

**International Association of
Accident Reconstruction Specialists
Sept 12 – 15, 2005**

**Validation crash with a vehicle striking another car
pulling a trailer with a boat**

www.iaars.org

iWitness close range photogrammetry and
Nikon AIMS total station. Time and 3D points
comparison



Scene overview of post collision. Bullet car #2 center, #1 tow car on right, boat trailer and crash evidence on left. iWitness 3D point marking illustrated with lime green "+" marks.



Expanded view of trailer scuff marking, and trailer final rest.



Reverse image of tow car, and boat trailer.

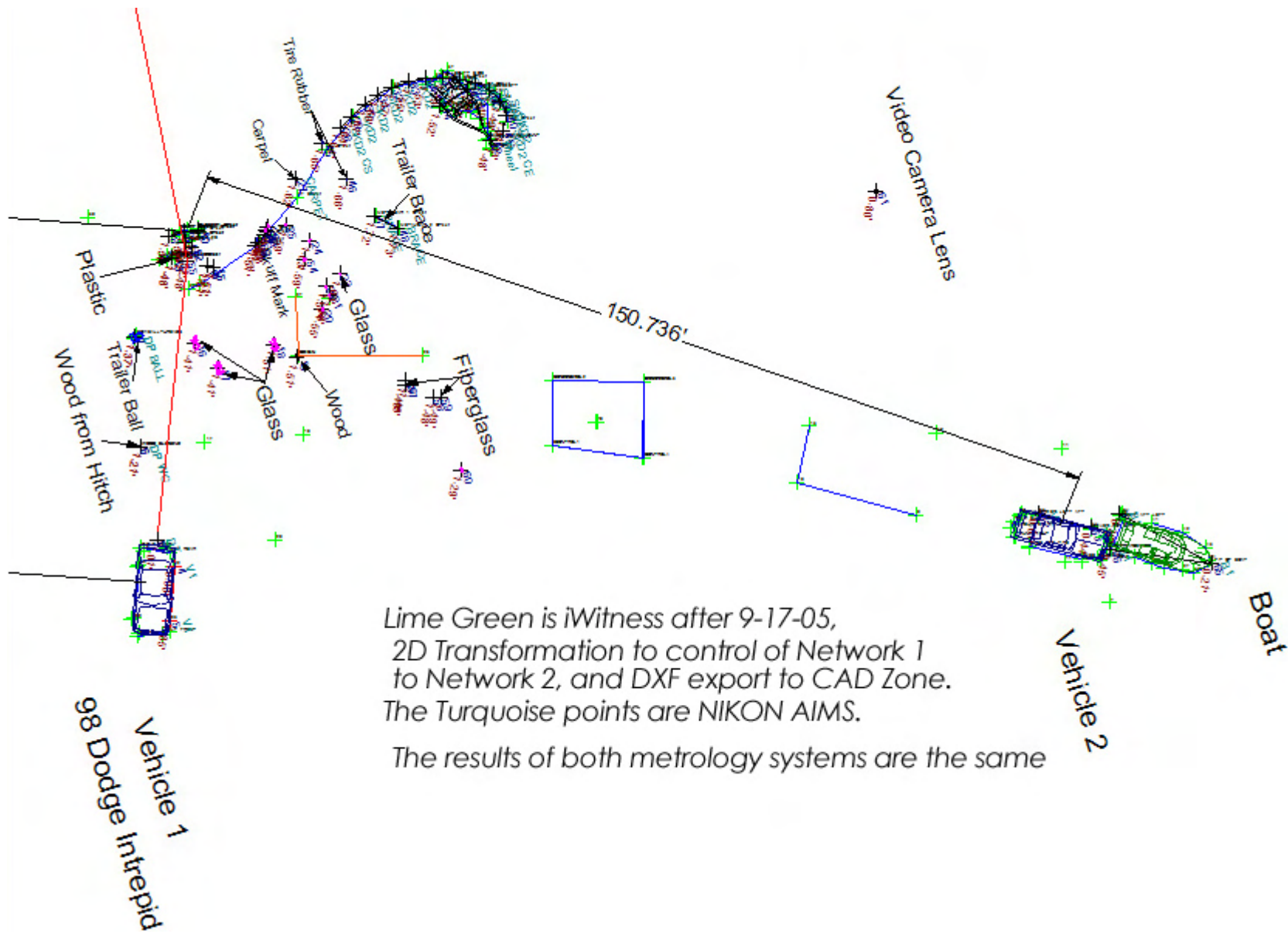


The boat disengaged the trailer from bullet vehicle impact and rode on top of the bullet car for about 150', and then slide off the car's roof, to it's final rest position as noted above.

Time & 3D Point Comparison

- Independent time keeper noted the Total Station took 60 minutes to document the crash.
- Total Station operator noted 70 points were measured.
- Independent time keeper noted the Photogrammetry took 28 minutes to document the crash.
- iWitness photogrammetry operator noted 144 points were measured.

The DXF output overlay was made in The Crash Zone, accomplished on 9-17-5. The two metrology systems 3D data points are essentially identical.



Lime Green is iWitness after 9-17-05,
 2D Transformation to control of Network 1
 to Network 2, and DXF export to CAD Zone.
 The Turquoise points are NIKON AIMS.

The results of both metrology systems are the same