

## Imperviousness Change 2015-2018 (raster 100 m), Europe, 3-yearly, Aug. 2020

The High Resolution Layer Imperviousness Change (IMC) 2015-2018 is a raster dataset showing change in imperviousness between 2015 and 2018 reference years, produced in the frame of the EU Copernicus programme. This metadata refers to the derived product 100 meter aggregated raster (fully conformant with EEA reference grid) provided as a full mosaic of the EEA38 countries and the United Kingdom.

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.

More information about the product can be found here <https://land.copernicus.eu/en/products/high-resolution-layer-imperviousness/imperviousness-change-2015-2018>.

### Simple

Date (Creation)	2020-08-28				
Date (Publication)	2020-08-28				
Edition	01.00				
Citation identifier	copernicus_r_3035_100_m_imc-2015-2018_p_2015-2018_v01_r00				
Citation identifier	DAT-14-en				
Code	<a href="https://doi.org/10.2909/f6628606-6552-4d3b-8d3a-df19f827ac56">10.2909/f6628606-6552-4d3b-8d3a-df19f827ac56</a>				
Point of contact	<b>Organisation name</b>	<b>Individual name</b>	<b>Electronic mail address</b>	<b>Website</b>	<b>Role</b>
	European Environment Agency		copernicus@eea.europa.eu	<a href="https://land.copernicus.eu">https://land.copernicus.eu</a>	Distributor
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### Point of contact

No information provided.

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

<b>GEMET</b>	<ul style="list-style-type: none"> <li>• landscape alteration</li> <li>• built environment</li> <li>• sealing</li> <li>• soil surface sealing</li> <li>• urban area</li> <li>• land cover</li> <li>• built-up area</li> <li>• land use</li> </ul>
<b><a href="#">Spatial scope</a></b>	<ul style="list-style-type: none"> <li>• <a href="#">European</a></li> </ul>
<b>EEA topics</b>	<ul style="list-style-type: none"> <li>• Land use</li> </ul>
<b>EEA Management Plan</b>	<ul style="list-style-type: none"> <li>• 2018 3.6.1</li> </ul>
<b>Access constraints</b>	Other restrictions
<b>Other constraints</b>	<a href="#">no limitations to public access</a>
<b>Use constraints</b>	Other restrictions
<b>Other constraints</b>	<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"> <li>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.</li> <li>2. Users shall make sure not to convey the impression to the public that the user's activities are officially endorsed by the Union.</li> <li>3. Where that data or information has been adapted or modified, the user shall clearly state this.</li> <li>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".</li> </ol>
<b>Spatial representation type</b>	Grid
<b>Distance</b>	100 m
<b>Language of dataset</b>	English
<b>Character set</b>	UTF8
<b>Topic category</b>	<ul style="list-style-type: none"> <li>• Environment</li> <li>• Imagery base maps earth cover</li> </ul>
<b>Begin date</b>	2015-01-01
<b>End date</b>	2018-12-31

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Coordinate reference system identifier	<a href="#">EPSG:3035</a>		
Distribution format	<ul style="list-style-type: none"> <li>GeoTIFF ( 1.0 )</li> </ul>		
OnLine resource	<b>Protocol</b> WWW:LINK-1.0-http--link	<b>Linkage</b> <a href="https://land.copernicus.eu/en/products/high-resolution-layer-imperviousness/imperviousness-change-2015-2018#Download">https://land.copernicus.eu/en/products/high-resolution-layer-imperviousness/imperviousness-change-2015-2018#Download</a>	<b>Name</b> Download (requires authentication)
OnLine resource	<b>Protocol</b> DOI	<b>Linkage</b> <a href="https://doi.org/10.2909/f6628606-6552-4d3b-8d3a-df19f827ac56">https://doi.org/10.2909/f6628606-6552-4d3b-8d3a-df19f827ac56</a>	<b>Name</b>
Hierarchy level	Dataset		

## Conformance result

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

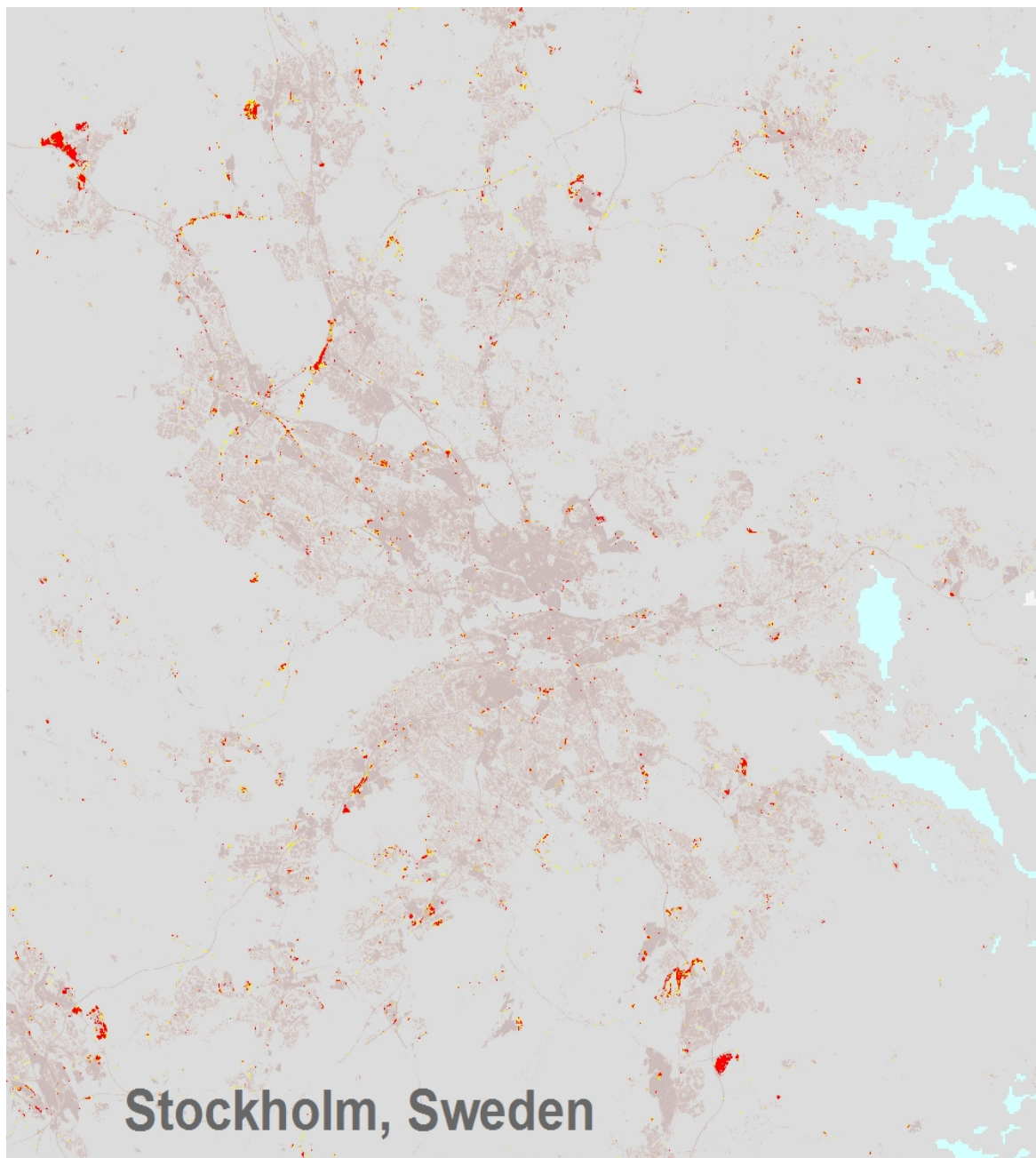
Statement	<p>Quality assurance follows the ISO9000 standards for Quality Management and comprises of dedicated procedures of ongoing quality checks (QA breakpoints) during implementation of the production chain, in order to keep persistent control over the various stages of production, assure fitness-for-purpose 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:</p> <ul style="list-style-type: none"> <li>(i) Completeness,</li> <li>(ii) Logical Consistency,</li> <li>(iii) Thematic Accuracy,</li> <li>(iv) Temporal quality and</li> <li>(v) Usability.</li> </ul> <p>Each of them (excl. the Thematic Accuracy hereafter) forms a section in the QA/QC Procedures.</p> <p>IMPORTANT: Please be aware that we are currently investigating the reliability of the magnitude of imperviousness increase that was mapped for the 2015-2018 period. The change products (as mapped) show a significant increase of the speed to soil sealing /imperviousness as compared to the previous periods for which we have change data (2006-2009, 2009-2012 and 2012-2015). We are confident that the spatial pattern of the trend reflects reality, but the magnitude of the increase needs to be further investigated. See background information in the Quality section here: <a href="https://land.copernicus.eu/en/products/high-resolution-layer-imperviousness/imperviousness-change-2015-2018">https://land.copernicus.eu/en/products/high-resolution-layer-imperviousness/imperviousness-change-2015-2018</a> .</p> <p>The validation report of the product is available here: <a href="https://land.copernicus.eu/en/technical-library/hrl-imperviousness-2018-validation-report/@_@download/file">https://land.copernicus.eu/en/technical-library/hrl-imperviousness-2018-validation-report/@_@download/file</a> .</p>
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Source	<ul style="list-style-type: none"><li><a href="#">Imperviousness Change 2015-2018 (raster 20 m), Europe, 3-yearly, Aug. 2020</a></li></ul>
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Metadata

File identifier	f6628606-6552-4d3b-8d3a-df19f827ac56 <a href="#">XML</a>										
Metadata language	English										
Character set	UTF8										
Hierarchy level	Dataset										
Date stamp	2024-02-06T16:44:29.929Z										
Metadata standard name	ISO 19115/19139										
Metadata standard version	1.0										
Metadata author	<table><tr><th>Organisation name</th><th>Individual name</th><th>Electronic mail address</th><th>Website Role</th></tr><tr><td>European Environment Agency</td><td></td><td>sdi@eea.europa.eu</td><td>Point of contact</td></tr></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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