EEA geospatial data catalogue

Slope of the Green-down Period 2017-present (raster 10 m), Europe, yearly, Sept. 2021

The slope of the green-down or senescent period (Right Slope, RSLOPE), 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 slope of the green-down or senescent period (RSLOPE) expresses the rate of change in the values of the Plant Phenology Index (PPI) at the day when the vegetation growing season ends.

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, which is a filtered time series with regular 10-day time step. 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 green-down period slope is one of the 13 parameters. The full list is available in the table 3 of the Product User Manual https://land.copernicus.eu/en/technical-library/product-user-manual-of-seasonal-trajectories/@@download/file

A complementary quality indicator (QFLAG) provides a confidence level, that is described in table 4 of the same manual.

The RSLOPE dataset is made available as raster files with 10 x 10m resolution, in UTM/WGS84 projection corresponding to the Sentinel-2 tiling grid, for those tiles that cover the EEA38 countries and the United Kingdom and for two seasons in each year from 2017 onwards. It is updated in the first quarter of each year.

Simple

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Code	10.2909/a04554dd-74be-4ce7-8dfc-5effca405eaa

Point of contact

No information provided.

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No information provided.

Maintenance and update frequency	Annually
GEMET - INSPIRE themes, version 1.0	• Environmental monitoring facilities • Habitats and biotopes • Orthoimagery
Keywords	
Keywords	
GEMET	• plant ecology • index • vegetation • land • productivity • remote sensing • plant production

Spatial scope	• European
Temporal resolution	• Annually
Continents, countries, sea regions of the world.	• EEA38 (from 2020) • United Kingdom
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. Free, full and open access to this data set is made on the conditions that: 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 Datasetindentifier	copernicus_r_utm-wgs84_10_m_hrvpp-vi-qflag2_p_2017-ongoing_v01_r01
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Aggregate Datasetindentifier	copernicus_r_utm-wgs84_10_m_hrvpp-vi-lai_p_2017-ongoing_v01_r01
Association Type	Cross reference
Spatial representation type	Grid
Distance	10 m
Language of dataset	English
Character set	UTF8
Topic category	• Environment • Imagery base maps earth cover • Climatology, meteorology, atmosphere

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Begin date	2017-01-01
Coordinate reference system identifier	EPSG:32625
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OnLine resource	Protocol	Linkage	Name
	DOI	https://doi.org/10.2909/a04554dd-74be-4ce7-8dfc-5effca405eaa	

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 slope of the green-down period (Right Slope - RSLOPE), that expresses the slope or rate of change in the PPI vegetation index values at the day when the season ends. The date and PPI value for the season end are available as well. The latest validation results are described in the validation report at https://land.copernicus.eu/en/technical-library/validation-report-of-seasonal-trajectories-vpp-parameters/@@download/file .
Source	• High Resolution Vegetation Phenology and Productivity: PPI Seasonal Trajectories (raster 10m) version 1 revision 1, Sep. 2021

Metadata

File identifier	a04554dd-74be-4ce7-8dfc-5effca405eaa XML
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Hierarchy level	Dataset
Date stamp	2024-02-06T16:45:51.363Z
Metadata standard name	ISO 19115/19139
Metadata standard version	1.0

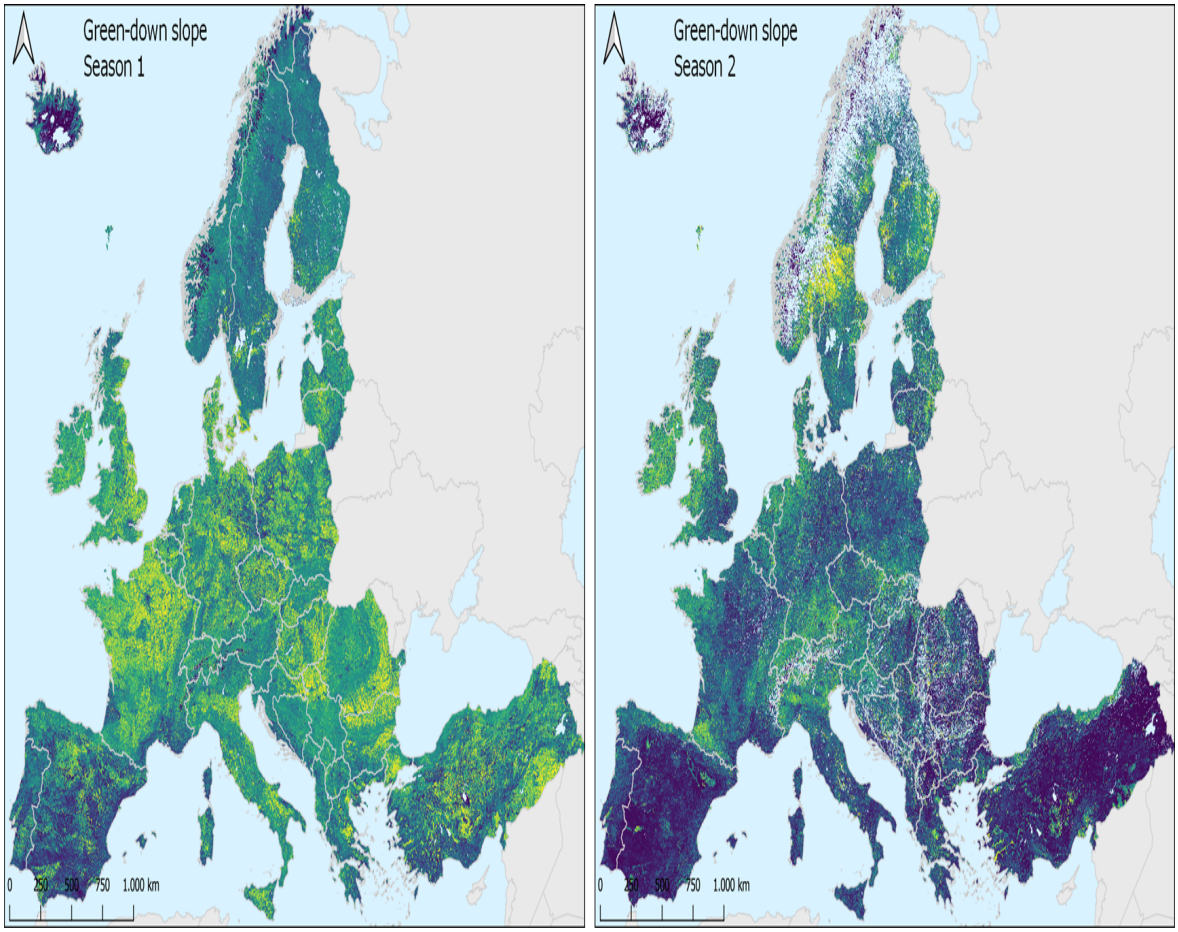
Metadata author	Organisation name	Individual name	Electronic mail address	Website	Role
					Point

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Overviews



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