

# Display laser data with ROS

**Olivier Aycard**

Professor

Grenoble INP - PHELMA

GIPSA Lab

<https://www.gipsa-lab.grenoble-inp.fr/user/olivier.aycard>

*olivier.aycard@grenoble-inp.fr*



# Display laser data with ROS (1/4)

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- Download RosBag data files and ROS packages :  
Open a terminal and run these commands :

1. `cd ~/ros2_ws`
2. `git clone https://gricad-gitlab.univ-grenoble-alpes.fr/tp_ros2/data_for_labs.git`
3. `cd src`
4. `git clone https://gricad-gitlab.univ-grenoble-alpes.fr/tp_ros2/tutorial_ros.git`
5. `git clone https://gricad-gitlab.univ-grenoble-alpes.fr/tp_ros2/smooth_teleop.git`

Make sure you see the `data_for_labs` folder in **ros2\_ws** ; and `tutorial_ros` and `smooth_teleop` folders in `ros2_ws/src`.

- To play recorded data: Open two terminals

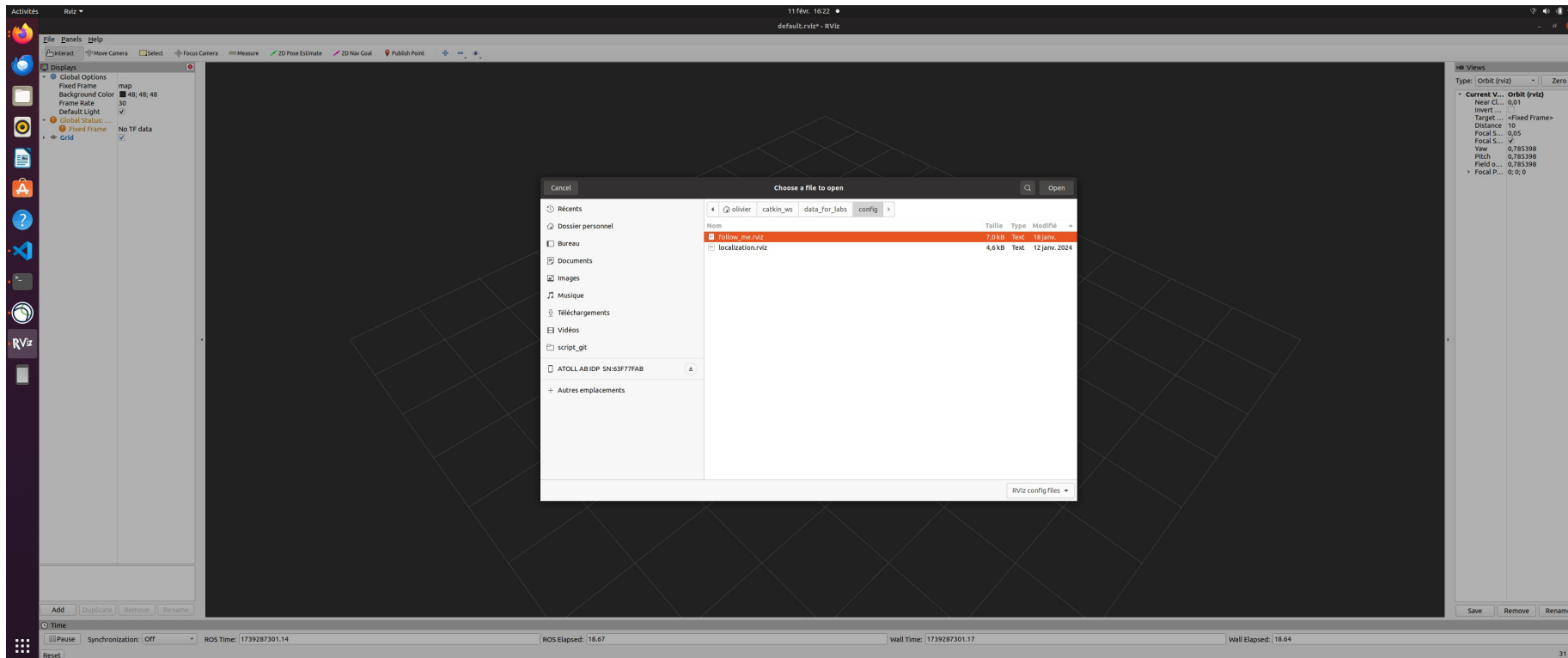
1. One terminal to run Rviz :  
`ros2 run rviz2 rviz2`
2. One terminal to play the rosbag file:  
`cd ~/ros2_ws/data_for_labs/follow_me/detection/old_laser`  
`ros2 bag play <data_file>.bag2`  
*Replace <data\_file>.bag2 with the name of the file to play,*  
*for instance : `detection01.bag2`*

You will use these rosbag files to develop and test your code later.

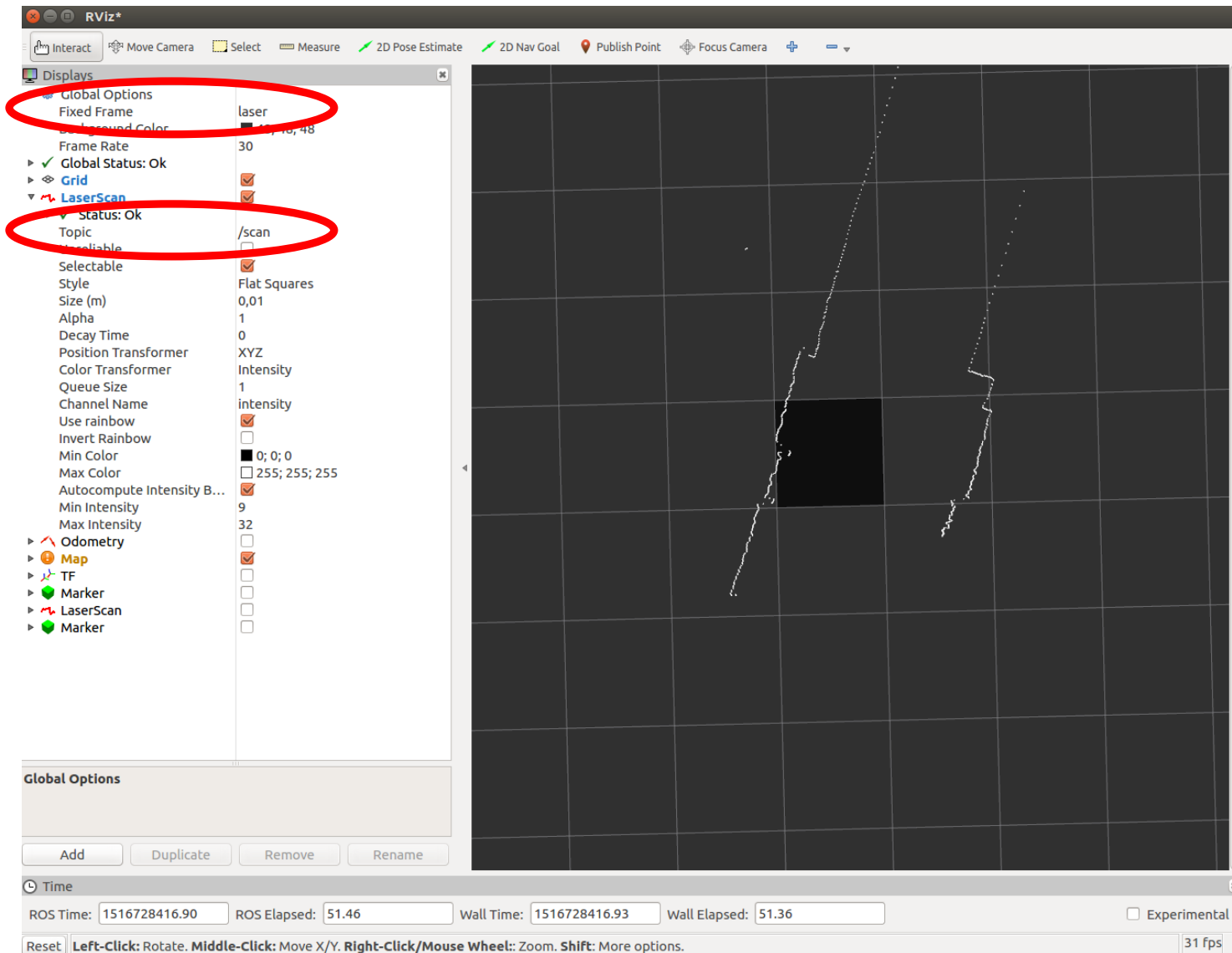
# Display laser data with ROS (2/4)

## 3. Rviz: the visualization tool of ROS;

1. Open the configuration file (*File → Open Config*) :
2. `~/ros2_ws/src/tutorial_ros/config/laser_only.rviz`

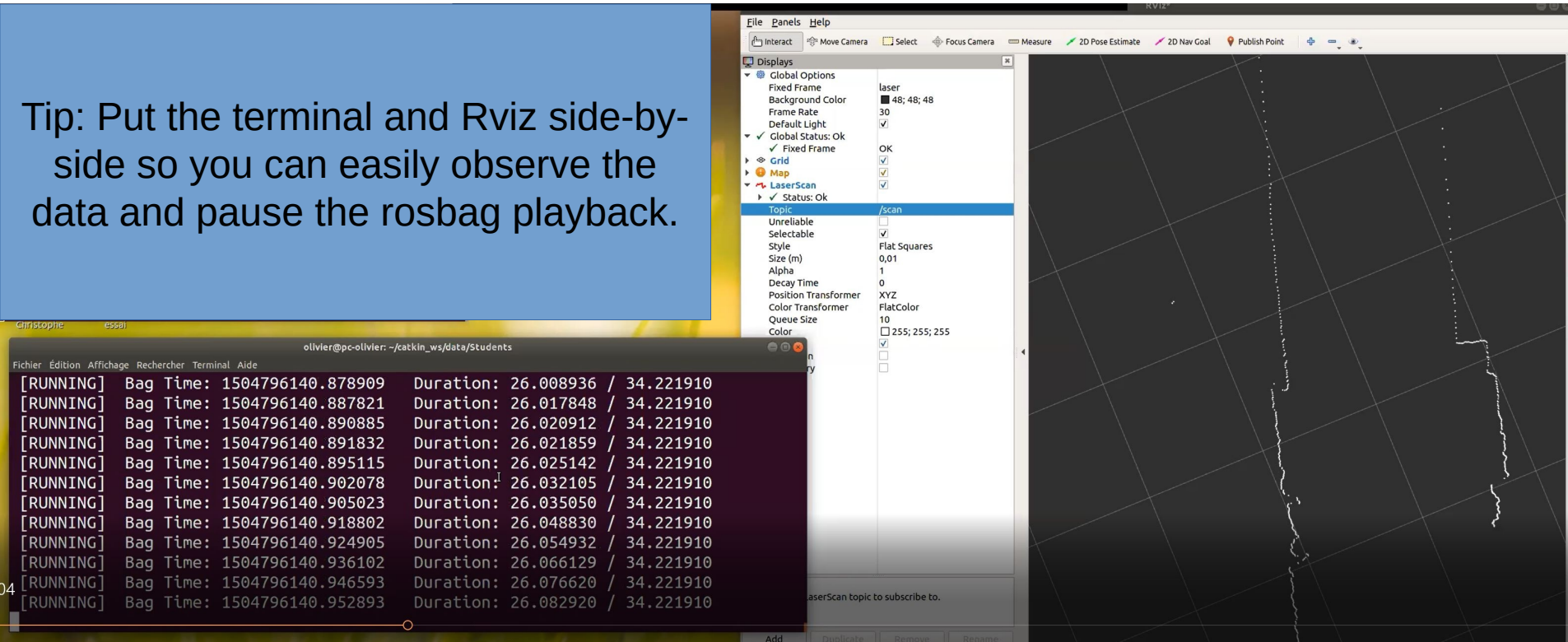


# Display laser data with ROS (3/4)



# Display laser data with ROS (4/4)

Tip: Put the terminal and Rviz side-by-side so you can easily observe the data and pause the rosbag playback.



- You can control the data playback by clicking in the ros2 bag play terminal and pressing keys :
  - To pause a rosbag, press space
  - To run a rosbag step by step, press right arrow =>