



New Features in TerraStereo

What's New in Terrasolid Jan 2020
Webinar
31 January 2020

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Engine Improvements

Improved Handling of Clouds over 10k pts/m²

- Reduced hard disk and memory foot print for dense point clouds.

Support for BIG GPU

- The visible points in TerraStereo are octree based meaning that far away points are not actually loaded, but their reduced resolution presentation is shown instead.
- New 64-bit indexing makes it possible to load over 4 billion points at full resolution. This makes it possible to use dynamic cross sections with no resolution loss.
- The new nVidia RTX8000 board has 48 GB memory that can store 2-10 billion points depending on the point density and used channel.

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POINT CLOUD INTELLIGENCE



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This slide shows a dense point cloud of an urban area. The buildings are represented as a complex grid of points. A central cluster of buildings is highlighted in black, while the rest of the city is shown in a light gray color. The background is a dark blue gradient.

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This slide displays a 3D point cloud model of a building's interior. The model shows the floor plan, including rooms, corridors, and structural elements. The background is a dark blue gradient.

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Group Based Classification Tools

Selection of Groups

- The cursor can either select groups individually or with a spherical 3d brush.
- Selected groups can be highlighted or hidden or they can be visible without other points.

Snapping and Visibility Filters

- The points that are kept visible but belong to a non-snappable class are shown in different color.
- If the group contains both snappable and non-snappable classes only the snappable points from the selected group are chosen if that group is selected.

Visualization Views

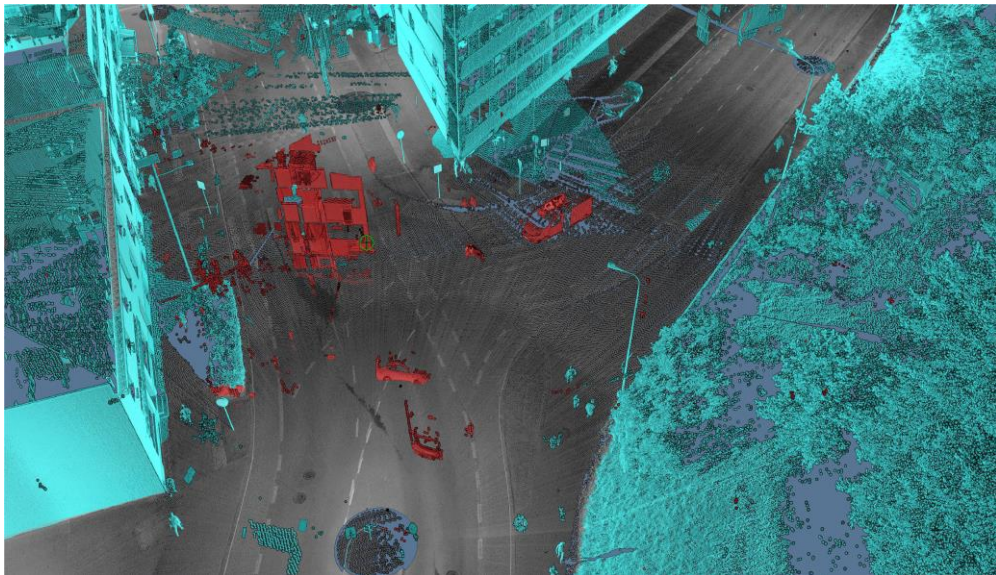
- RGB or Intensity together with highlighted snappable classes
- Group Coloring with grey non snappable classes

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Group Editing Tools

The Big Question of Group Based Classification

Q: "How to create the reasonably right groups?"

A: "With TerraScan, BUT..."

The typical problem is not that the groups would be too small. It is that they are too large and extend to the points they shouldn't.

Trimming the Group

A new 3d brush 'Point Selection Sphere' is used to trim a single group.

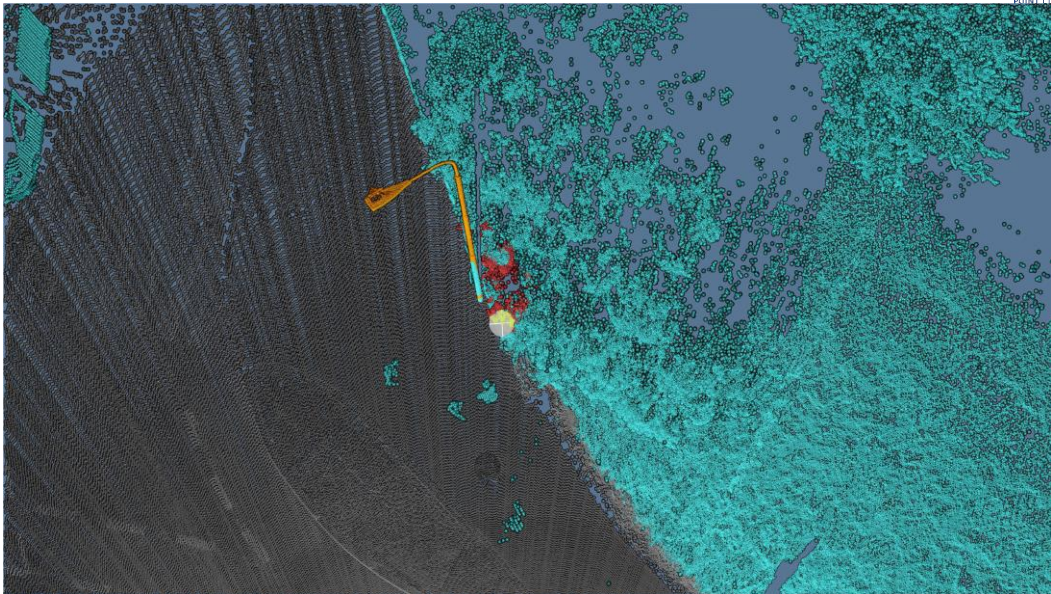
The trimming is performed using the same highlight/hide/focus -modes than in group selection.

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TerraStereo for CAD

View Synchronization

- Works best from stereo screen to other open views. The synchronized view's center coordinates are moved to the stereo cursor position. Other properties of the view(s) are unchanged so you can use this for cross sections etc.