

High Resolution Vegetation Phenology and Productivity: Plant Phenology Index (raster 10m) version 1 revision 1, Sep. 2021

This metadata refers to the Plant Phenology Index (PPI) dataset, one of the near real-time (NRT) Vegetation Index products of the pan-European High Resolution Vegetation Phenology and Productivity (HR-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.

The PPI 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 the period from October 2016 until today, with daily updates.

Each file has an associated quality indicator (QFLAG2) to assist users with the screening of clouds, shadows from clouds and topography, snow and water surfaces.

Simple

Date (Publication)	2021-09-02		
Date (Creation)	2021-09-02		
Edition	01.01		
Citation identifier	copernicus_r_utm-wgs84_10_m_hrvpp-vi-ppi_p_2016-now_v01_r01		
Point of contact	Organisation name	Individual name	Electronic mail address Website Role
	European Environment Agency		copernicus@eea.europa.eu https://land.copernicus.eu Distributor
	European Environment Agency		copernicus@eea.europa.eu https://land.copernicus.eu Custodian
	European Environment Agency		copernicus@eea.europa.eu https://land.copernicus.eu Point of contact

Point of contact

No information provided.

Maintenance and update frequency	Continual
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> Land cover Orthoimagery
Keywords	
Keywords	
GEMET	<ul style="list-style-type: none"> productivity index

	<ul style="list-style-type: none"> • remote sensing • land • vegetation • plant ecology • plant production
Spatial scope	<ul style="list-style-type: none"> • European
Temporal resolution	<ul style="list-style-type: none"> • Daily
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> • United Kingdom • EEA38 (from 2020)
EEA topics	<ul style="list-style-type: none"> • Biodiversity • Land use • Agriculture and food
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
Association Type	Cross reference
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	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	2016-10-01																
CRS identifier	EPSG:32625																
CRS identifier	EPSG:32626																
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Distribution format	<ul style="list-style-type: none"> • GeoTIFF (1.0) 																
OnLine resource	<table border="0"> <tr> <td>Protocol</td> <td>Linkage</td> </tr> <tr> <td>WWW:</td> <td>https://www.wekeo.eu/data?view=viewer&t=1566840390697&z=0&center=13.08408%2C48.33915&zoom=12.34&layers=W3siaWQiOiJjMilsInJlcGxhY2VfZlZlW50Q29sb3JNYXBjZC16bnVsbCwibGF5ZlZlZC16ikVPOkVFQTPeFQVQ6Q0</td> </tr> <tr> <td>LINK-1.0-http-link</td> <td></td> </tr> <tr> <td>OGC:WMTS</td> <td>https://phenology.vgt.vito.be/wmts?request=GetCapabilities</td> </tr> <tr> <td>WWW:</td> <td>https://land.copernicus.eu/en/technical-library/hr-vpp-data-access-manual/@_@download/file</td> </tr> <tr> <td>LINK-1.0-http-link</td> <td></td> </tr> <tr> <td>OGC:</td> <td>https://phenology.vgt.vito.be/description?collection=copernicus_r_utm-wgs84_10_m_hrvpp-vi_p_2017-now_v01</td> </tr> <tr> <td>OpenSearch</td> <td>https://land.copernicus.eu/en/products/vegetation/high-resolution-plant-phenology-index</td> </tr> </table>	Protocol	Linkage	WWW:	https://www.wekeo.eu/data?view=viewer&t=1566840390697&z=0&center=13.08408%2C48.33915&zoom=12.34&layers=W3siaWQiOiJjMilsInJlcGxhY2VfZlZlW50Q29sb3JNYXBjZC16bnVsbCwibGF5ZlZlZC16ikVPOkVFQTPeFQVQ6Q0	LINK-1.0-http-link		OGC:WMTS	https://phenology.vgt.vito.be/wmts?request=GetCapabilities	WWW:	https://land.copernicus.eu/en/technical-library/hr-vpp-data-access-manual/@_@download/file	LINK-1.0-http-link		OGC:	https://phenology.vgt.vito.be/description?collection=copernicus_r_utm-wgs84_10_m_hrvpp-vi_p_2017-now_v01	OpenSearch	https://land.copernicus.eu/en/products/vegetation/high-resolution-plant-phenology-index
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WWW:	https://www.wekeo.eu/data?view=viewer&t=1566840390697&z=0&center=13.08408%2C48.33915&zoom=12.34&layers=W3siaWQiOiJjMilsInJlcGxhY2VfZlZlW50Q29sb3JNYXBjZC16bnVsbCwibGF5ZlZlZC16ikVPOkVFQTPeFQVQ6Q0																
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	<p>WWW: LINK-1.0- http--link</p> <p>WWW: https://land.copernicus.eu/en/technical-library/product-user-manual-of-vegetation-indices/@@download/file LINK-1.0- http--link</p> <p>OGC:WMS https://phenology.vgt.vito.be/wms?request=GetCapabilities</p> <p>WWW: https://land.copernicus.eu/en/products/vegetation/high-resolution-plant-phenology-index#download LINK-1.0- http--link</p>
Hierarchy level	Dataset

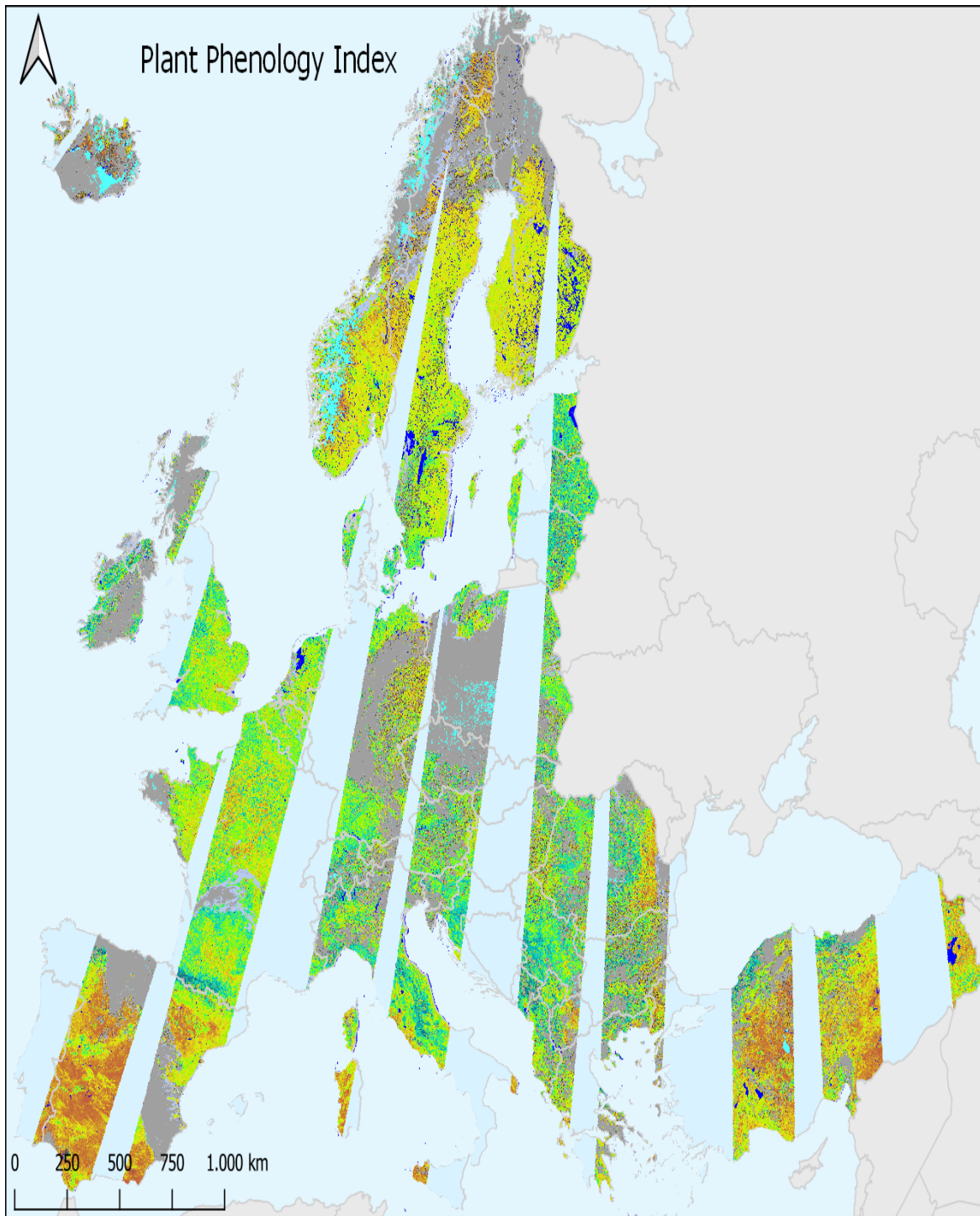
Conformance result

Date (Publication)	2010-12-08
Explanation	See the referenced specification
Statement	The latest validation results are described in the validation report at: https://land.copernicus.eu/en/technical-library/validation-report-of-vegetation-indices/@@download/file .

Metadata

File identifier	65f095af-5225-490b-8a29-4500d4c31b8a XML		
Metadata language	English		
Character set	UTF8		
Hierarchy level	Dataset		
Date stamp	2024-02-06T16:46:28.962Z		
Metadata standard name	ISO 19115/19139		
Metadata standard version	1.0		
Metadata author	Organisation name	Individual name	Electronic mail address Website Role
	European Environment Agency		sdi@eea.europa.eu Point of contact

Overviews



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