

## High Resolution Snow and Ice Monitoring: Wet/Dry Snow (raster 60m)

The Copernicus Wet/Dry Snow (WDS) product is generated in near real-time for the entire EEA38 and the United Kingdom, based on radar satellite data from the Sentinel-1 constellation. The product differentiates the snow state conditions within the snow mask defined by the FSCTOC information (snow fraction at the top of canopy - see the Copernicus Fractional Snow Cover product) with a spatial resolution of 60 m x 60 m. In other words, it provides a binary discrimination of wet and dry snow, identifying patchy snow or snow free areas.

The WDS product is distributed in raster files covering an area of 110 km by 110 km with a pixel size of 60 m by 60 m in UTM/WGS84 projection, which corresponds to the Sentinel-2 input L1C product tile. Each product is composed of two separate GeoTIFF files corresponding to the different layers of the product (the snow state classification -SSC- and the associated quality layer -QCSSC-) and a metadata file.

The WDS 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 WDS product here: <https://land.copernicus.eu/en/products/snow/high-resolution-wet-dry-snow> .

### Simple

<b>Date (Creation)</b>	2021-09-01				
<b>Date (Publication)</b>	2021-09-01				
<b>Edition</b>	01.00				
<b>Citation identifier</b>	copernicus_r_utm-wgs84_60_m_hrsi-wds_p_2016-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>ice</li> <li>land cover</li> </ul>

	<ul style="list-style-type: none"> <li>• landscape alteration</li> <li>• monitoring</li> <li>• climate change impact</li> <li>• snow</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>• Irregular</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
<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>	60 60 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>



Begin date	2016-09-01
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 ( )</li> </ul>

OnLine resource	Protocol	Linkage	Name
	WWW:LINK-1.0-http--link	<a href="https://cryo.land.copernicus.eu/finder/">https://cryo.land.copernicus.eu/finder/</a>	Cryo portal
	OGC:WMS	<a href="https://cryo.land.copernicus.eu/wms/WDS?service=WMS&amp;request=GetCapabilities&amp;version=1.3.0">https://cryo.land.copernicus.eu/wms/WDS?service=WMS&amp;request=GetCapabilities&amp;version=1.3.0</a>	
	WWW:LINK-1.0-http--link	<a href="https://www.wekeo.eu/">https://www.wekeo.eu/</a>	WEKEO portal
	WWW:LINK-1.0-http--link	<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>	REST API
	WWW:LINK-1.0-http--link	<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>	Product user manual
	WWW:LINK-1.0-http--link	<a href="https://land.copernicus.eu/en/technical-library/hrsi-snow-s1-atbd/@_@download/file">https://land.copernicus.eu/en/technical-library/hrsi-snow-s1-atbd/@_@download/file</a>	Algorithm Theoretical Basis Document
	WWW:LINK-1.0-http--link	<a href="https://wekeo-broker.apps.mercator.dpi.wekeo.eu/databroker/ui/">https://wekeo-broker.apps.mercator.dpi.wekeo.eu/databroker/ui/</a>	

	WWW:LINK-1.0-http--link	<a href="https://land.copernicus.eu/en/products/snow/high-resolution-wet-dry-snow#download">https://land.copernicus.eu/en/products/snow/high-resolution-wet-dry-snow#download</a>	HDA API (Harmonized Data Access (WEkEO)  Download (requires authentication)
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<b>Hierarchy level</b>	Dataset
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## Conformance result

<b>Date (Publication)</b>	2010-12-08
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<b>Explanation</b>	See the referenced specification
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<b>Statement</b>	The algorithm for WDS retrieval is fully described in the Algorithm Theoretical Basis Document:  <a href="https://land.copernicus.eu/en/technical-library/hrsi-snow-s1-atbd/@.download/file">https://land.copernicus.eu/en/technical-library/hrsi-snow-s1-atbd/@.download/file</a> . Its validation is described <a href="https://land.copernicus.eu/en/technical-library/hrsi-snow-qar-s1-s2/@.download/file">https://land.copernicus.eu/en/technical-library/hrsi-snow-qar-s1-s2/@.download/file</a> .
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## Metadata

<b>File identifier</b>	add40e90-0175-49af-a641-361dda3c7e1d <a href="#">XML</a>
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<b>Metadata language</b>	English
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<b>Character set</b>	UTF8
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<b>Hierarchy level</b>	Dataset
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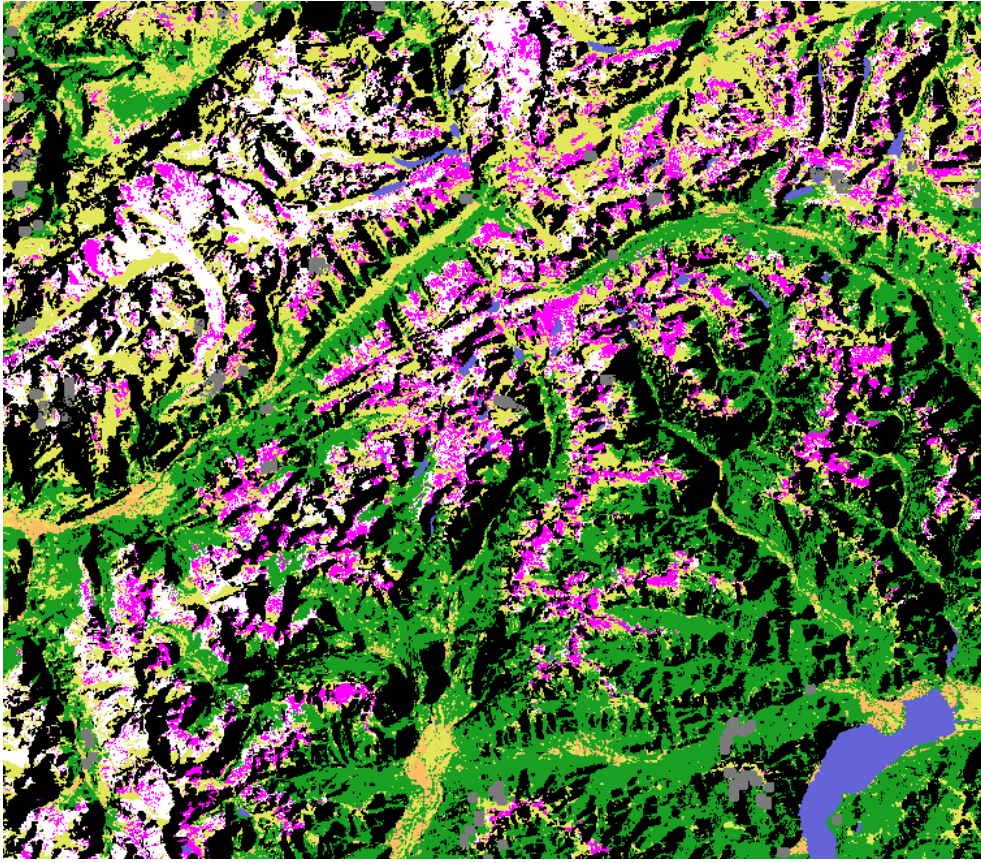
<b>Date stamp</b>	2024-02-06T16:46:15.187Z
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<b>Metadata standard name</b>	ISO 19115/19139
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<b>Metadata standard version</b>	1.0
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<b>Metadata author</b>	<b>Organisation name</b>	<b>Individual name</b>	<b>Electronic mail address</b>	<b>Website Role</b>
	European Environment Agency		sdi@eea.europa.eu	Point of contact

## Overviews



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