

Small Woody Features 2015 (raster 5 m), Europe, 3-yearly - Nov. 2019

The HRL Small Woody Features (SWF) is a new Copernicus Land Monitoring Service (CMLS) product, which provides harmonized information on linear structures such as hedgerows, as well as patches (200 m² area 5000 m²) of woody features across the EEA39 countries.

Small woody landscape features are important vectors of biodiversity and provide information on fragmentation of habitats with a direct potential for restoration while also providing a link to hazard protection and green infrastructure, amongst others. The SWF layer contains woody linear, and small patchy elements, but is not differentiated into trees, hedges, bushes and scrub. The spatial pattern are limited to linear structures and isolated patches (patchy structures) on the basis of geometric characteristics. Additional Woody Features (AWF) are also included in this product. They consist of woody structures that do not fulfil the SWF geometric specifications but which are connected to valid SWFs structures. VHR imagery (DEIMOS-2, Pleiades 1A, Pleiades 1B, GeoEye-1, SPOT 6, SPOT 7, WorldView-2, WorldView-3 images from 2015) made available in the ESA Copernicus DWH are the main data source for the detection of small woody features identifiable within the given image resolution.

The dataset is available for the 2015 reference year and is produced in three different formats. This metadata corresponds to the SWF 5m spatial resolution raster layer, which distinguishes between SWF (code =1) and AWF (code =3)). This layer is derived from the SWF vector product in order to be more in line with other HR layers, and for allowing raster processing of the results. It describes the SWF landscape according to the high resolution of the input data, but without taking into account the possible small geometric inaccuracy of the vector product (due to VHR geometric imprecision, automatic processing such as smoothing, etc.). The geometric resolution is consistent with the EEA reference grid.

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	built environment
	land use
	soil surface sealing
	landscape alteration
Spatial scope	• European
EEA Management Plan	• 2020 3.6.7
	• Biodiversity
EEA topics	Agriculture and food
	Land use
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:
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	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	5 m
Language of dataset	English
Character set	UTF8
Topic category	 Environment Imagery base maps earth cover
Begin date	2014-01-01
End date	2016-12-31

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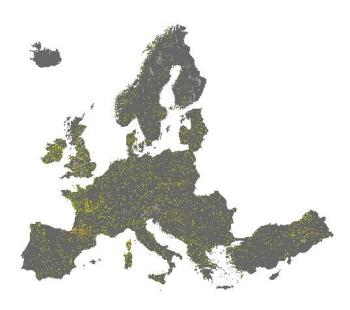
Coordinate reference system identifier	EPSG:3035		
Distribution format	• GeoTIFF (1.0)		
OnLine resource	Protocol	Linkage	Name
	OGC:WMS	https://image.discomap.eea.europa.eu/arcgis/services /GioLandPublic/HRL_SmallWoodyFeatures_2015_005m /ImageServer/WMSServer? request=GetCapabilities&service=WMS	0
	ESRI:REST	https://image.discomap.eea.europa.eu/arcgis/rest/services /GioLandPublic/HRL_SmallWoodyFeatures_2015_005m /ImageServer	
	WWW:LINK-1.0-httplink	https://land.copernicus.eu/en/products/high-resolution-layer- small-woody-features/small-woody-features-2015#Download	Download (requires authentication
OnLine resource	Protocol	Linkage	Name
	DOI	https://doi.org/10.2909/4e92b07d-48b0-4a53-9db2- fd8d07070cc1	
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	Supervised classification and visual interpretation of linear and patchy features on pan-sharpened VHR_IMAGE_2015. Small woody landscape features are important vectors of biodiversity and provide information on fragmentation of habitats with a direct potential for restoration while also providing a link to hazard protection and green infrastructure, amongst others (code = 1). Besides, the Minimum Mapping Unit (MMU) for small patches of trees is 200 m ² while the Maximum Mapping Unit (MAXMU) is defined by 5000 m ² . The Minimum Mapping Length (MML) of linear elements is 50 m. There is also an other distinction between this two structures: width (30 m maximum for linear instead of 30 m minimum for patchy). Additional Woody Features (code = 3) consist of woody structures that do not fulfil the SWF geometric specifications but which are connected to valid SWFs structures, as well as patchy structures too large to be considered as valid SWF. No data (code = 254). Out of Large Region limits (code = 255). Tiles NO116 (Southeast Norway) and NO119 (Northeast Norway) have been discontinued and will not be published due to lack of availability of suitable satellite data.
Source	Small Woody Features 2015 (vector), Europe, 3-yearly - Nov. 2019
Metadata	I

File identifier	4e92b07d-48b0-4a53-9db2-fd8d07070cc1 XML			
Metadata language	English			
Character set	UTF8			
Hierarchy level	Dataset			
Date stamp	2024-02-06T16:45:30.977Z			
Metadata standard name	ISO 19115/19139			
Metadata standard version	1.0			
Metadata author	Organisation name European Environment Agency	Individual name	Electronic mail address sdi@eea. europa.eu	Website Role Point of contact

Overviews



Provided by

