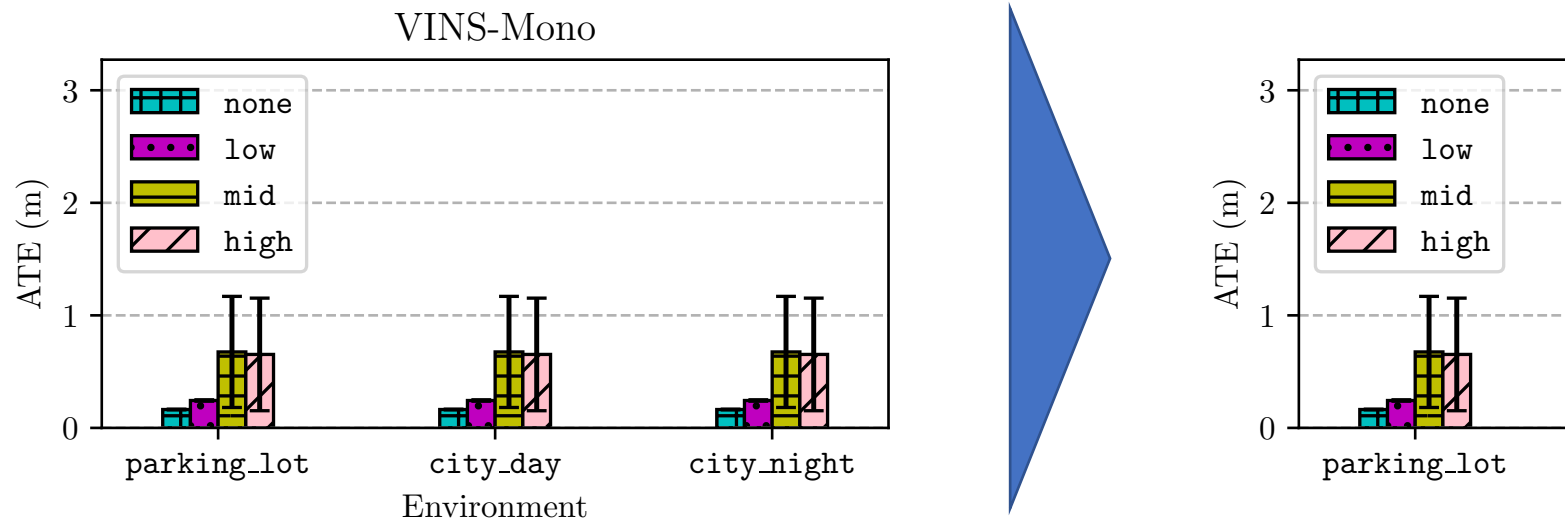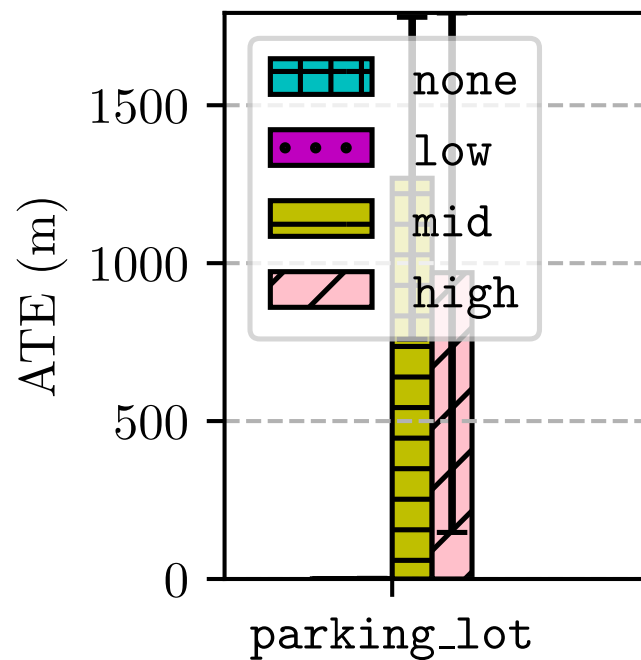# Setups – Additional experiments for VIODE

- Using **parking_lot** dataset in the VIODE dataset
- Using **VINS-Mono**
- Change some parameters of VINS-Mono and see the effects
  - Default parameters: The one used in the RA-L paper experiment.
  - Parameters we changed: IMU noise & max_cnt (=max feature number in feature tracking)
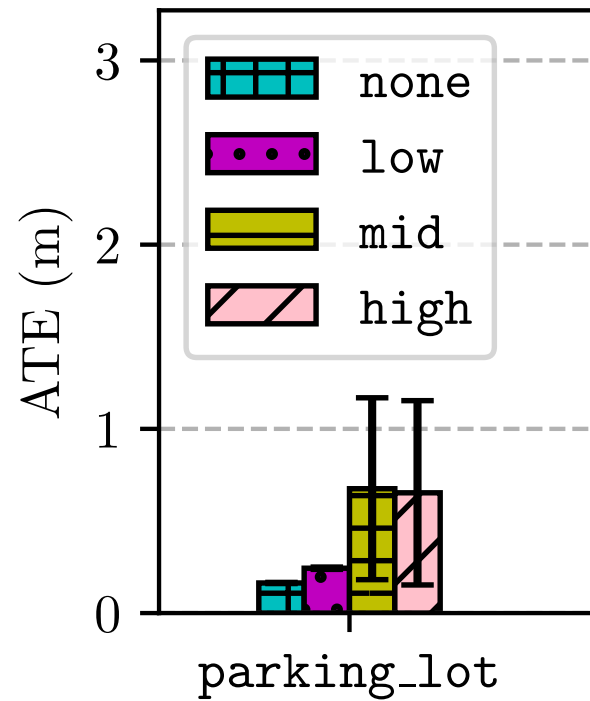
A. IMU 1 (IMU noise value from AirSim)

https://github.com/microsoft/AirSim/blob/master/AirLib/include/sensors/imu/ImuSimpleParams.hpp
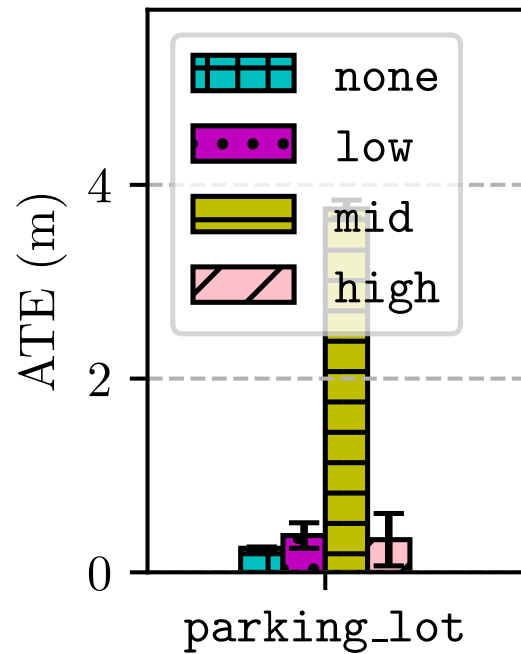

Parameter	Value (Changed if bold, else default)
Max_cnt	120
Acc_n	**0.03328**
Gyr_n	**0.001234**
Acc_w	**8.8259e-7**
Gyr_w	**7.0523e-8**

B. IMU 2

Parameter	Value (Changed if bold, else default)
Max_cnt	120
Acc_n	**0.1**
Gyr_n	**0.01**
Acc_w	**0.01**
Gyr_w	**0.001**

C. IMU 3

Parameter	Value (Changed if bold, else default)
Max_cnt	120
Acc_n	**0.1**
Gyr_n	**0.01**
Acc_w	**0.001**
Gyr_w	**0.0001**

D. Max count
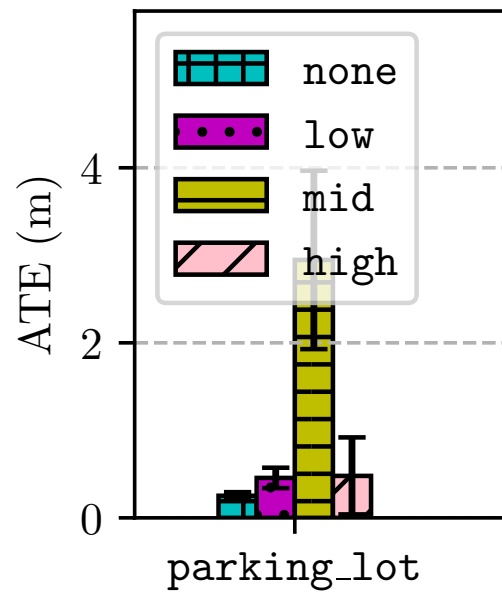
Parameter	Value (Changed if bold, else default)
Max_cnt	**150**
Acc_n	0.2
Gyr_n	0.05
Acc_w	0.02
Gyr_w	4.0e-5

E. IMU 1 (value from AirSim) + maxcount
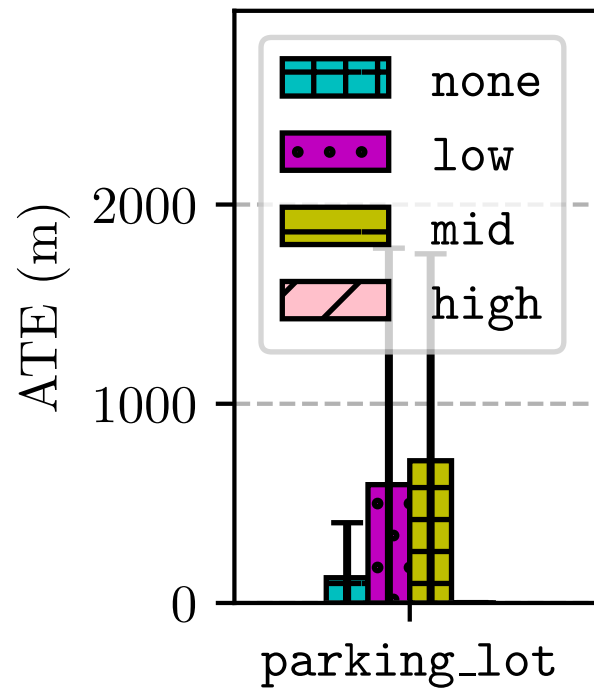
Parameter	Value (Changed if bold, else default)
Max_cnt	**150**
Acc_n	**0.03328**
Gyr_n	**0.001234**
Acc_w	**8.8259e-7**
Gyr_w	**7.0523e-8**

F. IMU 2 + maxcount
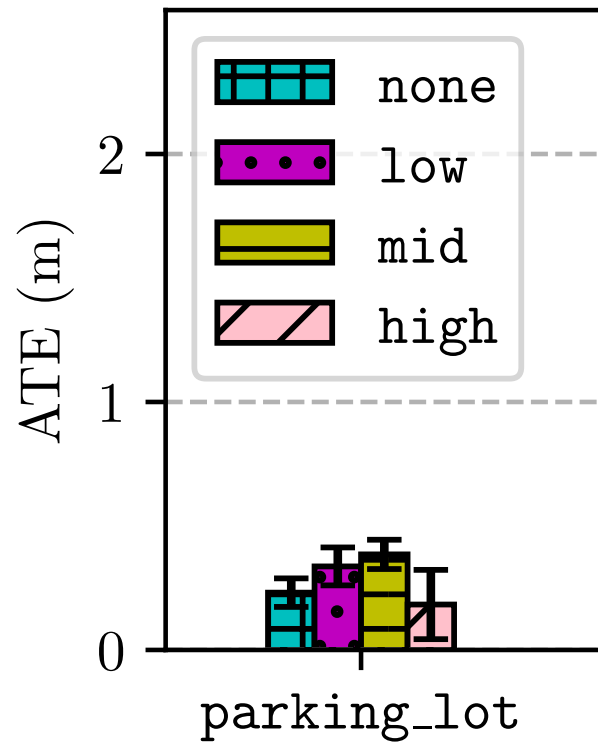
Parameter	Value (Changed if bold, else default)
Max_cnt	**150**
Acc_n	**0.1**
Gyr_n	**0.01**
Acc_w	**0.01**
Gyr_w	**0.001**

G. IMU 3 + maxcount

This is the case which was first reported on the GitHub issue.

Parameter	Value (Changed if bold, else default)
Max_cnt	**150**
Acc_n	**0.1**
Gyr_n	**0.01**
Acc_w	**0.001**
Gyr_w	**0.0001**