geoimagery

GeoImagery

Intuitive. Smart. Multi-scenario.

Geospatial information is growing exponentially due to the **proliferation of data sources**. These include satellite constellations, drones, ground-based sensor networks, and IoT devices.

The resulting data ecompasses satellite imagery, drone footage, climate measurements, and environmental monitoring information.

The principle purpose of **GeoImagery** is to make these data available in a complete *Spatial Data Infrastructure* (SDI) and transform them into **valuable information** for geo-business-intelligence decisions, ad-hoc spatial analysis, and territorial forecasts.
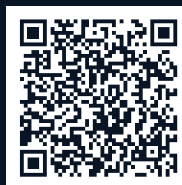
geodatalab

GeoDataLab Srls
Via Tiburtina 912, 00156 Roma
info@geodatalab.it
Tel +39 06 24 19 585

in f t ▶

@geodatalab

GeoImagery is an advanced system for the geospatial data management which provides valuable information for a wide range of applications.

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GeoImagery

Advanced software system

GeoImagery is an advanced software system for managing geospatial data from satellites, drones, ground-based sensors, and IoT devices.

MANAGEMENT BLOCK

It is the brain of the infrastructure and contains the following modules:

Workflow Manager
Harness robust workflow orchestration to schedule and monitor task execution.

Data Manager
Acquire diverse geospatial data from satellites, drones, sensors, and IoT devices.

DATA BLOCK

Components for storage (PostgreSQL/AWS S3), access (GeoServer), and data processing.

Data Module
Database ecosystem for efficient data management of the process stages.

Artificial Intelligence Module
Machine learning and computer vision algorithms to extract information from images.

INTERFACE BLOCK

External interface modules.

Software interface
REST API for software access to services.

User interface
Module to view and interact with the results on the map.

Applications

Possible scenarios

Land Management

Comprehensive terrain monitoring for:
- Early detection of environmental changes,
- Optimization of resource allocation,
- Informed decision-making to enhance land productivity.

Urban planning

Monitoring infrastructure development for:
- Identifying expansion needs,
- Optimizing network usage,
- Planning sustainable growth.

Natural disasters

Analysis of risk prediction and action after the disaster for:
- Identification of areas at most elevated risk,
- Mitigating damages.

Avionics

Analysis for:
- The identification of the best routes,
- The positioning of the UAV infrastructures.

For over 20 years, we have been developing GIS software to create innovative ideas for businesses and territories.
Contact us to request an appointment.

GeoImagery

Advanced of the solution

Scalable
Robust, efficient, and scalable data and workflow management.

Multi-scenario
Valuable information extraction to support a wide variety of applications.

AI-powered
Machine learning and computer vision techniques to extract valuable information from images.

Open source-based
GeoImagery leverages open-source technologies in its core architecture

Intuitive
To acquire, manage and process geospatial data through an easily accessible and intuitive interface.