

one_stationary Turtlebot 1 Report

Matthew Swartwout

June 24, 2016

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

The runtime of this experiment was 1 hours, 59 minutes, and 3659.4 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.
## -2.400e-07  1.483e-02  2.965e-02  2.965e-02  4.448e-02  5.930e-02
```

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

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
## -1.000e-10  3.823e-05  1.509e-04  2.047e-04  3.449e-04  6.213e-04
```

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

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
##  2.400e-07  1.483e-02  2.965e-02  2.965e-02  4.448e-02  5.931e-02
```

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

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
## -2.400e-07  1.483e-02  2.965e-02  2.965e-02  4.448e-02  5.930e-02
```

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

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
## -1.000e-10  3.823e-05  1.509e-04  2.047e-04  3.449e-04  6.213e-04
```

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

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
##  2.400e-07  1.483e-02  2.965e-02  2.965e-02  4.448e-02  5.931e-02
```