EEA geospatial data catalogue

Dominant Leaf Type 2018 (raster 10 m), Europe, 3-yearly, Sep. 2020

This metadata refers to the HRL Forest 2018 primary status layer Dominant Leaf Type (DLT). The DLT raster product provides a basic land cover classification with 3 thematic classes (all non-tree covered areas, broadleaved and coniferous) at 10m spatial resolution and covers the full of EEA38 area and the United Kingdom. The production of the High Resolution Forest layers was coordinated by the European Environment Agency (EEA) in the frame of the EU Copernicus programme.

The HRL Forest product consists of 3 types of (status) products and additional change products. The status products are available for 2012, 2015, and 2018 reference years:

1. Tree cover density (TCD) (level of tree cover density in a range from 0-100%)

2. Dominant leaf type (DLT) (broadleaved or coniferous majority)

3. Forest type product (FTY). The forest type product allows to get as close as possible to the FAO forest definition. In its original (10m (2018) / 20m (2012, 2015)) resolution it consists of two products: a dominant leaf type product that has a MMU of 0.5 ha, as well as a 10% tree cover density threshold applied, and 2) a support layer that maps (now only available on demand), based on the dominant leaf type product, trees under agricultural use and in urban context (derived from CLC and imperviousness 2009 data). For the final 100 m product trees under agricultural use and urban context from the support layer are removed.

NEW for 2018: the 10m 2018 reference year FTY product now also has the agricultural/urban trees removed. In the past this was done only for the 100m product, now it is consistently applied for both the 10m and the 100m FTY products.

This dataset is provided as 10 meter rasters (fully conformant with the EEA reference grid) in 100 x 100 km tiles grouped according to the EEA38 countries and the United Kingdom.

You can find more information about the product here: https://land.copernicus.eu/en/products/high-resolution-layer-dominant-leaf-type/dominant-leaf-type-2018.

Simple

Identification info

Date (Creation)	2020-09-18
Date (Publication)	2020-09-18
Edition	01.00
Citation identifier	copernicus_r_3035_10_m_dlt-2018_p_2018_v01_r00

Identifier

Code	10.2909/7b28d3c1-b363-4579-9141-bdd09d073fd8

Status	Superseded

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 Environment Agency		sdi@eea.europa.eu	http://www.eea.europa.eu	Publisher
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	10 m

Topic category	• Environment • Imagery base maps earth cover

Extent

Temporal extent

Time period	2018-03-01 2018-10-31

Extent

72.66	N	24.28	S	72.91	E	-56.51	W

Maintenance and update frequency	Continual
GEMET - INSPIRE themes, version 1.0	• Land cover
Continents, countries, sea regions of the world.	• EEA38 (from 2020) • United Kingdom
GEMET	• forest management • forest • leaf • land cover • land use • landscape alteration
Spatial scope	• European
EEA topics	• Agriculture and food system • Biodiversity: state of habitats and species • Land use

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.

Associated resource

Association Type	Cross reference
Metadata Reference	• Dominant Leaf Type 2015 (raster 20 m), Europe, 3-yearly, Apr. 2018

Associated resource

Association Type	Cross reference
Metadata Reference	• Dominant Leaf Type 2012 (raster 20 m), Europe, 3-yearly, Apr. 2018

Language	English
Character encoding	UTF8

Distribution Information

Distribution format	• GeoTIFF
OnLine resource	https://copernicus.discomap.eea.europa.eu/arcgis/rest/services/GioLandPublic/HRL_DominanteLeafType_2018/ImageServer
OnLine resource	https://copernicus.discomap.eea.europa.eu/arcgis/services/GioLandPublic/HRL_DominanteLeafType_2018/ImageServer/WMSServer?request=GetCapabilities&service=WMS
OnLine resource	Download (requires authentication)
OnLine resource	

Data quality info

Hierarchy level	Dataset

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	See the referenced specification

Resource lineage

Statement	Hierarchical spatio-temporal classification of time features derived from Sentinel-2A+B time series (Level-2A data) using a Random Forest (RF) classifier with 200 trees. The selected time window ranges from 01-03-2018 to 31-10-2018 and covers the whole reference year 2018. In total, 59 statistical time features have been calculated using more than 138,000 samples, automatically collected from the LUCAS 2018 database and various CLMS products plus additional manual sampling. First, a binary Tree Cover Mask (TCM) with 2 classes (all non-tree covered areas / tree cover) has been generated. Various post-processing steps have been applied in order to improve the quality of the mask (e.g. correction of omission errors caused by the topographic overcorrection within the native Sentinel-2 Level-2A input data). Subsequently, the DLT has been seperately classified within the confines of the Tree Cover Mask. The final product will be accompanied by a series of quality layers (Confidence Layer, Data Score, Layer, Parent Scene Identification Layer). Quality assurance follows the ISO 9001:2015 standards for Quality Management and comprises of dedicated procedures of quality checks (QA breakpoints) during implementation of the production chain, in order to keep persistent control over the various stages of production, assure fitness-for-purpose of the end-products and that all quality requirements are fulfilled. Priority has been given to the target thematic accuracy to be achieved by each product, as well as to the issues of product consistency (spatial, thematic, temporal)

	and homogeneity. Quality Assessment: The quality assessment has been performed according to INSPIRE Data Specifications. The data quality elements considered are: (i) Completeness, (ii) Logical Consistency, (iii) positional accuracy, (iv) Thematic Accuracy, (v) Temporal quality and (vi) Usability. Geometric accuracy (positioning scale): Less than one pixel (10m) according to ortho-rectified satellite image base (Sentinel-2 Level-2A) delivered by ESA. Thematic target accuracy: 90% producer and user accuracy. Validation results DLT: 96.52% overall accuracy with a 95% confidence level applied (broadleved: 95.62% producer accuracy and 90.21% user accuracy; coniferous: 93.39% producer accuracy and 96.64% user accuracy). Thematic accuracy has been assessed using a stratified random sampling approach with 9,695 points (area weighted), visually interpreted using VHR_IMAGE_2018 data and Sentinel-2 time series data, complemented by additional data sources like virtual globes (e.g. Google Earth Pro).
Hierarchy level	Dataset

Reference System Information

Reference System Information

Code	EPSG:3035

Maintenance and update frequency	

Metadata

Metadata identifier	7b28d3c1-b363-4579-9141-bdd09d073fd8
Language	English
Character encoding	UTF8

Contact

Organisation	Individual	Electronic mail address	Website	Role
European Environment Agency		sdi@eea.europa.eu		Point of contact

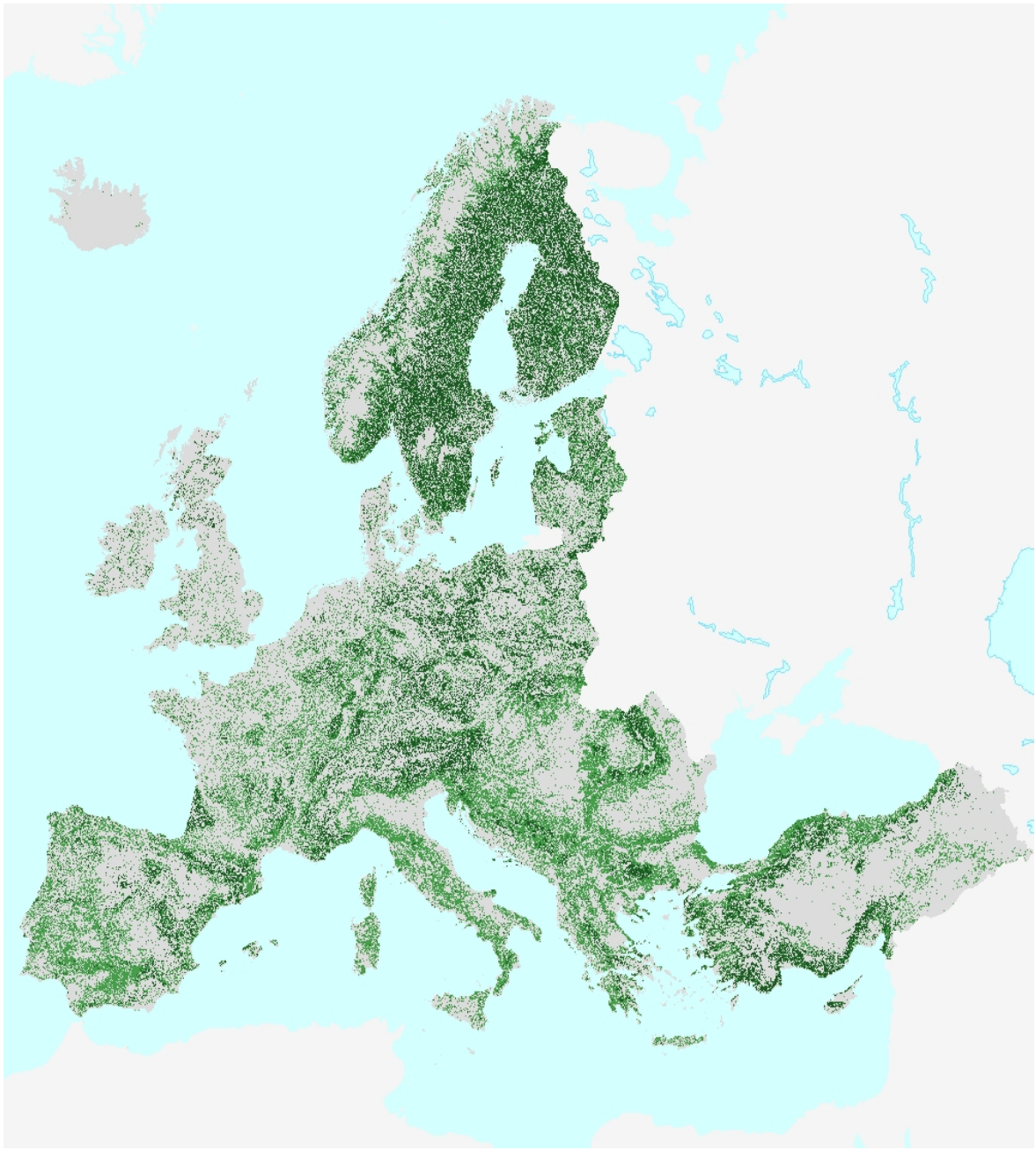
Type of resource

Resource type	Dataset
Metadata linkage	https://doi.org/10.2909/7b28d3c1-b363-4579-9141-bdd09d073fd8
Date info (Creation)	2020-10-22T12:10:20Z
Date info (Revision)	2025-10-09T10:59:09.100492Z

Metadata standard

Title	ISO 19115/19139
Edition	1.0

Overviews



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