CloudCompare

3D point cloud and mesh processing software
Open Source Project

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These great tutorial videos have been made by Eugene Liscio (www.ai2-3d.com, all rights reserved).

First introductory tutorial video (basic concepts: registration, distance computation, etc.)

![Introductory Video on CloudCompare](image)

you can download the 2 clouds used in this tutorial here
(20 Mb 7zip archive - 2 files @ CloudCompare BIN V2 format inside)

About the (new) interactive alignment tool (by picking - at least - 4 pairs of points)

CloudCompare home - danielgm.net - EDF R&D - contact
Display by various attributes: classification
Top view; click on scissors to segment
Single tree by return number
Single tree by return number
Ground returns only
Cloud mesh distance
Tree height > 1 m over ground mesh
Octree
Octree
Octree Level: 8
Min. points: 10
Random colors: checked
Octree level 8 connected points
Octree level 8 connected points
Switch to Cloud Comparison for garden with excavation (see demo on web site with video)
Distance computation

Compared: CloudCompareGarden1 - Cloud.registered
Reference: CloudCompareGarden2 - Cloud

Approx. results

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<td>1</td>
<td>Min dist.</td>
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<td>2</td>
<td>Max dist.</td>
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<tr>
<td>3</td>
<td>Mean dist.</td>
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<tr>
<td>4</td>
<td>Sigma</td>
</tr>
<tr>
<td>5</td>
<td>Max relative error</td>
</tr>
</tbody>
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Precise results

General parameters

- Octree Level: 8
- Max. dist: 6.651582
- signed distances
- multi-threaded
- split X, Y and Z components

Local modeling

Compute

Ok Cancel
Switch to El Mayor Cucupah earthquake pre and post data analysis
Mesh the post event data
Import but do not recenter
### Approx. results

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### Precise results

#### General parameters

- Octree Level: 8
- Max. dist: 1738.839111
- signed distances
- multi-threaded

#### Local modeling

- split X, Y and Z components