General Information

Mission Information

Project name	201125_A_5060380_nad2011_FINAL
Processing date	2020-11-30 18:12:44
Mission date	2020-11-25 13:56:12
Mission duration	05:19:23.000
Processing mode	IN-Fusion PP-RTX

Rover Hardware Information

Product	POS AV 610 VER6 HW2.5-12
Serial number	S/N7769
IMU type	57
Receiver type	BD982
Antenna type	AV39

Project File List

Rover Data Files

File name	File type
201125a.042	POS Data
201125a.043	POS Data
201125a.044	POS Data
201125a.045	POS Data
201125a.046	POS Data
201125a.047	POS Data
201125a.048	POS Data
201125a.049	POS Data
201125a.050	POS Data
201125a.051	POS Data
201125a.052	POS Data
201125a.053	POS Data
201125a.054	POS Data
201125a.055	POS Data
201125a.056	POS Data
201125a.057	POS Data
201125a.058	POS Data
201125a.059	POS Data
201125a.060	POS Data
201125a.061	POS Data
201125a.062	POS Data
201125a.063	POS Data
201125a.064	POS Data
201125a.065	POS Data
201125a.066	POS Data
201125a.067	POS Data
201125a.068	POS Data
201125a.069	POS Data
201125a.070	POS Data
201125a.071	POS Data

Input Files

File Name	File Type
Ephm3300.20g	GLONASS Broadcast Ephemeris
Ephm3300.20n	GPS Broadcast Ephemeris

Output Files

Filename	File type
sbet_201125_A_5060380_nad2011_FINAL.out	SBET Trajectory File

Rover Data Summary

First raw data file	201125a.042		
Last raw data file	201125a.071		
Start GPS week	2133		
Start time	309378.762 (11/25/2020 1:56:18 PM)		
End time	328532.282 (11/25/2020 7:15:32 PM)		
Start of fine alignment	309728.589 (11/25/2020 2:02:08 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)	0.548	-0.432	-0.960
Reference to Primary GNSS lever arm std dev (m)	-1.000		
Aircraft to Reference mounting angles (deg)	0.000	0.000	0.000

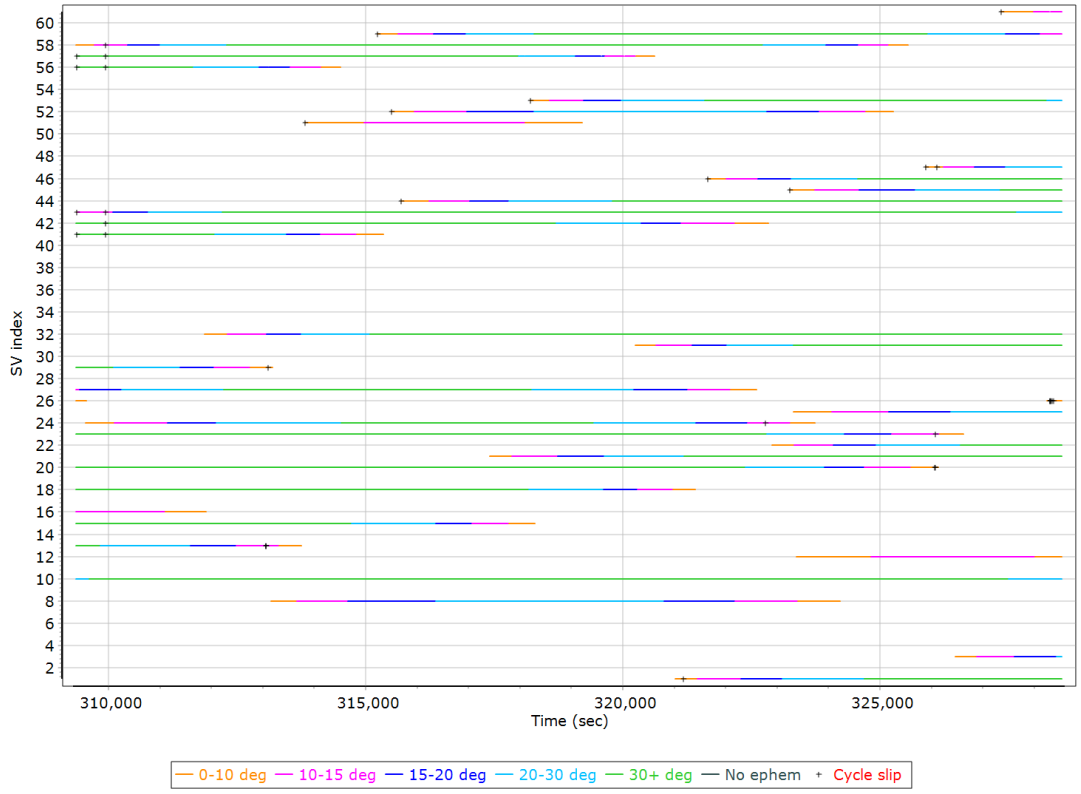
Rover Data QC

Raw IMU Import QC Summary

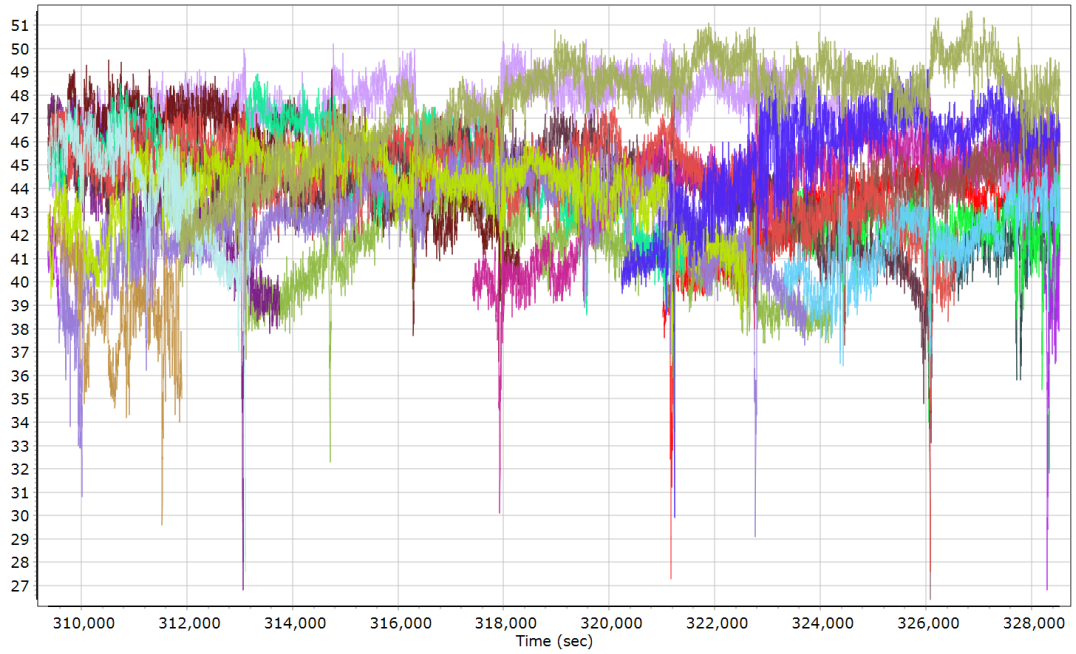
IMU data input file	imu_201125_A_5060380_nad2011_FINAL.dat
IMU data check log file	imudt_201125_A_5060380_nad2011_FINAL.log
IMU Records Processed	3832336
Termination Status	Warnings
IMU Anomalies	1
IMU Failure Messages	
309378.517 : WARNING : Gap of 309356.5245 seconds in CHECKDT input data	

Primary Observables & Satellite Data

GPS/GLONASS L1 Satellite Lock/Elevation

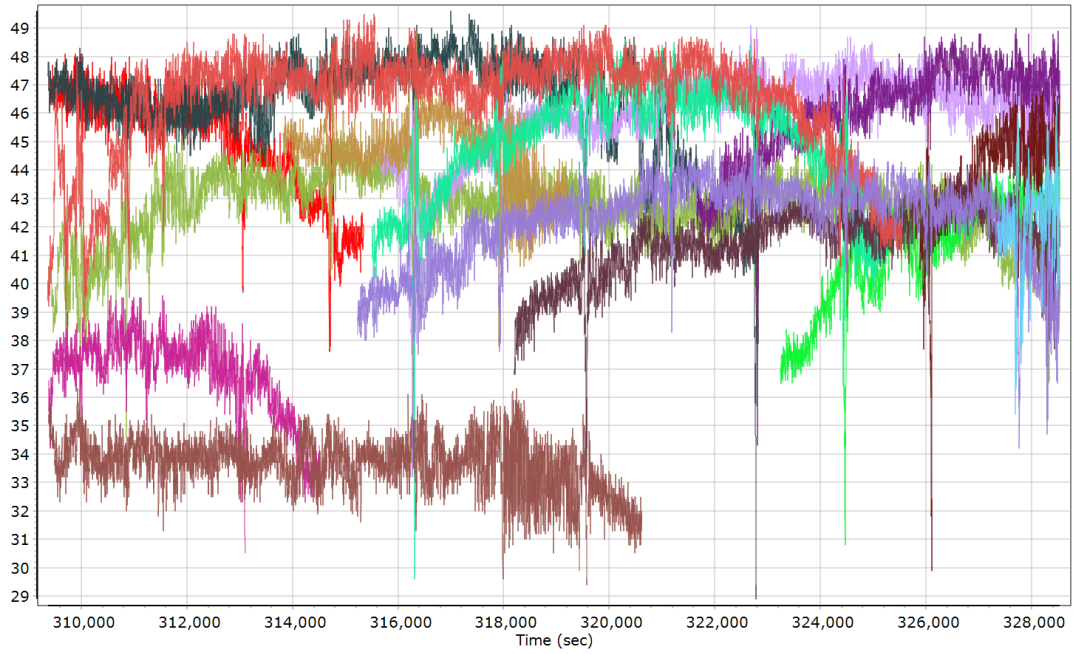


GPS L1 SNR



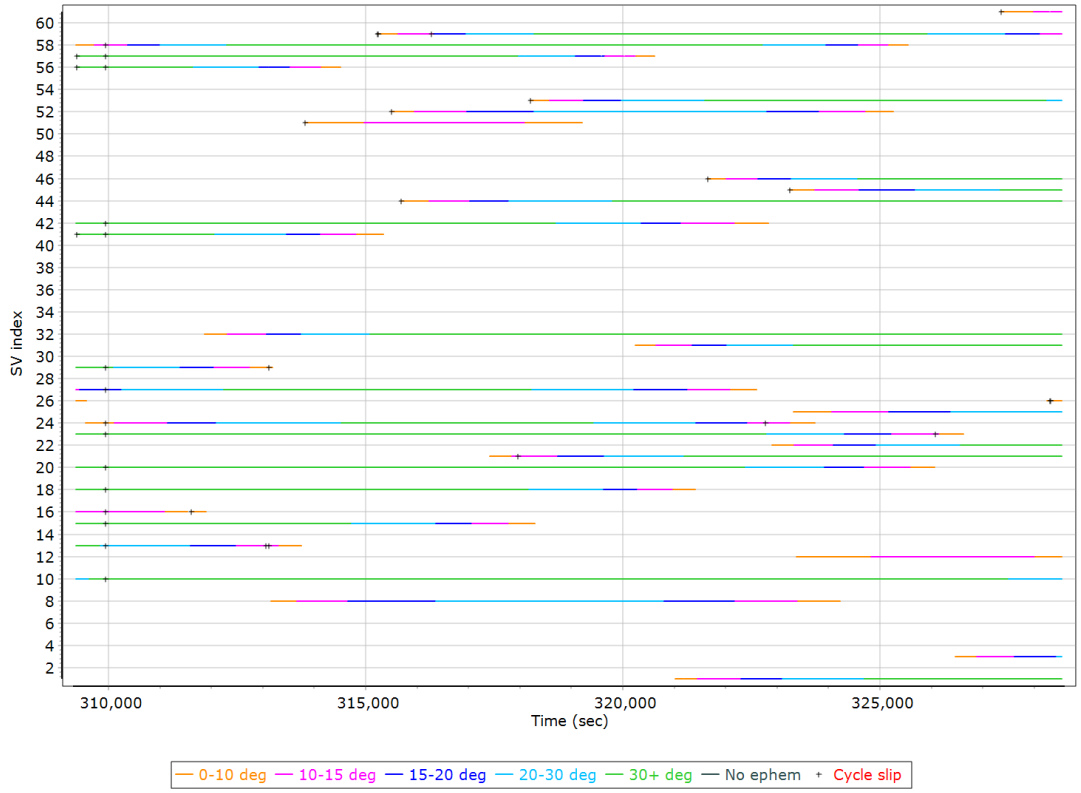
GPS PRN 01 L1 SNR (dB/Hz) GPS PRN 03 L1 SNR (dB/Hz) GPS PRN 08 L1 SNR (dB/Hz) GPS PRN 10 L1 SNR (dB/Hz)
GPS PRN 12 L1 SNR (dB/Hz) GPS PRN 13 L1 SNR (dB/Hz) GPS PRN 15 L1 SNR (dB/Hz) GPS PRN 16 L1 SNR (dB/Hz)
GPS PRN 18 L1 SNR (dB/Hz) GPS PRN 20 L1 SNR (dB/Hz) GPS PRN 21 L1 SNR (dB/Hz) GPS PRN 22 L1 SNR (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

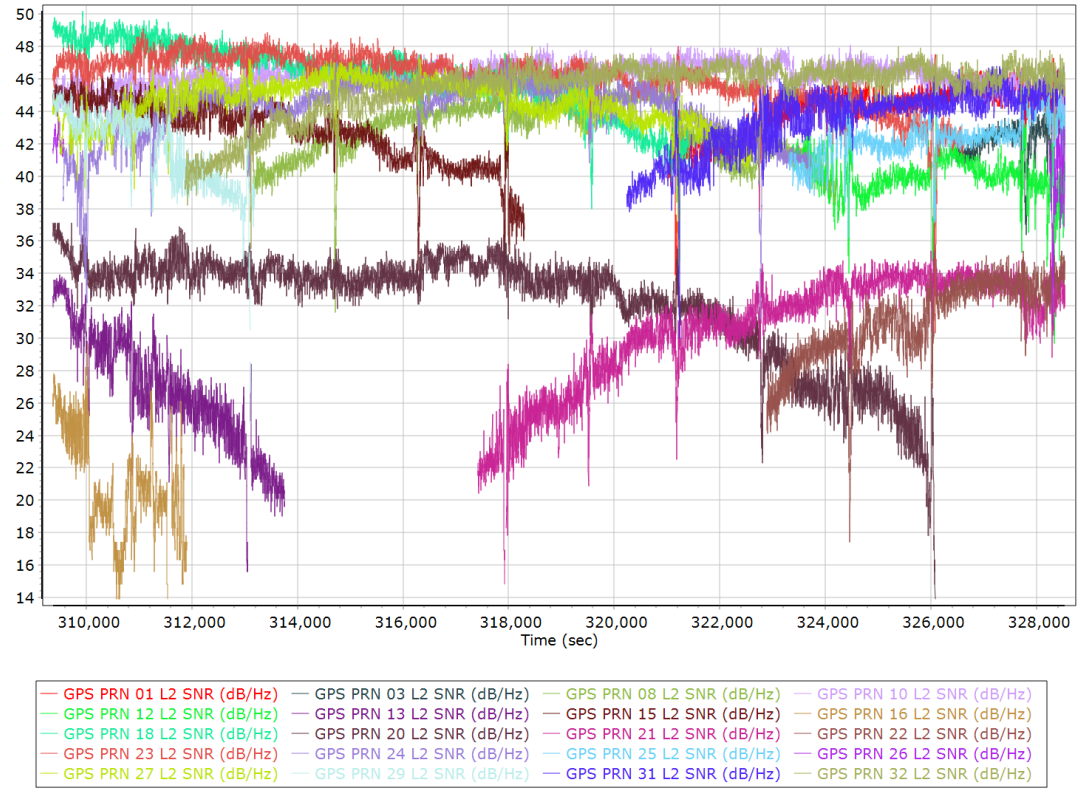


GLONASS 04 L1 SNR (dB/Hz) GLONASS 05 L1 SNR (dB/Hz) GLONASS 06 L1 SNR (dB/Hz)
GLONASS 07 L1 SNR (dB/Hz) GLONASS 08 L1 SNR (dB/Hz) GLONASS 09 L1 SNR (dB/Hz)
GLONASS 10 L1 SNR (dB/Hz) GLONASS 14 L1 SNR (dB/Hz) GLONASS 15 L1 SNR (dB/Hz)
GLONASS 16 L1 SNR (dB/Hz) GLONASS 19 L1 SNR (dB/Hz) GLONASS 20 L1 SNR (dB/Hz)
GLONASS 21 L1 SNR (dB/Hz) GLONASS 22 L1 SNR (dB/Hz) GLONASS 24 L1 SNR (dB/Hz)

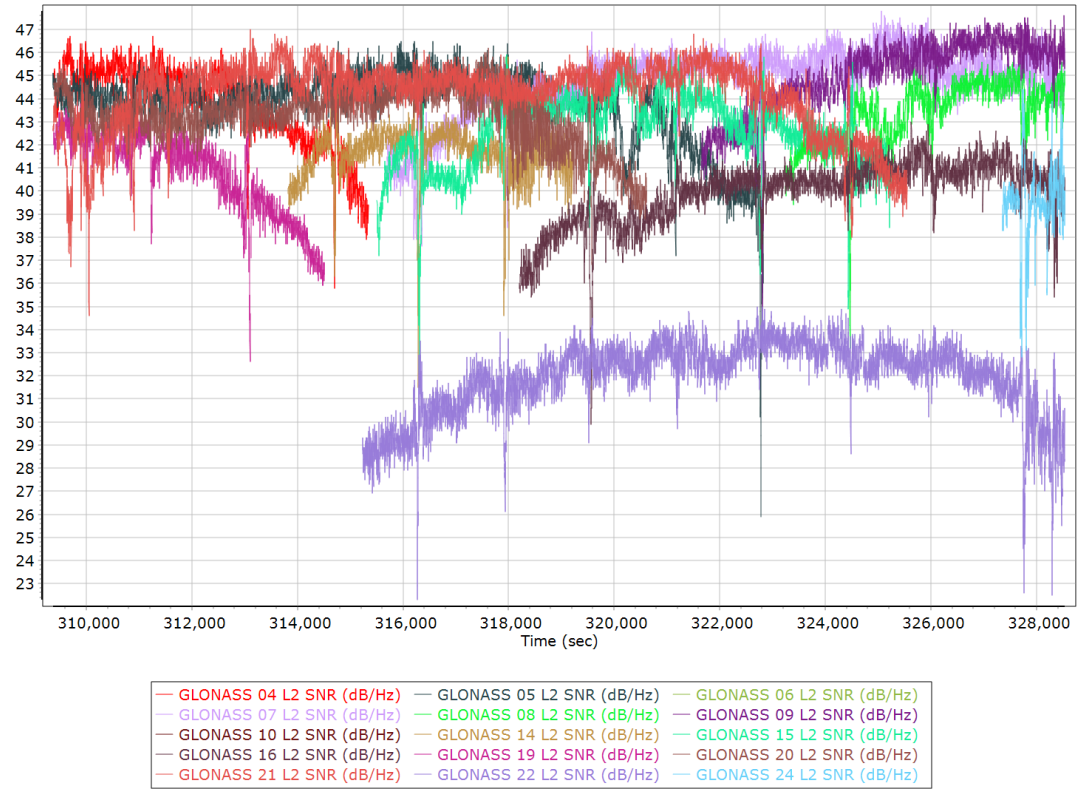
GPS/GLONASS L2 Satellite Lock/Elevation



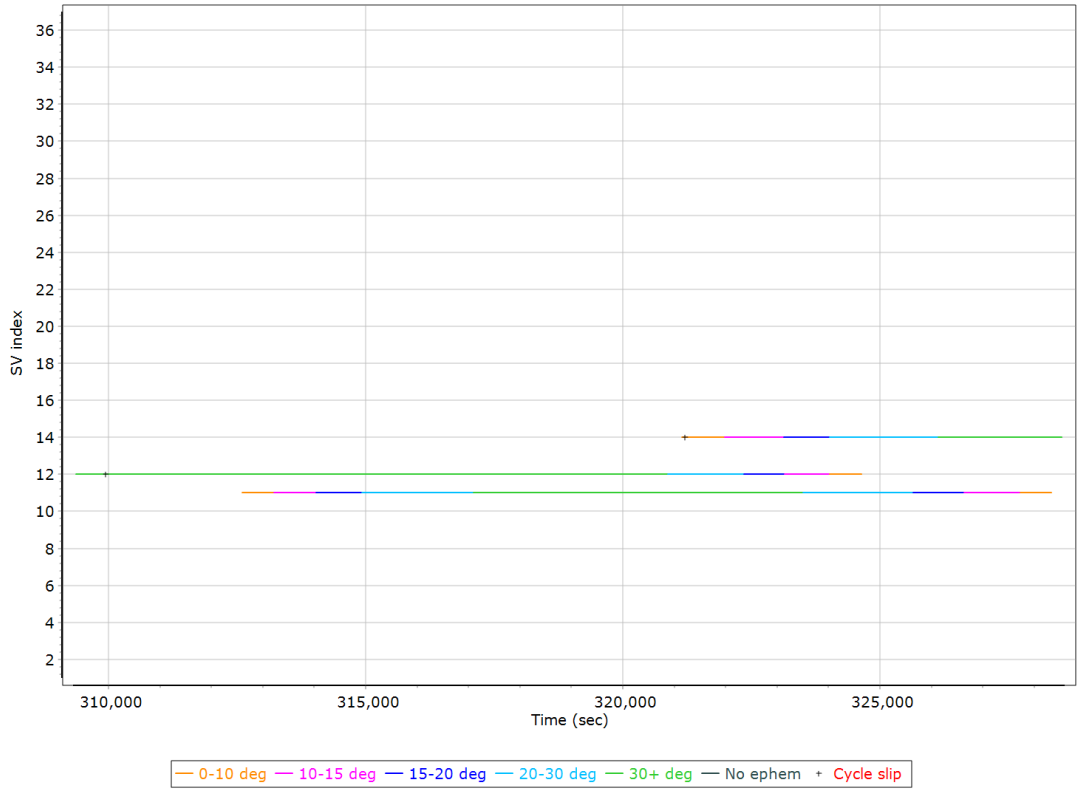
GPS L2 SNR



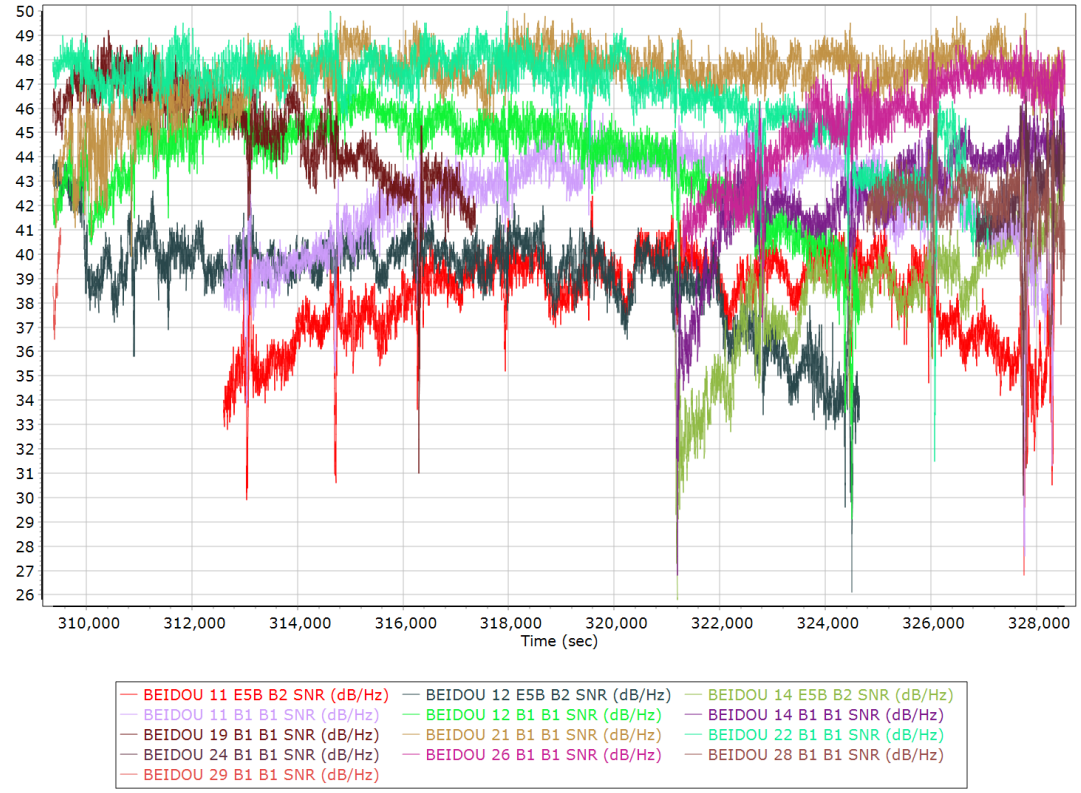
GLONASS L2 SNR



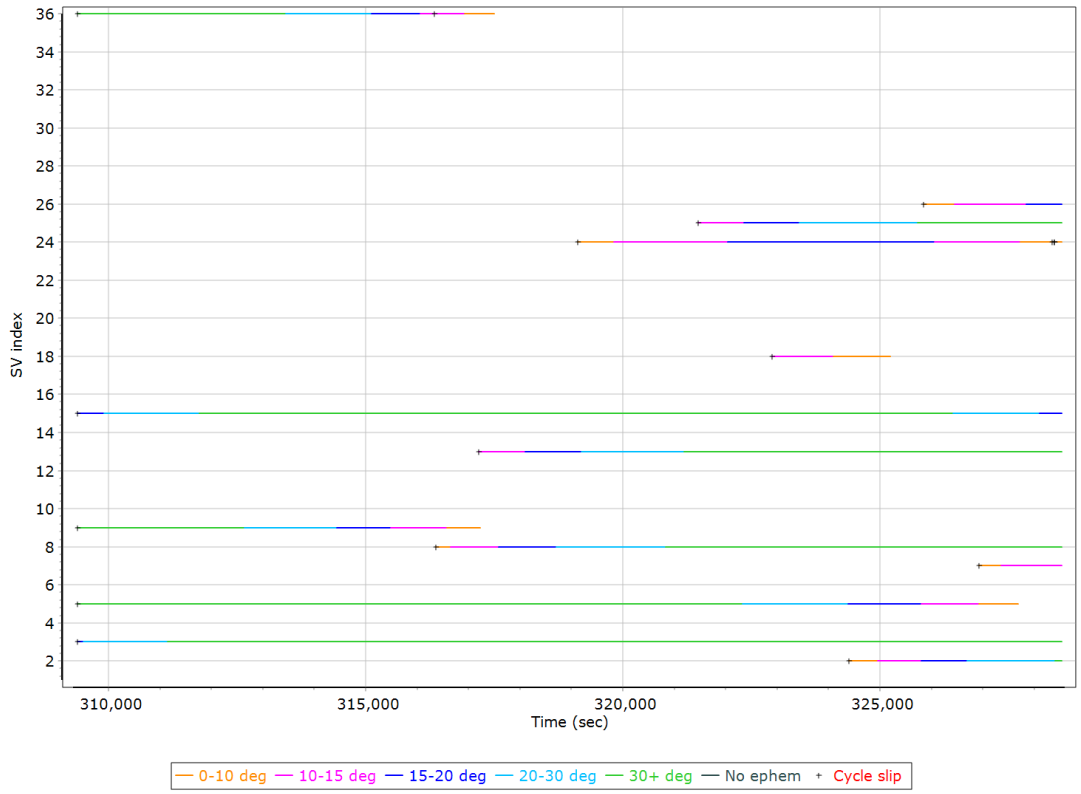
BEIDOU Satellite Lock/Elevation



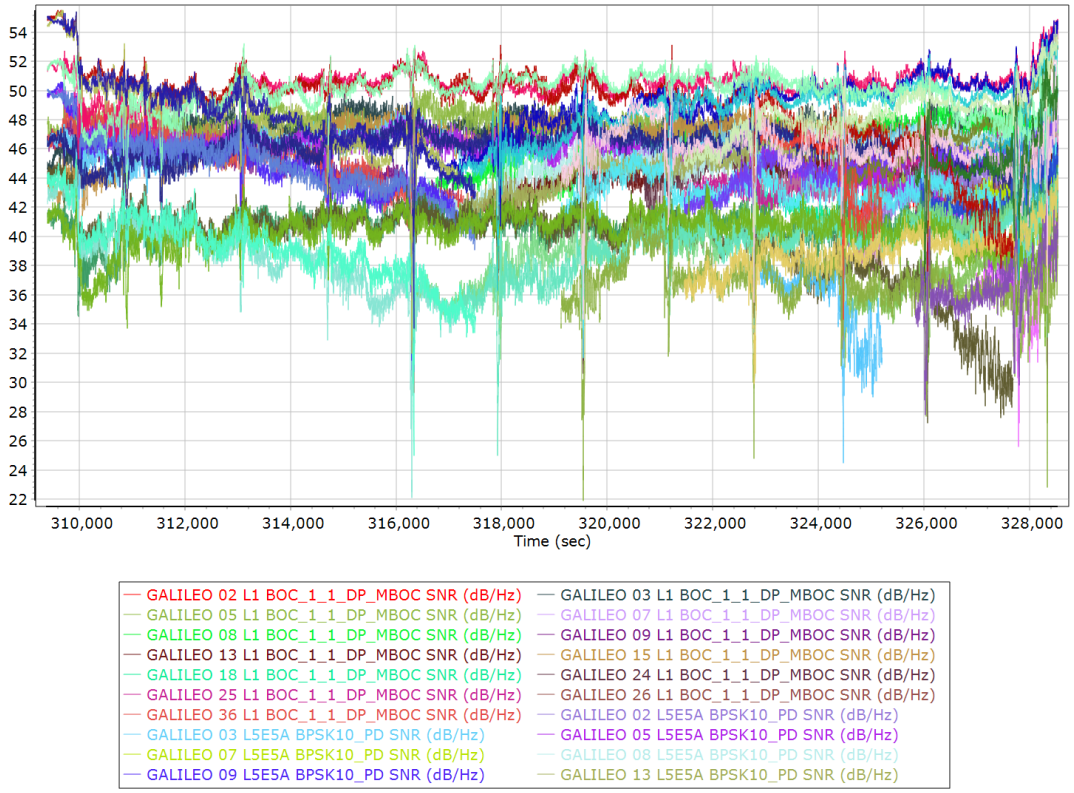
BEIDOU SNR



GALILEO Satellite Lock/Elevation

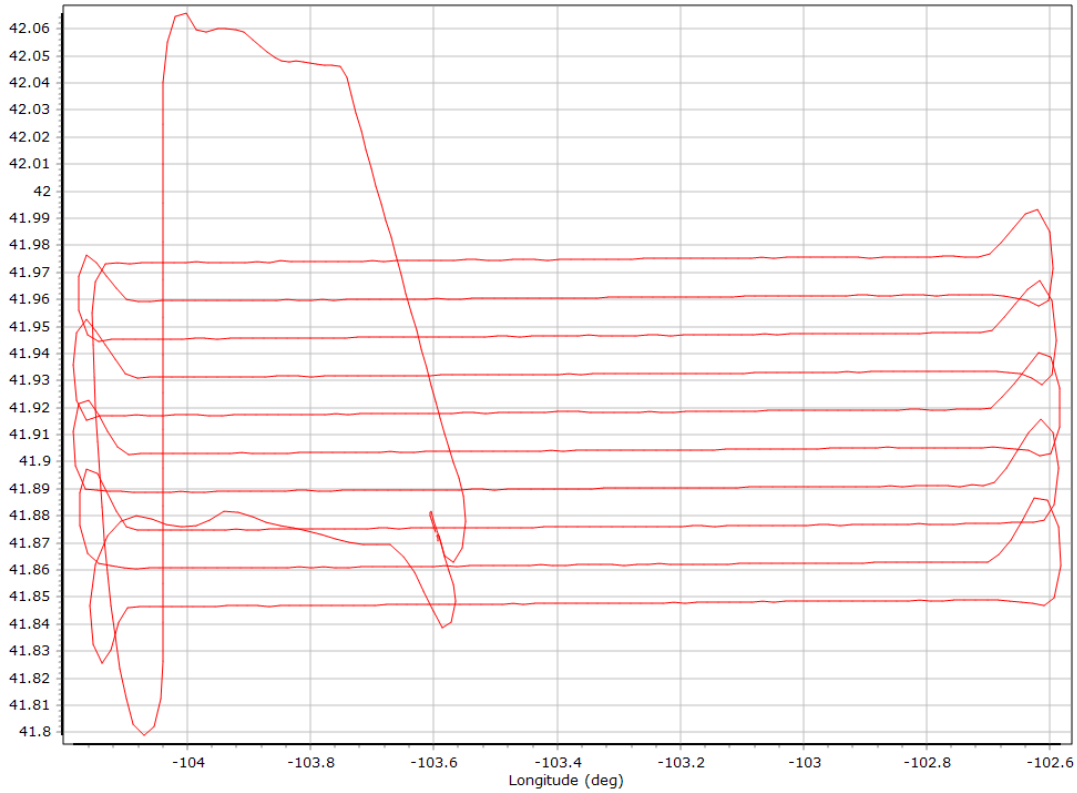


GALILEO SNR

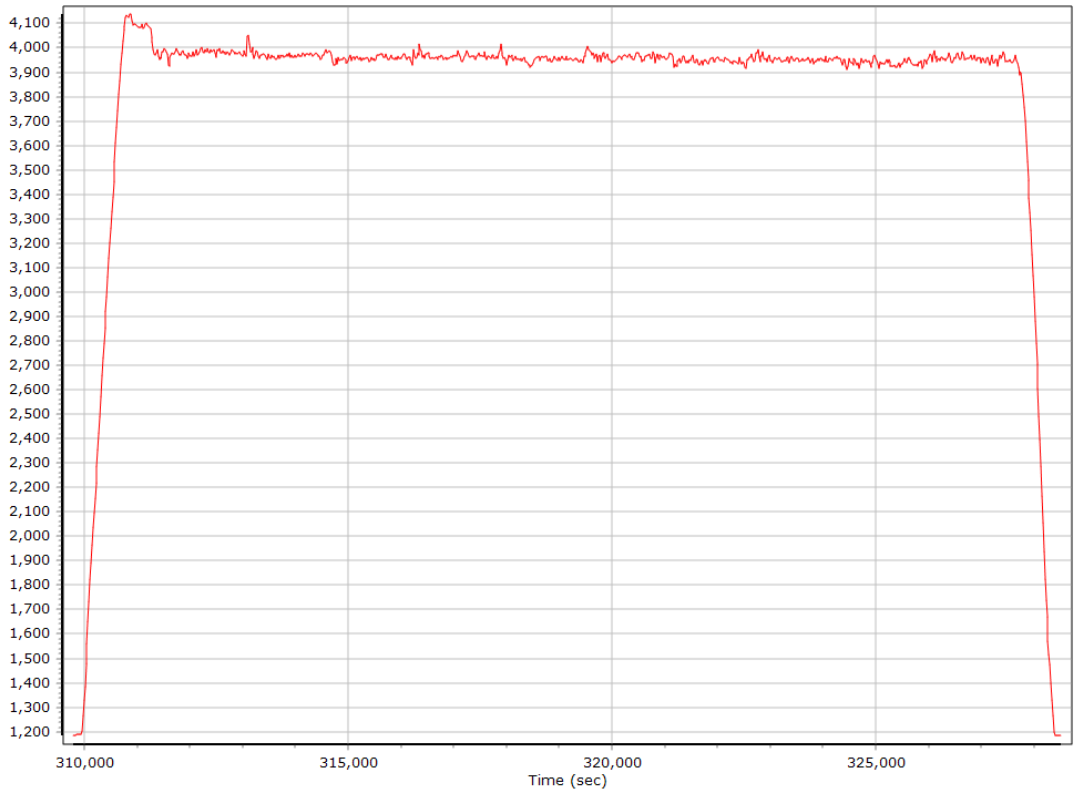

54
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
310,000
312,000
314,000
316,000
318,000
320,000
322,000
324,000
326,000
328,000
Time (sec)
GALILEO 02 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 03 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 05 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 07 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 08 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 09 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 18 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 24 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 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 09 L5E5A BPSK10_PD SNR (dB/Hz)
GALILEO 13 L5E5A BPSK10_PD SNR (dB/Hz)

Smoothed Trajectory Information

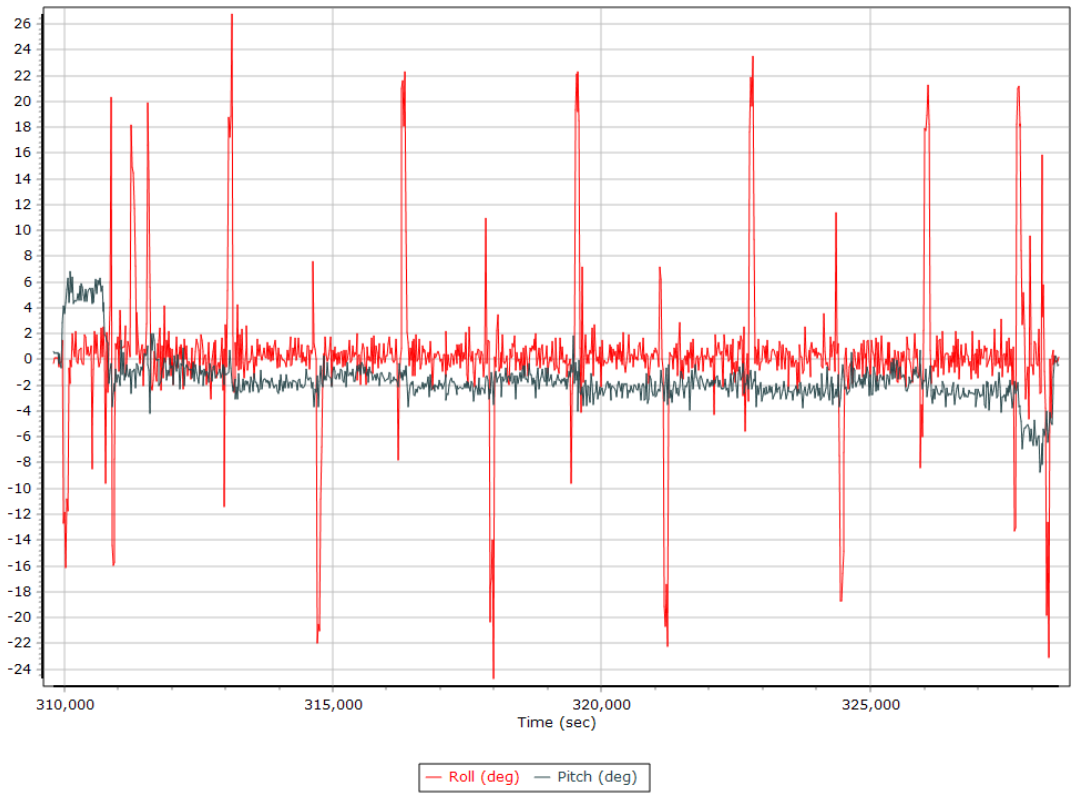
Top View



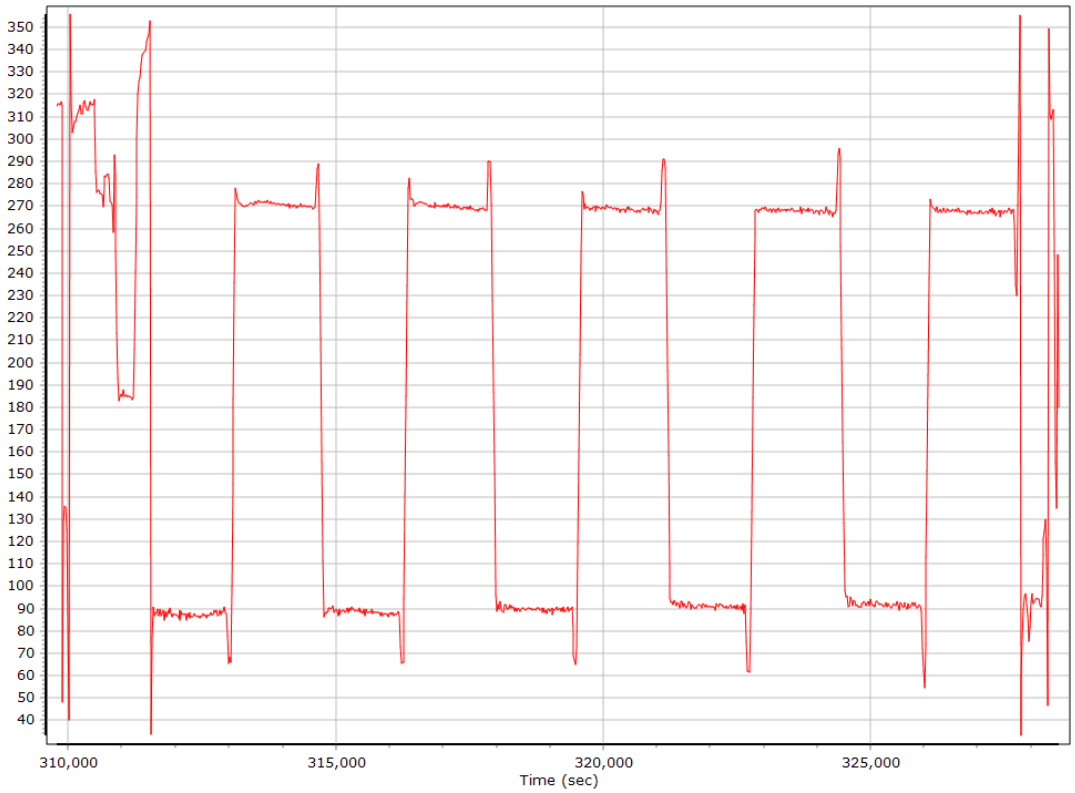
Altitude



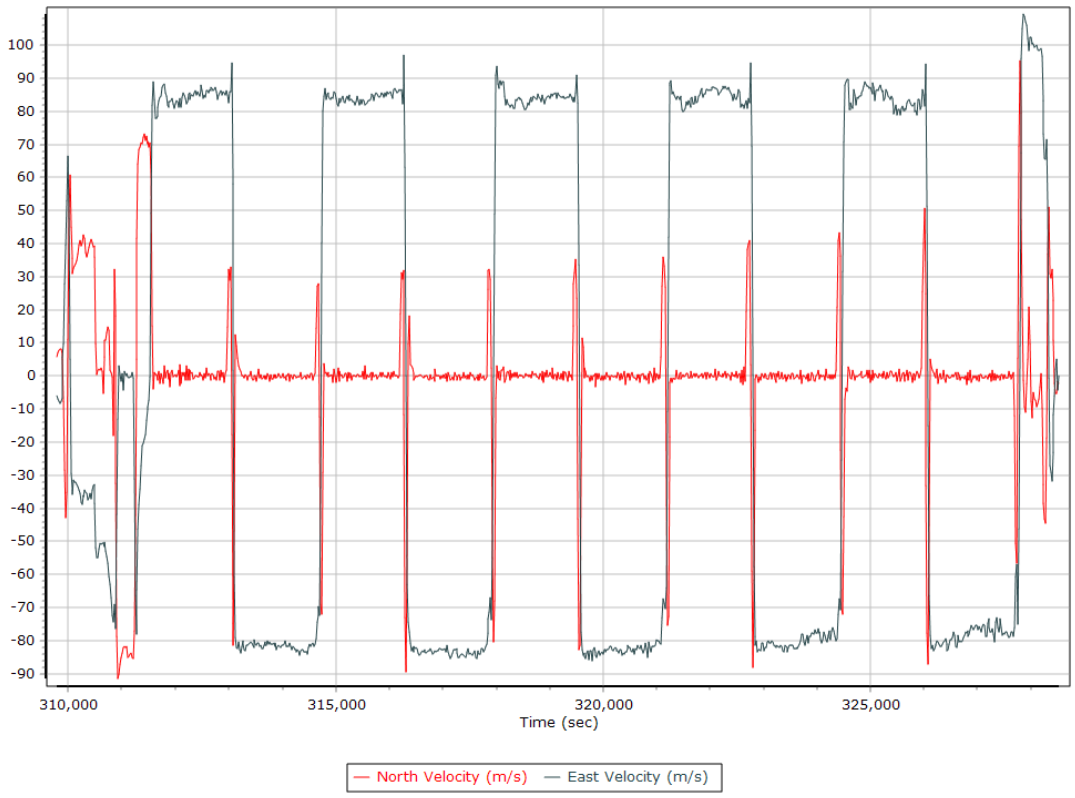
Roll/Pitch



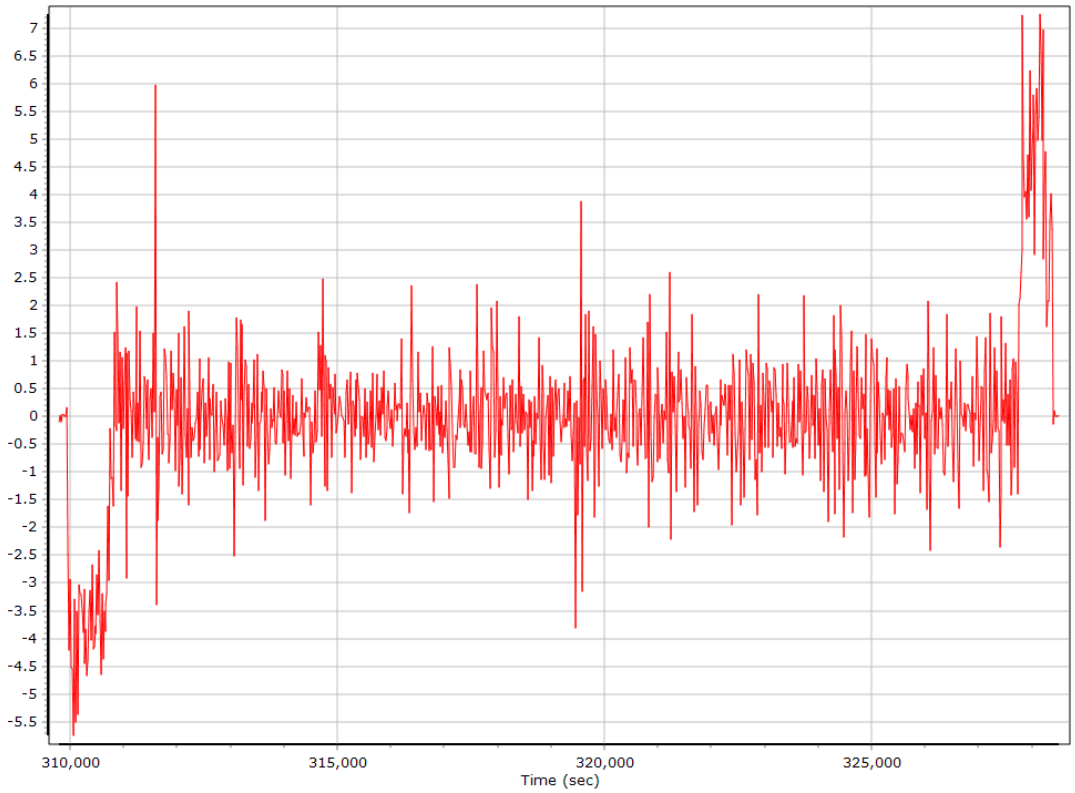
Heading



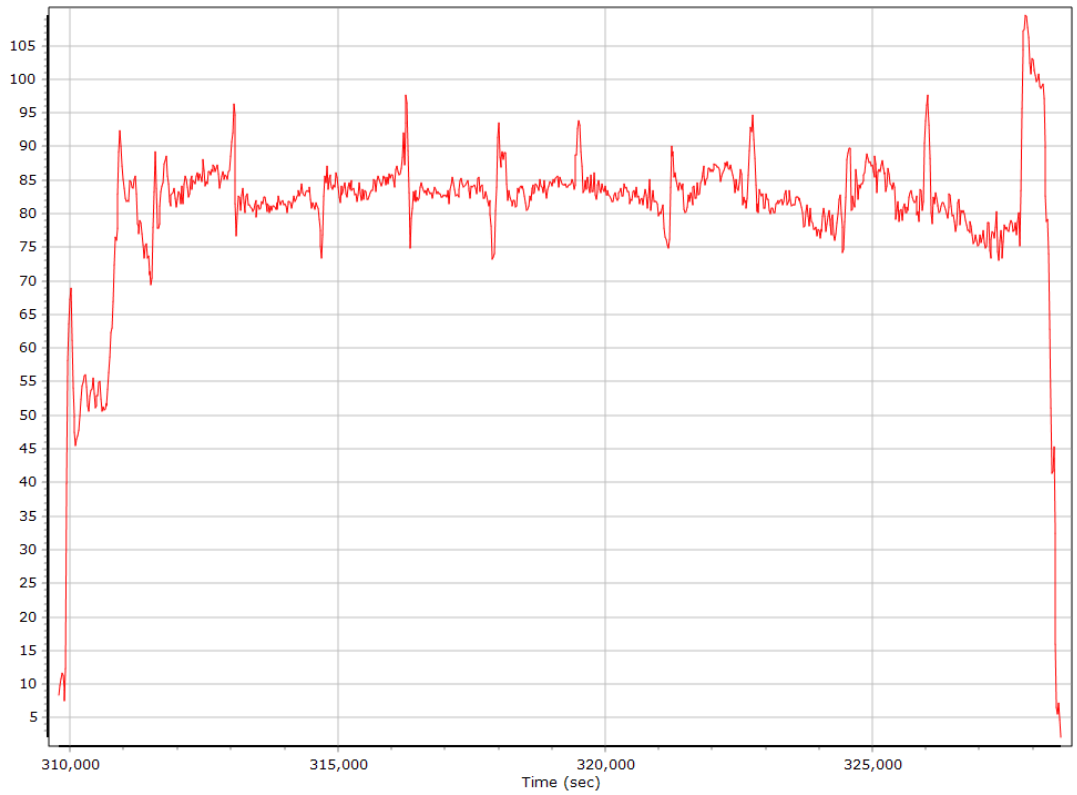
North/East Velocity



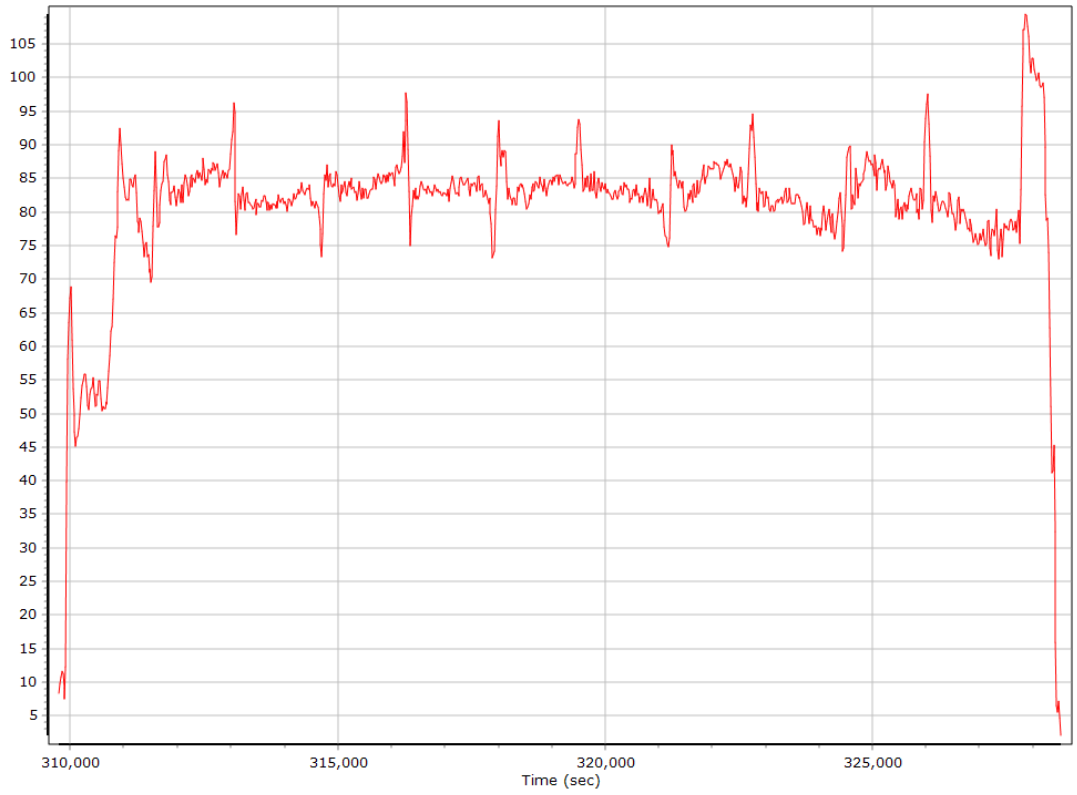
Down Velocity



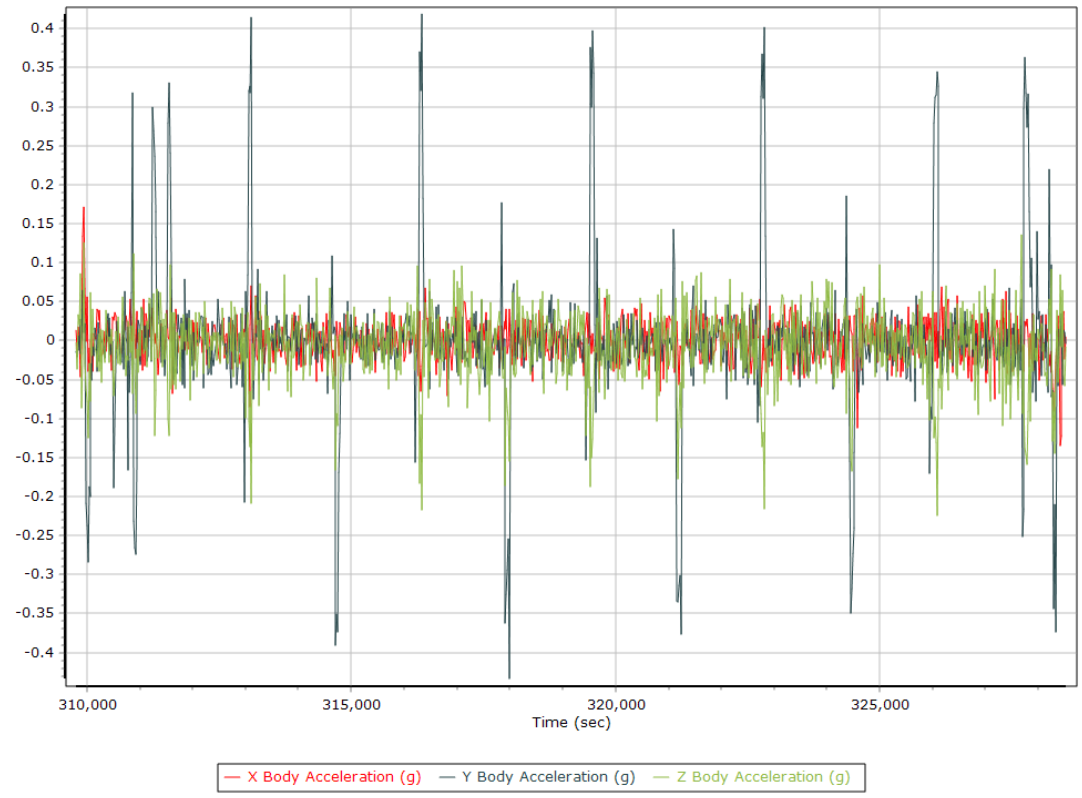
Total Speed



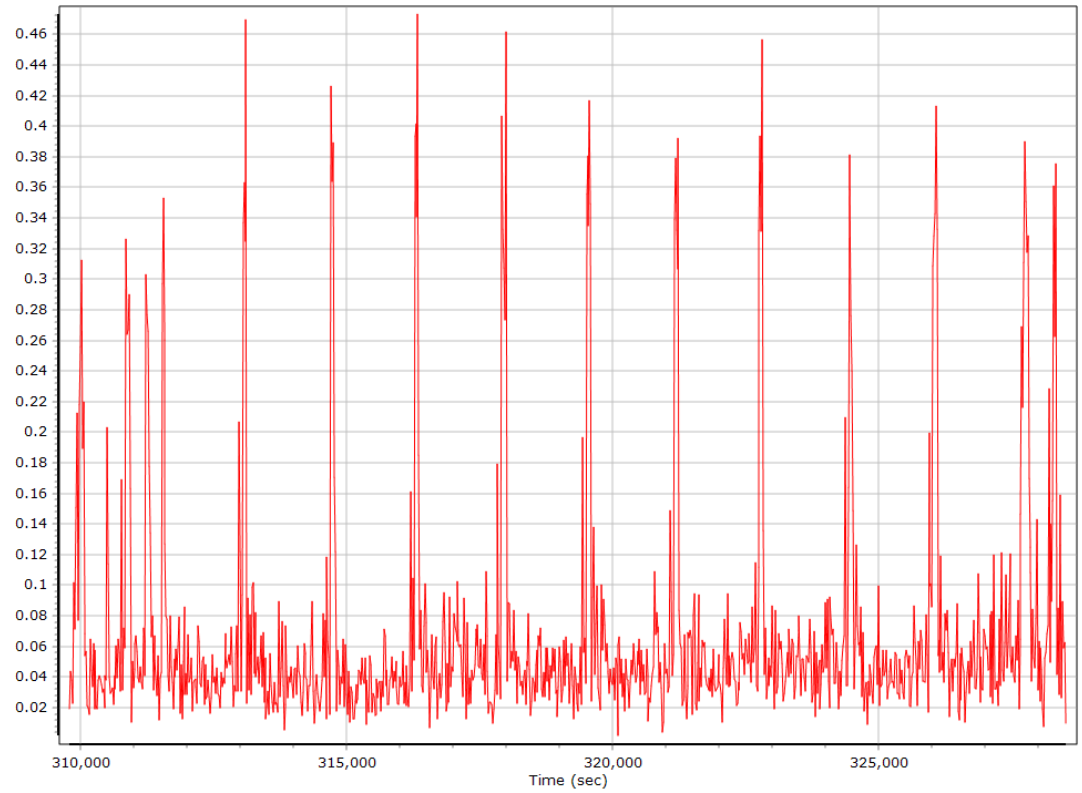
Ground Speed



Body Acceleration



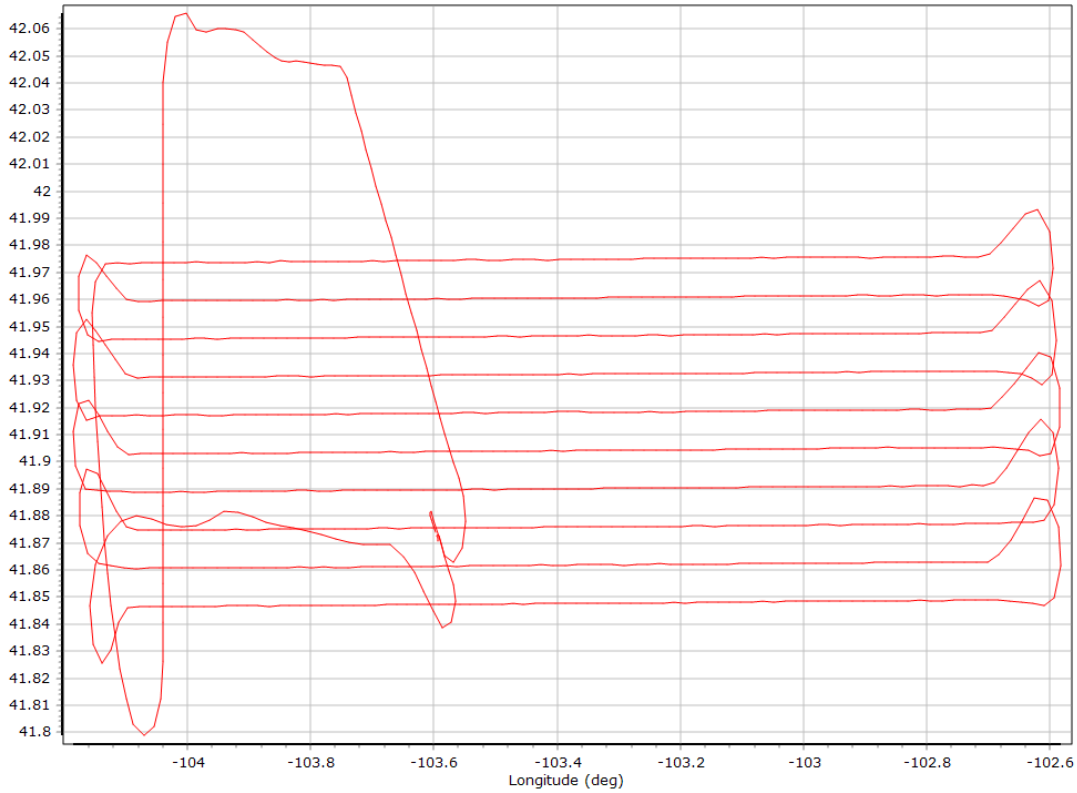
Total Body Acceleration



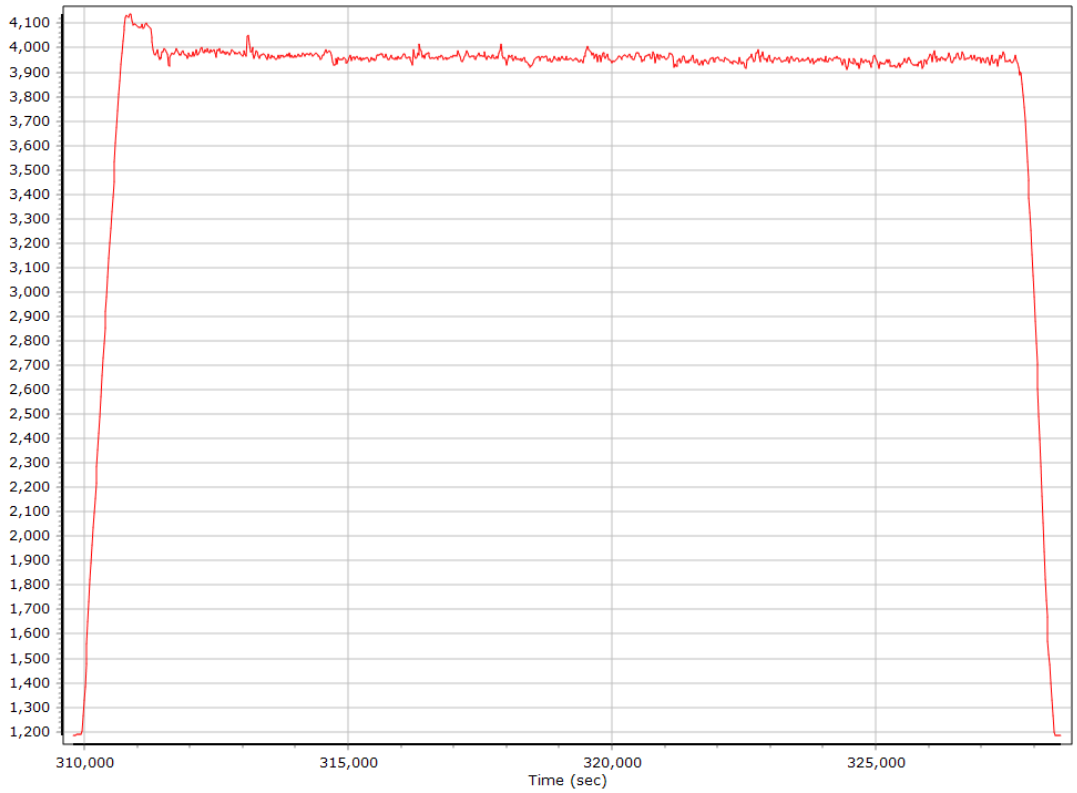
Body Angular Rate

Forward Processed Trajectory Information

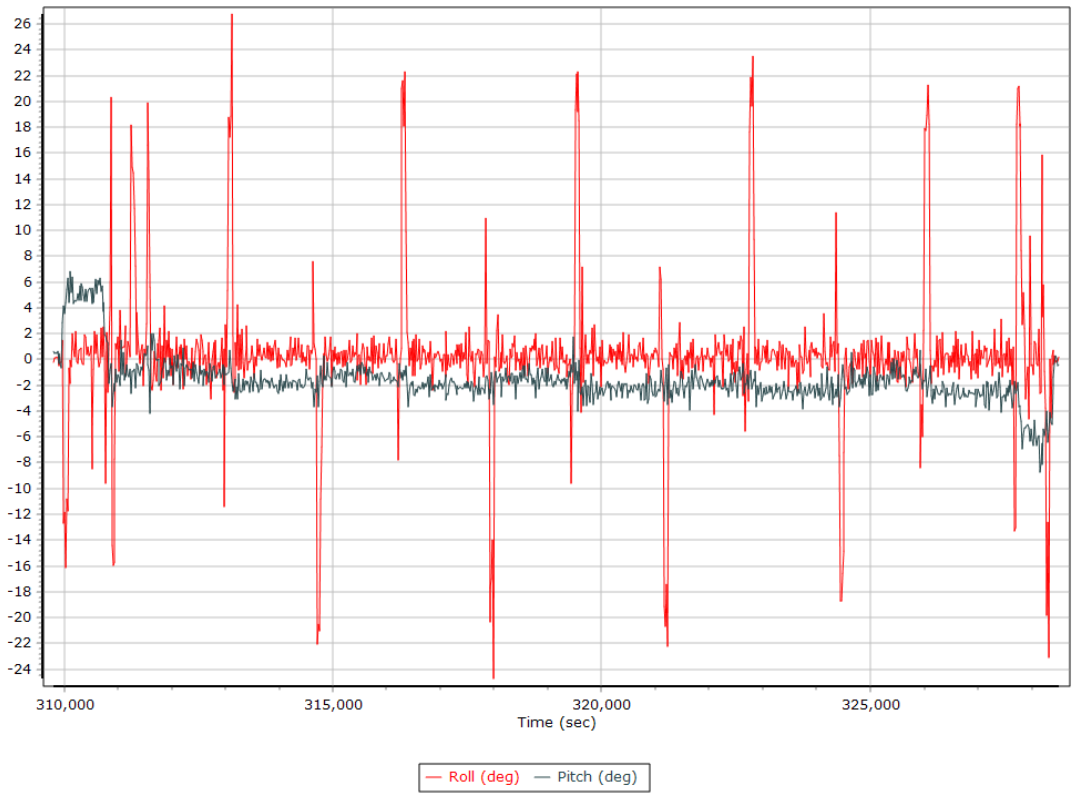
Top View



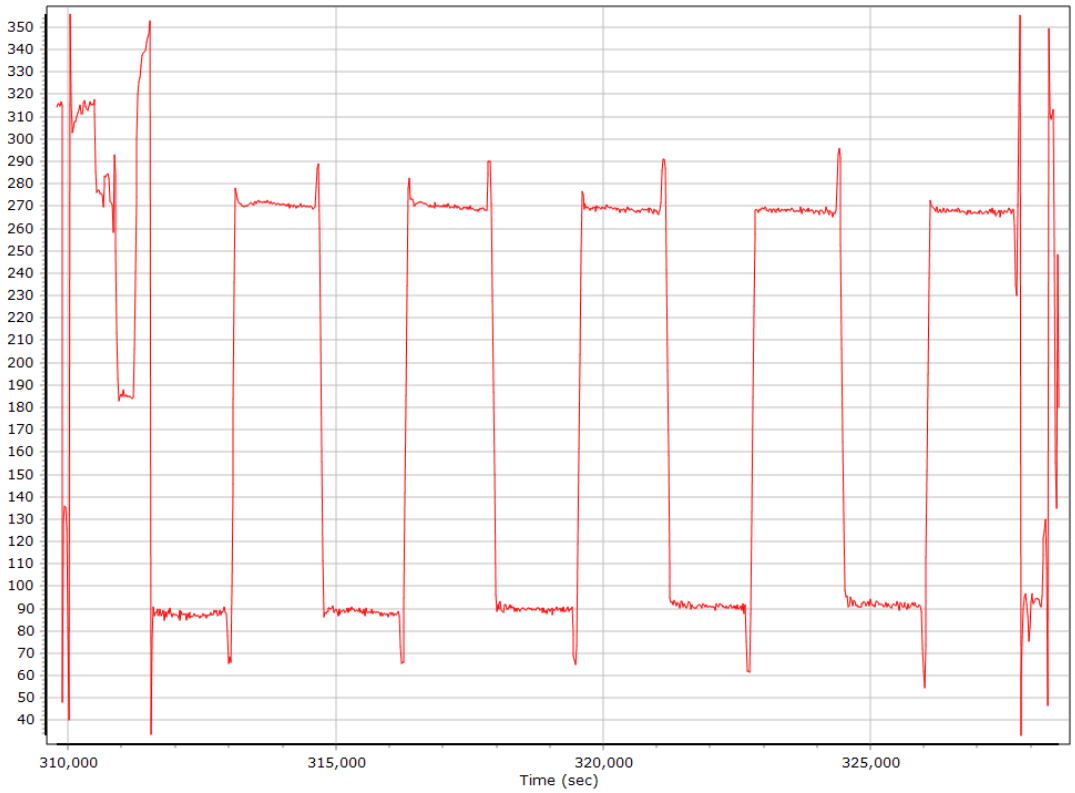
Altitude



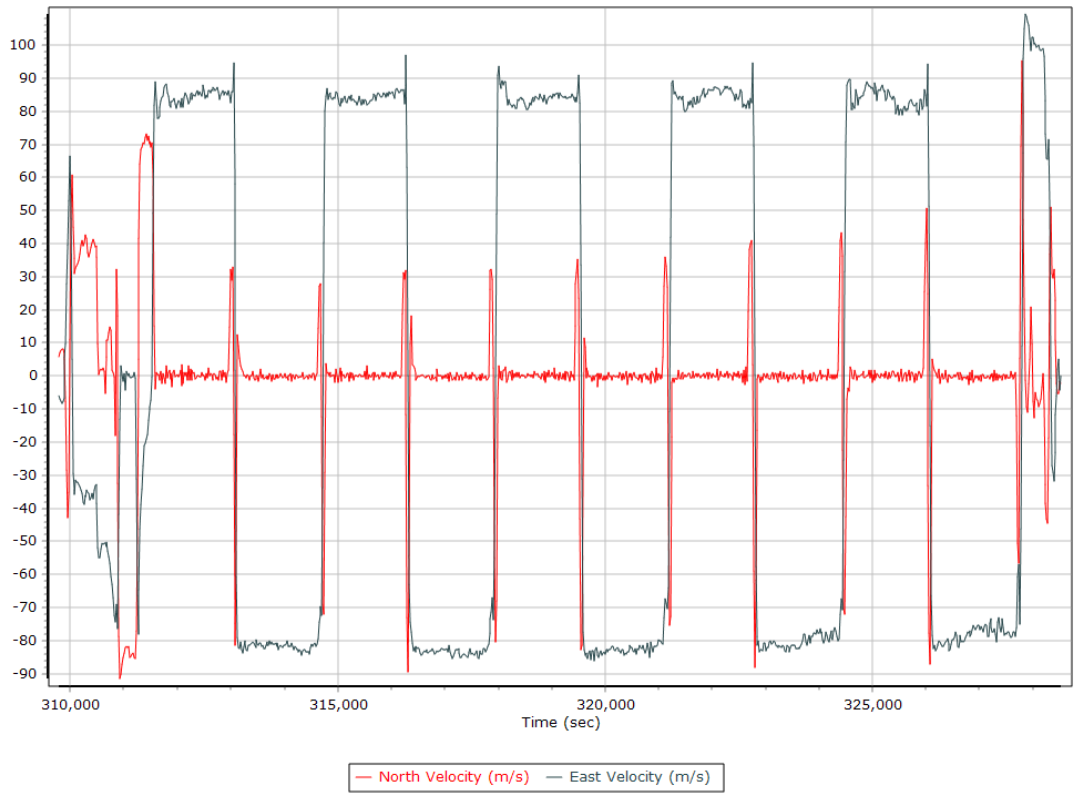
Roll/Pitch



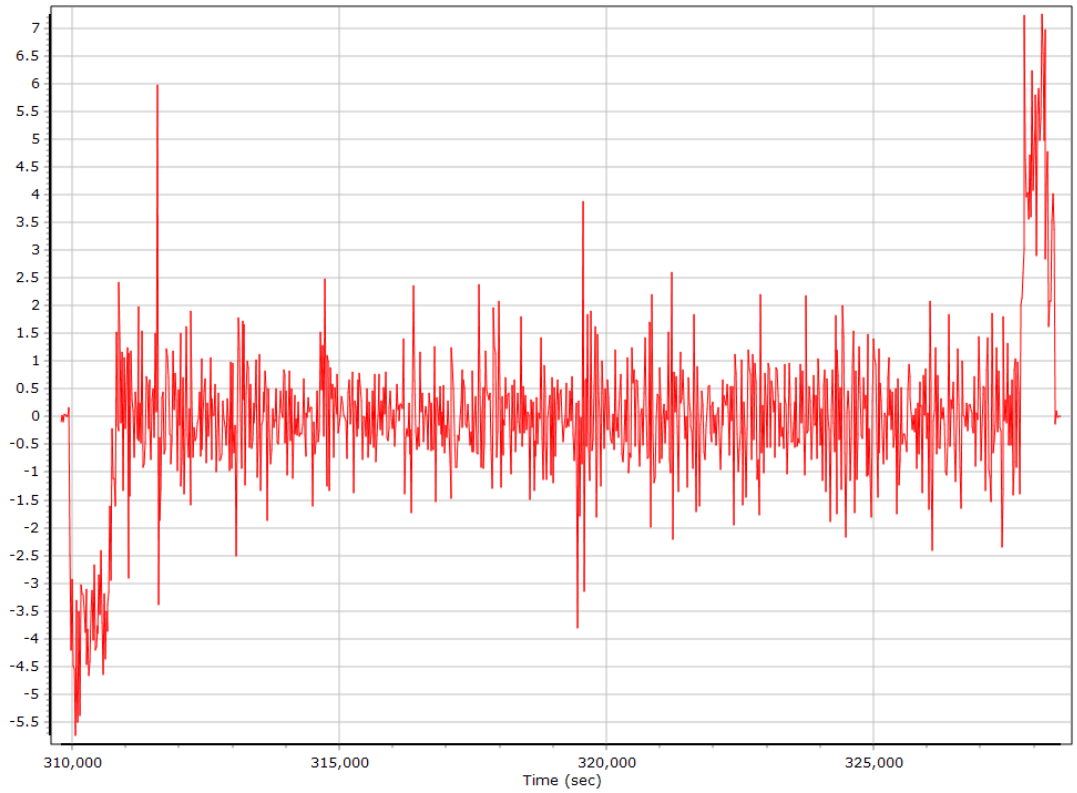
Heading



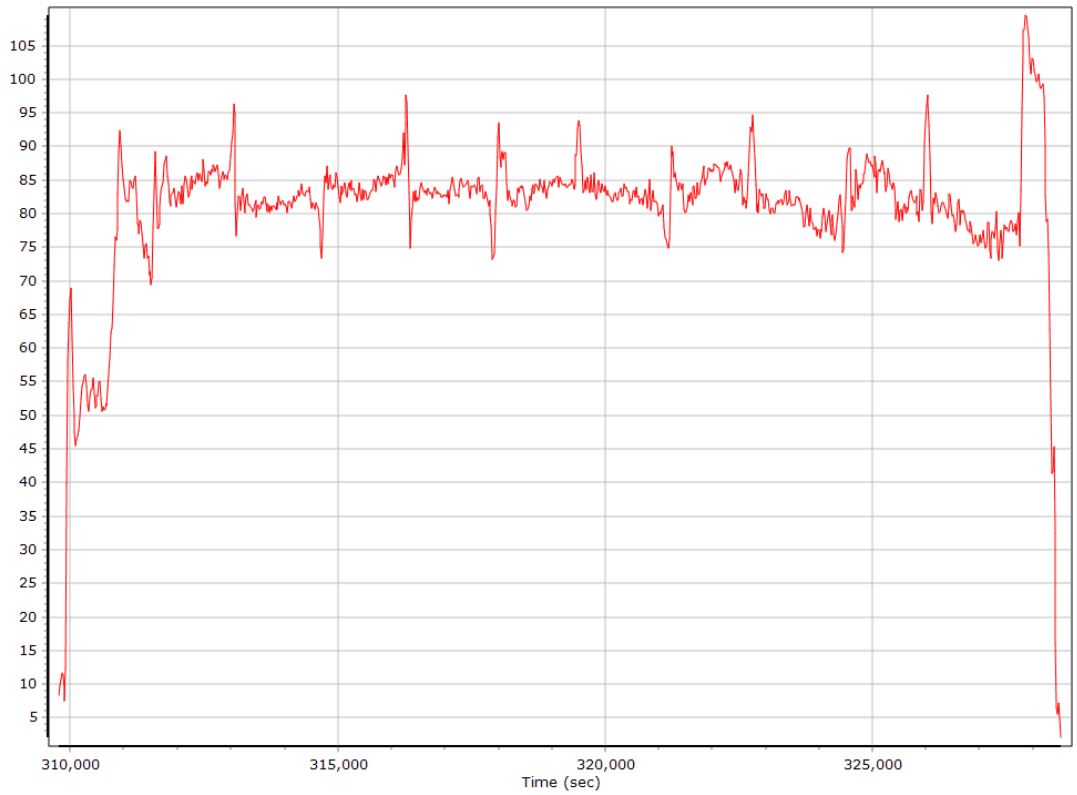
North/East Velocity



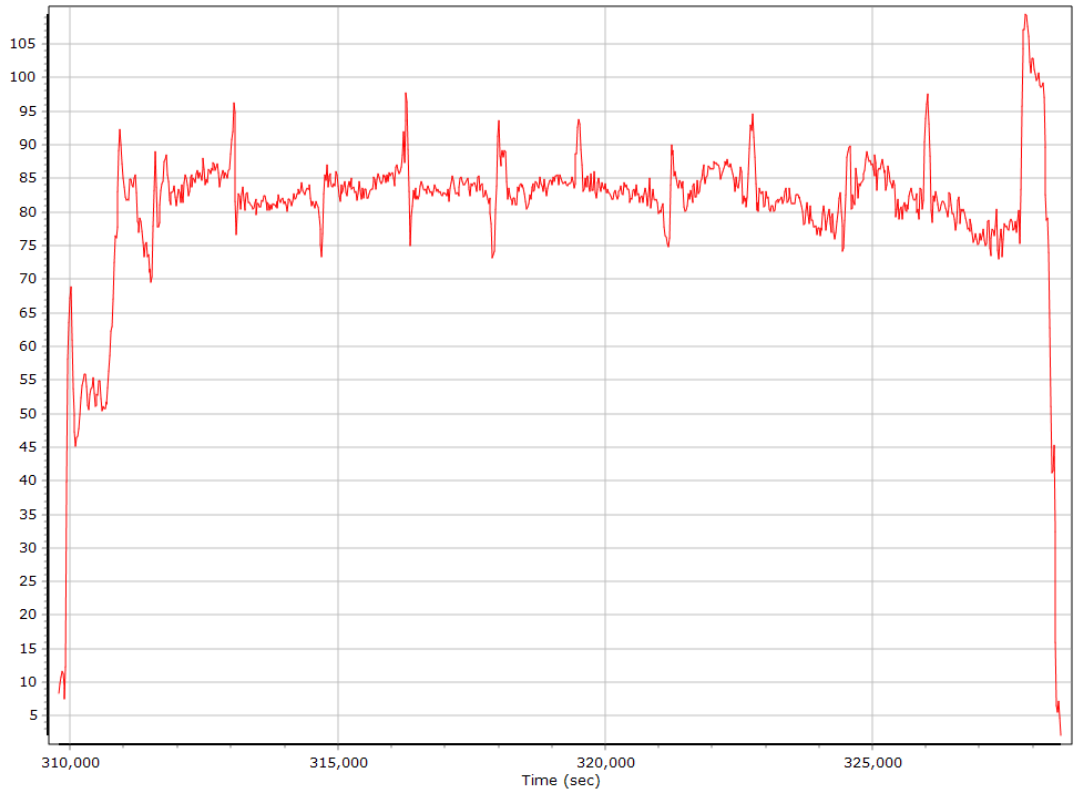
Down Velocity



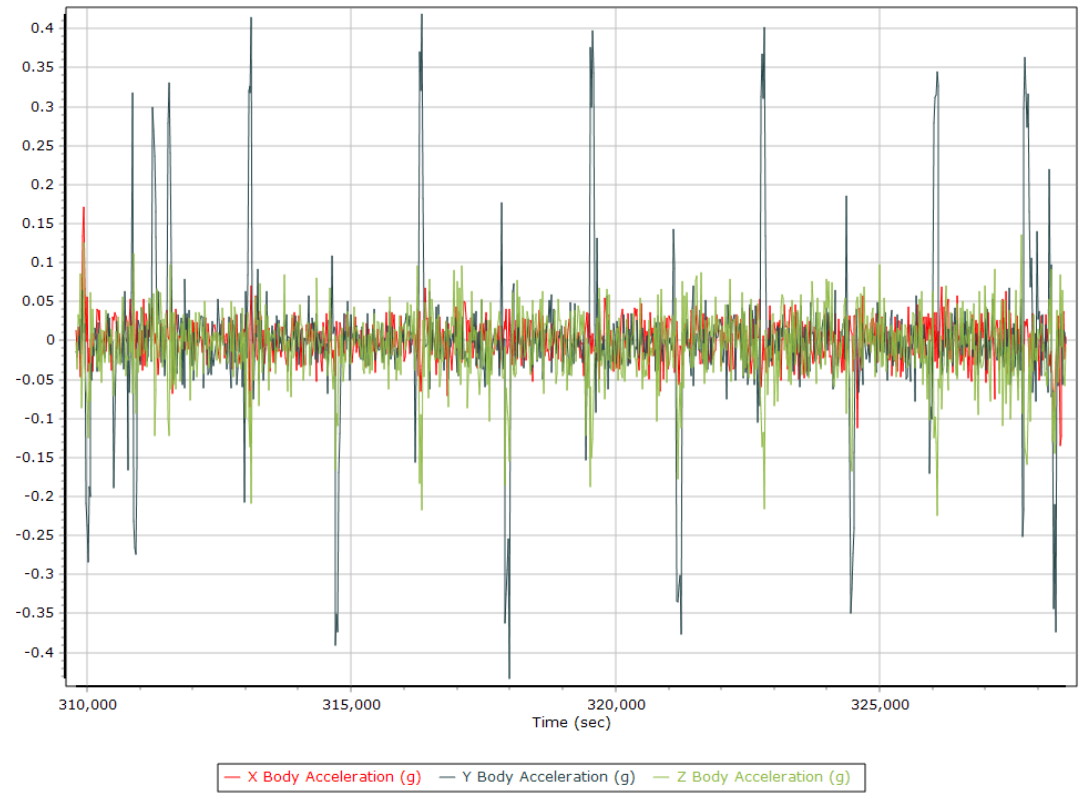
Total Speed



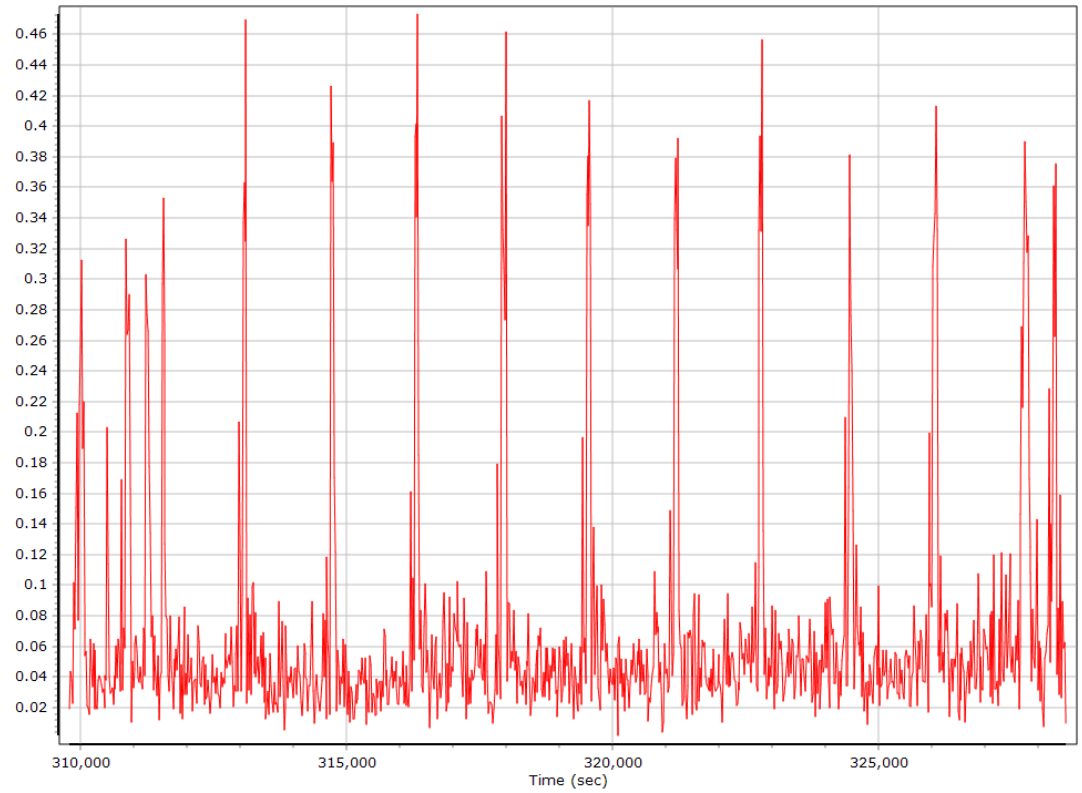
Ground Speed



Body Acceleration



Total Body Acceleration



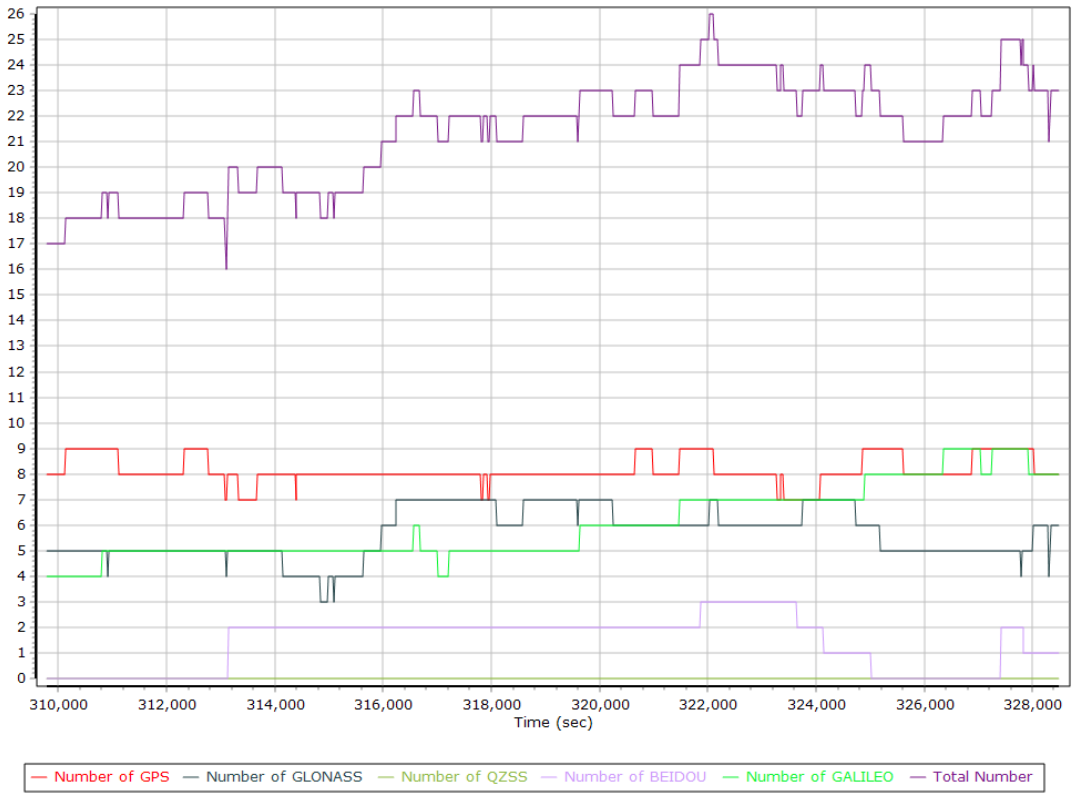
Body Angular Rate

GNSS QC

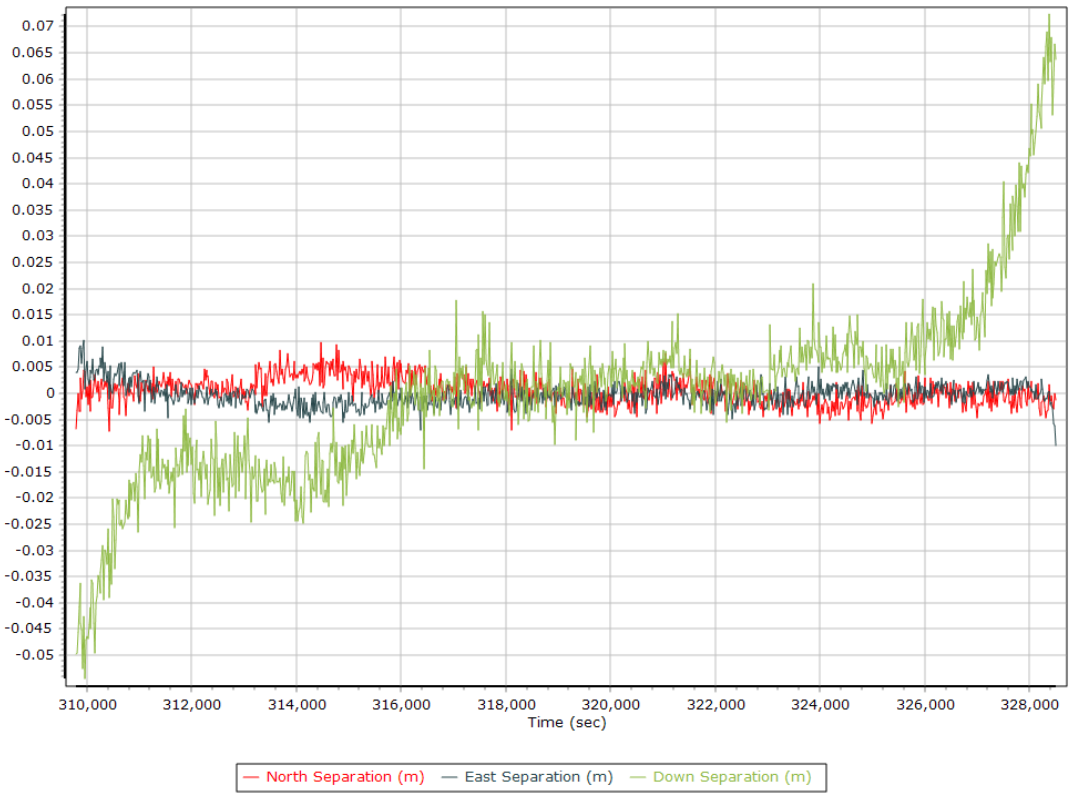
GNSS QC Statistics

Statistics	Min	Max	Mean
Baseline length (km)	0.00	0.00	
Number of GPS SV	7	9	8
Number of GLONASS SV	0	7	6
Number of QZSS SV	0	0	0
Number of BEIDOU SV	0	3	1
Number of GALILEO SV	0	9	6
Total number of SV	8	26	21
PDOP	0.99	1.97	1.16
QC Solution Gaps	0.00	0.00	
Solution Type	Fixed	Float	No solution
Epoch (sec)	19109.00	0.00	0.00
Percentage	100.00	0.00	0.00

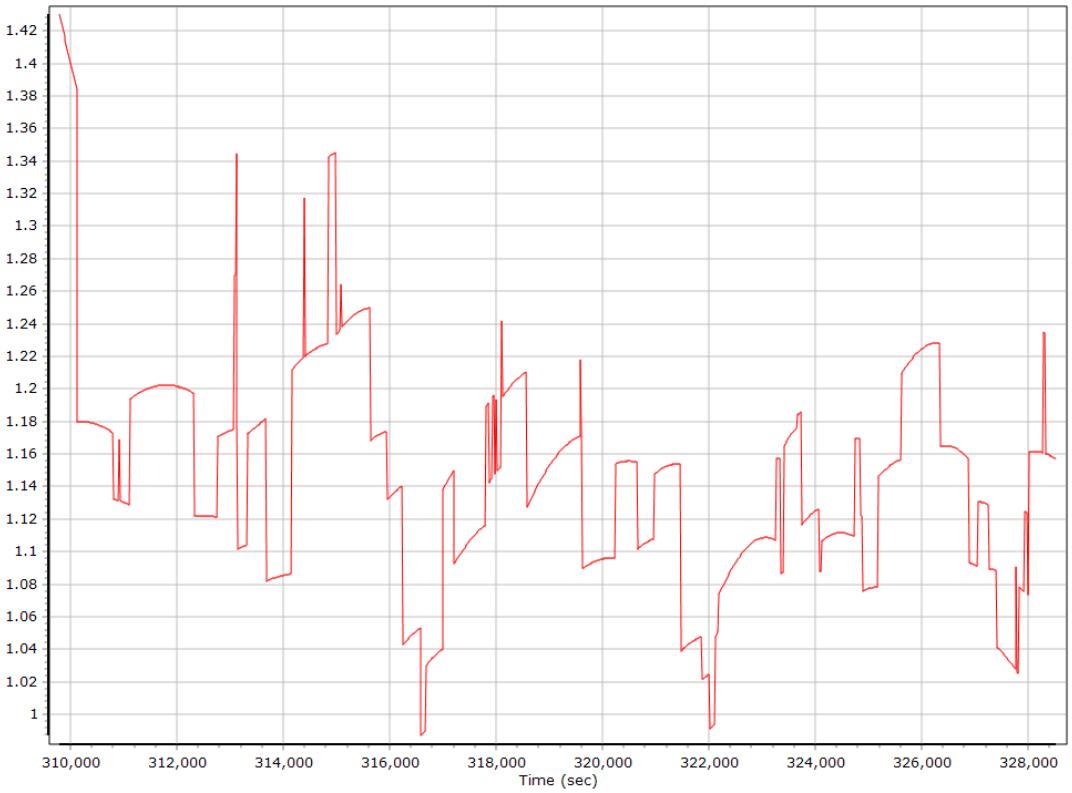
Num SVs in solution



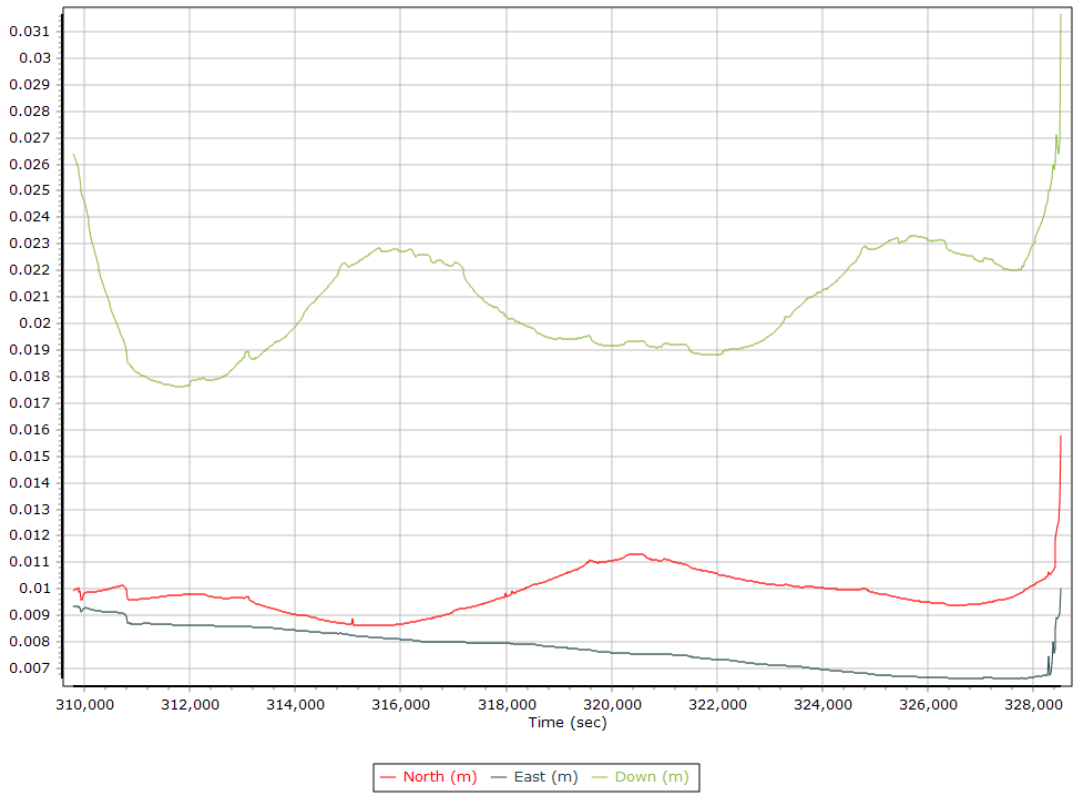
Forward/Reverse Separation



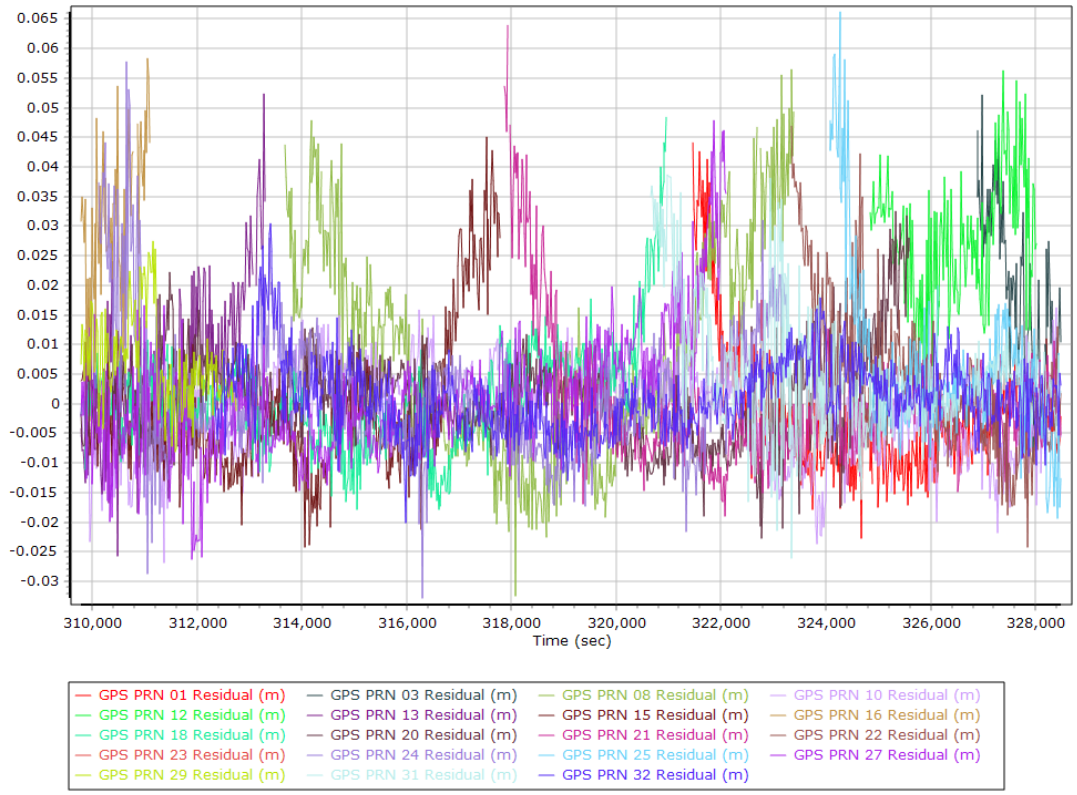
PDOP



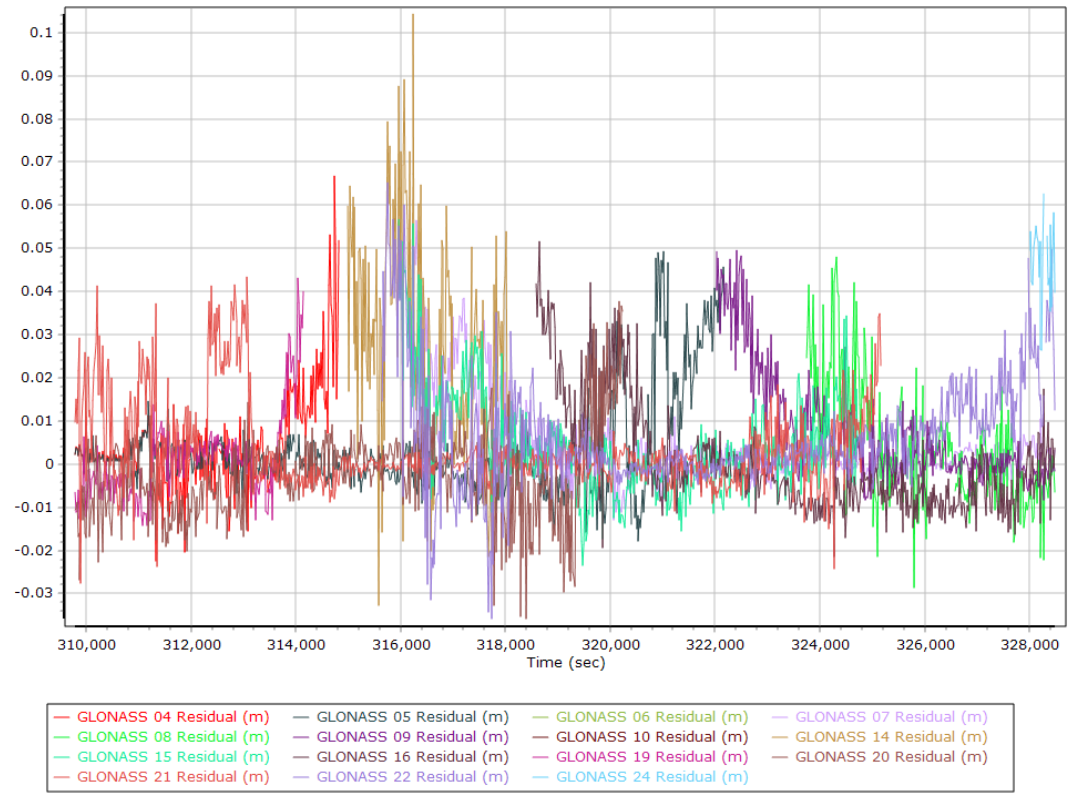
Estimated Position Accuracy



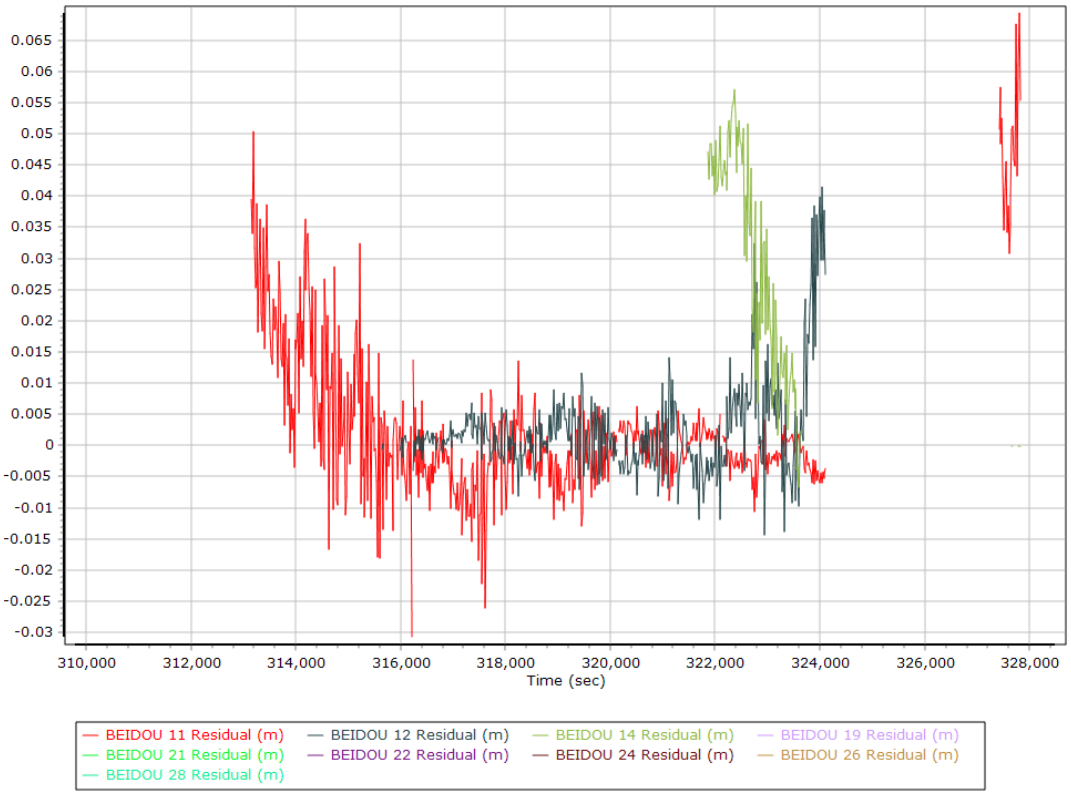
GPS Residuals



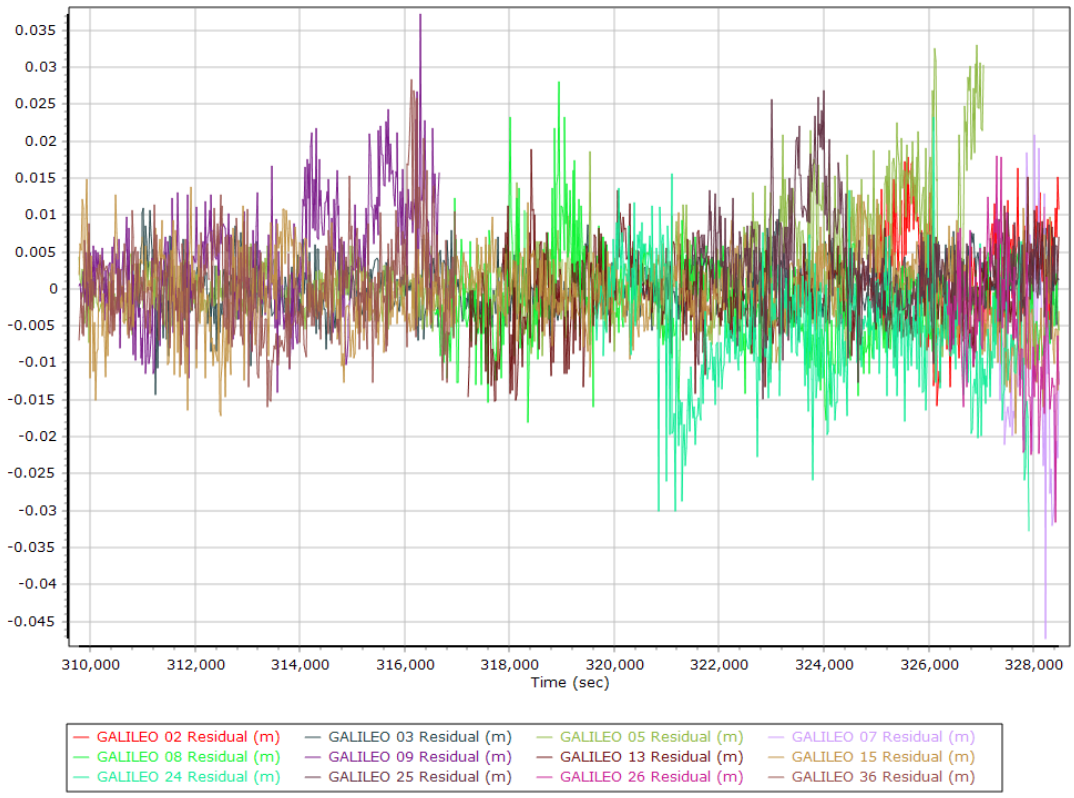
GLONASS Residuals



BEIDOU Residuals



GALILEO Residuals



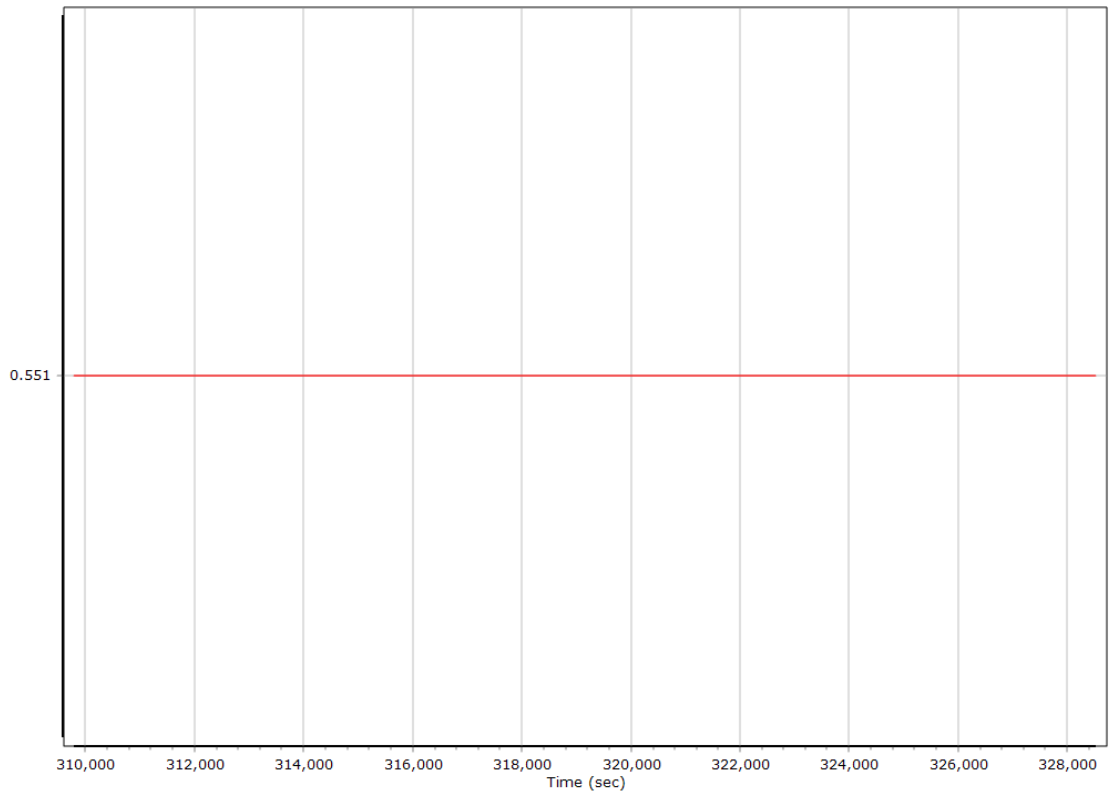
GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion PP-RTX		
Stabilized mount	False		
Processing start time	309372.000 (11/25/2020 1:56:12 PM)		
Processing end time	328535.000 (11/25/2020 7:15:35 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)	0.551	-0.435	-0.972
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

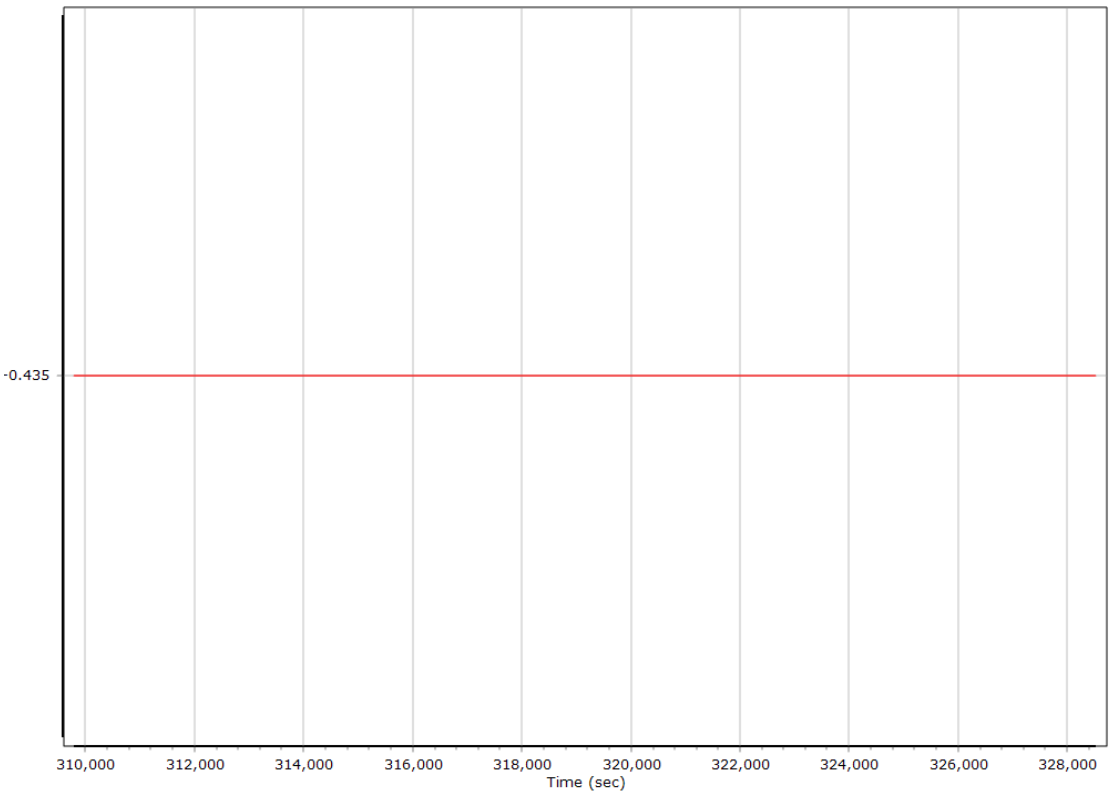
Calibrated Installation Parameters

Reference-Primary GNSS Lever Arm (m)

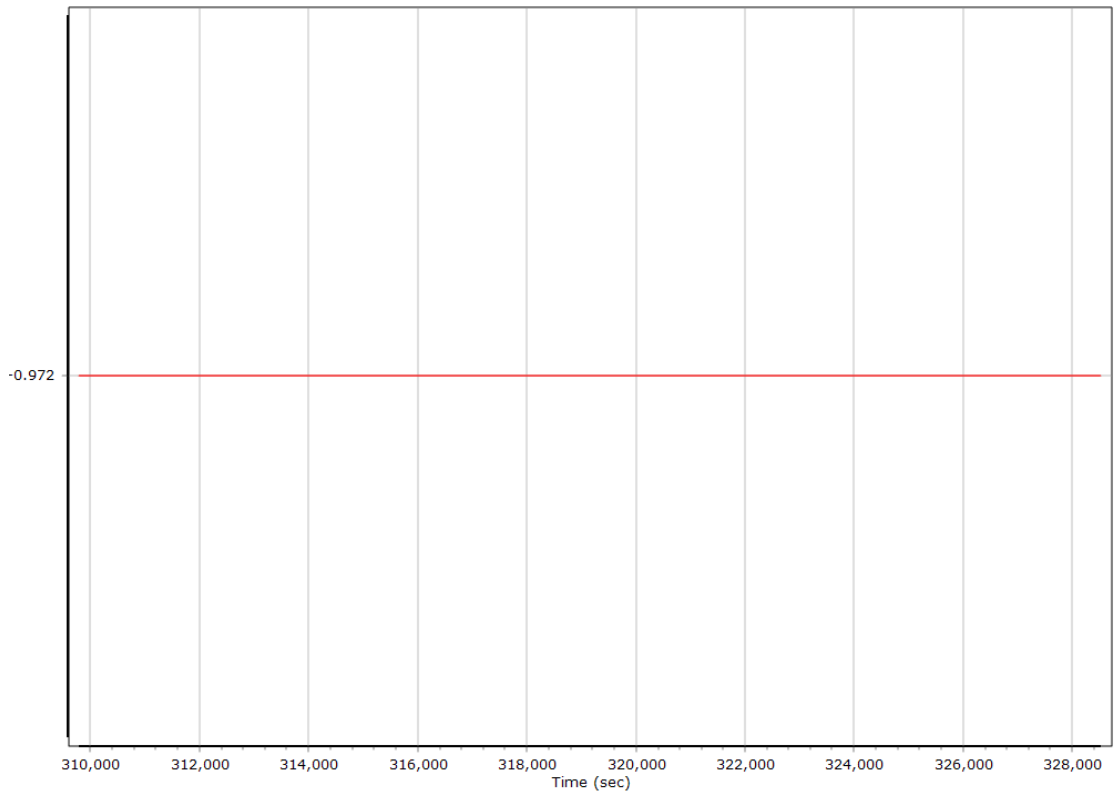
X Reference-Primary GNSS Lever Arm (m)



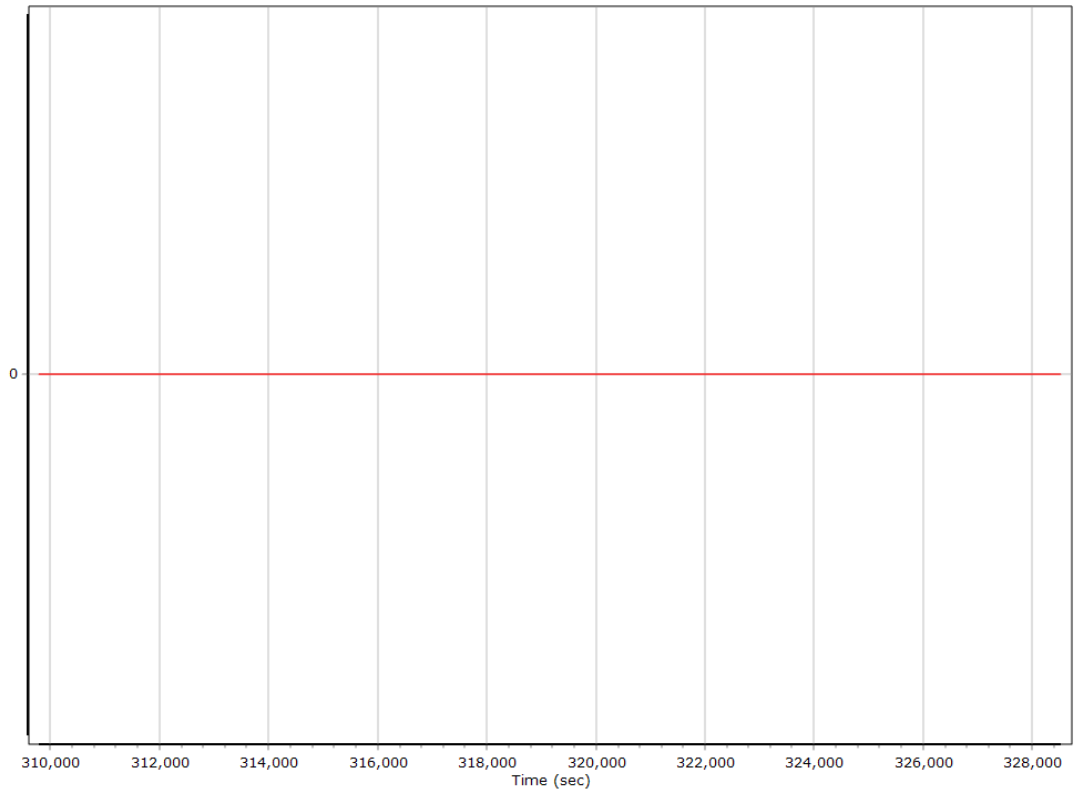
Y Reference-Primary GNSS Lever Arm (m)



Z Reference-Primary GNSS Lever Arm (m)



Reference-Primary GNSS Lever Arm Figure of Merit



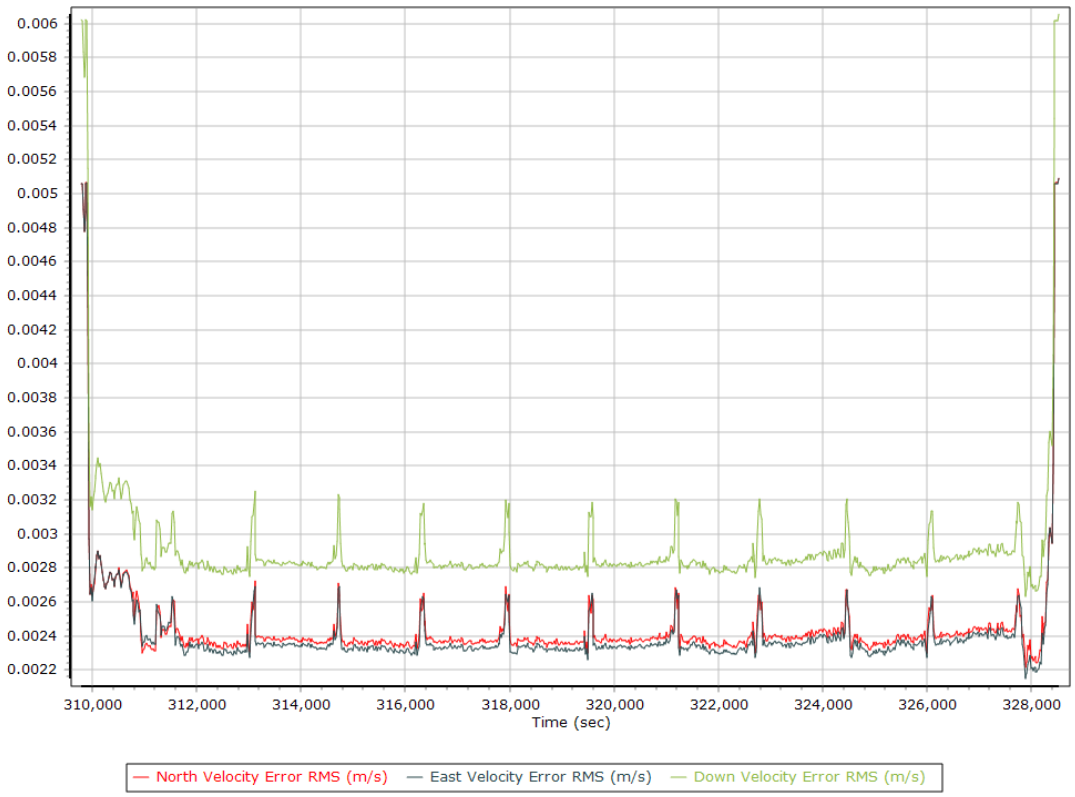
IN-Fusion QC

Forward Processed Estimated Errors, Reference Frame

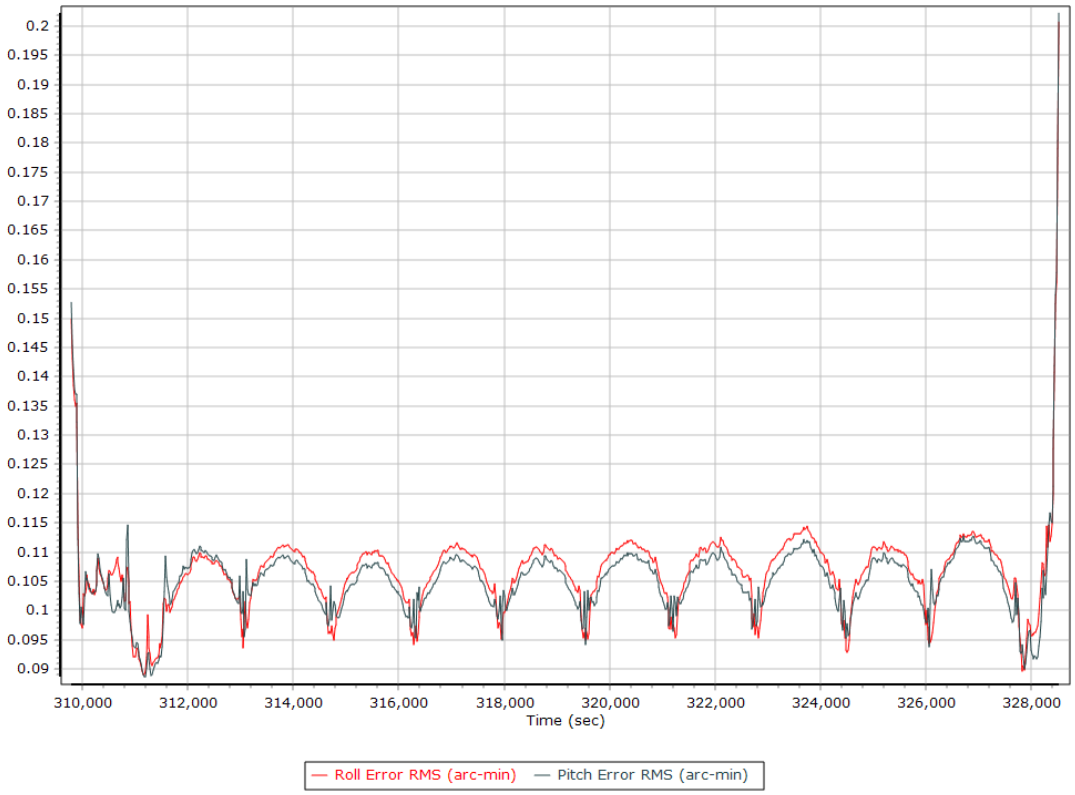
Smoothed Performance Metrics

Position Error RMS (m)

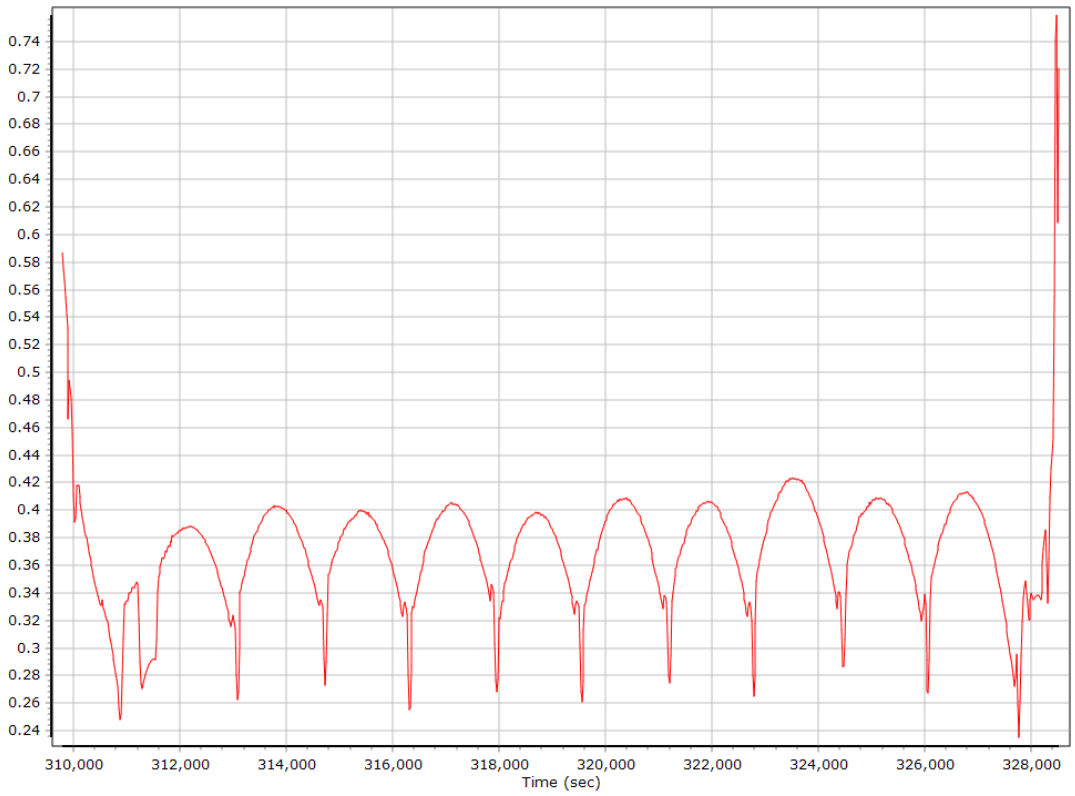
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

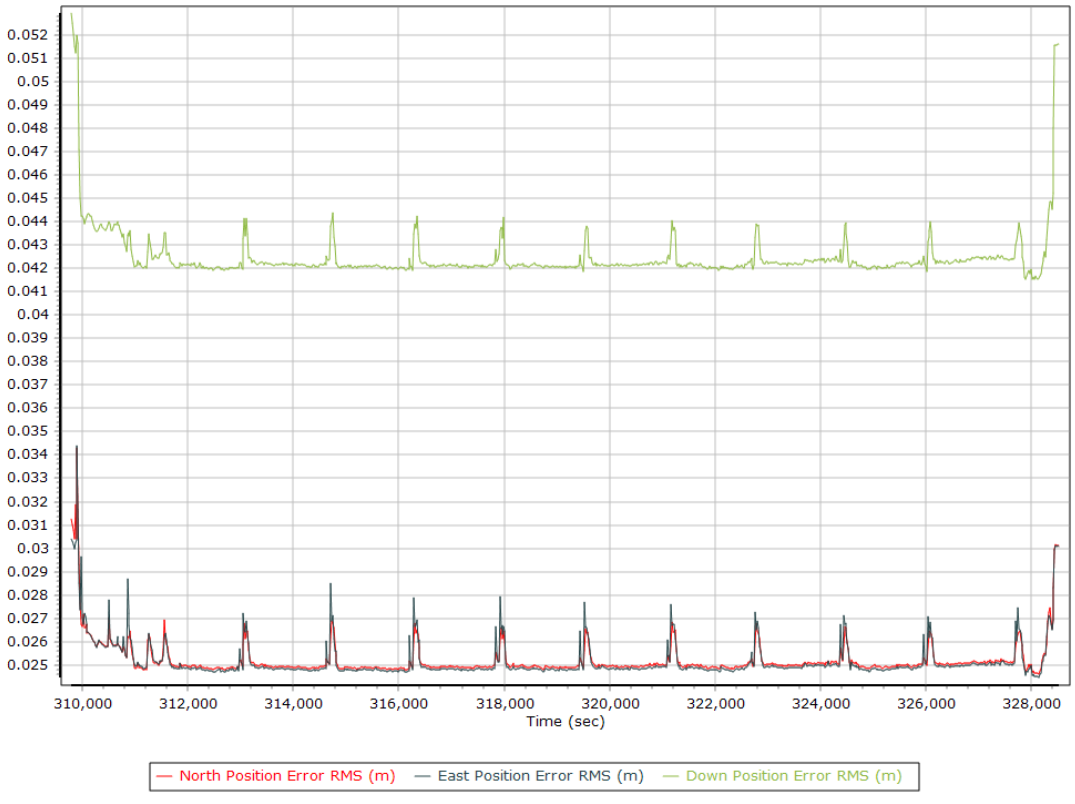


Heading Error RMS (arc-min)

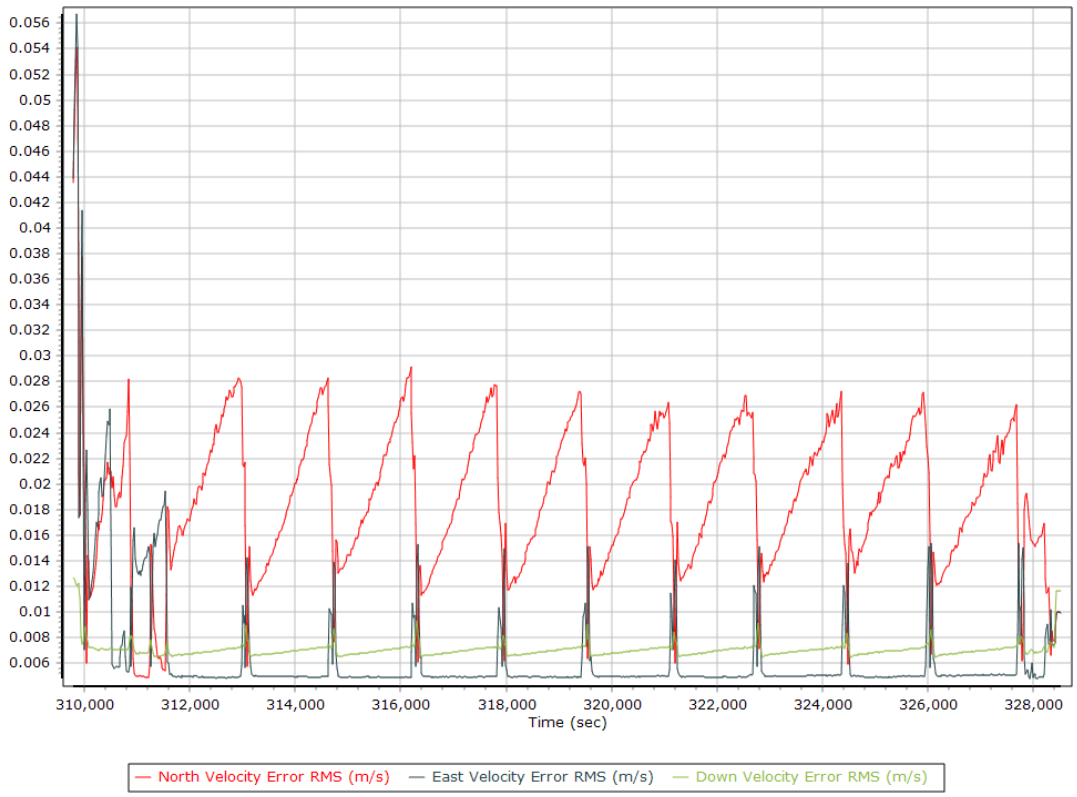


Forward Processed Performance Metrics

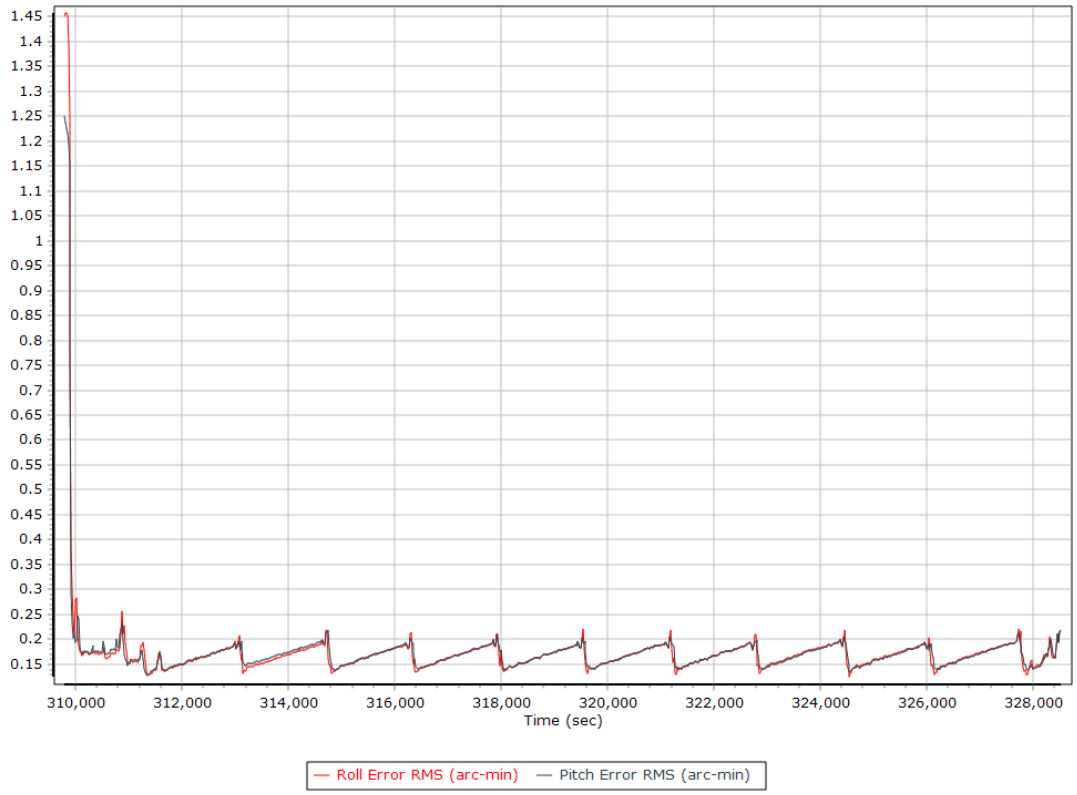
Position Error RMS (m)



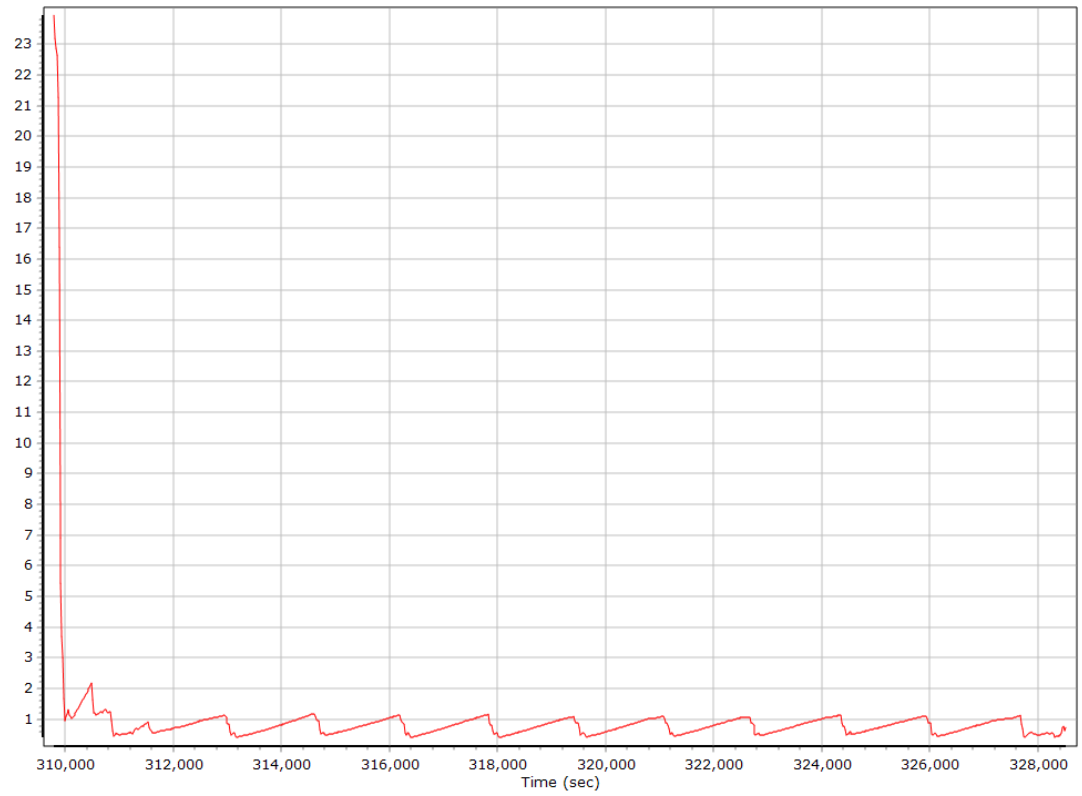
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

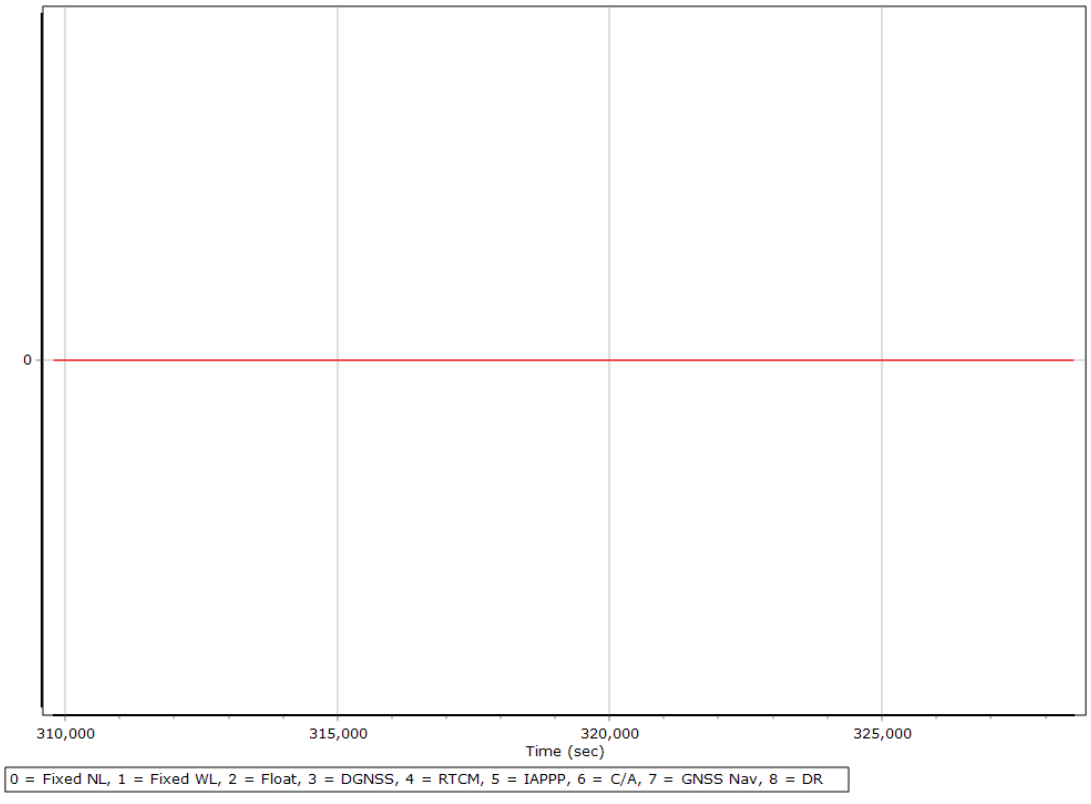


Heading Error RMS (arc-min)

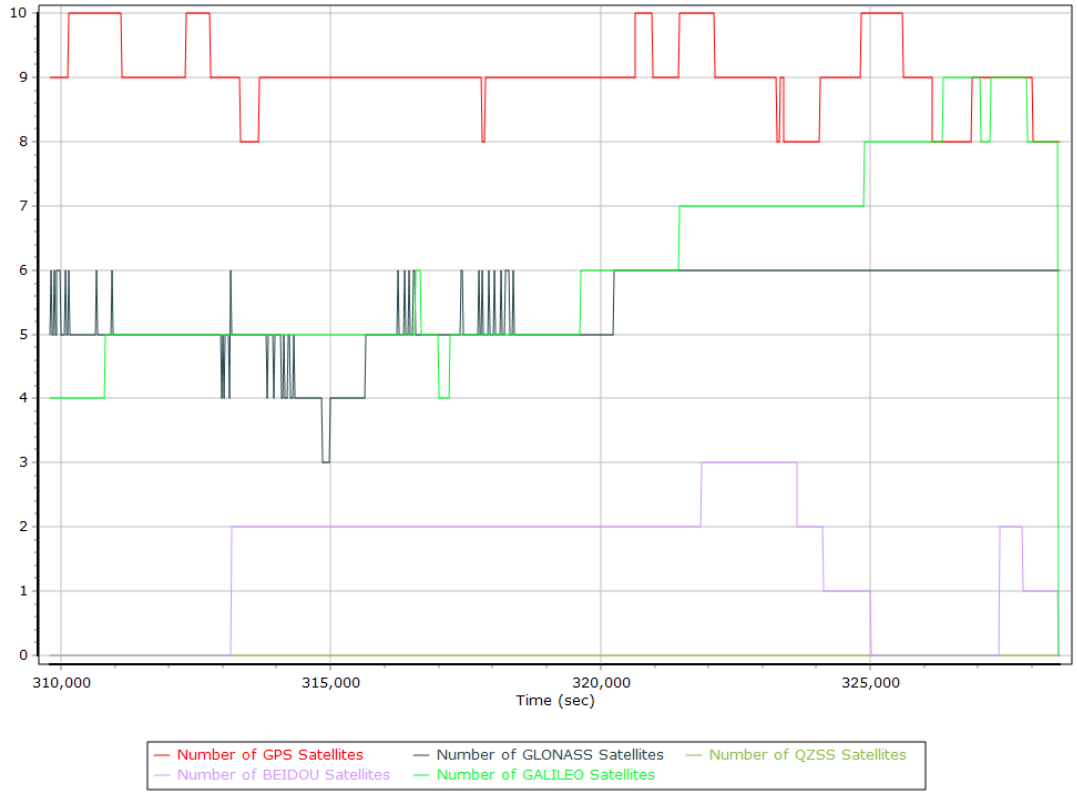


Forward Processed Solution Status

Processing Mode



Number of Satellites



Baseline Length