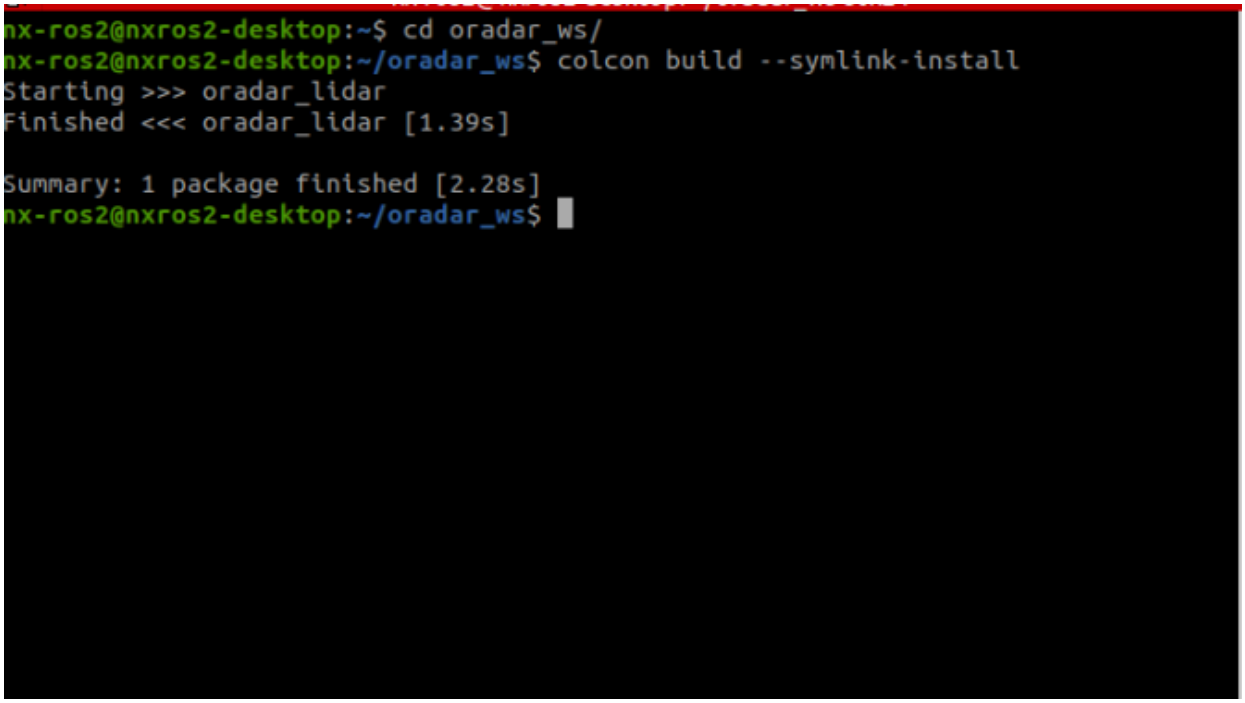
11、Use lidar in ROS2

1、Compile function package

In the folder, unzip oradar_ros2.rar to get oradar_ros, and copy oradar_ros to the src directory of your own created workspace. Here, the workspace name is oradar_ws as an example. The path of oradar_ws is in the ~ directory, and then return to work In the space directory, compile,

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



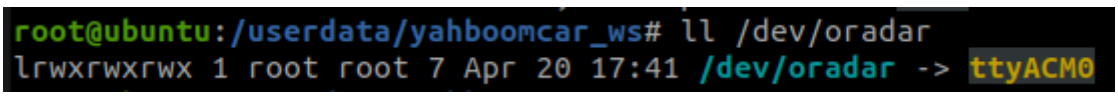
The above picture shows that the compilation has passed. Then enter the following command to set the environment variable.

```
source install/setup.bash
```

Open the terminal under the oradar_ros 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, terminal input ll /dev/oradar ,



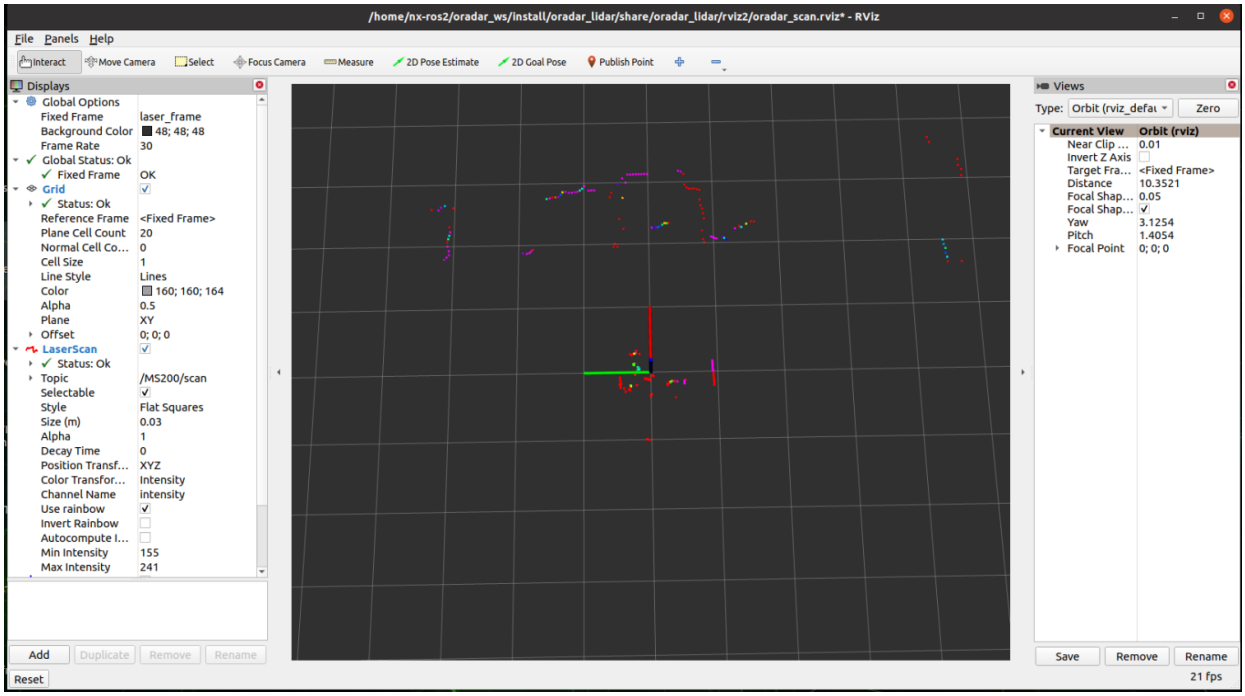
If the above content appears, it means the binding is successful, and the ending is not necessarily 0, it will change according to the order of inserting the devices.

2、Run launch

Before operation, you need to refer to the first section and bind the following radar port names

For details, refer to the section "1. Preparation before use - Bind radar port names". After binding the radar, enter the following command to start the lidar.

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



You can view lidar node data through the following command.

```
ros2 topic echo
```

```
header:
  stamp:
    sec: 1677134404
    nanosec: 903166855
  frame_id: laser_frame
angle_min: 0.013962420634925365
angle_max: 6.269222736358643
angle_increment: 0.014025247655808926
time_increment: 0.0002240974281448871
scan_time: 0.09994745254516602
range_min: 0.05000000074505806
range_max: 20.0
ranges:
- 1.9500000476837158
- 2.239000082015991
- 2.236999988555908
- 2.242000102996826
- 2.2239999771118164
- 2.2139999866485596
- 2.2219998836517334
- 2.234999895095825
- 2.24399995803833
- 2.249000072479248
- 2.255000114440918
- 2.2720000743865967
- 2.321000099182129
- 2.2200000286102295
- 0.0
- 0.0
- 2.312000036239624
- 2.1640000343322754
- 2.0269999504089355
- 2.0280001163482666
- 3.005000114440918
- 3.0179998874664307
- 3.0299999713897705
- 3.1740000247955322
- 3.062000036239624
- 3.068000078201294
- 3.071000099182129
- 3.0820000171661377
- 3.0899999141693115
- 3.118000030517578
- 3.226000070571899
```