

Geospatial Modeling & Visualization

A Method Store for Advanced Survey and Modeling Technologies

GMV Geophysics GPS Modeling Digital Photogrammetry 3D Scanning Equipment Data and Projects by Region

Modeling an Irregular Features – Comparing Modeled Objects to Original Points

In this series, columns in a deteriorating colonnade will be modeled by several methods.
Hint: You can click on any image to see a larger version.

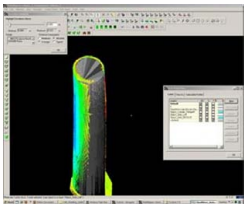
CLOUDWORX

Comparing Modeled Objects to Original Points in this example

(analyzed at .005 m (.5 cm) / average distance of deviation/ absolute value)

I. CloudWorx – three section cuts in the x or y direction – lofted in the z (up) direction to create 3D solid column:

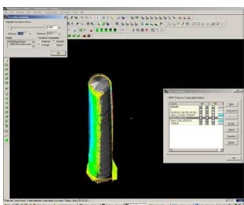
- 7% of the mesh faces (ie: 484 of 6,914) were above .5 cm deviation from point cloud



CLOUDWORX 2

II. Cloudworx – 1 section cut in the z direction (representing 1/2 the column from outside edge to center) – revolved around center axis to create 3D solid column

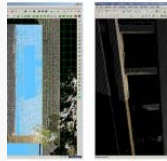
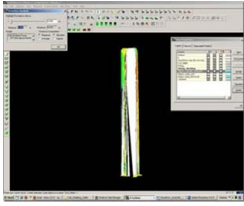
- 43% of the mesh faces (ie: 6,055 of 14,160) were above the .5 cm deviation from point cloud



CYCLONE

III. Cyclone – Mesh created in Cyclone from point cloud

- < 1% of the mesh faces (ie: 977 of 334,133) were above the .5 cm deviation from point cloud



You are reading the series: [Modeling an Irregular Feature from Point Cloud Data - 3D](#)

[Modeling an Irregular Feature from Point Cloud Data – Method 1](#)

[Modeling an Irregular Features – Method 2](#)

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