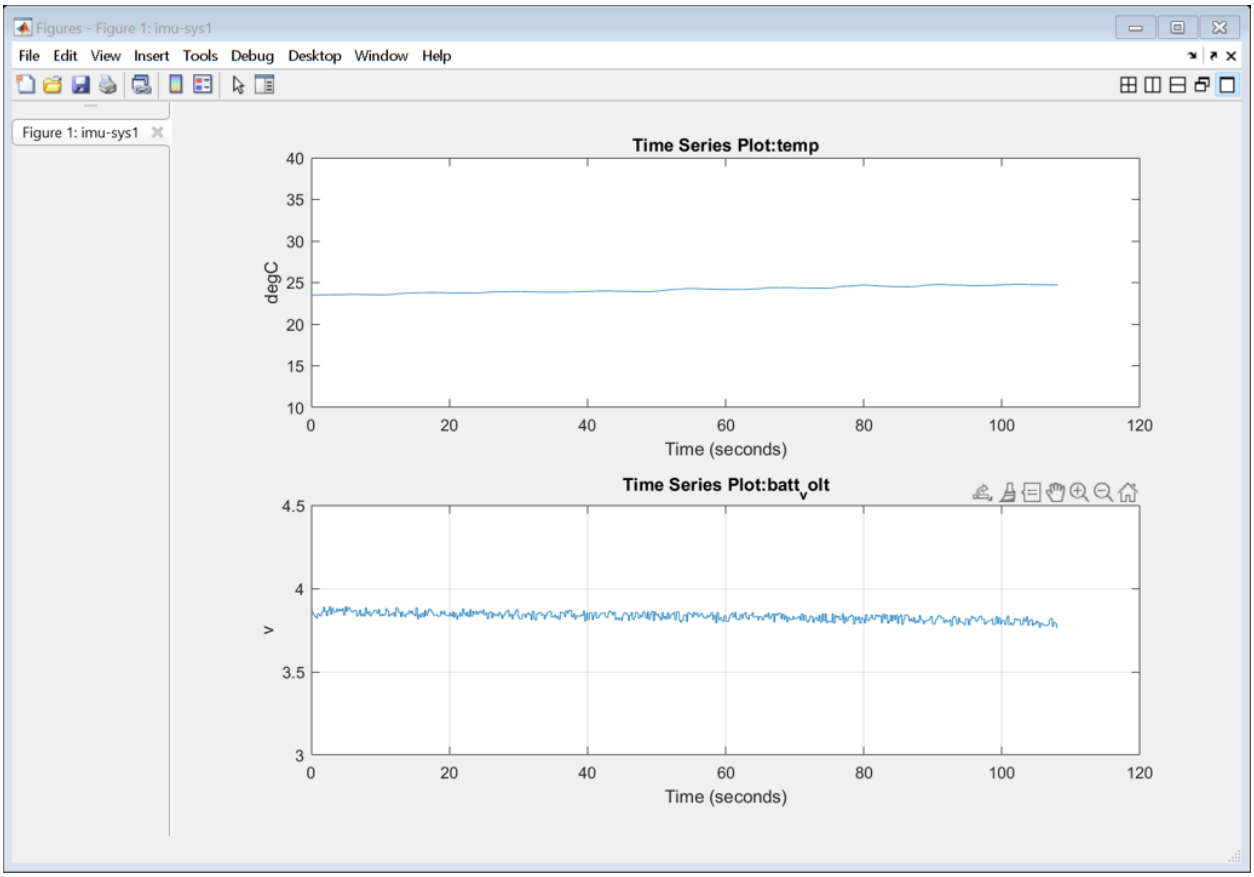
addpath ./arxiv/data/SN-2024110603/calibration/

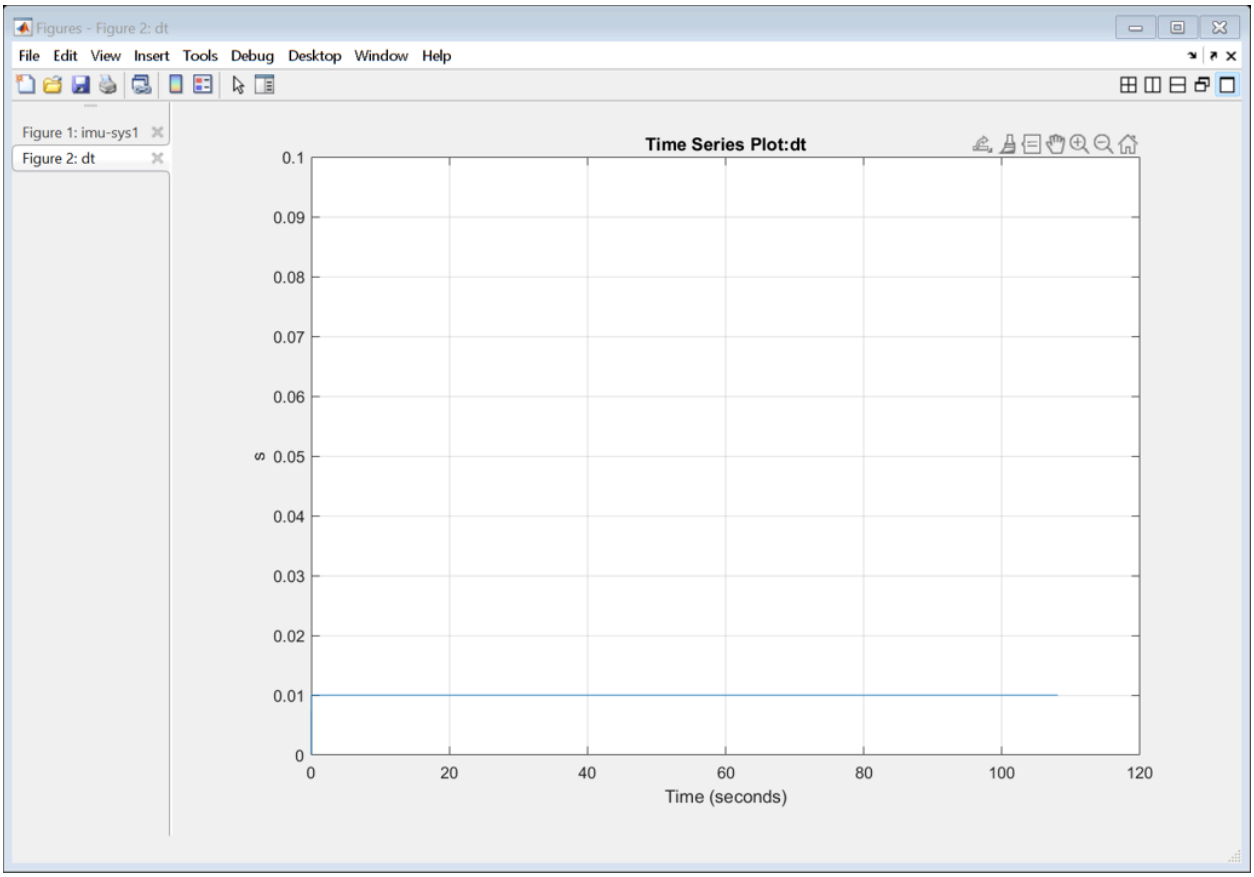
```
addpath( genpath( './arxiv/data/SN-2024110603/'));

SN_str = "SN-2024110603";

fname = sprintf( "f-dev-cal-%s.csv", SN_str);
fname = which( fname);
tsc = flatball_log_proc( fname);
```

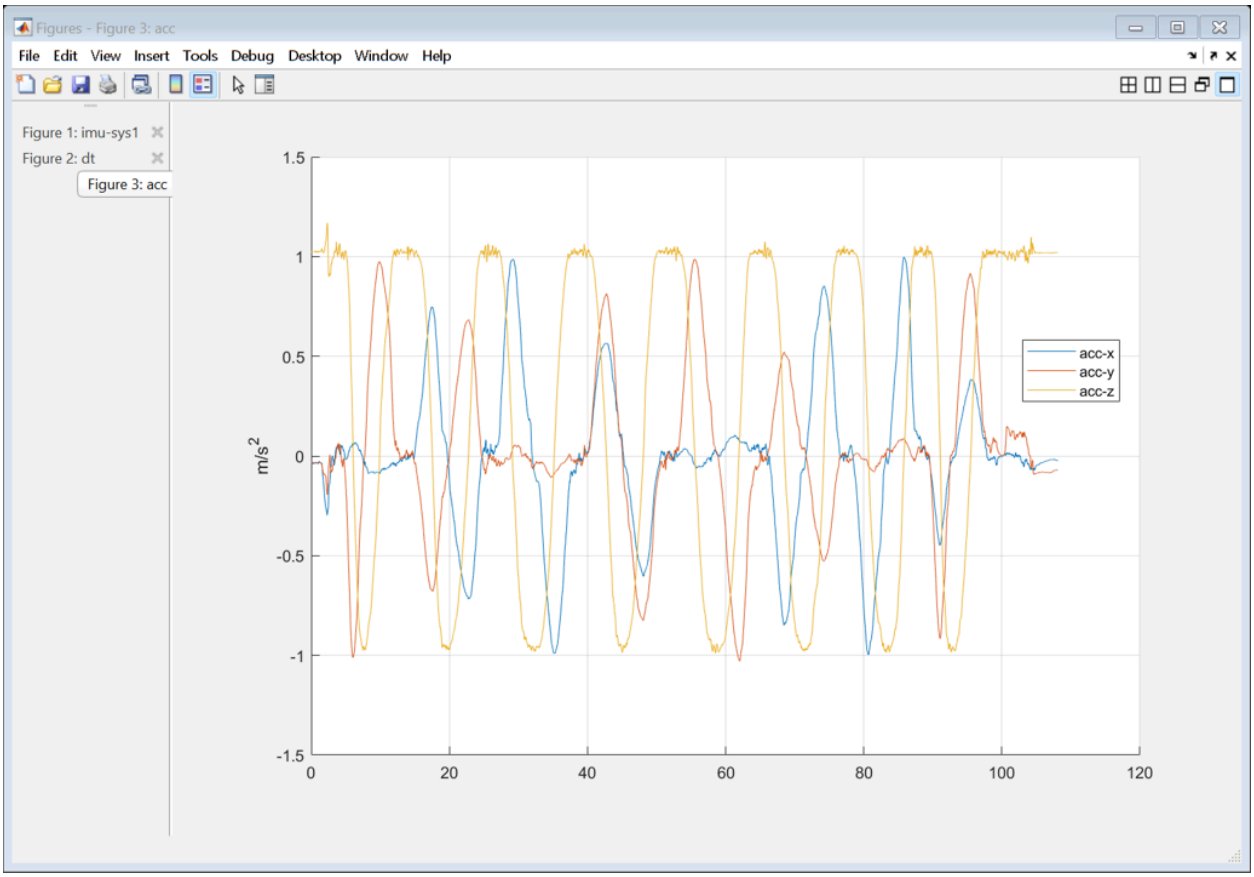
```
Warning: Column headers from the file were modified to make them valid MATLAB
identifiers before creating variable names for the table. The original column
headers are saved in the VariableDescriptions property.
Set 'VariableNamingRule' to 'preserve' to use the original column headers as
table variable names.
Parsing v33 csv...
```

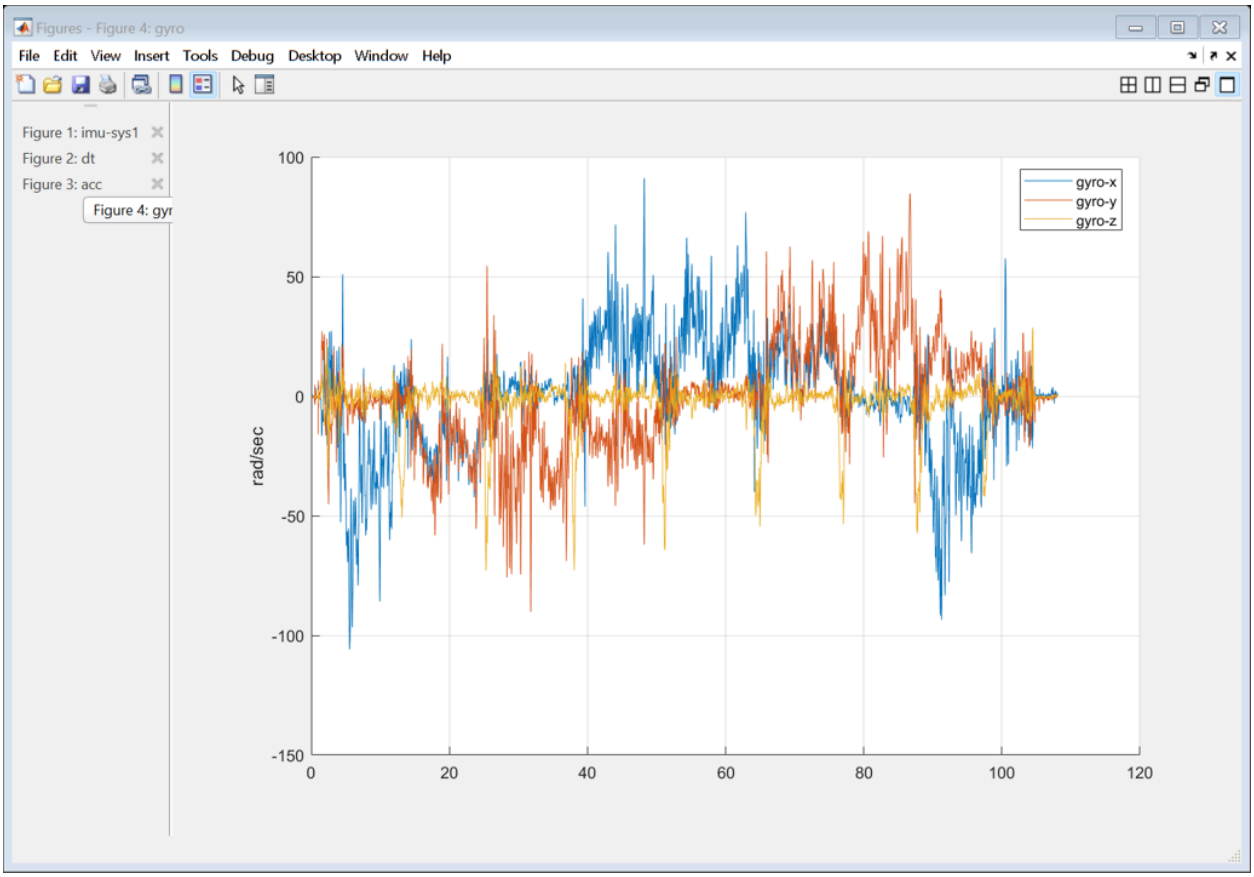
```
fdev_acc_cal;

SN-2024110603 - acc cal

A =

    1.0040    0.0007    0.0014
    0.0007    0.0964    0.0010
    0.0014    0.0010    0.9997


b =

   -0.0007   -0.0165    0.0279


expmfs =

    0.9964


fdev_gyro_cal;

SN-2024110603 - gyro cal

A =

    1.1711         0         0
         0    1.3375         0
         0         0    0.6385


b =

   -5.2525    2.8813   87.5852
```

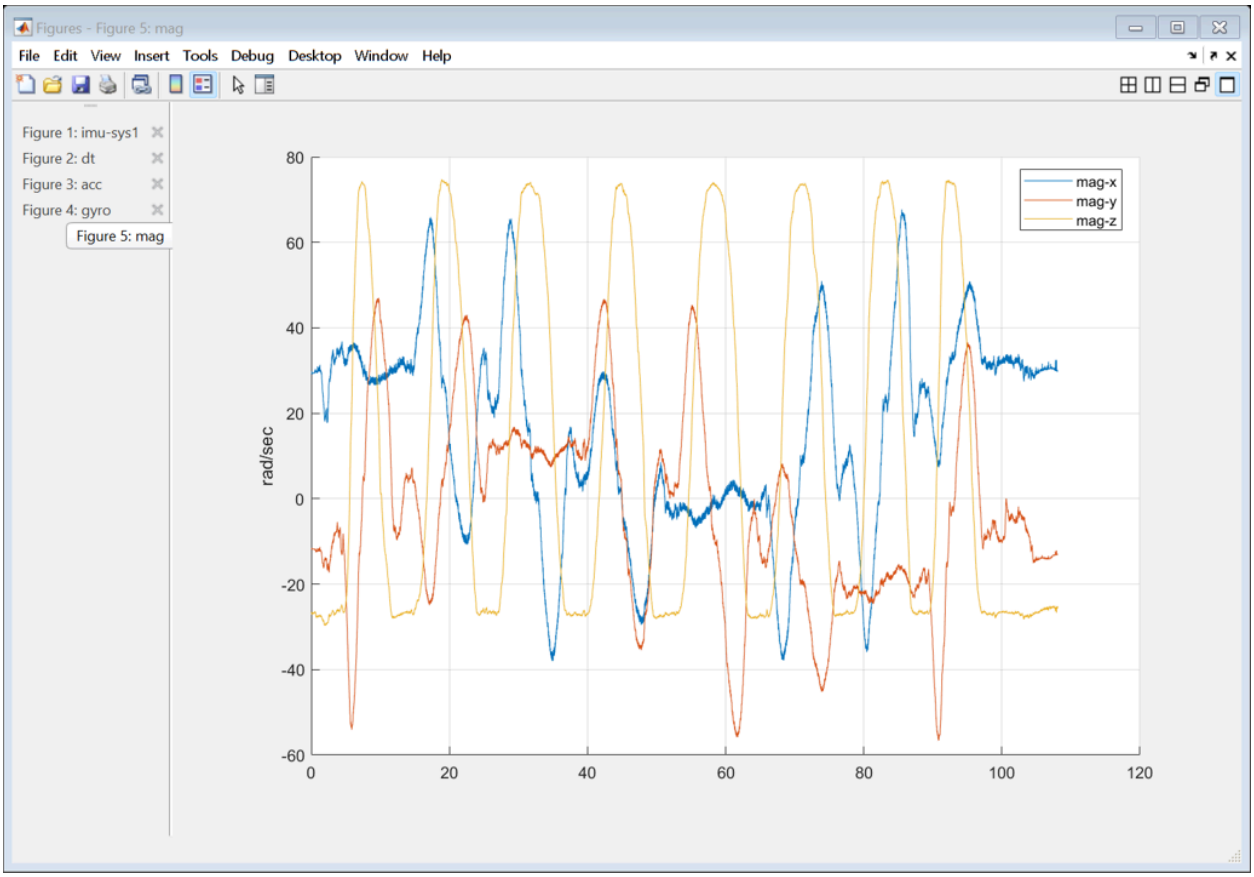
```
expmfs =

   86.0052


fdev_mag_cal;

SN-2024110603 - mag cal

A =

    0.9928    0.0040   -0.0111
    0.0040    1.0097    0.0012
   -0.0111    0.0012    0.9978


b =

   14.9180   -4.4365   23.1223


expmfs =

   53.1162


title_str = sprintf( "%s - calibration", SN_str);
fdev_cal_plots;
```

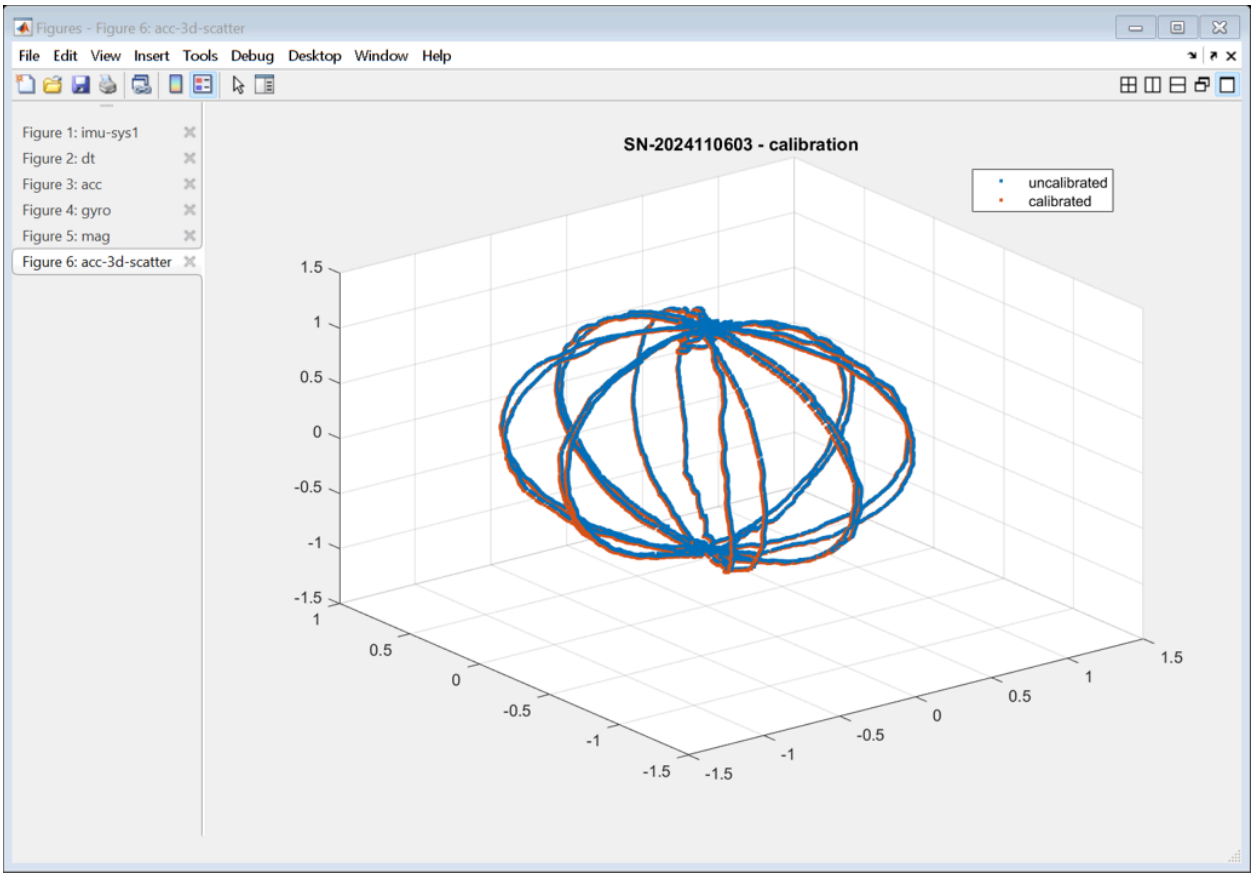

Figures - Figure 1: imu-sys1
File Edit View Insert Tools Debug Desktop Window Help
Figure 1: imu-sys1
Time Series Plot:temp
degC
Time (seconds)
Time Series Plot:batt_volt
v
Time (seconds)

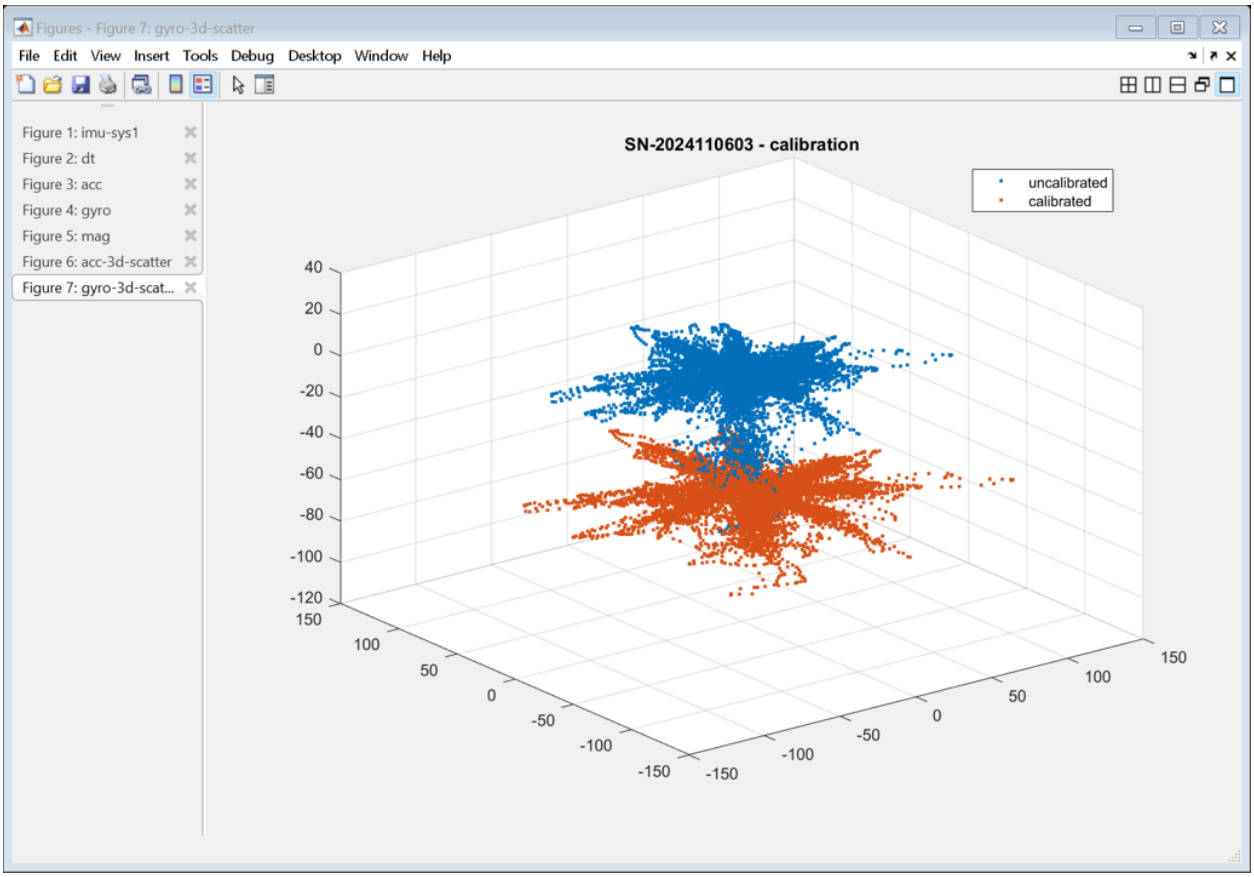

Figures - Figure 2: dt
File Edit View Insert Tools Debug Desktop Window Help
Figure 1: imu-sys1
Figure 2: dt
Time Series Plot:dt
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
s
0
20
40
60
80
100
120
Time (seconds)

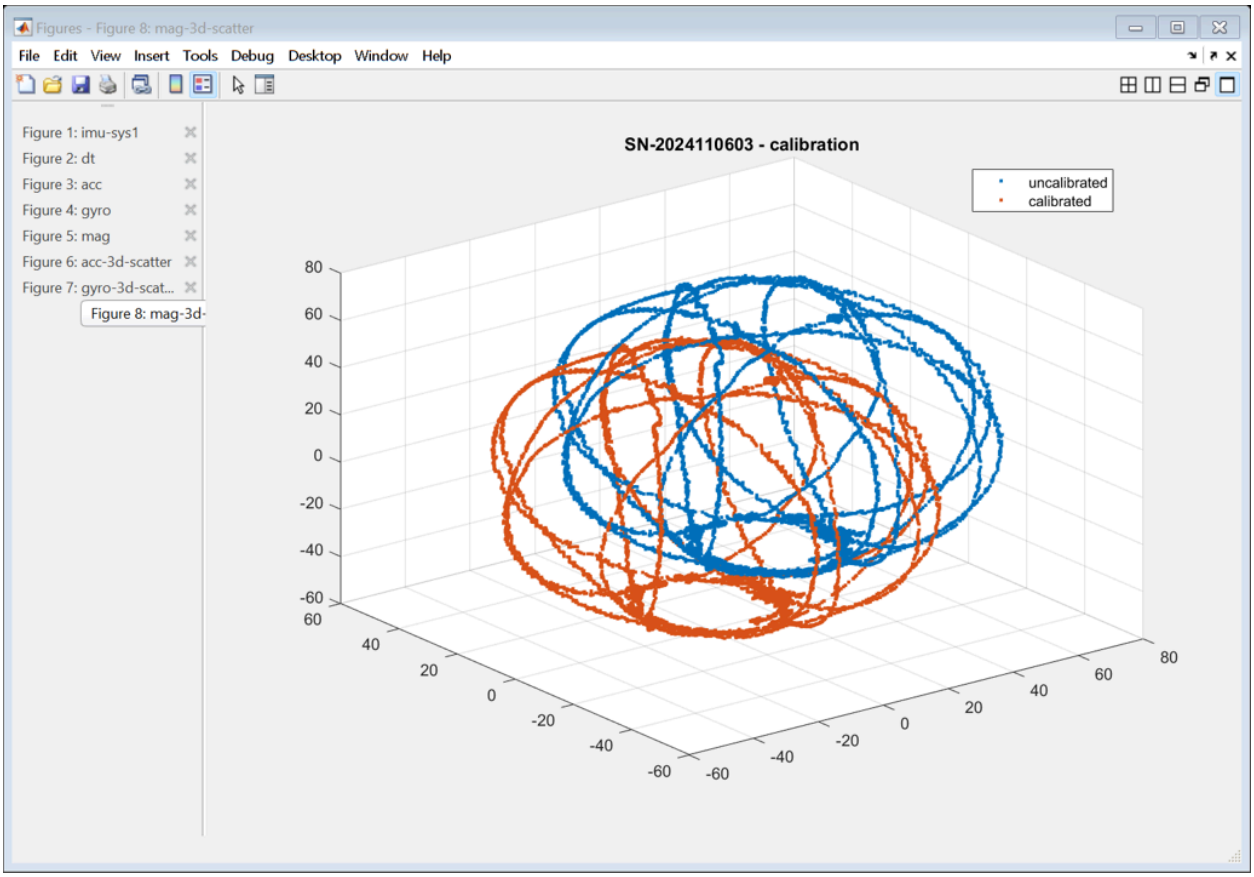

Figures - Figure 3: acc
File Edit View Insert Tools Debug Desktop Window Help
Figure 1: imu-sys1
Figure 2: dt
Figure 3: acc
1.5
1
0.5
0
-0.5
-1
-1.5
m/s²
0
20
40
60
80
100
120
acc-x
acc-y
acc-z

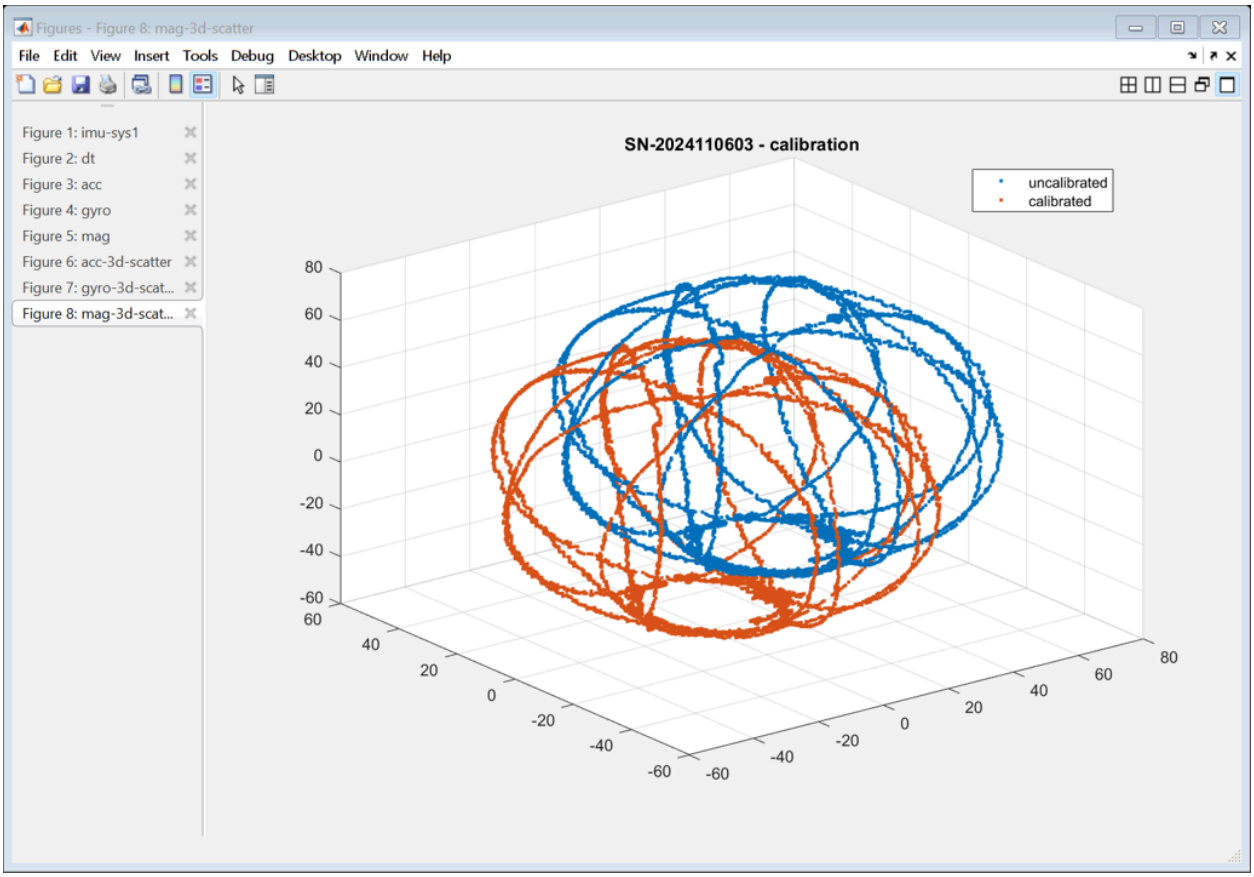

Figures - Figure 4: gyro
File Edit View Insert Tools Debug Desktop Window Help
Figure 1: imu-sys1
Figure 2: dt
Figure 3: acc
Figure 4: gyr
gyro-x
gyro-y
gyro-z
rad/sec
100
50
0
-50
-100
-150
0
20
40
60
80
100
120


Figures - Figure 5: mag
File Edit View Insert Tools Debug Desktop Window Help
Figure 1: imu-sys1
Figure 2: dt
Figure 3: acc
Figure 4: gyro
Figure 5: mag
mag-x
mag-y
mag-z
rad/sec
80
60
40
20
0
-20
-40
-60
0
20
40
60
80
100
120


Figures - Figure 6: acc-3d-scatter
File Edit View Insert Tools Debug Desktop Window Help
Figure 1: imu-sys1
Figure 2: dt
Figure 3: acc
Figure 4: gyro
Figure 5: mag
Figure 6: acc-3d-scatter
SN-2024110603 - calibration
uncalibrated
calibrated
1.5
1
0.5
0
-0.5
-1
-1.5


Figures - Figure 7: gyro-3d-scatter
File Edit View Insert Tools Debug Desktop Window Help
Figure 1: imu-sys1
Figure 2: dt
Figure 3: acc
Figure 4: gyro
Figure 5: mag
Figure 6: acc-3d-scatter
Figure 7: gyro-3d-scat...
SN-2024110603 - calibration
uncalibrated
calibrated
40
20
0
-20
-40
-60
-80
-100
-120
150
100
50
0
-50
-100
-150
-150
-100
-50
0
50
100
150


Figures - Figure 8: mag-3d-scatter
File Edit View Insert Tools Debug Desktop Window Help
Figure 1: imu-sys1
Figure 2: dt
Figure 3: acc
Figure 4: gyro
Figure 5: mag
Figure 6: acc-3d-scatter
Figure 7: gyro-3d-scat...
Figure 8: mag-3d-
SN-2024110603 - calibration
uncalibrated
calibrated
80
60
40
20
0
-20
-40
-60



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