

## **Common Vehicle Features:**

**Rear Bumper:** This is typically a flat, horizontal surface at the rear of the vehicle. In LiDAR point clouds, it appears as a dense cluster of points with similar z-coordinates.

**Roof:** The roof of a vehicle is typically a flat or slightly curved surface. In LiDAR point clouds, it appears as a cluster of points with similar z-coordinates, often with lower intensity values due to its material properties.

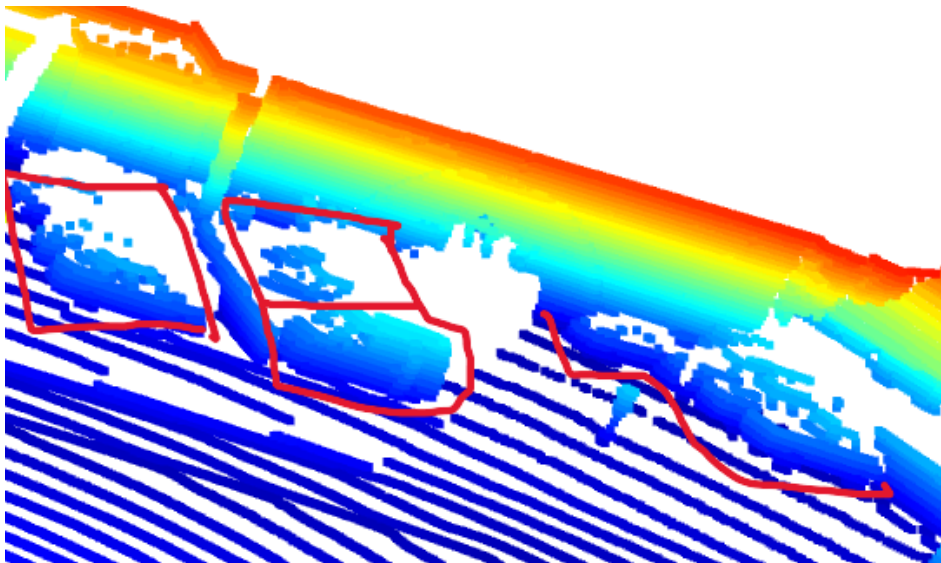
**Side Mirrors:** These are small, protruding objects on the sides of the vehicle. They can be identified as clusters of points that are distinct from the main body of the vehicle.

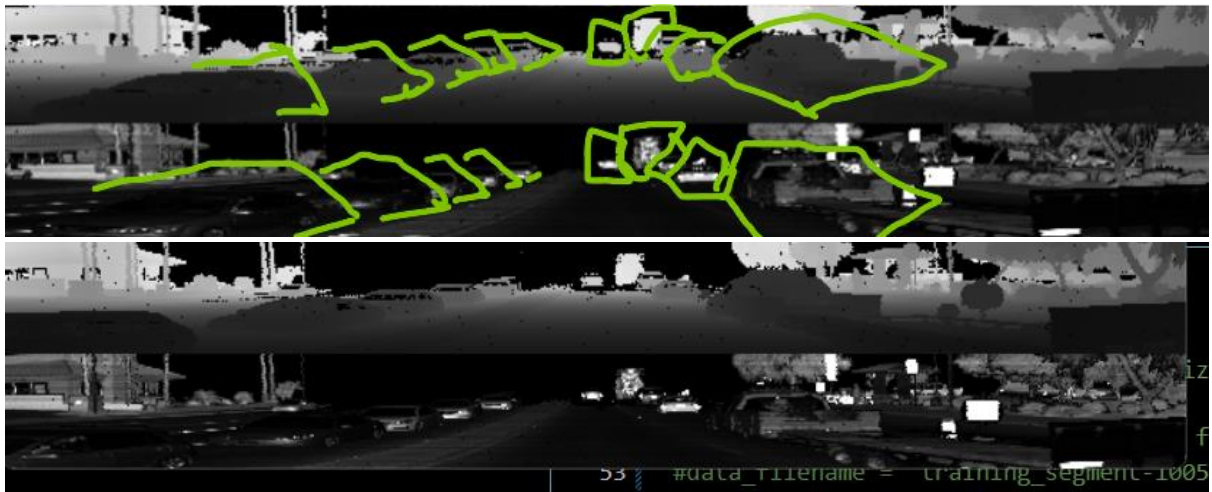
**Corners and Edges:** The corners and edges of the car body, such as the corners of the hood, trunk, and doors, are sharp discontinuities in the point cloud. They can be identified by analysing the local curvature of the surface.

**Windows:** While windows themselves are transparent and won't directly reflect LiDAR pulses, the window frames and surrounding bodywork can be identified as distinct features.

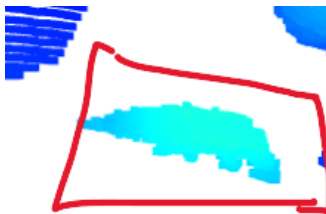
## **Vehicles with varying degrees of visibility:**

1.

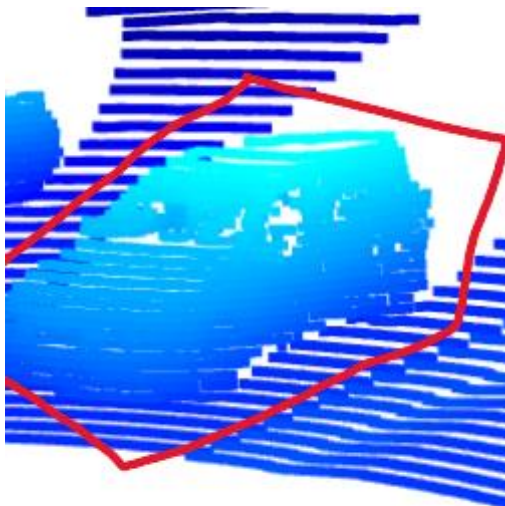




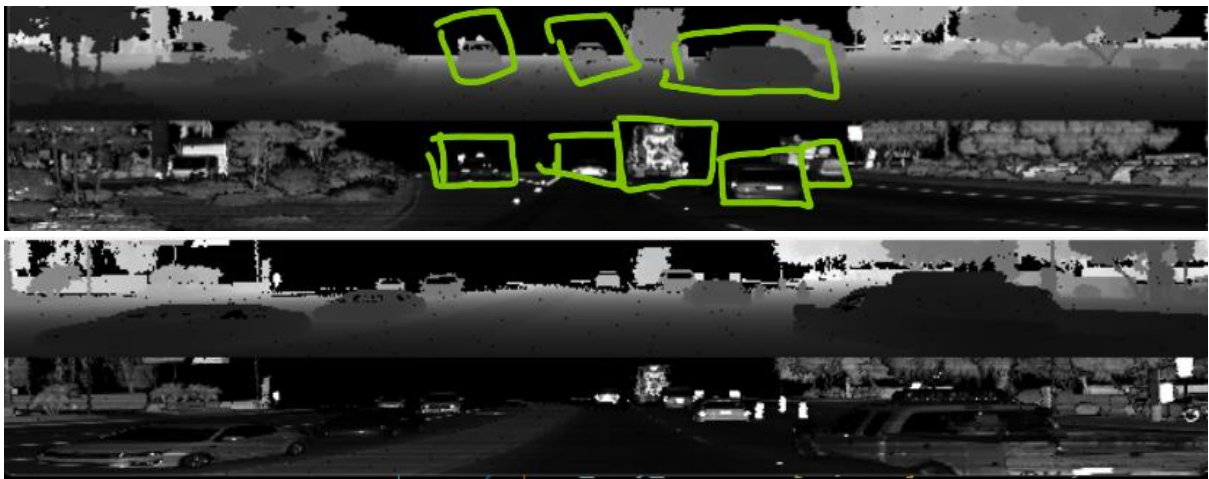
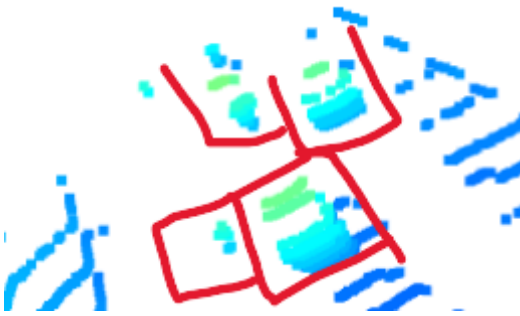
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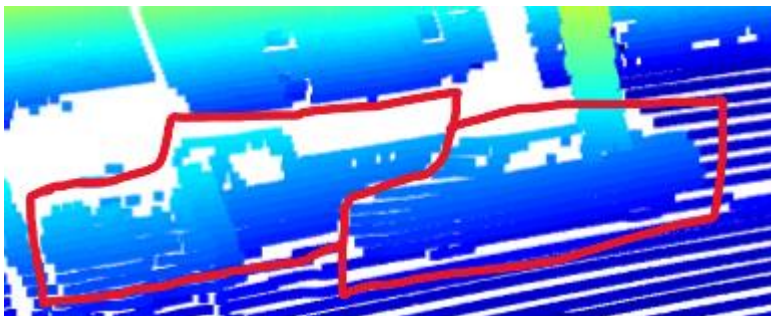
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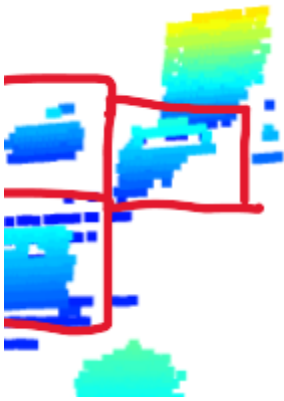
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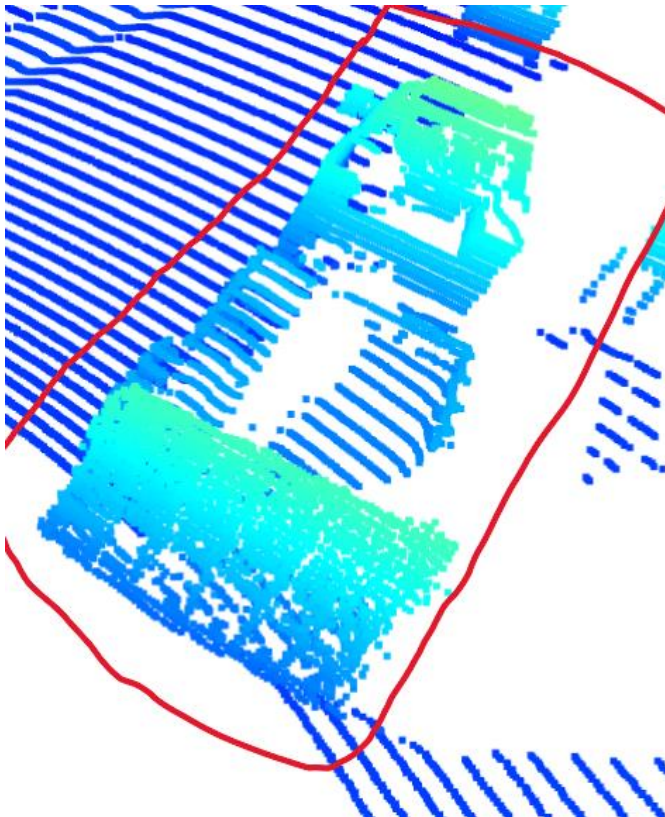
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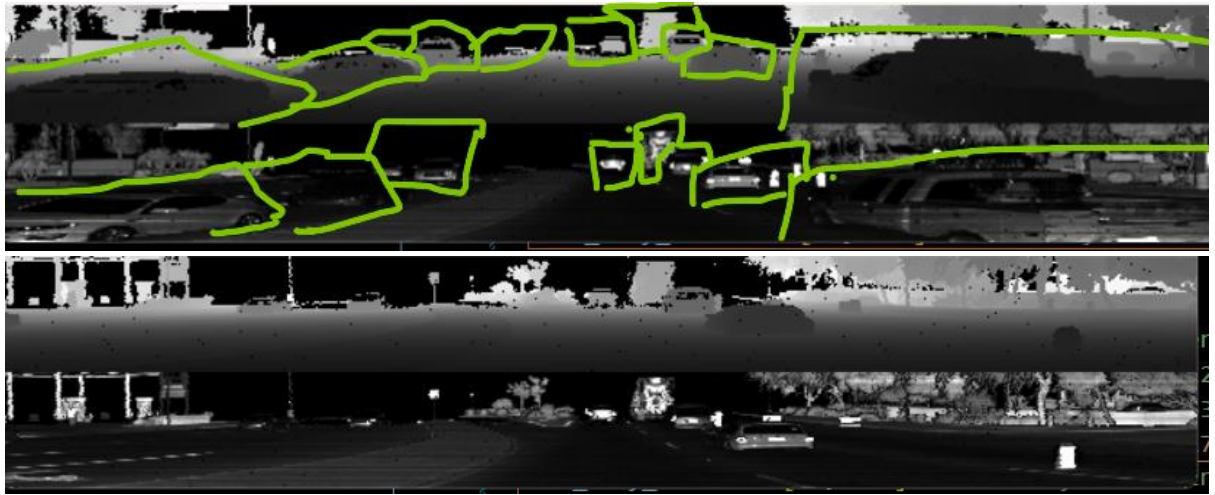


6.

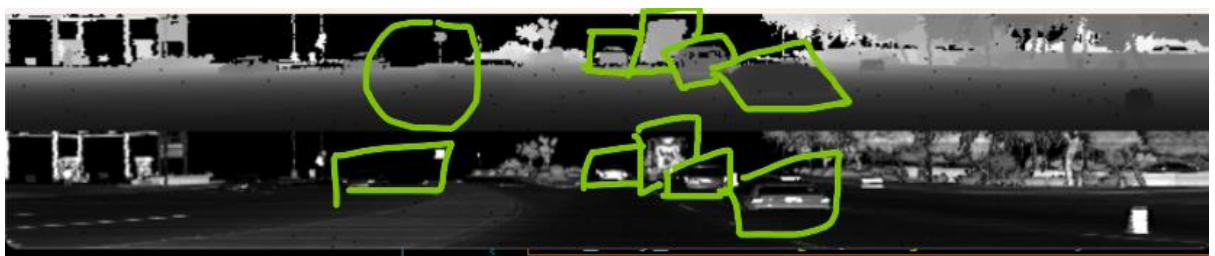
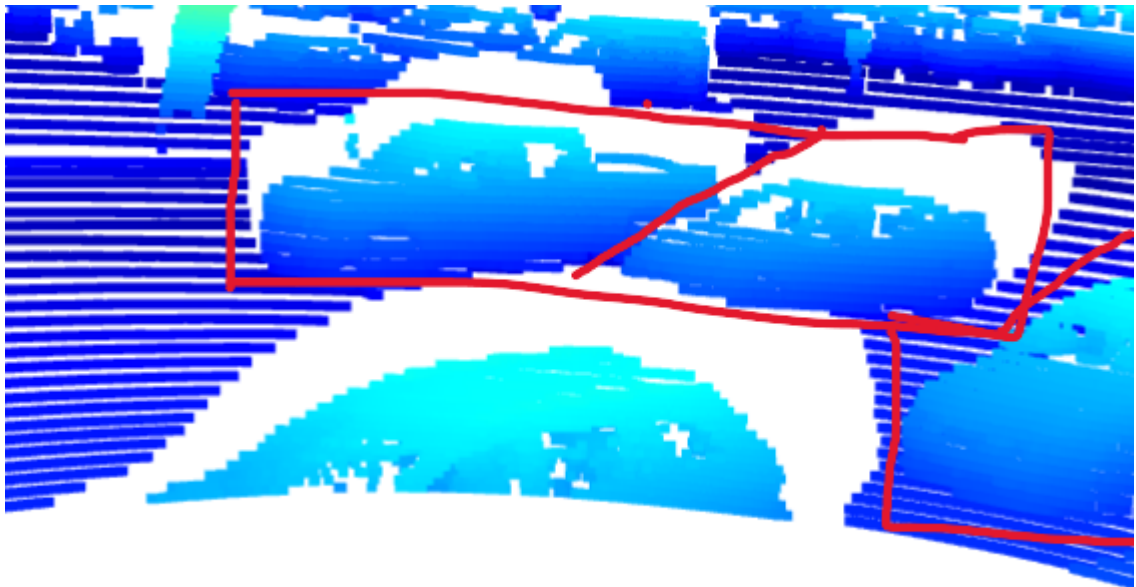


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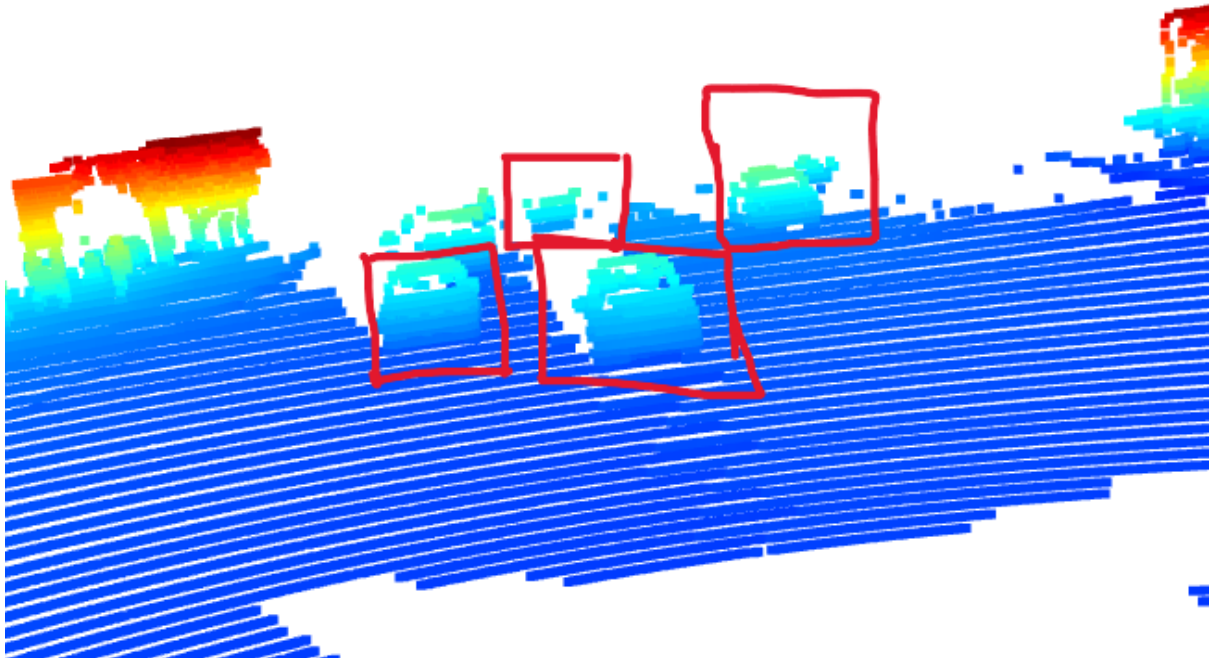


8.





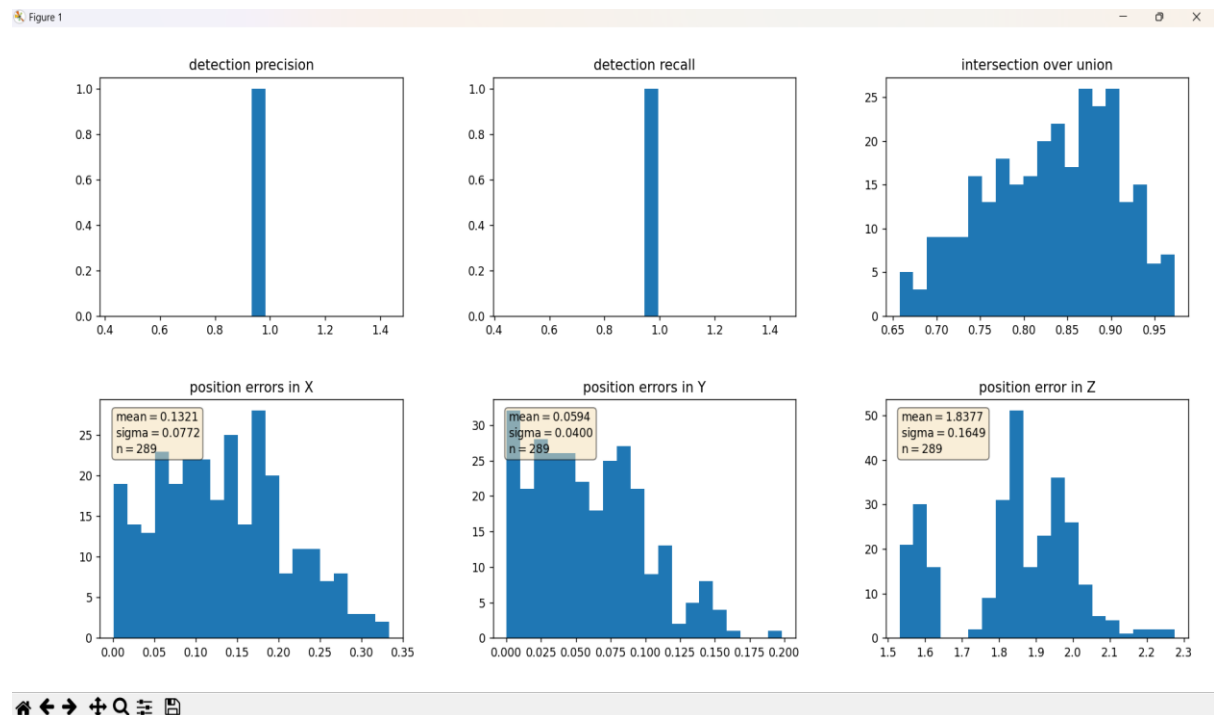
9.



10.



# Model Metrics(150 frames):



# Verifying using GT as Labels(10 Frames):

