

# neor\_mini.urdf Running in PX4-Autopilot

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## Part One: Installation

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### Step 1: Install PX4-Autopilot

```
# open a Terminal  
mkdir catkin_ws  
cd catkin_ws  
git clone https://github.com/PX4/PX4-Autopilot.git --recursive
```

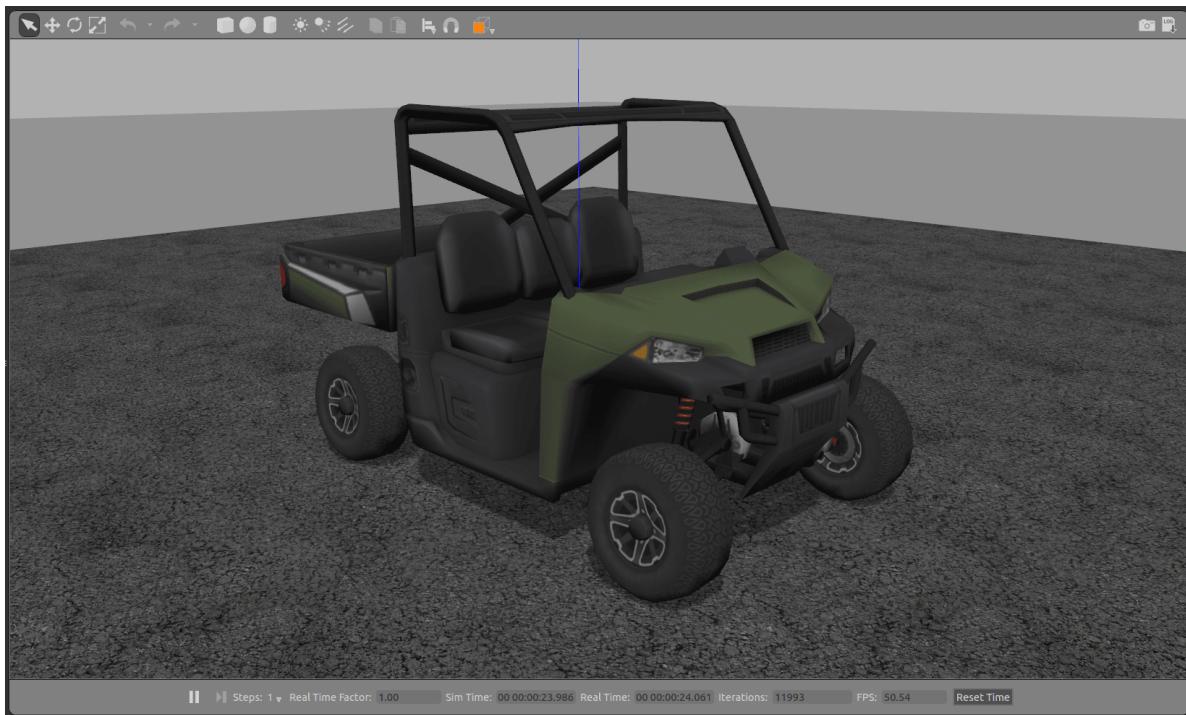
### Step 2: Download dependence by scripts

```
# open a Terminal  
cd ~/catkin_ws/  
bash ./PX4-Autopilot/Tools/setup/ubuntu.sh  
sudo apt-get update  
sudo apt-get upgrade
```

### Step 3: Make and Run

Please enable your computer connect with the Internet.

```
cd catkin_ws/PX4-Autopilot/  
make px4_sitl_default gazebo_rover
```



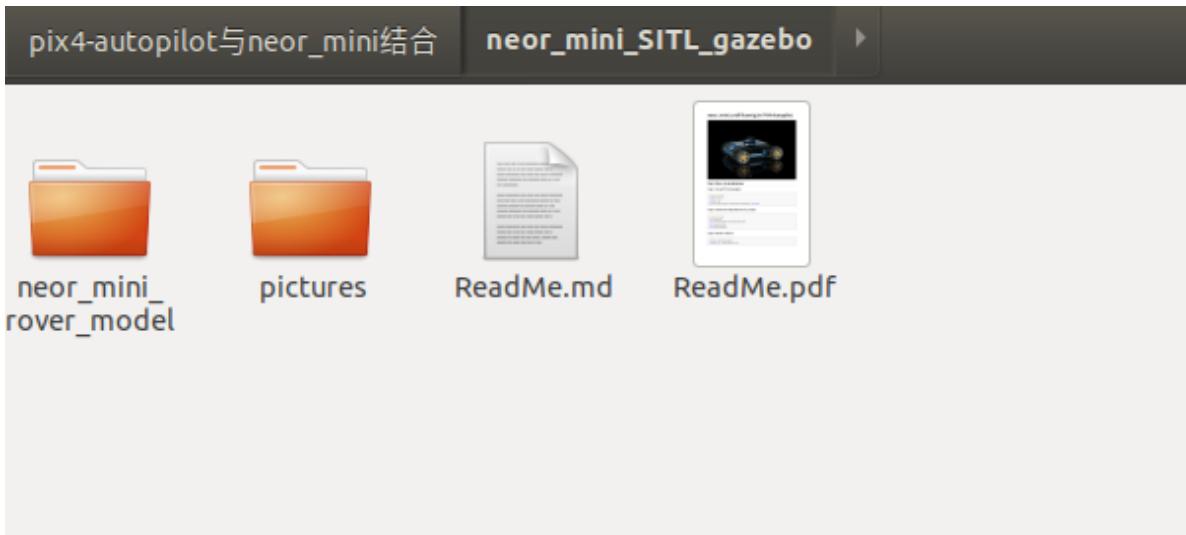
Congratulations, the installation was successful.

## Part two: Replace the rover model

### Step 1: Download neor\_mini\_STIL\_gazebo

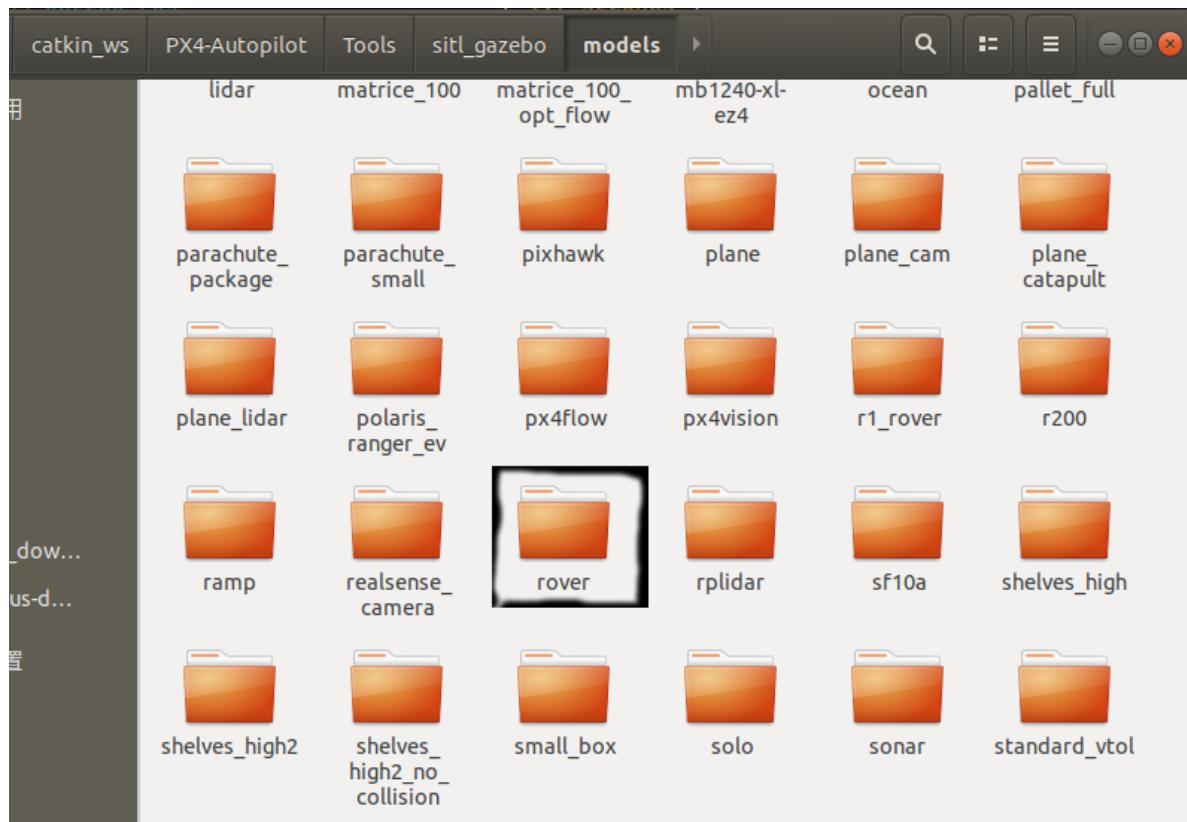
```
git clone https://github.com/COONEO/neor_mini_STIL_gazebo.git
```

look like this:



### Step 2: Replace rover model

Replace rover under ...../sitl\_gazebo/Models folder with rover under **neor\_mini\_rover\_model** folder



### Step 3: Run new rover model

Please enable your computer connect with the Internet.

```
# open a Terminal  
cd catkin_ws/PX4-Autopilot  
make px4_sitl_default gazebo_rover
```



Congratulations, the replacement is successful.

## Part three: Automatic driving by QGroundControl

## Step 1: Run new rover

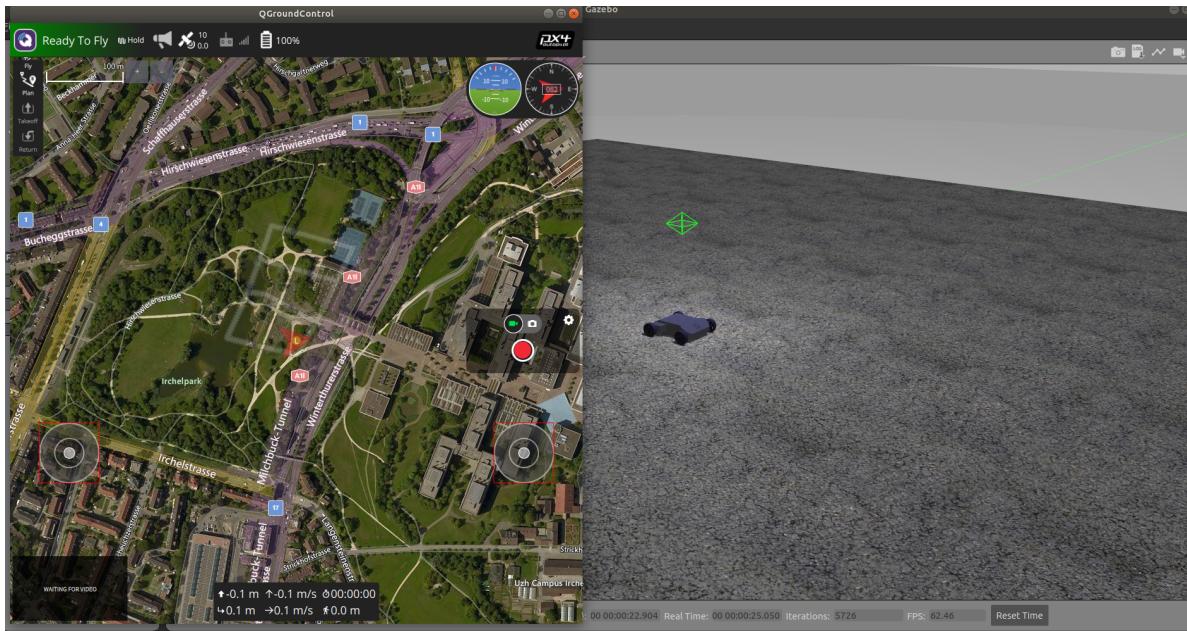
Please enable your computer connect with the Internet.

```
# open a Terminal  
cd catkin_ws/PX4-Autopilot  
make px4_sitl_default gazebo_rover
```

continue with step 2.

## Step 2: Run QGroundControl.AppImage

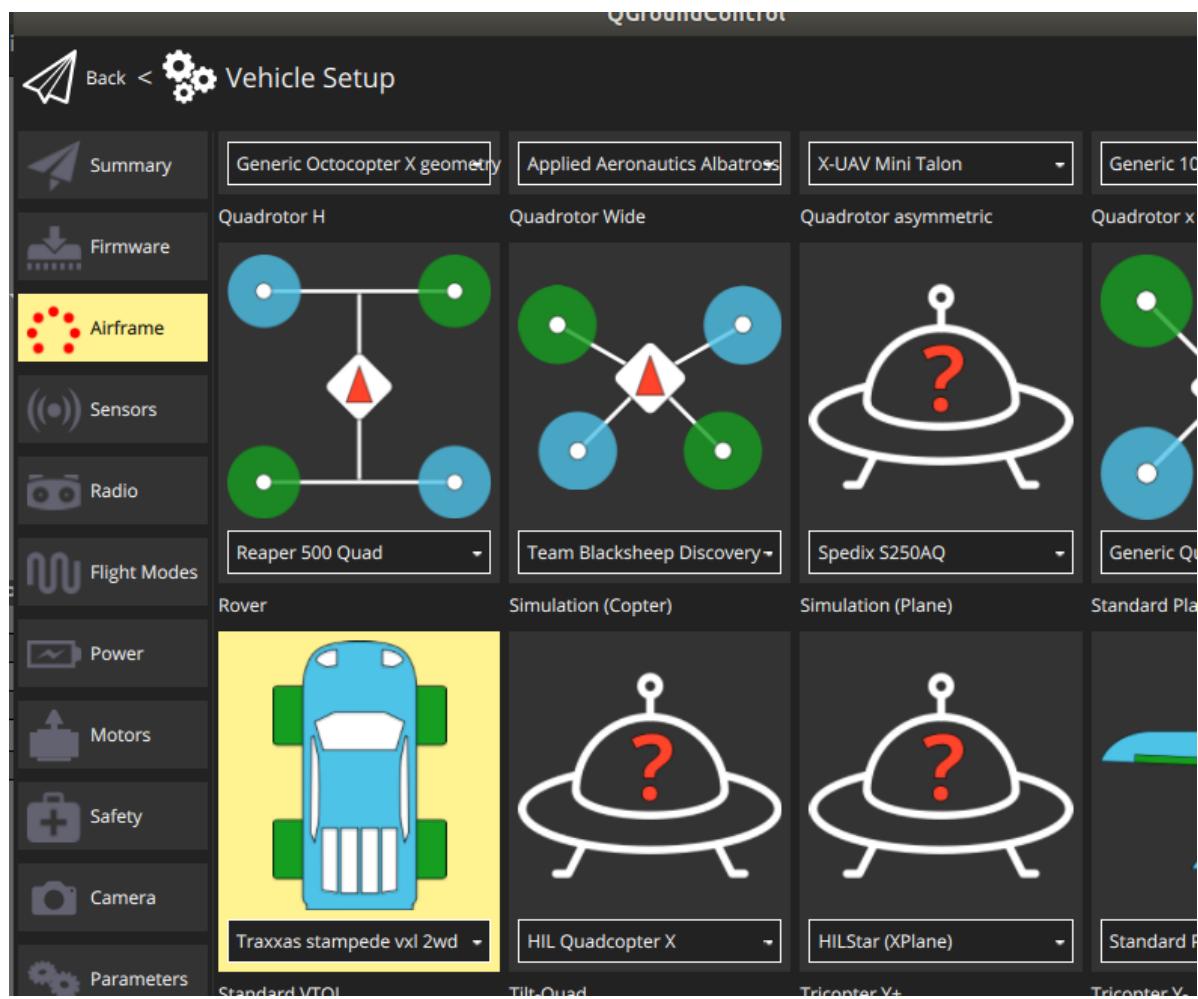
```
cd <your_path>/neor_mini_SITL_gazebo/neor_mini_rover_model/  
sudo chmod +x QGroundControl.AppImage  
./QGroundControl.AppImage
```



continue with step 3.

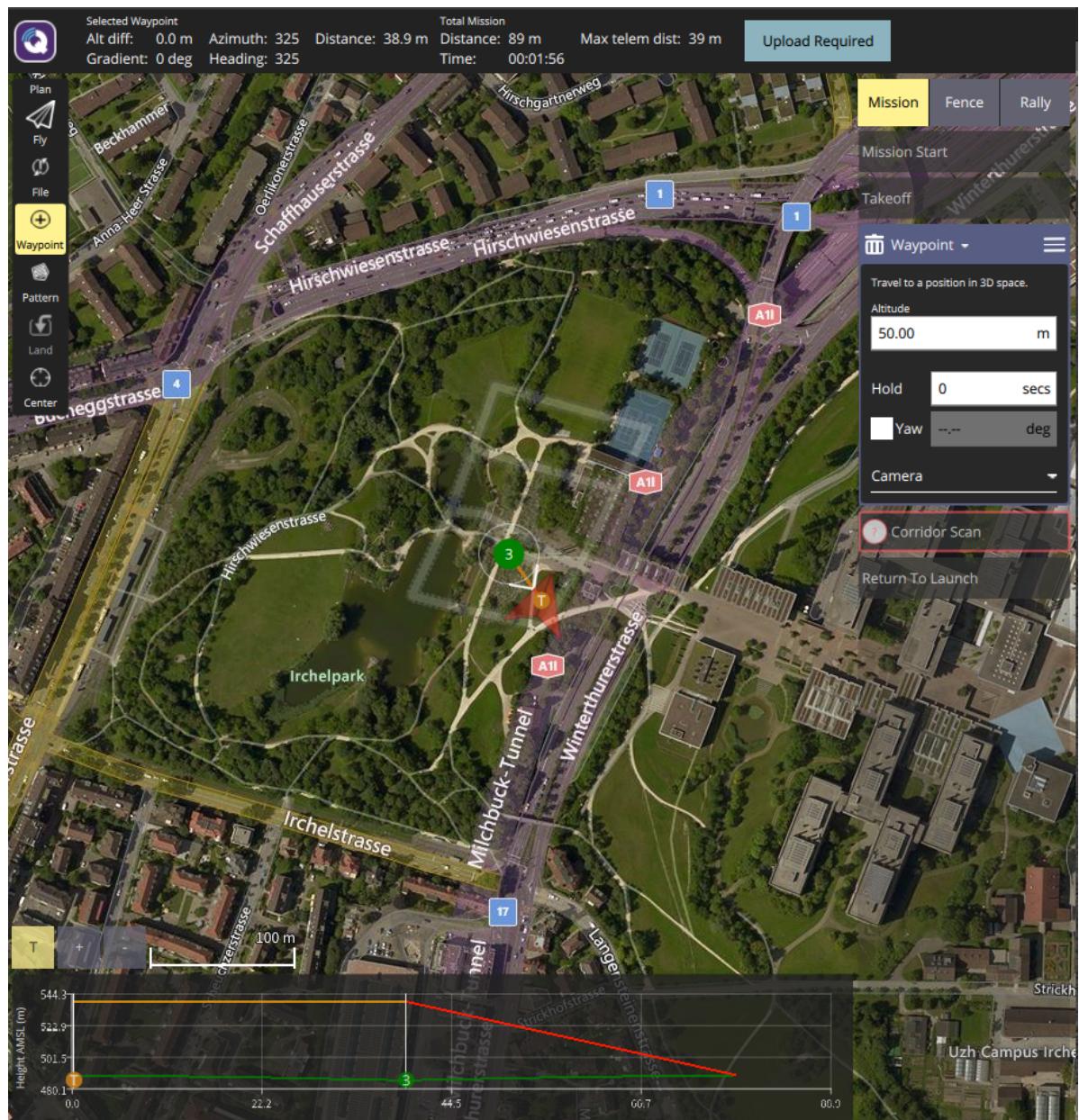
## Step 3: Setup QGC to let new rover model can GPS trajectory tracking

- click the top left corner of QGC, then select right airframe



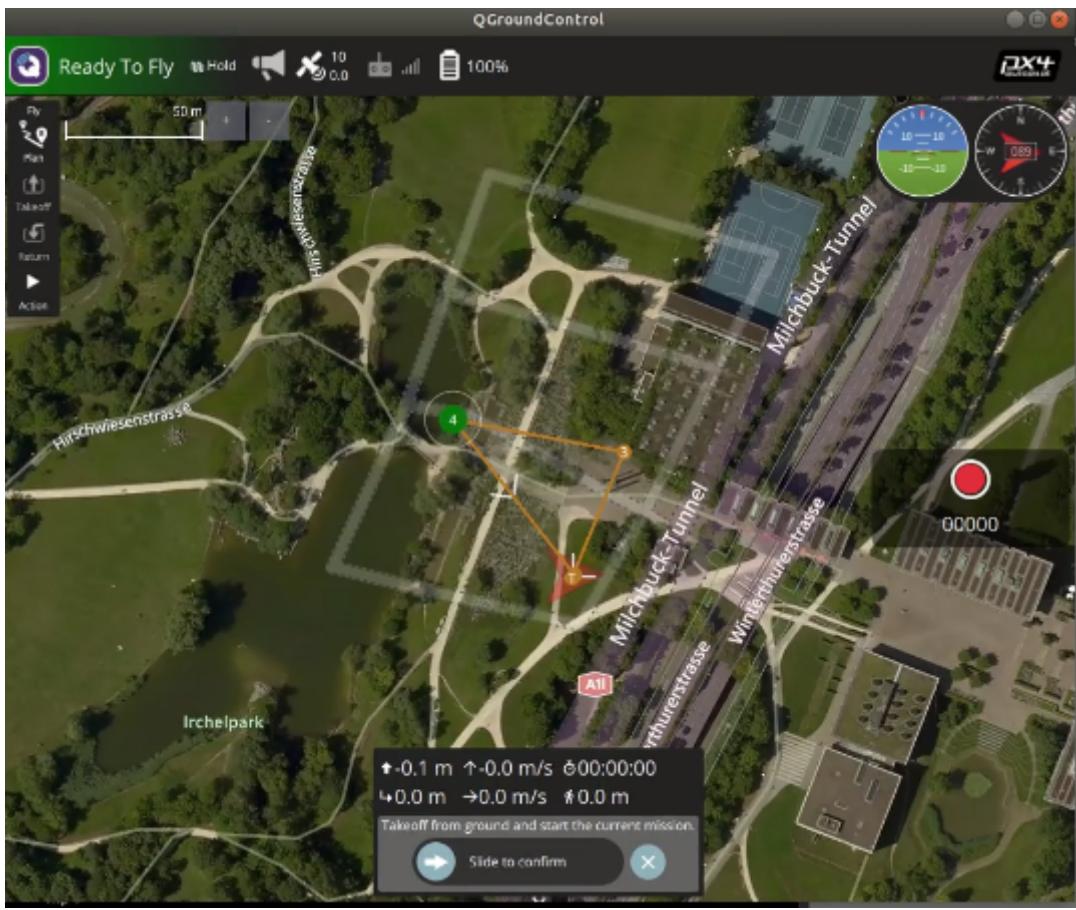
then apply your setting.

- drawing a GPS trajectory path by your hand and upload.



- Start automatic driving

click action and slide the bottom button .



Congratulations, the new rover can run.

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#neor\_mini\_SITL\_gazebo

## neor\_mini\_SITL\_gazebo