



Eiffel

GEOS APPLICATIONS
FOR CLIMATE CHANGE

the little book of big facts

Revealing the role of GEOSS as the default digital portal for building climate change adaptation & mitigation applications

EIFFEL is a game changer in the domain of climate change adaptation and mitigation by harvesting the benefits of the GEOSS data.

The project will offer to the Earth Observation community the ground-breaking capacity of exploiting existing GEOSS datasets and will also build upon prior knowledge, with minimal new data collection activities. Added-value services interoperable with GEOSS will be designed, using cognitive search and metadata augmentation tools based on Artificial Intelligence, including Natural Language Processing. These tools will leverage advanced cognitive features to extract meaningful information from and enrich GEOSS metadata.



Our Expertise

The project will promote the development and uptake of 5 pilot applications from different geographic areas and climate regions, addressing the UN Sustainable Development Goals, the Paris Agreement and the Sendai Framework for Disaster Risk Reduction and aligned with GEO Societal Benefit Areas:

- > Water and Land Use Management
- > Sustainable Agriculture
- > Transport Management
- > Sustainable Urban Development
- > Disaster Resilience



Our Goals

- > **Exploit** the untapped potential of available GEOSS datasets, i.e. satellite, in-situ, modelling, crowd-sourced, by creating AI-based cognitive search tools;
- > **Leverage** techniques of Explainable AI to develop tangible indicators for Climate Change impacts;
- > **Contribute** to GEO's new infrastructural feature, the GEO Knowledge Hub, a digital repository providing access to knowledge needed to build GEOSS-driven applications;
- > **Foster** the co-design of Climate Change adaptation and mitigation applications by bringing onboard the decision makers who are working towards the Paris Agreement goals at local, regional and national scales;
- > **Develop** using co-creation, a set of Climate Change adaptation and mitigation applications in different and quite diverse GEO Societal Benefit Areas, in order to demonstrate the project innovations.

Behind the project

>19 partners

>8 European countries



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IHE
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Open Universiteit

Provincie Noord-Brabant

LIBRA
AI Technologies



Ports de Balears

Autoritat Portuària de Balears





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Topic → LC-CLA-19-2020-Building a low-carbon, climate resilient future:
climate action in support of the Paris Agreement

Coordinator → Institute of Communications & Computer Systems (ICCS)

EU Project Officer → Izabela Freytag



-  @eiffel4climate
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