

# What's new and fixed in 3Dsurvey v2.8.0

## What's new:

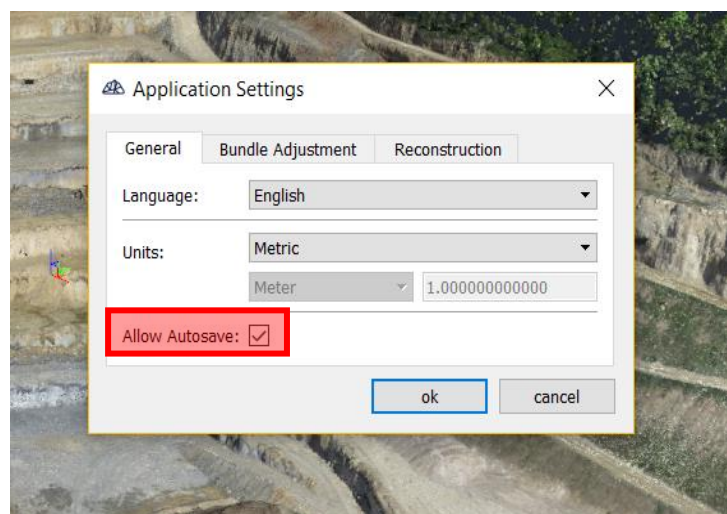
- **New Point Cloud Algorithm**

Based on a new algorithm for point cloud processing on graphics card we have improved the quality of the point cloud dramatically and sped up the processing for up to 5 times (processing time depends on graphics card used). At this stage NVIDIA graphics cards are supported.



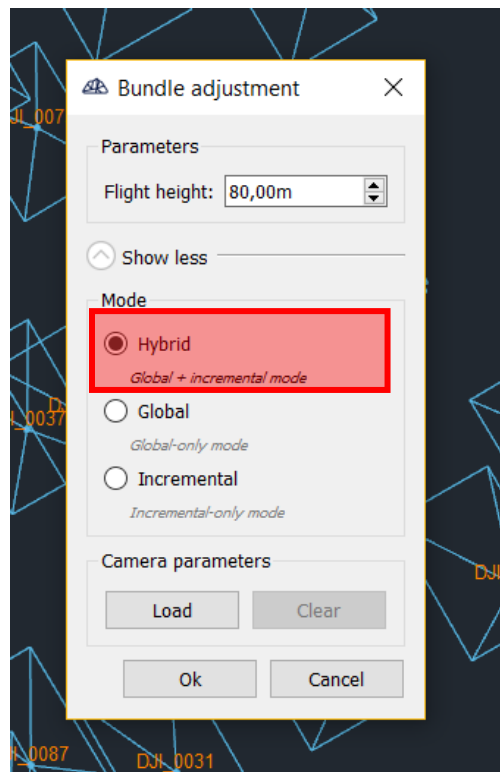
- **AutoSave Option**

After every important step (Bundle Adjustment, Orientation, Reconstruction) the project is AutoSaved in the image folder. You can turn AutoSave ON/OFF in: Options -> Application Settings



- **Hybrid Bundle Adjustment**

Hybrid BA has speed of global BA and stability of Incremental BA and solves cases in which the number of matched images after Global Bundle Adjustment was not sufficient and the data set was too big for Incremental BA.



- **New Import/Export formats**

3Dsurvey now supports most of all state-of-the-art Import/Export file formats. You can now export point clouds in E57 format and import it into any other design programs.

- Export DSM in STL file and use it directly for 3D printing or import a designed AutoCAD surface in GEOTIF and do a direct comparison with surveyed terrain in 3Dsurvey. Export orthophoto directly to Google EARTH!



**What's fixed:**

- Fixed issues with coordinate systems - datum shifts
- Fixed slow GUI when disabling GCPs during georeferencing on large datasets
- Respect line width when rendering CAD data on orthophoto
- Significantly improved project saving speed when it has orthophotos
- Fixed missing GCP markers on orthophotos
- Added oblique equatorial stereographic projection method
- Support for transparent orthophoto background when draping on DSM

**Known issues:**

- Matching and filtering features takes significantly longer then before
- Some NVIDIA cards have issues with new dense point cloud algorithm (most problematic are Quadro graphics cards)
- Less powerful Nvidia graphics cards (with less than 4GB Memory) are not able to calculate the Reconstruction on Extreme level – go and lower the reconstruction level in such cases
- There is no GPU support in dense reconstruction step for AMD graphic cards and Intel integrated graphics cards. Users with AMD graphic cards should deselect option: "Use graphics card" in Reconstruction popup.