

# Imperviousness Change 2012-2015 (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)     | 2018-04-30                               |                   |                             |                                    |      |
|---------------------|--|-------------------|-----------------------------|------------------------------------|------|
| Date (Publication)  | 2018-04-30                               |                   |                             |                                    |      |
| Edition             | 03.00                                    |                   |                             |                                    |      |
| Citation identifier | copernicus_r_3035_20_m_imc-2012-2015_p_  | 2011-2016_v03_r00 |                             |                                    |      |
| Citation identifier | DAT-14-en                                |                   |                             |                                    |      |
| Code                | 10.2909/463f357e-6419-461b-9ed1-c38948a7 | <u>5f09</u>       |                             |                                    |      |
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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       •         GEMET       • Iandscape alteration         • sealing       • built environment         • built environment       • soil surface sealing |  |                      |
|--|--|----------------------|
| Keywords     • EEA39       Continents, countries, sea regions of the world.     • Iandscape alteration       GEMET     • landscape alteration       • sealing     • built environment  | Maintenance and update frequency                 | Continual            |
| Continents, countries, sea regions of the world.       • EEA39         Keywords       • landscape alteration         GEMET       • sealing         • built environment   | GEMET - INSPIRE themes, version 1.0              | Land cover           |
| Continents, countries, sea regions of the world.         Keywords         GEMET         • landscape alteration         • sealing         • built environment   | Keywords   |                      |
| GEMET       • landscape alteration         • sealing       • built environment   | Continents, countries, sea regions of the world. | • EEA39              |
| GEMET       • landscape alteration         • sealing       • built environment   | Kanwords   |                      |
| built environment  | noy no do  | landscape alteration |
|  | GEMET  | • sealing            |
| <ul> <li>soil surface sealing</li> </ul>   |  | built environment    |
|  |  | soil surface sealing |
| Iand cover   |  |                      |
| • urban area   |  | • urban area         |

|                             | land use  |
|-----------------------------|---|
| Spatial scope               | • European  |
|                             |   |
| EEA Management Plan         | • 2018 3.6.1  |
| EEA topics                  | 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.  |
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| Spatial representation type | Grid  |
| Distance                    | 20 m  |
| Language of dataset         | English   |
| Character set               | UTF8  |
| Topic category              | <ul> <li>Environment</li> <li>Imagery base maps earth cover</li> </ul>  |
| Begin date                  | 2011-01-01  |
| 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                                    |  |
|  | WWW:LINK-1.0-httplink | https://land.copernicus.eu/en/products/high-resolution-layer-<br>imperviousness/imperviousness-change-2012-<br>2015#Download  | Download<br>(requires<br>authentication |  |
|  | ESRI:REST             | https://image.discomap.eea.europa.eu/arcgis/rest/services<br>/GioLandPublic/HRL_ImperviousnessChange_12_15<br>/MapServer  |   |  |
|  | OGC:WMS               | https://image.discomap.eea.europa.eu/arcgis/services<br>/GioLandPublic/HRL_ImperviousnessChange_12_15<br>/MapServer/WMSServer?<br>request=GetCapabilities&service=WMS |   |  |
| OnLine resource                        | Protocol              | Linkage   | Name                                    |  |
|  | DOI                   | https://doi.org/10.2909/463f357e-6419-461b-9ed1-<br>c38948a75f09  |   |  |
| Hierarchy level                        | Dataset               |   |   |  |

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### 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. |

- Imperviousness Density 2012 (raster 20 m), Europe, 3-yearly, Apr. 2018
  Imperviousness Density 2015 (raster 20 m), Europe, 3-yearly, Marc. 2018

### Metadata

| File identifier           | 463f357e-6419-461b-9ed1-c38948a75f09 XML |                 |                               |                        |
|---------------------------|--|-----------------|-------------------------------|------------------------|
| Metadata language         | English                                  |                 |                               |                        |
| Character set             | UTF8                                     |                 |                               |                        |
| Hierarchy level           | Dataset                                  |                 |                               |                        |
| Date stamp                | 2024-02-06T16:47:21.216Z                 |                 |                               |                        |
| Metadata standard name    | ISO 19115/19139                          |                 |                               |                        |
| Metadata standard version | 1.0                                      |                 |                               |                        |
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#### **Overviews**



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