

# five\_mobile Turtlebot 4 Report

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This is a summary of the data from the five\_mobile experiment, Turtlebot #4.

The runtime of this experiment was 1 hours, 59 minutes, and 3657.7 seconds.

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.
## -0.014380 -0.004606  0.004390  0.003722  0.012040  0.028030
```

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

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## -0.003822  0.081240  0.092530  0.086630  0.103800  0.114900
```

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

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 0.0000004 0.0825700 0.0926700 0.0875500 0.1039000 0.1158000
```

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

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## -0.01634  0.01478  0.02333  0.02356  0.03260  0.04545
```

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

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## -0.01367  0.12180  0.13300  0.12290  0.14420  0.15540
```

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

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 0.0000004 0.1272000 0.1358000 0.1260000 0.1453000 0.1556000
```