Global 10-daily Fraction of Absorbed PAR 333m

The FAPAR quantifies the fraction of the solar radiation absorbed by plants for photosynthesis. It refers only to the green and living elements of the canopy.

The FAPAR depends on the canopy structure, vegetation element optical properties, atmospheric conditions and angular configuration.

To overcome this latter dependency, a daily integrated FAPAR value is assessed. FAPAR is very useful as input to a number of primary productivity models and is recognized as an Essential Climate Variable (ECV) by the Global Climate Observing System (GCOS).

The product at 333m resolution is provided in Near Real Time and consolidated in the next six periods.

Proposition de citation
European Commission Directorate-General Joint Research Centre. Global 10-daily Fraction of Absorbed PAR 333m. http://land.copernicus.vgt.vito.be/geonetwork/srv/api/records/urn:cgls:global:fapar300_v1_333m

Simple

Date (Creation)
2017-01-01

Edition
Version 1

Edition date
2017-01-01

Identifier
urn:cgls:global:fapar300_v1_333m

Date (Revision)
2016-01-01

Other citation details
http://land.copernicus.eu/global/documents/fapar300/v1/pum

Purpose
This product is first designed to fit the requirements of the Global component of Land Service of the Copernicus programme. It can be also useful for all applications related to the environment monitoring.

Credit
FAPAR 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 PROBA-V 333m data (copyright BELSPO and distribution by VITO NV).

Status
completed Completed

Principal investigator

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Organization website

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Website
VITO NV website

Organization website

Owner

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Copernicus programme website

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Protocol
http://ies.jrc.ec.europa.eu

Name
EC DG-JRC Institute for Environment and Sustainability

Description
Organization website

Function
information Information

Maintenance and update frequency
asNeeded As needed

Update scope
series Series

Name
NetCDF

Version
4.2.1.1

Specification
Network Common Data Form

GEMET - INSPIRE themes, version 1.0 (Theme)

- Orthoimagery

GEMET - Concepts, version 2.1

- geophysical environment

Mots clés (Theme)

- biogeophysical , fapar

Mots clés (Place)

- GLOBE

Mots clés (Temporal)

- Dekad , 10-daily composite

Copernicus Themes (Theme)

- Vegetation

Copernicus Variables (Theme)

- FAPAR

Use limitation
No limitations

Use constraints
@copernicus.eu Copyright

Access constraints
data policy @copernicus.eu Other restrictions

Other constraints
(d) the confidentiality of commercial or industrial information, where such confidentiality is provided for by national or Community law to protect a legitimate economic interest, including the public interest in maintaining statistical confidentiality and tax secrecy.

Association Type
partOfSeamlessDatabase Part of seamless database

Initiative Type
project Project

Association Type
source Source

Initiative Type
Proba-V Platform

Association Type
source Source

Initiative Type
VEGETATION Sensor

Spatial representation type
Grid

Distance
0.0029761905 http://standards.iso.org/ittf/PubliclyAvailableStandards/ISO_19139_Schemas/resources/uom/ML_gmxUom.xml#deg

Metadata language
eng

Character set
utf8 UTF8

Topic category

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

80.00 N
-60.00 S
180.00 E
-180.00 W

Time period
10-dailydekad2014-01-01T00:00:002019-12-31T23:59:59

Reference system identifier
EPSG Geodetic Parameter Dataset / EPSG:4326

Reference system identifier
World Geodetic System / WGS84

Number of dimensions

2

Dimension name
row Row

Dimension size
47040

Resolution
0.0029761905 deg

Dimension name
column Column

Dimension size
120960

Resolution
0.0029761905 deg

Cell geometry
area Area

Transformation parameter availability
false

Checkpoint Availability
true

Checkpoint Description
Upperleft corner tiepoint

Point in Pixel

- Center

Distribution format

- NetCDF (4.2.1.1)

  Specification
  Network Common Data Form

Distributor

Distributor

VITO NV
Boeretang 200 Mol 2400 Belgium

Hours of service
Office hours, 7 days per week

Contact instructions
Preferably by e-mail

Website
Data portal

Project portal

Fees
Free by ftp and EUMETCast; cost of medium by DvD or tape

Ordering instructions
Products can be downloaded online via HTTP (or FTP) or can be received through EUMETCast satellite reception in Europe, Africa and Latin-America. When ordering products from the online archive or subscribing to receive future products, users are informed via e-mail whenever the requested products are ready to be downloaded on the FTP server.

Units of distribution
Per product

OnLine resource
Copernicus Global Land Service

1. Search, download and custom order products from Catalogue and Ordering services

OnLine resource
Copernicus Global Land Service

2. Subscribe to receive future products via e-mail

Units of distribution
Per product

OnLine resource
Copernicus Global Land Service

3. Register to receive products via EUMETCast

Hierarchy level
series Series

Conformance result

Date (Publication)
2010-12-01

Explanation
http://land.copernicus.eu/global/documents/fapar300/v1/vr

Pass
1

Conformance result

Date (Publication)
2010-04-26

Explanation
See the referenced specification

Pass
true

Statement
The input data are the daily Top of the Atmosphere reflectances measured by the sensor at 1/3 km. The calibrated reflectances are used to calculate instantaneous estimates of the products using a neural network trained with MODIS and CYCLOPES products, removing outliers as clouds and their shadows and atmospherically corrected (SMAC). In a second stage these instantaneous first guess of products are composited using an asymmetric period. The compositing is performing a temporal smooth and gap fill operation based on the land cover type (Evergreen Broadleaf Forest or not).

gmd:MD_Metadata

File identifier
urn:cgls:global:fapar300_v1_333m _XML

Metadata language
eng English

Character set
utf8 UTF8

Hierarchy level
series Series

Date stamp
2017-01-03

Metadata standard name
ISO19115

Metadata standard version
2003/Cor.1:2006

Point of contact

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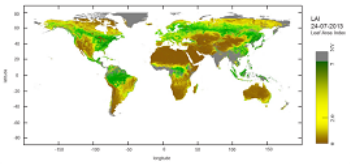
Copernicus Global Land website

Aperçus



Quick-look image of FAPAR layer, with width and height sub-sampled to 5% of their original dataset size.

Fourni par

Partager

Ressources associées

Not available