

Grassland 2018 (raster 10 m), Europe, 3-yearly, Aug. 2020

The High Resolution Layer (HRL) Grassland 2018 raster product provides a basic land cover classification with 2 thematic classes (grassland / non-grassland) at 10m spatial resolution, covering the EEA38 area and the United Kingdom. The production of the High Resolution grassland layers was coordinated by the European Environment Agency (EEA) in the frame of the EU Copernicus programme.

This is the main High Resolution grassland product. This grassy and non-woody vegetation baseline product includes all kinds of grasslands: managed grassland, semi-natural grassland and natural grassy vegetation. It is a binary status layer for the 2015 reference year mapping grassland and all non-grassland areas in 20m and (aggregated) 100m pixel size and, for the 2018 reference year, in 10m and (aggregated) 100m pixel size.

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

You can read more about the product here: <https://land.copernicus.eu/en/products/high-resolution-layer-grassland/grassland-2018> .

Simple

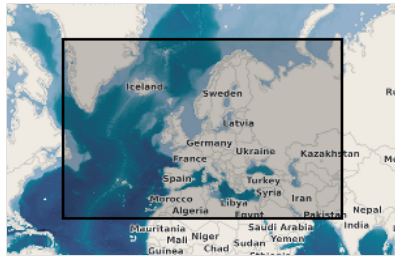
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Citation identifier	copernicus_r_3035_10_m_gra-2018_p_2018_v01_r00				
Code	10.2909/60639d5b-9164-4135-ae93-fb4132bb6d83				
Point of contact	Organisation name	Individual name	Electronic mail address	Website	Role
	European Environment Agency		copernicus@eea.europa.eu	https://land.copernicus.eu	Distributor
	European Environment Agency		copernicus@eea.europa.eu	https://land.copernicus.eu	Custodian
	European Environment Agency		copernicus@eea.europa.eu	https://land.copernicus.eu	Point of contact

Point of contact

No information provided.

Maintenance and update frequency	Continual
GEMET - INSPIRE themes, version 1.0	<ul style="list-style-type: none"> Land cover
Keywords	
Continents, countries, sea regions of the world.	<ul style="list-style-type: none"> EEA38 (from 2020) United Kingdom
Keywords	
GEMET	<ul style="list-style-type: none"> land cover landscape alteration

	<ul style="list-style-type: none"> • grassland • forest management • land use
Spatial scope	<ul style="list-style-type: none"> • European
EEA topics	<ul style="list-style-type: none"> • Land use
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".
Aggregate Datasetidentifier	35a036bb-c027-401c-8625-2ecf722e8461
Association Type	Cross reference
Spatial representation type	Grid
Distance	10 10 m
Language of dataset	English
Character set	UTF8
Topic category	<ul style="list-style-type: none"> • Environment • Imagery base maps earth cover
Begin date	2018-03-01
End date	2018-10-31



Coordinate reference system identifier	EPSG:3035		
Distribution format	<ul style="list-style-type: none"> • GeoTIFF (1.0) 		
OnLine resource	Protocol ESRI:REST OGC:WMS WWW:LINK-1.0-http--link	Linkage https://image.discomap.eea.europa.eu/arcgis/rest/services/GioLandPublic/HRL_Grassland_2018/ImageServer https://image.discomap.eea.europa.eu/arcgis/services/GioLandPublic/HRL_Grassland_2018/ImageServer/WMServer?request=GetCapabilities&service=WMS https://land.copernicus.eu/en/products/high-resolution-layer-grassland/grassland-2018#Download	Name Download (requires authentication)
OnLine resource	Protocol DOI	Linkage https://doi.org/10.2909/60639d5b-9164-4135-ae93-fb4132bb6d83	Name
Hierarchy level	Dataset		

Conformance result

Date (Publication)	2010-12-08
Explanation	See the referenced specification

Statement

The primary grassland status layer at 10m spatial resolution was produced with a 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 01-02-2018 to 30-11-2018, adapted to regional conditions where needed. In total, 137 statistical time features have been calculated and more than 700,000 samples were automatically collected from the LUCAS 2018 database, various CLMS products and additional manual sampling. The final product will be accompanied by a series of expert and reference products (PLOUGH, GRAVPI, Confidence 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.

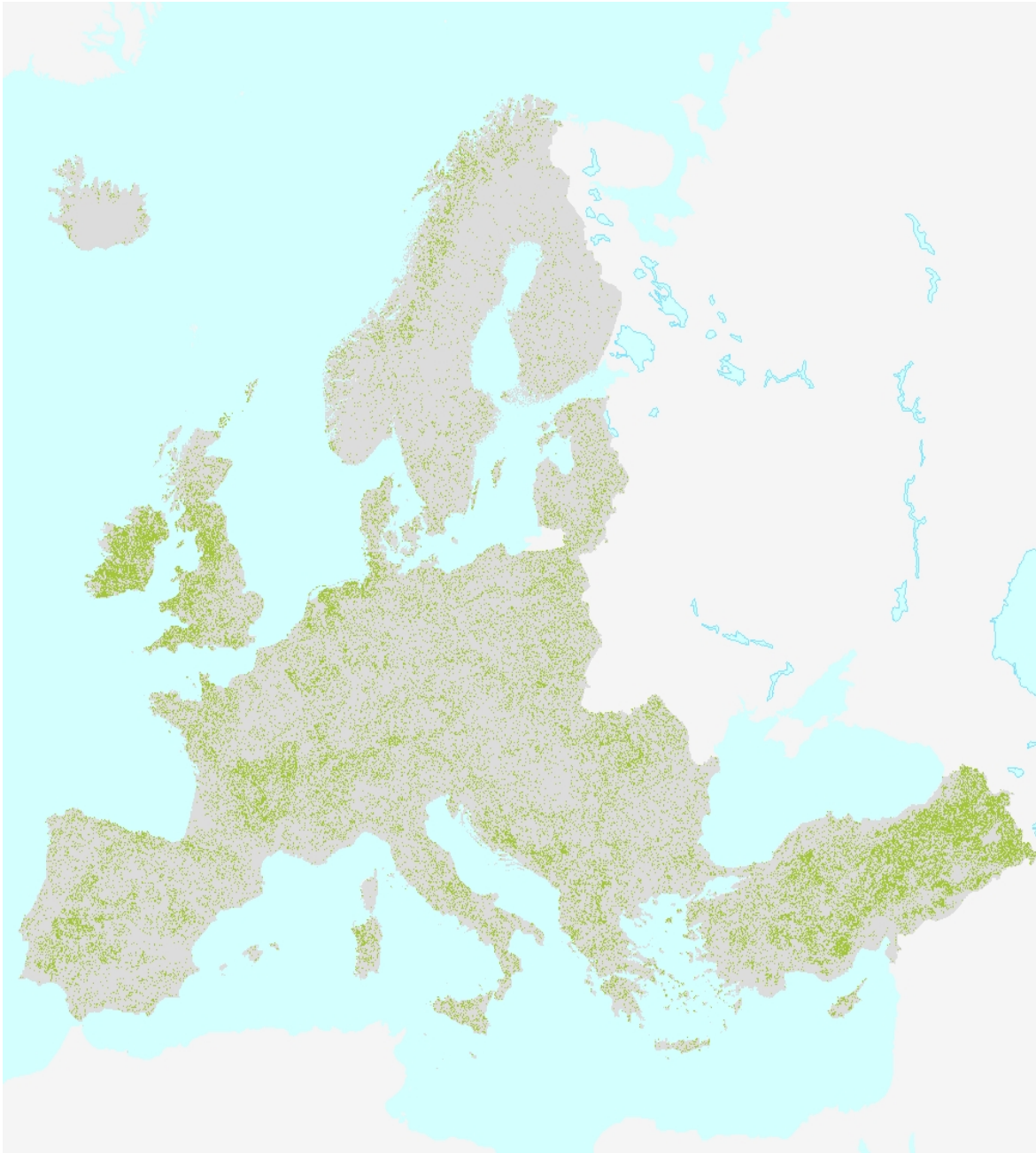
Thematic target accuracy: 85% overall accuracy within each bio-geographic region.

Achieved overall accuracy: 95.31% with a 95% confidence level applied. Thematic accuracy has been assessed using a stratified random point sampling approach with 11708 points (area weighted), visually interpreted using VHR_IMAGE_2018 data, Sentinel-2 time series data and complemented by additional data sources like LPIS data sets and Google Earth imagery.

Metadata

File identifier	60639d5b-9164-4135-ae93-fb4132bb6d83 XML										
Metadata language	English										
Character set	UTF8										
Hierarchy level	Dataset										
Date stamp	2024-02-06T16:45:17.445Z										
Metadata standard name	ISO 19115/19139										
Metadata standard version	1.0										
Metadata author	<table border="1"> <thead> <tr> <th>Organisation name</th> <th>Individual name</th> <th>Electronic mail address</th> <th>Website Role</th> </tr> </thead> <tbody> <tr> <td>European Environment Agency</td> <td></td> <td>sdi@eea.europa.eu</td> <td>Point of contact</td> </tr> </tbody> </table>	Organisation name	Individual name	Electronic mail address	Website Role	European Environment Agency		sdi@eea.europa.eu	Point of contact		
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Overviews



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