Gas Dispersion Simulator Installation Guide

The simulator was developed for ROS Indigo. It is highly recommended to read the introduction tutorials in the ROS wiki (http://wiki.ros.org/ROS/Tutorials) before starting.

The following steps allow to create a dedicated catkin workspace for the simulator.

1) Inside the ROS working directory,if not already present, create a folder called "src"
2) Go to catkin_ws/src and create a folder called "simulated_tdlas"and copy the following folders: **dispersion_simulation**, **environment**, **msgs_and_srvs, launch, simulated_MOX** and **simulated_tdlas**
3) Go to "simulated_tdlas" and run catkin_make. The compiler should throw error messages.
4) Run source devel/setup.sh.
5) Run again catkin_make. The code should compile succesfully.
6) Before launching the simulator, edit **demo_launch.launch** and verify that the launch variables "*/environment_data*" and "*/wind_data*" are pointing to the locations of the environment file and wind file respectively.
7) In "simulated_tdlas" run roslaunch demo_launch.data. An rviz window should open and show the gas dispersion simulation.
8) If you cannot see the green laser shooted around the room, in Rviz access to "Display" panel and modify the marker topic "Mox04/Sensor_display" in "Tdlas04/Sensor_display"