

Reference Land Cover Change in Kundelungu-Upemba 2016-2019 (vector) - version 1, Nov. 2019

This metadata refers to the Land Cover Change vector data generated over Kundelungu-Upemba (Africa) 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 dichotomous legend (CAF_11_lcc_a) or the detailed modular legend (CAF_11_lcc_b).

The mapped area of interest (AOI) represents a key landscape for conservation area (KLC).

The KLC has a total size of 4,731,810 ha (47,318.1 km²) and is comprised by the Kundelungu Upemba National Parks complex. The Upemba National Park in the northern part of the KLC has a reported area of 1,367,365 ha (13,673.65 km²) while the Kundelungu National Park in the southern sector of the KLC has an area of 823,636 ha (8236.36 km²).

Reference time: 2016 - 2019

Simple

Date (Creation)	2019-11-14
Date (Publication)	2019-11-14
Date (Revision)	2019-11-14
Edition	01.00
Citation identifier	jrc_v_4326_30_m_c-gl-hsm-kundelungu-upemba_p_2016-2019_v01_r00

Point of contact

No information provided.

Point of contact

No information provided.

Point of contact

No information provided.

Point of contact

No information provided.

Maintenance and update frequency	Not planned
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> Land cover Human health and safety
Keywords	
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> Africa Democratic Republic of the Congo
Keywords	
GEMET	<ul style="list-style-type: none"> land cover land landscape alteration

	<ul style="list-style-type: none"> • landscape • land use
Spatial scope	<ul style="list-style-type: none"> • Regional
EEA topics	<ul style="list-style-type: none"> • Land use • Environmental health impacts
Temporal resolution	<ul style="list-style-type: none"> • Not planned
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".
Spatial representation type	Vector
Distance	30 30 m
Denominator	30000
Language of dataset	English
Character set	UTF8
Topic category	<ul style="list-style-type: none"> • Geoscientific information • Environment • Imagery base maps earth cover



Begin date	2016-01-01		
End date	2019-12-31		
Additional Information	<p>The Upemba National Park is one of the oldest parks in Africa, established in 1939. In 2017 in order to improve the management of both parks the Kundelungu Upemba National Parks complex was established. The two parks are characterised by a wide diversity of habitats, including a full transitional gradient from highland steppe through miombo woodland to both wooded and grassland savannah and areas distinguished by rivers, waterfalls (the Lofoi Falls are one of the largest in Africa), wetlands and gallery forests.</p> <p>This in the past almost "forgotten park" suffered substantially from illegal poaching and bushmeat hunting. Nevertheless, many species remain and the park is a refuge for the last savannah elephants in the region as well as the last zebras in Democratic Republic of Congo (DRC). Other notable species include the endemic Upemba lechwe, roan antelope, black sable, buffalo, leopard, giant ground hornbill and many other bird species (https://africanconservation.org/).</p> <p>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.</p> <p>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.</p>		
Coordinate reference system identifier	EPSG:4326		
Distribution format	<ul style="list-style-type: none"> • SHP (1.0) 		
OnLine resource	Protocol	Linkage	Name
	WWW:URL	https://land.copernicus.eu/en/products/clcc-hot-spots/land_cover_change#download	Kundelungu-Upemba – Dichotomous and Modular Reference Land Cover Change
	OGC:WMS	https://geospatial.jrc.ec.europa.eu/geoserver/hotspots/wms	all_lcc_a_pol
	WWW:LINK-1.0-http--link	https://land.copernicus.eu/global/hsm	HotSpot Land Cover Change Explorer
	OGC:WMS	https://geospatial.jrc.ec.europa.eu/geoserver/hotspots/wms	all_lcc_b_pol
	WWW:DOWNLOAD-1.0-http--download	https://land.copernicus.eu/en/technical-library/kundelungu-upemba-validation-file-2000-2016/@.download/file	Validation file for download
	WWW:DOWNLOAD-1.0-http--download	https://land.copernicus.eu/en/technical-library/kundelungu-upemba-report-file-2000-2016/@.download/file	Report file for download

OnLine resource

No information provided.

Hierarchy level

Dataset

Conformance result**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: 2016-2019

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 and the validation 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 classificaion (ROI based or decision tree) and labeling according to the required output LCCS legend schema.

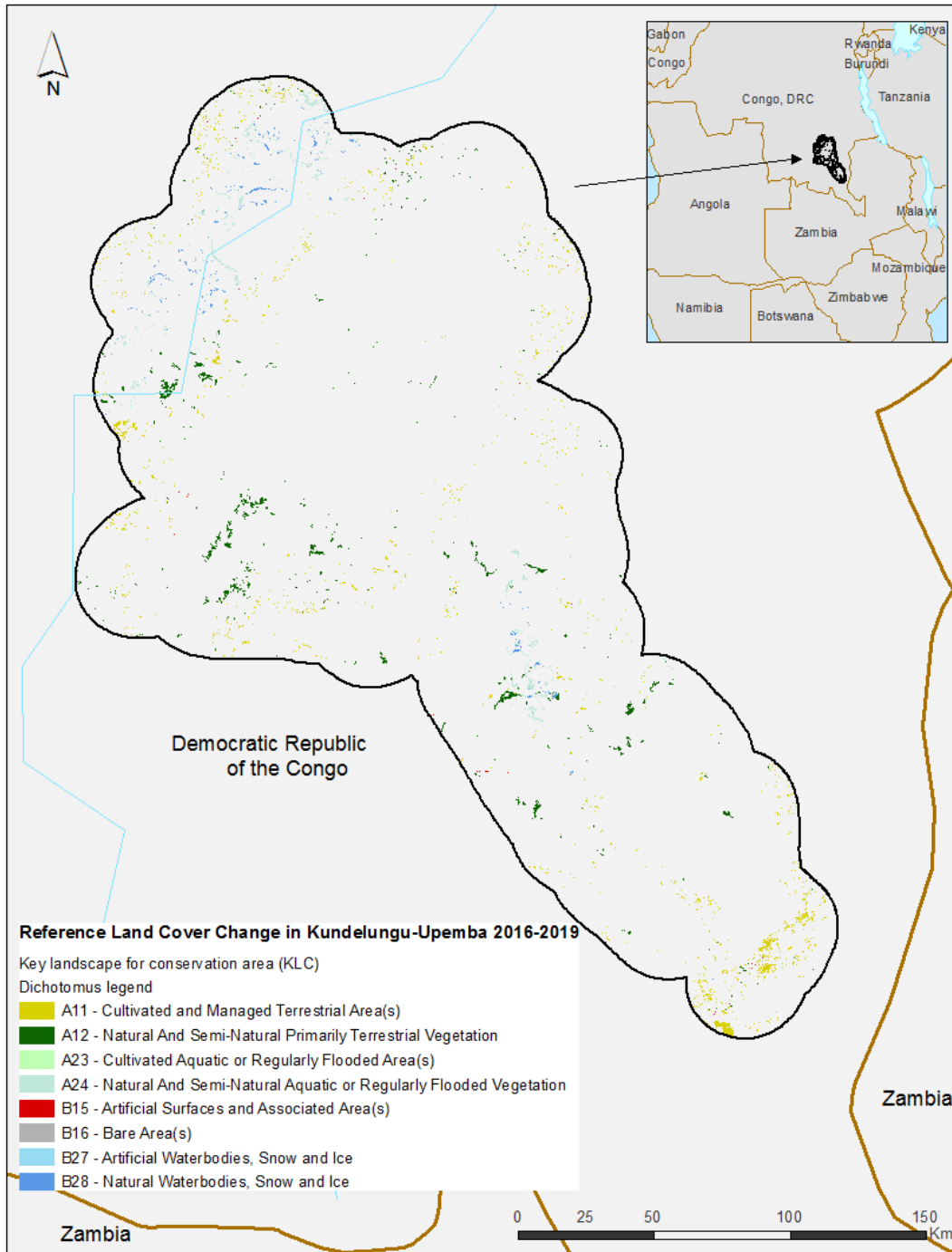
Visual inspection and refiment: check and refinement of the LCCS product generated through the automatic procedure in order to corrected classification errors and to refine borders where necessary.

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 quantitative check of the declared Thematic and Positional accuracies.

Metadata

File identifier	57b094f8-2a83-4e4a-9c9f-537c5238ef45 XML			
Metadata language	English			
Character set	UTF8			
Hierarchy level	Dataset			
Date stamp	2023-12-19T11:13:35.283Z			
Metadata standard name	ISO 19115/19139			
Metadata standard version	1.0			
Metadata author	Organisation name	Individual name	Electronic mail address sdi@eea. europa.eu	Website Role Point of contact

Overviews



Provided by

