

## **AI Mapping Platform**

The Earth Observation to Mapping & Analytics goes through the human eyes 👀

However the streaming services and Al tools can help human cartographers and data analysts to drastically speed up the whole thing - from the access to premium and updated imagery to the analytical reports and situational maps as a final production output.

Here Mapflow comes in game \*\*

Mapflow is powered by the big data processing and AI engine, it has multiple choice of Satellite imagery starting from free imagery services to leading data providers such as Maxar Technologies.



#### **Building footprints with heights**

Building footprints enriched with building types, heights and population which is crucial for telecom and urban planning, business consultancy, etc. Active learning is applied to transfer this technology to new construction patterns to increase the



#### **Utilities** monitor

Vegetation mapping and classification by height for utilities management such as powerline and pipeline monitoring. Cloud services for imagery access and data processings (discounts depends on the total area size of monitoring)



#### **Construction monitor**

Locate construction sites and classify development by state. Monitor dynamics from a specific site to a whole city area. It is considered to be the fastest and the most cost-effective way to detect overall construction progress for land management, mitigation of financial risks, forecasting of the demand services

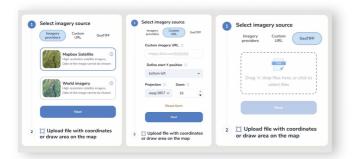


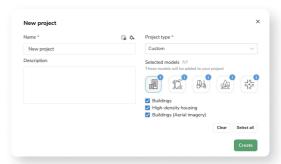
#### Land use / Land management

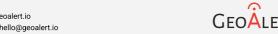
Extraction and lassification of roads, outline agriculture fields, classification of the forestry areas - all power of semantic and instance segmentation tools with the instant access to the major satellite imagery providers



mapflow.ai









## Platform use cases

Find out how Mapflow is used by our clients and partners. Mapflow API is a REST service that is designed to power your product with the geospatial imagery and AI mapping capabilities. QGIS Python plugins that allows to connect more apps and extend core functionallity. Our "Mapflow - QGIS" app enables connection to Mapflow Processing API to run AI-mapping and add output as layers to the QGIS workspace.

### Informal housing development analysis

Case study:



good.



We were tasked with analysis of informal housing patterns in a touristy coastal municipality with a large agricultural hinterland. We had some concerns over the quality of satellite imagery but the Mapflow algorithm handled it with speed and accuracy unsurpassed by any other detection platforms we had used before. The QGIS integration is flawless and speeds up the whole process, so we had much more time to focus on pattern analysis and developing scenarios our client looked for. It's easy, it's fun and it's really

Djordjije Kalezic, Senior urban planner and researcher



#### Data access and provisioning

Mapflow service Mapflow-QGIS, buildings

Software OGIS

Data service Maxar SecureWatch

Data formats GeoJSON

### Population density maps

Generate countrywide datasets of detailed urban and population density maps to implement into analytical workflow for insurance, disasters risk assessment, census mapping, etc.

At the implementation phase our clients used Mapflow to detect buildings and their heights in residential areas and estimate the number of the households in the area. This allows them to create a custom dataset by distributing the population proportionately to the number of residents against the spatial grid.

#### Case study: KO∩TU∩



At Kontur we provide geospatial solutions for risk management using open data and extractions from satellite images. Geoalert helps us optimizing the mapping costs where the open data is limited or incomplete.

Darafei Praliaskouski, Head of Product



#### Data access and provisioning

 Mapflow service
 Dense buildings

 Software
 QGIS/PostGIS

 Data service
 Maxar Vivid

 Data formats
 GeoPackage





# **Powerful imagery integration**

MAXAR SecureWatch is one of integrated imagery service that provides global access to high-resolution satellite images and basemaps from the world leading company. The spatial resolution of images varies in the range from 30 cm to 50 m. All images are accompanied by metadata, including information about the acquisition date and time, cloud cover etc. Mapfow is connected to Premium and contonuously updated commercial imagery and enables searching for it, previewing it and running the AI models on the selected images.





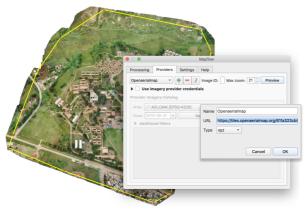
# **S**atlmagery

We use high-resolution satellite imagery from select sensors to supply you with accurate and up-to-date information. Users can search for imagery from leading data providers, get it processed via Mapflow pipelines and - moreover - place an order for the imagery updates intersecting the area of interest to stay alert.

- Data supplies: archive and new (greater than 90 days and newer)
- No minimum Order Size (subscription starts from 100 sq km)
- Product types: 30-cm 75-cm georeferenced, natural color
- Avg Price per Sq Km for image & derivatives: \$4\$ (more detailed pricing canbe quoted depending on the total project area)
- · Imagery updates
- · Imagery download is not allowed
- · Custom tile server / data source integration

Contact us at sales@geoalert.io to get more details on the integrated service





### Integration with free GIS software





