General Information

Mission Information

Project name	19118_DewberryID_P2_1114_L1
Processing date	2020-10-22 23:03:57
Mission date	2019-11-14 15:42:48
Mission duration	04:25:07.000
Processing mode	IN-Fusion PP-RTX

Rover Hardware Information

Product	POS AV 610 VER6 HW2.5-12
Serial number	S/N10659
IMU type	57
Receiver type	BD982
Antenna type	AV39

Project File List

Rover Data Files

File name	File type
20191114.084	POS Data
20191114.085	POS Data
20191114.086	POS Data
20191114.087	POS Data
20191114.088	POS Data
20191114.089	POS Data
20191114.090	POS Data
20191114.091	POS Data
20191114.092	POS Data
20191114.093	POS Data
20191114.094	POS Data
20191114.095	POS Data
20191114.096	POS Data
20191114.097	POS Data
20191114.098	POS Data
20191114.099	POS Data
20191114.100	POS Data
20191114.101	POS Data
20191114.102	POS Data
20191114.103	POS Data
20191114.104	POS Data
20191114.105	POS Data
20191114.106	POS Data
20191114.107	POS Data
20191114.108	POS Data
20191114.109	POS Data
20191114.110	POS Data
20191114.111	POS Data
20191114.112	POS Data
20191114.113	POS Data
20191114.114	POS Data
20191114.115	POS Data
20191114.116	POS Data
20191114.117	POS Data

Input Files

File Name	File Type
Ephm3180.19g	GLONASS Broadcast Ephemeris
Ephm3180.19n	GPS Broadcast Ephemeris

Output Files

Filename	File type
sbet_Mission 1.out	SBET Trajectory File

Rover Data Summary

First raw data file	20191114.084		
Last raw data file	20191114.117		
Start GPS week	2079		
Start time	402167.549 (11/14/2019 3:42:47 PM)		
End time	418115.418 (11/14/2019 8:08:35 PM)		
Start of fine alignment	402402.542 (11/14/2019 3:46:42 PM)		
Available subsystems	Primary GNSS, IMU		
POS Event Input	None		
Correction data	None		
IMU Installation Lever Arms & Mounting Angles			
Reference to IMU lever arm (m)	0.000	0.000	0.000
Reference to IMU mounting angles (deg)	0.000	0.000	180.000
Reference to Primary GNSS lever arm (m)	0.326	-0.406	-1.087
Reference to Primary GNSS lever arm std dev (m)	-1.000		
Aircraft to Reference mounting angles (deg)	0.000	0.000	0.000

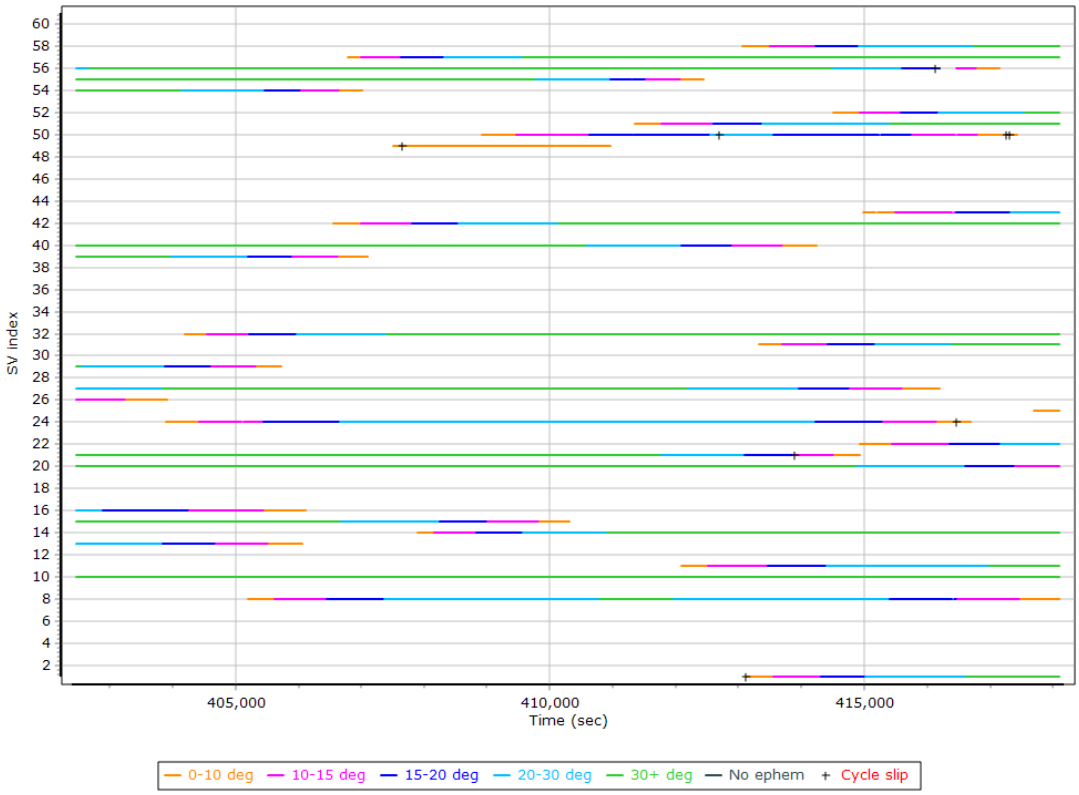
Rover Data QC

Raw IMU Import QC Summary

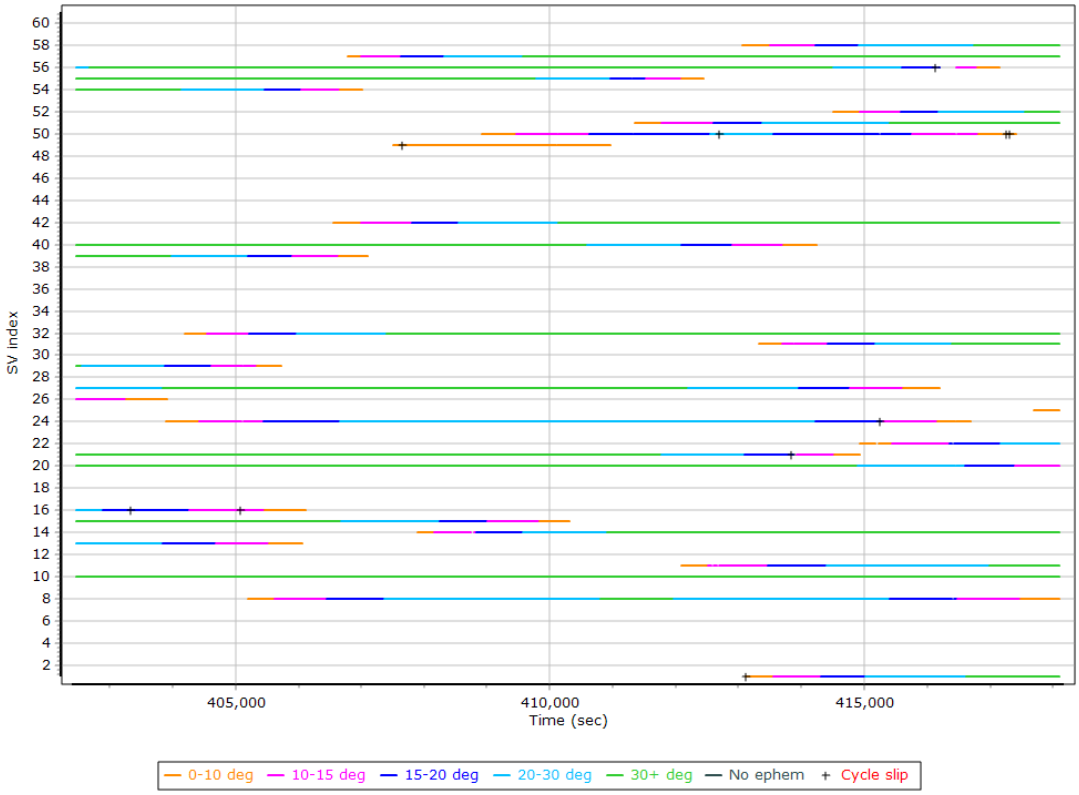
IMU data input file	imu_Mission 1.dat
IMU data check log file	imudt_Mission 1.log
IMU Records Processed	3188950
Termination Status	Normal
IMU Anomalies	0

Primary Observables & Satellite Data

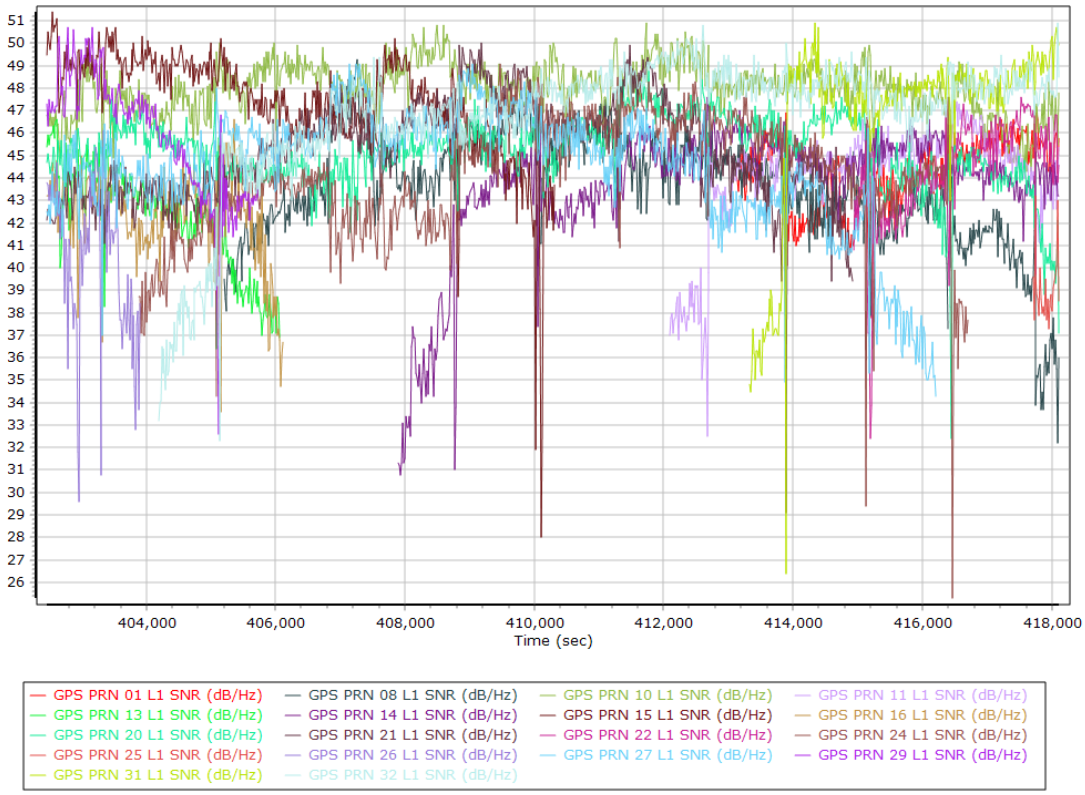
L1 Satellite Lock/Elevation



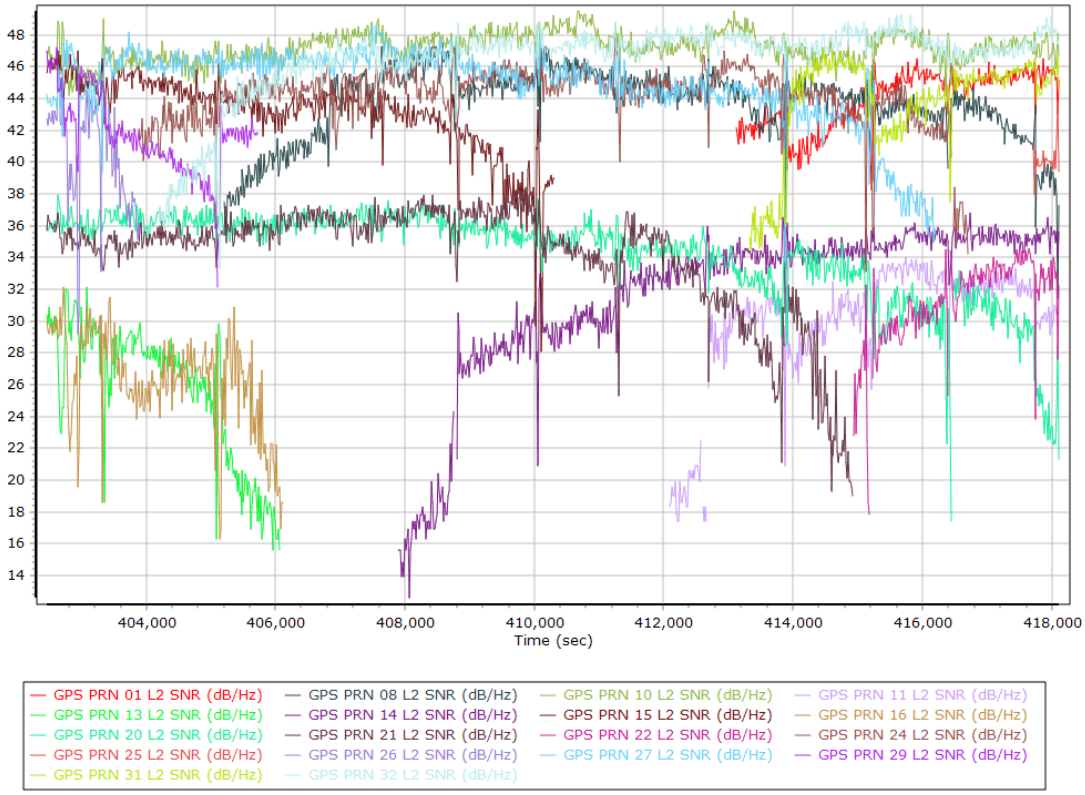
L2 Satellite Lock/Elevation



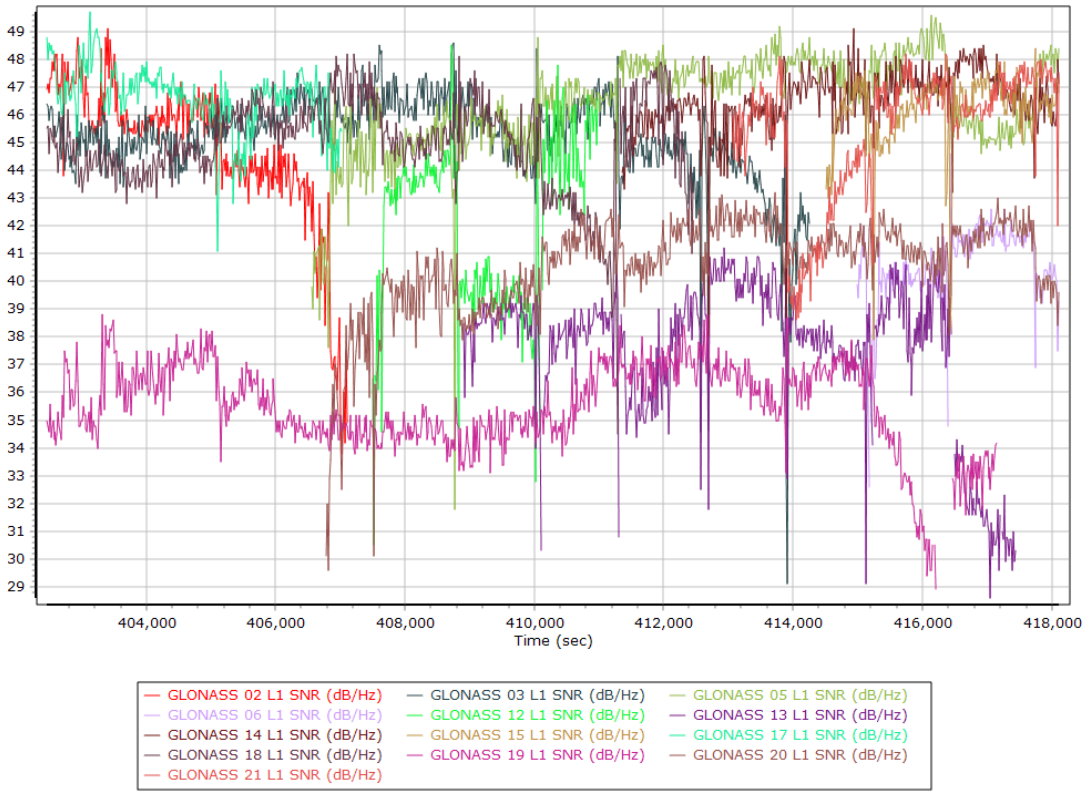
GPS L1 SNR



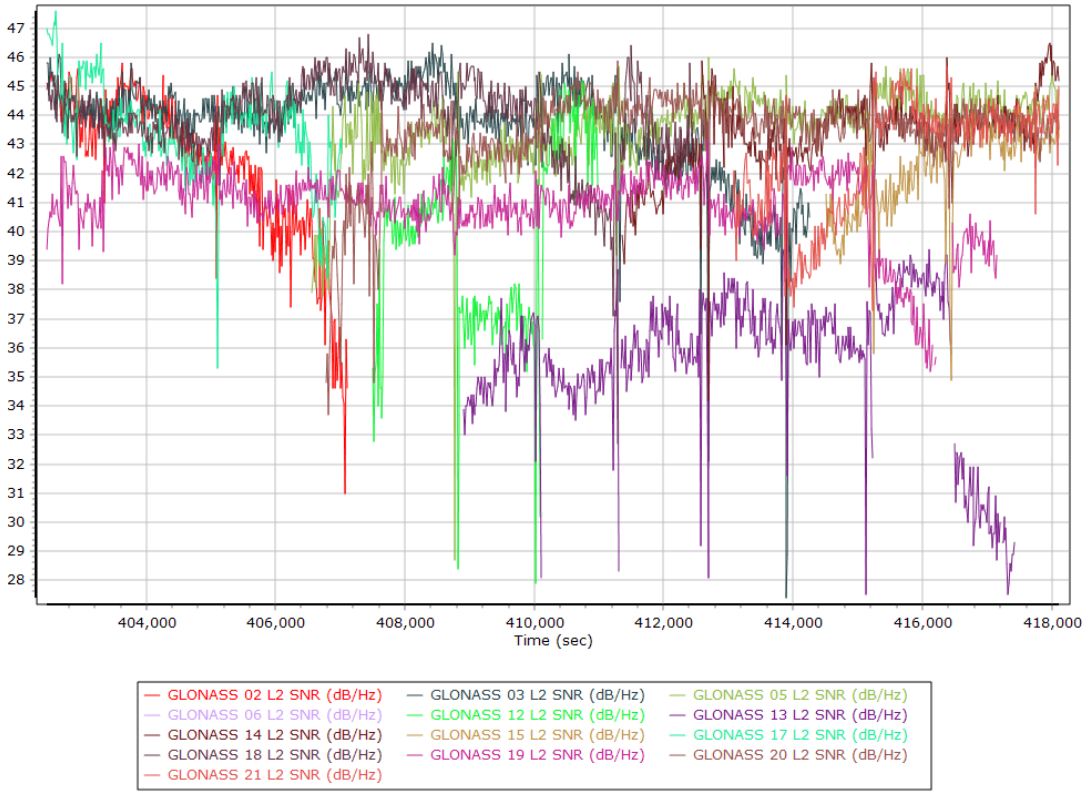
GPS L2 SNR



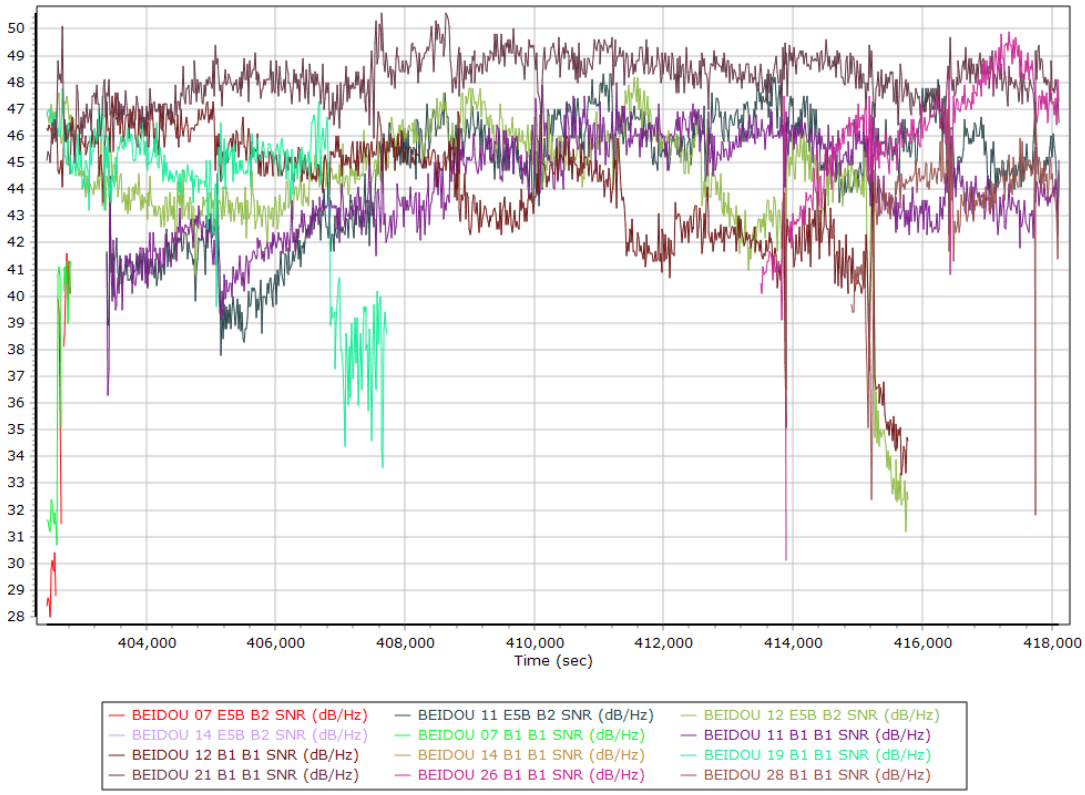
GLONASS L1 SNR



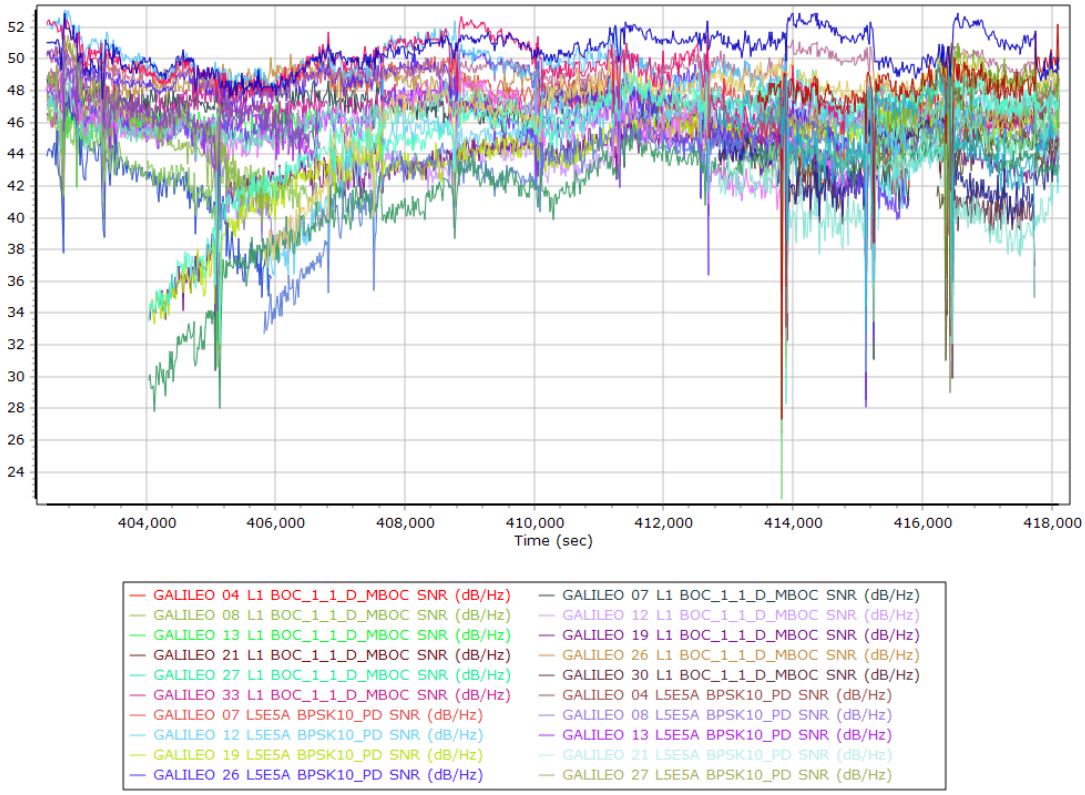
GLONASS L2 SNR



BEIDOU SNR

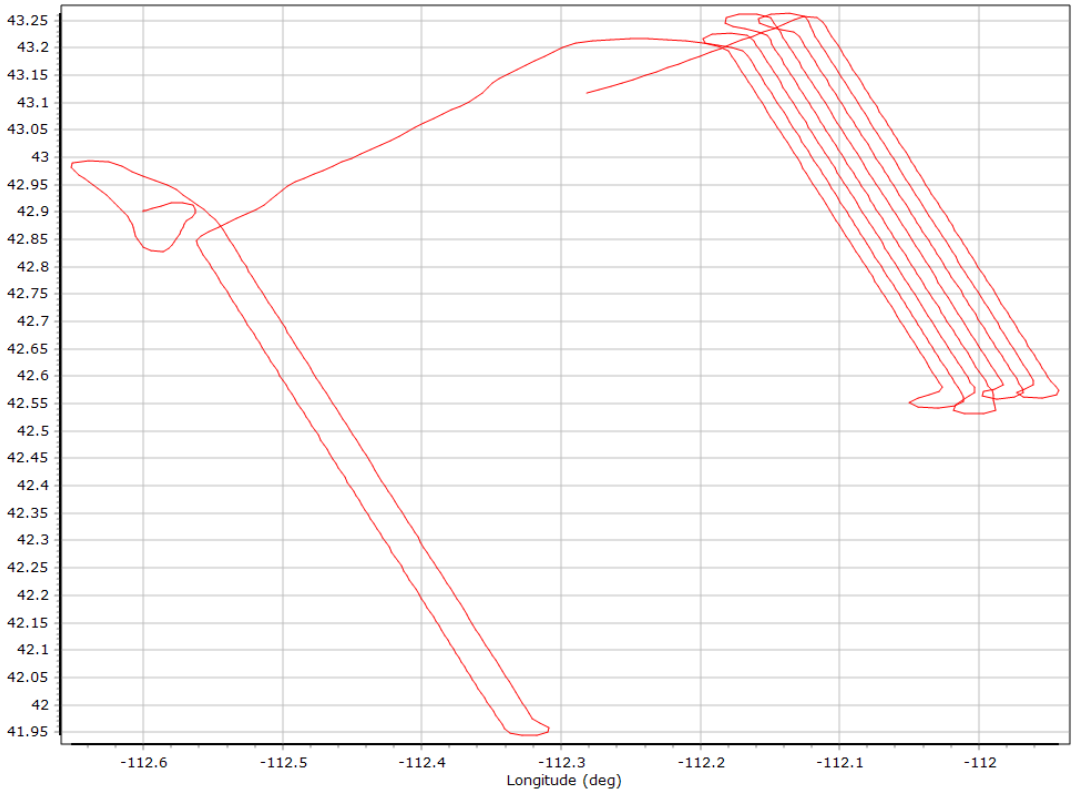


GALILEO SNR

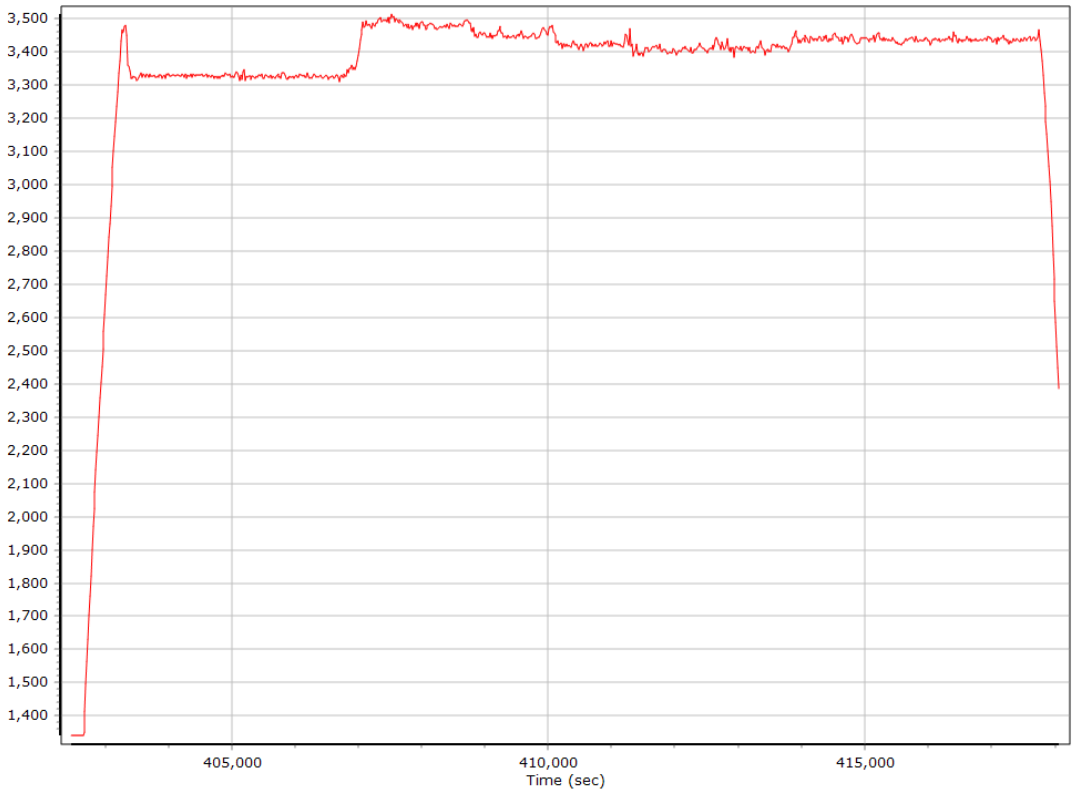

52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
404,000
406,000
408,000
410,000
412,000
414,000
416,000
418,000
Time (sec)
GALILEO 04 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 07 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 08 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 12 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 13 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 19 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 21 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 26 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 27 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 30 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 33 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 04 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 07 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 08 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 12 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 13 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 19 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 21 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 26 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 27 L5E5A BPSK10_PD SNR (dB/Hz)

Smoothed Trajectory Information

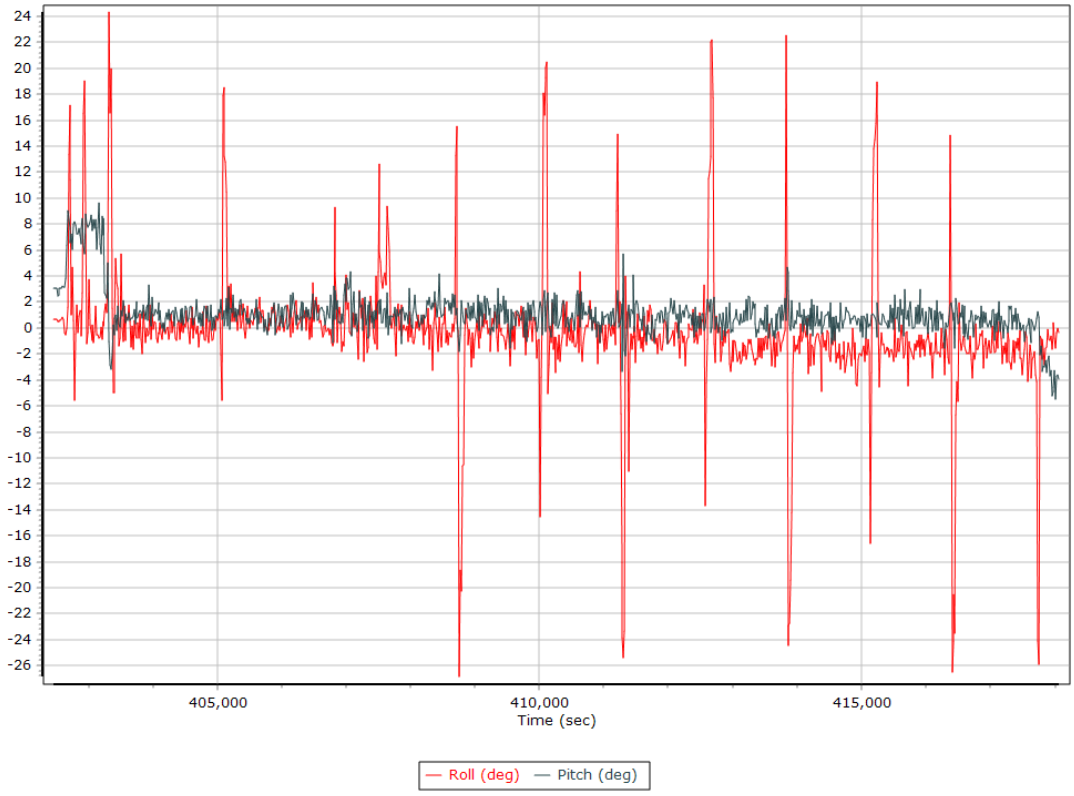
Top View



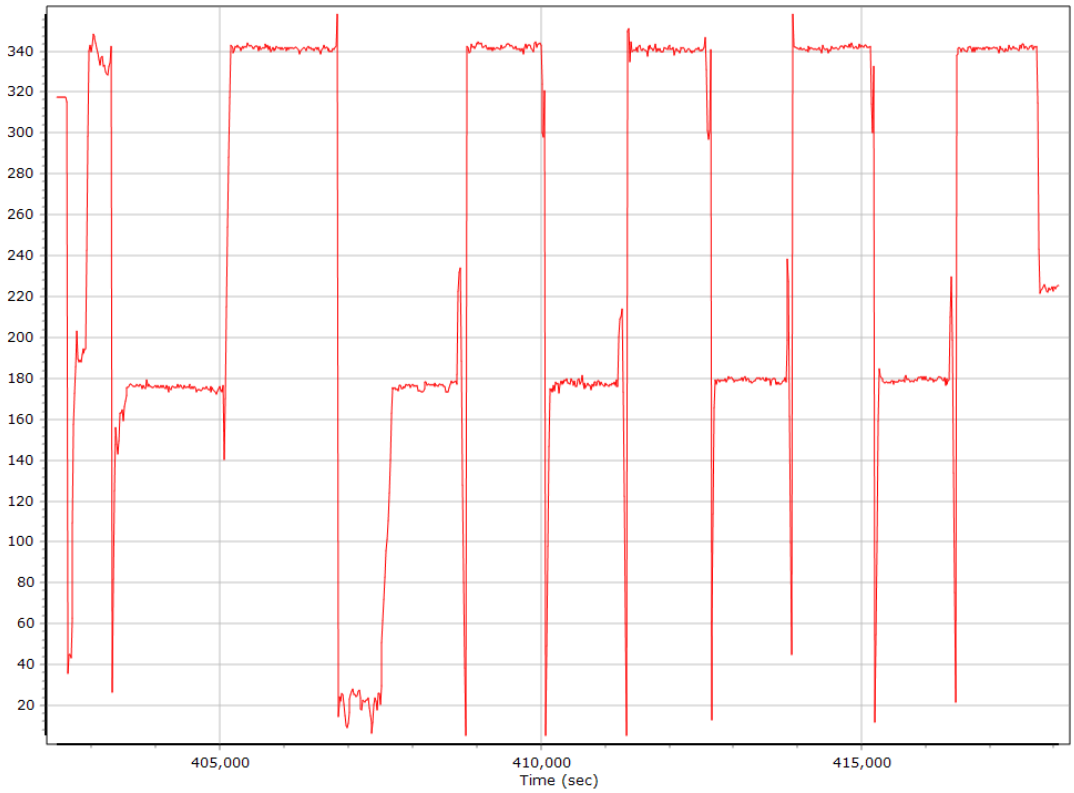
Altitude



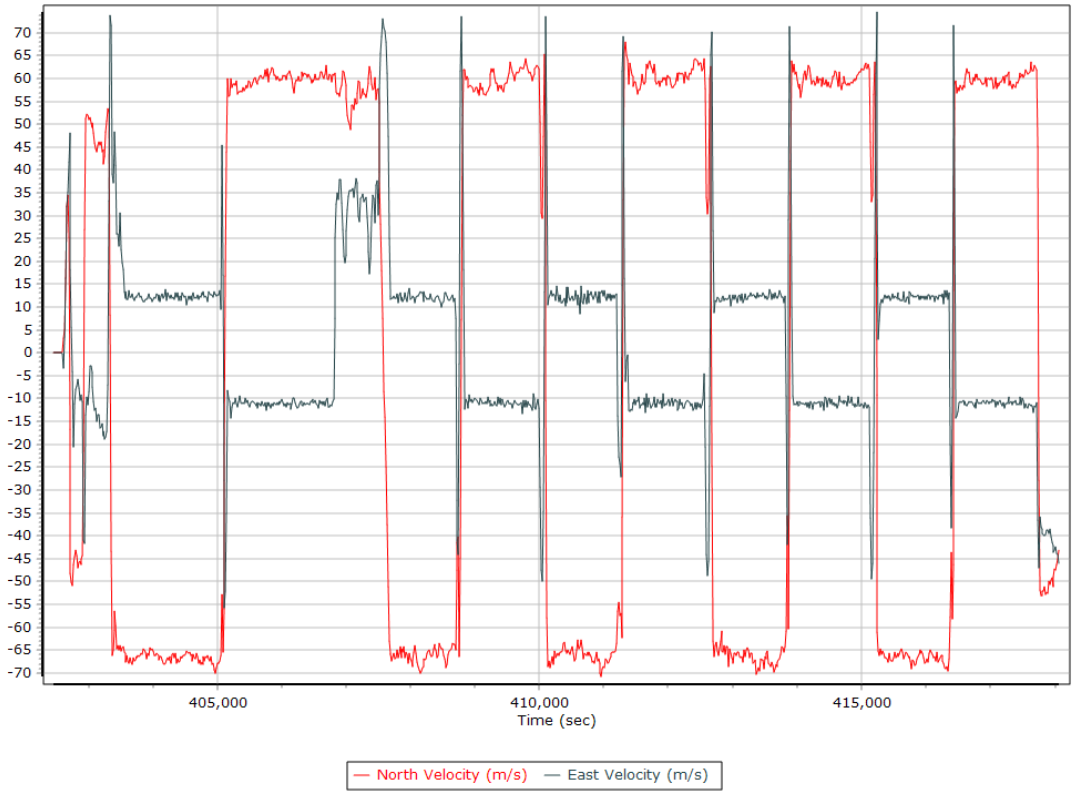
Roll/Pitch



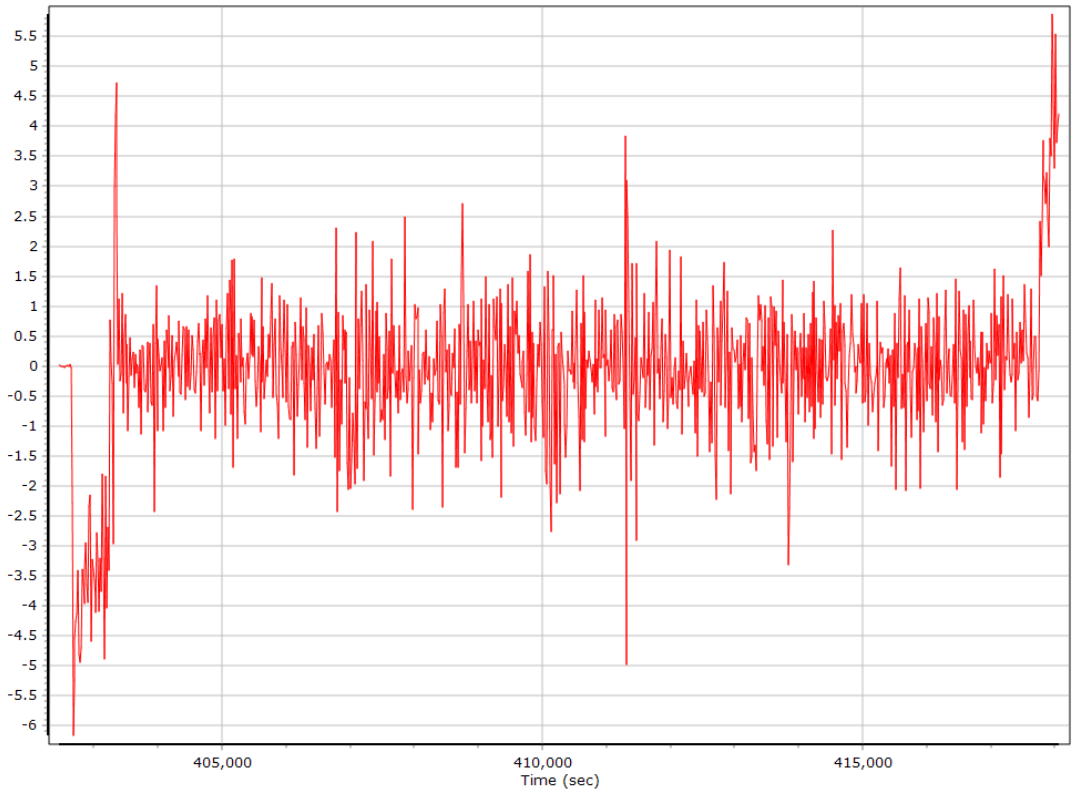
Heading



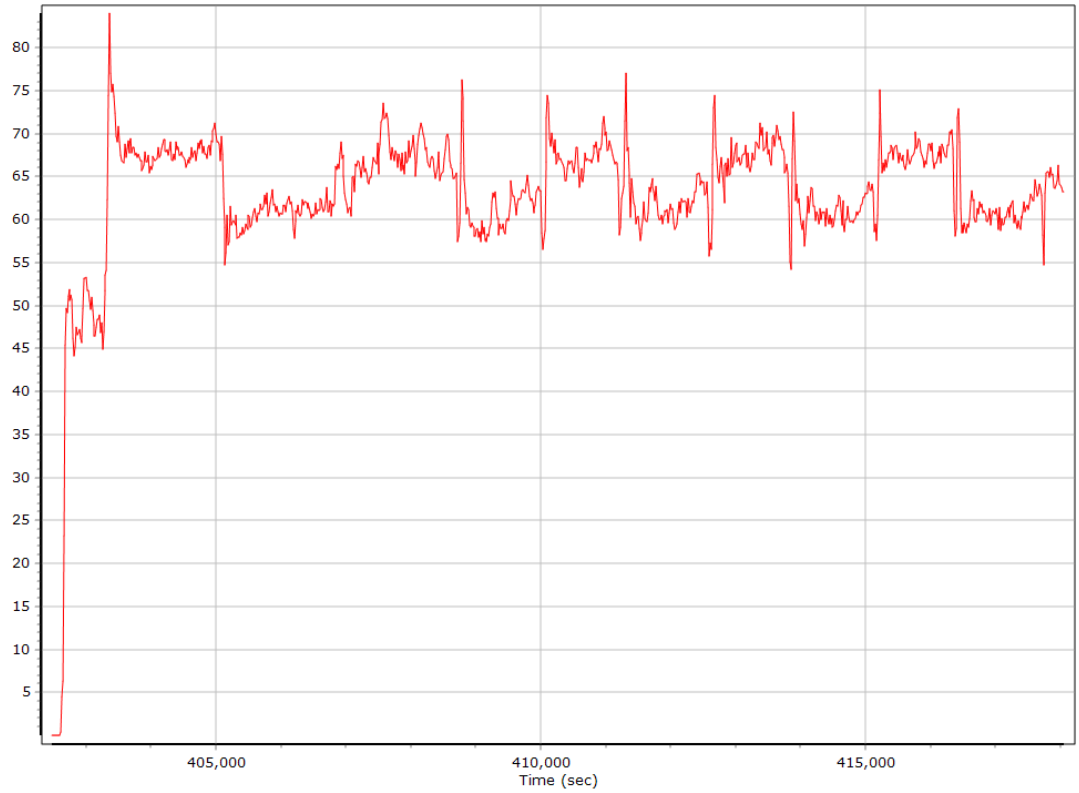
North/East Velocity



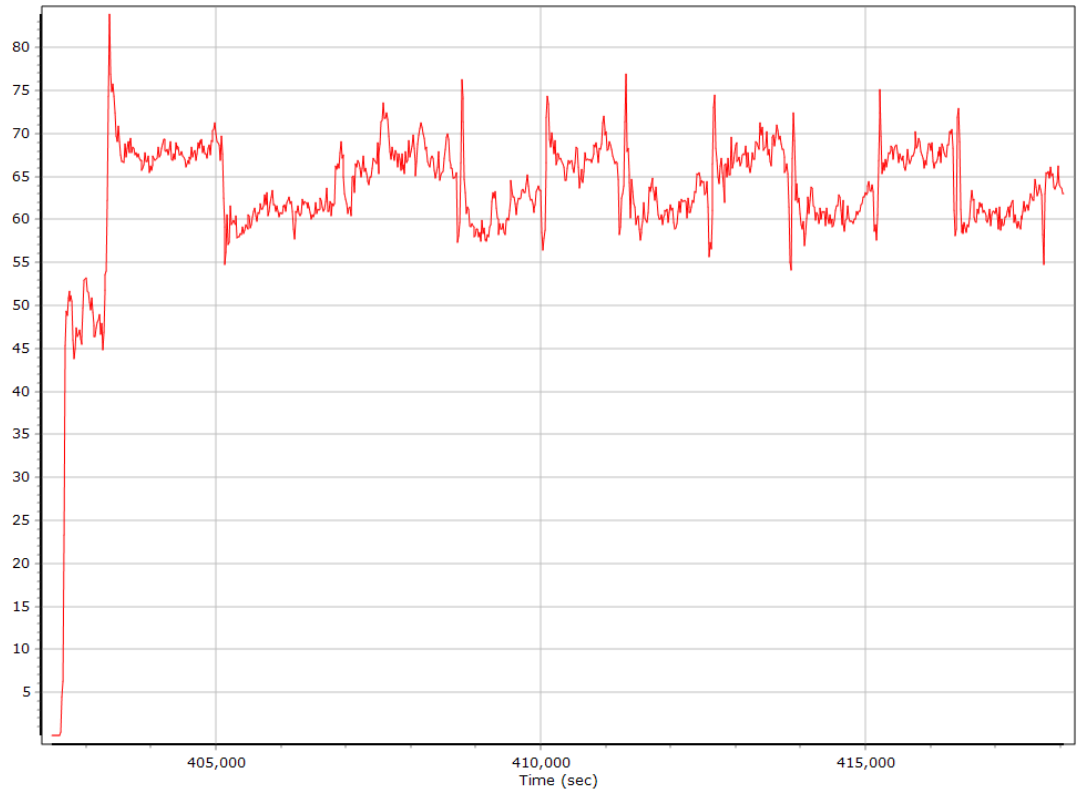
Down Velocity



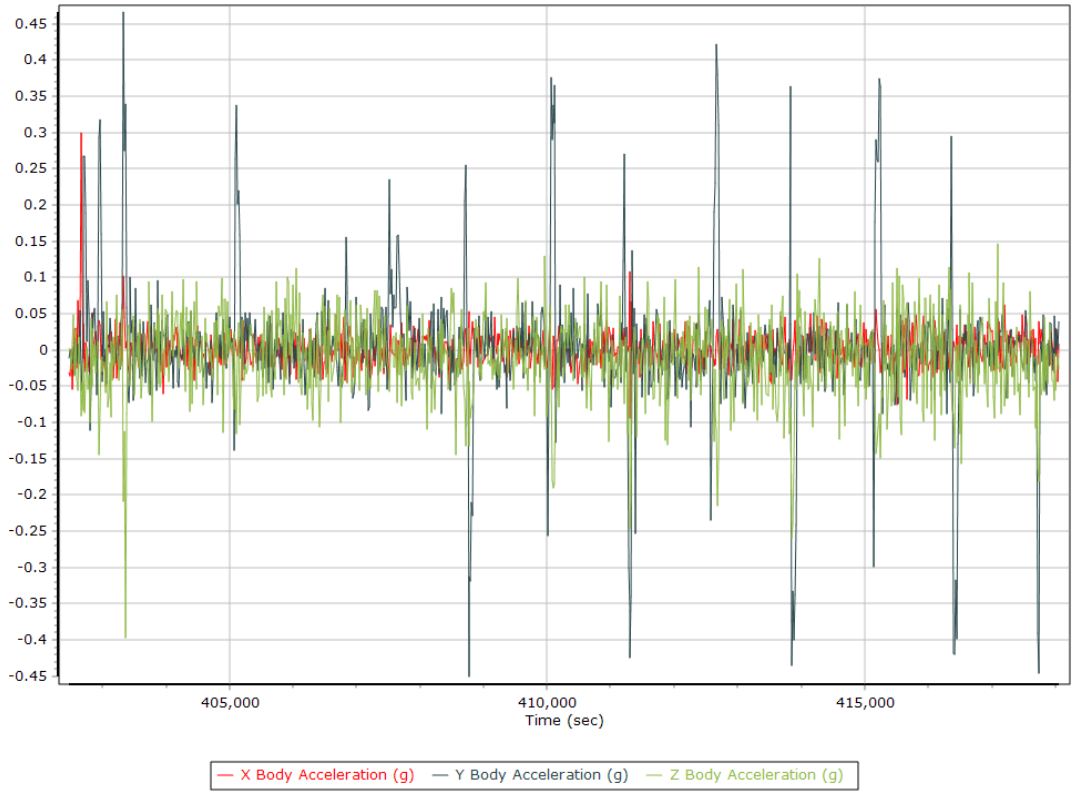
Total Speed



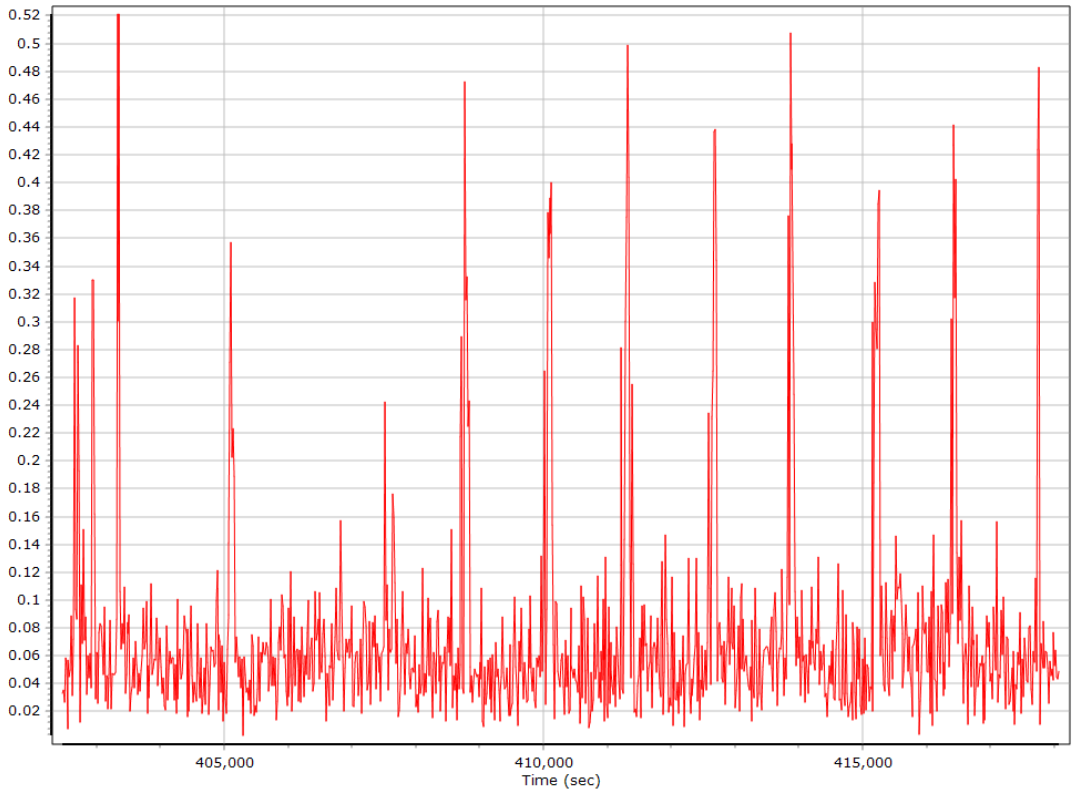
Ground Speed



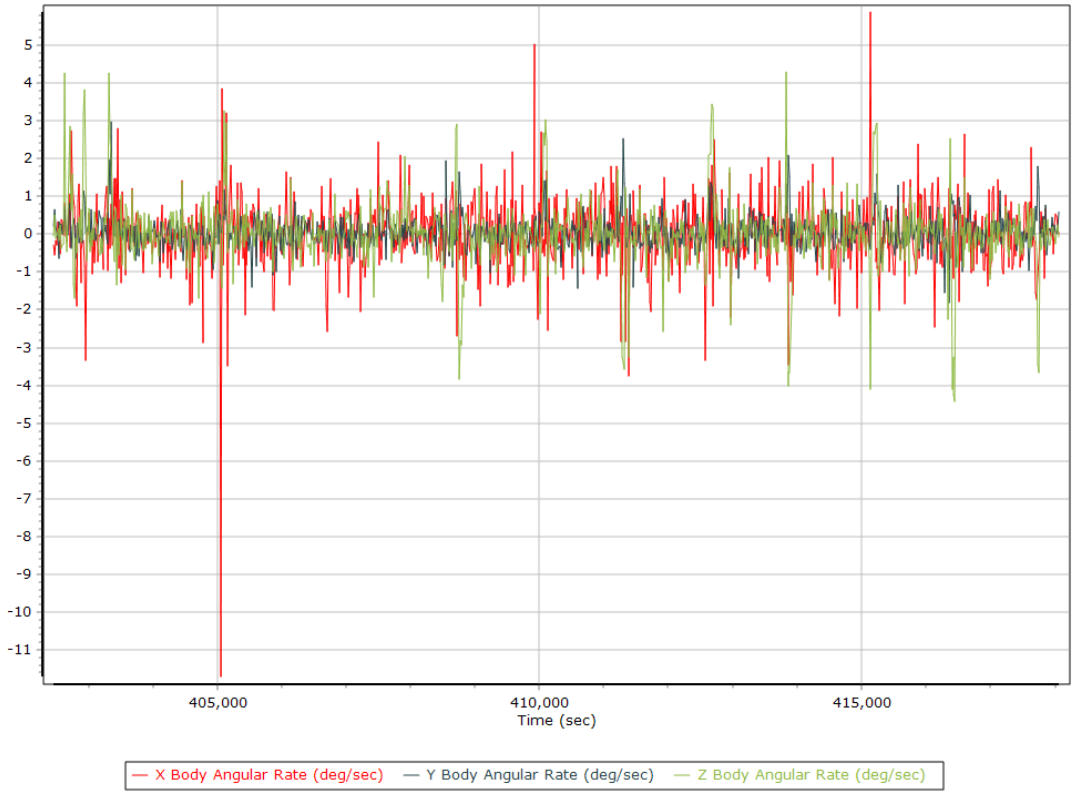
Body Acceleration



Total Body Acceleration

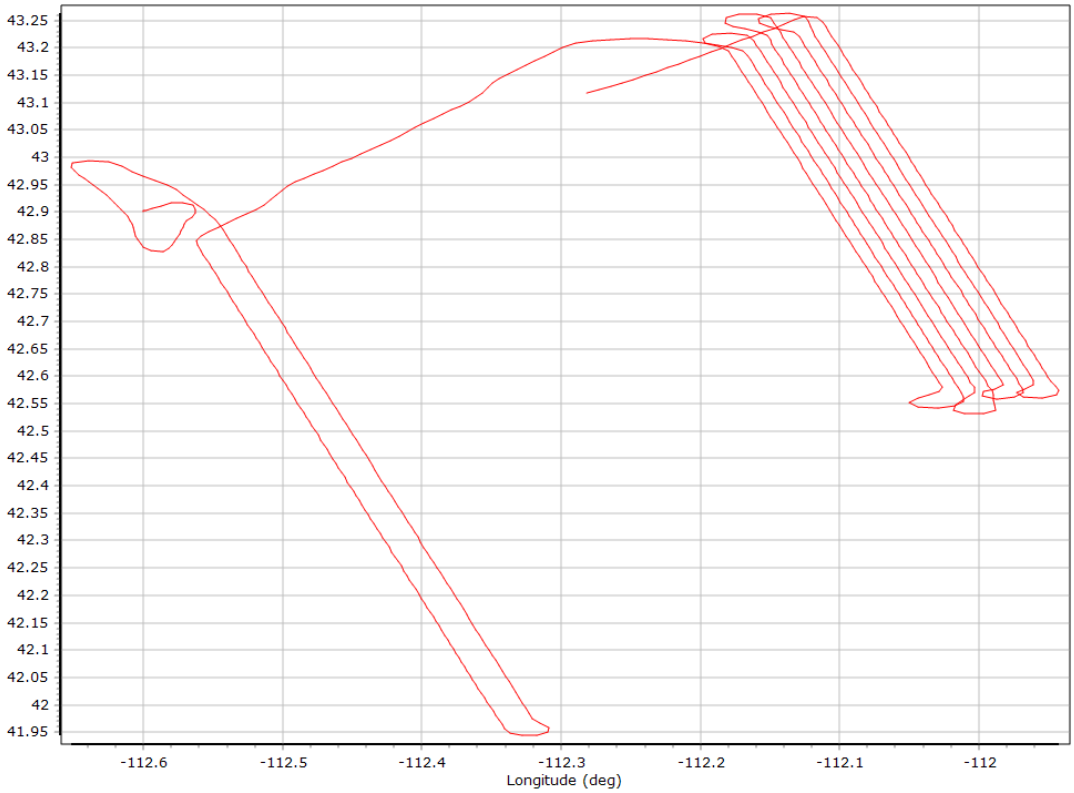


Body Angular Rate

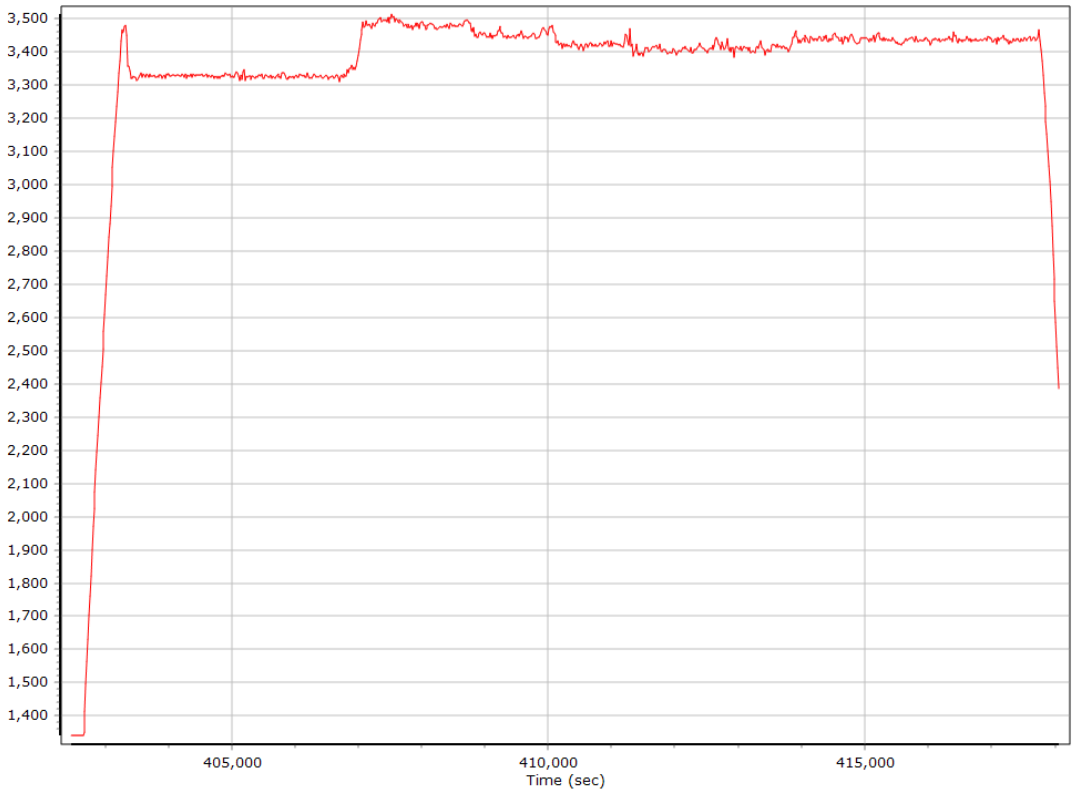


Forward Processed Trajectory Information

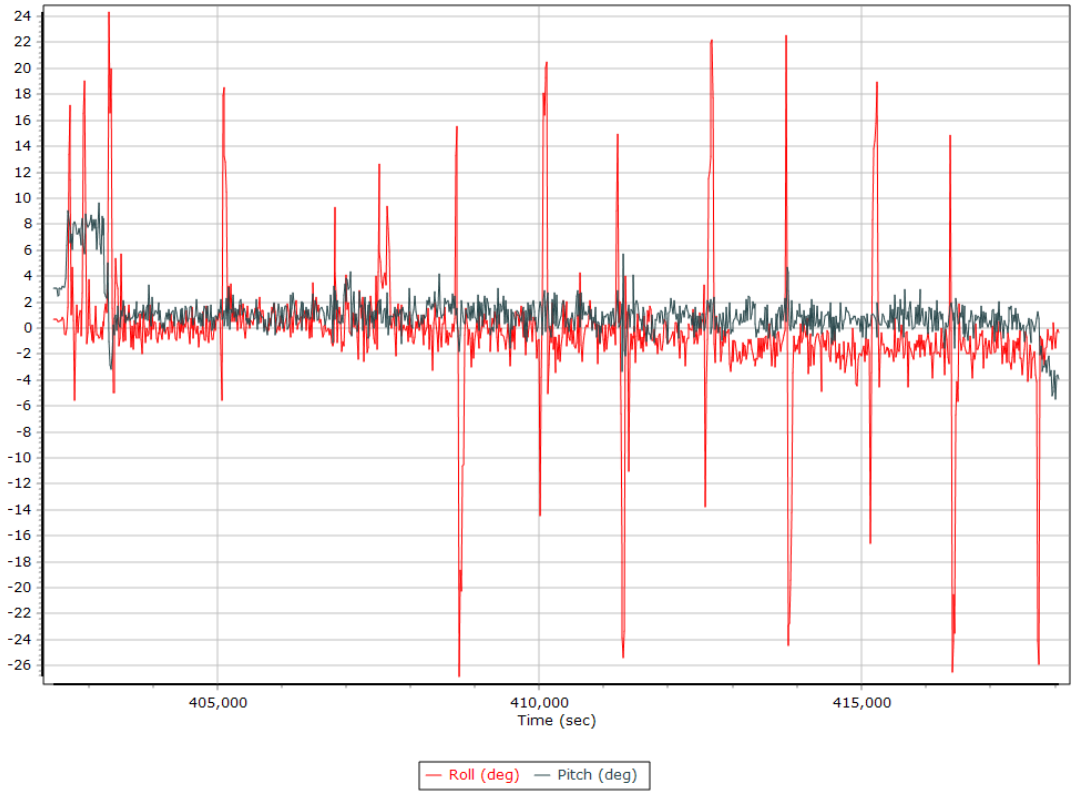
Top View



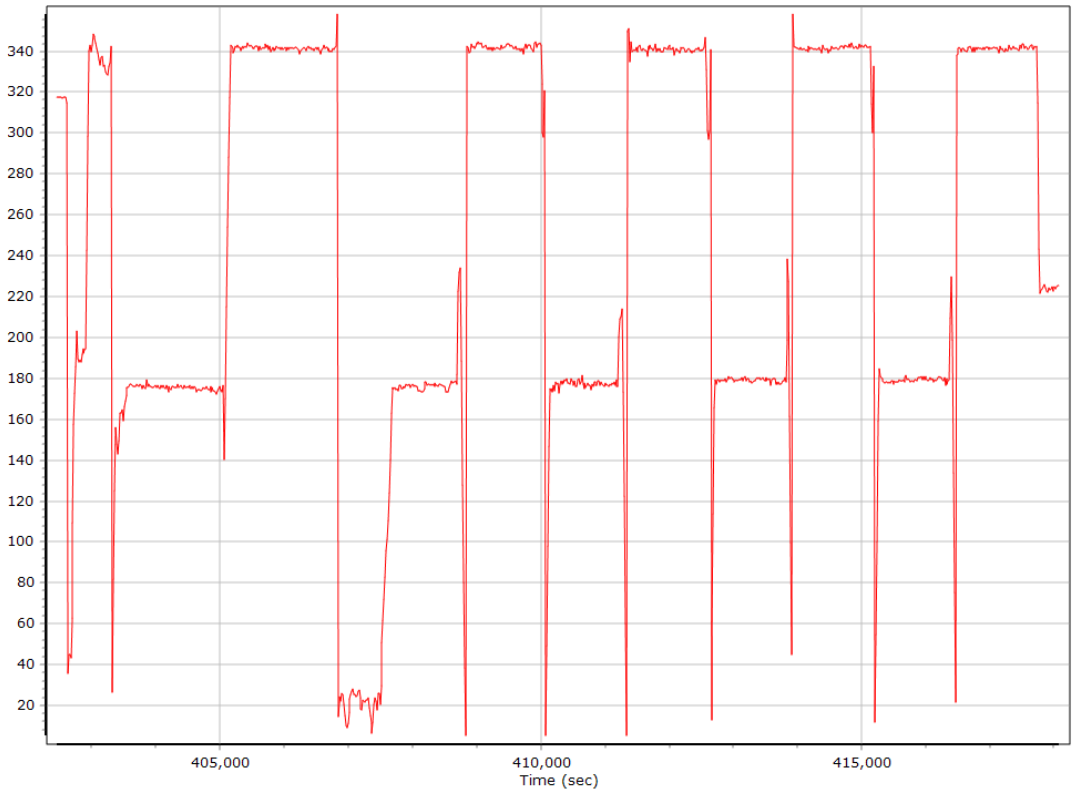
Altitude



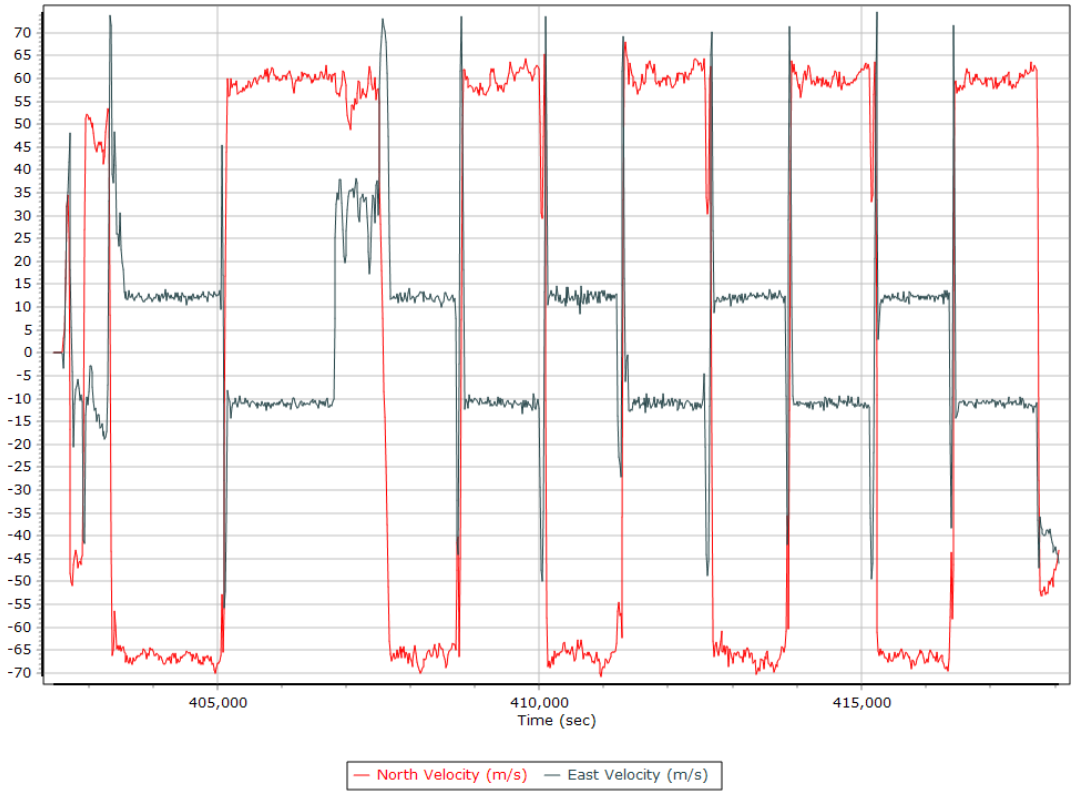
Roll/Pitch



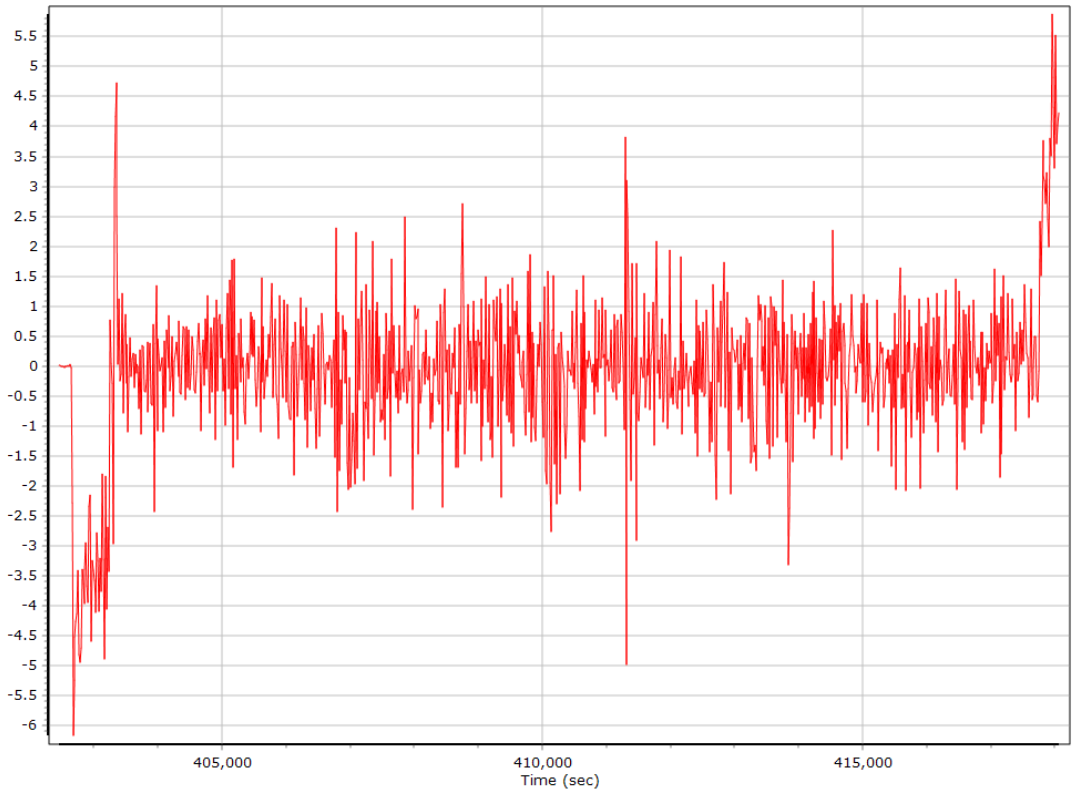
Heading



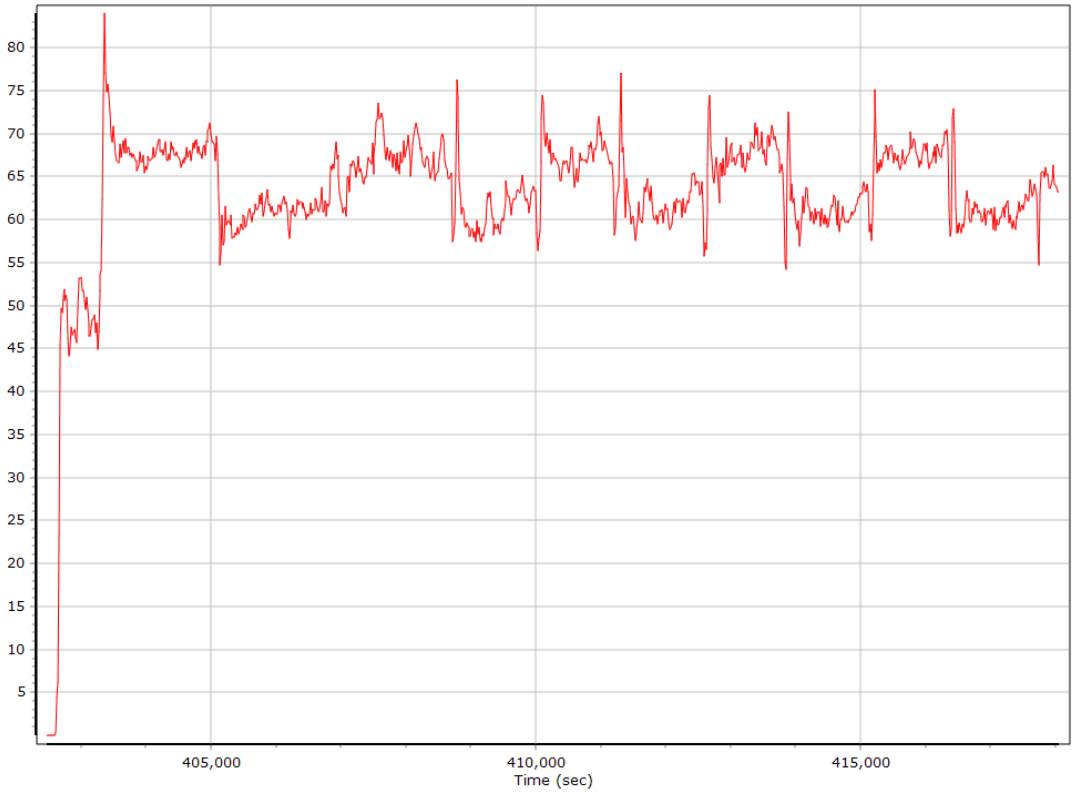
North/East Velocity



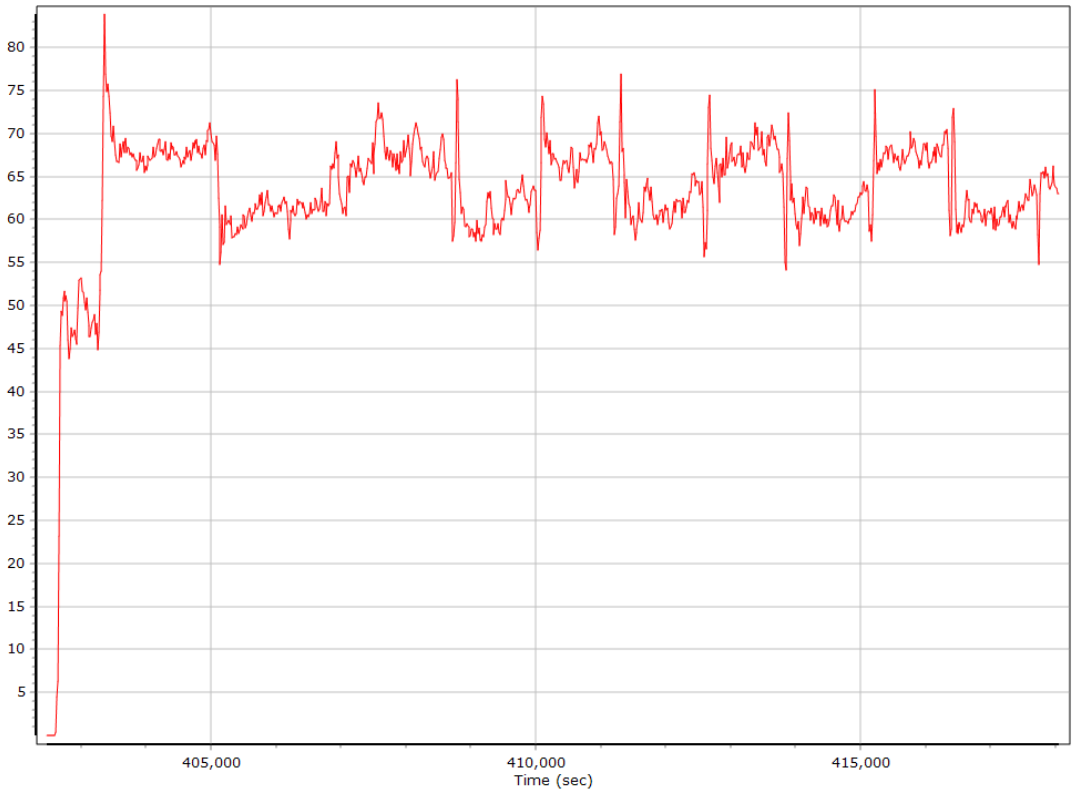
Down Velocity



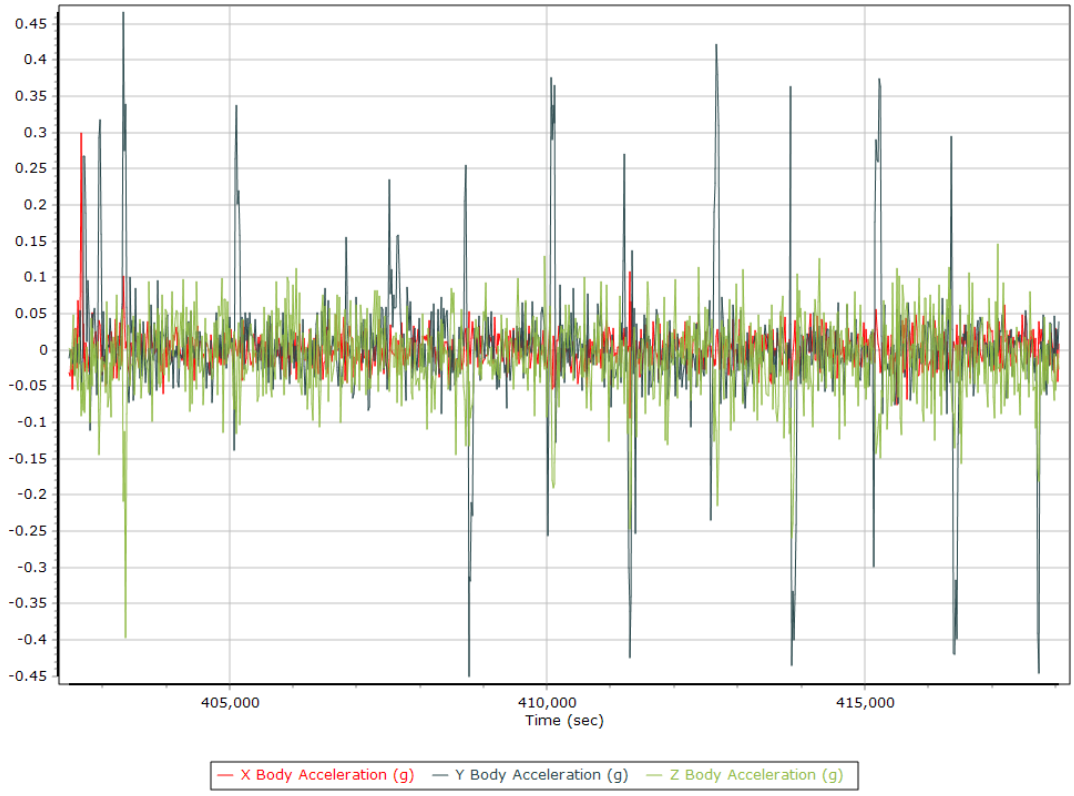
Total Speed



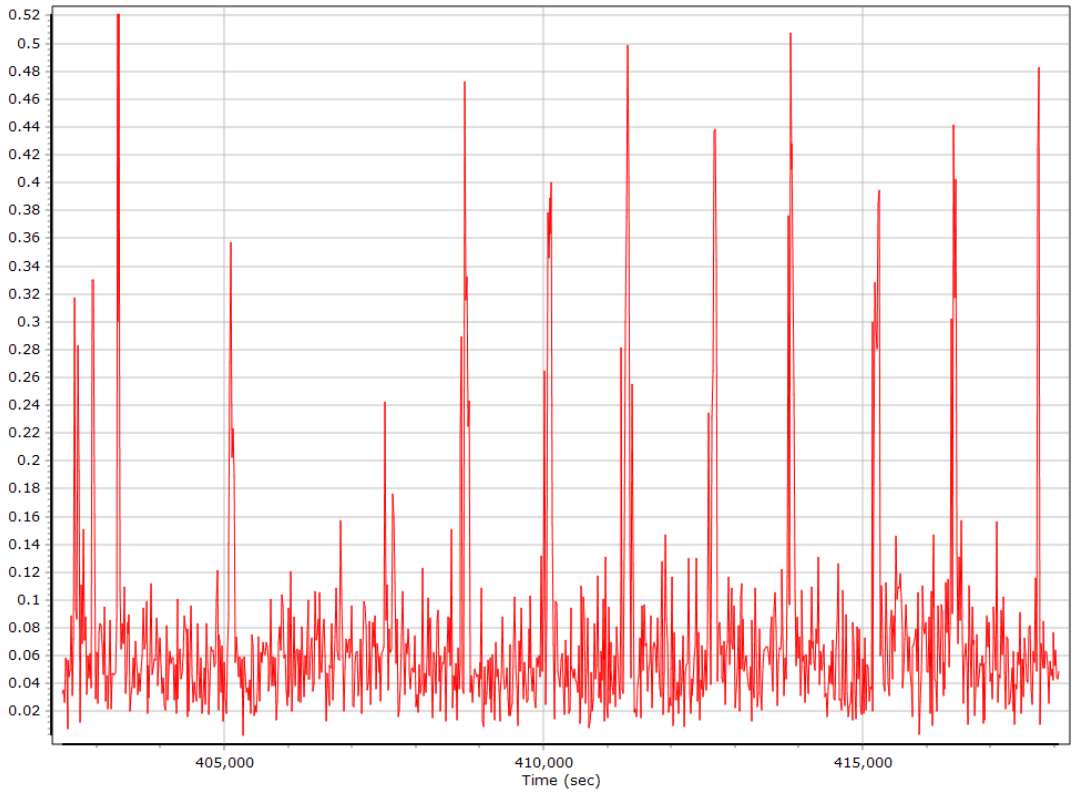
Ground Speed



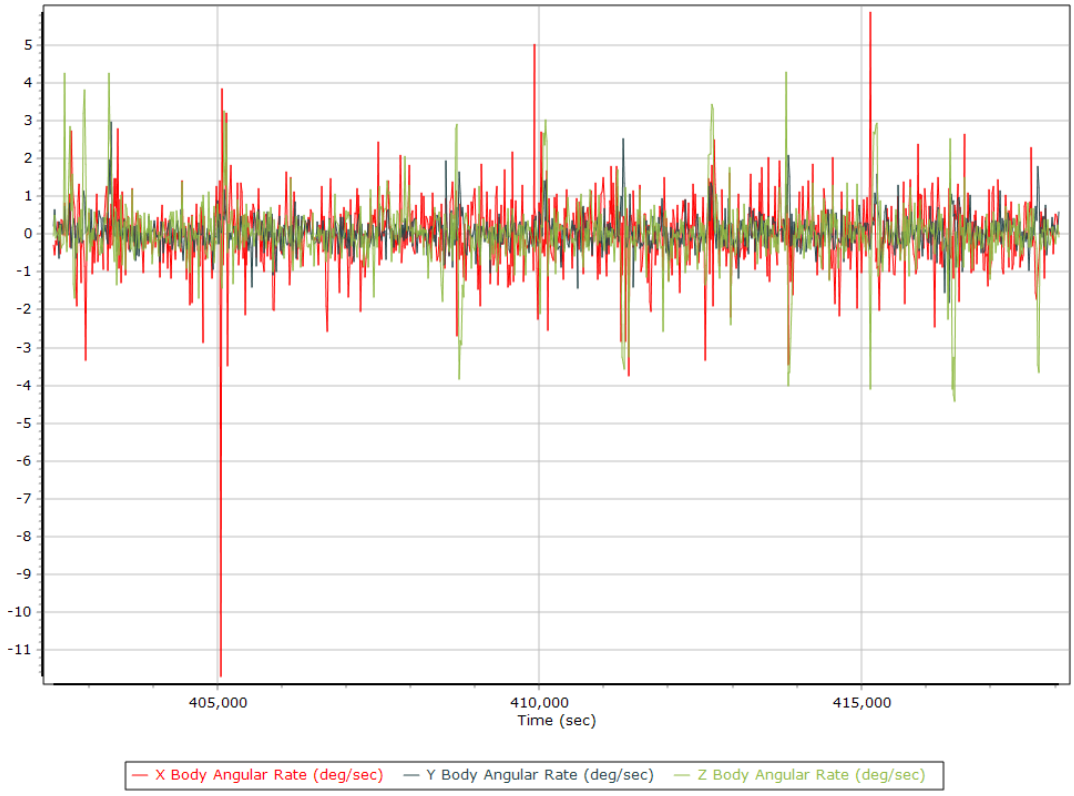
Body Acceleration



Total Body Acceleration

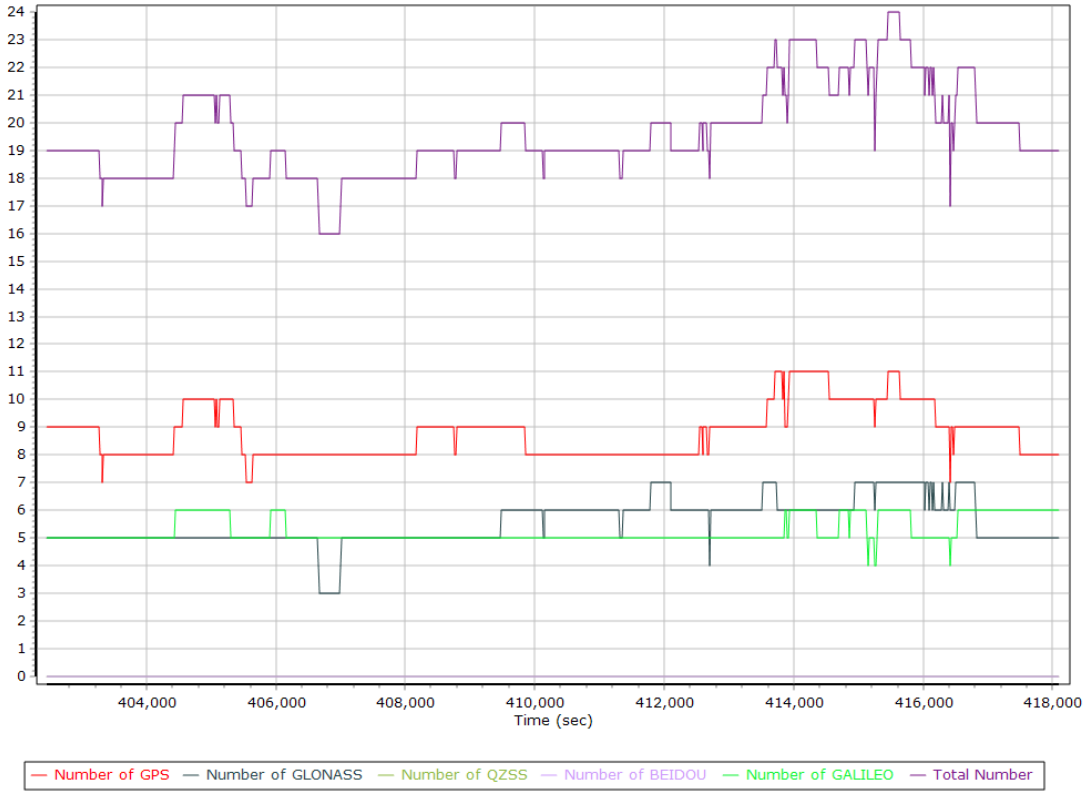


Body Angular Rate

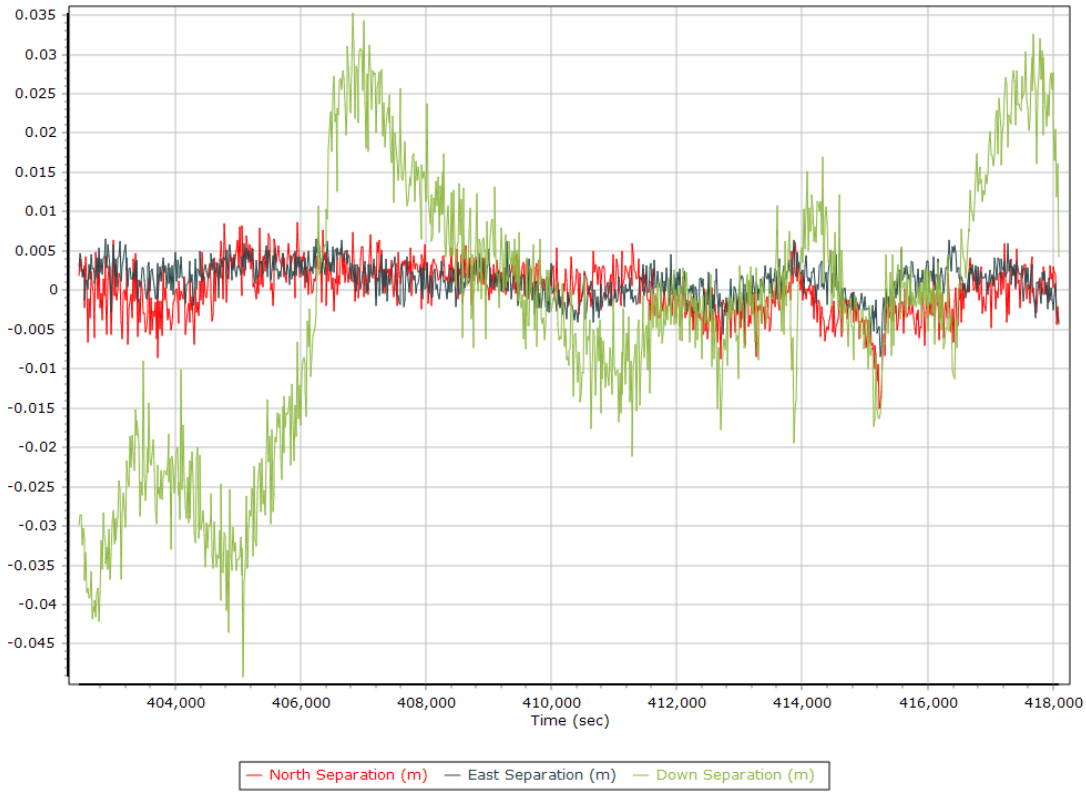


GNSS QC

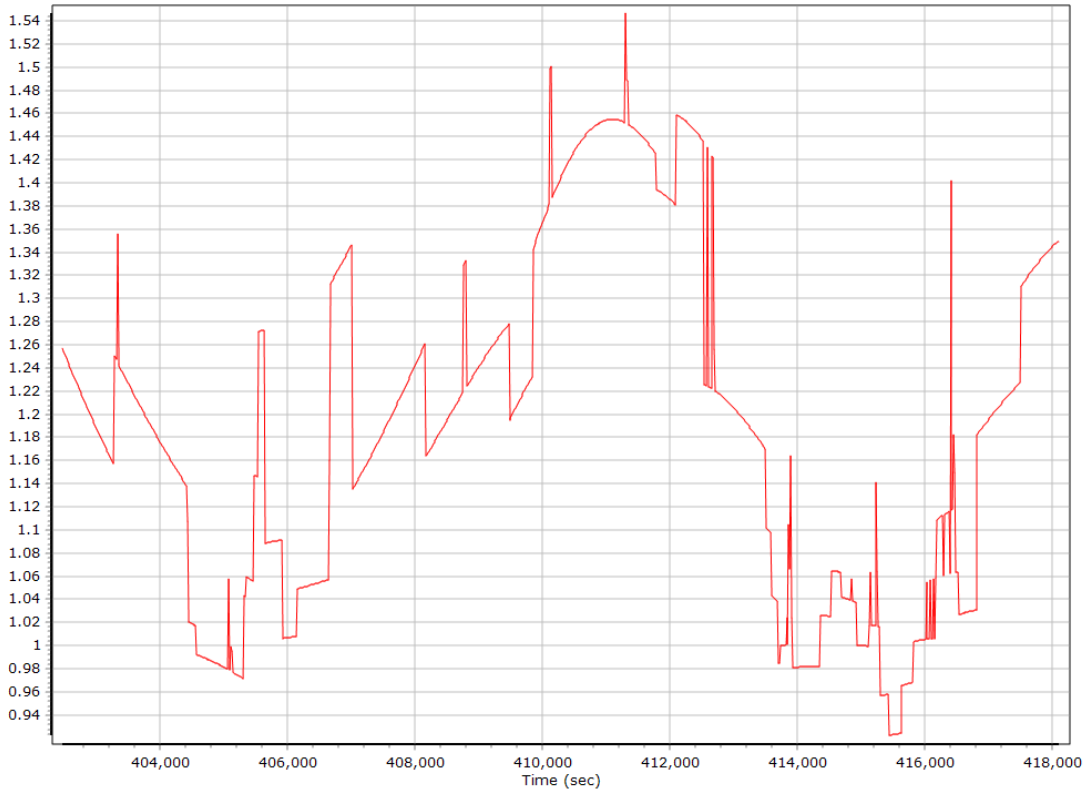
Num SVs in solution



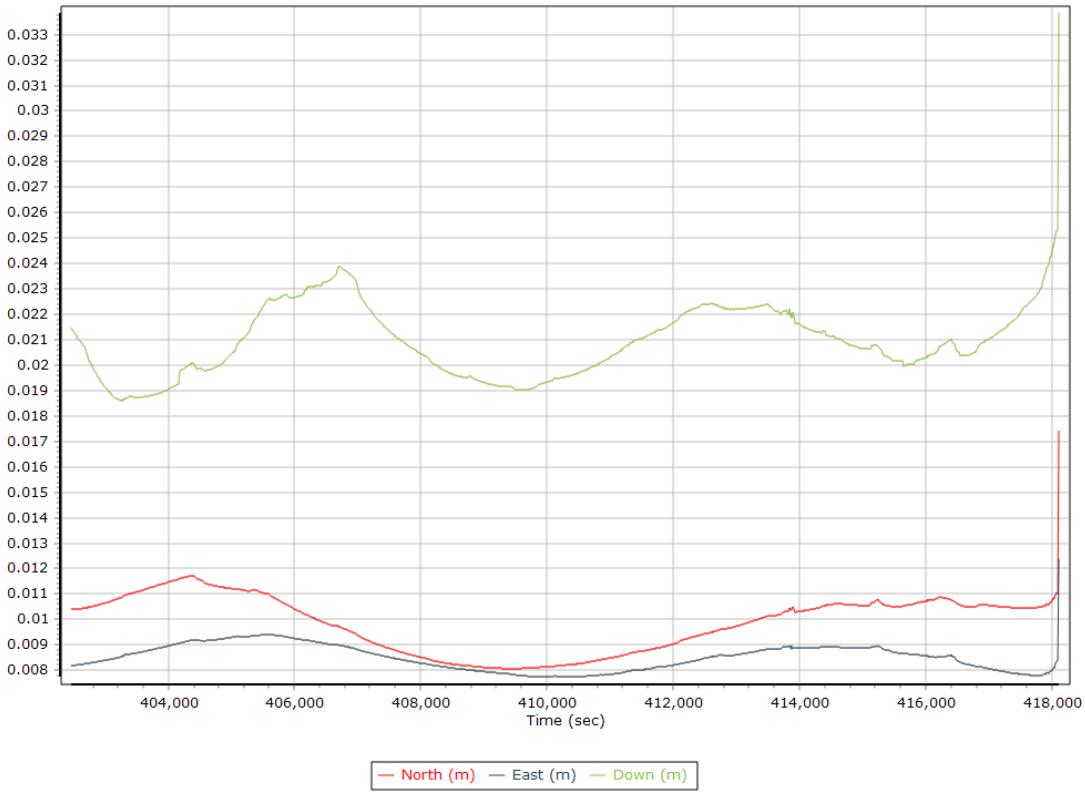
Forward/Reverse Separation



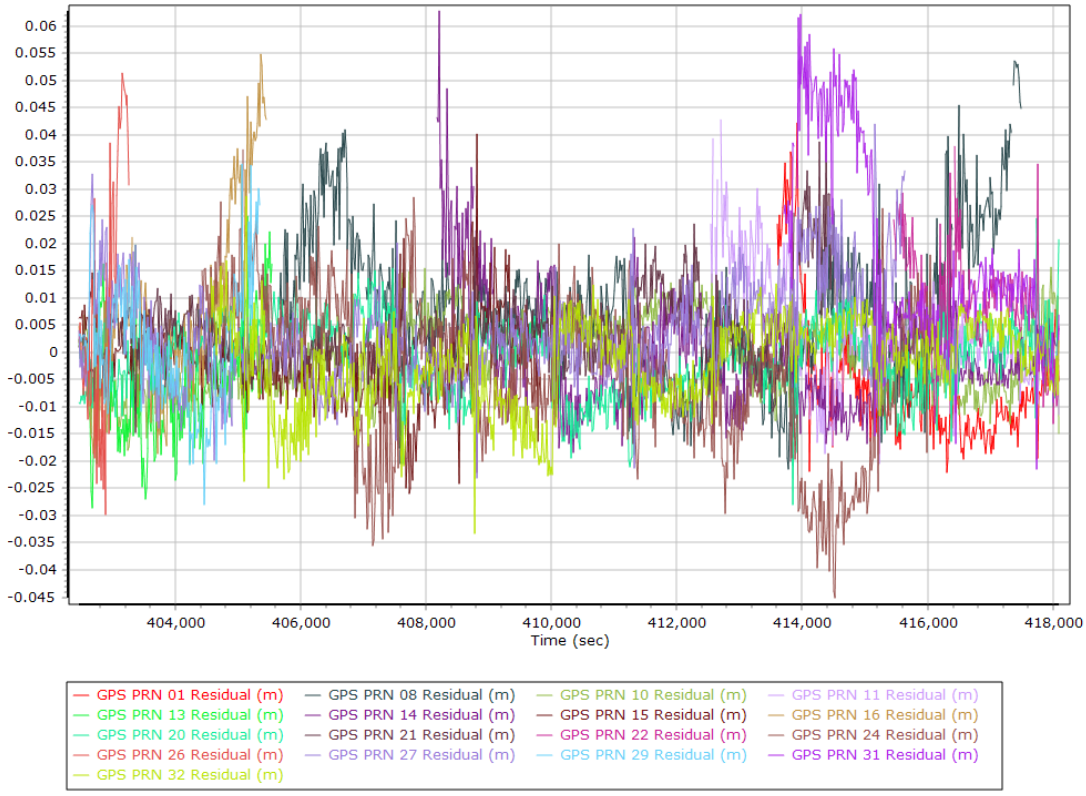
PDOP



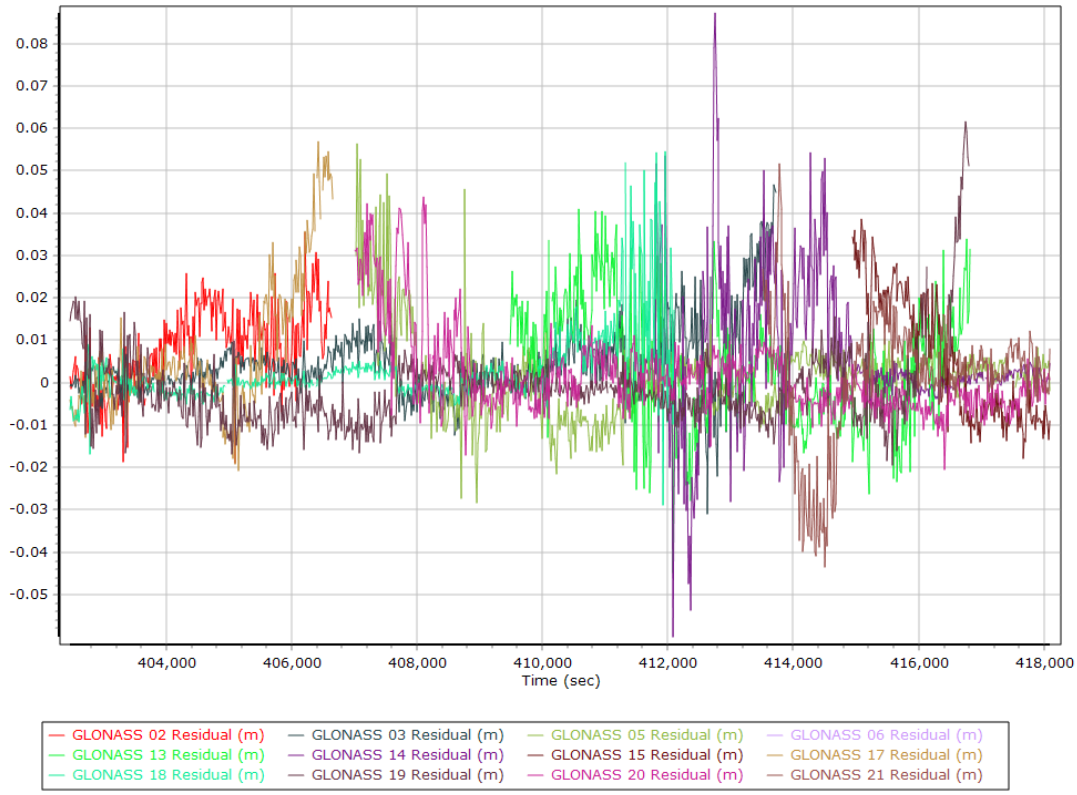
Estimated Position Accuracy



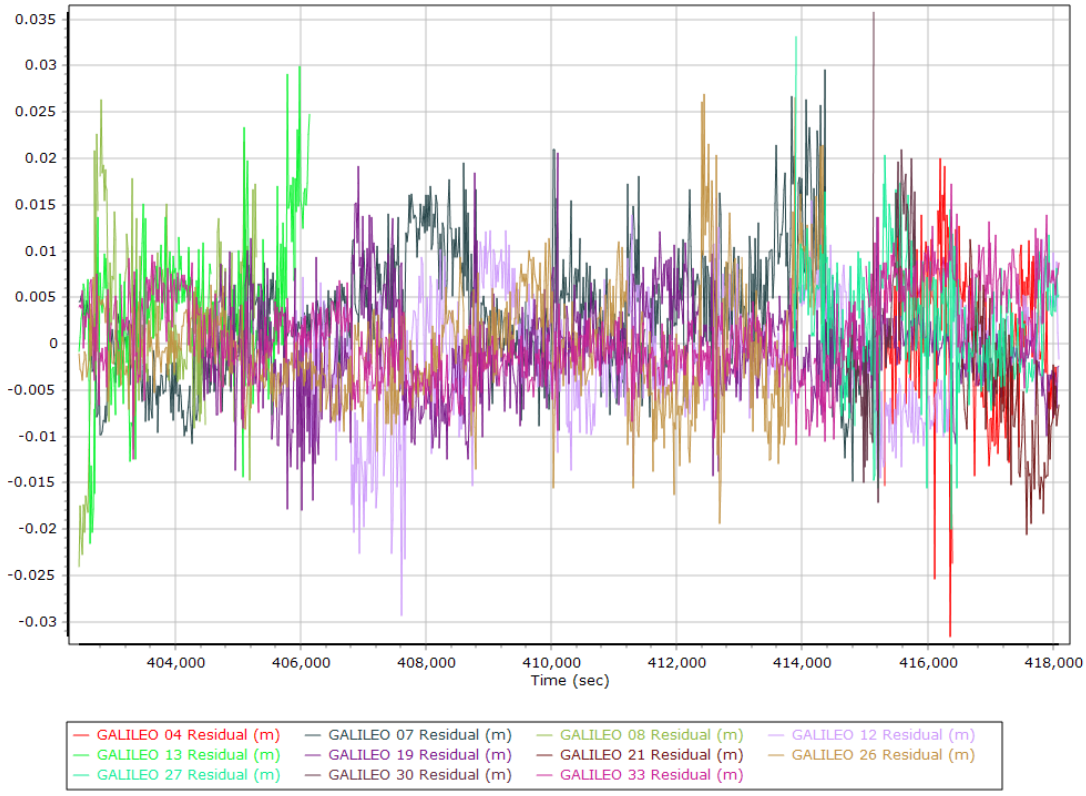
GPS Residuals



GLONASS Residuals



GALILEO Residuals



GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion PP-RTX		
Stabilized mount	False		
Processing start time	402168.000 (11/14/2019 3:42:48 PM)		
Processing end time	418075.000 (11/14/2019 8:07:55 PM)		
Initial attitude source	Real-Time VNAV/RNAV Attitude		
IMU Sensor Context	Processing with Onboard IMU		
Reference to IMU lever arm (m)	0.000	0.000	0.000
Reference to IMU mounting angles (deg)	0.000	0.000	180.000
Reference to Primary GNSS lever arm (m)	0.000	-0.315	-0.926
Reference to Primary GNSS lever arm std dev (m)	0.030	0.030	0.030
Aircraft to Reference mounting angles (deg)	0.000	0.000	0.000

Calibrated Installation Parameters

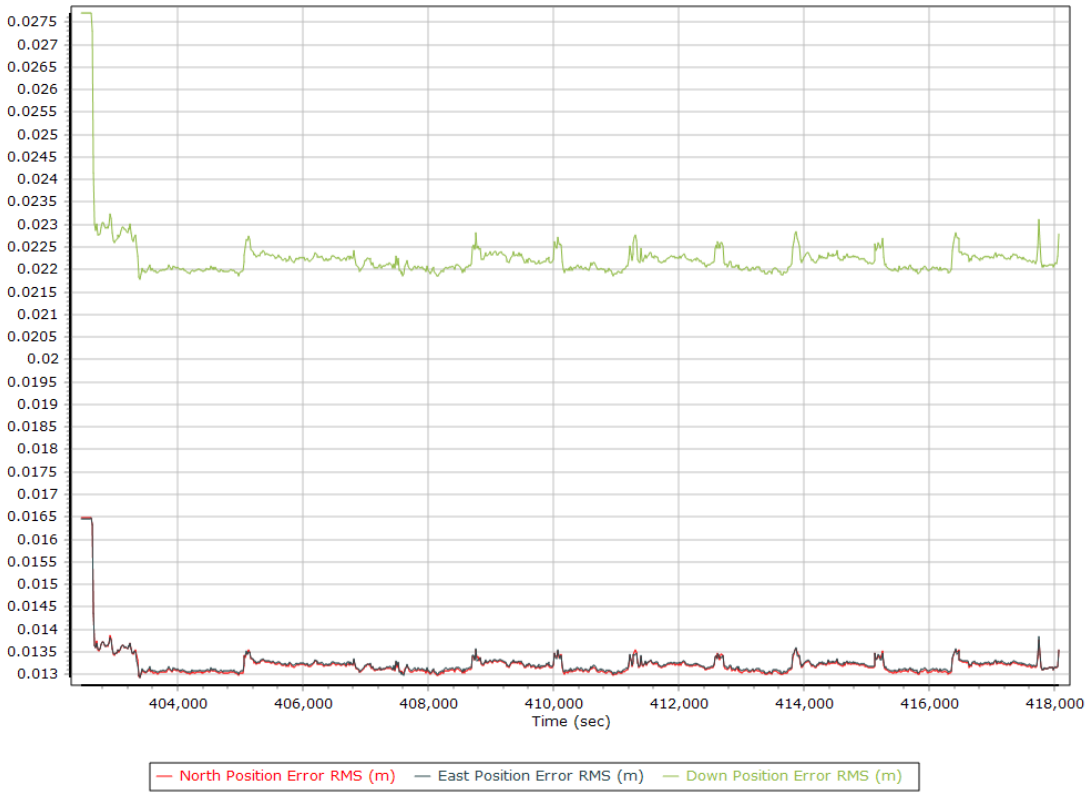
Reference-Primary GNSS Lever Arm (m)

IN-Fusion QC

Forward Processed Estimated Errors, Reference Frame

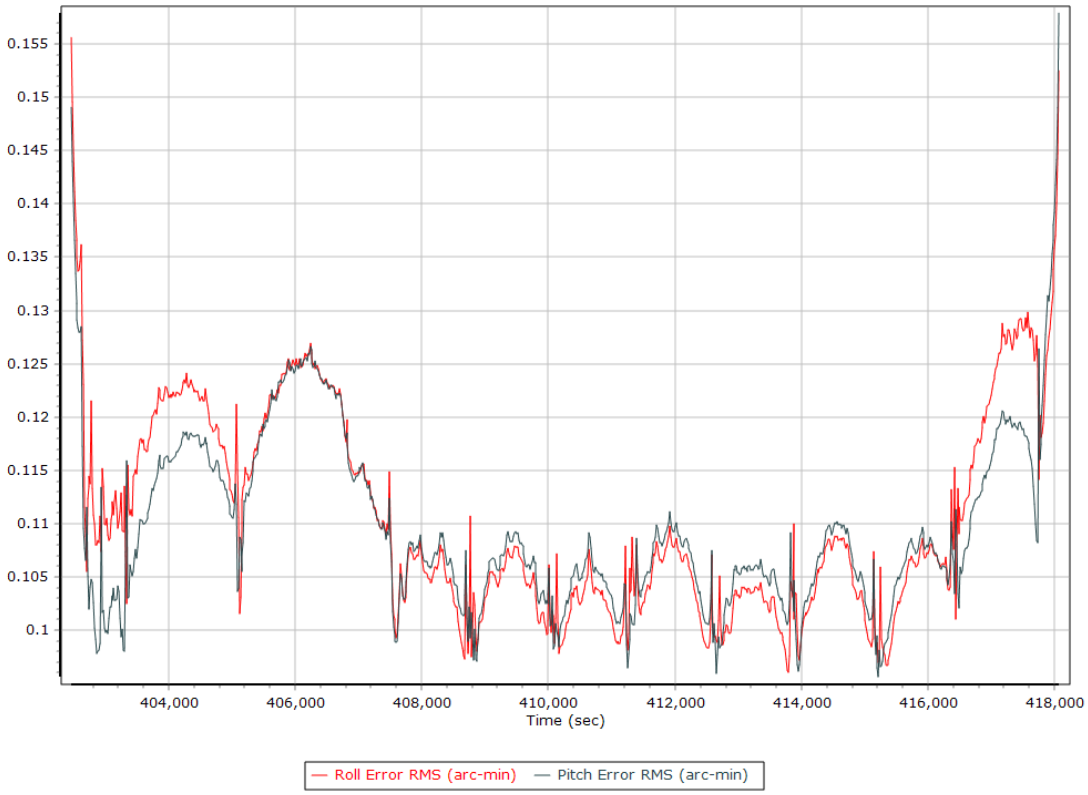
Smoothed Performance Metrics

Position Error RMS (m)

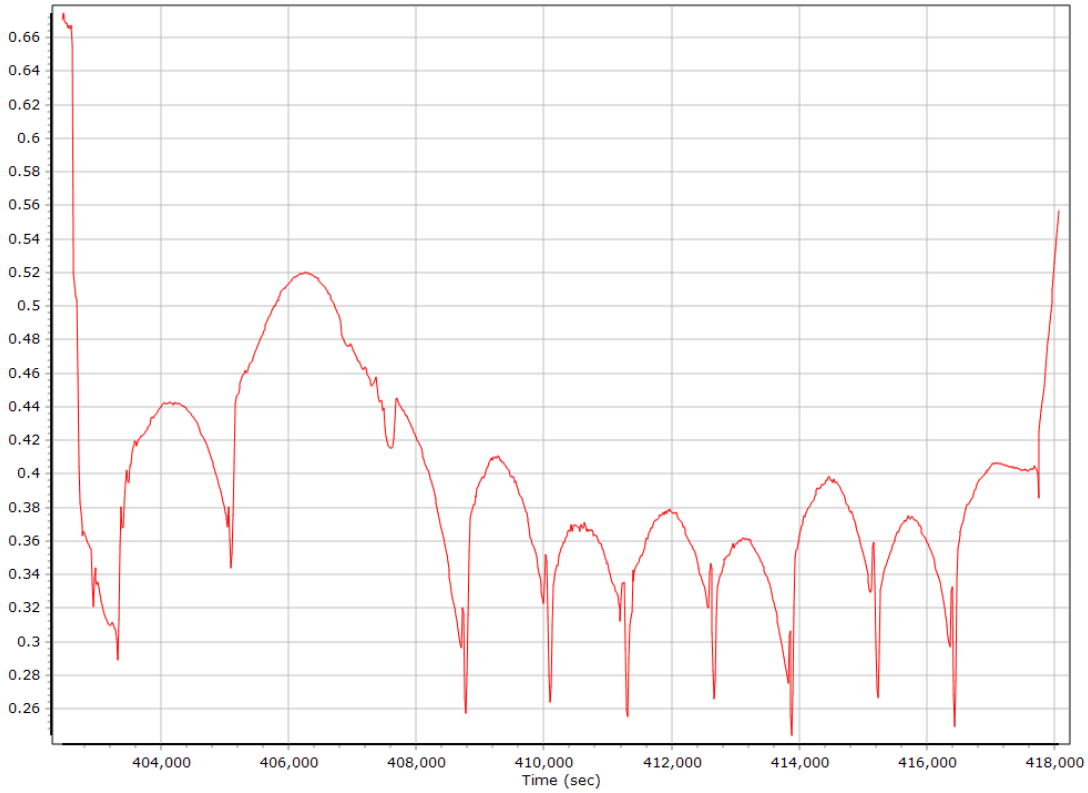


Velocity Error RMS (m/s)

Roll/Pitch Error RMS (arc-min)



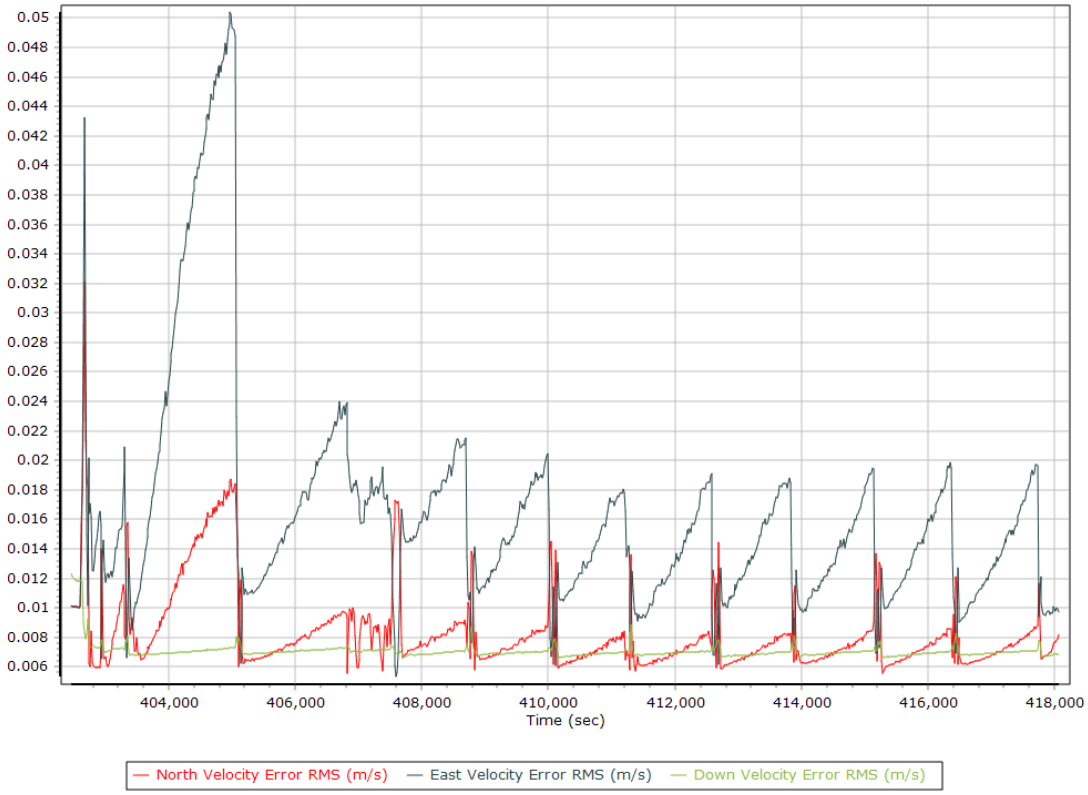
Heading Error RMS (arc-min)



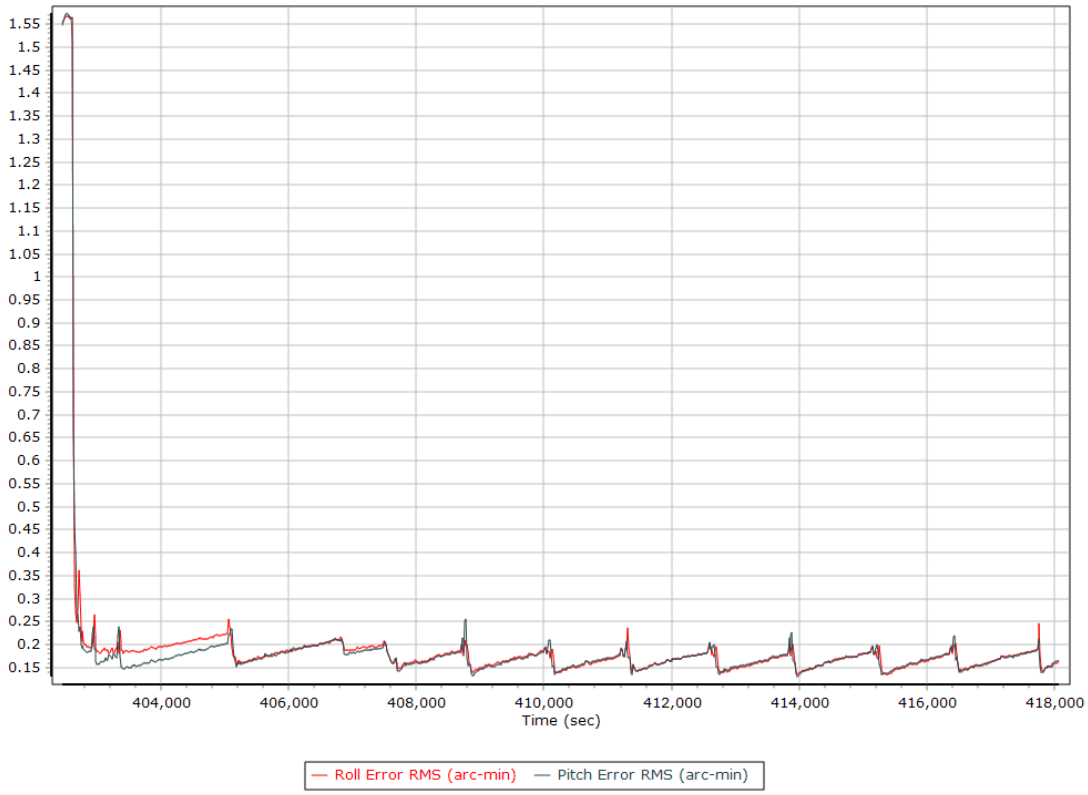
Forward Processed Performance Metrics

Position Error RMS (m)

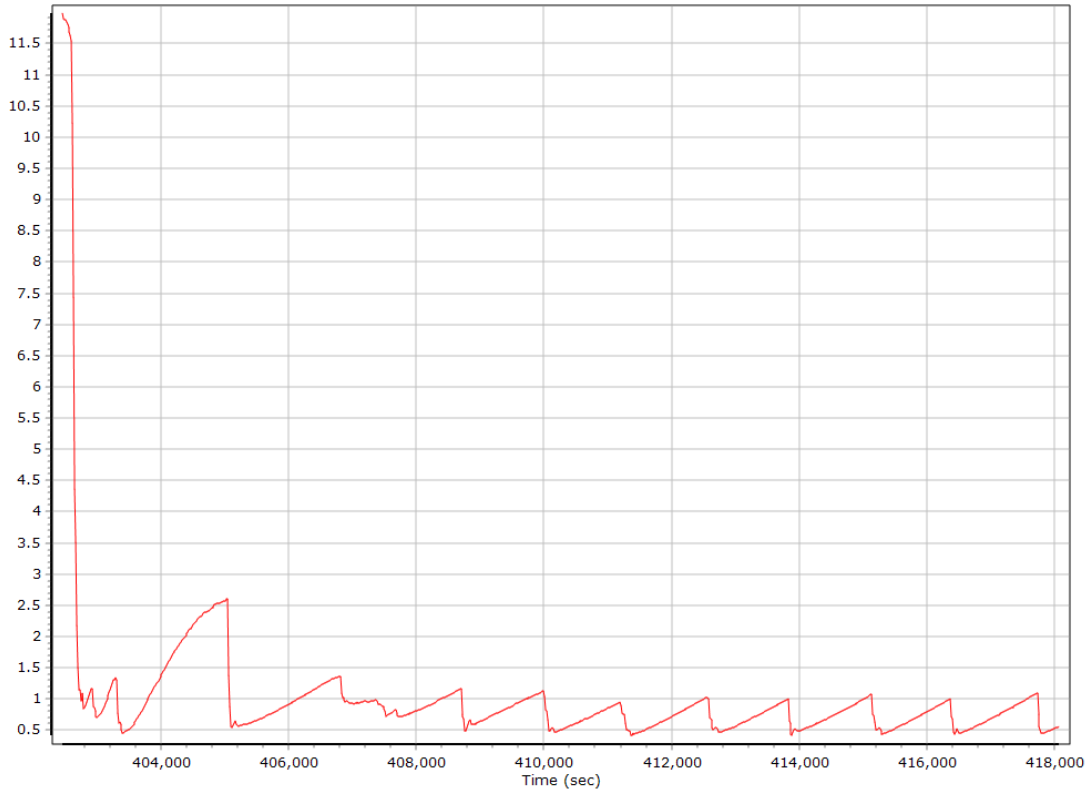
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

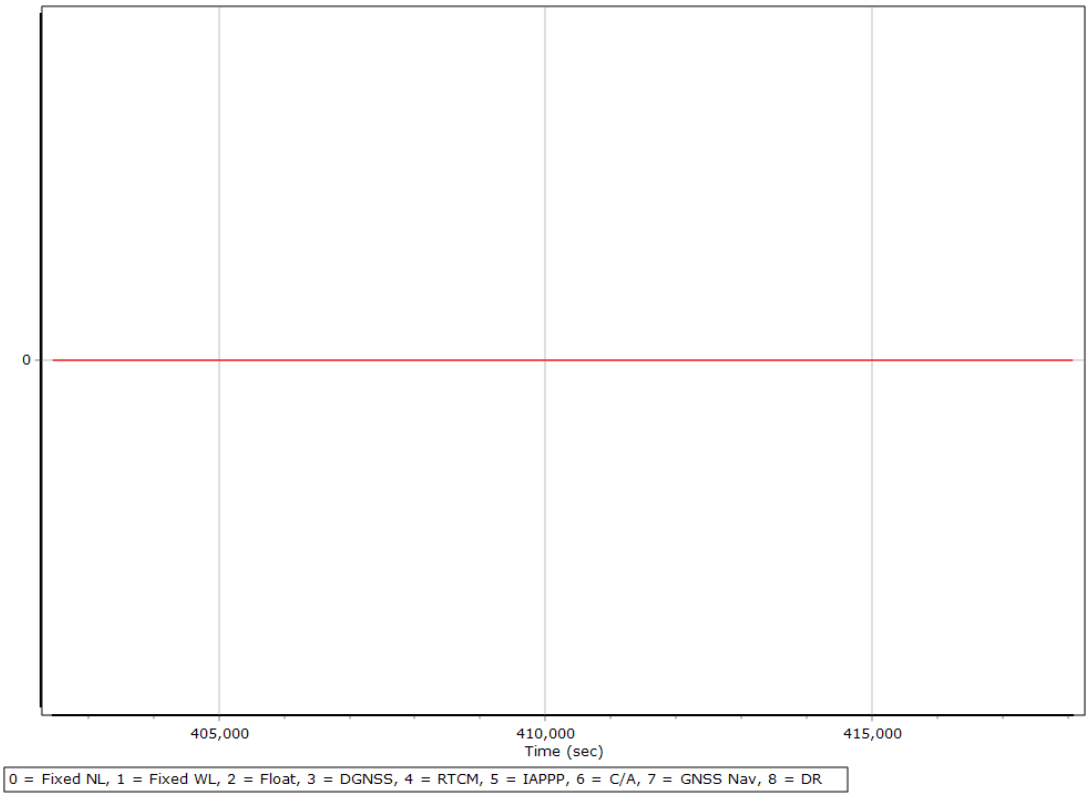


Heading Error RMS (arc-min)

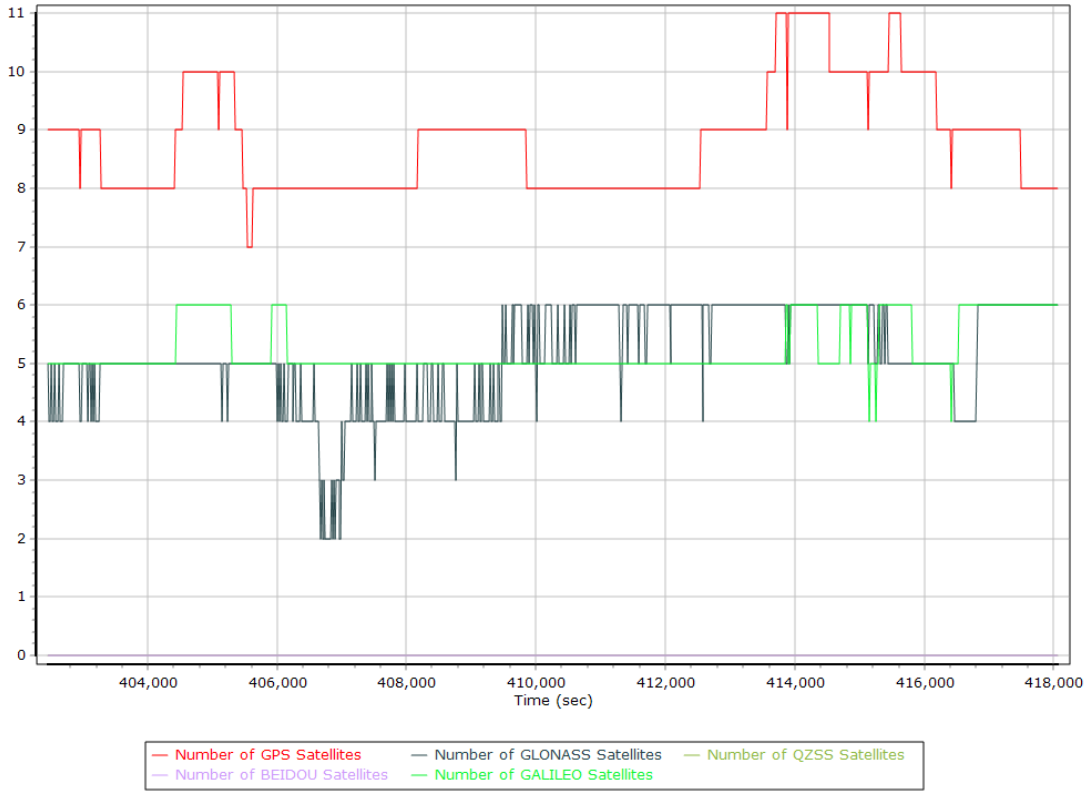
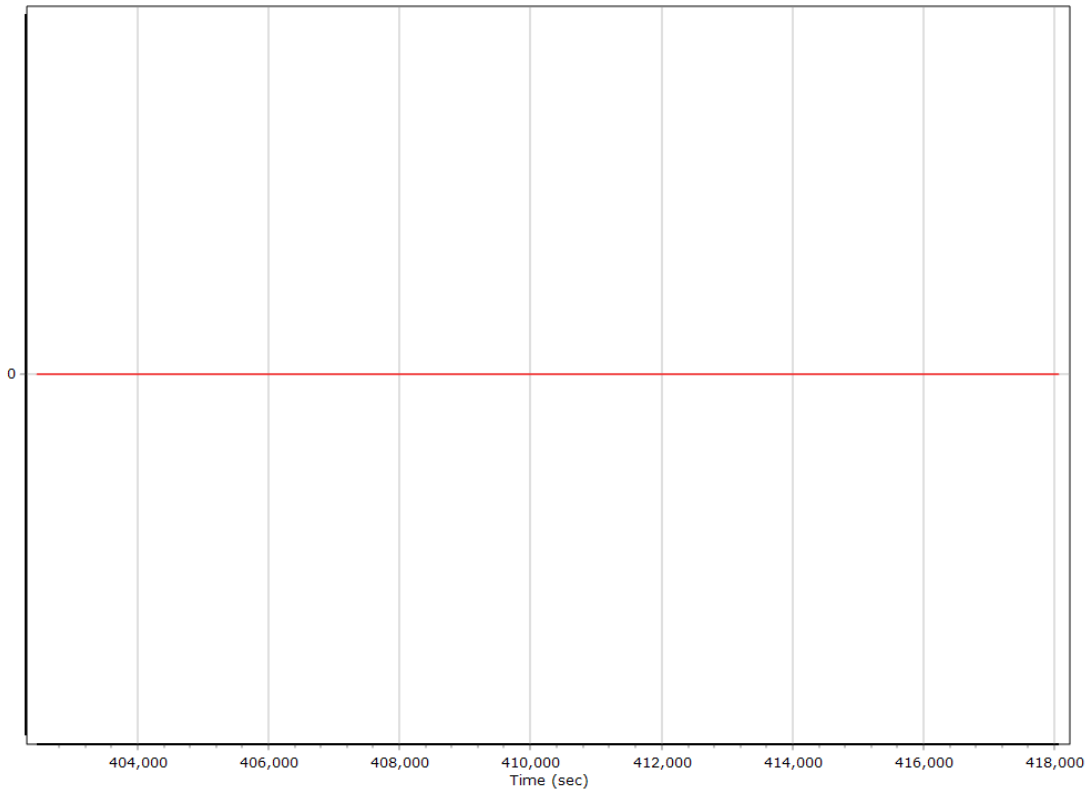


Forward Processed Solution Status

Processing Mode



Number of Satellites



Baseline Length