

# one\_stationary\_imu\_both Turtlebot 1 Report

*Matthew Swartwout*

*June 24, 2016*

This is a summary of the data from the one\_stationary\_imu\_both experiment, Turtlebot #1.

The runtime of this experiment was 0 hours, 3 minutes, and 59.5 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(continuous$x_error)
```

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
## -5.631e-07  4.910e-04  9.840e-04  9.841e-04  1.477e-03  1.970e-03
```

```
summary(continuous$y_error)
```

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
## -1.252e-10  7.911e-08  2.284e-07  3.190e-07  5.298e-07  9.322e-07
```

```
summary(continuous$dist_error)
```

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
## 2.526e-07  4.910e-04  9.840e-04  9.841e-04  1.477e-03  1.970e-03
```

```
summary(discrete$x_error)
```

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
## -5.631e-07  4.910e-04  9.840e-04  9.841e-04  1.477e-03  1.970e-03
```

```
summary(discrete$y_error)
```

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
## -1.252e-10  7.911e-08  2.284e-07  3.190e-07  5.298e-07  9.322e-07
```

```
summary(discrete$dist_error)
```

```
##      Min.    1st Qu.    Median      Mean    3rd Qu.      Max.
## 2.526e-07  4.910e-04  9.840e-04  9.841e-04  1.477e-03  1.970e-03
```