

five_mobile Turtlebot 5 Report

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This is a summary of the data from the five_mobile experiment, Turtlebot #5.

The runtime of this experiment was 1 hours, 59 minutes, and 3658.3 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.
## -0.178000 -0.064240 -0.019460 -0.038310  0.002269  0.079770
```

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

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## -0.075500  0.002907  0.133200  0.111300  0.172500  0.286500
```

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

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 0.0000003 0.0540000 0.1402000 0.1381000 0.1757000 0.3225000
```

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

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## -0.3462000 -0.2070000 -0.0959600 -0.0882000 -0.0002658  0.2768000
```

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

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## -0.47550 -0.16690 -0.04820 -0.07989  0.02865  0.21530
```

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

```
##      Min.   1st Qu.   Median     Mean   3rd Qu.     Max.
## 0.0000003 0.1007000 0.2028000 0.2164000 0.3255000 0.4957000
```