

Sentinel-2: Cloud Probability

[Source](#) [Share](#)

 in [Google Earth Engine Catalog](#)
[Go to Parent](#)
[Browse](#)

Description

The S2 cloud probability is created with the [sentinel2-cloud-detector](#) library (using [LightGBM](#)). All bands are upsampled using bilinear interpolation to 10m resolution before the gradient boost base algorithm is applied. The resulting **0..1** floating point probability is scaled to **0..100** and stored as a UINT8. Areas missing any or all of the bands are masked out. Higher values are more likely to be clouds or highly reflective surfaces (e.g. roof tops or snow).

Sentinel-2 is a wide-swath, high-resolution, multi-spectral imaging mission supporting Copernicus Land Monitoring studies, including the monitoring of vegetation, soil and water cover, as well as observation of inland waterways and coastal areas.

The Level-2 data can be found in the collection [COPERNICUS/S2_SR](#). The Level-1B data can be found in the collection [COPERNICUS/S2](#). Additional metadata is available on assets in those collections.

See [this tutorial](#) explaining how to apply the cloud mask.

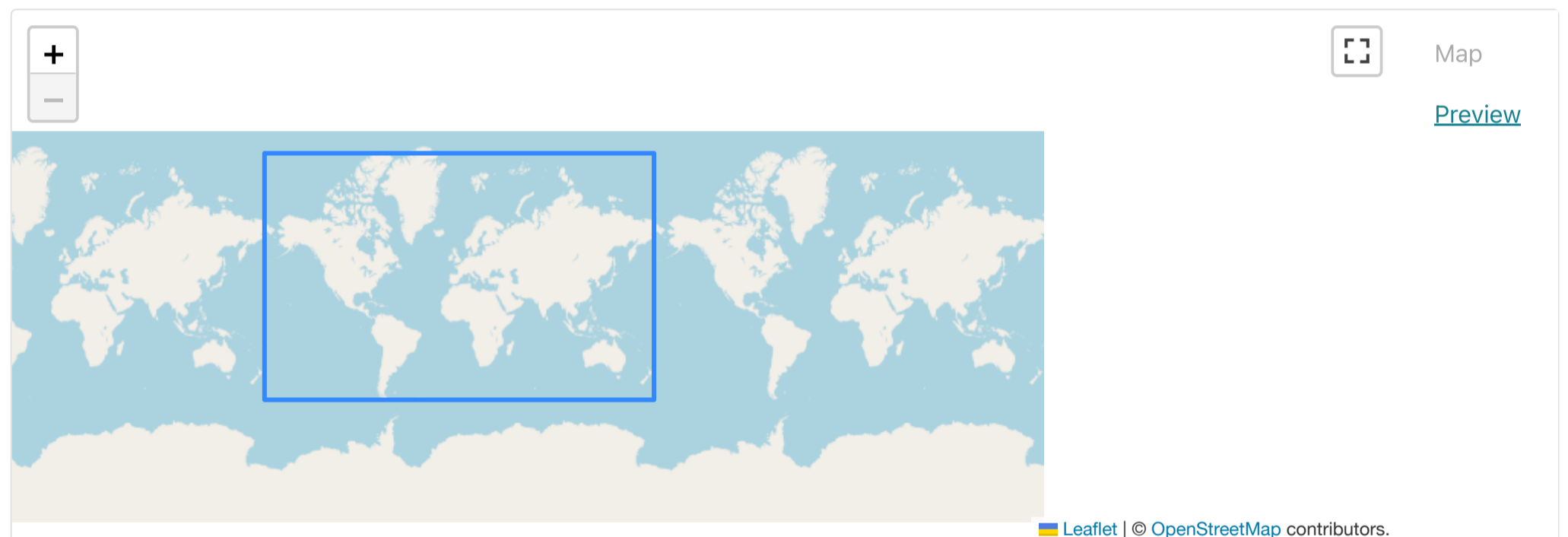
[Read less](#)
[cloud](#) [copernicus](#) [esa](#) [eu](#) [msi](#) [radiance](#) [sentinel](#) [sentinelhub](#)

License

[proprietary](#)

Temporal Extents

6/23/2015, 12:00:00 AM UTC - 12/6/2022, 10:15:51 PM UTC



Providers

[European Union/ESA/Copernicus/SentinelHub](#)

LICENSOR

PRODUCER

[Google Earth Engine](#)

HOST

Metadata

General

Instruments	MSI
Platform	1. Sentinel-2A 2. Sentinel-2B
Probability	0 – 100

Electro-Optical

Spectral Bands	Description: Probability that the pixel is cloudy. Gsd: 10 m Name: probability
-----------------------	---

Google Earth Engine

Interval	Interval: 5 Type: revisit_interval Unit: day
Terms of Use	The use of Sentinel data is governed by the Copernicus Sentinel Data Terms and Conditions .
Type	Image Collection
Visualizations	Display Name: RGB Image Visualization: Band Vis: Bands: probability Max: 100 Min: 0 Lookat: Lat: 51.4191 Lon: 4.1968

Additional resources

- [Run the example for COPERNICUS/S2_CLOUD_PROBABILITY in the Earth Engine Code Editor](#)

Powered by [STAC Browser](#) 3.0.0-beta.5