

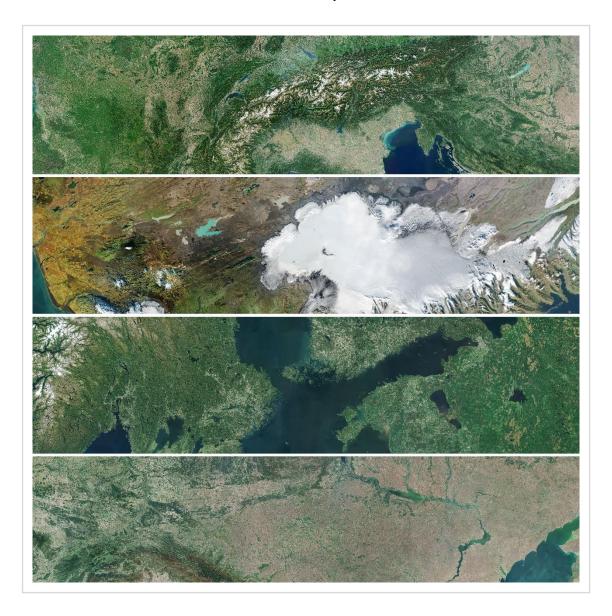
GeoBasis-DE

Geodaten der deutschen Landesvermessung

Bundesamt für Kartographie und Geodäsie

Documentation

Pan-European mosaic from Sentinel-2 data Sen2Europe



Content

1			3
2			4
	2.1	Content and format	4
	2.2	Fields of application	4
	2.3	Changes compared to last data set	4
3 Data acquisition			5
4	Terms of use and copyright		
5	Contact		

1 Overview of the dataset

Product:	Sen2Europe
Content:	Pre-processed and processed remote sensing data of the European Union's Earth observation programme Copernicus (Sentinel-2, L1C-L2A)
Area:	Europe
Spatial structure:	Complete area
Spatial reference:	ETRS89-extended / LAEA Europe
Currentness:	2018 and 2021
Resolution:	10 metres
Data formats:	Raster, GeoTiff
Data supply*:	Web Map Service (WMS)
Changes compared to last data set:	No
Historical data:	No
Data volume:	300-400 GB
Data source:	European Space Agency (ESA): Earth observation programme Copernicus

* Please note that not all forms of delivery can be provided with each georeferencing and data format. If you have any questions, feel free contact the Service Centre (DLZ).

2 Description of the dataset and online services

2.1 Content and format

The Federal Agency for Cartography and Geodesy (BKG) has developed a procedure for the demand-related delivery of remote sensing data. For remote sensing production, optical satellite image data are currently preferred in the federal administration. The so-called mosaic procedure is for the instant use an important method for this. The in-house development was set up with the EU-funded Sentinel-2 data of the European Earth observation programme Copernicus and can be applied to any optical data set (including aerial images).

With the pan-European mosaic from Sentinel-2 data, we provide the mosaic procedure as an exemplary service (showcase) via which optical remote sensing data for any area of the earth can be processed professionally (high quality images) and according to user requirements of the federal authorities.

Web Map Service (WMS) Sen2Europe:

This service enables users to integrate pre-processed and processed remote sensing information of the Copernicus Earth observation programme (Sentinel-2, L1C-L2A) for Europe into their own existing subject-related procedures. In each case the 2018 and 2021 imagery data was assembled into a mosaic, which has a ground resolution of 10 metres. A composite of three bands (Sentinel-2 bands: 2, 3, 4 (R, G, B)) and input image data information is provided. In the course of image data processing a radiometric colour balancing method was performed to obtain a uniform appearance. For each mosaic, the cloud cover over the entire area is less than 3 %.

The web service contains the following layers:

- Sen2Europe RGB: Display of the processed Sentinel-2 data of the Copernicus Earth observation programme.
- Currentness: Metadata on the up-to-dateness of the Sentinel-2 data. GetFeatureInfo queries can be used to display further information, such as the recording date of the associated Sentinel-2 scene.

2.2 Fields of application

Possible areas of use for this service are:

- Background maps for own services
- Satellite maps in combination with own information
- Mapping and updating support of land covers
- 3D flight simulations in combination with height information (Digital Terrain Model, Digital Surface Model)

2.3 Changes compared to last data set

The data has been updated. The content of the documentation has not changed from the previous version, only the Currentness of the data has been changed.

3 Data acquisition

The Web Map Service (WMS) can be obtained free of charge from the German service center for geoinformation and geodesy website (https://gdz.bkg.bund.de/) under the heading "Webdienste" \rightarrow "Digitale Orthophotos und Satellitenbilddaten".

4 Terms of use and copyright

The data are protected by copyright. The data are made available free of charge under the following termins of use. The source note must be observed.

Legal notice on the use of Copernicus Sentinel Data and Service Information (PDF, 113 KB)

The licensee is obliged to attach a recognisable and visually coherent source note and <u>change notice</u> to any public reproduction, distribution or presentation of the data as well as to any publication or external use of an adaptation or transformation, which is to be designed as follows.

European Union, contains modified Copernicus Sentinel data (actual year)

5 Contact

Federal Agency for Cartography and Geodesy Section GDL2 | Service centre (DLZ) | Central Office for Geotopography (ZSGT) Karl-Rothe-Straße 10-14 D-04105 Leipzig

Phone.: +49(0)341 5634-333 Fax: +49(0)341 5634-415 Email: dlz@bkg.bund.de

Further information and services can be found on our homepage <u>www.bkg.bund.de</u> under the heading "Products & Services".