# YellowScan CloudStation.

## All-integrated software to handle your point clouds

CloudStation is the proprietary software developed by YellowScan to generate and visualize point clouds.

It comes as an all-integrated solution to allow a better and simplified experience for the customer.

## Main features

▸ User-friendly graphical interface

▸ Automatic or custom strip selection

▸ Process and export in .LAS / .LAZ format

▸ Advanced visualization tools

▸ Project setttings: Coordinate System, LiDAR profile, angle range...

# Software description.

YellowScan CloudStation provides a complete software solution to create and manipulate point cloud data. It allows to extract, process and display data immediately after flight acquisition.

The auto-generation of strips and the production of LAS files are now done in only few clicks.

To allow for remote work in the field, customers have the option to test out the license for up to 30 days.

The software is provided with support, maintenance and updates at no additional costs during the first year after purchase.

# General characteristics.

## CloudStation software:

### TECHNICAL SPECIFICATIONS

- Operating on Windows 10
- Automatic updates
- Offline license mode
- Optional extra license seats

### DISPLAY OPTIONS

- EDL filter
- Measurement tools
- Custom image export
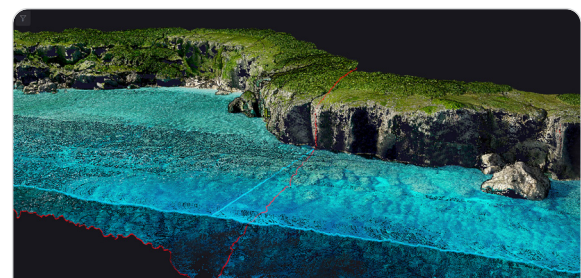- Cloud color: Elevation, Intensity, Echo...

## Key features:

### STRIP ADJUSTMENT

- Seamless adjustment of strips
- State of the art algorithms used in the offered adjustment methods
- Takes advantage of Ground Control Points (GCPs) for final adjustments
- One-click adjustment



*YellowScan Navigator point cloud*

### POINT CLOUD CLASSIFICATION

- Automatic classification of points as «ground/non-ground»
- Export classified LAS
- Export Digital Model from your classified point cloud as geolocalized TIFF
- Generate hillshade of your DTM

### POINT CLOUD COLORIZATION

- Export colorized point clouds from simultaneous LiDAR + camera acquisition
- Export colorized point clouds from orthophoto
- Colorize and visualize your strips in only few clicks
- Automatic LiDAR - camera calibration refinement

# CloudStation bundles.

### CloudStation Essential
Visualize, inspect, colorize from orthophotos, and export your data.

*Free upgrade from Core with active maintenance*

### CloudStation Ultimate
Zero compromise, all features activated. Includes Orthophoto generation and Command Line (ytk) processing for automation & batching.
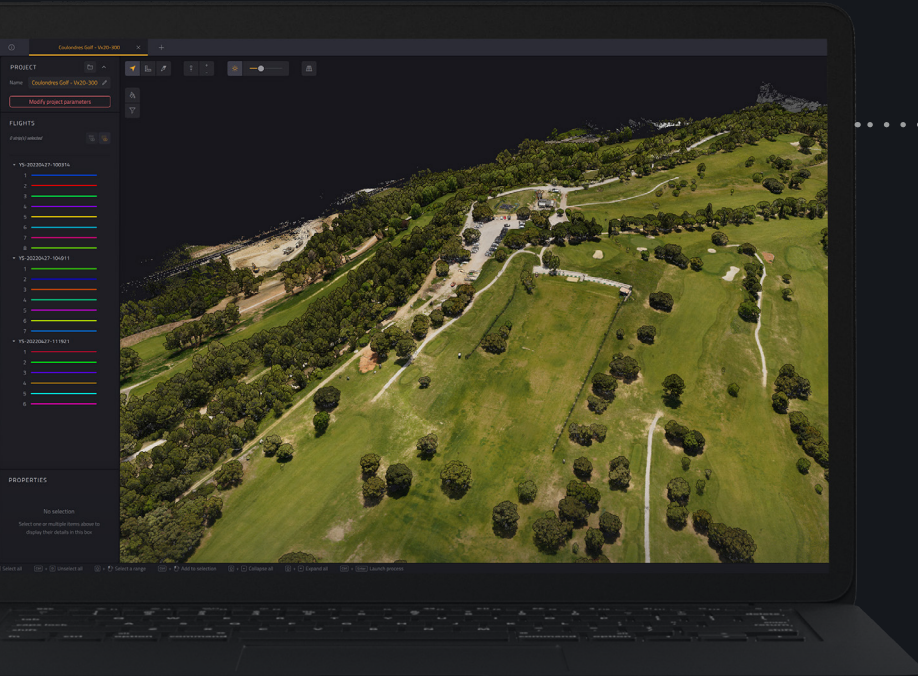
### CloudStation Pro
Visualize, inspect, refine your data quality, enrich your data with classification and color, and unlock more export features.

*Free upgrade from any module with active maintenance*

| FEATURES COMPARISON | ESSENTIAL | PRO | ULTIMATE |
|---|:---:|:---:|:---:|
| Georeference Raw YS data | ✅ | ✅ | ✅ |
| Strips timestamps management (auto + manual) | ✅ | ✅ | ✅ |
| Iterative water classification *(Navigator)* | ✅ | ✅ | ✅ |
| POSPac & Qinertia integration: Easy SBET generation within CloudStation | ✅ | ✅ | ✅ |
| Remove Outliers | ✅ | ✅ | ✅ |
| Colorization from Orthophotos | ✅ | ✅ | ✅ |
| Export in multiple formats | ✅ | ✅ | ✅ |
| Import GCP files | | ✅ | ✅ |
| Display GCP in the Viewport along with the point cloud | | ✅ | ✅ |
| Robust Strip Adjustment Algorithm | | ✅ | ✅ |
| Precise (Time-Dependent) Strip Adjustment Algorithm | | ✅ | ✅ |
| Utilize GCPs during Strip Adjustment to constrain accuracy | | ✅ | ✅ |
| Cut Overlap | | ✅ | ✅ |
| Colorization from Images | | ✅ | ✅ |
| Strip Adjustment Report *(accuracy, precision, mismatch..)* | | ✅ | ✅ |
| Export DTM, DSM, DHM and Hillshade | | ✅ | ✅ |
| YTK: Command line / batch processing for server processing | | | ✅ |
| Orthophoto generation | | | ✅ |
| Automated Trajectory QC *(Part of the upcoming QA/QC Module)* | | | ✅ |

# Typical pointcloud snapshots.

## YellowScan Vx20 series

▶ Flight height: 50 m AGL

▶ Speed: 5 m/s

▶ Processing: Colorized

## YellowScan Voyager

▶ Flight height: 180 m AGL

▶ Speed: 31 m/s

▶ Processing: Strip Adjusted