two_stationary Turtlebot 1 Report

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

The runtime of this experiment was 1 hours, 59 minutes, and 3659.5 seconds.

The total number of external pose measurements recieved by the robot during this time was 304222 which means poses were received at an average of 42.25599 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(t1_continuous$x_error)
##
                 1st Qu.
                              Median
                                           Mean
                                                    3rd Qu.
                                                                  Max.
## -2.800e-07 1.483e-02 2.965e-02
                                     2.965e-02
                                                 4.448e-02
                                                             5.930e-02
summary(t1_continuous$y_error)
         Min.
                 1st Qu.
                              Median
                                           Mean
                                                    3rd Qu.
                                                                  Max.
               4.074e-05 1.593e-04
## -1.000e-10
                                      2.083e-04
                                                 3.514e-04
                                                             6.121e-04
summary(t1_continuous$dist_error)
##
        Min.
               1st Qu.
                           Median
                                       Mean
                                              3rd Qu.
                                                            Max.
## 2.000e-08 1.483e-02 2.965e-02 2.965e-02 4.448e-02 5.931e-02
summary(t1_discrete$x_error)
         Min.
                 1st Qu.
                              Median
                                                    3rd Qu.
                                           Mean
                                                                  Max.
## -2.800e-07
               1.483e-02
                          2.965e-02
                                      2.965e-02
                                                 4.448e-02
                                                             5.930e-02
summary(t1_discrete$y_error)
         Min.
                              Median
                                           Mean
                                                    3rd Qu.
                                                                  Max.
## -1.000e-10
               4.074e-05
                          1.593e-04
                                      2.083e-04
                                                 3.514e-04
                                                             6.121e-04
summary(t1_discrete$dist_error)
##
        Min.
               1st Qu.
                           Median
                                       Mean
                                              3rd Qu.
                                                            Max.
## 2.000e-08 1.483e-02 2.965e-02 2.965e-02 4.448e-02 5.931e-02
```