NextGEOSS Biodiversity Pilot 6.2.1: Generating Remote Sensing-enabled Essential Biodiversity Variables using high-resolution data

What are EBVs?

Essential Biodiversity Variables (EBVs) have been proposed by GEO BON as a layer between biodiversity observation and biodiversity indicators used in the policy formulation. However, the biodiversity community still lacks a global observing system that revolves around the monitoring of a set of agreed variables essential to the tracking of changes in biological diversity on Earth. Therefore, there is an urgent need for remote-sensing for EBVs to fill the spatial and temporal gaps between in situ observation data of biodiversity.

In NextGEOSS Biodiversity Pilot WP 6.2.1, we focus on:

Generating RS-enabled EBVs using high-resolution satellite data (Sentinel-2).

From the RS-enabled EBVs, which were initially proposed to be derived from high-resolution satellite data, leaf area index (LAI) was selected as one of the most important vegetation biophysical parameters as well as the EBVs.

The Terradue cloud platform was used for the implementation of the data processing algorithm, and the product was deposited at ITC server (Faculty of Geo-Information Science and Earth Observation, University of Twente, the Netherlands). The product is available in Geo TIFF format and will be removed from the server after 48h.

References
