this package is working:

the drone flying for 25 m distance and avoiding obstacles using field approach. To run the package follow the following steps.

Terminal (1)

roscore

Terminal (2)

source ~/.bashrc # first use only

roslaunch drone\_ppo\_nav simulation.launch

Terminal (3)

roslaunch mavros px4.launch fcu\_url:="udp://:14540@127.0.0.1:14557"

Terminal (4)

python3 ~/catkin\_ws/src/drone\_ppo\_nav/scripts/train\_ppo.py

General Notes:

Fixed the issue: the reset() method now always returns a valid observation array (never None), preventing unpacking errors during PPO training.

Let me know if you'd like to:

* Add TensorBoard logging
* Refine the reward function further
* Add rendering (RViz or markers)
* Vectorize the environment for parallel training