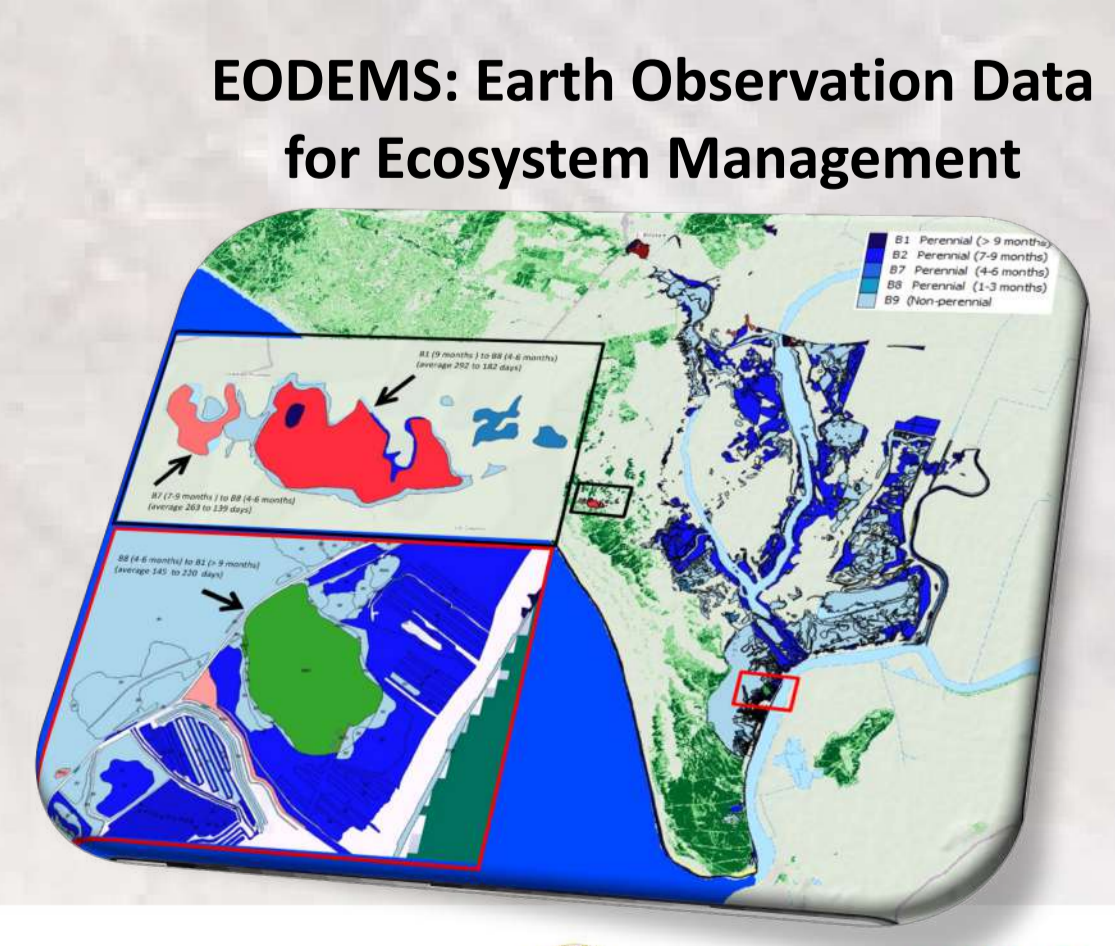
ECOPOTENTIAL works with Protected Areas for defining current and future challenges and needs, and up-scales its results to broader scales. Science-policy interfaces will transfer scientific and technological knowledge into citizen information and policy strategies, improving management and conservation.

INTEGRATING VIEWS



INTEGRATING PROGRAMMES AND INITIATIVES

ECOPOTENTIAL is creating a Community of Practice of data producers and users, working together with other international projects and initiatives and contributing to GEO initiatives as GEO ECO, GEO GNOME, EUROGEOS. **ECOPOTENTIAL is building a Virtual Laboratory platform interoperable with the GEO Common Infrastructure, where data, results, models, tools will be available.**



The ECOPOTENTIAL Virtual Laboratory will make available data, products, modules, models, tools. Interoperable with GEO GCI

