

five_mobile Turtlebot 3 Report

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This is a summary of the data from the five_mobile experiment, Turtlebot #3.

The runtime of this experiment was 1 hours, 59 minutes, and 3658.2 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.
## -0.20900 -0.14980 -0.14340 -0.13220 -0.13700  0.01829
```

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

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## -0.03125  0.14000  0.15310  0.13360  0.16620  0.18060
```

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

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.0000079 0.1960000 0.2098000 0.1906000 0.2237000 0.2492000
```

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

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## -0.39999 -0.29371 -0.28711 -0.26321 -0.28051  0.02041
```

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

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## -0.02105  0.28120  0.29440  0.25890  0.30760  0.32090
```

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

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 0.0000079 0.3974000 0.4114000 0.3716000 0.4253000 0.4707000
```