

Medium Resolution Vegetation Phenology and Productivity: Season length (raster 500m), Oct. 2022

The raster file is the temporal trend in the length of the vegetation growing season. The length of growing season data set is based on the time series of the Plant Phenology Index (PPI) derived from the MODIS BRDF-Adjusted Reflectance product (MODIS MCD43 NBAR). The PPI index is optimized for efficient monitoring of vegetation phenology and is derived from the source MODIS data using radiative transfer solutions applied to the reflectance in visible-red and near infrared spectral domains. The season length indicator is based on calculating the start and end of the growing season from the annual PPI temporal curve using the TIMESAT software for each year between and including 2000 and 2021.

The Season Length (LENGTH), one of the Vegetation Phenology and Productivity (VPP) parameters, is a product of the pan-European High Resolution Vegetation Phenology and Productivity (HR-VPP) component of the Copernicus Land Monitoring Service (CLMS).

The Season Length is the number of days between the start and end dates of the vegetation growing season in the time profile of the Plant Phenology Index (PPI).

The Plant Phenology Index (PPI) is a physically based vegetation index, developed for improving the monitoring of the vegetation growth cycle. The PPI index values, with 5-day satellite revisit cycle, are first used in a function fitting to derive the PPI Seasonal Trajectories. From these Seasonal Trajectories, a suite of 13 Vegetation Phenology and Productivity (VPP) parameters are then computed and provided, for up to two seasons each year. The Season Length is one of the 13 parameters. The full list is available in the Product User Manual: https://land.copernicus.eu/user-corner/technical-library/clms_mrpp_pum_d1-0.pdf

The Season Length time series dataset is made available as raster files with 500x 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 two seasons in each year from 2000 onwards. It is updated in the first quarter of each year.

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

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	European Environment Agency		copernicus@eea.europa.eu https://land.copernicus.eu Distributor
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No information provided.

Maintenance and update frequency	Annually
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> Environmental monitoring facilities Habitats and biotopes Orthoimagery
Keywords	
Keywords	

GEMET	<ul style="list-style-type: none"> • vegetation • plant ecology • remote sensing • plant production • productivity • index • land
Spatial scope	<ul style="list-style-type: none"> • European
Temporal resolution	<ul style="list-style-type: none"> • Annually
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> • EEA38 (from 2020) • United Kingdom
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".
Aggregate DatasetIdentifier	copernicus_r_utm-wgs84_10_m_hrvpp-vi-qflag2_p_2017-ongoing_v01_r01
Association Type	Cross reference
Aggregate DatasetIdentifier	copernicus_r_utm-wgs84_10_m_hrvpp-vi-ndvi_p_2017-ongoing_v01_r01
Association Type	Cross reference
Aggregate DatasetIdentifier	copernicus_r_utm-wgs84_10_m_hrvpp-vi-fapar_p_2017-ongoing_v01_r01
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Aggregate DatasetIdentifier	copernicus_r_utm-wgs84_10_m_hrvpp-vi-lai_p_2017-ongoing_v01_r01
Association Type	Cross reference
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 (1.0) 		
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		

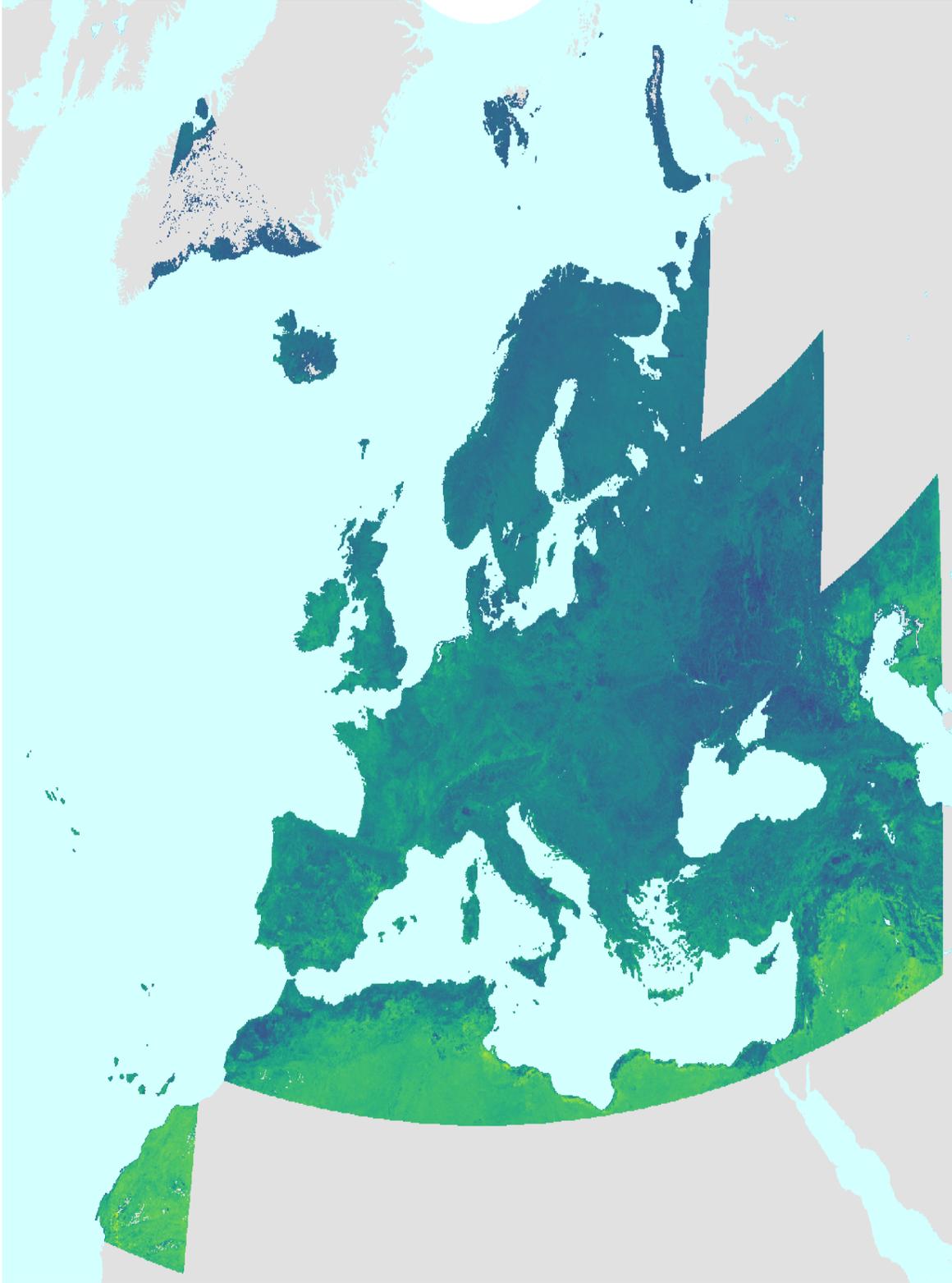
Conformance result

Date (Publication)	2010-12-08
Explanation	See the referenced specification
Statement	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. One of the parameters is the the number of days between the start and end dates of the vegetation growing season (season length - LENGTH). The related start and end dates and the PPI values for those dates are available as well.

Metadata

File identifier	14c9a652-cf8e-45cb-89fd-5bc5a2bd1d5d XML				
Metadata language	English				
Character set	UTF8				
Hierarchy level	Dataset				
Date stamp	2024-04-02T13:54:32.650307Z				
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Metadata author	<table border="0"> <tr> <td>Organisation name</td> <td>Individual name</td> <td>Electronic mail address</td> <td>Website Role</td> </tr> </table>	Organisation name	Individual name	Electronic mail address	Website Role
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Overviews



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