EEA geospatial data catalogue

Water and Ice Cover S1&S2 2016-present (raster 20 m), Europe, daily

The Sentinel-1 & Sentinel-2 Water and Ice Cover (WIC S1+S2) product is generated in near real-time at European scale. It combines ice and water extent information derived from radar data from the Sentinel-1 constellation (WIC S1), and from optical data from the Sentinel-2 constellation (WIC S2). The WICS1+S2 product is processed when both WIC S1 and WIC S2 data are available on the same day. It provides the water and ice extent on water bodies (rivers and lakes), at a spatial resolution of 20 m x 20 m.

WIC S1+S2 is one of the products of the pan-European High-Resolution Water Snow & Ice portfolio (HR-WSI), which are provided at high spatial resolution from the Sentinel-2 and Sentinel-1 constellations data from September 1, 2016 onwards.

The WIC S1+S2 product is distributed in raster files covering an area of 110 km by 110 km with a pixel size of 20 m by 20 m in UTM/WGS84 projection, which corresponds to the Sentinel-2 input L1C product tile. Each product is composed of separate files corresponding to the different layers of the product, and another metadata file."

Simple

Identification info

Date (Publication)	2025-03-05
Edition	01.00
Citation identifier	copernicus_r_utm-wgs84_20_m_wics1s2_p_2016-now_v01_r00
Citation identifier	da67c24d-a8b3-4b43-a321-aedf9e5f0c83

Identifier

Code	10.2909/668f4071-5d18-48dc-9034-9680a2aea717

Spatial representation type	Grid

Spatial resolution

Spatial resolution	20 m

Topic category	• Environment

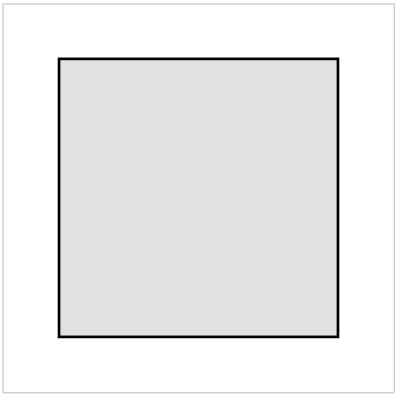
Extent

Temporal extent

Time period	2025-03-05

Extent

72.00	N	27.00	S	46.00	E	-32.00	W



Maintenance and update frequency	Continual
GEMET - INSPIRE themes, version 1.0	• Hydrography • Land cover
Continents, countries, sea regions of the world.	• United Kingdom • EEA38 (from 2020)
GEMET	• snow • landscape alteration • environmental policy • monitoring • ice • land cover • water • climate change impact
Spatial scope	• European
EEA topics	• Environmental inequalities • Water
Temporal resolution	• Irregular

Resource constraints

Access constraints	Other restrictions
Other constraints	no limitations to public access

Resource constraints

Use constraints	Other restrictions
Other constraints	The Copernicus component is governed by Regulation (EU) No 2021/696 of the European Parliament and of the Council of 28 April 2021 establishing the Union Space Programme and the European Union Agency for the Space Programme and repealing Regulations (EU) No 912/2010, (EU) No 1285/2013 and (EU) No 377/2014 and Decision No 541/2014/EU. Within the Copernicus component, a portfolio of land monitoring activities has been delegated by the European Union to the European Environment Agency (EEA) and the DG Joint Research Centre of the European Commission. The Copernicus land monitoring products and services are made available on a principle of full, open and free access, as established by the Commission Delegated Regulation (EU) No 1159/2013 of 12 July 2013. Free, full and open access to the products and services of the Copernicus Land Monitoring Service is made on the conditions that:

	1. When distributing or communicating Copernicus Land Monitoring Service products and services (data, software scripts, web services, user and methodological documentation and similar) to the public, users shall inform the public of the source of these products and services. 2. Where the Copernicus Land Monitoring Service products and services have been adapted or modified by the user, the user shall clearly state this. 3. Users shall make sure not to convey the impression to the public that the user's activities are officially endorsed by the European Union.
Language	English
Character encoding	UTF8

Distribution Information

Distribution format	• GeoTIFF
OnLine resource	Product Information & Technical Documentation
OnLine resource	https://doi.org/10.2909/668f4071-5d18-48dc-9034-9680a2aea717

Data quality info

Hierarchy level	Dataset

Report

Result

Title	Commission Regulation (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial data sets and services
Date (Publication)	2010-12-08
Explanation	See the referenced specification

Resource lineage

Statement	Input data are the Sentinel-1 and Sentinel-2 data as well as High Resolution Water Snow and Ice - Water/Ice cover products (WIC S1 and WIC S2), generated during the period covered by the WCD product.
Hierarchy level	Dataset
Source	• Water and Ice Cover S1 2016-present (raster 60 m), Europe, NRT • Water and Ice Cover S2 2016-present (raster 20 m), Europe, NRT

Reference System Information

Reference System Information

Code	EPSG:32625

Reference System Information

Reference System Information

Code	EPSG:32626

Reference System Information

Reference System Information

Code	EPSG:32627

Reference System Information

Reference System Information

Code	EPSG:32628

Reference System Information

Reference System Information

Code	EPSG:32629

Reference System Information

Reference System Information

Code	EPSG:32630

Reference System Information

Reference System Information

Code	EPSG:32631

Reference System Information

Reference System Information

Code	EPSG:32632

Reference System Information

Reference System Information

Code	EPSG:32633

Reference System Information

Reference System Information

Code	EPSG:32634

Reference System Information

Reference System Information

Code	EPSG:32635

Reference System Information

Reference System Information

Code	EPSG:32636

Reference System Information

Reference System Information

Code	EPSG:32637

Reference System Information

Reference System Information

Code	EPSG:32638
Maintenance and update frequency	

Metadata

Metadata identifier	668f4071-5d18-48dc-9034-9680a2aea717
Language	English
Character encoding	UTF8

Contact

Organisation	Individual	Electronic mail address	Website	Role
European Environment Agency		sdi@eea.europa.eu		Point of contact

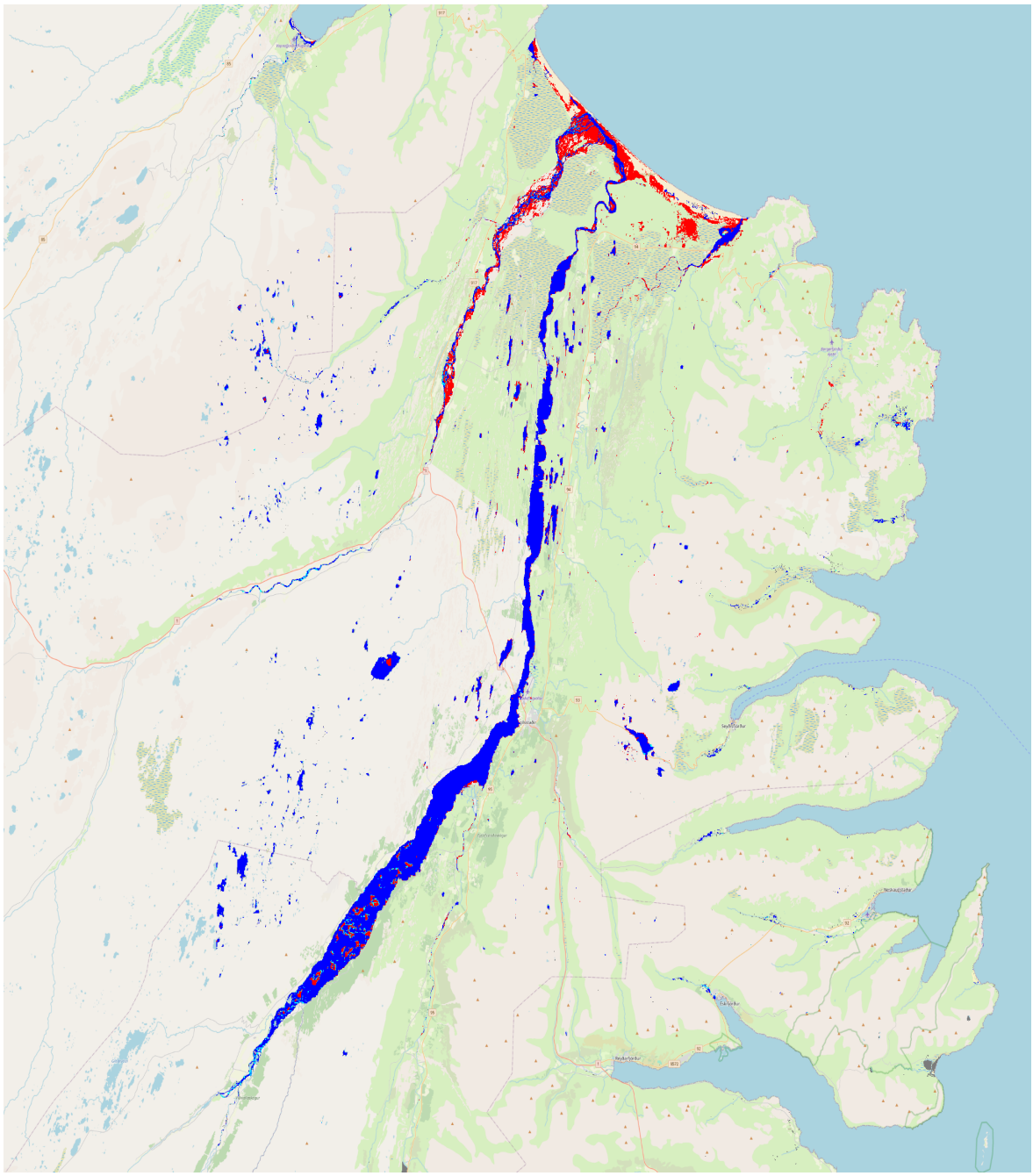
Type of resource

Resource type	Dataset
Metadata linkage	https://doi.org/10.2909/668f4071-5d18-48dc-9034-9680a2aea717
Date info (Creation)	2024-12-04T15:07:33.574069Z
Date info (Revision)	2026-03-04T09:50:13.897367Z

Metadata standard

Title	ISO 19115/19139
Edition	1.0

Overviews



Provided by