## **Preparation**

## 1.1Compile function package

Unzip oradar\_ros-dev-ros2 in the [Source Code] folder to get the oradar\_ros-dev-ros2 function package. Copy oradar\_ros to the src directory of the workspace you created. Here, the workspace name is oradar\_ws as an example. The path of oradar\_ws is in the ~ directory, and then return to the workspace directory to compile.

```
cd ~/oradar_ws
colcon build --symlink-install
```

The above screen description appears and the compilation is passed.

Then enter the following command to set the environment variables.

```
echo "source ~/oradar_ws/install/setup.bash --extend" >> ~/.bashrc
```

Open the terminal under the oradar\_ros-dev-ros2 function package, enter the following command, and copy the oradar\_rules file under the function package to /etc/udev/rules.d.

```
sudo cp oradar.rules /etc/udev/rules.d/
```

Then re-plug the radar serial port.

Input following command:

```
yahboom@VM:~/oradar_ws/src/oradar_ros$ ll /dev/oradar
lrwxrwxrwx 1 root root 7 11月 9 10:57 /dev/oradar -> ttyACMO
yahboom@VM:~/oradar_ws/src/oradar_ros$
```

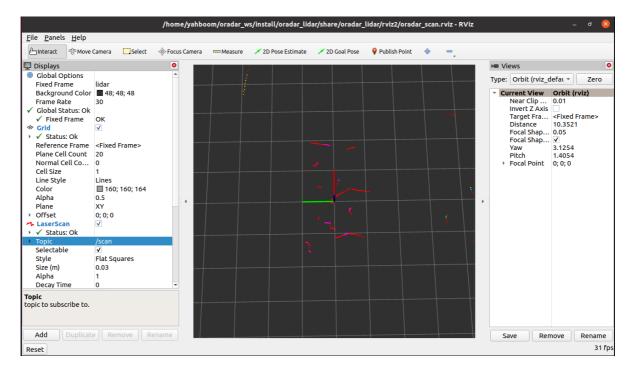
The above content indicates that the binding is successful.

The end is not necessarily 0 and changes according to the order in which the devices are inserted.

## 1.2 Run launch

Run lidar:

```
ros2 launch oradar_lidar ms200_scan_view.launch.py
```



Lidar node data can be viewed through the following command.

```
ros2 topic echo /scan
```

```
header:
   stamp:
     sec: 1699498981
   nanosec: 57374624
frame_id: lidar
frame_id: lidar
angle_min: 0.0013965616235509515
angle_max: 6.2732367515563965
angle_increment: 0.013937423005700111
time_increment: 0.00022122383234091103
scan_time: 0.09955072402954102
range_min: 0.05000000074505806
range_max: 20.0
ranges:
 - 0.1379999965429306
   0.1420000046491623
   0.15299999713897705
- 0.0
- 1.8359999656677246
  1.8450000286102295
   1.8459999561309814
   1.8580000400543213
   1.86899995803833
   1.871999979019165
   1.875
   1.8839999437332153
   1.8930000066757202
   1.902999997138977
   1.9149999618530273
   1.9220000505447388
   1.9299999475479126
   1.944000005722046
   1.9529999494552612
```