

# Software

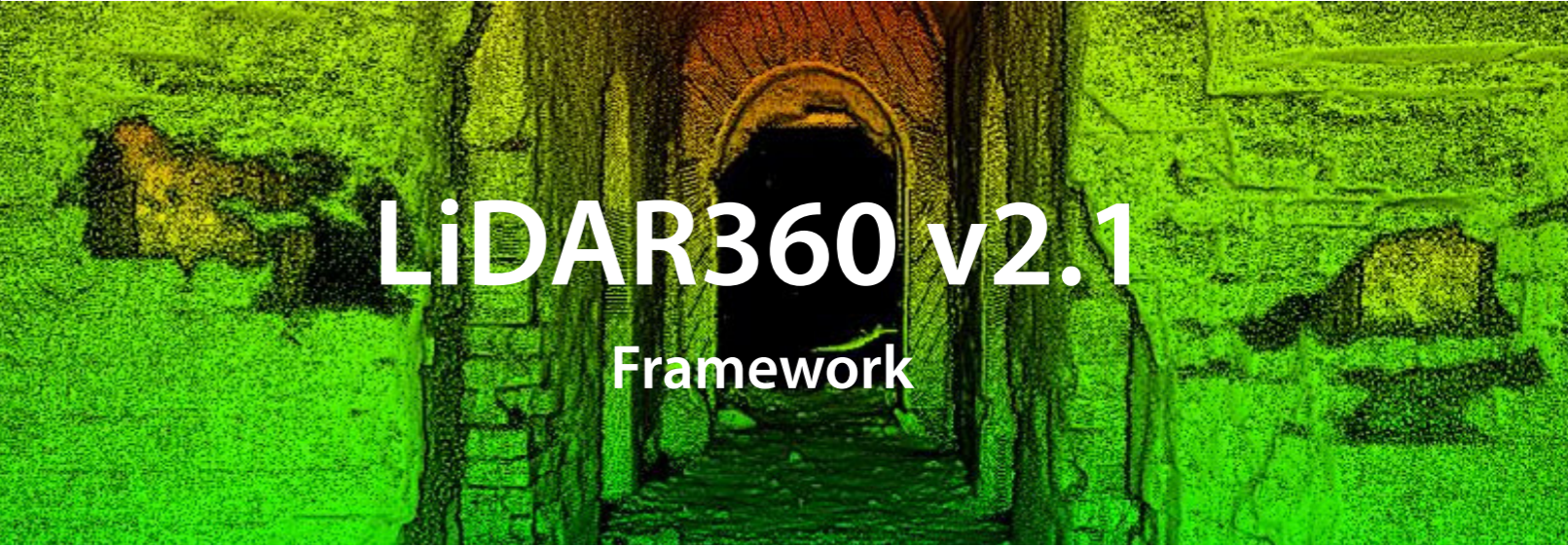
Map the World in 3D





# LiMapper v2.1

Imagery Efficiency

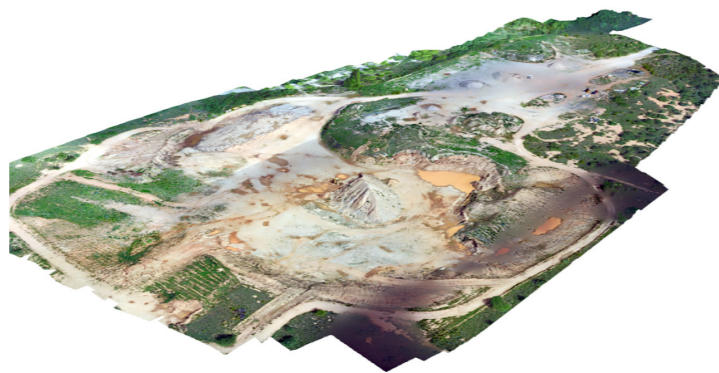


# LiDAR360 v2.1

Framework

## LiMapper

LiMapper is GVI's flagship image processing software. LiMapper provides photogrammetry users a quick and user-friendly way of processing imagery datasets. Generate orthomosaics and surface models with ease. It's ability to handle large datasets is unparalleled, making it an ideal solution for users in need of maximum imagery efficiency.



## LiDAR360 Framework

The LiDAR360 Framework lays the foundation for the entire software suite. As such, we continually aspire to include tools required for effectively visualizing and interacting the LiDAR point cloud data. The Framework allows users to correctly manage your data and upgrade modules when necessary. After your 30-day free trial, LiDAR360 becomes a free point cloud data visualizer.



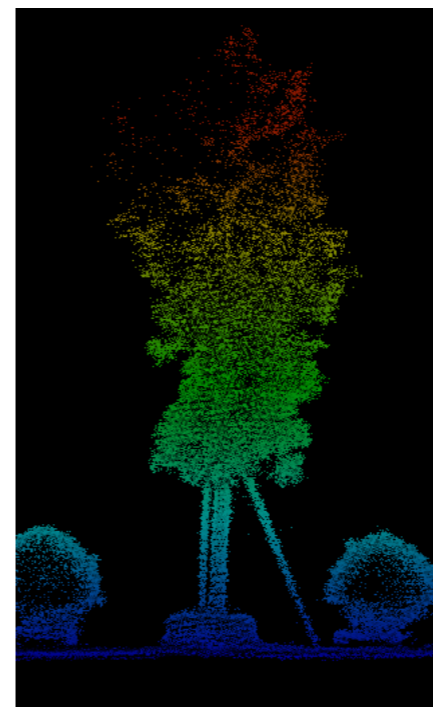
## Features

- Handle data captured from terrestrial, air manned or unmanned platforms
- Support cameras of various types
- Import external DSM/DEM
- Evaluate the quality and accuracy of the collected data
- Generate DEM based on points classified from point cloud
- Improved display functions including EDL mode
- Mosaic aerial imagery
- Surface model generation
- Process large datasets (>10,000)



## Features

- TB-level processing power through proprietary format, LiData
- Input data from point cloud, models, rasters, vectors and more
- Data management tools
- Display by elevation, intensity, category, RGB, combination, etc.
- Classification tools
- Display modes:
  - Mixed display
  - treeID
  - EDL
  - Glass





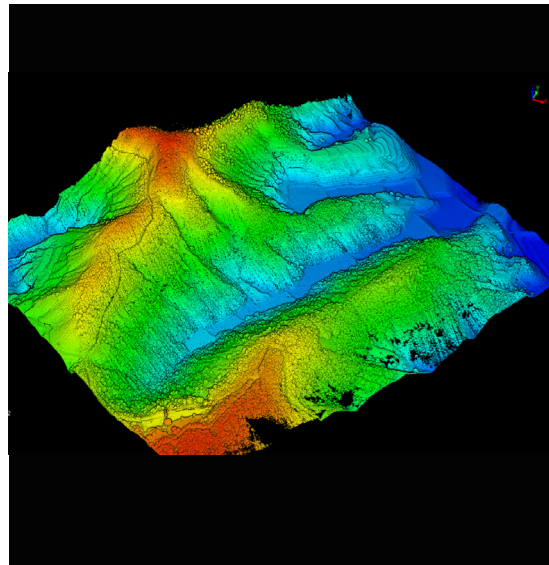
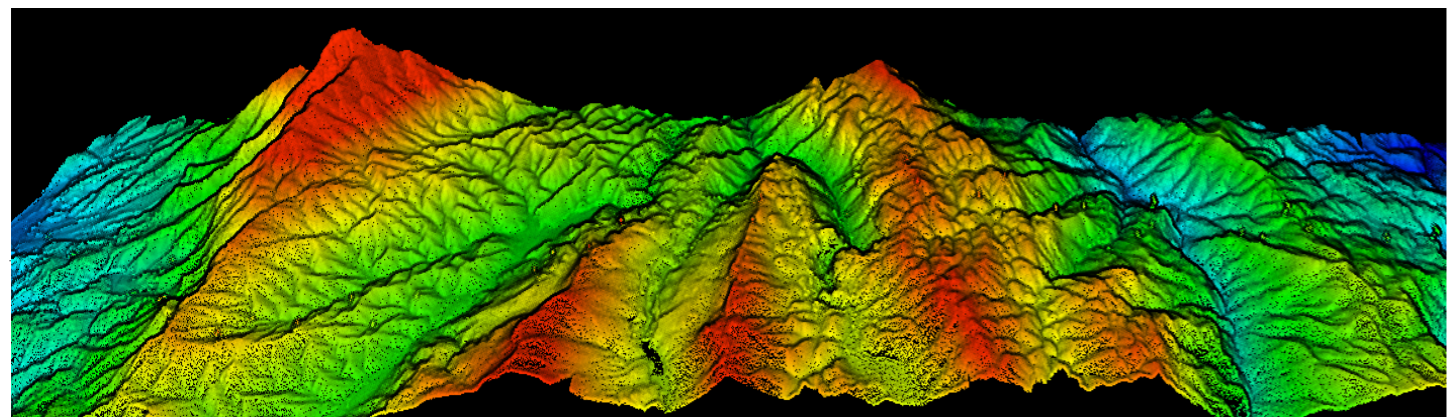


# LiDAR360

## Terrain

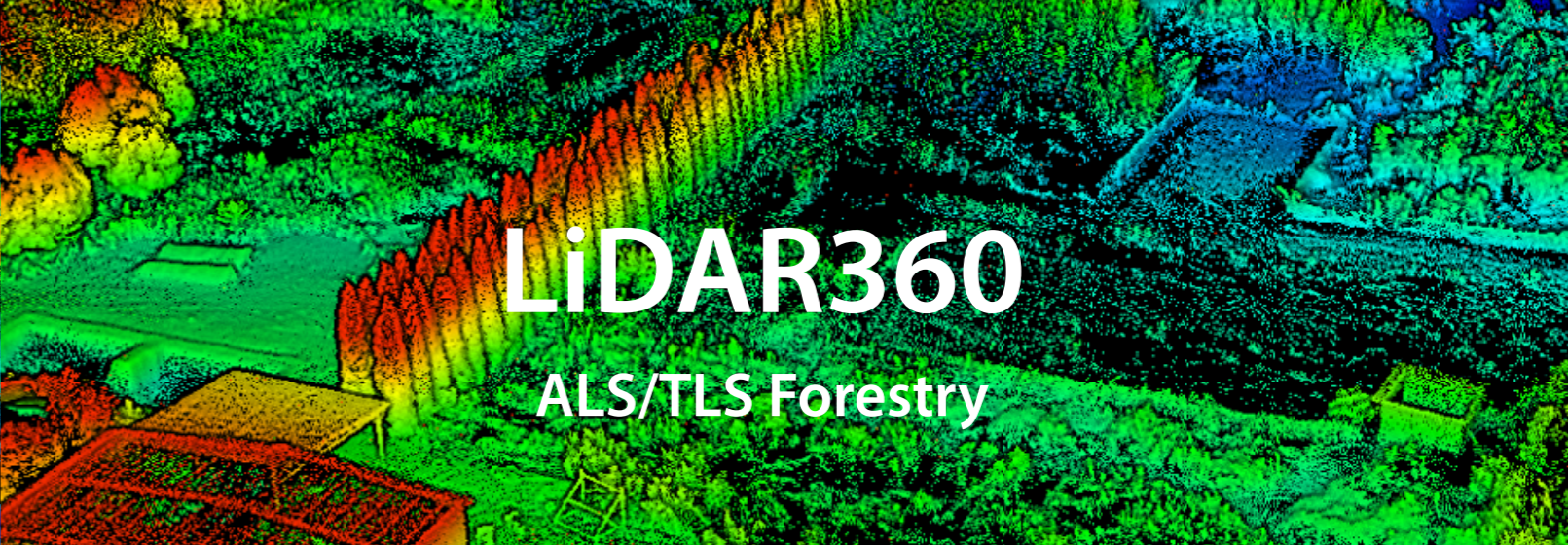
### Terrain

The Terrain module provides a suite of GIS tools for calculating calculating slope, roughness, aspect & contours from surface models. Additionally, it contains tools for repairing surface models, i.e., spikes, holes and extraneous values.



### Features

- Generate DEM, DSM, canopy height models & more
- Generate and edit TIN models based on point cloud (using proprietary file format \*.LiTIN)
- Generate contour lines from rasters
- Ground point filtering
- Hillshade
- Slope
- Roughness

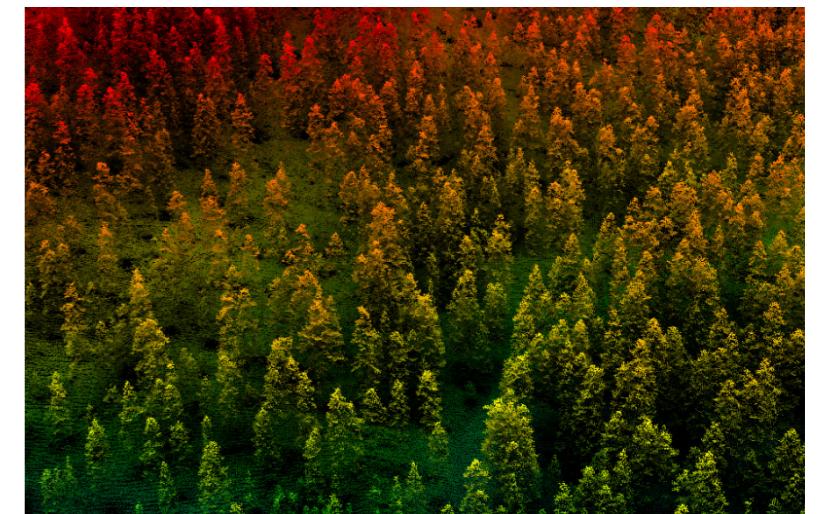


# LiDAR360

## ALS/TLS Forestry

### ALS/TLS Forestry

The ALS/TLS Forestry module includes highly refined tools for calculating forestry metrics from both aerial and terrestrial point cloud datasets. Structural statistics, regression models, segmentation algorithms, batch processing and more are all possible within this module. ALS/TLS Forestry includes everything and more from our recently discontinued software, LiForest.



### Features

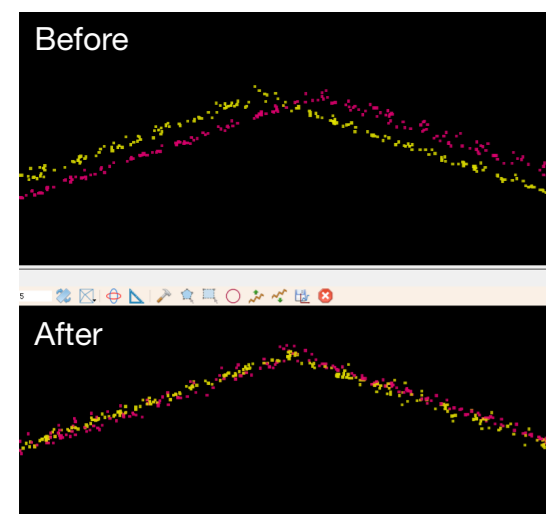
- Height Variables
- Intensity Variables
- Leaf Area Index (LAI)
- Artificial Neural Network Regression
- CHM Segmentation
- Point Cloud Segmentation
- Ground Point Filtering
- Extract by treeID
- Classification (Gaussian Mixture Model)





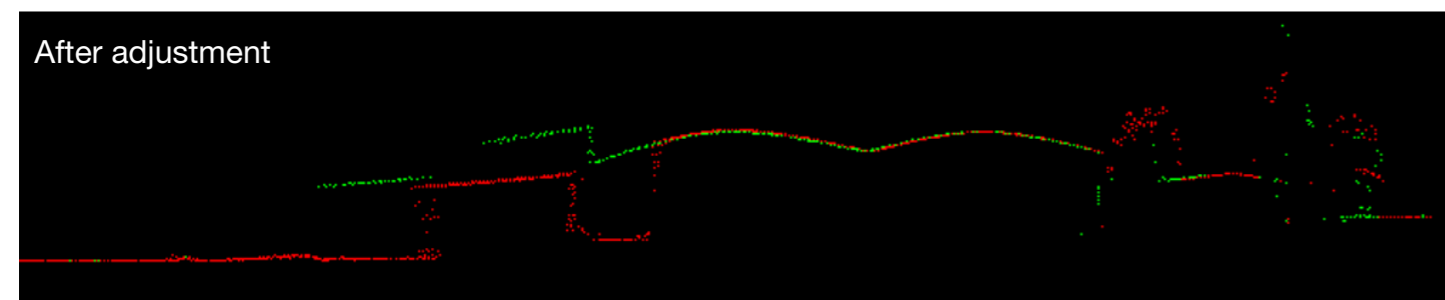
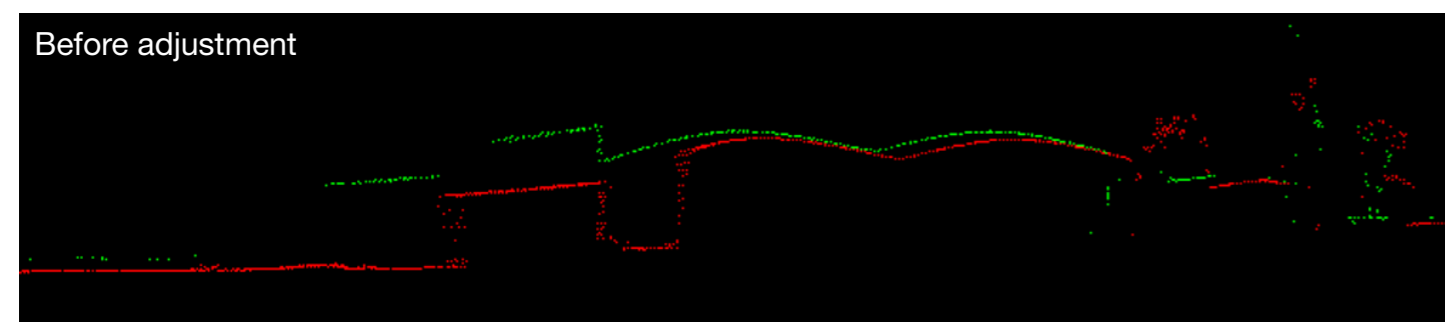
## Strip Adjustment

The Strip Adjustment module offers the toolset for importing flight path POS files, extracting data points by paths and correcting measurement offsets based on user inputs.



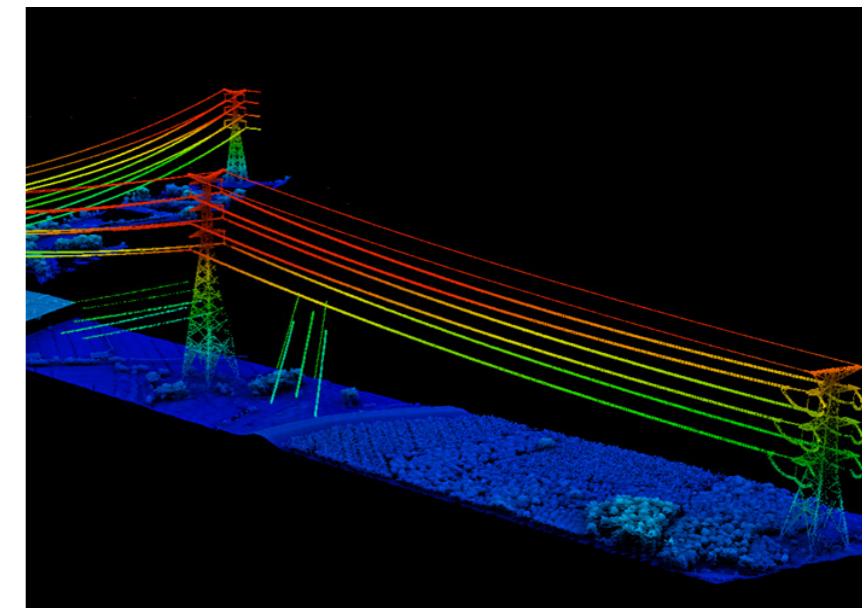
### Features

- Supports track files in POS, ASCII and OUT formats
- Display and measure flight path files
- Clip flight path
- Cut point cloud based on track line
- Point cloud and track line matching
- Flight strip adjustment
- Remove redundancies



## Powerline

The Power Line module offers effective automatic classification of power lines, towers, and detection of a range of user defined hazardous points such as clearance violation and tree fall. The module provides an intuitive workflow that also includes powerful manual editing tools to augment the automatic classification procedures. It's built-in reporting function allows the users to quickly generate detailed project reports.



### Features

#### Automatic classification of power line tower

- Automatic identification of power line and tower type by machine learning algorithms.

#### Clearance danger point detection

- Detection of clearance danger point based on a safe distance threshold.

#### Analysis and prediction of simulated working conditions

- Simulation analysis of tree inversion, tree growth, high temperature, ice cover and wind deviation.

#### Report generation

- Generate the clearance danger point detection report and the working condition simulation and analysis report.



# Map the World in 3D

[www.greenvalleyintl.com](http://www.greenvalleyintl.com)

[info@greenvalleyintl.com](mailto:info@greenvalleyintl.com)

(+1) 209.720.4054

2120 University Ave STE 210 | Berkeley, CA 94704 USA

