



Normalised Difference Vegetation Index Statistics (Long Term 1999-2019 / Short Term 2015-2019) (raster 1 km), global, 10-daily - version 3

The Normalised Difference Vegetation Index (NDVI) is a widely used, dimensionless index that is indicative for vegetation density and is defined as $NDVI = \frac{NIR - Red}{NIR + Red}$ where NIR corresponds to the reflectance in the near infrared bands, and Red to the reflectance in the red bands. The time series of 10-daily NDVI 1km version 3 observations is used to calculate Long Term Statistics (LTS), over the 20-year period 1999-2019, and Short Term Statistics (STS), over the 5-year period (2015-2019), for each of the 36 10-daily periods (dekads) of the year. The calculated statistics include the minimum, median, maximum, mean, standard deviation and the number of observations in the covered time series period. These statistics can be used as a reference for actual NDVI observations, which allows monitoring of anomalous vegetation conditions.

Simple

Identification info

Date (Creation)	2019-12-31	
Date (Publication)	2019-12-31	
Edition	3.0	
Edition date	2021-03-01T00:00:00	
Citation identifier	clms_r_4326_1_km_ndvi-statistics-global_p_1999-2019_v3_r00	
Citation identifier	clms_global_ndvi_1km_v3_statistics	
	Title	VITO NV
	Date (Revision)	2021-03-01

Identifier

Code	10.2909/290e81fb-4c84-42ad-ae12-f663312b0eda				
Other citation details	https://land.copernicus.eu/en/products/vegetation/normalised-difference-vegetation-long-term-statistics-v3-0-1km				
Purpose	This product is first designed to fit the requirements of the Global component of the Copernicus Land service. It can be also useful for all applications related to environment monitoring.				
Credit	NDVI Statistics products were generated by the Global Land Service of Copernicus, the Earth Observation programme of the European Commission. The research leading to the current version of the product has received funding from various European Commission Research and Technical Development programs. The product is based on VEGETATION data provided by CNES and PROBA-V data provided by ESA, both distributed by VITO NV.				
Point of contact	Organisation	Individual	Electronic mail address	Website	Role
	European Commission			https://commission.europa.eu	Owner
	Copernicus Land Monitoring Service		JRC-Copernicus-Land@ec.europa.eu	https://land.copernicus.eu	Custodian
	European Commission's Joint Research Centre			https://joint-research-centre.ec.europa.eu/	Publisher

Copernicus Land Monitoring Service
helpdesk

JRC- <https://land.copernicus.eu/en> Point of
Copernicus- Land@ec.europa.eu [/contact-service-helpdesk](#) contact

Spatial representation type

Grid

Spatial resolution

Spatial resolution

0.0089285714 deg

Topic category

- Imagery base maps earth cover
- Biota
- Farming
- Environment

Extent



Extent

Temporal extent

Time period	statistics per 10-day period 10-daily 1999-01-01T00:00:00 2019-12-31T23:59:59
Maintenance and update frequency	As needed
mmi:updateScope	Series

Resource format

Title	netCDF
Alternate title	Network Common Data Form
Date	
Edition	4

EEA topics	<ul style="list-style-type: none"> • Agriculture and food
Spatial scope	<ul style="list-style-type: none"> • Global
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> • World
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> • Orthoimagery
GEMET	<ul style="list-style-type: none"> • vegetation
Theme	<ul style="list-style-type: none"> • density • cover • growth • ndvi
Place	<ul style="list-style-type: none"> • GLOBAL
Temporal	<ul style="list-style-type: none"> • Dekad • 10-daily

Resource constraints

Access constraints	Other restrictions
Other constraints	no limitations to public access

Resource constraints

Use constraints	Other restrictions
Other constraints	<p>The Copernicus component is governed by Regulation (EU) No 2021/696 of the European Parliament and of the Council of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU. Within the Copernicus component, a portfolio of land monitoring activities has been delegated by the European Union to the European Environment Agency (EEA) and the DG Joint Research Centre of the European Commission.</p> <p>The Copernicus land monitoring products and services are made available on a principle of full, open and free access, as established by the Commission Delegated Regulation (EU) No 1159/2013 of 12 July 2013.</p> <p>Free, full and open access to the products and services of the Copernicus Land Monitoring Service is made on the conditions that:</p> <ol style="list-style-type: none">1. When distributing or communicating Copernicus Land Monitoring Service products and services (data, software scripts, web services, user and methodological documentation and similar) to the public, users shall inform the public of the source of these products and services.2. Where the Copernicus Land Monitoring Service products and services have been adapted or modified by the user, the user shall clearly state this.3. Users shall make sure not to convey the impression to the public that the user's activities are officially endorsed by the European Union.
Language	English
Character encoding	UTF8

Distribution Information

Distribution format	<ul style="list-style-type: none">• netCDF
Fees	Free
Ordering instructions	Products can be downloaded online via HTTP or can be received through EUMETCast satellite reception in Europe and Africa.
Units of distribution	Per product
OnLine resource	
OnLine resource	OGC WMTS
OnLine resource	Copernicus Data Space Ecosystem download services
Units of distribution	Per product
OnLine resource	Copernicus Browser

Data quality info

Hierarchy level	Dataset
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Report

Result

Title	Validation results conform CEOS LPV guidelines
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Date (Publication)	2010-12-01
Explanation	https://land.copernicus.eu/en/products/vegetation/normalised-difference-vegetation-long-term-statistics-v3-0-1km
Pass	1

Report

Result

Title	COMMISSION REGULATION (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services
Date (Publication)	2010-12-08
Explanation	This data set is conformant with the INSPIRE Implementing Rules for the interoperability of spatial data sets and services
Pass	true

Report

Result

Title	INSPIRE Data Specification on orthoimagery - Guidelines
Date (Publication)	2010-04-26
Explanation	See the referenced specification
Pass	true

Resource lineage

Statement	The input data are the 10-daily NDVI products, at 1km resolution, measured by the SPOT-VEGETATION and PROBA-V sensors, for the reference period 1999-2019. From the time series of valid NDVI observations, a set of Long Term Statistics are calculated, one per dekad (10-daily period) of the year. Sea pixels are specifically masked.
Hierarchy level	Dataset

Spatial representation info

Number of dimensions	2
Dimension name	Row
Dimension size	15680
Resolution	0.0089285714
Dimension name	Column
Dimension size	40320
Resolution	0.0089285714
Cell geometry	Area
Transformation parameter availability	false
Check point availability	true
Check point description	Upperleft corner tiepoint

Description	Upperleft corner tiepoint
Identifier	upperLeftTiePoint
Name	Tie Point in upper left corner
Pixel orientation code	

Reference System Information

Reference System Information

Code	EPSG:4326
Maintenance and update frequency	As needed

Metadata

Metadata identifier	290e81fb-4c84-42ad-ae12-f663312b0eda												
Language	English												
Character encoding	UTF8												
Contact	<table border="0"> <thead> <tr> <th>Organisation</th> <th>Individual</th> <th>Electronic mail address</th> <th>Website</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>Copernicus Land Monitoring Service</td> <td></td> <td>JRC-Copernicus-Land@ec.europa.eu</td> <td>https://land.copernicus.eu</td> <td>Point of contact</td> </tr> </tbody> </table>	Organisation	Individual	Electronic mail address	Website	Role	Copernicus Land Monitoring Service		JRC-Copernicus-Land@ec.europa.eu	https://land.copernicus.eu	Point of contact		
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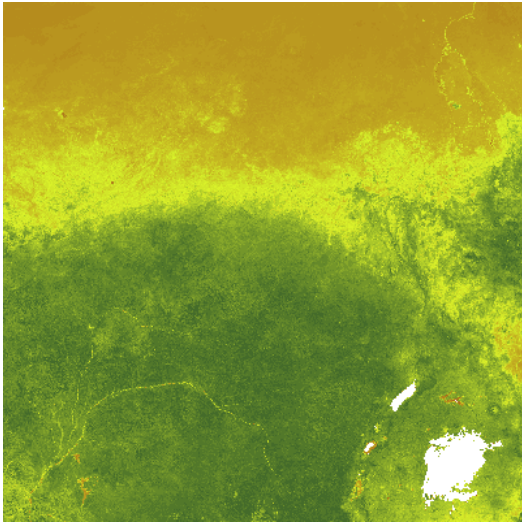
Type of resource

Resource type	Dataset
Metadata linkage	https://sdi.eea.europa.eu/catalogue/srv/api/records/290e81fb-4c84-42ad-ae12-f663312b0eda
Date info (Creation)	2024-12-17T06:50:30.455346Z
Date info (Revision)	2025-10-09T10:42:12.961916Z

Metadata standard

Title	ISO 19115/19139
Edition	1.0

Overviews



Example of NDVI map

Provided by

