

one_mobile Turtlebot 1 Report

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

The runtime of this experiment was 1 hours, 59 minutes, and 3659.7 seconds.

The total number of external pose measurements recieved by the robot during this time was 0 which means poses were received at an average of 0 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(t1_continuous$x_error)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## -0.02821 -0.02522 -0.02235 -0.01912 -0.01970  0.05186
```

```
summary(t1_continuous$y_error)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## -0.159700 -0.145300 -0.130800 -0.125900 -0.116800  0.001599
```

```
summary(t1_continuous$dist_error)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.0000001 0.1196000 0.1328000 0.1282000 0.1467000 0.1607000
```

```
summary(t1_discrete$x_error)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## -0.03929 -0.03630 -0.03344 -0.02938 -0.03080  0.06892
```

```
summary(t1_discrete$y_error)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## -0.09106 -0.07409 -0.05960 -0.05674 -0.04510  0.02884
```

```
summary(t1_discrete$dist_error)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.0000001 0.0587600 0.0689400 0.0669600 0.0805900 0.0949800
```