



Musaicum EU-plus regional satellite image mosaic

Version 1

Product Information





produced by:

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Product description

The *Musaicum EU-plus* is a regional visible color satellite image mosaic of the Continental European Union and adjacent areas with a ground resolution of 10m. It combines recent Sentinel-2 satellite imagery into the highest quality and most cloud free depiction of Europe in this resolution class available today.

It is generated using a classical mosaicing process derived from the methods and techniques developed for local mosaics but with a high degree of automatization. This eliminates most of the time intensive manual steps while maintaining high quality standards.

Compared to the Green Marble the *Musaicum EU-plus* offers much higher spatial resolution (10m compared to 250/300m) at the cost of slightly more heterogeneous coloring due to the smaller data basis. Cloud occurrence is comparable to my hand produced local mosaics with less than about one in 100k pixels significantly affected by clouds.

Primary data source for the image is Sentinel-2 imagery from 2019 to 2022.

Key properties

- Visible color mosaic of the Continental European Union and adjacent areas (including the UK, Ireland and Cyprus but not any other Atlantic islands, extending eastwards to a line Sea of Azov to White Sea).
- 10m base resolution.
- Based predominantly on Sentinel-2 data from 2020 to 2022 with additional 2019 data with lower priority in areas where it is needed and 2018 data in very small parts.
- Includes full coverage of lakes and coastal waters, no coverage of the open ocean.
- Shows atmosphere compensated surface color, available either as linear surface reflectance values or tone mapped for direct display.
- Shading compensated version can be produced on request.



Product packaging

The mosaic is produced in different projections for different parts of the coverage area and is assembled in the target projection on demand. The previews of the whole mosaic shown here are in Lambert conformal conic projection, small area samples are in UTM projection. For use in web maps in Mercator projection by default a z14 grid (9.5546m nominal resolution) is provided.

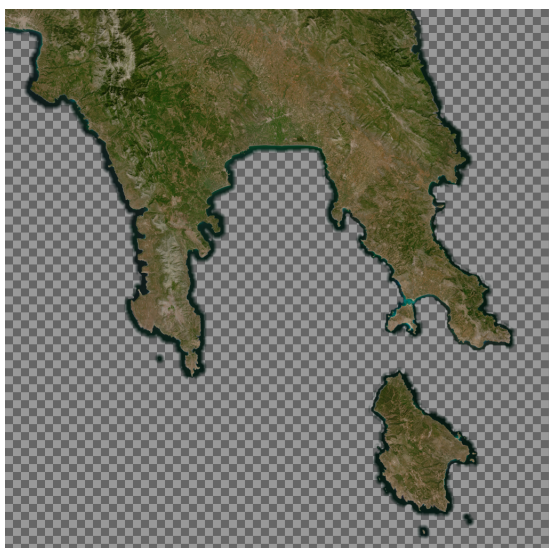
The standard form of distribution of this mosaic is with an alpha channel for seamless blending with a background image for the open ocean - like the Green Marble. This is illustrated in the samples below. Other variants can be produced on request.



(a) Mosaic as is without ocean background



(b) With Green Marble based ocean background

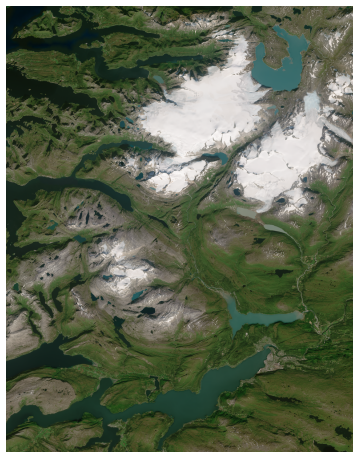


(c) Mosaic as is without ocean background

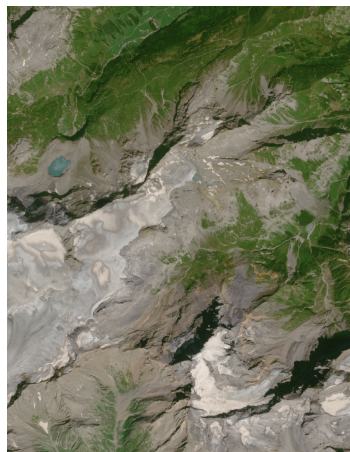


(d) With Green Marble based ocean background

Ocean blending with the supplied alpha channel (top: whole image, bottom:detail)



(a) Svartisen, Norway



(b) Tödi, Switzerland



(c) Zakynthos, Greece

Examples from the Musaicum EU-plus

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Musaicum EU-plus

on <https://imagico.de/services/musaicum-eup.php>

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