

# 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:

UPLOAD VOXEL POINT CLOUD

Item Name \*

New Voxel Point Cloud

Capture Date

03/24/2025 08:44 AM

Horizontal datum \*

World Geodetic System 1984 (WGS 84)

Vertical datum \*

World Geodetic System 1984 (WGS 84)

Projection \*

Mercator

Horizontal Units \*

Meters

Vertical Units \*

Meters

Translate X \*

0

Translate Y \*

0

Translate Z \*

0

CANCEL

CREATE

UPLOAD VOXEL POINT CLOUD

Translate Y \*

0

Translate Z \*

0

Scale X \*

1

Scale Y \*

1

Scale Z \*

1

Rotate X \*

0

Rotate Y \*

0

Rotate Z \*

0

Rotate Order \*

ZXZ

Coordinate Order \*

XYZ

CHOOSE FILE

CANCEL

CREATE

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.