



Grassland Change 2015-2018 (raster 20 m), Europe, 3-yearly, Oct. 2020

The High Resolution Layer (HRL) Grassland Change 2015-2018 raster product at 20m resolution provides information on changes in grassland vegetation cover between the reference years 2015 and 2018. The thematic classes indicate all non-grassland areas, grassland gain and grassland loss, unchanged grassland in both years and unverified grassland gain and loss areas for the pan-European area of EEA38 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 dataset is provided as 20 meter rasters in 100 x 100 km tiles grouped according to the EEA38 countries and the United Kingdom (fully conformant with the EEA reference grid).

The HRL Grassland layer 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.

You can read more about the product here: <https://land.copernicus.eu/en/products/high-resolution-layer-grassland/grassland-change-2015-2018>.

Simple

Date (Creation)	2020-10-20				
Date (Publication)	2020-10-20				
Edition	01.00				
Citation identifier	copernicus_r_3035_20_m_grac-2015-2018_p_2010-2018_v01_r00				
Code	10.2909/a0925bc0-d3d8-49af-ba9d-c4f1cf2b654d				
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 Environment Agency		sdi@eea.europa.eu	http://www.eea.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	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">forest managementland coverlandscape alterationland 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>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.</p> <p>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.</p> <p>Free, full and open access to the products and services of the Copernicus Land Monitoring Service is made on the conditions that:</p> <ol style="list-style-type: none"> 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	Grid
Distance	20 m
Language of dataset	English
Character set	UTF8
Topic category	<ul style="list-style-type: none"> • Environment • Imagery base maps earth cover
Begin date	2010-01-01
End date	2018-10-31

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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_GrasslandChange_15_18/ImageServer https://image.discomap.eea.europa.eu/arcgis/services/GioLandPublic/HRL_GrasslandChange_15_18/ImageServer/WMSServer?request=GetCapabilities&service=WMS https://land.copernicus.eu/en/products/high-resolution-layer-grassland/grassland-change-2015-2018#Download	Name Download (requires authentication)
OnLine resource	Protocol DOI	Linkage https://doi.org/10.2909/a0925bc0-d3d8-49af-ba9d-c4f1cf2b654d	Name
Hierarchy level	Dataset		

Conformance result

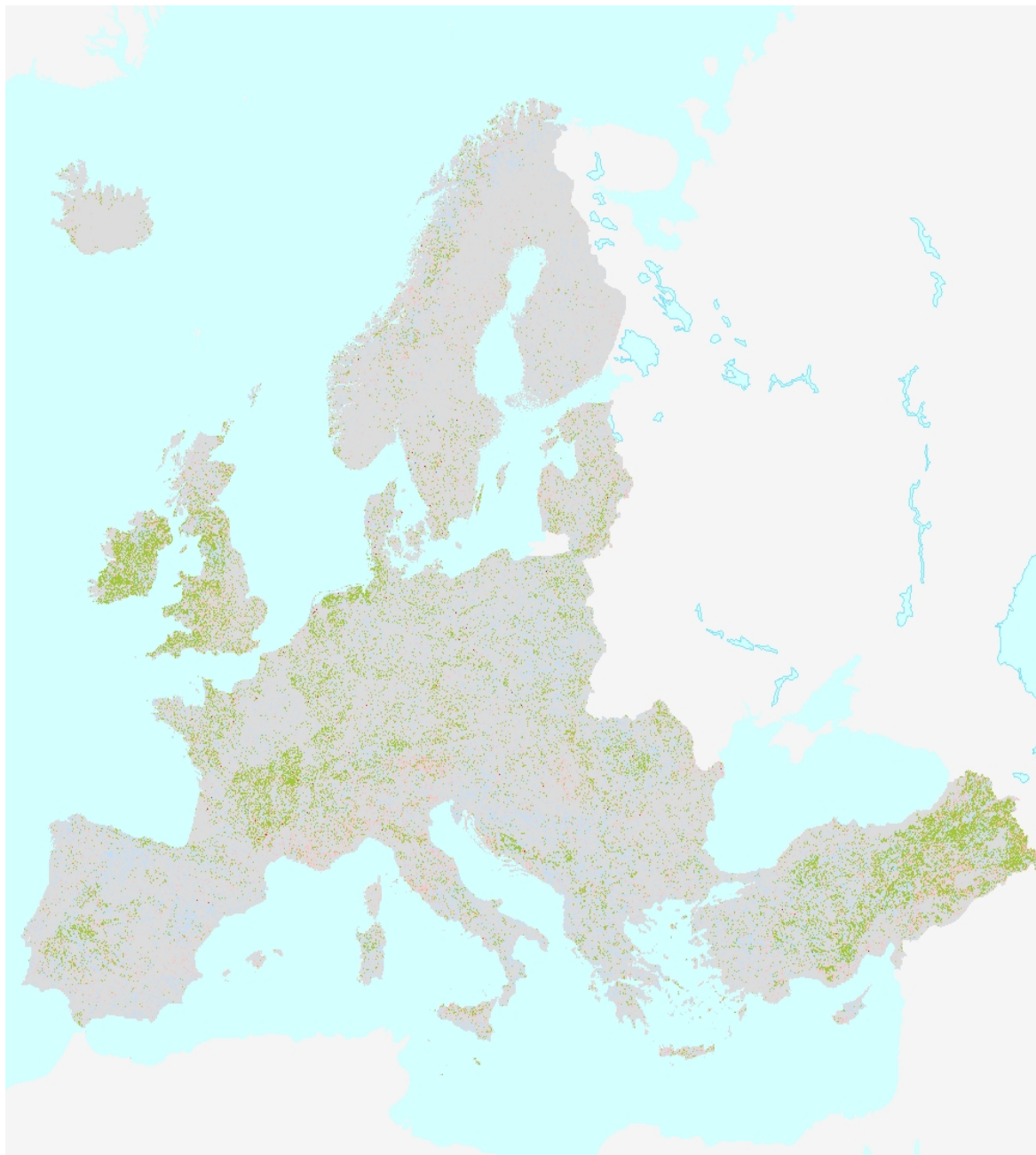
Title	Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services
Date (Publication)	2010-12-08
Explanation	See the referenced specification

Statement	<p>The Grassland Change Layer 2015-2018 at 20m spatial resolution is derived from the primary Pan-European Grassland Status Layers of the reference years 2015 (HRL GRA at 20m resolution) and 2018 (HRL GRA at 10m spatial resolution) and covers the area of EEA38 and the United Kingdom. The GRA Change Layer is the first of its kind indicating changes in grassland vegetation cover in five thematic classes. The production workflow consists of a map-to-map comparison of both years and takes adequate time features of both years as well as ploughing information from PLOUGH 2015 and 2018 back to the year 2010 into account.</p> <p>Due to substantial transformations concerning resolution (20m to 10m), significantly enhanced data availability and therefore a refined technical approach, differences between the reference years of 2015 and 2018 are not always illustrating real changes in grassland vegetation cover but are sometimes technically induced. Areas differing in the years 2015 and 2018 that could not be verified as real change by the workflow are therefore labelled as unverified gain or loss areas.</p> <p>Geometric accuracy (positioning scale): Less than one pixel (10m) according to ortho-rectified satellite image base (Sentinel-2 Level-2A) delivered by ESA.</p> <p>Thematic target accuracy: The thematic accuracy has been assessed on the primary pan-European Change product and refers to classes 1-gain, 2-loss, 10-unchanged grassland in both years an 0-all non-grassland areas. Unverified areas are not part of the validation process. The unweighted overall accuracy is 88,97%. The weighted overall accuracy is 99,30% and considers the relative importance of all classes.</p>
Source	<ul style="list-style-type: none"> Grassland 2015 (raster 20 m). Europe. 3-yearly. Apr. 2018 Grassland 2018 (raster 10 m). Europe. 3-yearly. Aug. 2020 High Resolution Layer: Ploughing Indicator 2015 (raster 20m). May 2018

Metadata

File identifier	a0925bc0-d3d8-49af-ba9d-c4f1cf2b654d XML		
Metadata language	English		
Character set	UTF8		
Hierarchy level	Dataset		
Date stamp	2024-02-06T16:45:24.005Z		
Metadata standard name	ISO 19115/19139		
Metadata standard version	1.0		
Metadata author	Organisation name	Individual name	Electronic mail addressWebsite Role
	European Environment Agency		sdi@eea.europa.euPoint of contact

Overviews



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