

## High Resolution Snow and Ice Monitoring: Persistent Snow Area (raster 20m)

The Copernicus Persistent Snow Area (PSA) product is generated annually for the entire EEA38 and the United Kingdom, based on the Fractional Snow Cover (FSC) information. It provides the extent of the persistent snow cover, i.e. the area where snow is present throughout the hydrological year with a spatial resolution of 20 m x 20 m.

This metadata refers to the PSA product distributed in raster files as tiles aligned with Sentinel-2 (UTM/WGS84) at 20 m x 20 m GSD. It is also available in another projection as tiles aligned with the Pan-European High-Resolution Layers in the European 20 m x 20 m grid (ETRS89 LAEA - EPSG: 3035). It is typically released on an annual basis with a release date in October, after the end of the hydrological year. Each product is composed of two separate files corresponding to the different layers of the product, and another metadata file.

PSA is one of the products of the pan-European High-Resolution Snow & Ice service (HR-S&I), which are provided at high spatial resolution (20 m x 20 m and 60 m x 60 m), from the Sentinel-2 and Sentinel-1 constellations data from September 1, 2016 onwards.

You can read more about the PSA product here: <https://land.copernicus.eu/en/products/snow/high-resolution-persistent-snow-area> .

### Simple

|                            |   |                        |                                |  |
|----------------------------|---|------------------------|--------------------------------|--|
| <b>Date (Creation)</b>     | 2020-07-01  |                        |                                |  |
| <b>Date (Publication)</b>  | 2020-10-14  |                        |                                |  |
| <b>Edition</b>             | 01.00   |                        |                                |  |
| <b>Citation identifier</b> | copernicus_r_utm-wgs84_20_m_hrsi-psa_p_2017-now_v01_r00 |                        |                                |  |
| <b>Citation identifier</b> | DAT-244-en  |                        |                                |  |
| <b>Point of contact</b>    | <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      |
|                            | European Environment Agency                             |                        | copernicus@eea.europa.eu       | <a href="https://land.copernicus.eu">https://land.copernicus.eu</a> Custodian        |
|                            | European Environment Agency                             |                        | copernicus@eea.europa.eu       | <a href="https://land.copernicus.eu">https://land.copernicus.eu</a> Point of contact |

### 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> </ul>                                |
| <b>Keywords</b>   |   |
| <b>Continents, countries, sea regions of the world.</b> | <ul style="list-style-type: none"> <li>EEA38 (from 2020)</li> <li>United Kingdom</li> </ul> |
| <b>Keywords</b>   |   |
| <b>GEMET</b>  | <ul style="list-style-type: none"> <li>monitoring</li> <li>climate change impact</li> </ul> |

|                                    |   |
|------------------------------------|---|
|                                    | <ul style="list-style-type: none"> <li>• snow</li> <li>• landscape alteration</li> <li>• land cover</li> </ul>  |
| <b>Spatial scope</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>Temporal resolution</b>         | <ul style="list-style-type: none"> <li>• Annually</li> </ul>  |
| <b>EEA Management Plan</b>         | <ul style="list-style-type: none"> <li>• 2020 3.6.7</li> </ul>  |
| <b>Access constraints</b>          | Other restrictions<br><a href="#">no limitations to public access</a>   |
| <b>Other constraints</b>           | Other restrictions  |
| <b>Use constraints</b>             |   |
| <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>                    | 20 20 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> <li>• Climatology, meteorology, atmosphere</li> </ul>  |
| <b>Begin date</b>                  | 2017-05-14  |



|  |  |  |   |
|--|--|--|---|
| Coordinate reference system identifier | <a href="#">EPSG:32625</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32626</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32627</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32628</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32629</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32630</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32631</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32632</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32633</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32634</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32635</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32636</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32637</a>   |  |   |
| Coordinate reference system identifier | <a href="#">EPSG:32638</a>   |  |   |
| Distribution format                    | <ul style="list-style-type: none"> <li>GeoTIFF ( 1.0 )</li> </ul>  |  |   |
| OnLine resource                        | <b>Protocol</b><br>WWW:LINK-1.0-http--link<br>OGC:WMS<br>WWW:LINK-1.0-http--link<br>WWW:LINK-1.0-http--link<br>WWW:LINK-1.0-http--link<br>WWW:LINK-1.0-http--link<br>WWW:LINK-1.0-http--link | <b>Linkage</b><br><a href="https://cryo.land.copernicus.eu/finder/">https://cryo.land.copernicus.eu/finder/</a><br><a href="https://cryo.land.copernicus.eu/wms/PSA?service=WMS&amp;request=GetCapabilities&amp;version=1.3.0">https://cryo.land.copernicus.eu/wms/PSA?service=WMS&amp;request=GetCapabilities&amp;version=1.3.0</a><br><a href="https://cryo.land.copernicus.eu/resto/api/collections/HRSI/search.json">https://cryo.land.copernicus.eu/resto/api/collections/HRSI/search.json</a><br><a href="https://www.wekeo.eu">https://www.wekeo.eu</a><br><a href="https://land.copernicus.eu/en/technical-library/hrsi-snow-pum/@_@download/file">https://land.copernicus.eu/en/technical-library/hrsi-snow-pum/@_@download/file</a><br><a href="https://land.copernicus.eu/en/technical-library/hrsi-snow-atbd/@_@download/file">https://land.copernicus.eu/en/technical-library/hrsi-snow-atbd/@_@download/file</a><br><a href="https://wekeo-broker.apps.mercator.dpi.wekeo.eu/databroker/ui/">https://wekeo-broker.apps.mercator.dpi.wekeo.eu/databroker/ui/</a><br><a href="https://land.copernicus.eu/en/products/snow/high-resolution-">https://land.copernicus.eu/en/products/snow/high-resolution-</a> | <b>Name</b><br>Cryo portal<br>REST API<br>WEKEO portal<br>Product user manual<br>Algorithm theoretical basis document<br>HDA API (Harmonized Data Access (WEKEO)) |

|                 |                         |   |                                       |
|-----------------|-------------------------|---|---------------------------------------|
|                 | WWW:LINK-1.0-http--link | <a href="#">persistent-snow-area#download</a> | Download<br>(requires authentication) |
| Hierarchy level | Dataset                 |   |                                       |

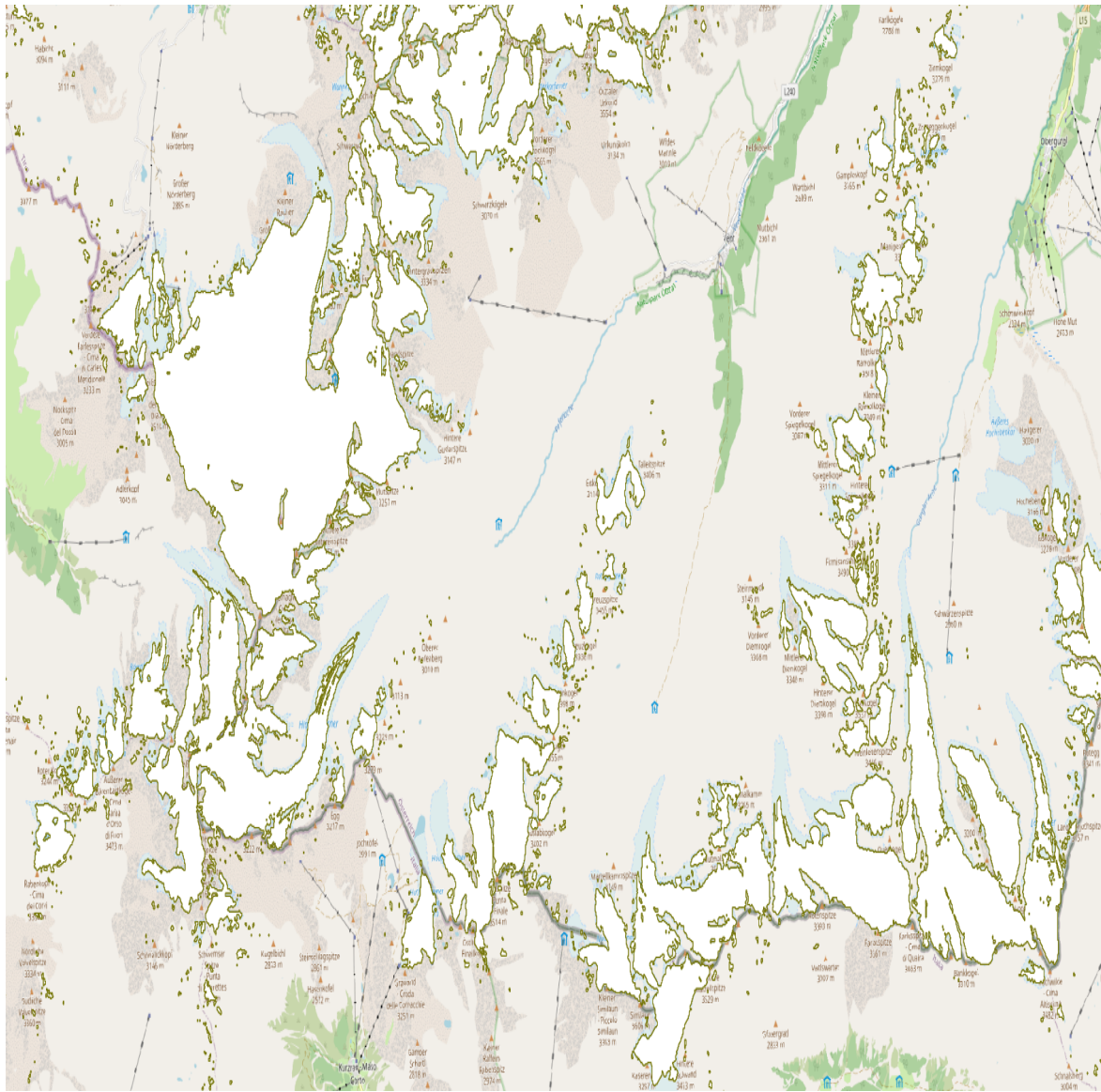
## Conformance result

|                    |   |  |  |
|--------------------|---|--|--|
| Date (Publication) | 2010-12-08  |  |  |
| Explanation        | See the referenced specification  |  |  |
| Statement          | <p>Pixels are classified as persistent snow area when snow was observed in at least 95% of the observations (under clear sky conditions).</p> <p>The quality assessment report (QAR) can be accessed here: <a href="https://land.copernicus.eu/en/technical-library/hrsi-snow-qar-s2/@@download/file">https://land.copernicus.eu/en/technical-library/hrsi-snow-qar-s2/@@download/file</a>.</p> |  |  |
| Source             | <ul style="list-style-type: none"> <li></li> </ul>  |  |  |

## Metadata

| File identifier             | 54a3d887-5cac-4e70-b441-454459e7c954 <a href="#">XML</a>   |                         |                  |                         |              |                             |  |                   |                  |  |  |
|-----------------------------|--|-------------------------|------------------|-------------------------|--------------|-----------------------------|--|-------------------|------------------|--|--|
| Metadata language           | English  |                         |                  |                         |              |                             |  |                   |                  |  |  |
| Character set               | UTF8   |                         |                  |                         |              |                             |  |                   |                  |  |  |
| Hierarchy level             | Dataset  |                         |                  |                         |              |                             |  |                   |                  |  |  |
| Date stamp                  | 2024-02-06T16:45:58.533Z   |                         |                  |                         |              |                             |  |                   |                  |  |  |
| Metadata standard name      | ISO 19115/19139  |                         |                  |                         |              |                             |  |                   |                  |  |  |
| Metadata standard version   | 1.0  |                         |                  |                         |              |                             |  |                   |                  |  |  |
| Metadata author             | <table border="1"> <thead> <tr> <th>Organisation name</th> <th>Individual name</th> <th>Electronic mail address</th> <th>Website Role</th> </tr> </thead> <tbody> <tr> <td>European Environment Agency</td> <td></td> <td>sdi@eea.europa.eu</td> <td>Point of contact</td> </tr> </tbody> </table> | Organisation name       | Individual name  | Electronic mail address | Website Role | European Environment Agency |  | sdi@eea.europa.eu | Point of contact |  |  |
| Organisation name           | Individual name  | Electronic mail address | Website Role     |                         |              |                             |  |                   |                  |  |  |
| European Environment Agency |  | sdi@eea.europa.eu       | Point of contact |                         |              |                             |  |                   |                  |  |  |

## Overviews



Provided by

