Burnt Area 2019-present (raster 300 m), global, monthly - version 3

Burnt Area products map burn scars, surfaces which have been sufficiently affected by fire to display significant changes in the vegetation cover (destruction of dry material, reduction or loss of green material) and in the ground surface (temporarily darker because of ash). As fire can occur in any type of environmental context, the properties of the burnt surface may differ significantly from place to place. Therefore their identification is based on a combination of surface's properties and change detection, i.e. differences in spectral properties before and after the fire occurrance.

Simple

Identification info

Date (Creation)	2024-03-28
Date (Publication)	2024-03-28
Edition	V3
Edition date	2024-03-28T00:00:00
Citation identifier	clms_r_4326_300_m_ba-monthly-global_p_2019-2024_v3_r00
Citation identifier	clms_global_ba_300m_v3_monthly **Title**: VITO NV **Date (Revision)**: 2022-01-24

Identifier

Code	10.2909/08f6ac55-b896-481f-bb1c-bd9e5e18c411

Other citation details	https://land.copernicus.eu/en/products/vegetation/burnt-area-v3-1-monthly-300m
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	Burnt Area products were generated by the Global component of the Land Monitoring Service of Copernicus, the Earth Observation part of the European Union's Space programme. 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 Sentinel-3 data (copyright EU Copernicus and distribution by ESA).
Credit	The product is based on Copernicus Sentinel-3 data (copyright governed by the Legal notice on the use of Copernicus Sentinel Data and Service Information - https://sentinels.copernicus.eu/documents/247904/690755/Sentinel_Data_Legal_Notice).

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				Publisher

			https://joint-research-centre.ec.europa.eu/	
	Copernicus Land Monitoring Service helpdesk	JRC-Copernicus-Land@ec.europa.eu	https://land.copernicus.eu/en/contact-service-helpdesk	Point of contact

Spatial representation type	Grid

Spatial resolution

Spatial resolution	0.0029761905 https://www.isotc211.org/2005/resources/uom/gmxUom.xml#deg

Topic category	• Imagery base maps earth cover • Biota • Farming • Environment

Extent

80.00	N	-60.00	S	180.00	E	-180.00	W

Extent

Temporal extent

Time period	Monthly Monthly 2019-01-01T00:00:00 2024-12-31T23:59:59

Maintenance and update frequency	As needed
mmi:updateScope	Series

Resource format

Title	netCDF
Alternate title	Network Common Data Form
Date	
Edition	4

EEA topics	• Climate
Spatial scope	• Global
Continents, countries, sea regions of the world.	• World
GEMET - INSPIRE themes, version 1.0	• Orthoimagery
GEMET	• biomass burning • vegetation • fire
Theme	• burnt area • burn scar
Place	• global
Temporal	• monthly

Resource constraints

Access constraints	Other restrictions
Other constraints	no limitations to public access

Resource constraints

Use constraints	Other restrictions
Other constraints	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. 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. Free, full and open access to the products and services of the Copernicus Land Monitoring Service is made on the conditions that: 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	• 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

Report

Result

Title	Validation results conform CEOS LPV guidelines
Date (Publication)	2010-12-01

Explanation	https://land.copernicus.eu/en/technical-library/quality-assessment-report-burnt-area-version-3.1/
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 burnt area surfaces are calculated from Top-of-Canopy reflectance images from the Sentinel-3 SLSTR sensor. The method is based a random forest regression, trained with synthetic data from a spectral model of fire effects and a bidirectional reflectance model, calibrated at active fire detections. The training data takes into account the large variability of angular acquisition geometries commonly present in Sentinel-3 and the common anisotropy in most land surface reflectance. Temporal persistency checks (change detection) is used to make sure the detected spectral change lasts over time, as is common in burns. This allows to filter out cloud shadows and atmospheric correction errors with sudden, short-lived reflectance changes.
Hierarchy level	Dataset

Spatial representation info

Number of dimensions	2
Dimension name	Row
Dimension size	47040
Resolution	0.0029761905
Dimension name	Column
Dimension size	120960
Resolution	0.0029761905
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	08f6ac55-b896-481f-bb1c-bd9e5e18c411
Language	English
Character encoding	UTF8
Contact	**Organisation** / **Individual** / **Electronic mail address** / **Website** / **Role**: Copernicus Land Monitoring Service / / JRC-Copernicus-Land@ec.europa.eu / https://land.copernicus.eu / Point of contact

Type of resource

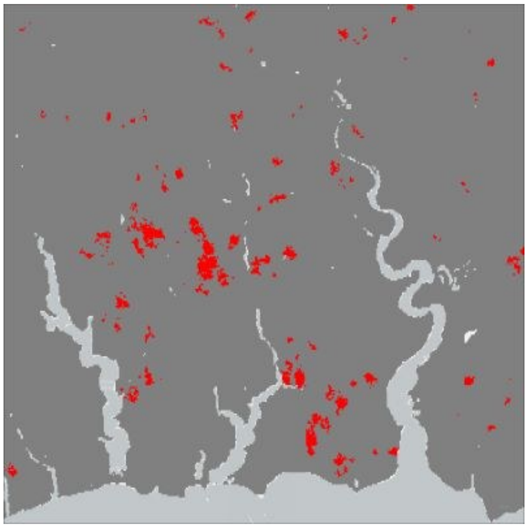
Resource type	Dataset

Metadata linkage	https://sdi.eea.europa.eu/geonetwork/srv/api/records/08f6ac55-b896-481f-bb1c-bd9e5e18c411
Date info (Creation)	2024-12-17T06:50:39.626172Z
Date info (Revision)	2025-10-09T10:35:31.612444Z

Metadata standard

Title	ISO 19115/19139
Edition	1.0

Overviews


Subsampled quicklook image of day_of_burn layer

Provided by