

method description: use os64 lidar and os imu for odometry estimation. gyroscope is used to undistort pointCloud rotation distortion, while translation is estimated during scan to scan match. Pure lidar odometry, implemented by scan to scan and then scan to map, features is extracted as structured planes on range map.

no loop closure, global map is maintained to reduce longtime drift

no BA,

cpu i5, processing time: 200ms/frame

for indoor scenario, plane fitting threshold is set to 3cm, while for outdoor scenario, threshold is set to 10cm, and restrict plane region grow size.