

Medium Resolution Vegetation Phenology and Productivity: Plant phenology index (raster 500m), Oct. 2022

This metadata refers to the Plant Phenology Index (PPI) dataset, one of the near real-time (NRT) Vegetation Index products of the pan-European Medium Resolution Vegetation Phenology and Productivity (MR-VPP), component of the Copernicus Land Monitoring Service (CLMS).

The Plant Phenology Index (PPI) is a physically based vegetation index for improved monitoring of plant phenology, that is developed from a simplified solution to the radiative transfer equation by Jin and Eklundh (2014). PPI has a linear relationship with green leaf area index, a strong correlation with gross primary productivity, and is capable of disentangling remotely sensed plant phenology from snow seasonality. It is reported to be superior to other indices for spring phenology retrieval over the northern latitudes and for GPP estimation in African semi-arid ecosystems. Comparison of satellite-derived PPI to ground observations of plant phenology and gross primary productivity (GPP) shows strong similarity of temporal patterns over several Nordic boreal forest sites. Further information is available in the Product User Manual: https://land.copernicus.eu/user-corner/technical-library/clms_mrvpp_pum_d1-0.pdf

The PPI time series dataset is made available as raster files with 500 x 500m resolution, in ETRS89-LAEA projection corresponding to the MCD43 tiling grid, for those tiles that cover the EEA38 countries and the United Kingdom and for the period from January 2000 until today.

The full on-line access to open and free data for this resource will be made available in the second half of 2024. Until then the data will be made available 'on-demand' by filling in the form at: <https://land.copernicus.eu/contact-form>

Simple

Date (Creation)	2022-06-08			
Date (Publication)	2022-10-10			
Edition	01.00			
Citation identifier	copernicus_r_3035_500_m_mrvpp-ppi_p_2000-now_v01_r00			
Point of contact	Organisation name	Individual name	Electronic mail address	Website Role
	European Environment Agency		copernicus@eea.europa.eu	https://land.copernicus.eu Distributor
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Point of contact

No information provided.

Maintenance and update frequency	Annually
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> Habitats and biotopes Orthoimagery Environmental monitoring facilities
Keywords	
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> EEA38 (from 2020) United Kingdom
Keywords	

GEMET	<ul style="list-style-type: none"> • plant ecology • plant production • productivity • land • remote sensing • index • vegetation
Spatial scope	<ul style="list-style-type: none"> • European
Temporal resolution	<ul style="list-style-type: none"> • Annually
EEA topics	<ul style="list-style-type: none"> • Agriculture and food • Land use • Forests and forestry
Access constraints	Other restrictions
Other constraints	no limitations to public access
Use constraints	Other restrictions
Other constraints	<p>Access to data is based on a principle of full, open and free access as established by the Copernicus data and information policy Regulation (EU) No 1159/2013 of 12 July 2013. This regulation establishes registration and licensing conditions for GMES/Copernicus users.</p> <p>Free, full and open access to this data set is made on the conditions that:</p> <ol style="list-style-type: none"> 1. When distributing or communicating Copernicus dedicated data and Copernicus service information to the public, users shall inform the public of the source of that data and information. 2. Users shall make sure not to convey the impression to the public that the user's activities are officially endorsed by the Union. 3. Where that data or information has been adapted or modified, the user shall clearly state this. 4. The data remain the sole property of the European Union. Any information and data produced in the framework of the action shall be the sole property of the European Union. Any communication and publication by the beneficiary shall acknowledge that the data were produced "with funding by the European Union".
Spatial representation type	Grid
Distance	500 500 m
Language of dataset	English
Character set	UTF8
Topic category	<ul style="list-style-type: none"> • Environment • Imagery base maps earth cover • Climatology, meteorology, atmosphere

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Begin date	2000-01-01		
Coordinate reference system identifier	EPSG:3035		
Distribution format	<ul style="list-style-type: none"> • GeoTIFF () 		
OnLine resource	Protocol	Linkage	Name
	WWW:LINK-1.0-http--link	https://land.copernicus.eu/user-corner/technical-library/clms_mrvpp_pum_d1-0.pdf	User manual
Hierarchy level	Dataset		

Conformance result

Date (Publication)	2010-12-08
Explanation	See the referenced specification
Statement	<p>Vegetation Phenology and Productivity parameters (VPP) are based on Plant Phenology Index (PPI) seasonal trajectories and are yearly produced for two seasons using the Timesat software. The Plant Phenology Index (PPI) is a physically based vegetation index for improved monitoring of plant phenology, that is developed from a simplified solution to the radiative transfer equation by Jin and Eklundh (2014). PPI has a linear relationship with green leaf area index, a strong correlation with gross primary productivity, and is capable of disentangling remotely sensed plant phenology from snow seasonality. It is reported to be superior to other indices for spring phenology retrieval over the northern latitudes and for GPP estimation in African semi-arid ecosystems.</p>

Metadata

File identifier	de0bc1e4-5b32-44fa-9690-1eb9e64aff9d XML
Metadata language	English
Character set	UTF8
Hierarchy level	Dataset
Date stamp	2024-04-02T13:53:38.221022Z
Metadata standard name	ISO 19115/19139
Metadata standard version	1.0
Metadata author	Electronic

Organisation name

Individual name

mail
address

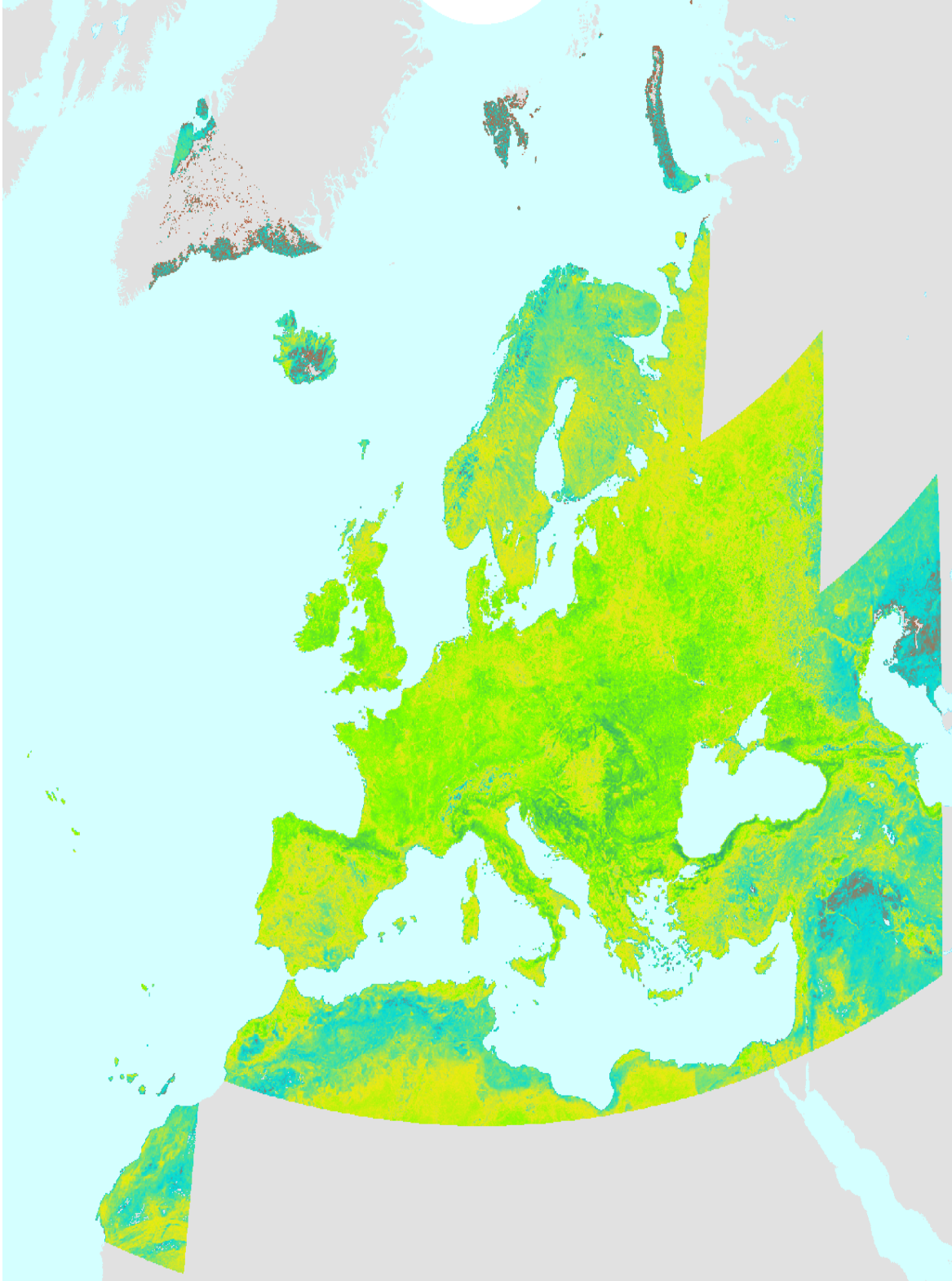
Website Role

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Point
of
contact

Overviews



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