

Voxel Point Cloud

This entity converts a series of spherical point cloud captures into a single volumetric voxel model.

Once you select “Voxelized Points” from the “Add” menu, you will see the following options:

The image displays two screenshots of the 'UPLOAD VOXEL POINT CLOUD' form. The left screenshot shows the initial form with fields for Item Name, Capture Date, Horizontal datum, Vertical datum, Projection, Horizontal Units, Vertical Units, and Translate X, Y, Z. The right screenshot shows the same form with additional fields for Scale X, Y, Z, Rotate X, Y, Z, Rotate Order, and Coordinate Order, along with a 'CHOOSE FILE' button.

Item Name	A readable name for the new entity
Capture Device	An optional string to identify capture device
Capture Date	An optional field containing the original capture date
Horizontal Datum	Horizontal datum used in the point cloud
Vertical Datum	Vertical datum used in the point cloud
Projection	Projection used by the point cloud
Horizontal Units	Horizontal unit type used in the point cloud
Vertical Units	Vertical unit type used in the point cloud

Translate XYZ	These fields allow translating the mesh position by the specified amounts along each coordinate axis
Scale XYZ	These fields allow scaling the mesh by the specified amounts along each coordinate axis. A value of 1.0 represents the original scale
Rotate XYZ	Euler rotation angles for each coordinate axis.
Rotation Order	Euler rotation angle sequence.

Once you have provided values to these fields, click on “Choose Files”. This will prompt a file selection dialog where multiple files can be selected for uploading. Each file must contain a sequence of comma-separated XYZ values, where the first entry contains the coordinates of the scanning device (a LiDAR device for instance) and the remaining points are the points that were captured from that location.

Click on “Create” to begin the upload and voxelization process. You can track the upload operation from the “Pending” section in the project’s page.

Revision #2

Created 17 March 2025 13:59:52 by Admin

Updated 24 March 2025 12:46:17 by Admin