General Information

Mission Information

Project name	211013_A_5060428_nad2011_FINAL
Processing date	2021-10-18 14:33:36
Mission date	2021-10-13 16:08:24
Mission duration	04:26:19.000
Processing mode	IN-Fusion PP-RTX

Rover Hardware Information

Product	POS AV 610 VER6 HW2.5-12
Serial number	S/N10633
IMU type	57
Receiver type	BD982
Antenna type	AV39

Project File List

Rover Data Files

File name	File type
survey1.pos	POS Data

Input Files

File Name	File Type
Ephm2860.21g	GLONASS Broadcast Ephemeris
Ephm2860.21n	GPS Broadcast Ephemeris

Output Files

Filename	File type
sbet_211013_A_5060428_nad2011_FINAL.out	SBET Trajectory File

Rover Data Summary

First raw data file	survey1.pos		
Last raw data file	survey1.pos		
Start GPS week	2179		
Start time	317303.480 (10/13/2021 16:08:23)		
End time	333283.179 (10/13/2021 20:34:43)		
Start of fine alignment	317650.003 (10/13/2021 16:14:10)		
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	-90.000
Reference to Primary GNSS lever arm (m)	0.534	0.060	-1.199
Reference to Primary GNSS lever arm std dev (m)	-1.000		
Aircraft to Reference mounting angles (deg)	0.000	0.000	0.000

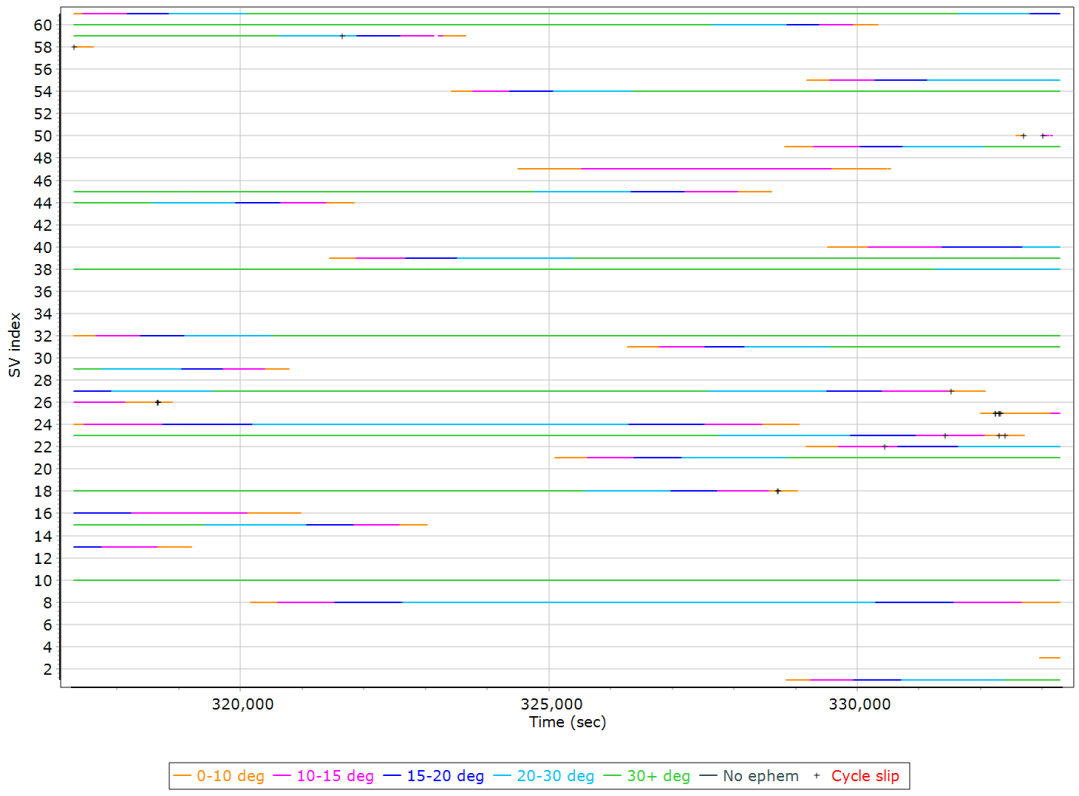
Rover Data QC

Raw IMU Import QC Summary

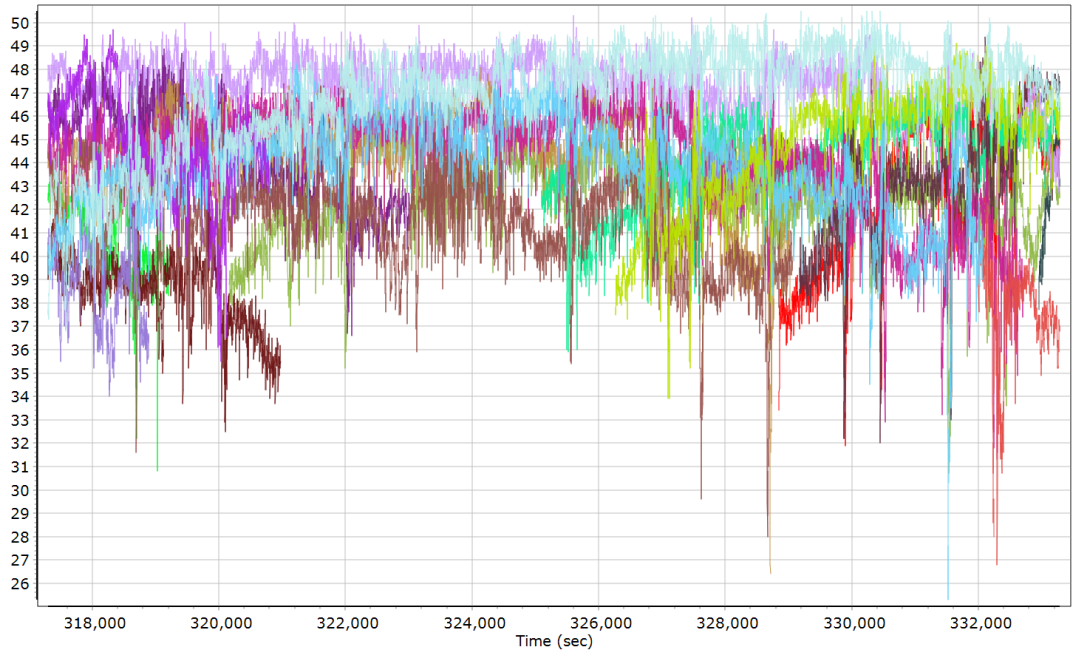
IMU data input file	imu_211013_A_5060428_nad2011_FINAL.dat
IMU data check log file	imudt_211013_A_5060428_nad2011_FINAL.log
IMU Records Processed	3195342
Termination Status	Normal
IMU Anomalies	0

Primary Observables & Satellite Data

GPS/GLONASS L1 Satellite Lock/Elevation

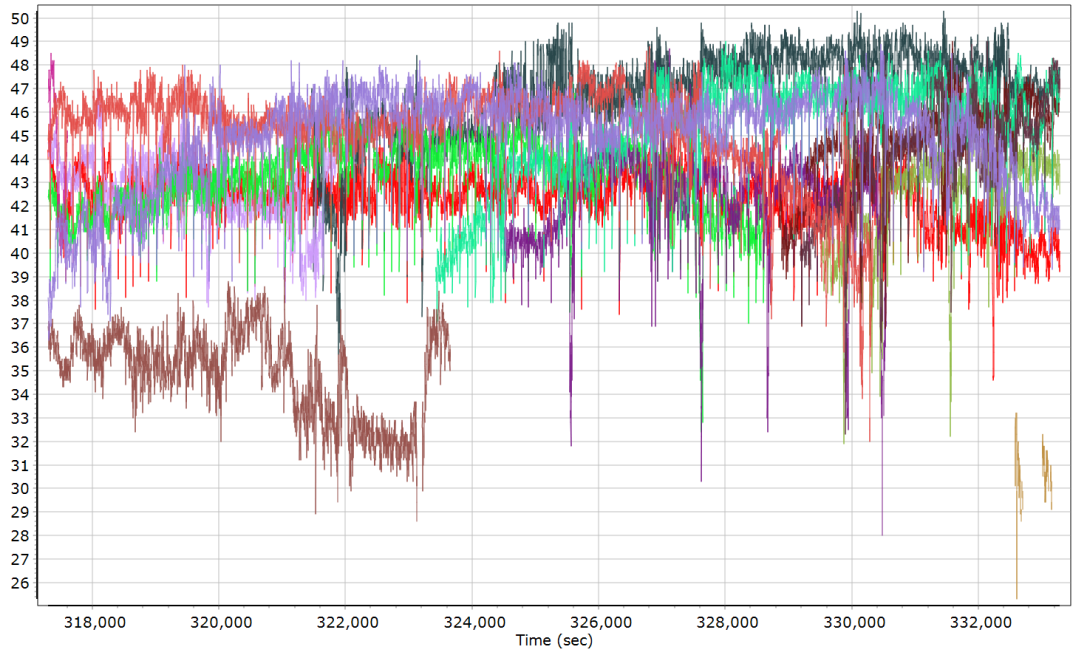


GPS L1 SNR



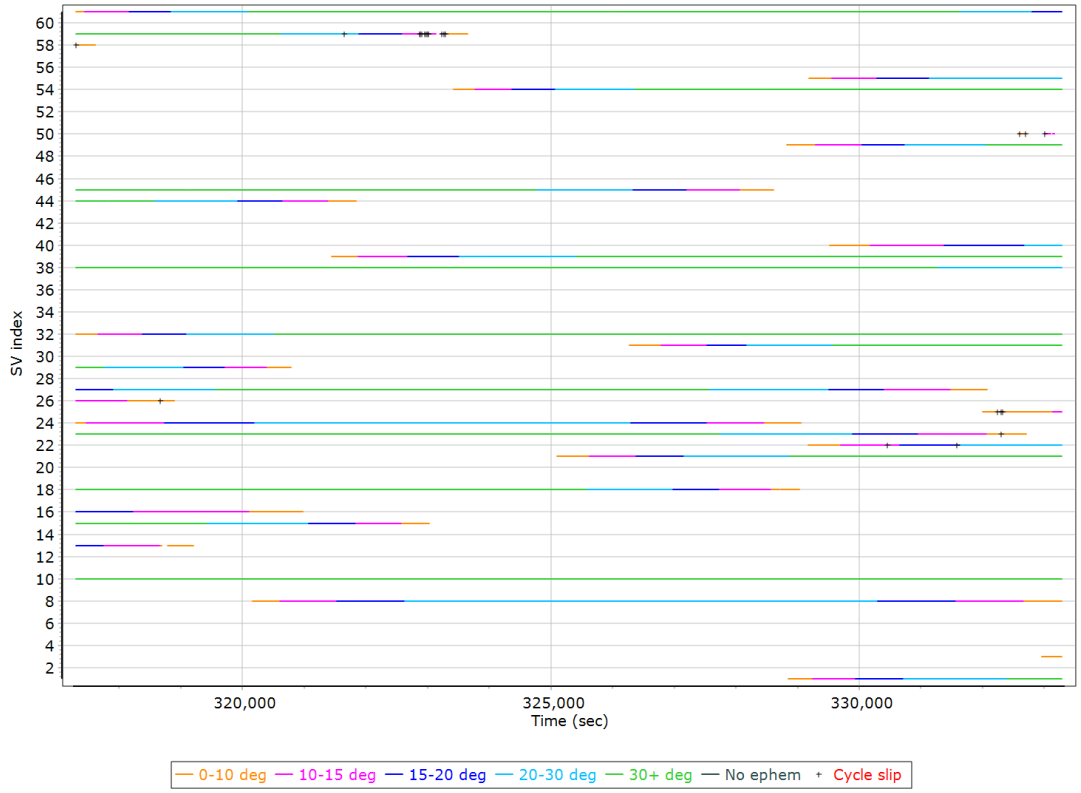
GPS PRN 01 L1 SNR (dB/Hz) GPS PRN 03 L1 SNR (dB/Hz) GPS PRN 08 L1 SNR (dB/Hz) GPS PRN 10 L1 SNR (dB/Hz)
GPS PRN 13 L1 SNR (dB/Hz) GPS PRN 15 L1 SNR (dB/Hz) GPS PRN 16 L1 SNR (dB/Hz) GPS PRN 18 L1 SNR (dB/Hz)
GPS PRN 21 L1 SNR (dB/Hz) GPS PRN 22 L1 SNR (dB/Hz) GPS PRN 23 L1 SNR (dB/Hz) GPS PRN 24 L1 SNR (dB/Hz)
GPS PRN 25 L1 SNR (dB/Hz) GPS PRN 26 L1 SNR (dB/Hz) GPS PRN 27 L1 SNR (dB/Hz) GPS PRN 29 L1 SNR (dB/Hz)
GPS PRN 31 L1 SNR (dB/Hz) GPS PRN 32 L1 SNR (dB/Hz)

GLONASS L1 SNR

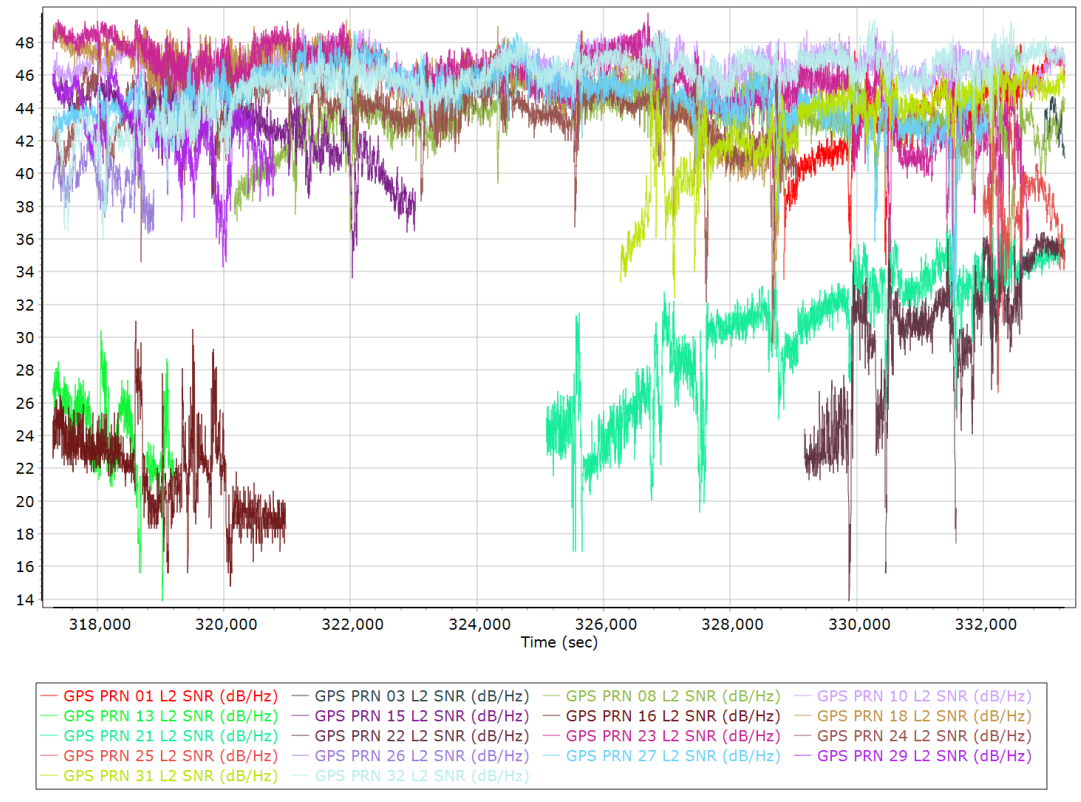


GLONASS 01 L1 SNR (dB/Hz) GLONASS 02 L1 SNR (dB/Hz) GLONASS 03 L1 SNR (dB/Hz)
GLONASS 07 L1 SNR (dB/Hz) GLONASS 08 L1 SNR (dB/Hz) GLONASS 10 L1 SNR (dB/Hz)
GLONASS 12 L1 SNR (dB/Hz) GLONASS 13 L1 SNR (dB/Hz) GLONASS 17 L1 SNR (dB/Hz)
GLONASS 18 L1 SNR (dB/Hz) GLONASS 21 L1 SNR (dB/Hz) GLONASS 22 L1 SNR (dB/Hz)
GLONASS 23 L1 SNR (dB/Hz) GLONASS 24 L1 SNR (dB/Hz)

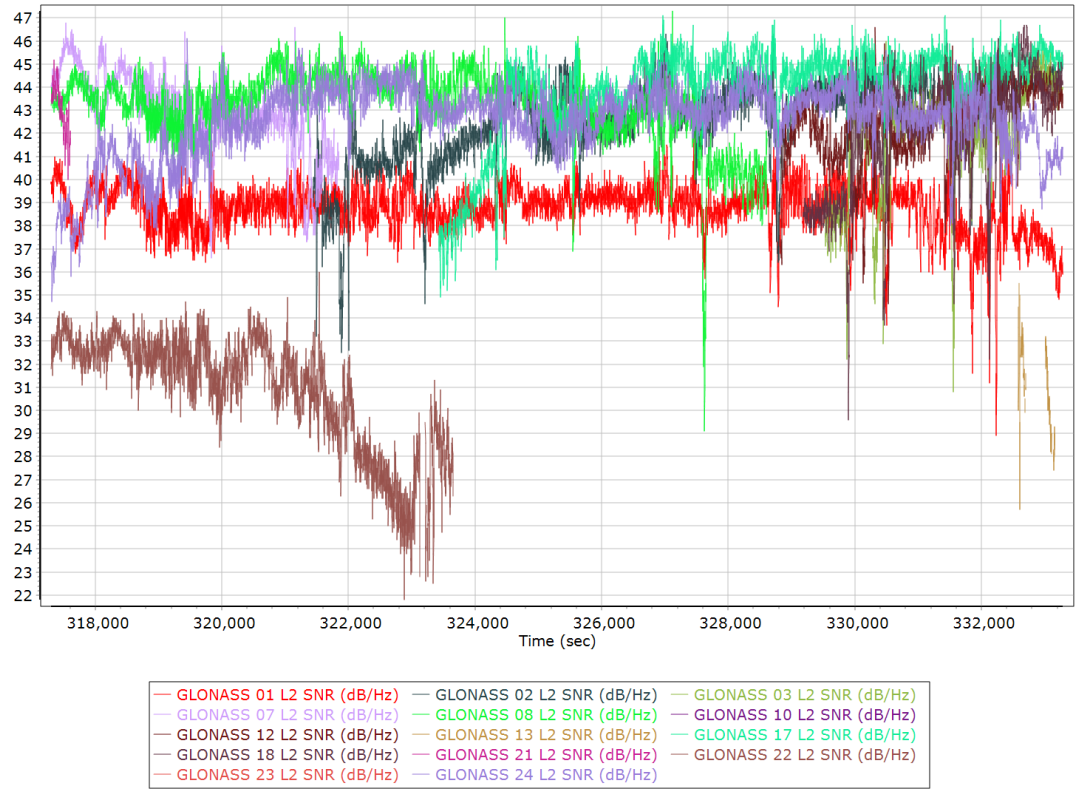
GPS/GLONASS L2 Satellite Lock/Elevation



GPS L2 SNR

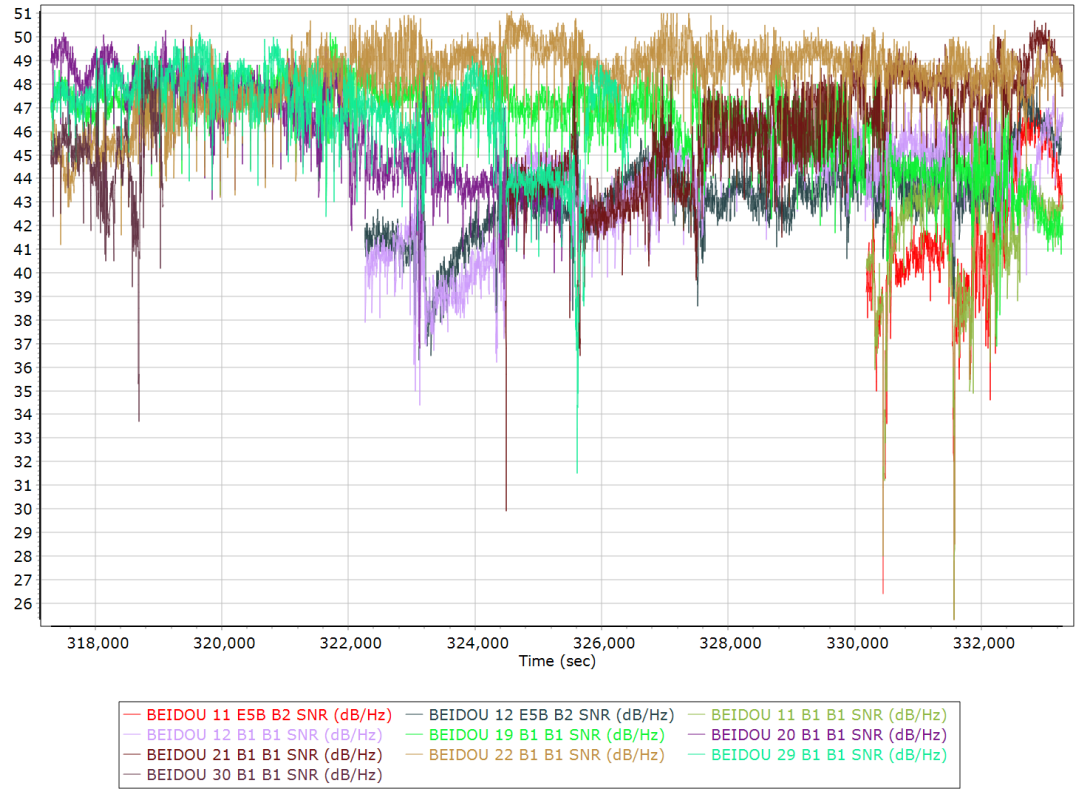


GLONASS L2 SNR

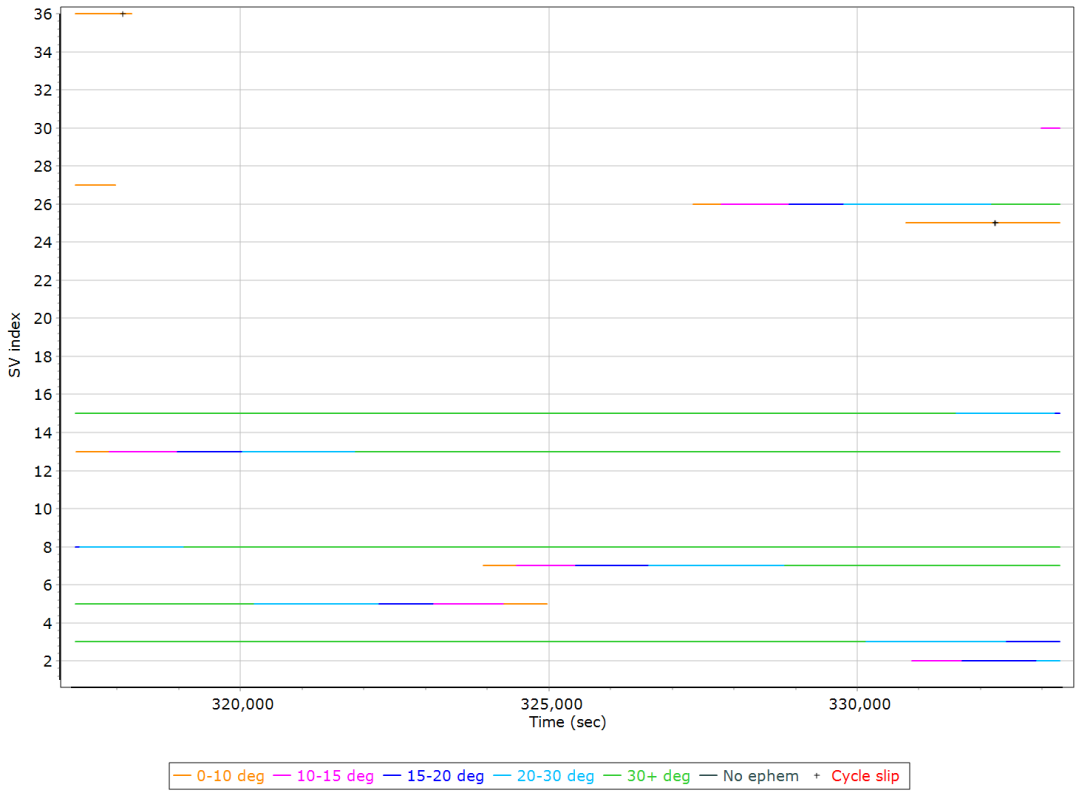


BEIDOU Satellite Lock/Elevation

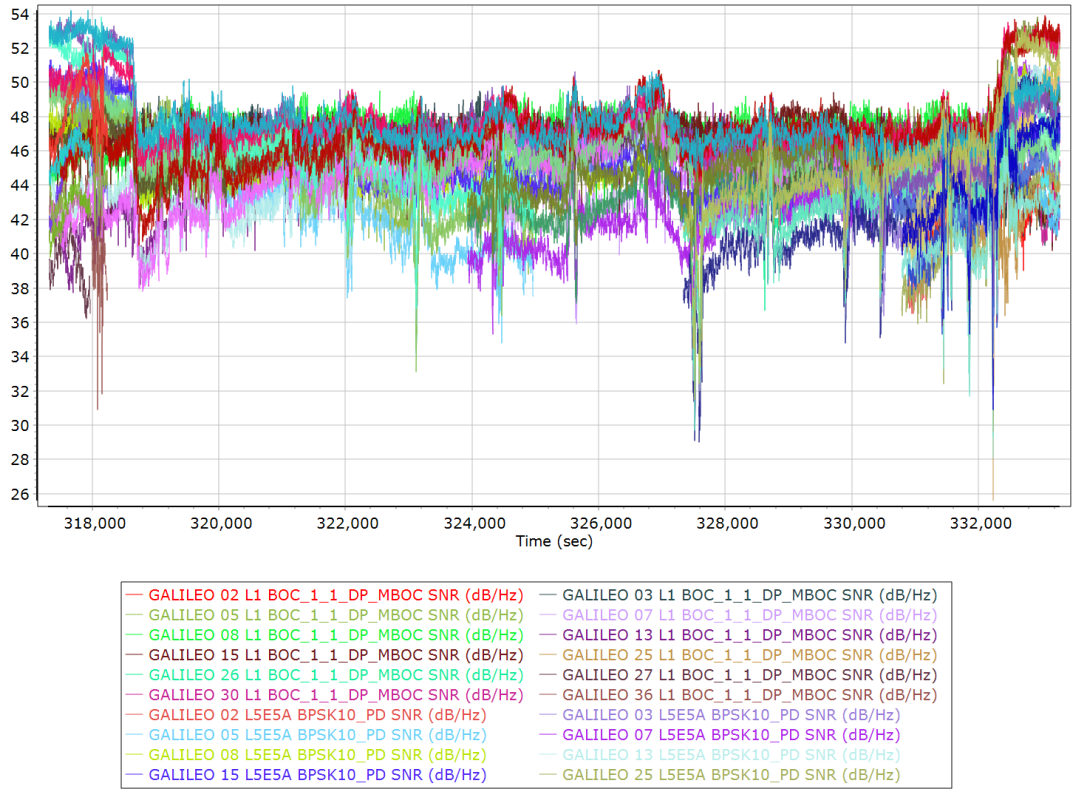
BEIDOU SNR



GALILEO Satellite Lock/Elevation

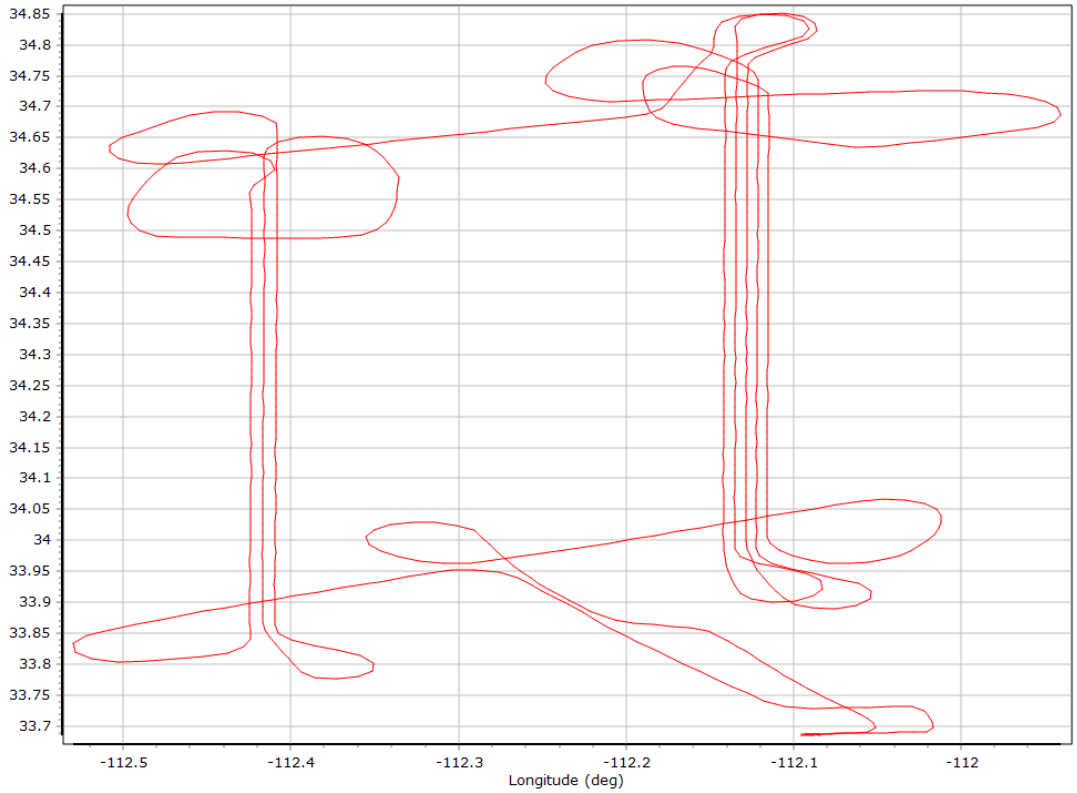


GALILEO SNR

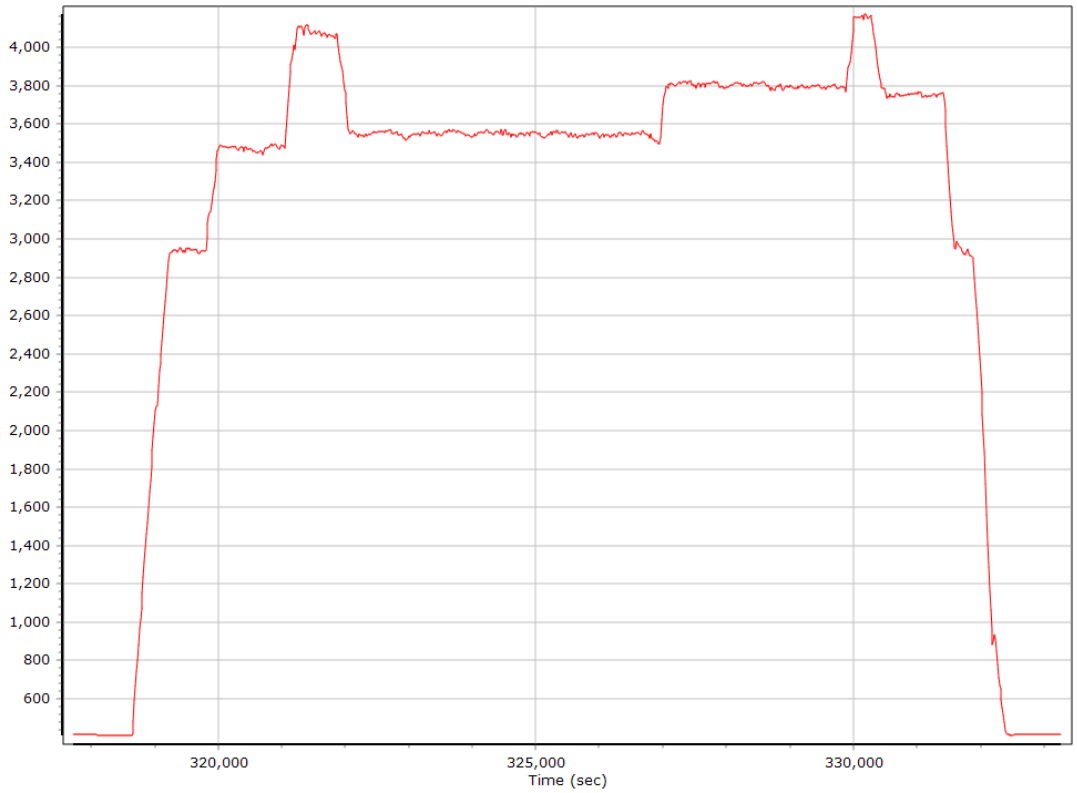

54
52
50
48
46
44
42
40
38
36
34
32
30
28
26
318,000
320,000
322,000
324,000
326,000
328,000
330,000
332,000
Time (sec)
GALILEO 02 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 03 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 05 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 07 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 08 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 13 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 15 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 25 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 26 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 27 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 30 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 36 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 02 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 03 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 05 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 07 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 08 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 13 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 15 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 25 L5E5A BPSK10_PD SNR (dB/Hz)

Smoothed Trajectory Information

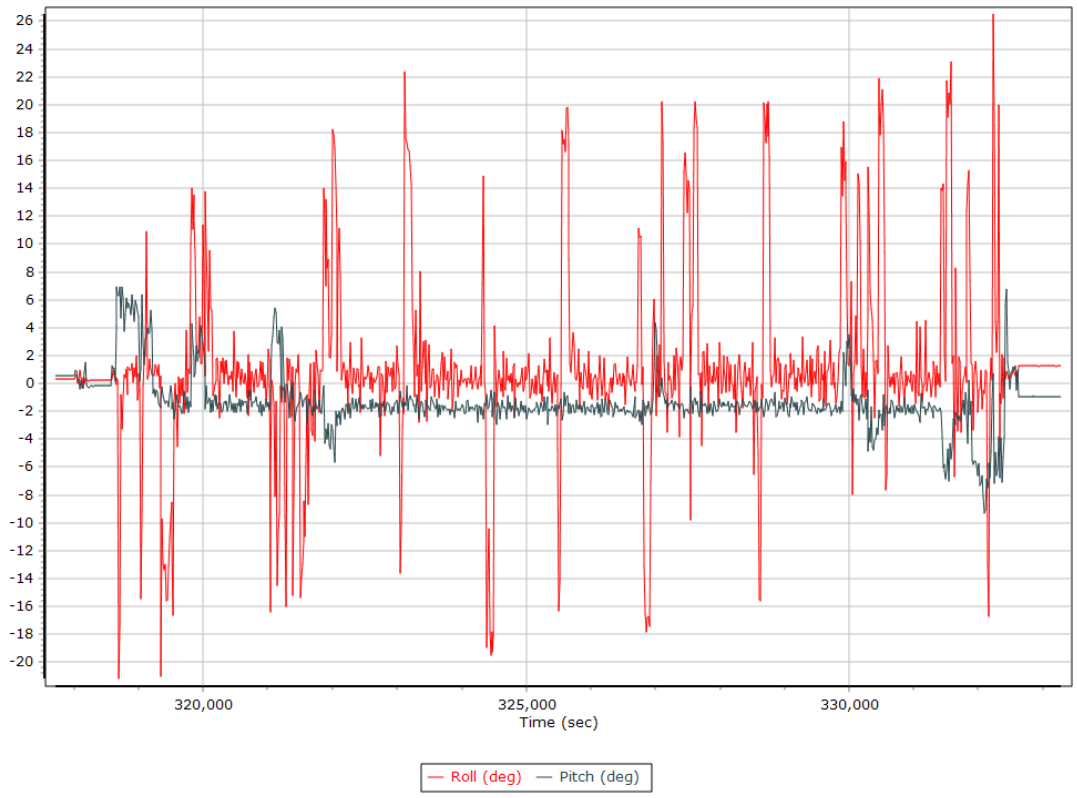
Top View



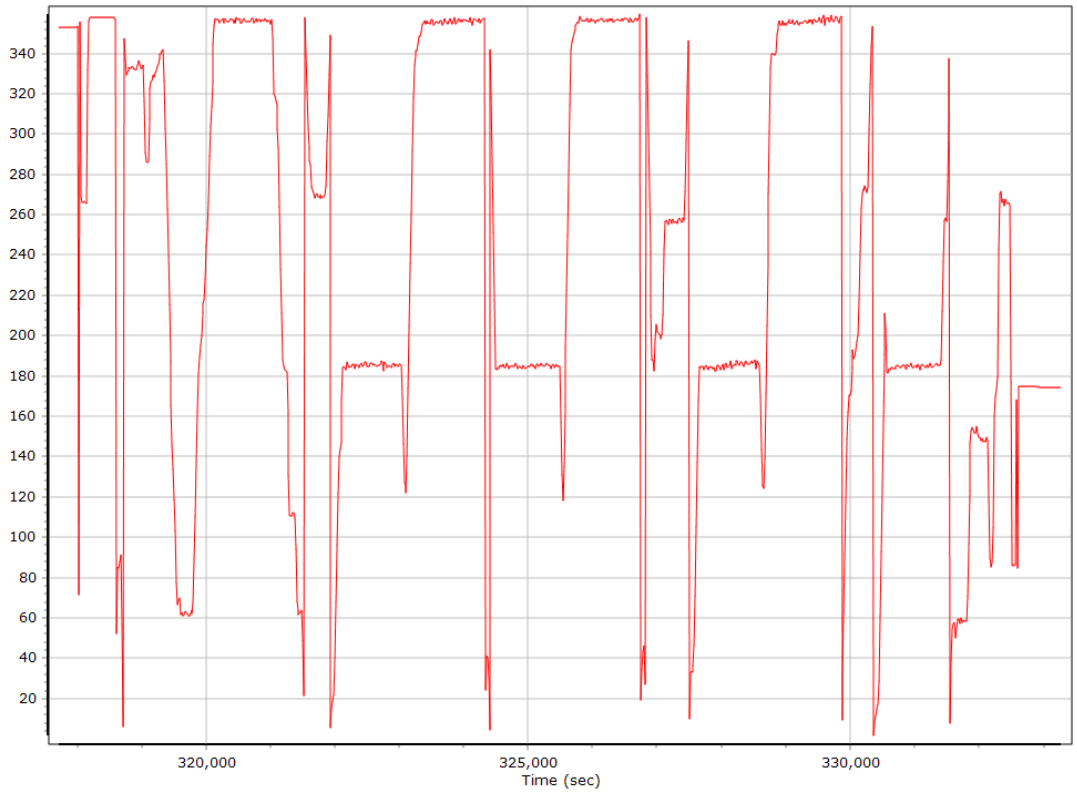
Altitude



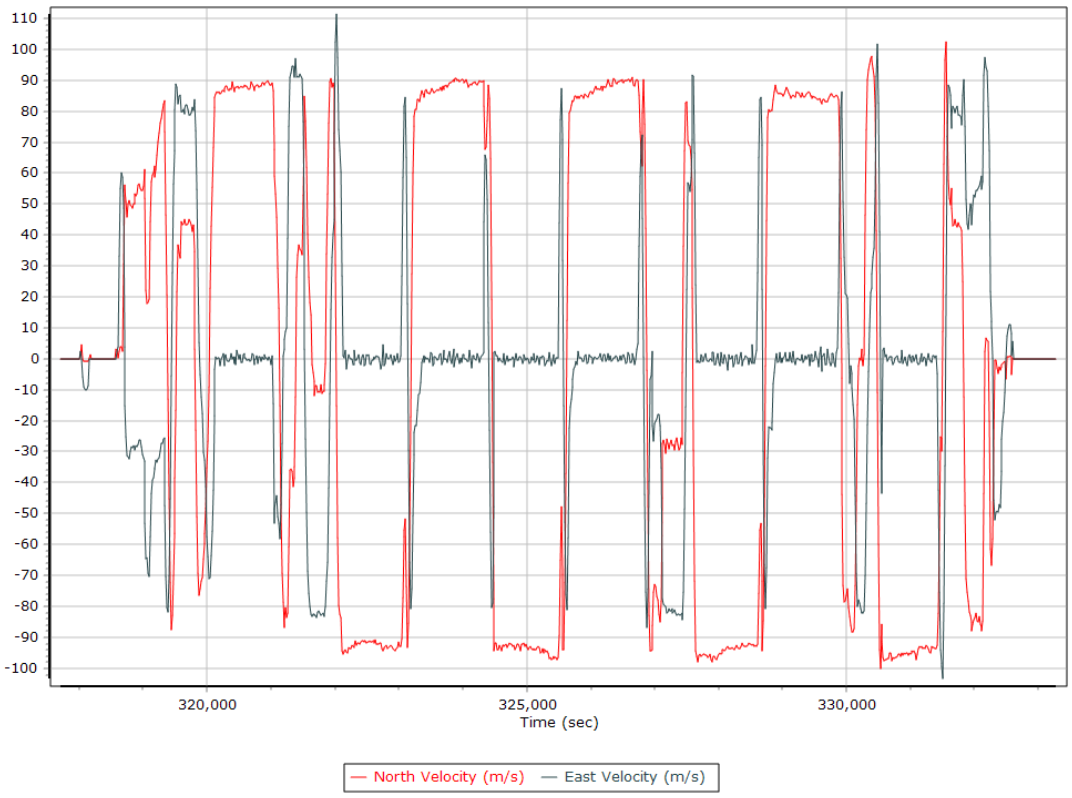
Roll/Pitch



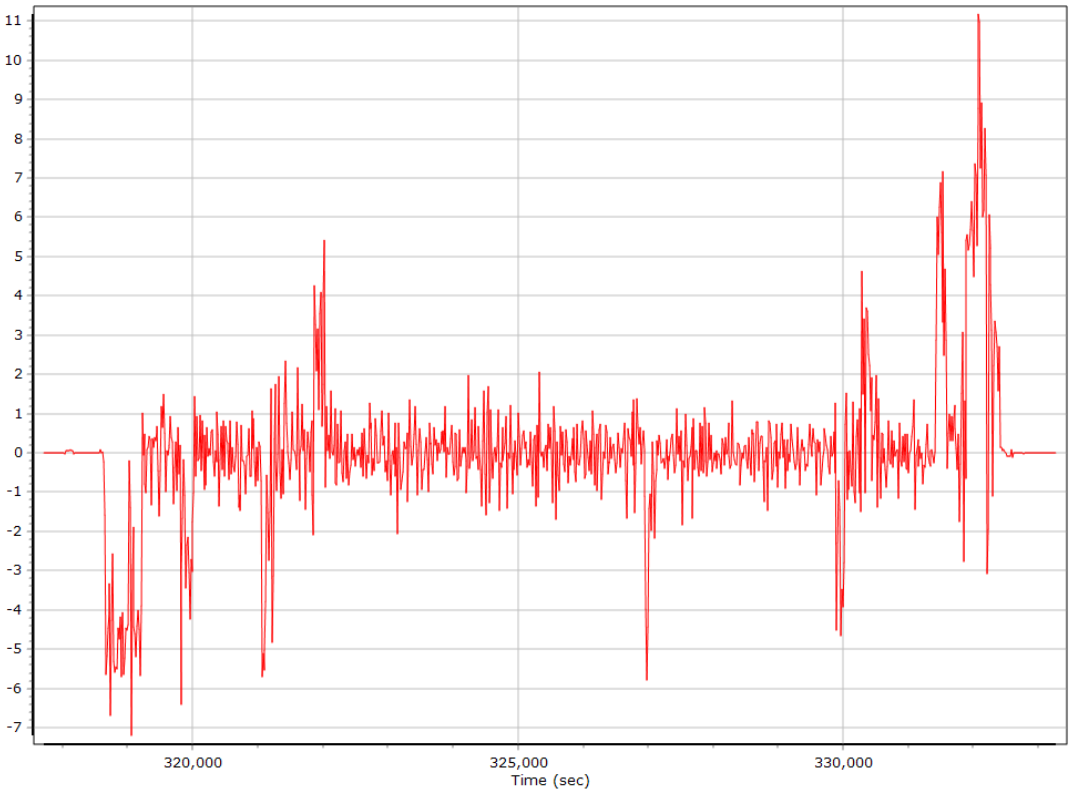
Heading



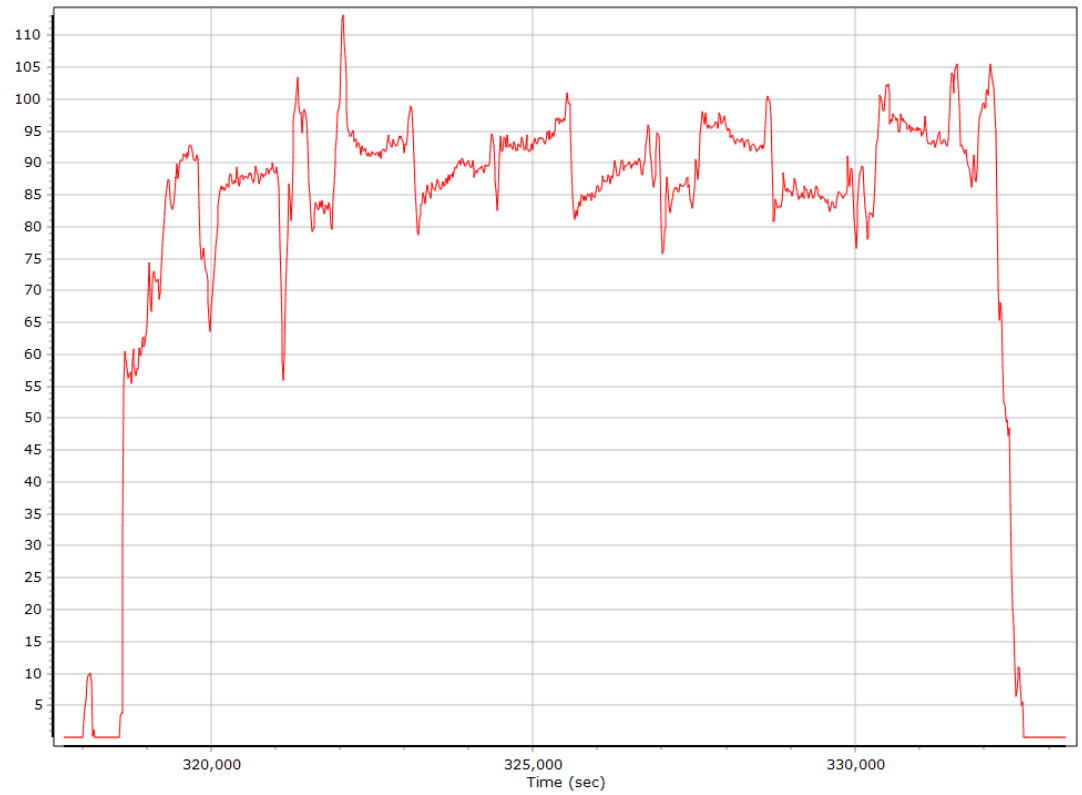
North/East Velocity



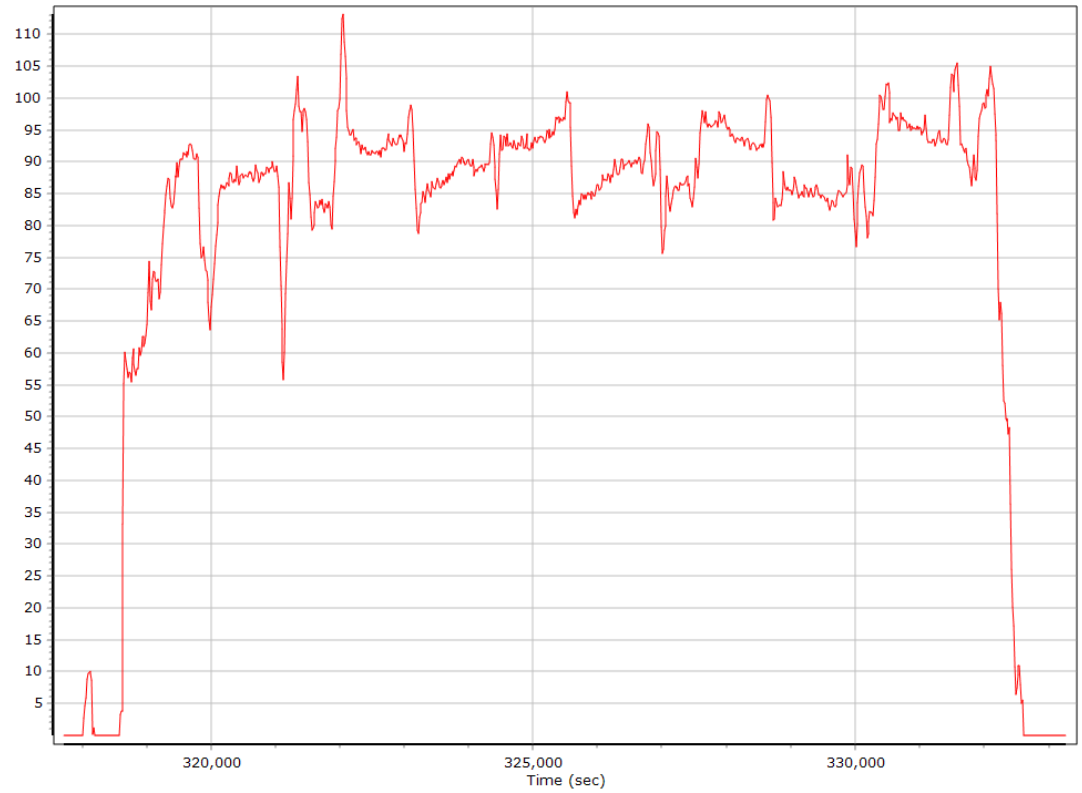
Down Velocity



Total Speed

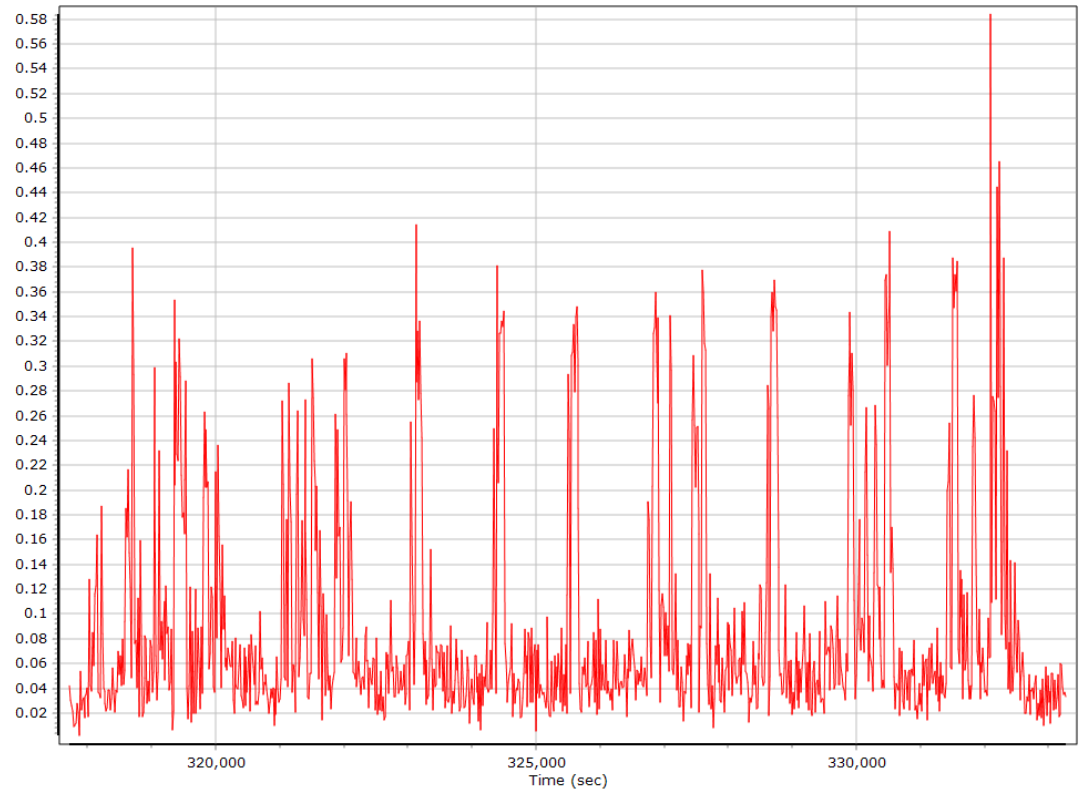


Ground Speed



Body Acceleration

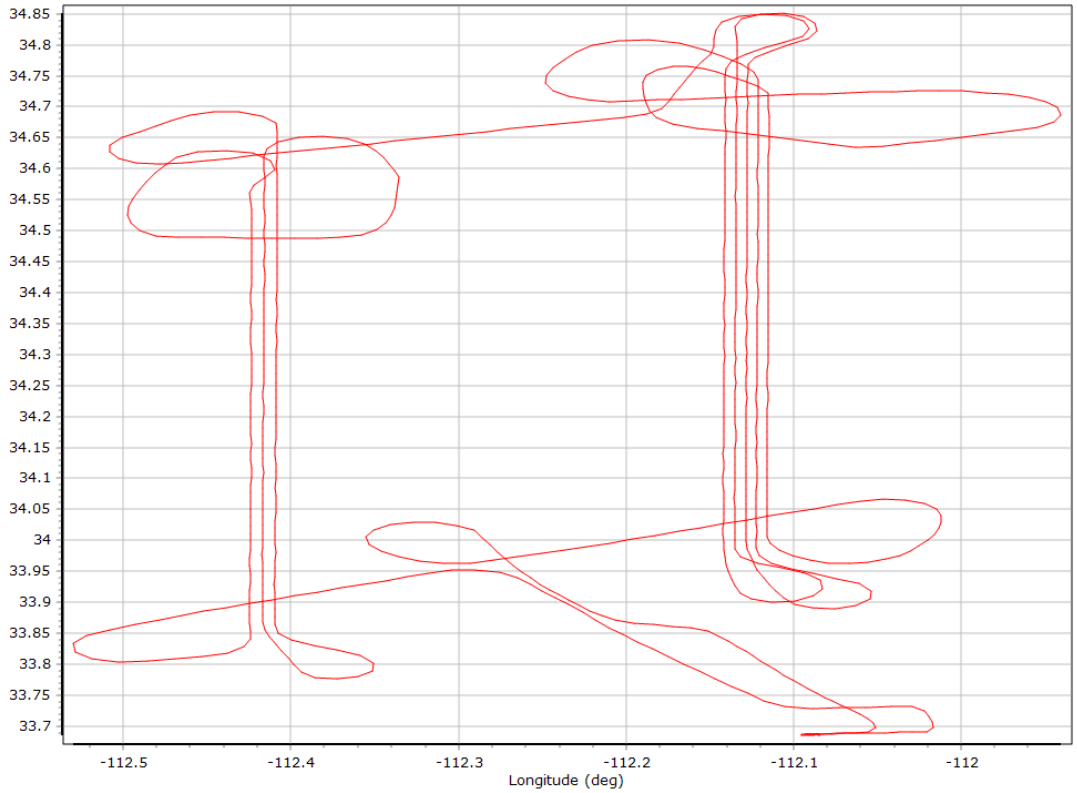
Total Body Acceleration



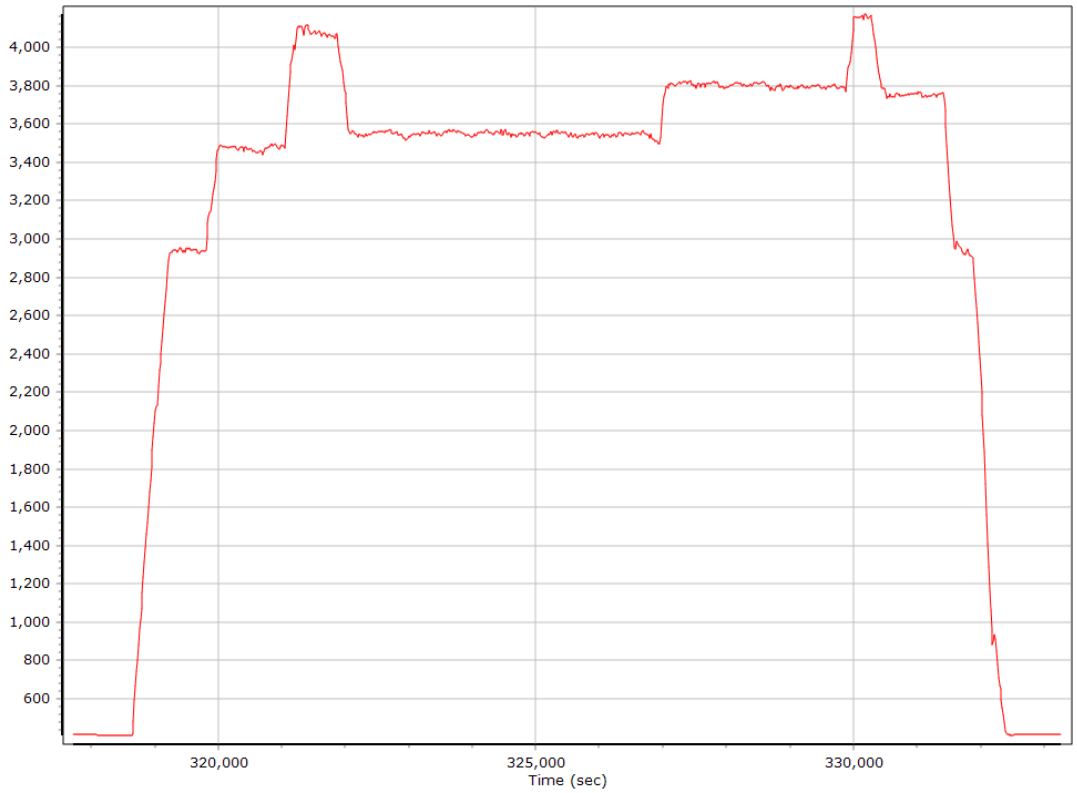
Body Angular Rate

Forward Processed Trajectory Information

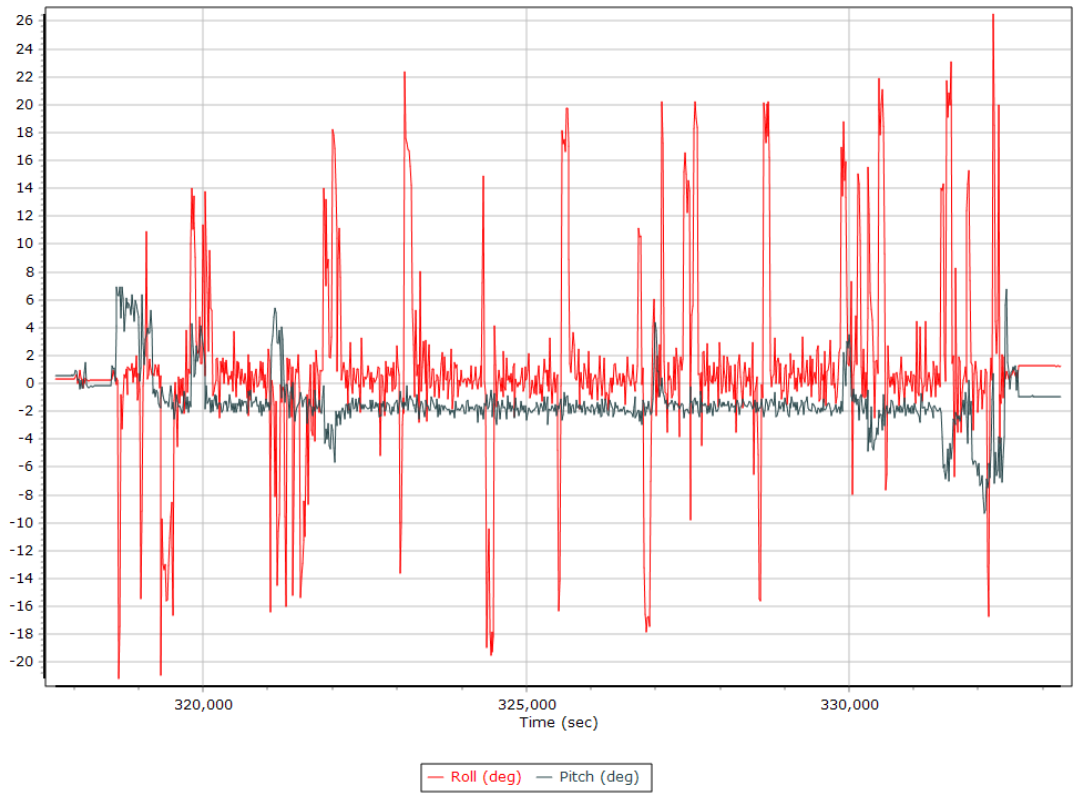
Top View



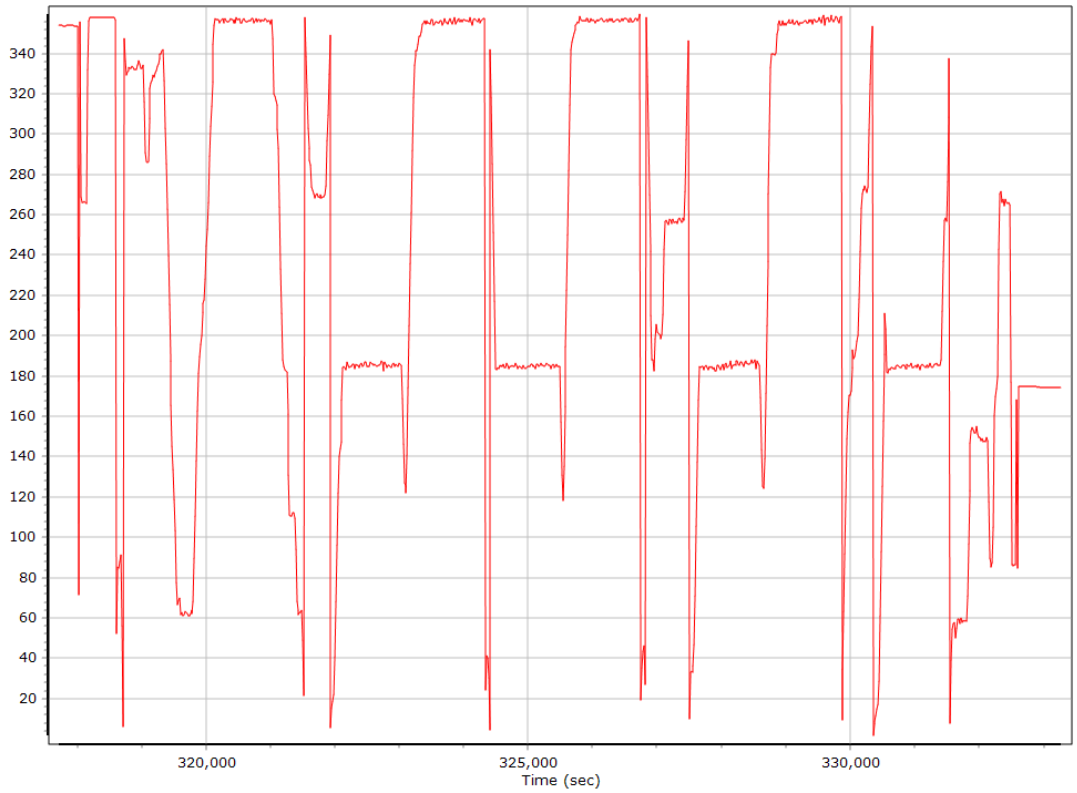
Altitude



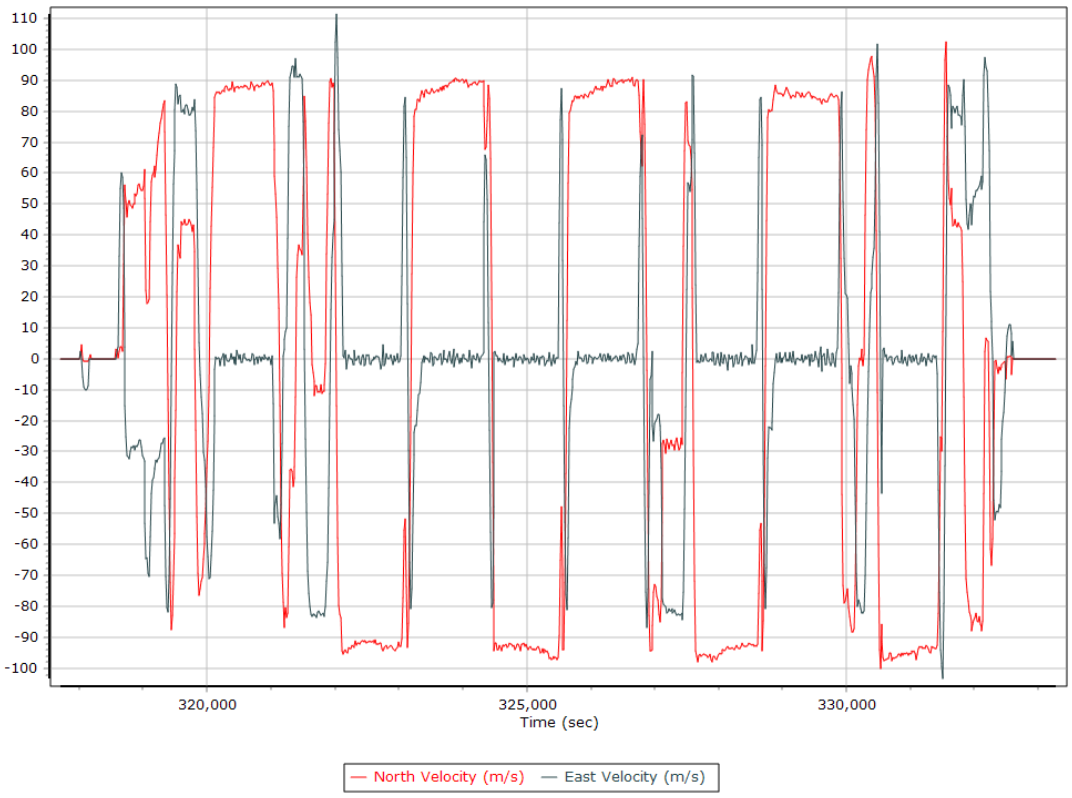
Roll/Pitch



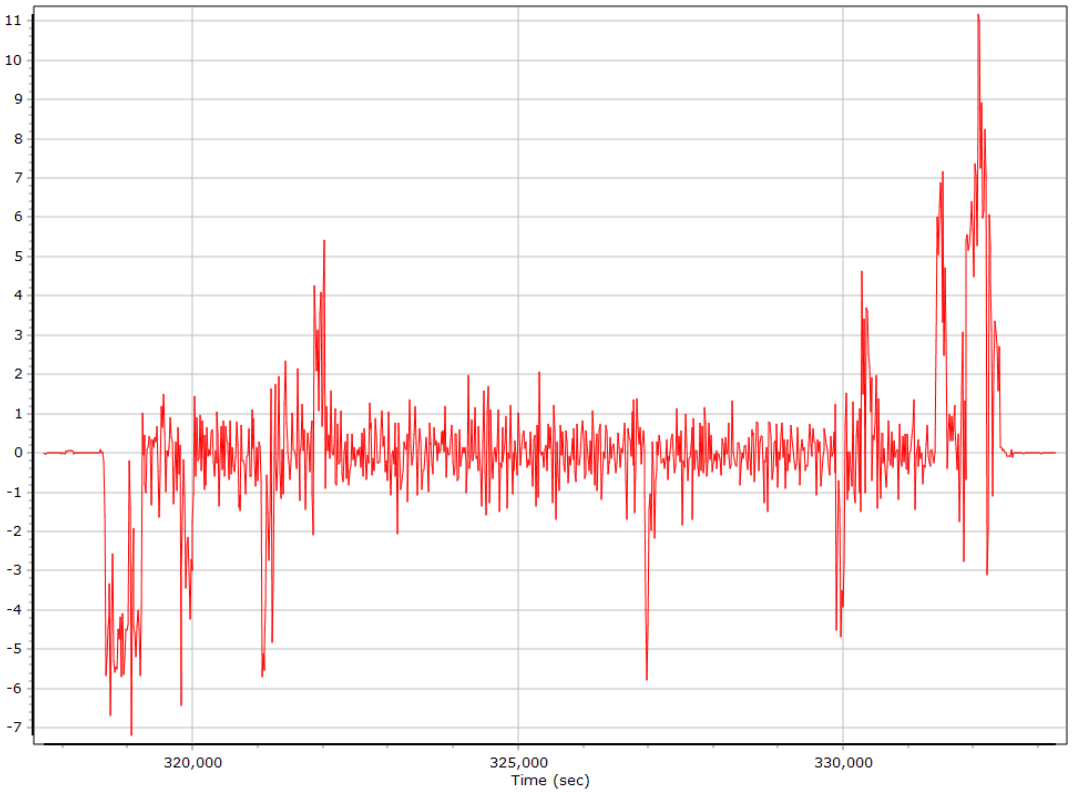
Heading



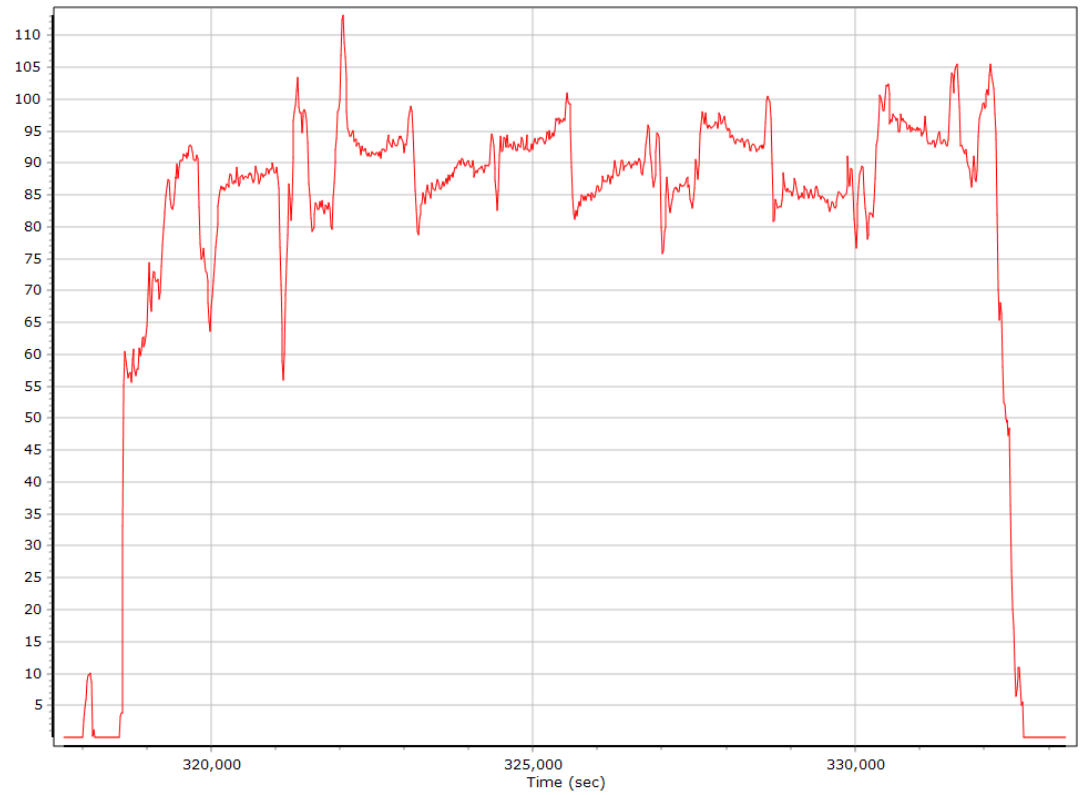
North/East Velocity



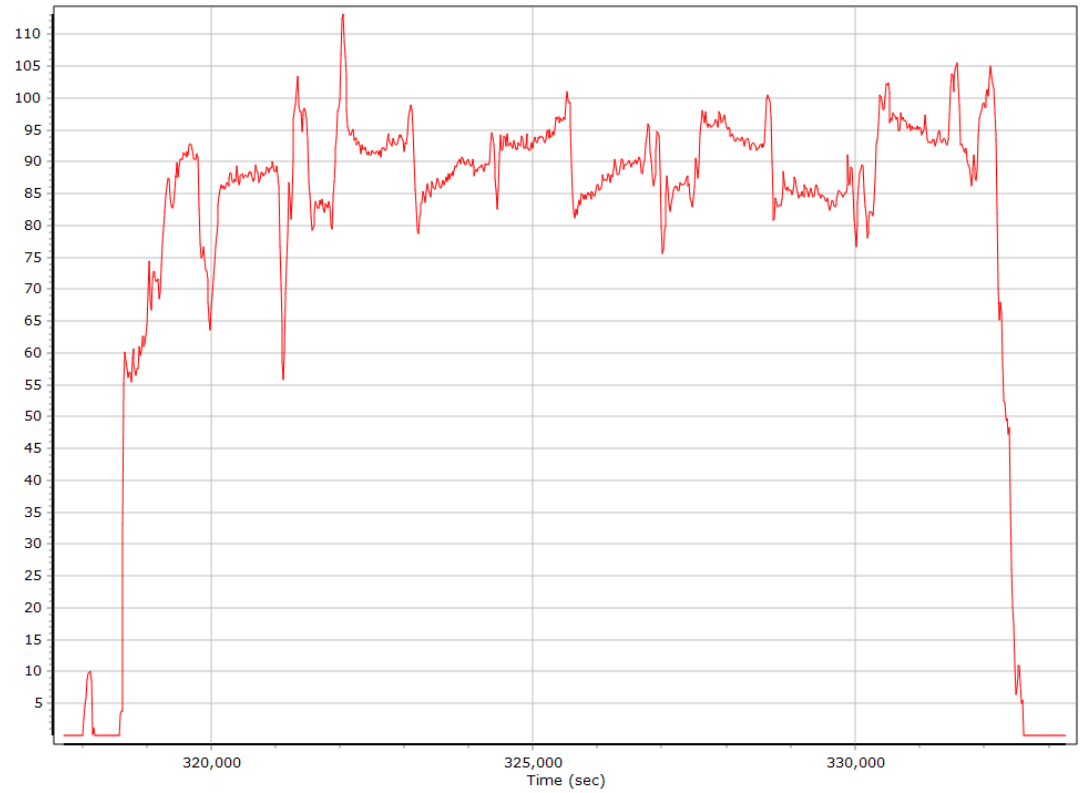
Down Velocity



Total Speed

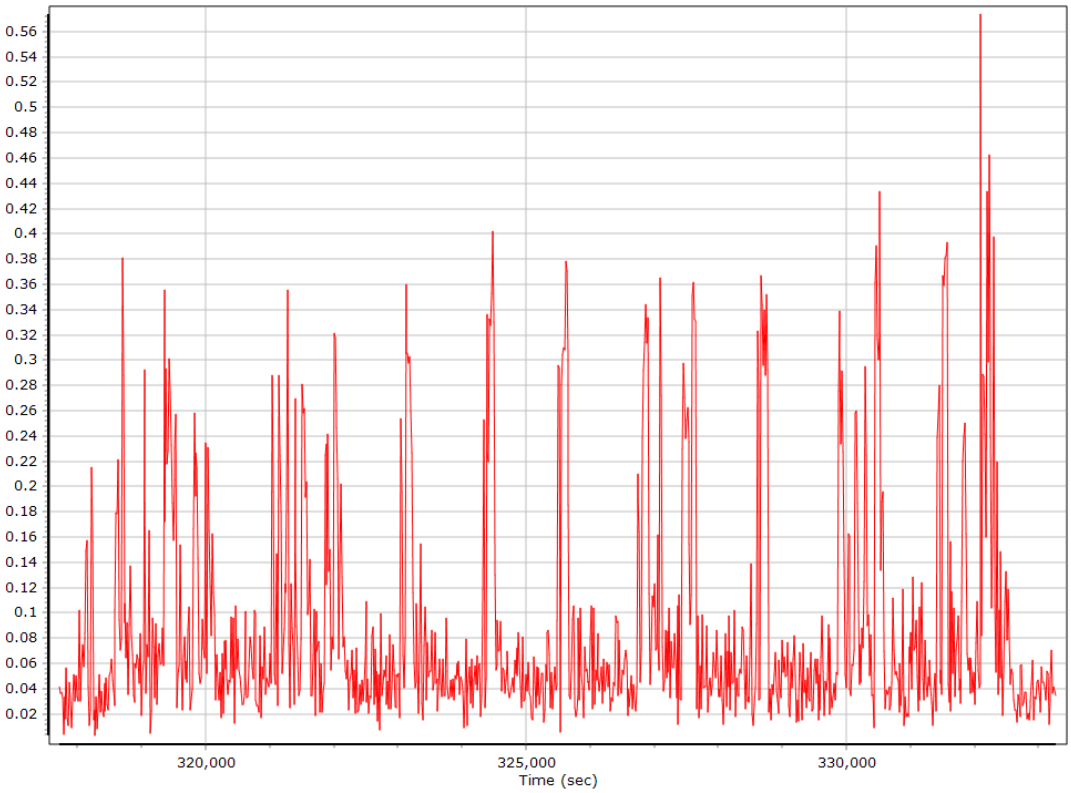


Ground Speed



Body Acceleration

Total Body Acceleration



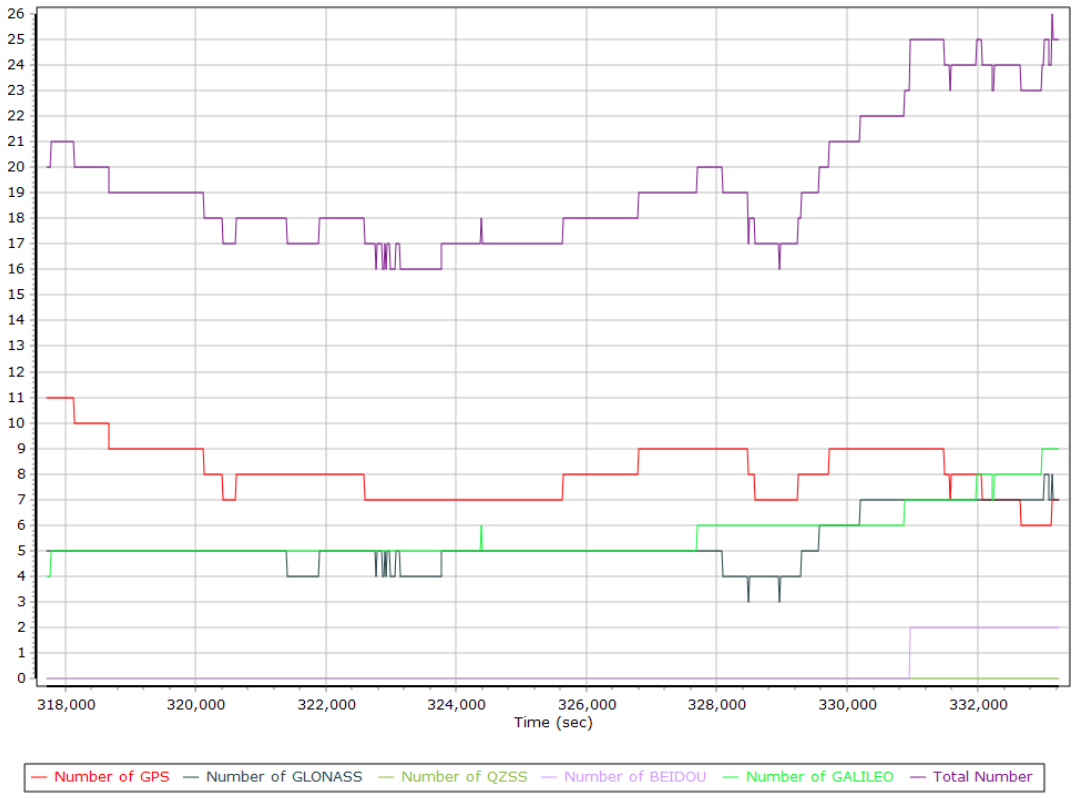
Body Angular Rate

GNSS QC

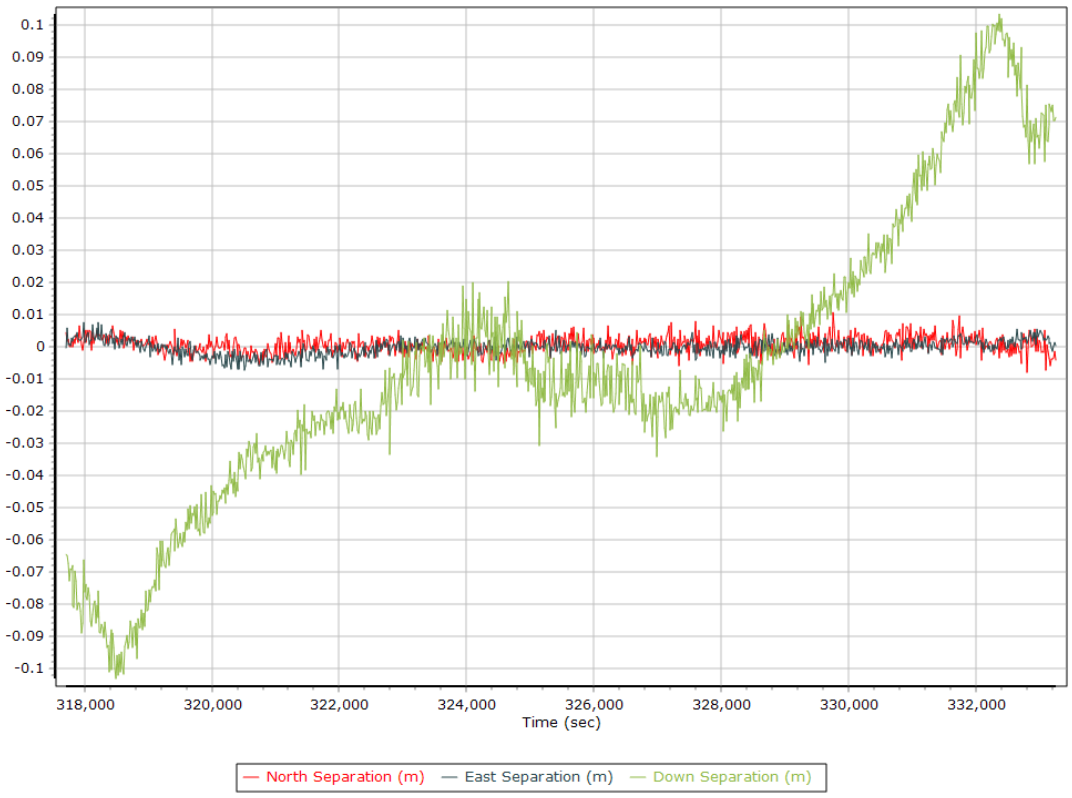
GNSS QC Statistics

Statistics	Min	Max	Mean
Baseline length (km)	0.00	0.00	
Number of GPS SV	4	11	8
Number of GLONASS SV	0	8	5
Number of QZSS SV	0	0	0
Number of BEIDOU SV	0	2	0
Number of GALILEO SV	0	9	6
Total number of SV	9	26	19
PDOP	1.01	2.20	1.22
QC Solution Gaps	1.00	2.00	
Solution Type	Fixed	Float	No solution
Epoch (sec)	15923.00	0.00	20.00
Percentage	99.87	0.00	0.13

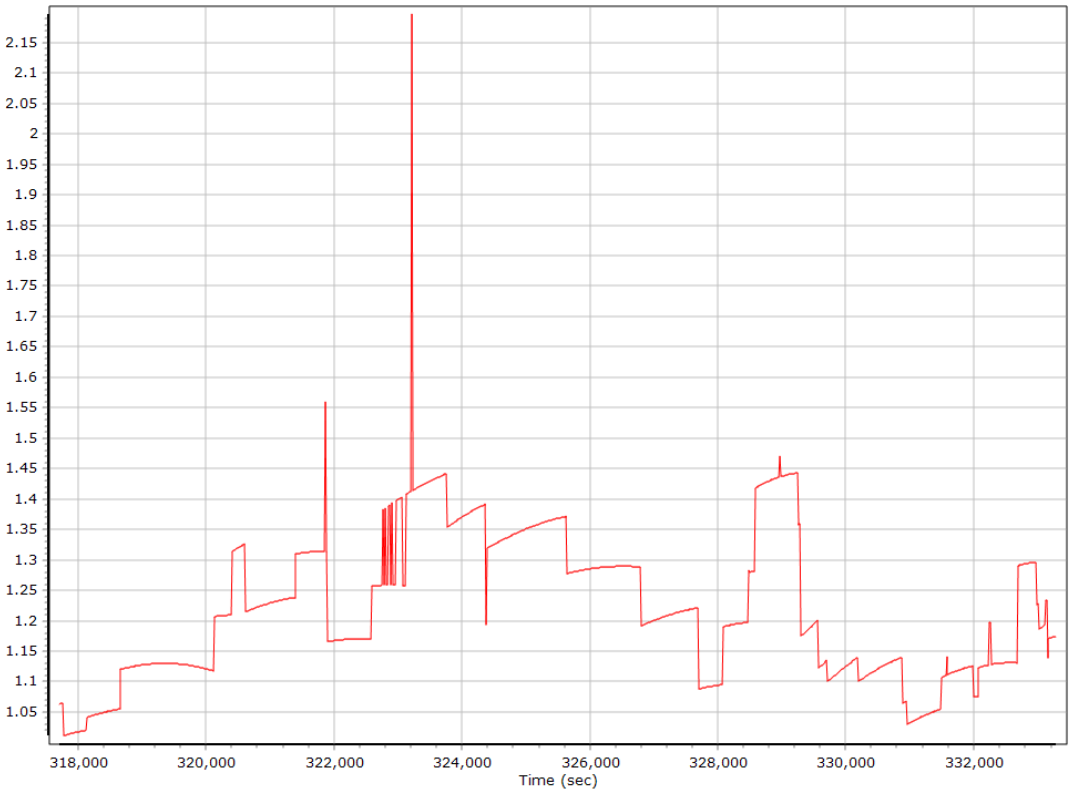
Num SVs in solution



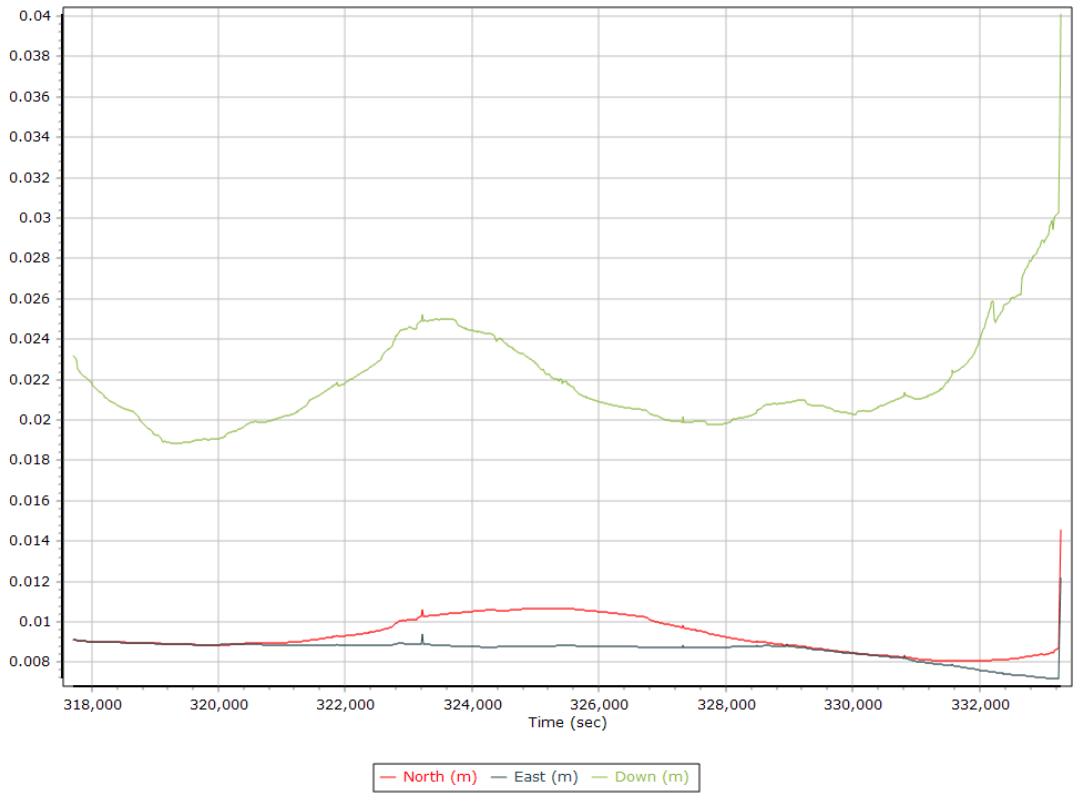
Forward/Reverse Separation



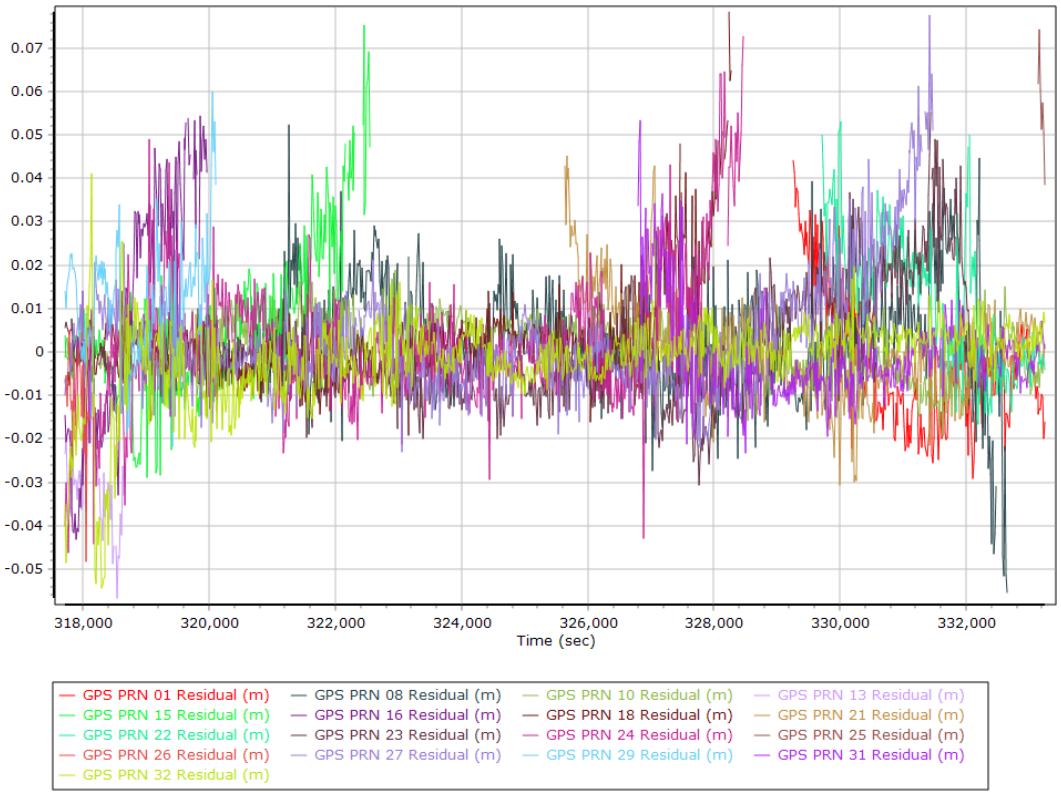
PDOP



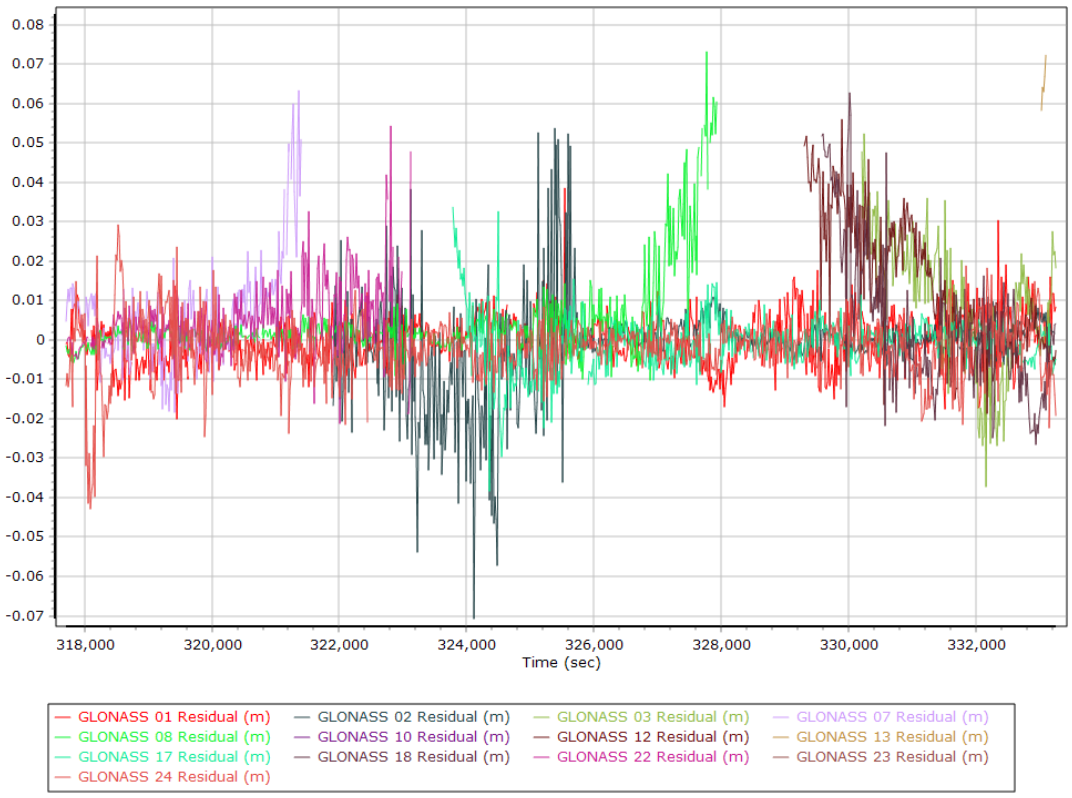
Estimated Position Accuracy



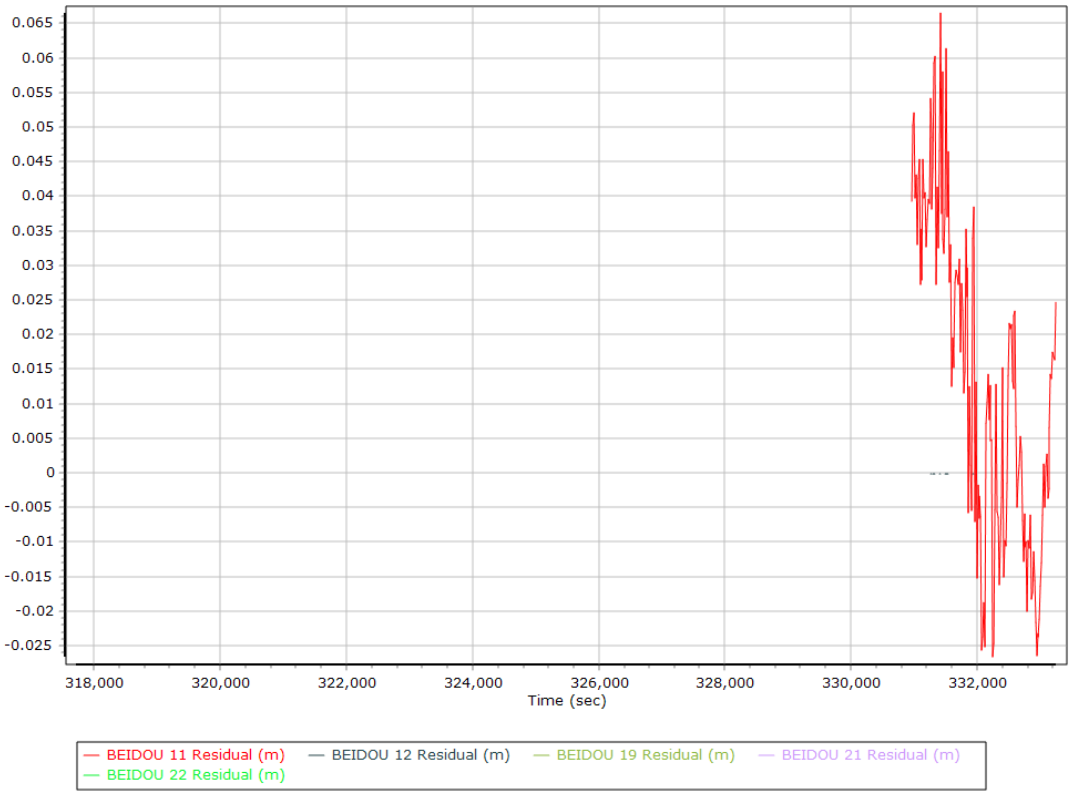
GPS Residuals



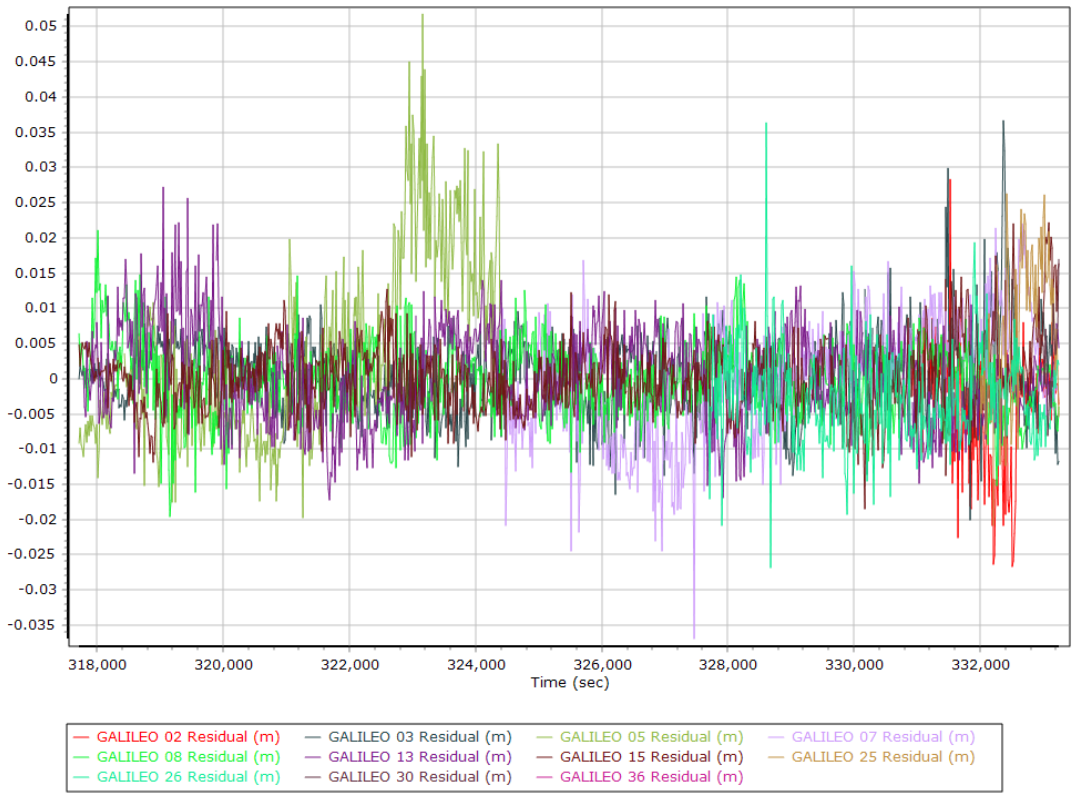
GLONASS Residuals



BEIDOU Residuals



GALILEO Residuals



GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion PP-RTX		
Stabilized mount	False		
Processing start time	317304.000 (10/13/2021 16:08:24)		
Processing end time	333283.000 (10/13/2021 20:34:43)		
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	-90.000
Reference to Primary GNSS lever arm (m)	0.533	0.037	-1.177
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

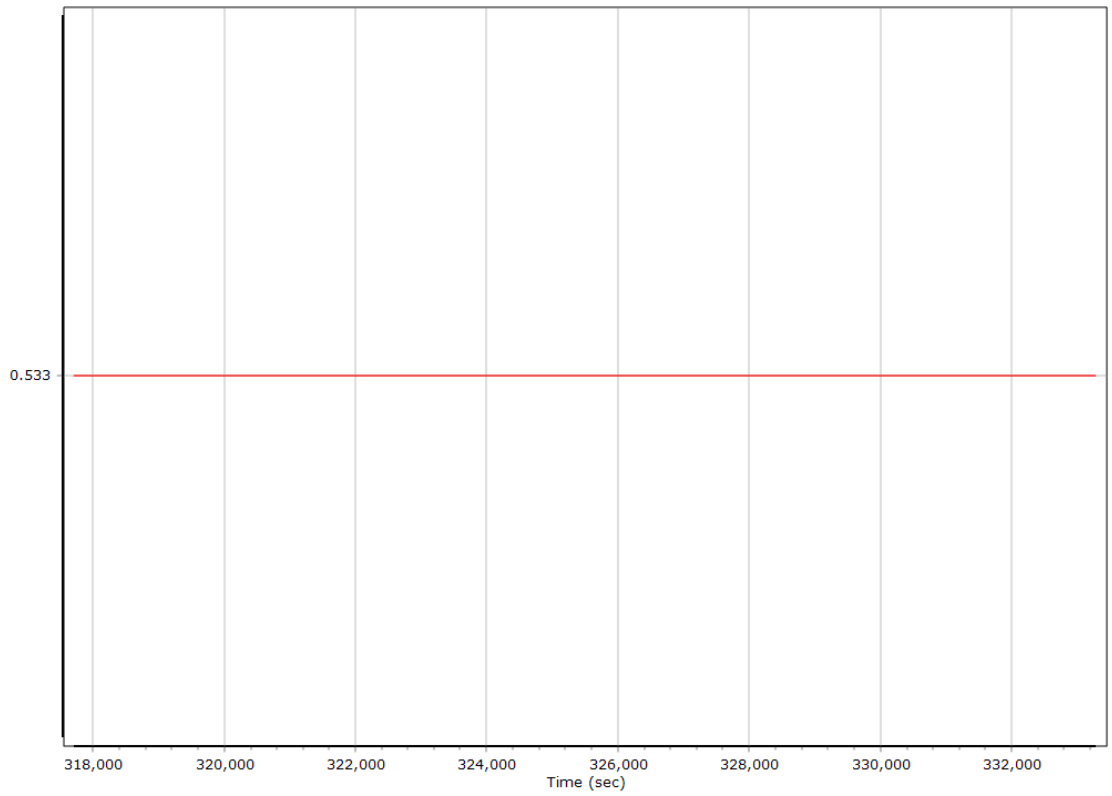
Calibrated Installation Parameters

Reference-Primary GNSS Lever Arm (m)

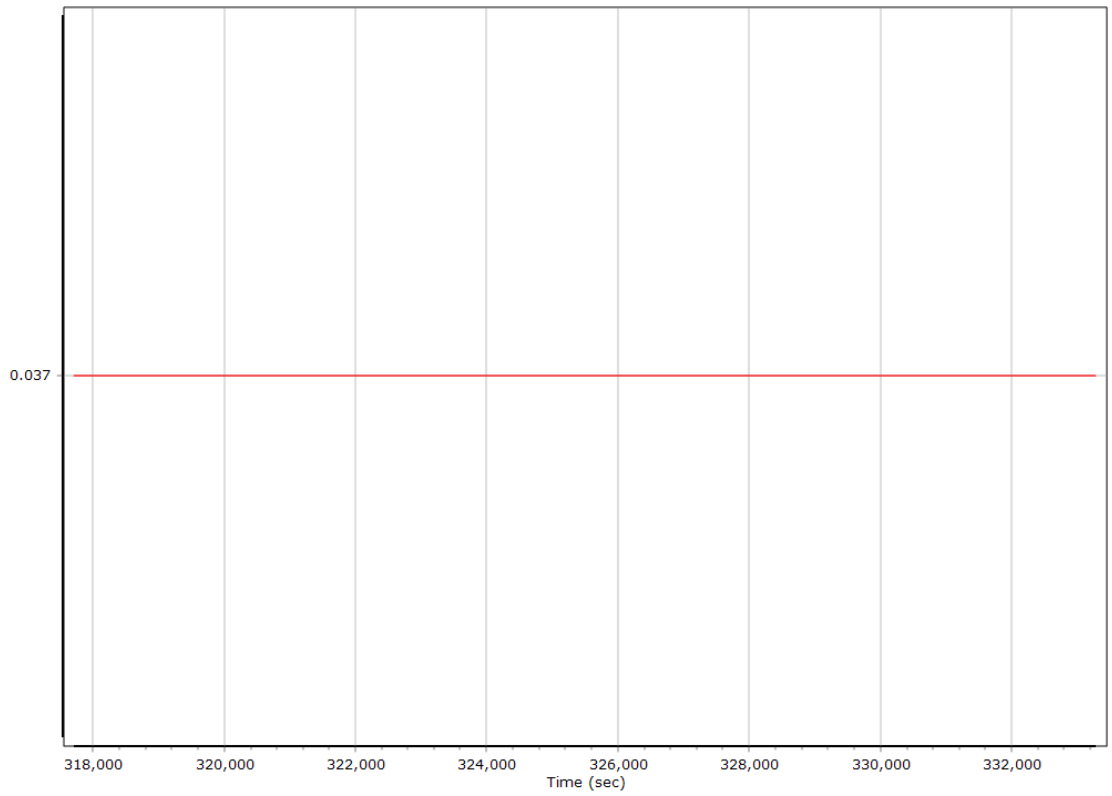
Reference-Primary GNSS Lever Arm Automatic Calibration Results

Original Reference to Primary GNSS lever arm (m)	0.534	0.060	-1.199
Iteration 1 Reference to Primary GNSS lever arm (m)	0.533	0.037	-1.178
Iteration 2 Reference to Primary GNSS lever arm (m)	0.533	0.037	-1.177
Primary GNSS Lever Arm In use	Iteration 2		

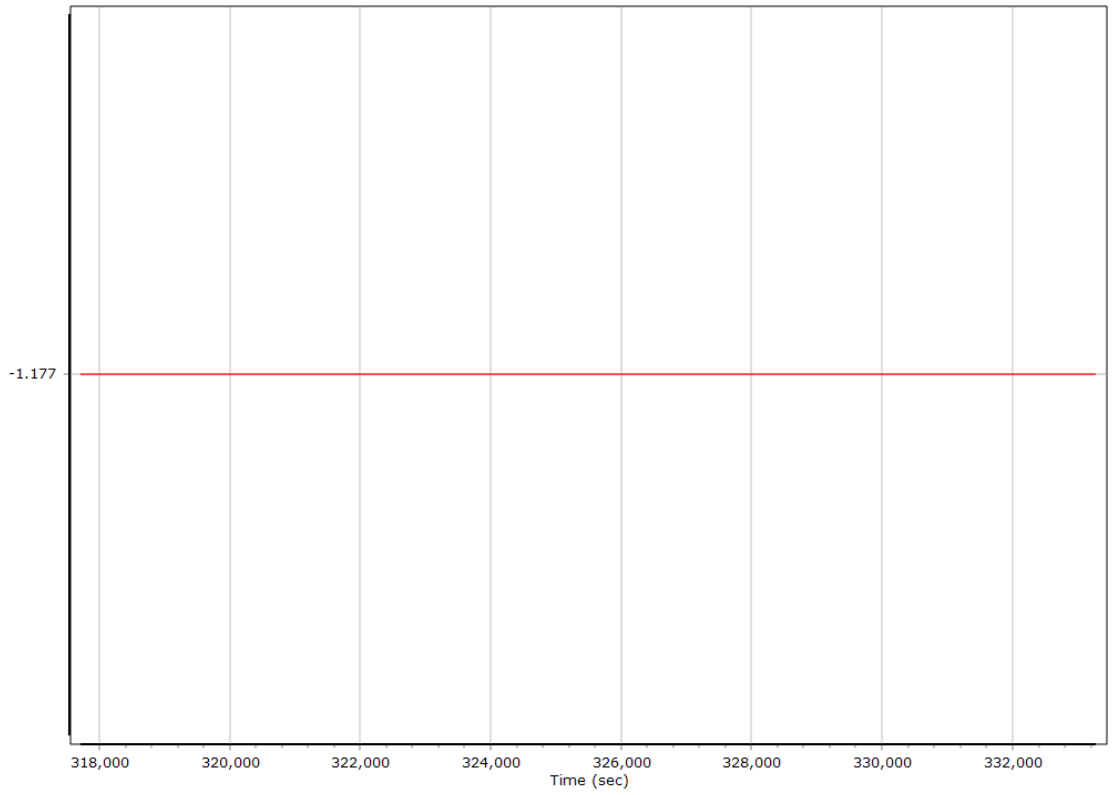
X Reference-Primary GNSS Lever Arm (m)



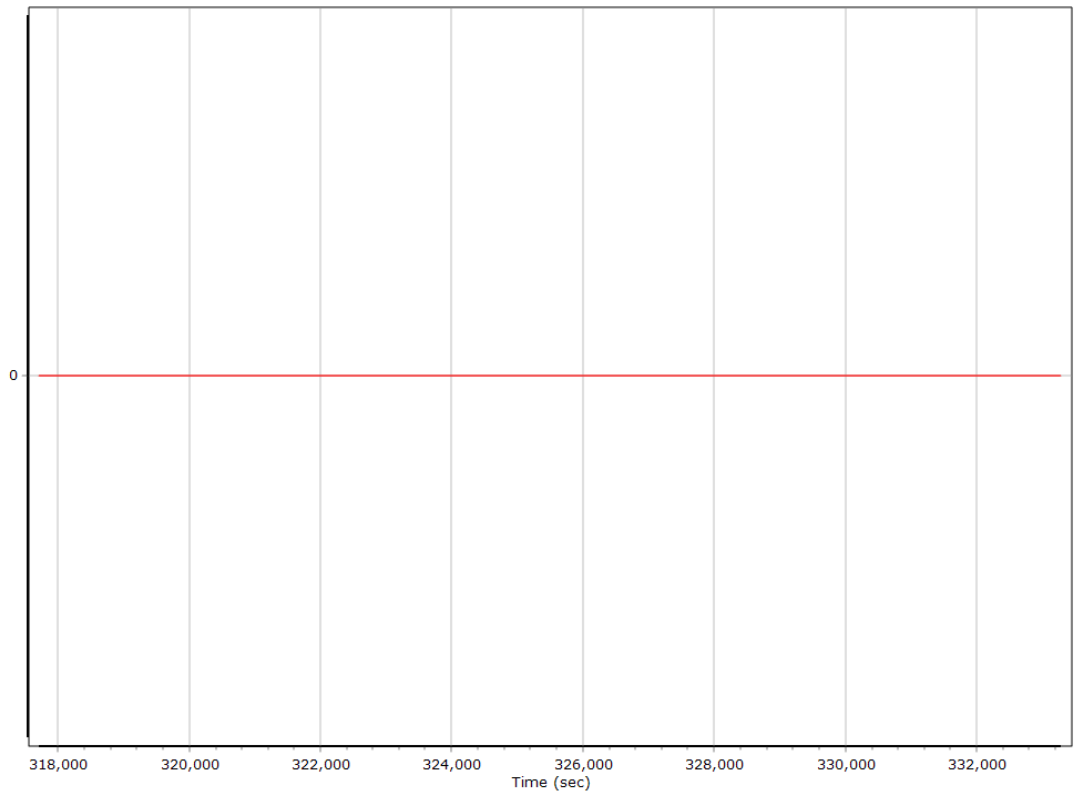
Y Reference-Primary GNSS Lever Arm (m)



Z Reference-Primary GNSS Lever Arm (m)



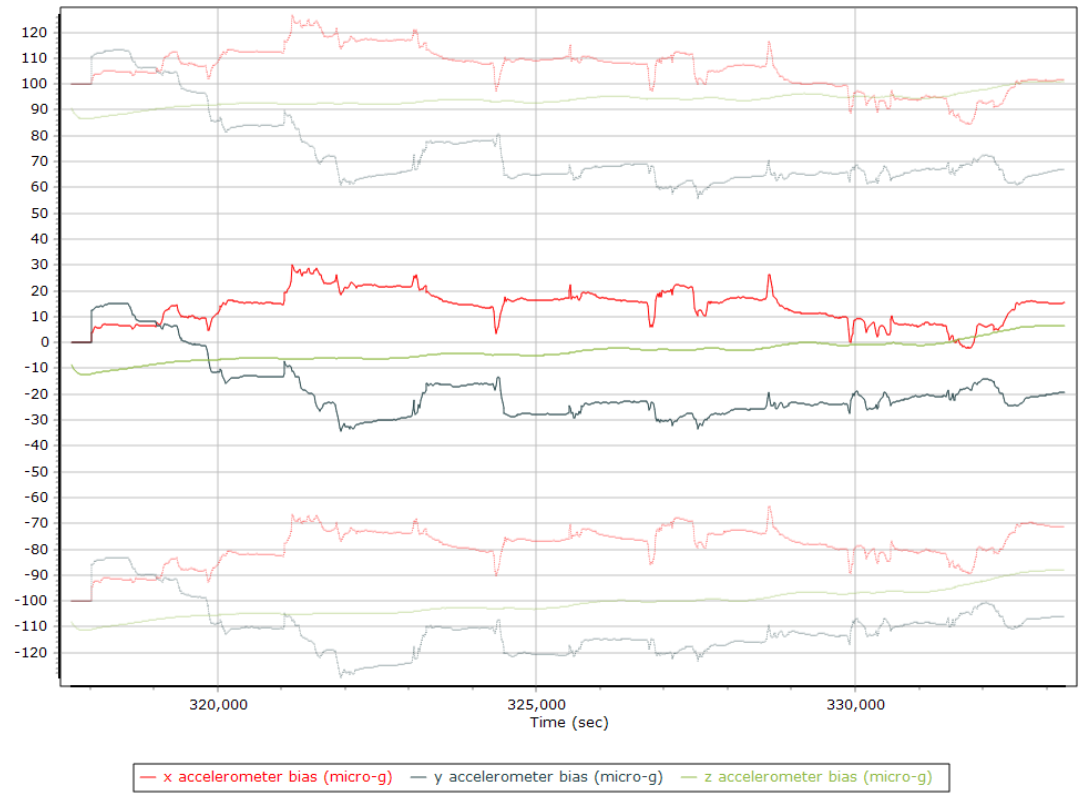
Reference-Primary GNSS Lever Arm Figure of Merit



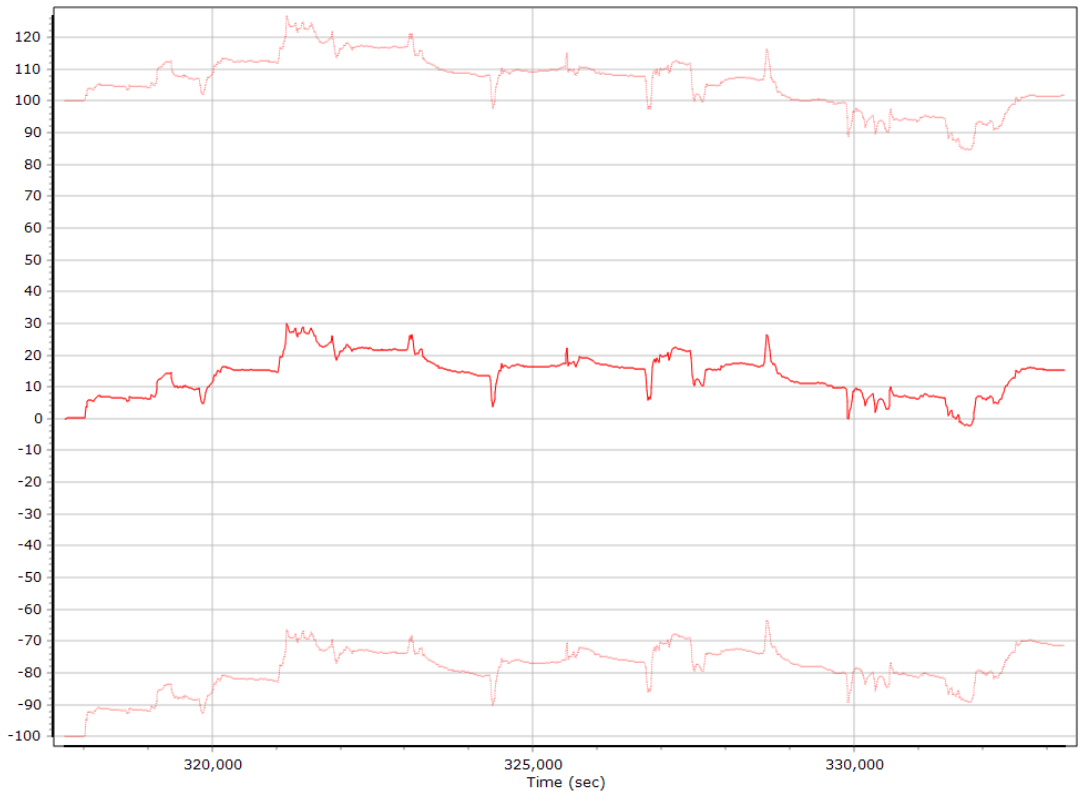
IN-Fusion QC

Forward Processed Estimated Errors, Reference Frame

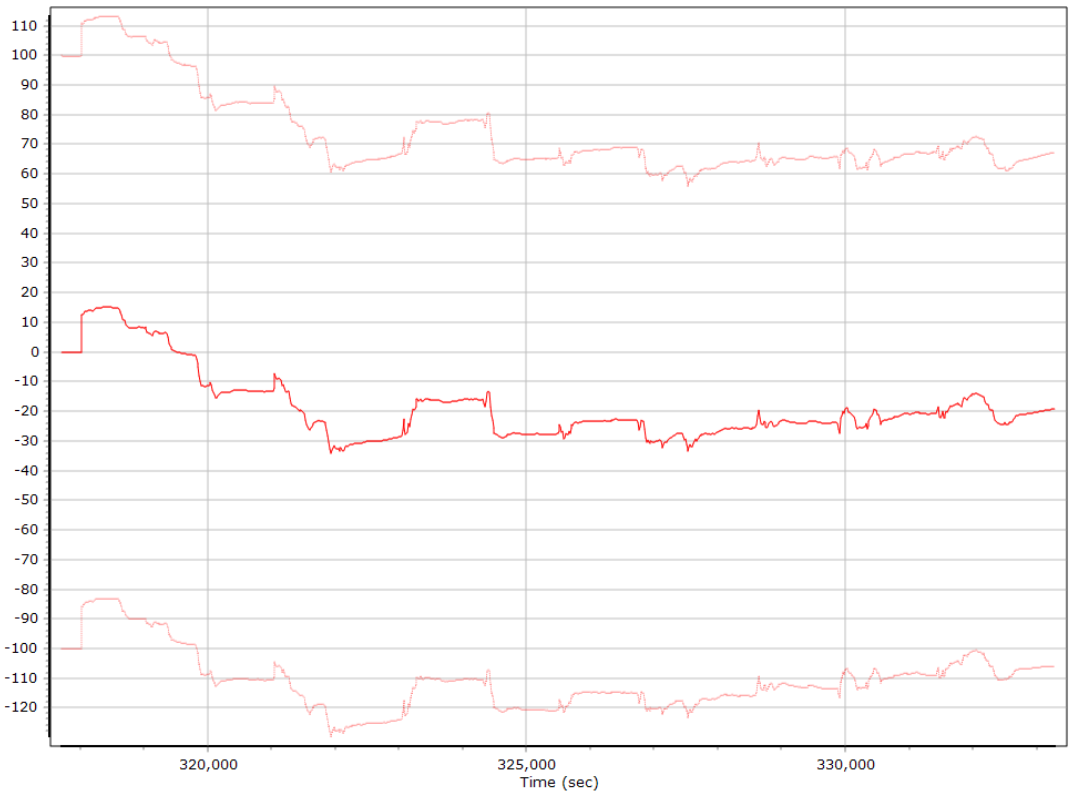
Accelerometer Bias (micro-g)



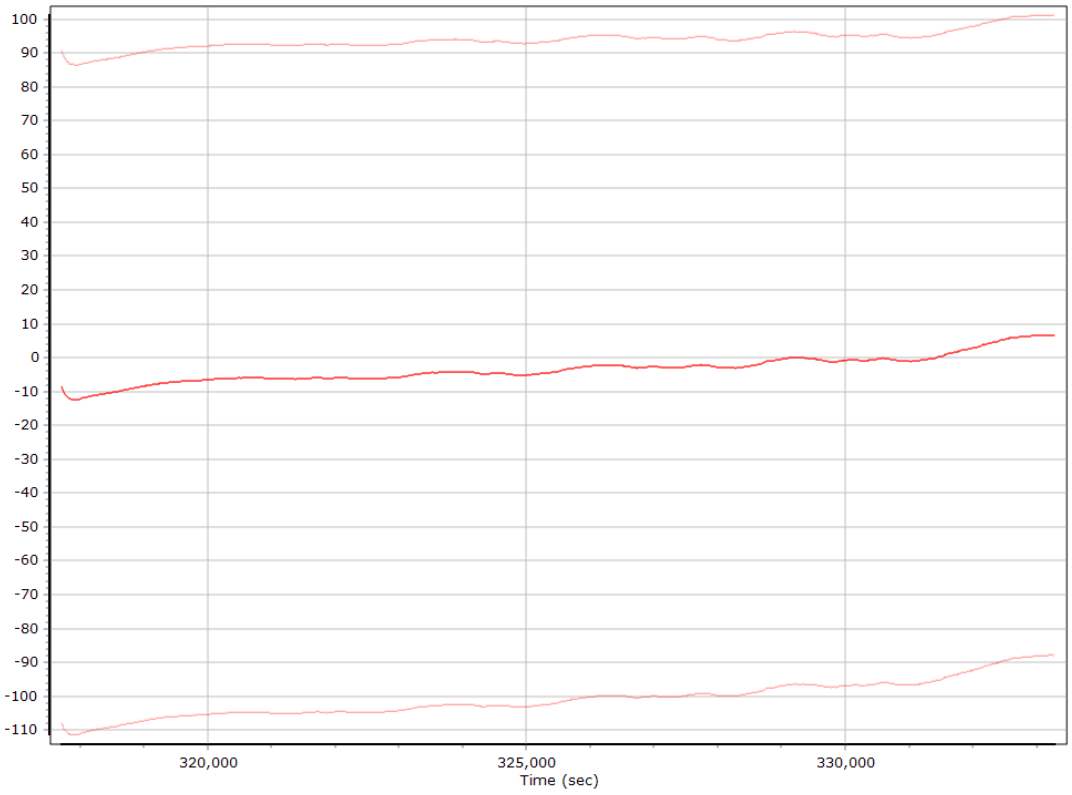
X Accelerometer Bias (micro-g)



Y Accelerometer Bias (micro-g)

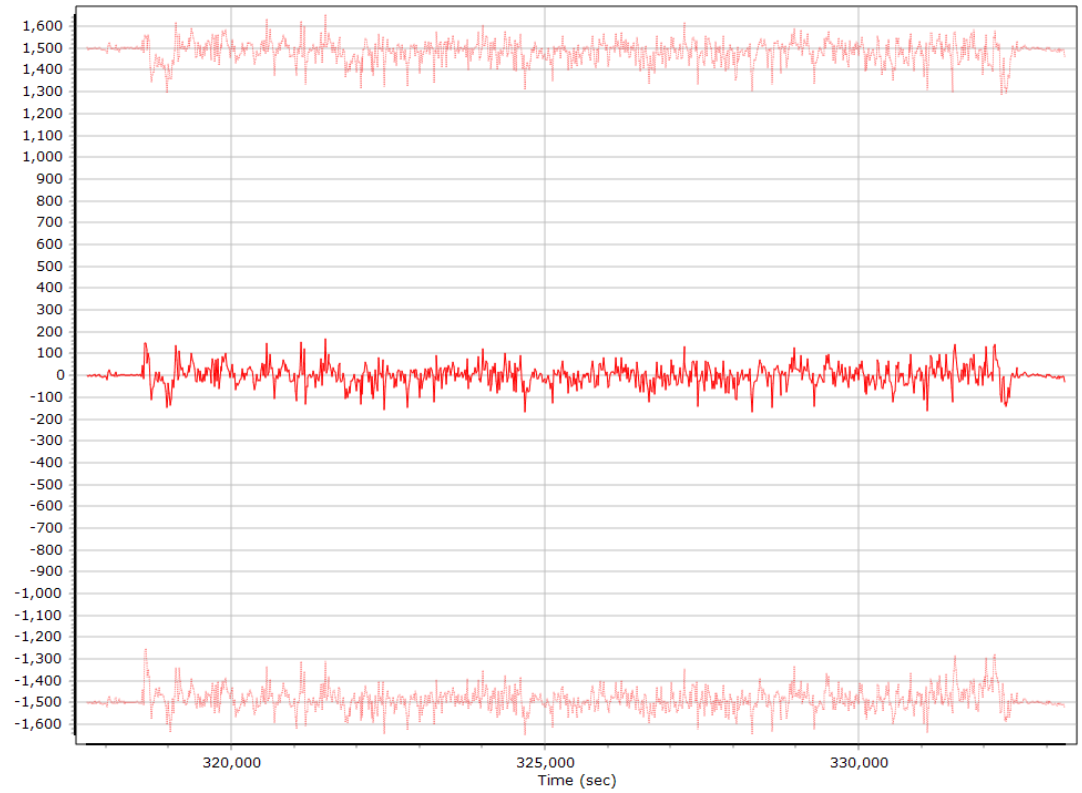


Z Accelerometer Bias (micro-g)

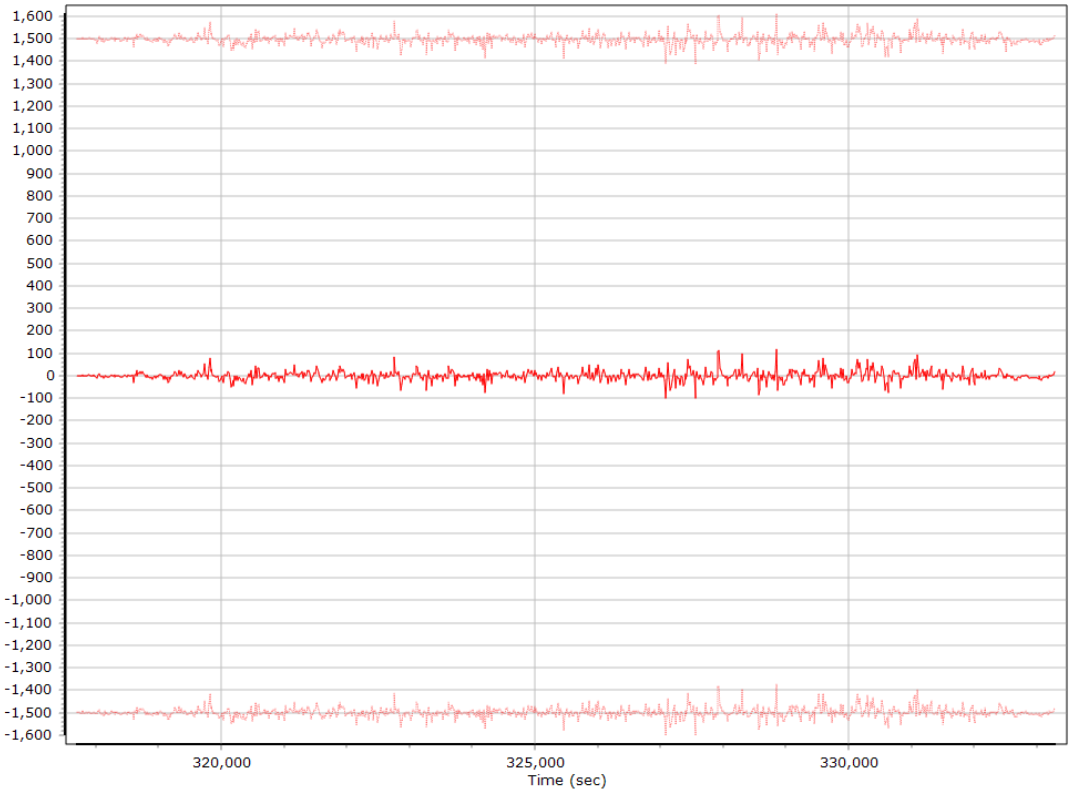


Accelerometer Scale Error (ppm)

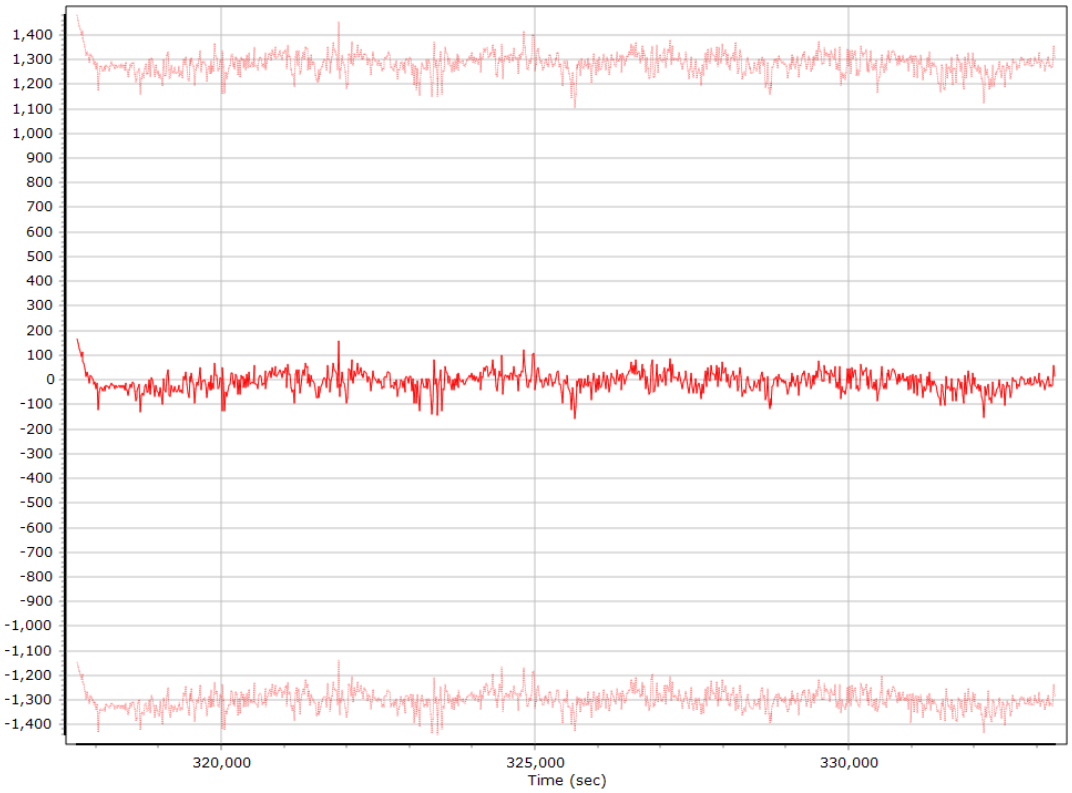
X Accelerometer Scale Error (ppm)



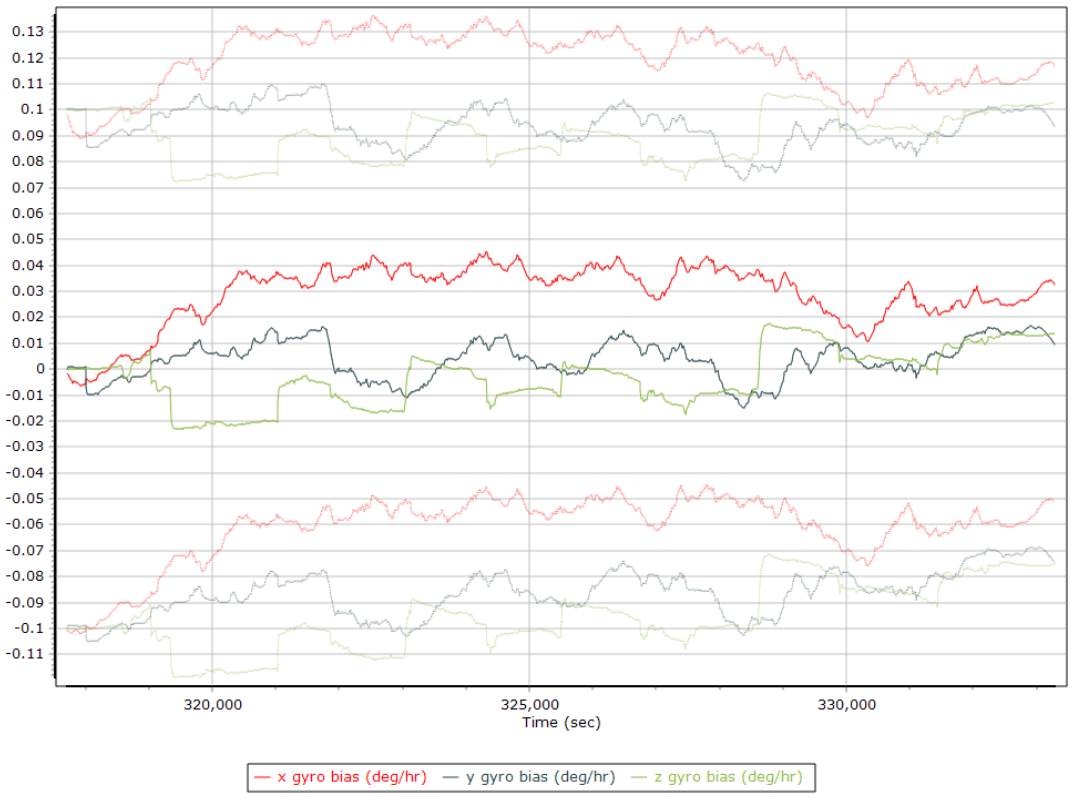
Y Accelerometer Scale Error (ppm)



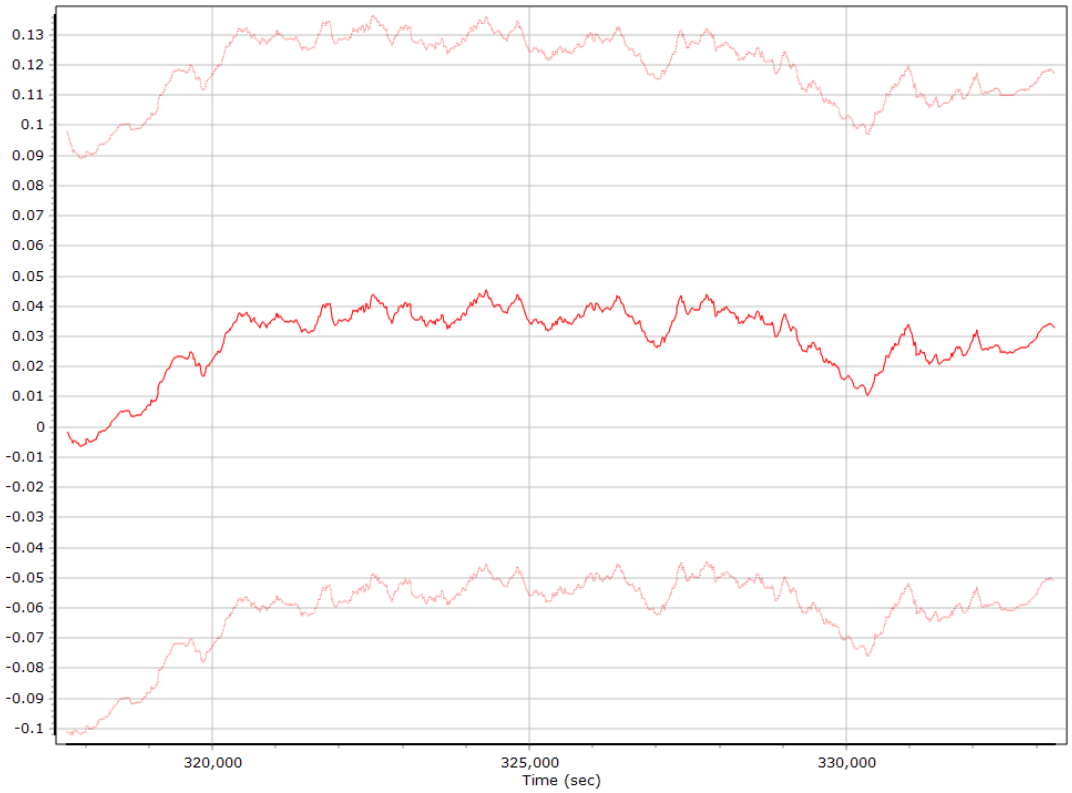
Z Accelerometer Scale Error (ppm)



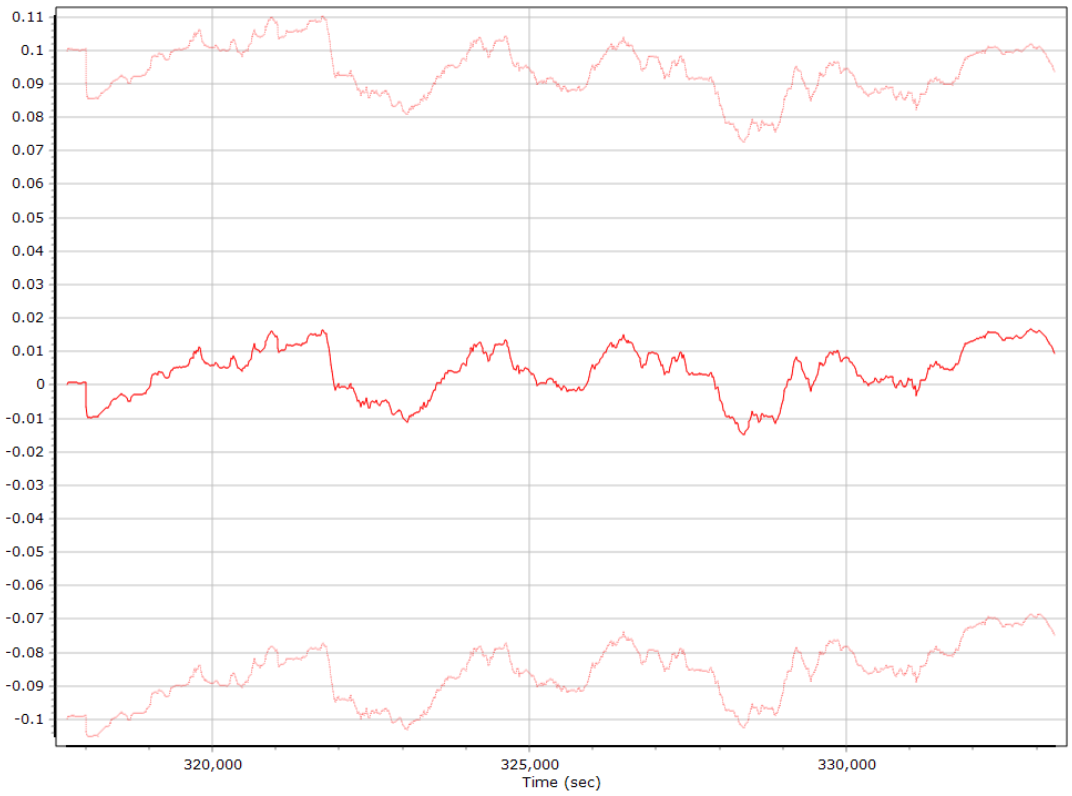
Gyro Bias (deg/h)



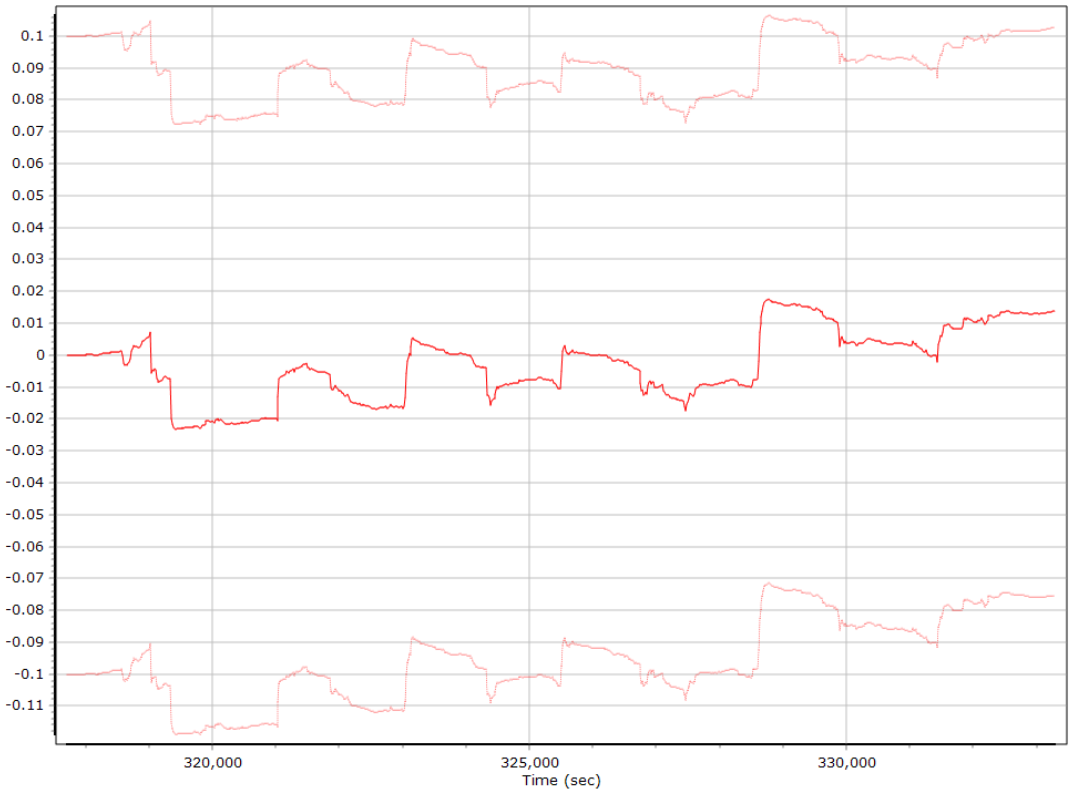
X Gyro Bias (deg/h)



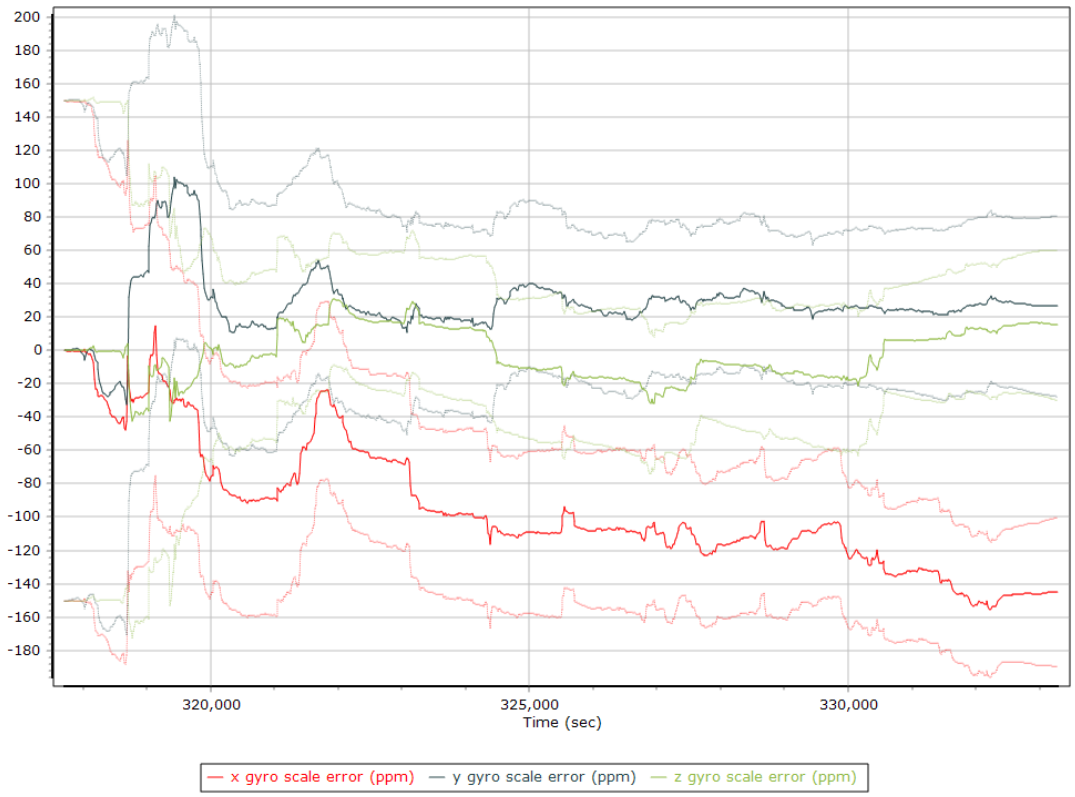
Y Gyro Bias (deg/h)



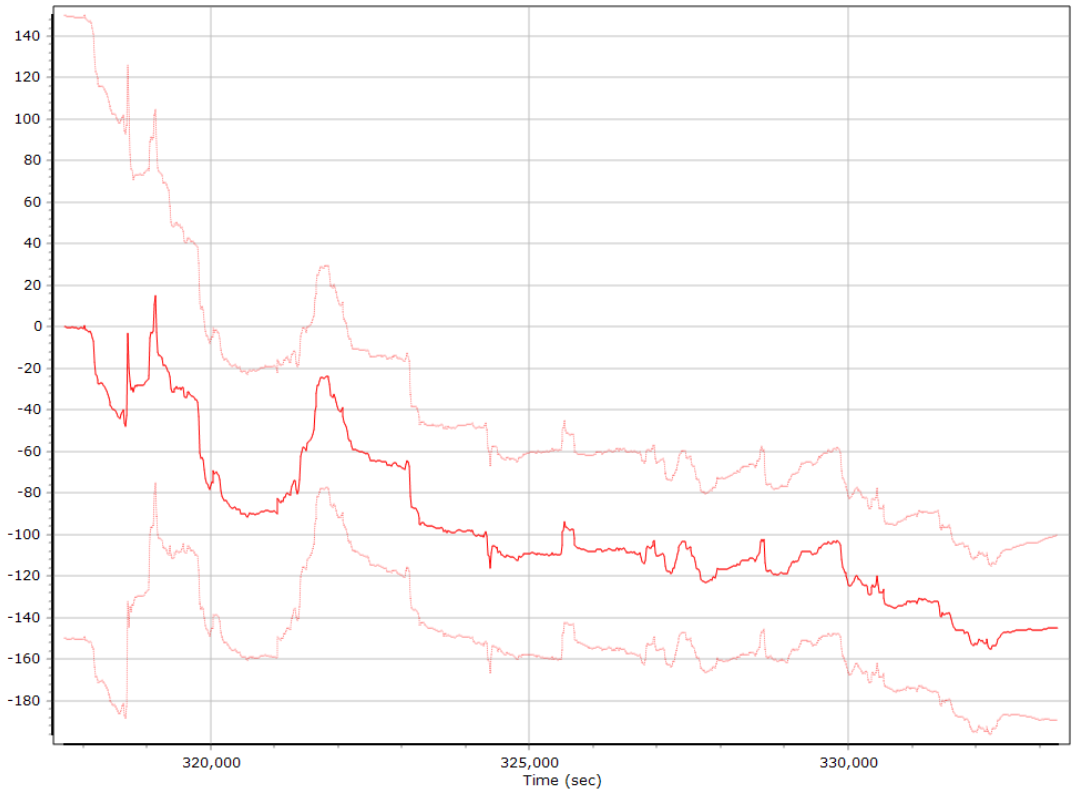
Z Gyro Bias (deg/h)



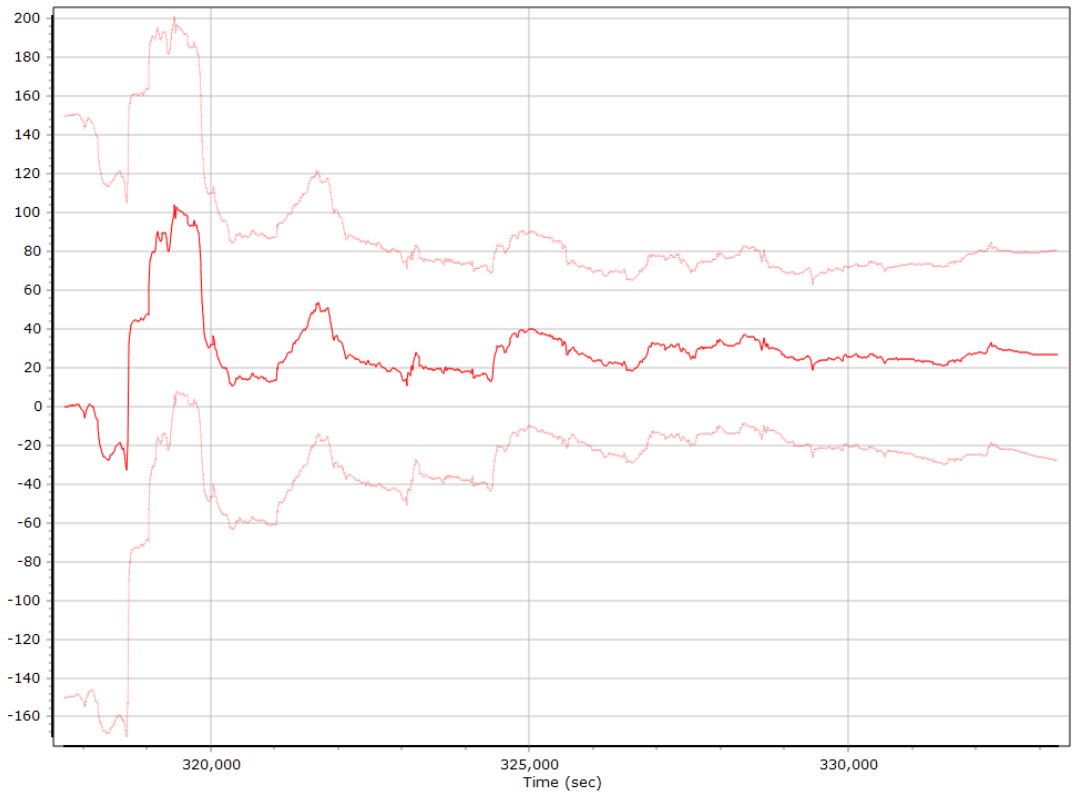
Gyro Scale Error (ppm)



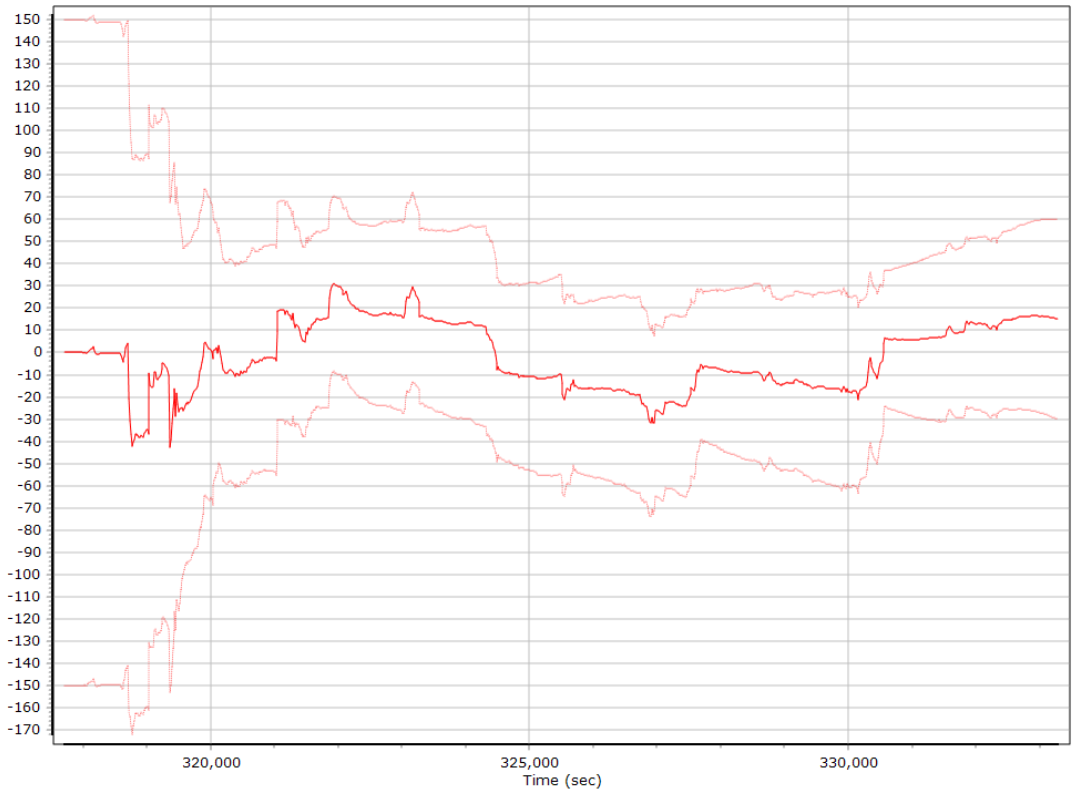
X Gyro Scale Error (ppm)



Y Gyro Scale Error (ppm)

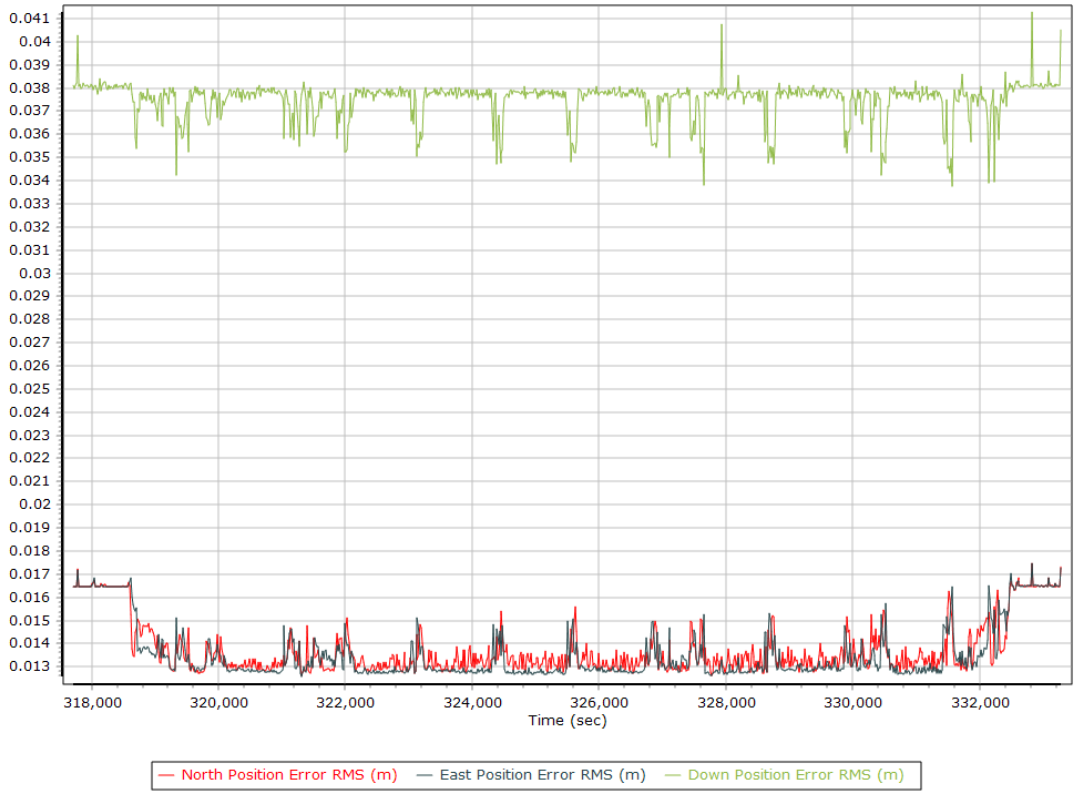


Z Gyro Scale Error (ppm)

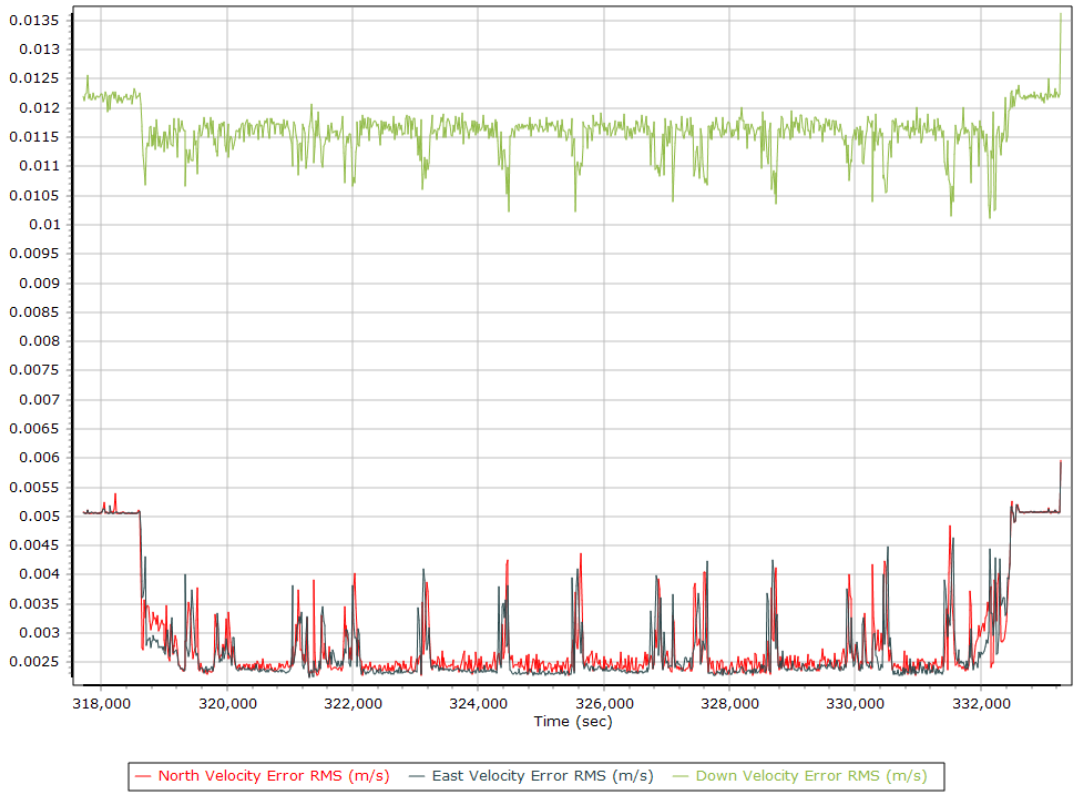


Smoothed Performance Metrics

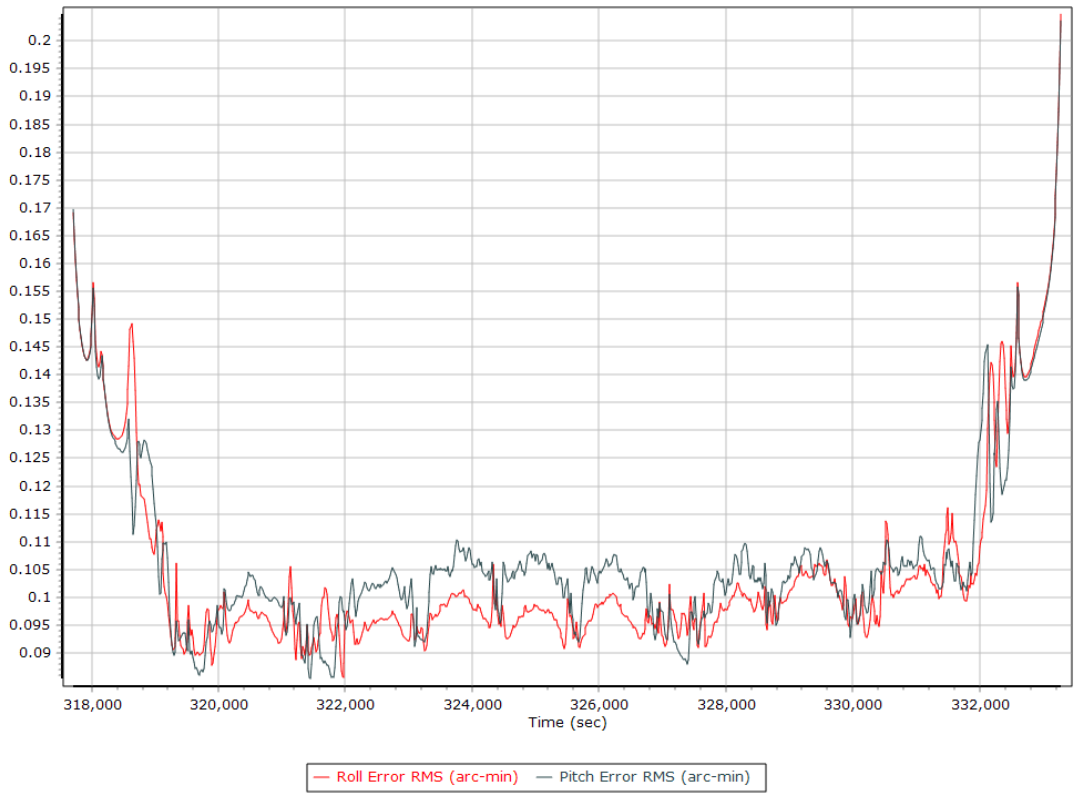
Position Error RMS (m)



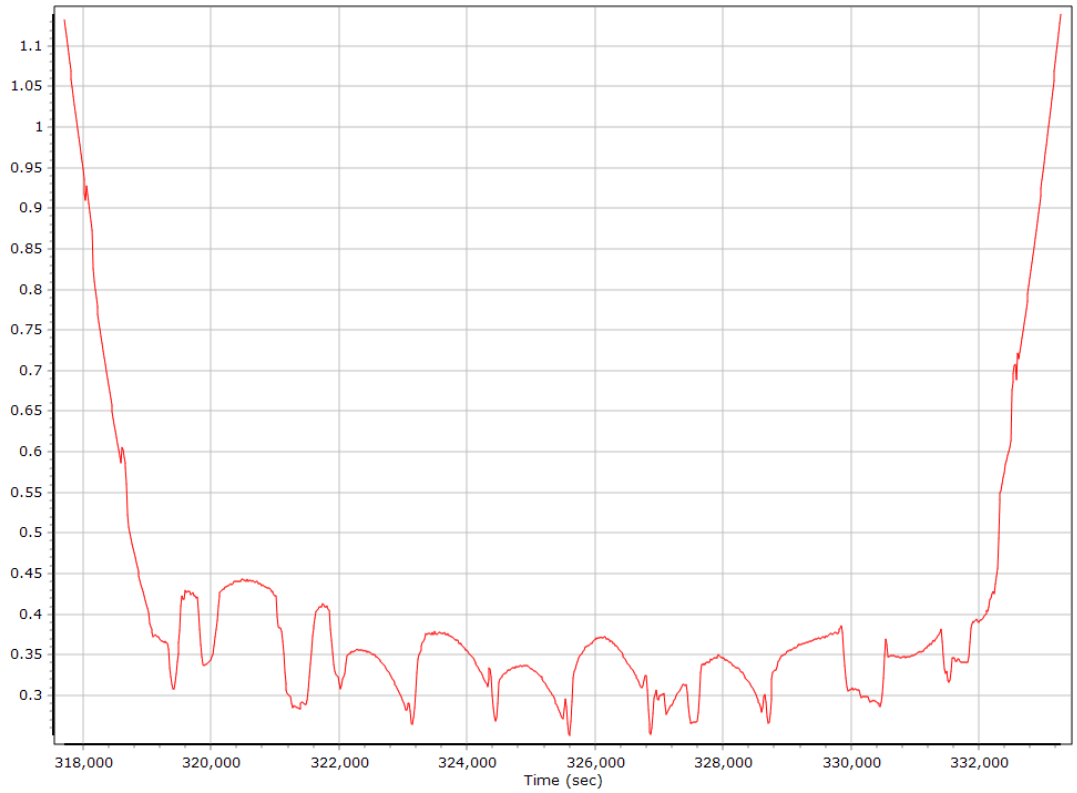
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

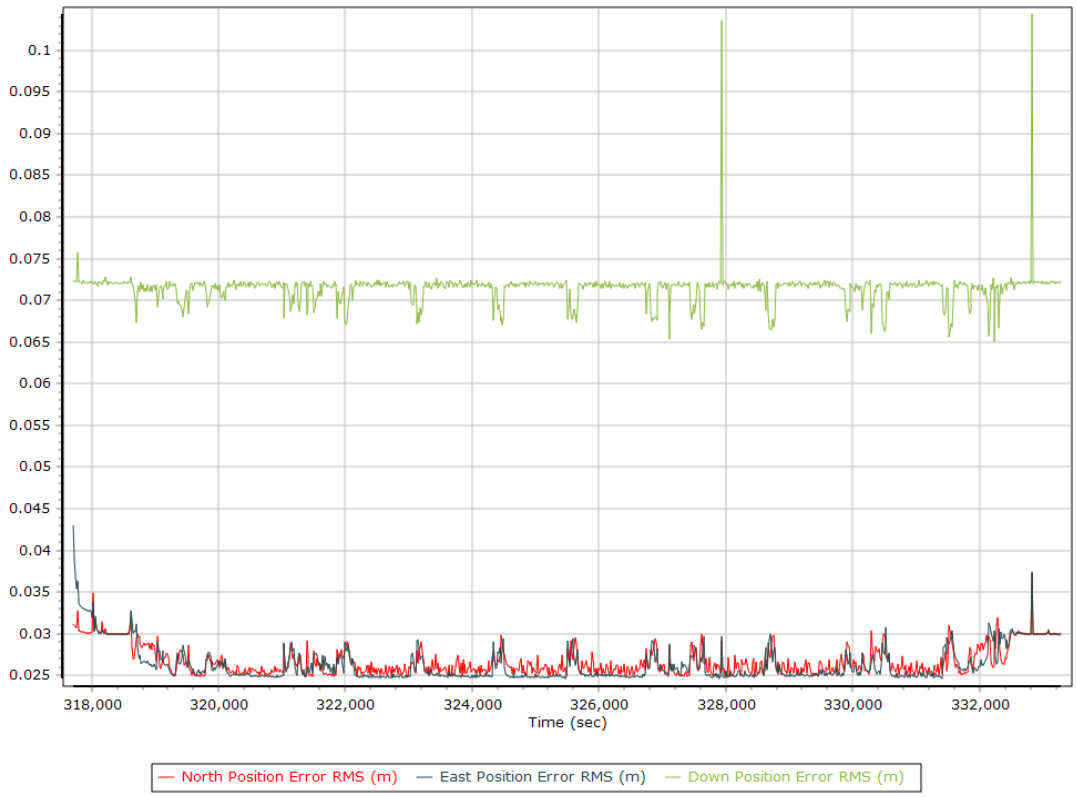


Heading Error RMS (arc-min)

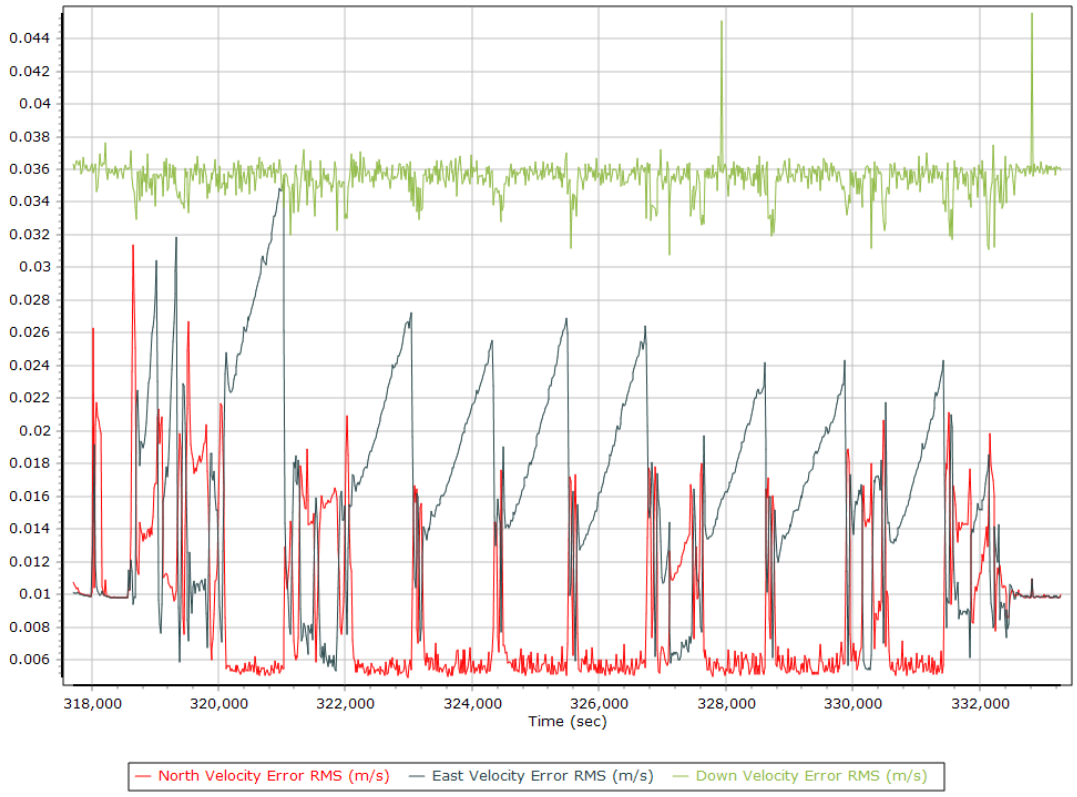


Forward Processed Performance Metrics

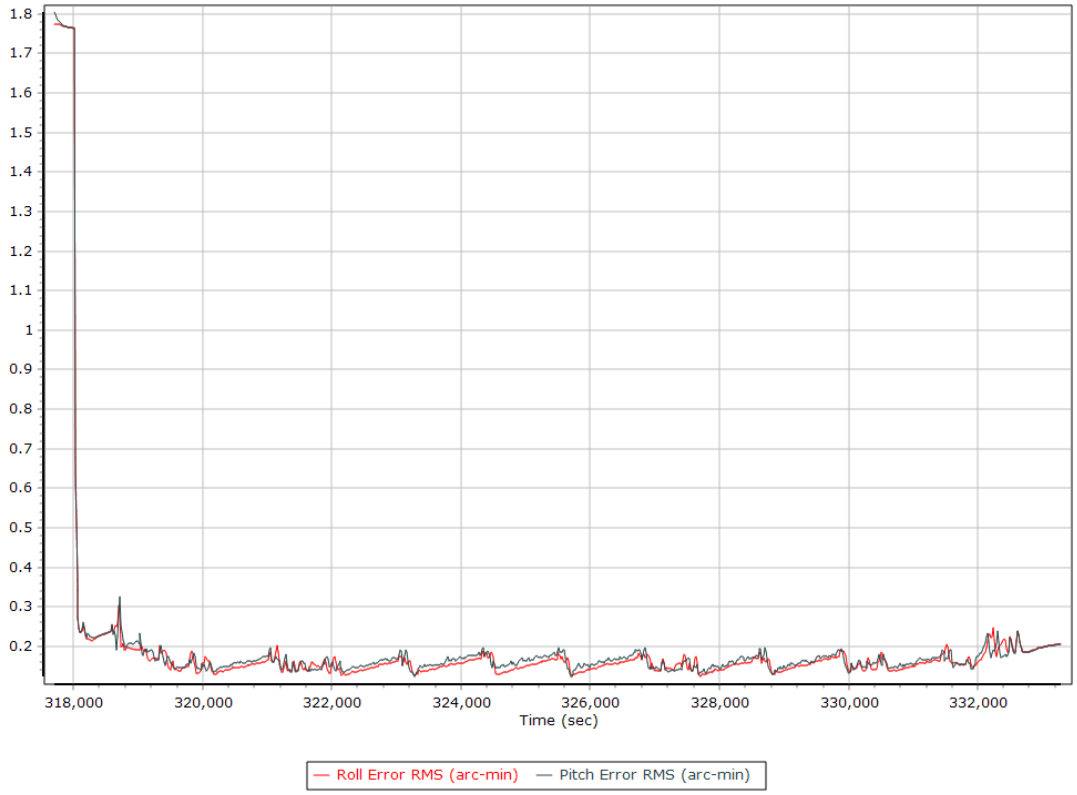
Position Error RMS (m)



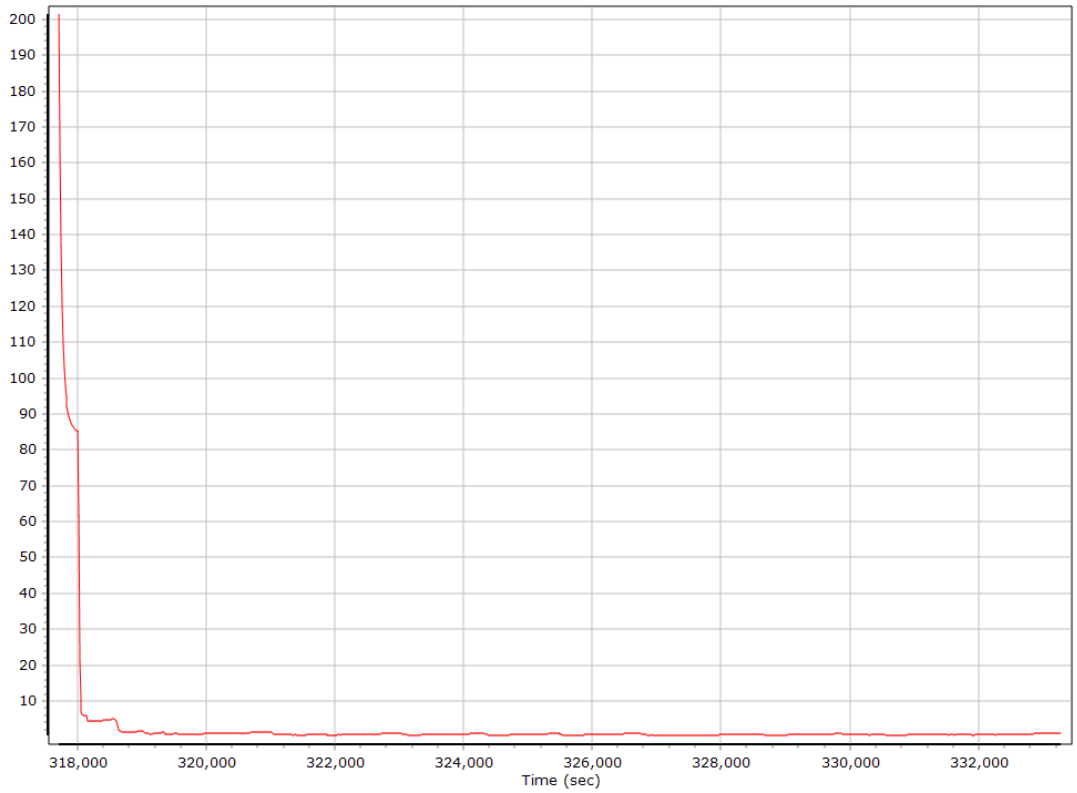
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

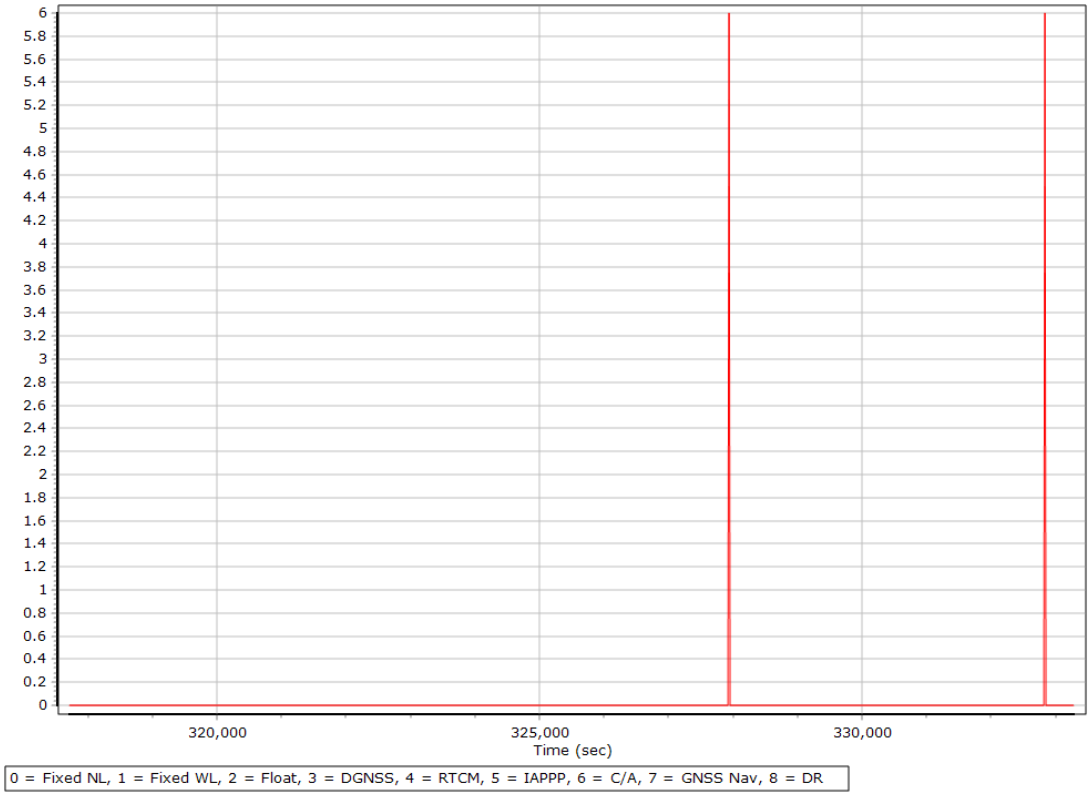


Heading Error RMS (arc-min)

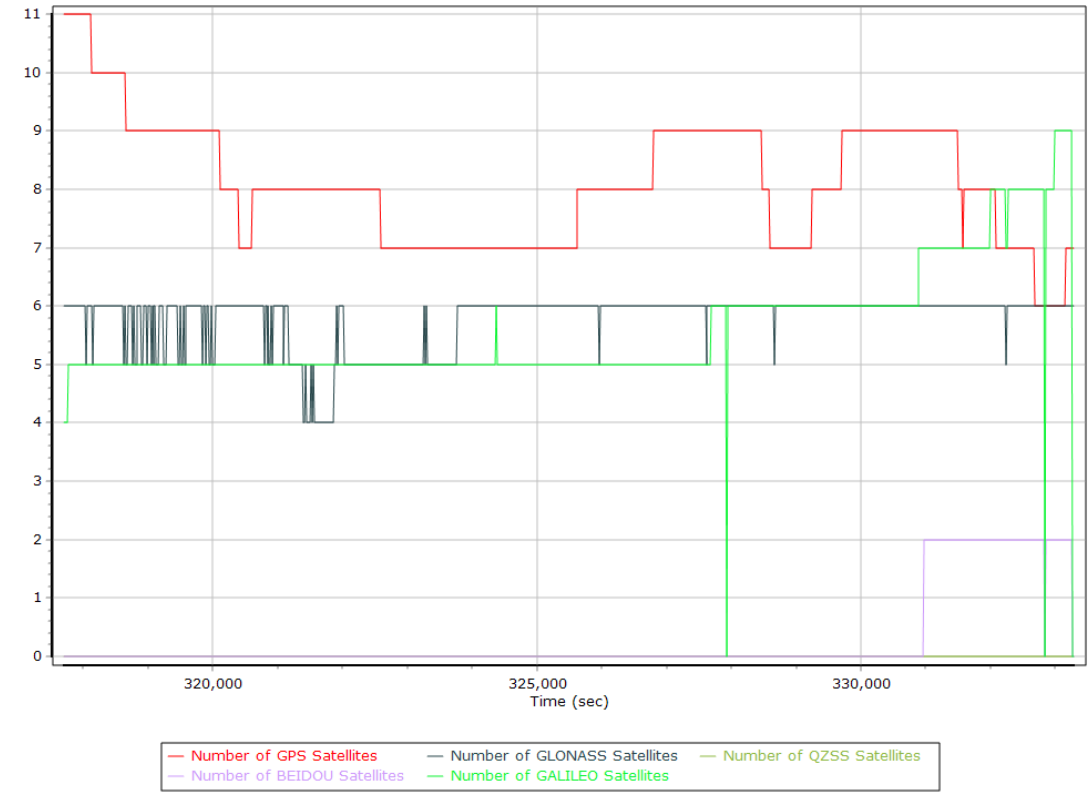


Forward Processed Solution Status

Processing Mode



Number of Satellites



Baseline Length