

Display laser data with ROS

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Display laser data with ROS (1/4)

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

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

(remember to `source ~/ros2_ws/install/local_setup.bash`)

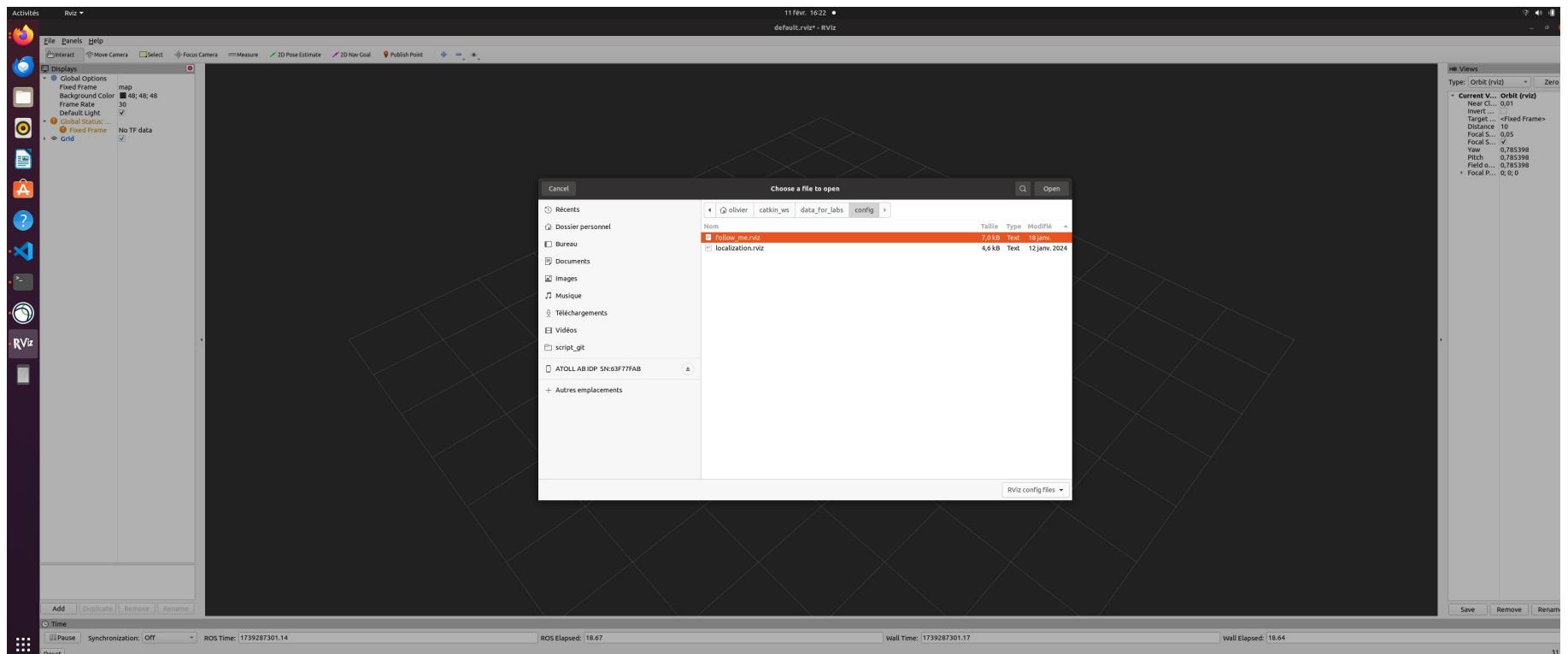
1. One terminal to run Rviz :
`ros2 run rviz2 rviz2`
2. One terminal to play the rosbag file:
`cd ~/ros2_ws/data_for_labs/follow_me/detection/old_laser`
`ros2 bag play <data_file>.bag2`

Replace `<data_file>.bag2` with the name of the file to play,
for instance : `detection01.bag2`

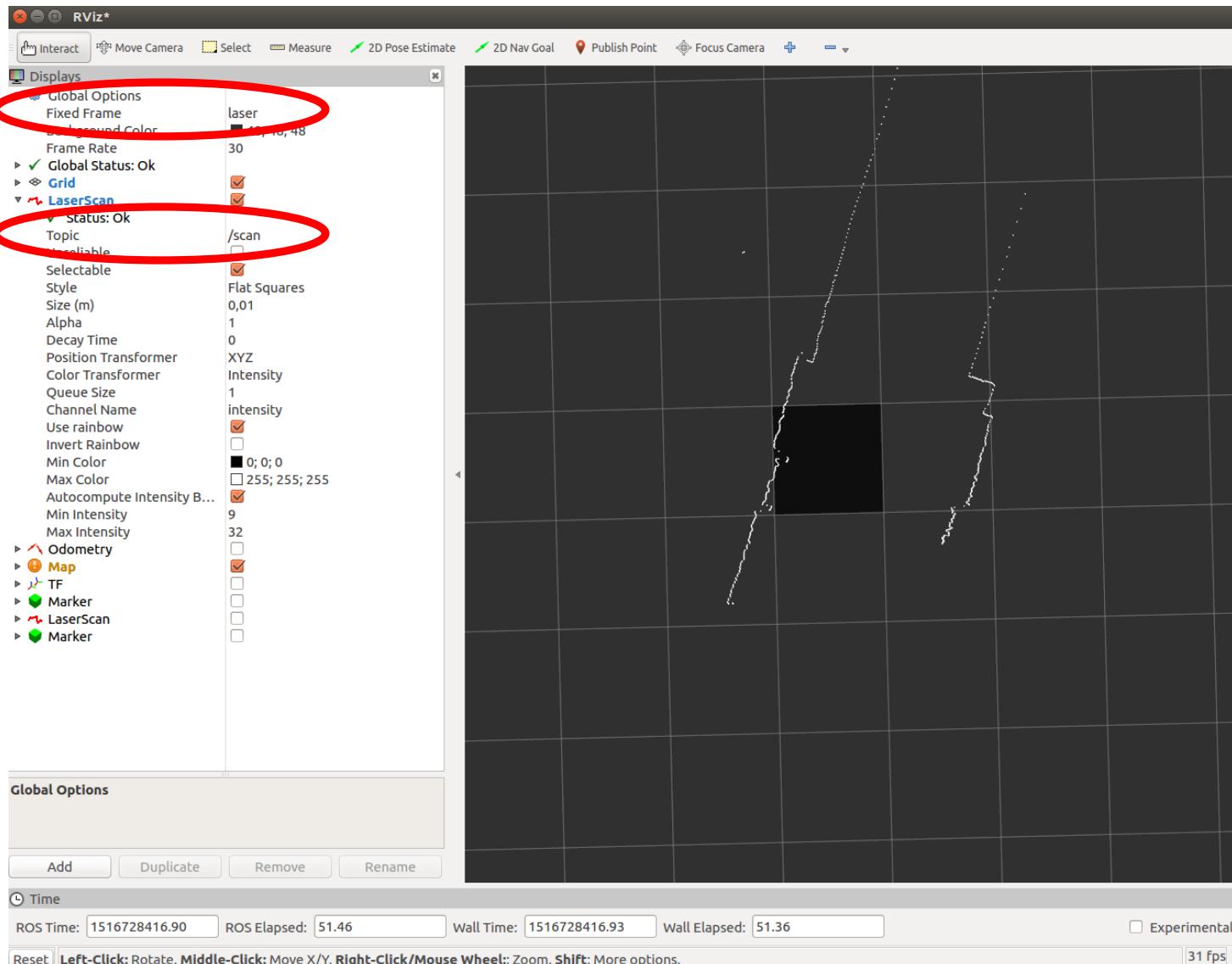
3. You will use these rosbag files to develop and test your code later.

Display laser data with ROS (2/4)

3. Rviz: *the visualization tool of ROS*;
 1. Open the configuration file (*File → Open Config*) :
`~/ros2_ws/src/tutorial_ros/config/laser_only.rviz`



Display laser data with ROS (3/4)

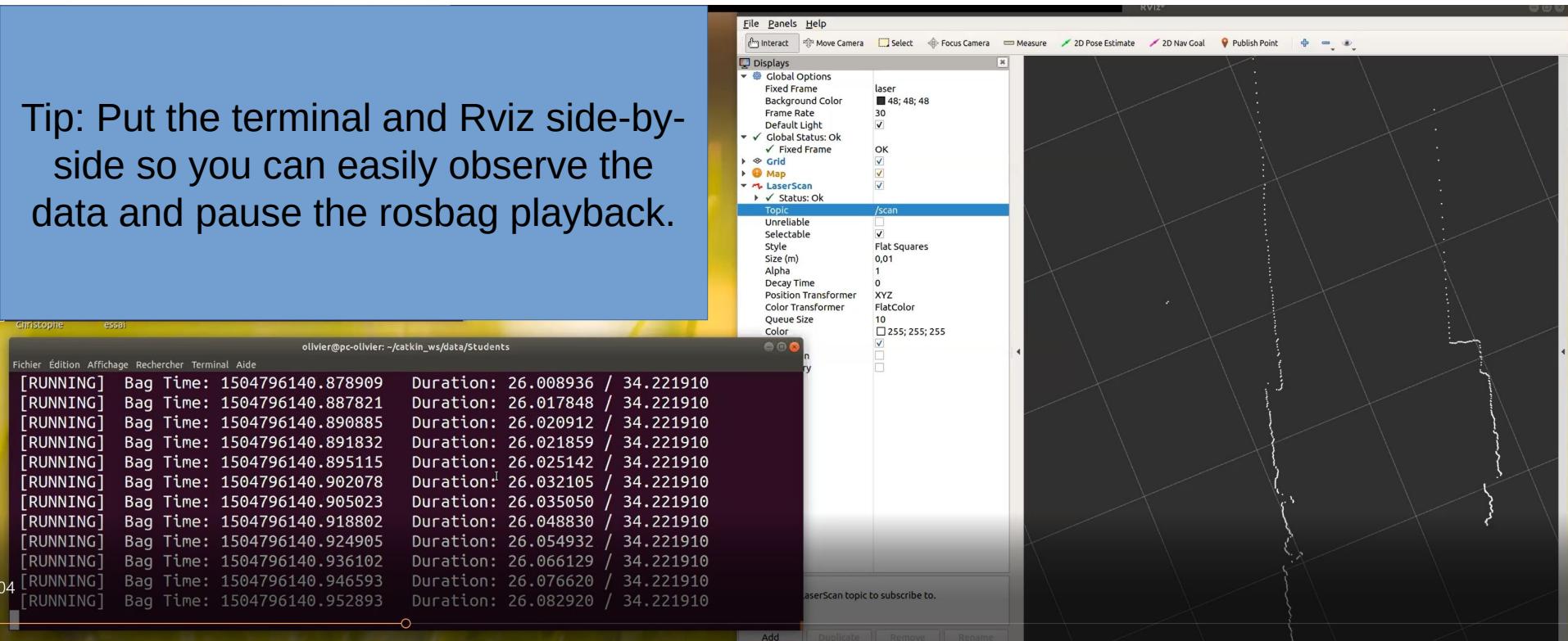


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Display laser data with ROS (4/4)

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 s