EEA geospatial data catalogue

Reference Land Cover in Madagascar Forests 2017-2019 (vector) - version 1, Jul. 2020

This metadata refers to the Land Cover vector data generated over Madagascar Forests (Africa) for 2017 in the framework of the Copernicus Global Land Hot Spot Mapping (C-GL-HSM) contract under the coordination of JRC. This area of interest is either mapped with the generic 8 classes dichotomus legend (SAF_21_lc_a) or the detailed modular legend (SAF_21_lc_b).

The mapped area of interest (AOI) represents a Key Landscape for Conservation area (KLC). The KLC has a total size of approximately 12,401,500 million ha (124,015 km²) and is covering the eastern escarpment and coastal plain of the north-south axis within the country of Madagascar. It includes almost all areas under protection of the eastern part of the country.

Reference time: 2017 - 2019

Simple

Date (Creation)	2020-07-28
Date (Publication)	2020-07-28
Date (Revision)	2020-07-28
Edition	01.00
Citation identifier	jrc_v_4326_30_m_c-gl-hsm-madagascar_p_2017-2019_v01_r00
Point of contact	**Organisation name** / **Individual name** / **Electronic mail address** / **Website** / **Role** European Commission / / / https://commission.europa.eu / Owner Copernicus Land Monitoring Service / / copernicus@eea.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 / / copernicus@eea.europa.eu / https://land.copernicus.eu/en/contact-service-helpdesk / Point of contact
Maintenance and update frequency	Not planned
GEMET - INSPIRE themes, version 1.0	• Human health and safety • Land cover
Keywords	
Continents, countries, sea regions of the world.	• Africa • Madagascar
Keywords	
GEMET	• land cover • landscape • land • land use • landscape alteration

Spatial scope	• Regional
EEA topics	• Environmental health impacts • Land use
Temporal resolution	• Not planned
Access constraints	Other restrictions
Other constraints	no limitations to public access
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.
Spatial representation type	Vector
Distance	30 m
Denominator	30000
Language of dataset	English
Character set	UTF8
Topic category	• Geoscientific information • Environment • Imagery base maps earth cover

-13.67	N	-25.20	S	50.49	E	46.19	W

Begin date	2017-01-01
End date	2019-12-31
Additional Information	The AOI covers the humid/sub-humid bioclimatic region of the country which originally was characterized by a continuous evergreen tropical forest. The island of Madagascar has one of the highest endemism in the World. Estimations are as high as 80 to 90 percent for all groups. However, since human appearance around 2000 years ago, over 90 percent of the original forest cover has disappeared with obvious threats to this unique habitat. The moist forest belt has been recognised as a particularly important centre of endemism and diversity. It is here where for instance the unique lemurs live (https://www.worldwildlife.org/ecoregions/at0117). However, nowadays these forests are among the most threatened habitats in the World due to rapid deforestation (often illegal) and degradation caused by logging and shifting cultivation practices. Also, the primate population is one of the most critically endangered in the World. The World Database on Protected Areas (WDPA 2019) has been used in the Copernicus Global Land Hot Spot mapping (C-GL-HSM) contract under the coordination of JRC to obtain statistics on land cover changes inside and outside the protected areas. To see how much of the Key Landscapes for Conservation area is a Protected Area, consult the WMS service found at the Service section of this metadata.
Coordinate reference system identifier	EPSG:4326

Distribution format	• SHP (1.0)

OnLine resource

Protocol	Linkage	Name
WWW:URL	https://land.copernicus.eu/en/products/lclcc-hot-spots/present_land_cover#download	Madagascar Forests – Dichotomous and Modular Reference Land Cover
OGC:WMS	https://geospatial.jrc.ec.europa.eu/geoserver/hotspots/wms	all_present_lc_b_pol
WWW:LINK-1.0-http--link	https://hsm.land.copernicus.eu/	HotSpot Land Cover Change Explorer
OGC:WMS	https://geospatial.jrc.ec.europa.eu/geoserver/hotspots/wms	all_present_lc_a_pol
WWW:DOWNLOAD-1.0-http--download	https://land.copernicus.eu/en/technical-library/madagascar-forests-klc-area-report-file-2000-2013-2017/@@download/file	Report file for download
WWW:URL	https://land.copernicus.eu/en/products/lclcc-hot-spots/satellite_images	Satellite images
OGC:WMS	https://geospatial.jrc.ec.europa.eu/geoserver/hotspots/wms	protected_areas

OnLine resource

No information provided.

Hierarchy level	Dataset

Conformance 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	See the referenced specification
Pass	Yes

Statement

e-GEOS Production Site produced this product by satellite analyses in the context of the Copernicus Global land Hot Spot Mapping (C-GL-HSM) framework.

Data and products are based on medium to high and very high resolution satellite images (from approximately 1 to 30m spatial resolution) with a change assessment frequency between 1 to 20 years. The Image data sources used for mapping are Landsat 7 and 8. The validation process made use of Spot-6 and Sentinel-2 images as reference data.

Images temporal range: 2015-2019

It is the time frame that has been accepted to collect the satellite images useful to produces the vector data.

The Reference year is included in this time frame and correspond to mean year considering all the image's year used. It is the year on which the majority of the used images are.

The classification scheme follows the Land Cover Classification System (LCCS) developed by the United Nations Food and Agriculture Organization (FAO).

Since LCCS is a hierarchical system, the modular legend can be aggregated to the dichotomus legend.

The FAO LCCS handbook which describes each class in detail, can be downloaded here: http://www.fao.org/3/a-i5232e.pdf

This LCCS Land Cover map includes the following land cover classes (associated raster code in [ ]):

A11 - Cultivated and Managed Terrestrial Area(s) [3]

A12 - Natural And Semi-Natural Primarily Terrestrial Vegetation [4]

A23 - Cultivated Aquatic or Regularly Flooded Area(s) [6]

A24 - Natural And Semi-Natural Aquatic or Regularly Flooded Vegetation [7]

B15 - Artificial Surfaces and Associated Area(s) [0]

B16 - Bare Area(s) [11]

B27 - Artificial Waterbodies, Snow and Ice [13]

B28 - Natural Waterbodies, Snow and Ice [14]

The produced and independently validated Land Cover and Land Cover Change maps and statistics are available to global users.

The report file can be downloaded from the link section.

Basic image processing: Cloud/Shadow masking, Data Selction (based on occlusion and sesonality considerations), Atmospheric correction (TOA) of satellite data, Coregistration.

Automatic classification: Feature extraction from Dense Multitemporal Time Series (D MTS), statistics generation, automatic classificaiton (ROI based or decision tree) and labeling according to the required output LCCS legend schema.

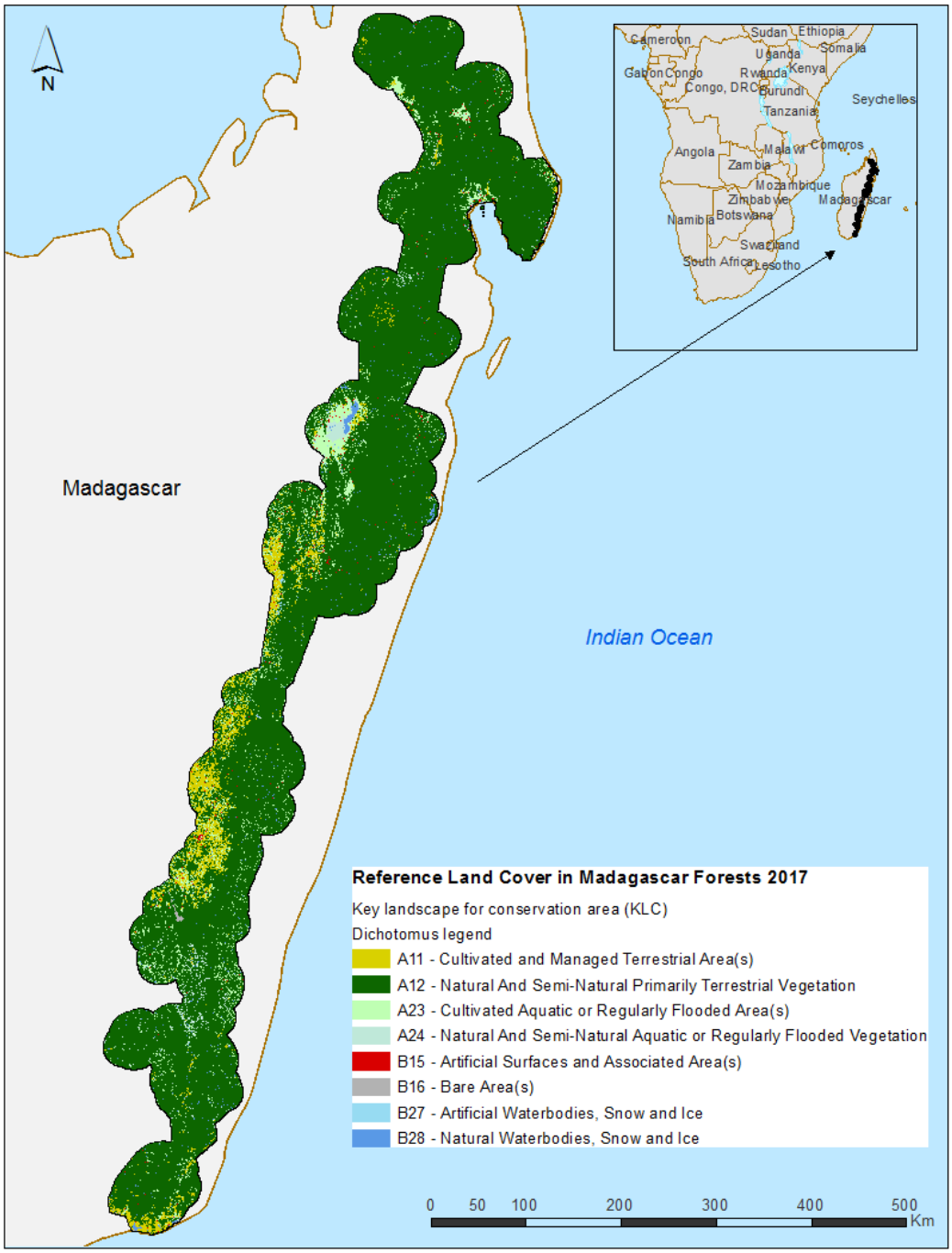
Visual inspection and refiment: check and refinement of the LCCS product generated through the automatic procedure in order to corrected classification errors and to refine borders where necessary.

Internal validation: independent validation of the LCCS product based on external reference data (where available) and on other datasets for intercomparison. The scope of the internal validation is to make a qualitative and quantitavie check of the declared Thematic and Positional accuracies.

Metadata

File identifier	18ac5909-7e2b-4538-bc39-7c458935fd0f XML
Metadata language	English
Character set	UTF8
Hierarchy level	Dataset
Date stamp	2024-07-22T09:23:19.87117Z
Metadata standard name	ISO 19115/19139
Metadata standard version	1.0
Metadata author	**Organisation name** / **Individual name** / **Electronic mail address** / **Website** / **Role** Copernicus Land Monitoring Service / copernicus@eea.europa.eu / https://land.copernicus.eu / Point of contact

Overviews



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