OrtoSky

The platform for photogrammetry, LiDAR processing, and 2D/3D visualization.

Introduction

OrtoSky is a key component of the Ipsilum platform, designed specifically for the **capture and processing of geospatial data**. It allows professionals in fields such as **photogrammetry**, **LiDAR data analysis**, and **spatial modeling** to work with advanced tools.

Key Features

1. **LiDAR and Photogrammetry Integration**
   - Process and visualize LiDAR point clouds and photogrammetric models.
   - Seamlessly integrates with data from UAVs, drones, and other aerial platforms.

2. **2D and 3D Visualization**
   - View and edit geospatial data in both 2D and 3D.
   - Real-time visual adjustments to 3D models and meshes for easy analysis.

3. **Data Upload and Compatibility**
   - Supports multiple geospatial formats including GeoJSON, LAS/LAZ, and others.
   - Easily upload large LiDAR datasets and imagery for processing and analysis.

4. **Advanced Editing Tools**
   - Tools for editing, annotating, and refining 2D and 3D spatial models.
   - Perform precise classification of point clouds.

5. **Collaboration and Sharing**
   - Share your data and work in real-time with colleagues and clients.
   - Streamline workflows by allowing multiple users to access and update the same models.

How OrtoSky Works

OrtoSky functions with databases and data in the cloud, which means you can access your work from anywhere with an internet connection.

1. **Upload Data**
   - Begin by process your data: LiDAR point clouds, aerial images, or other relevant datasets.
   - Supported file formats include LAS/LAZ, GeoTIFF, and other industry-standard geospatial formats.

2. **Processing**
   - OrtoSky automatically processes the uploaded data, generating elevation models,

orthophotos, and point cloud visualizations.
  - The system intelligently handles the alignment and integration of various data sources.

3. **3D Modeling and Editing**
  - Users can adjust 3D models and analyze changes in terrain, building structures, vegetation, and more.
  - Various editing tools allow for modifications to models in real-time.

Use Cases

OrtoSky is versatile and applicable across multiple industries. Some of the key use cases include:

- **Urban Planning and Design**: Create 3D models of city landscapes, urban zones, and infrastructure projects.
- **Environmental Monitoring**: Analyze changes in vegetation, water levels, and other environmental factors.
- **Disaster Management**: Visualize and assess the impact of natural disasters like floods, earthquakes, and wildfires.
- **Infrastructure Inspection**: Monitor and inspect infrastructure such as power lines, bridges, and roads.
- **Land Surveying**: Generate accurate elevation models and contours for land development and planning.

Why Choose OrtoSky?

OrtoSky offers several key advantages over traditional desktop-based photogrammetry and LiDAR software:

- **Real-time collaboration**: Share your models and data with team members and stakeholders instantly.
- **Integrated with Ipsilum**: OrtoSky works seamlessly with other Ipsilum modules like Ipsilum Maps and Ipsilum Core for a unified experience.
- **User-friendly**: Designed for non-experts, offering powerful tools in an intuitive interface.

Getting Started with OrtoSky

OrtoSky is easy to get started with. Simply visit the Ipsilum platform, create an account, and begin uploading your geospatial data for processing.

You can start working with photogrammetry, LiDAR, and other data types right away, all without the need for specialized software or expensive infrastructure.

See It in Action

Request access to OrtoSky and start visualizing and editing your geospatial data in the cloud, directly from your browser. Experience the power of real-time collaboration and advanced data processing without the complexity.