

# Imperviousness Density 2009 (raster 20 m), Europe, 3-yearly, Apr. 2018

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, 2015-2015, 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.

### Simple

Date (Creation)	2018-04-06								
Date (Publication)	2018-04-06								
Edition	03.00								
Citation identifier	copernicus_r_3035_20_m_imd-2009_p_2008-	copernicus_r_3035_20_m_imd-2009_p_2008-2010_v03_r00							
Citation identifier	DAT-14-en	DAT-14-en							
Code	<u>10.2909/61a2a6c8-9f9a-407d-a01d-d2101e9dcd65</u>								
Point of contact	Organisation name	Individual name	Electronic mail address	Website	Role				
	European Environment Agency		copernicus@eea europa.eu	https://land copernicus. eu	-				
	European Environment Agency		copernicus@eea europa.eu	https://land copernicus. eu					
	European Environment Agency		copernicus@eea europa.eu	https://land copernicus. eu					

#### Point of contact

No information provided.

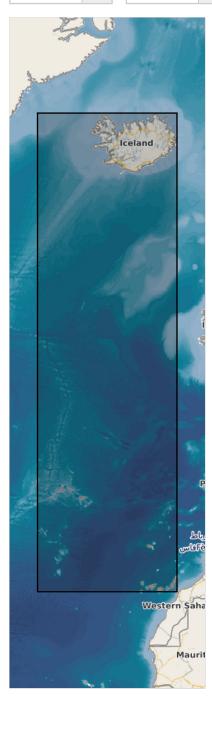
Maintenance and update frequency	Continual
GEMET - INSPIRE themes, version 1.0	Land cover
Keywords	
Continents, countries, sea regions of the world.	• EEA39
Keywords	
	land cover
GEMET	Iandscape alteration
	• urban area
	sealing
	soil surface sealing

	built environment
Spatial scope	• European
EEA Management Plan	• 2018 3.6.1
EEA topics	Land use Soil Buildings and construction
Use limitation	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".
Access constraints	Other restrictions
Other constraints	no limitations to public access
Spatial representation type	Grid
Distance	20 m
Language of dataset	English
Character set	UTF8
Topic category	Environment Imagery base maps earth cover
Begin date	2008-01-01
End date	2010-12-31



Е

w



N		S		Е		v	v
							_



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_ImperviousnessDensity_2009 /MapServer/WMSServer? request=GetCapabilities&service=WMS	0
	ESRI:REST	https://image.discomap.eea.europa.eu/arcgis/rest/services /GioLandPublic/HRL_ImperviousnessDensity_2009 /MapServer	
	WWW:LINK-1.0-httplink	https://land.copernicus.eu/en/products/high-resolution-layer- imperviousness/imperviousness-density-2009#Download	Download (requires authenticatior
OnLine resource	Protocol	Linkage	Name
	DOI	https://doi.org/10.2909/61a2a6c8-9f9a-407d-a01d- d2101e9dcd65	
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 ongoing 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 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:      (i) Completeness,     (ii) Logical Consistency,     (iii) Thematic Accuracy,     (iv) Temporal quality and     (v) Usability.     Each of them (excl. the Thematic Accuracy hereafter) forms a section in the QA/QC Procedures.

### Metadata

File identifier	61a2a6c8-9f9a-407d-a01d-d2101e9dcd65 XMI	L		
Metadata language	English			
Character set	UTF8			
Hierarchy level	Dataset			
Date stamp	2024-02-06T16:46:16.336Z			
Metadata standard name	ISO 19115/19139			
Metadata standard version	1.0			
Metadata author			Electronic	
	Organisation name	Individual name	mail address	Website Role
	European Environment Agency		sdi@eea. europa.eu	Point of contact

### Overviews



## Provided by

