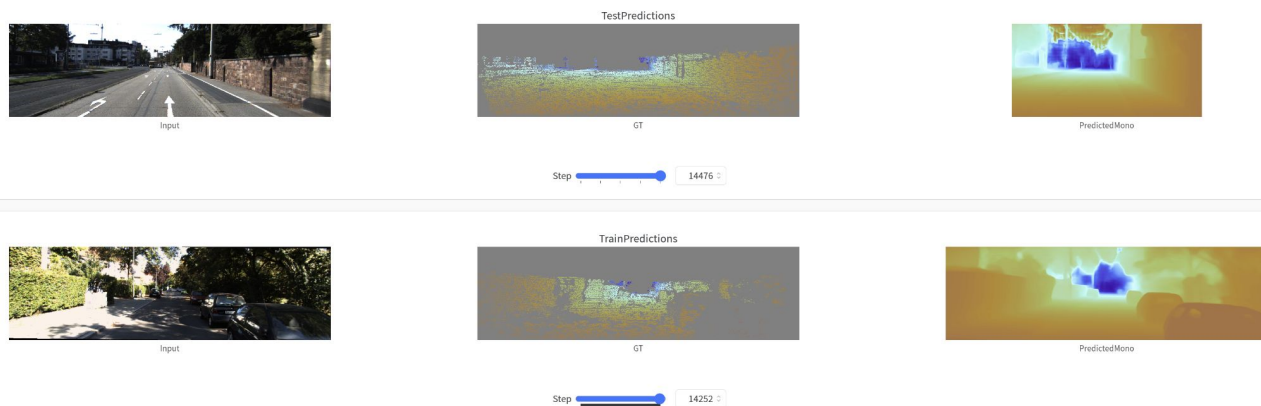


# Dataset - Gt Depth Issue of MS2 dataset

Train with RGB only on MS2 dataset , the predicted depth is pretty blurry, due to the noises in Gt depth (officially provided in depth\_filtered folder):

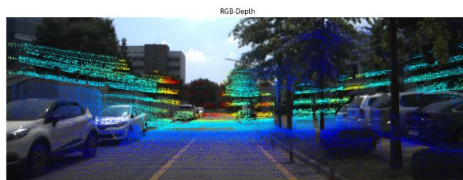
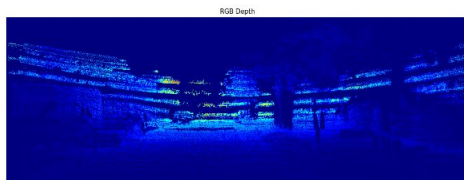


While the same network trained on Kitti dataset, the predicted depth is very crispy. This demonstrates Kitti has high-quality depth map.

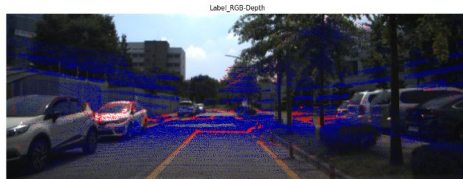
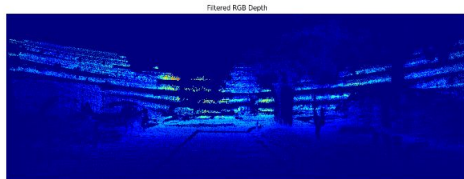


# Dataset - Depth Filter (stereo consistency) on MS2 dataset

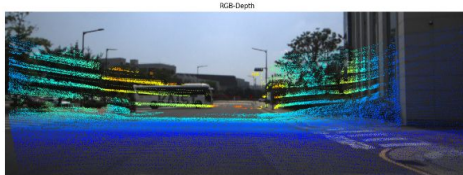
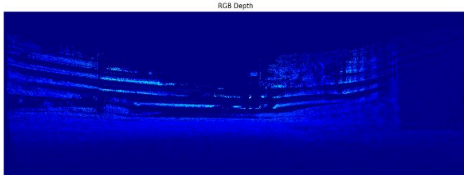
Filter out the GT depth (of left RGB) with significant L1 error and SSIM error when projecting left to right RGB.



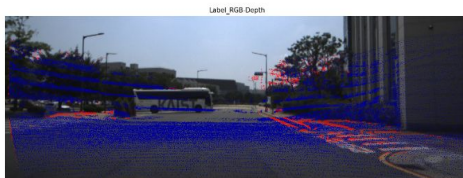
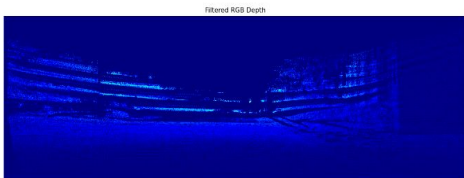
Officially provided depth



Points in red are filtered out



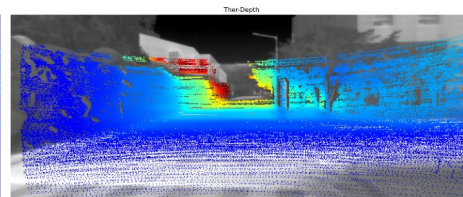
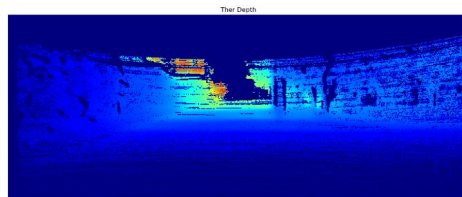
Officially provided depth



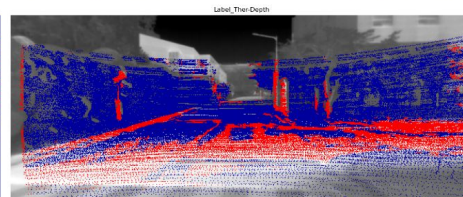
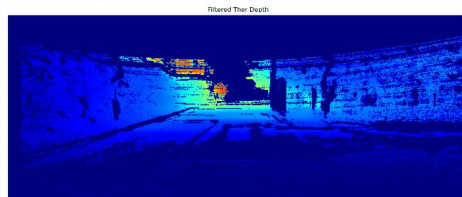
Points in red are filtered out

# Dataset - Depth Filter (stereo consistency) on MS2 dataset

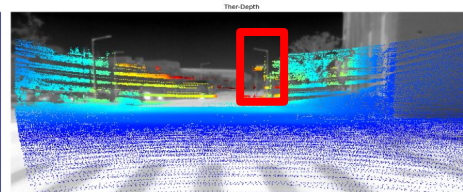
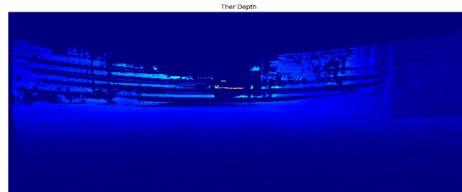
Filter out the GT depth (of left Thermal) with significant L1 error and SSIM error when projecting left to right RGB.



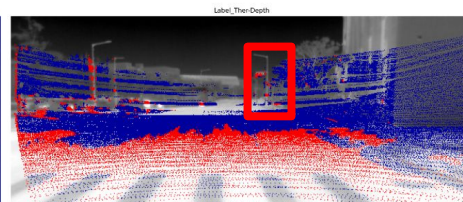
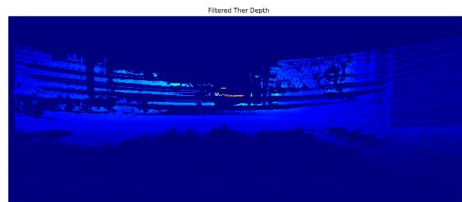
Officially provided depth



Points in red are filtered out



Officially provided depth



Points in red are filtered out



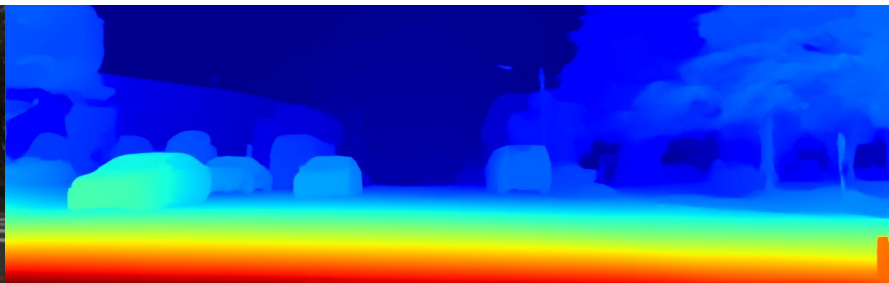
# Dataset - Depth Filter (RaftStereo consistency) on MS2 dataset

Filter out the GT depth (of left RGB) when its gap from the depth predicted by RaftStereo is over  $0.12 \times \text{GT}$

RGB Image:



Disparity from RaftStereo Net:

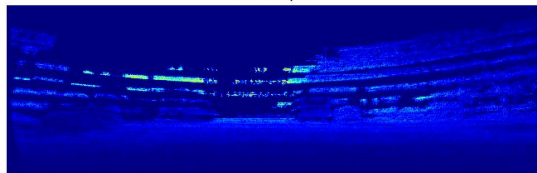


After applying both the left-right RGB consistency filter and RaftStereo depth consistency filter :

RGB Image



RGB Depth



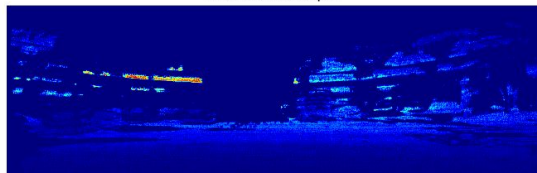
RGB-Depth



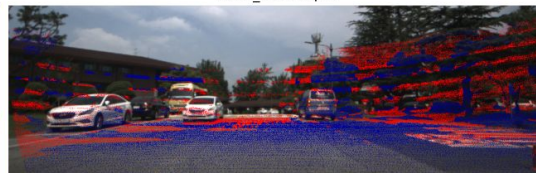
Right RGB Image



Filtered RGB Depth



Label\_RGB-Depth



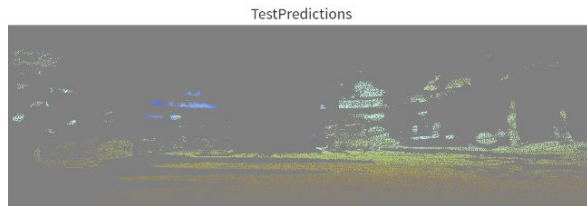
Officially  
provided depth

Points in red  
are filtered  
out

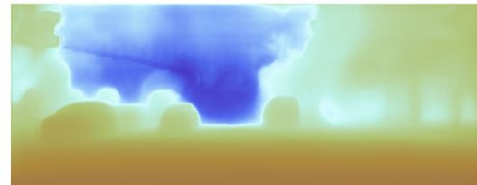
# Trained on one sequence with our filtered Gt depth (depth\_filtered\_myrefine)



Input



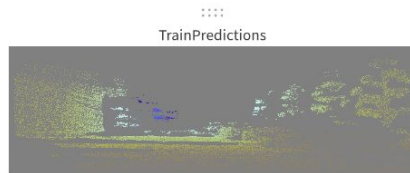
GT



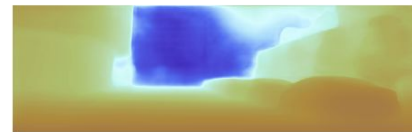
PredictedMono



Input



GT



PredictedMono

Step  14711