

two_stationary Turtlebot 1 Report

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This is a summary of the data from the two_stationary experiment, Turtlebot #1.

The runtime of this experiment was 0 hours, 3 minutes, and 58 seconds.

The total number of external pose measurements recieved by the robot during this time was 9560 which means poses were received at an average of 40.0670578 poses per second.

Shown below is the summary of each filter's error for both x and y coordinates, and also the error in total distance.

```
summary(continuous$x_error)
```

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 7.876e-06 4.990e-04 9.903e-04 9.902e-04 1.481e-03 1.973e-03
```

```
summary(continuous$y_error)
```

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 7.501e-10 7.645e-08 2.371e-07 3.091e-07 5.034e-07 8.887e-07
```

```
summary(continuous$dist_error)
```

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 7.876e-06 4.990e-04 9.903e-04 9.902e-04 1.481e-03 1.973e-03
```

```
summary(discrete$x_error)
```

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## -4.060000 -4.060000 -4.059000 -4.058000 -4.059000  0.000008
```

```
summary(discrete$y_error)
```

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 6.222e-10 7.646e-08 2.371e-07 3.092e-07 5.034e-07 8.887e-07
```

```
summary(discrete$dist_error)
```

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 0.000008 4.059000 4.059000 4.058000 4.060000 4.060000
```