

AUTOMATIC CLOUD-FREE SENTINEL-2 MOSAIC

The new service providing access to the most actual Sentinel-2 imagery data and indexes.

Key features:

- **Frequent data updates:** up to daily updates for areas without cloud cover
- **Extensive history (since April 2017):** go back in time to see how a specific area looked like (~ 10 images per season)
- **Fully automated mosaicking:** no manual work involved
- **Wide coverage:** all Baltic countries and more
- **Complete metadata:** see precise date of acquisition for any area
- **Integration with enterprise GIS and user authorization:** XYZ/TMS and WMS services
- **Automated calculation and representation of indexes:** LAI, MSAVI2, NDBI, NDMI, NDVI, NDWI, FAPAR, Fcover, infrared imagery and any other on customer request
- **Automated notification of new imagery inclusion in the service:** e-mail

Key benefits for the end users:

- Low cost service covering the whole country (19 EUR per user per month)
- New imagery and indexes are immediately included in the service after acquisition
- Saving lots of time - no need for manual work anymore to choose cloud-free data
- Regular access of GeoTIFF mosaics (1x a month or more often)

Key technical advancements:

- Mosaic data is saved in original format- allows for adding new indexes for historical imagery
- Automatic metadata layer creation - updated as soon as new imagery is added
- Very fast XYZ/TMS access to full image history - automatically scalable to thousands of users with no speed degradation
- WMS can support any projections (added per user request), full image history and is automatically scalable to thousands of users with no speed degradation
- No manual work involved for data processing

Satisfied end-users: a new service was integrated into different enterprise GIS systems, for instance:

- Rural Support Service of the Republic of Latvia (Paying Agency), <https://karte.lad.gov.lv/>
- Farmer's Parliament (serving more than 800 farmers), <https://app.smartagro.lv>.

