COMPARISON OF RECON 3D TO CLOUD COMPARE: A BRIEF SUMMARY
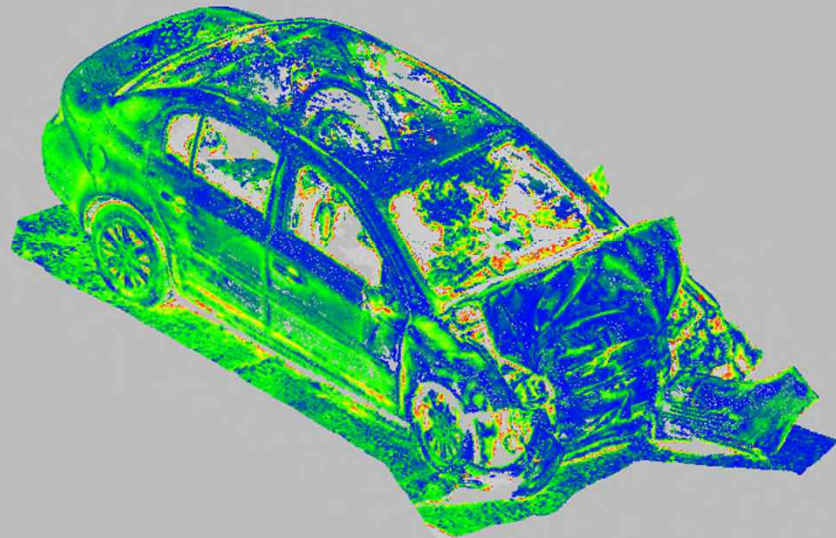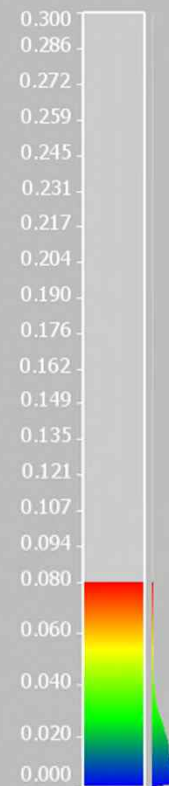
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PROCEDURE

- Scans of the same subject were collected using Faro 3D Scanner and Recon 3D

- Both scans were brought into Cloud Compare

- The Recon3D scans were then aligned and scaled using the faro scan as the reference

- The cloud to cloud distance was then computed in cloud compare using the Faro scan as the reference
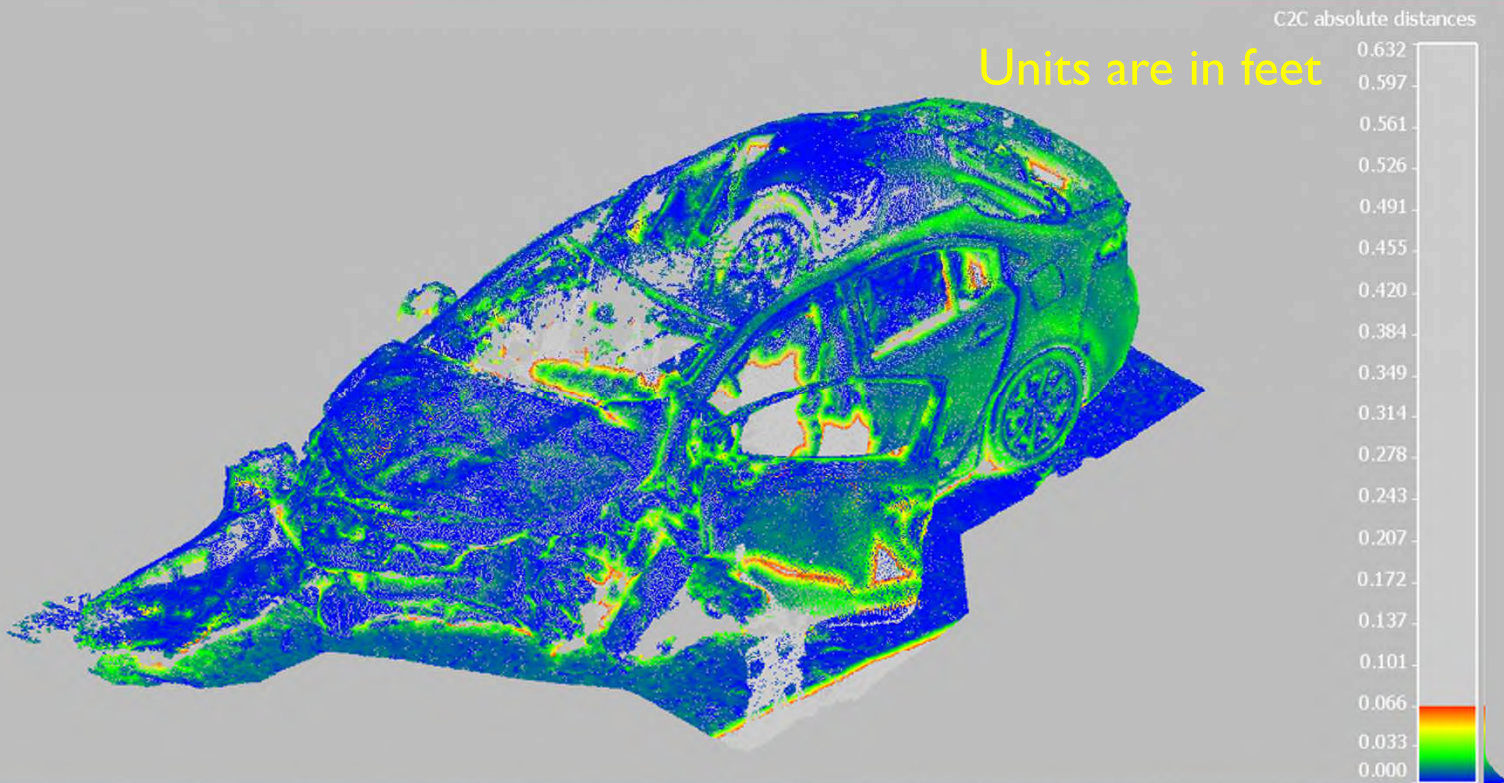
TEST 1

Units are in feet

C2C absolute distances[<0.3]

0.300
0.286
0.272
0.259
0.245
0.231
0.217
0.204
0.190
0.176
0.162
0.149
0.135
0.121
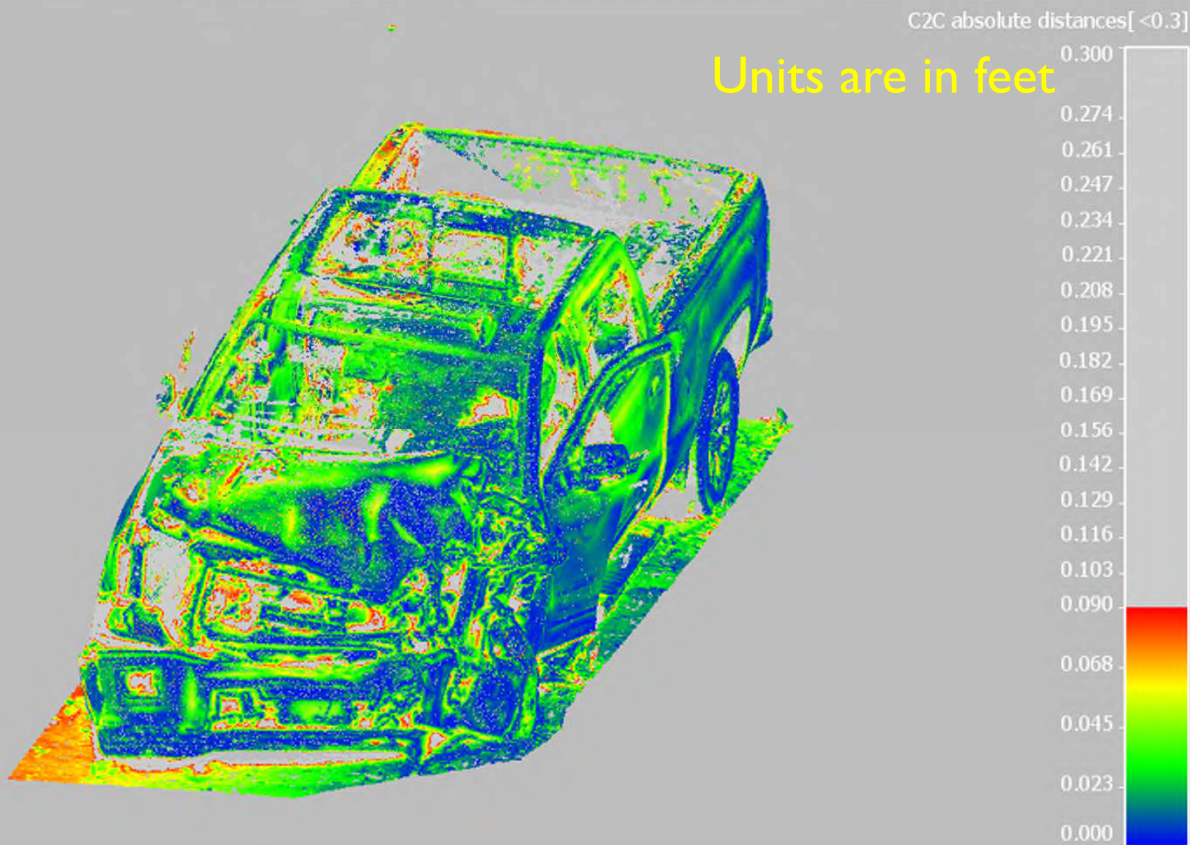0.107
0.094
0.080
0.060
0.040
0.020
0.000

- 569,720 points

- Recon 3D scan scaled by 1.008 to match Faro scan

- 50.5% of points within 0.2 inches of faro scan

- 35.5% between 0.2 and 0.624 inches

- Around 4.7% between 0.624 and 0.96 inches

- Around 10% between 0.96 and 3.6 inches. These are mainly associated with missing segments in the Faro scan

TEST 2

Units are in feet

C2C absolute distances

0.632
0.597
0.561
0.526
0.491
0.455
0.420
0.384
0.349
0.314
0.278
0.243
0.207
0.172
0.137
0.101
0.066
0.033
0.000

- 568,483 points

- Recon 3d scan scaled by 1.00279 to match Faro scan

- 78% within 0.2 inches

- 17% within between 0.2 and 0.79 inches

- 5% greater than 0.79 inches. These points are mainly associated with missing segments in the Faro scan

TEST 3

- 965,986 points

- Recon 3D scan scaled by 1.0036 to match Faro scan

- 27.5% of points within 0.25 inches

- 37.4% between 0.25 inches and 0.72 inches

- 13.1% between 0.72 and 1.08 inches

- Around 20% greater than 1.08 inches. These points are mainly associated with missing segments in the Faro scan