

# Medium Resolution Vegetation Phenology and Productivity: Rate of decrease at the end of the season (raster 500m), Oct. 2022

The decrease rate, one of the Vegetation Phenology and Productivity (VPP) parameters, is a product of the pan-European Medium Resolution Vegetation Phenology and Productivity (MR-VPP) component of the Copernicus Land Monitoring Service (CLMS).

The decrease rate at the end of the season (decrease rate) expresses the rate of change in the values of the Plant Phenology Index (PPI) at the day when the vegetation growing season ends. It is calculated as the absolute value of the ratio of the difference between the right 20 % and 80% levels and the corresponding time difference.

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 decrease rate at the end of the season (decrease rate) is one of the 13 parameters. The full list is available in the Product User Manual: <a href="https://land.copemicus.eu/user-corner/technical-library/clms\_mrypp\_pum\_d1-0.pdf">https://land.copemicus.eu/user-corner/technical-library/clms\_mrypp\_pum\_d1-0.pdf</a>

The decrease rate at the end of the season (decrease rate) 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: <a href="https://land.copernicus.eu/contact-form">https://land.copernicus.eu/contact-form</a>

### Simple

Date (Creation)	2022-06-08				
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Point of contact	Organisation name	Individual name	Electronic mail address	Website	Role
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#### Point of contact

No information provided.

Maintenance and update frequency	Annually
GEMET - INSPIRE themes, version 1.0	Habitats and biotopes     Environmental monitoring facilities     Orthoimagery
Keywords	
Continents, countries, sea regions of the world.	EEA38 (from 2020)     United Kingdom

Keywords	
GEMET	remote sensing
	• plant ecology
	plant production
	• index
	• productivity
	vegetation
	• land
Spatial scope	European
Temporal resolution	Annually
	Agriculture and food
EEA topics	Land use
	Forests and forestry
Access constraints	Other restrictions
Other constraints	no limitations to public access
Use constraints	Other restrictions
Other constraints	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.
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Spatial representation type	Grid
Distance	500 m
Language of dataset	English
Character set	UTF8
Topic category	Environment     Imagery base maps earth cover     Climatology, meteorology, atmosphere

N S E W



Begin date	2000-01-01		
Coordinate reference system identifier	EPSG:3035		
Distribution format	• GeoTIFF()		
OnLine resource	Protocol WWW:LINK-1.0-httplink	Linkage https://land.copernicus.eu/user-corner/technical-library /clms_mrvpp_pum_d1-0.pdf	Name 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

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 decrease rate at the end of the season (decrease rate) expressing the rate of change in the values of the Plant Phenology Index (PPI) at the day when the vegetation growing season ends. It is calculated as the absolute value of the ratio of the difference between the right 20 % and 80% levels and the corresponding time difference.

#### Metadata

File identifier	5b30f8ee-f5e3-4890-894a-eaff8497e2bd XML			
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Hierarchy level	Dataset			
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Metadata standard name	ISO 19115/19139			
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## Overviews



