EEA geospatial data catalogue

Imperviousness Density 2018 (raster 100 m), Europe, 3-yearly, Aug. 2020

The High Resolution Layer on Imperviousness Density 2018 with 100 m resolution is a thematic product showing the sealing density in the range from 0-100% in an aggregated version (100m) for the period 2018 (including data from 2017-2019) for the EEA-38 area and the United Kingdom. The production of the high resolution imperviousness layers is coordinated by EEA in the frame of the EU Copernicus programme.

The high resolution imperviousness products capture the percentage and change of soil sealing. Built-up areas are characterized by the substitution of the original (semi-) natural land cover or water surface with an artificial, often impervious cover. These artificial surfaces are usually maintained over long periods of time. A series of high resolution imperviousness datasets (for the 2006, 2009, 2012, 2015 and 2018 reference years) with all artificially sealed areas was produced using automatic derivation based on calibrated Normalized Difference Vegetation Index (NDVI). This series of imperviousness layers constitutes the main status layers. They are per-pixel estimates of impermeable cover of soil (soil sealing) and are mapped as the degree of imperviousness (0-100%). Imperviousness change layers were produced as a difference between the reference years (2006-2009, 2009-2012, 2012-2015, 2015-2018 and additionally 2006-2012, to fully match the CORINE Land Cover production cycle) and are presented 1) as degree of imperviousness change (-100% -- +100%), in 20m and 100m pixel size, and 2) a classified (categorical) 20m change product.

The dataset in 100 meter aggregate raster (fully conformant with the EEA reference grid) is provided as a full EEA38 and United Kingdom mosaic.

More information about this product is available here: https://land.copernicus.eu/en/products/high-resolution-layer-imperviousness/imperviousness-density-2018 .

Simple

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No information provided.

Maintenance and update frequency	Continual
GEMET - INSPIRE themes, version 1.0	• Land cover • Land use
Keywords	
Continents, countries, sea regions of the world.	• EEA38 (from 2020) • United Kingdom

Keywords	
GEMET	• soil surface sealing • built environment • built-up area • land cover • landscape alteration • sealing • urban area • land use
Spatial scope	• European
EEA Management Plan	• 2018 3.6.1
EEA topics	• Soil • Land use • Buildings and construction
Access constraints	Other restrictions
Other constraints	no limitations to public access
Use constraints	Other restrictions
Other constraints	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. Free, full and open access to this data set is made on the conditions that: 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	Grid
Distance	100 m
Language of dataset	English
Character set	UTF8
Topic category	• Environment • Imagery base maps earth cover
Begin date	2017-01-01
End date	2019-12-31

71.16	N	27.64	S	44.81	E	-31.28	W



Coordinate reference system identifier	EPSG:3035
Distribution format	• GeoTIFF (1.0)

OnLine resource	**Protocol**	**Linkage**	**Name**
	WWW:LINK-1.0-http--link	https://land.copernicus.eu/en/products/high-resolution-layer-imperviousness/imperviousness-density-2018#Download	Download (requires authentication)

OnLine resource	**Protocol**	**Linkage**	**Name**
	DOI	https://doi.org/10.2909/524fa72f-61d7-4364-801e-3e271d7b10bc	

Hierarchy level	Dataset

Conformance result

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

Statement	Quality assurance follows the ISO9000 standards for Quality Management and comprises of dedicated procedures of on-going 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 will be given to the target thematic accuracies 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: Completeness, Logical Consistency, Thematic Accuracy, Temporal quality and Usability. Each of them (excl. the Thematic Accuracy hereafter) forms a section in the QA/QC Procedures.
Source	• Imperviousness Density 2018 (raster 10 m), Europe, 3-yearly, Aug. 2020

Metadata

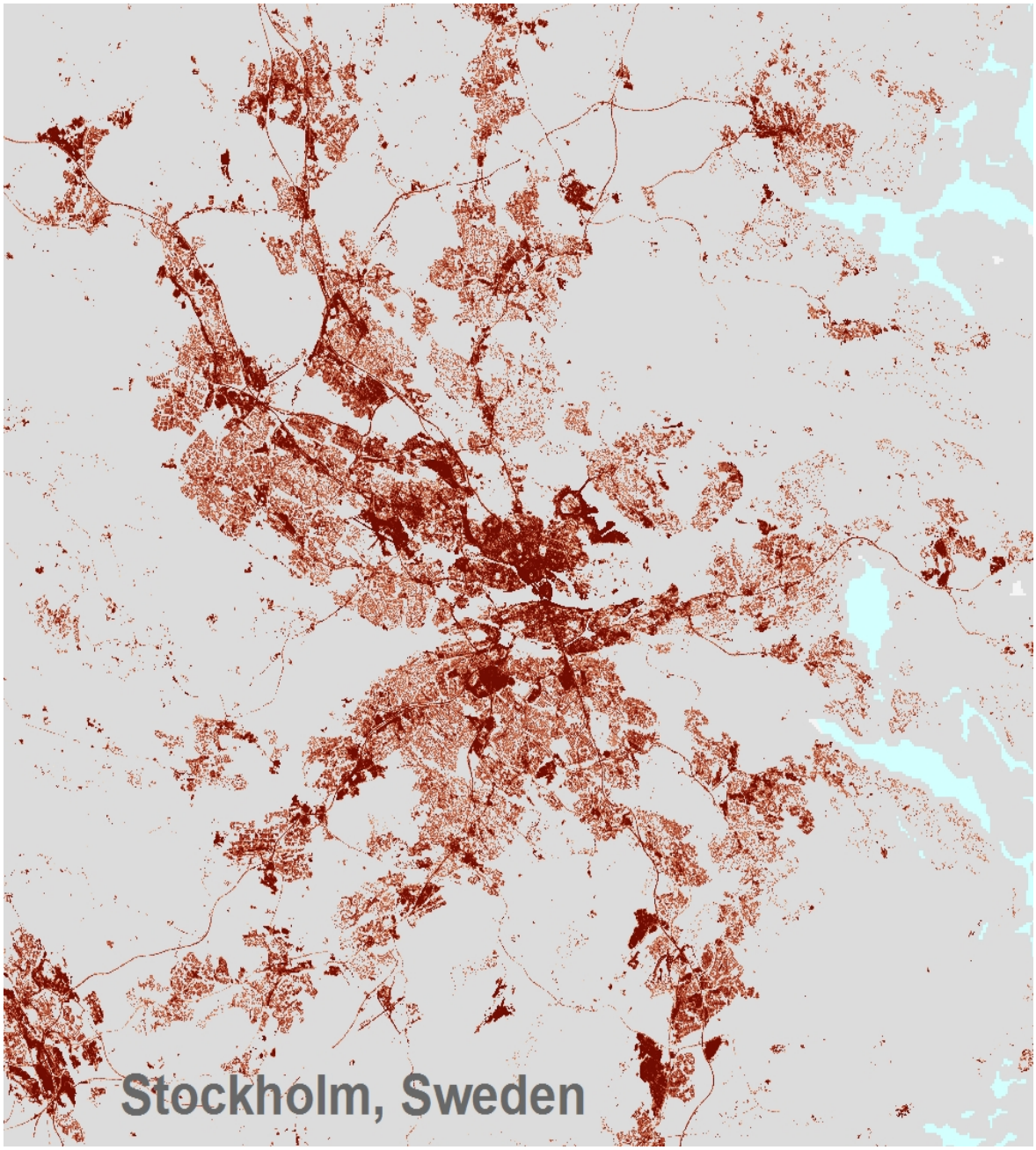
File identifier	524fa72f-61d7-4364-801e-3e271d7b10bc XML

Metadata language	English
Character set	UTF8
Hierarchy level	Dataset
Date stamp	2024-02-06T16:44:32.946Z
Metadata standard name	ISO 19115/19139
Metadata standard version	1.0

Metadata author

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Overviews



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