General Information

Mission Information

Project name	201204_A_5060380_nad2011_FINAL
Processing date	2020-12-07 14:14:49
Mission date	2020-12-04 13:56:52
Mission duration	05:24:29.000
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
201204a.198	POS Data
201204a.199	POS Data
201204a.200	POS Data
201204a.201	POS Data
201204a.202	POS Data
201204a.203	POS Data
201204a.204	POS Data
201204a.205	POS Data
201204a.206	POS Data
201204a.207	POS Data
201204a.208	POS Data
201204a.209	POS Data
201204a.210	POS Data
201204a.211	POS Data
201204a.212	POS Data
201204a.213	POS Data
201204a.214	POS Data
201204a.215	POS Data
201204a.216	POS Data
201204a.217	POS Data
201204a.218	POS Data
201204a.219	POS Data
201204a.220	POS Data
201204a.221	POS Data
201204a.222	POS Data
201204a.223	POS Data
201204a.224	POS Data
201204a.225	POS Data
201204a.226	POS Data
201204a.227	POS Data

Input Files

File Name	File Type
Ephm3390.20g	GLONASS Broadcast Ephemeris
Ephm3390.20n	GPS Broadcast Ephemeris

Output Files

Filename	File type
sbet_201204_A_5060380_nad2011_FINAL.out	SBET Trajectory File

Rover Data Summary

First raw data file	201204a.198		
Last raw data file	201204a.227		
Start GPS week	2134		
Start time	23.238 (11/29/2020 12:00:23 AM)		
End time	501682.571 (12/4/2020 7:21:22 PM)		
Start of fine alignment	482541.023 (12/4/2020 2:02:21 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

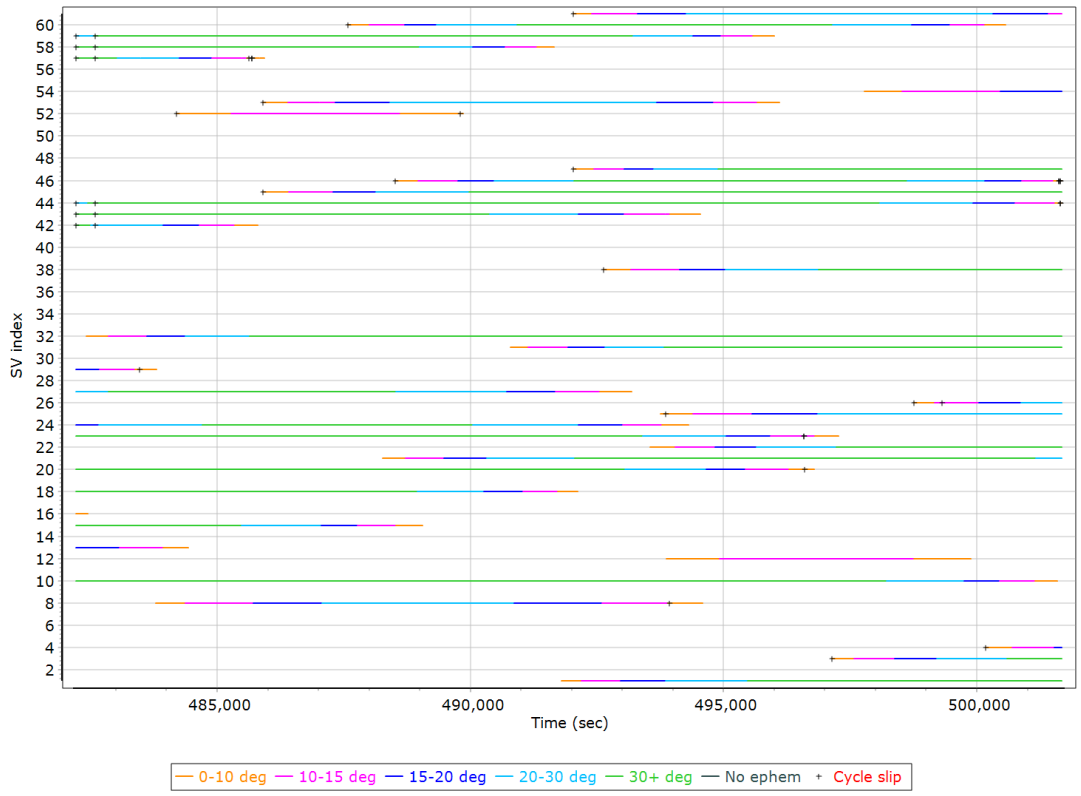
Rover Data QC

Raw IMU Import QC Summary

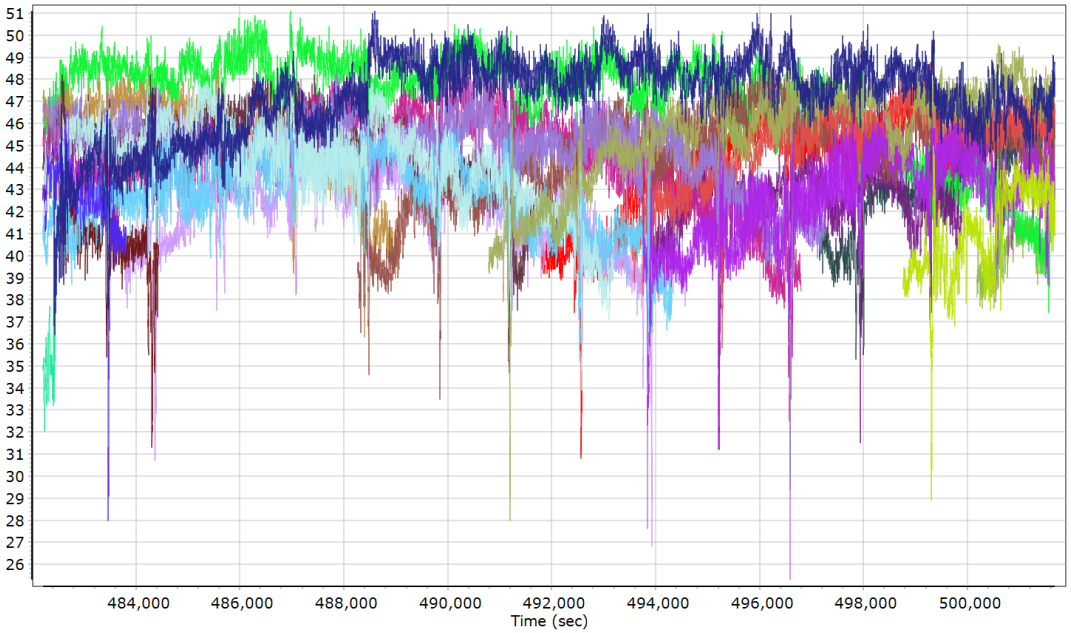
IMU data input file	imu_201204_A_5060380_nad2011_FINAL.dat
IMU data check log file	imudt_201204_A_5060380_nad2011_FINAL.log
IMU Records Processed	3893441
Termination Status	Warnings
IMU Anomalies	1
IMU Failure Messages	
482222.957 : WARNING : Gap of 482198.9638 seconds in CHECKDT input data	

Primary Observables & Satellite Data

GPS/GLONASS L1 Satellite Lock/Elevation

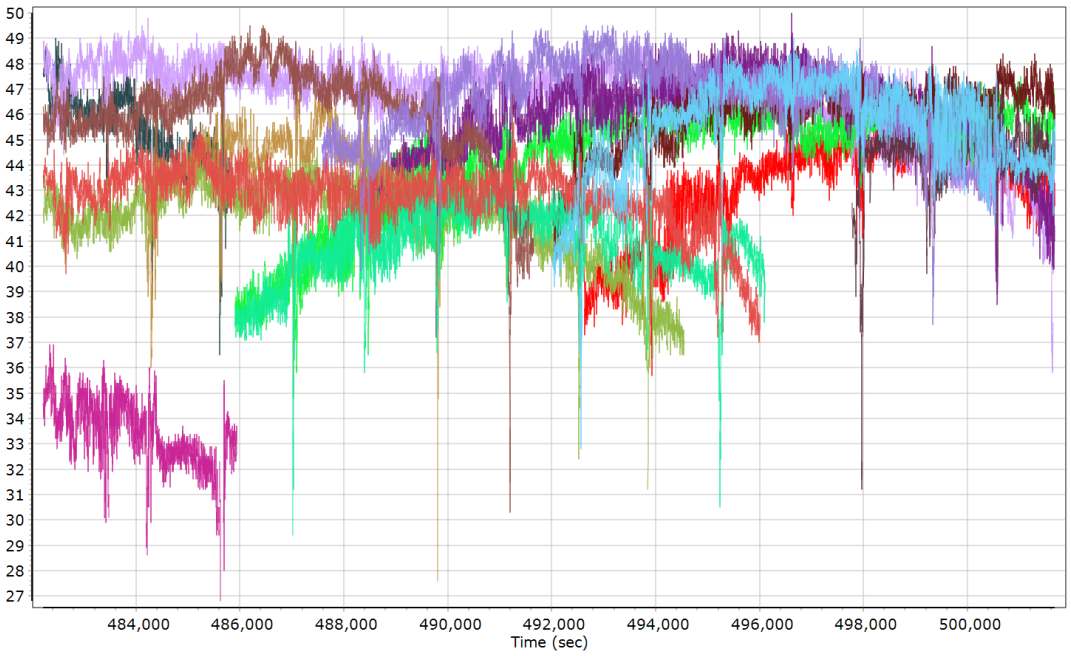


GPS L1 SNR



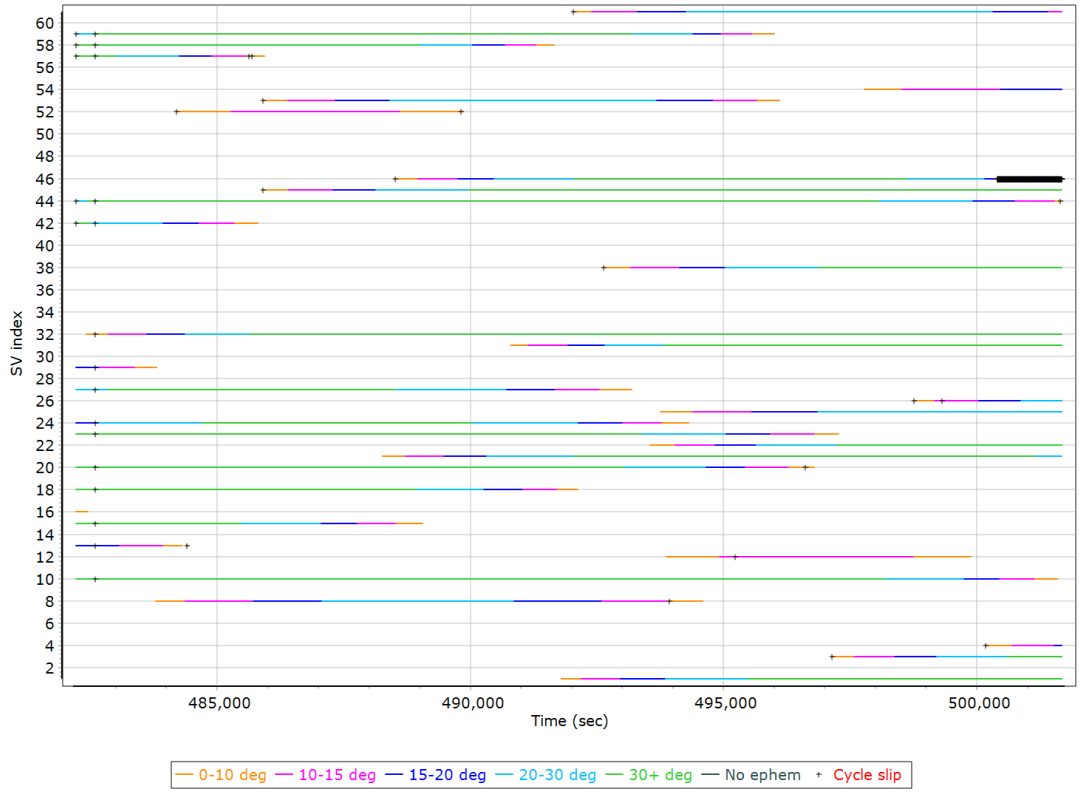
GPS PRN 01 L1 SNR (dB/Hz) GPS PRN 03 L1 SNR (dB/Hz) GPS PRN 04 L1 SNR (dB/Hz) GPS PRN 08 L1 SNR (dB/Hz)
GPS PRN 10 L1 SNR (dB/Hz) GPS PRN 12 L1 SNR (dB/Hz) GPS PRN 13 L1 SNR (dB/Hz) GPS PRN 15 L1 SNR (dB/Hz)
GPS PRN 16 L1 SNR (dB/Hz) GPS PRN 18 L1 SNR (dB/Hz) GPS PRN 20 L1 SNR (dB/Hz) GPS PRN 21 L1 SNR (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

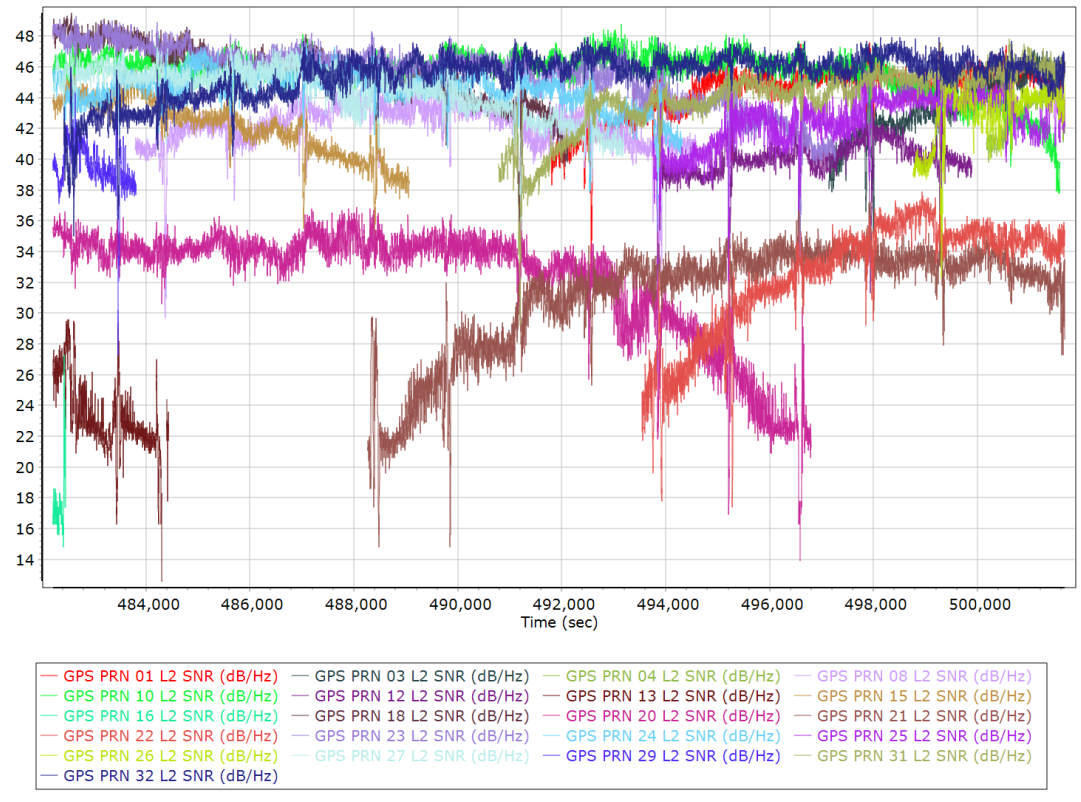


GLONASS 01 L1 SNR (dB/Hz) GLONASS 05 L1 SNR (dB/Hz) GLONASS 06 L1 SNR (dB/Hz)
GLONASS 07 L1 SNR (dB/Hz) GLONASS 08 L1 SNR (dB/Hz) GLONASS 09 L1 SNR (dB/Hz)
GLONASS 10 L1 SNR (dB/Hz) GLONASS 15 L1 SNR (dB/Hz) GLONASS 16 L1 SNR (dB/Hz)
GLONASS 17 L1 SNR (dB/Hz) GLONASS 20 L1 SNR (dB/Hz) GLONASS 21 L1 SNR (dB/Hz)
GLONASS 22 L1 SNR (dB/Hz) GLONASS 23 L1 SNR (dB/Hz) GLONASS 24 L1 SNR (dB/Hz)

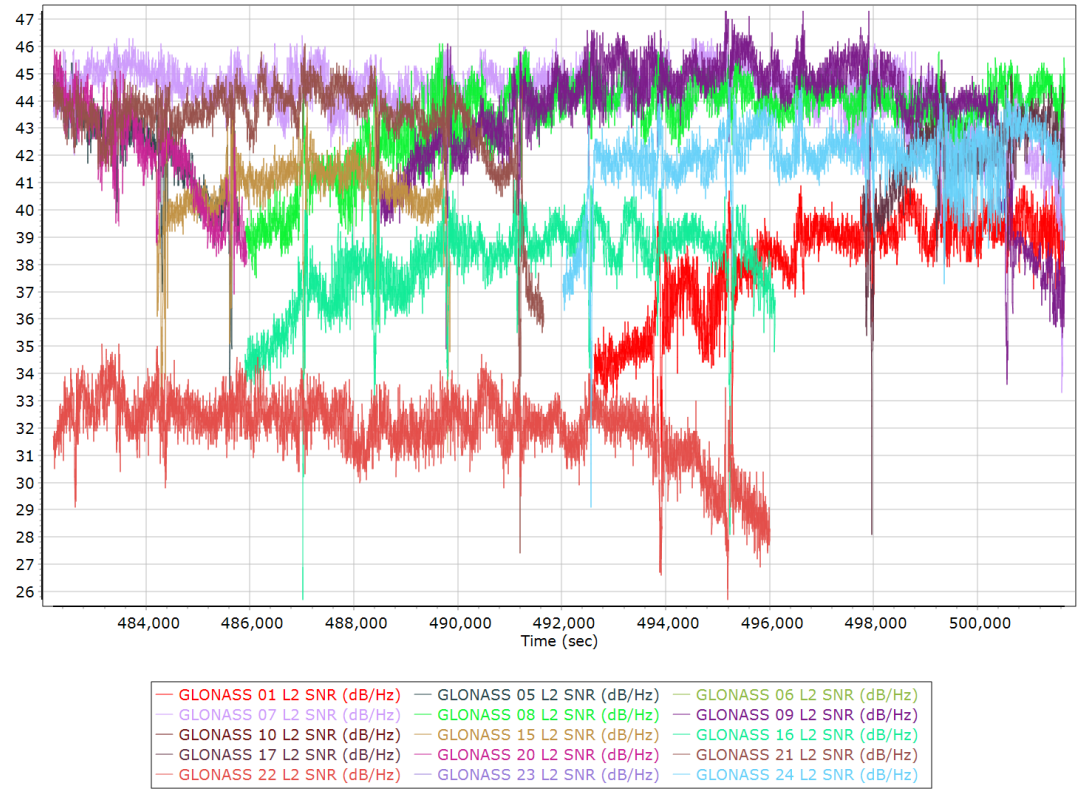
GPS/GLONASS L2 Satellite Lock/Elevation



GPS L2 SNR

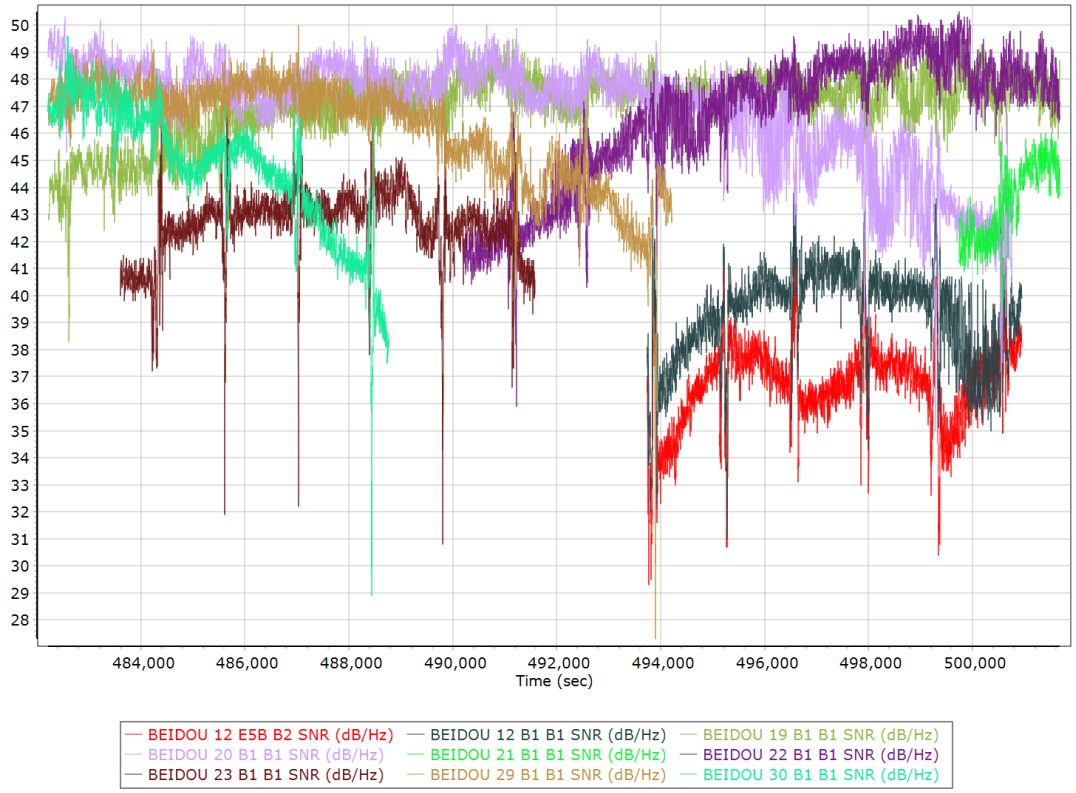


GLONASS L2 SNR

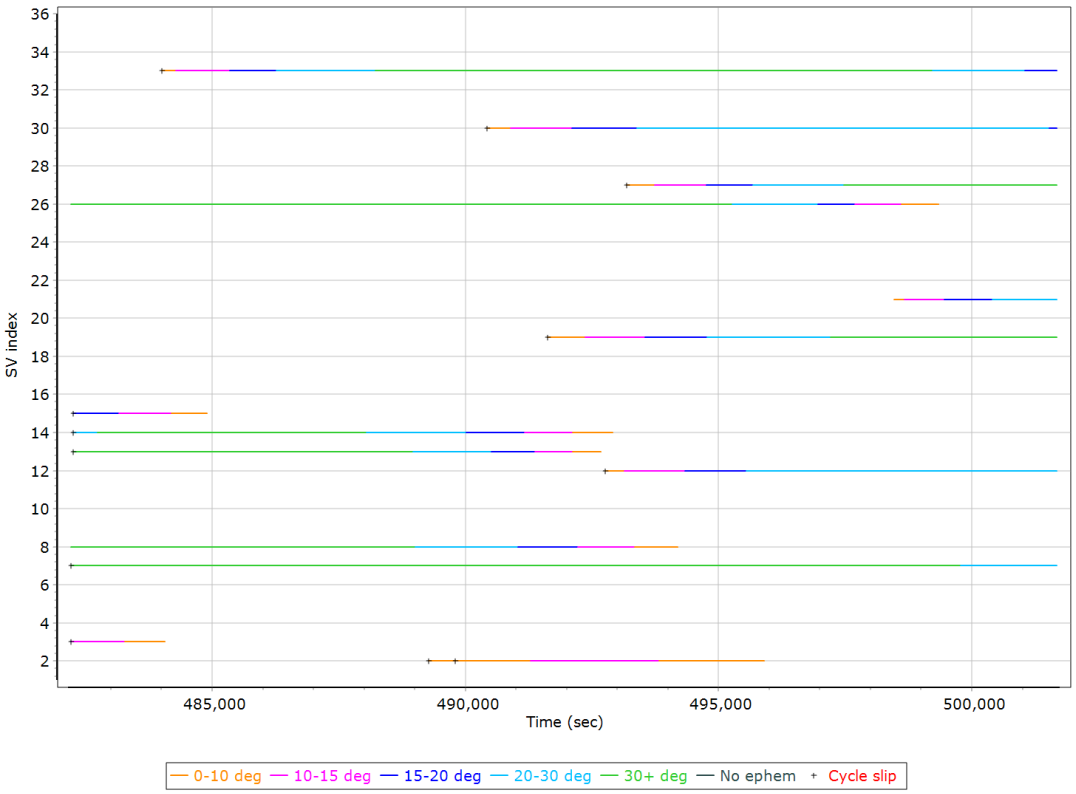


BEIDOU Satellite Lock/Elevation

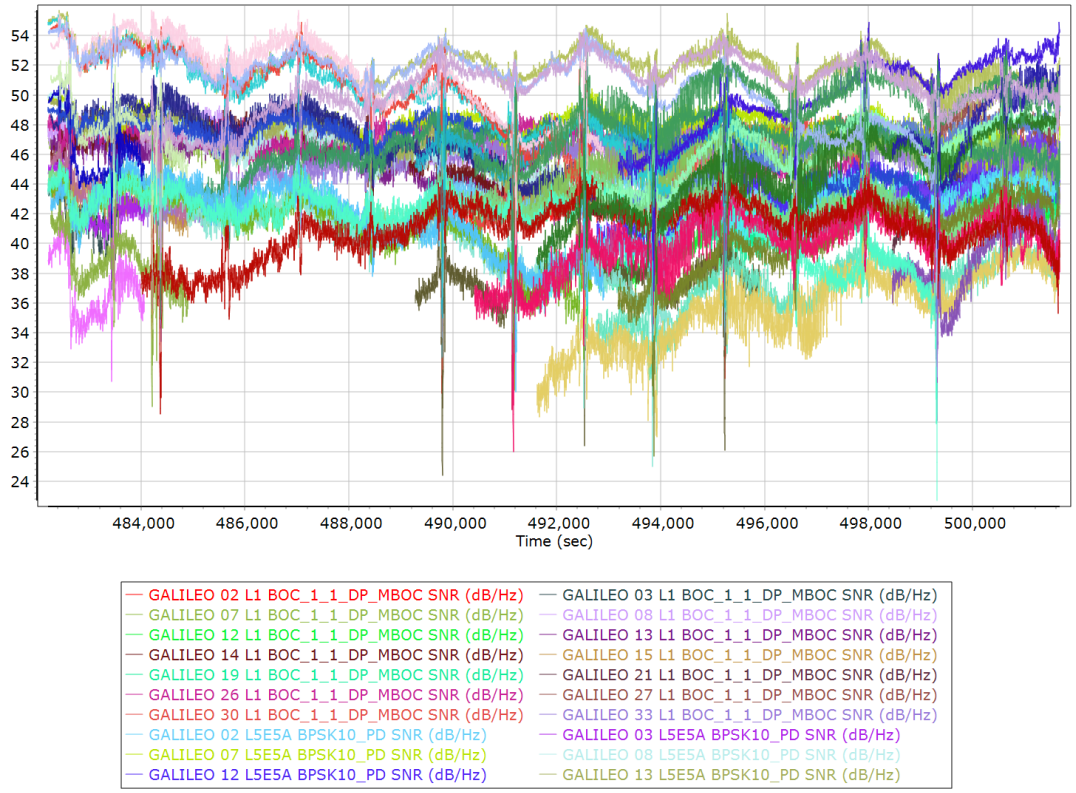
BEIDOU SNR



GALILEO Satellite Lock/Elevation

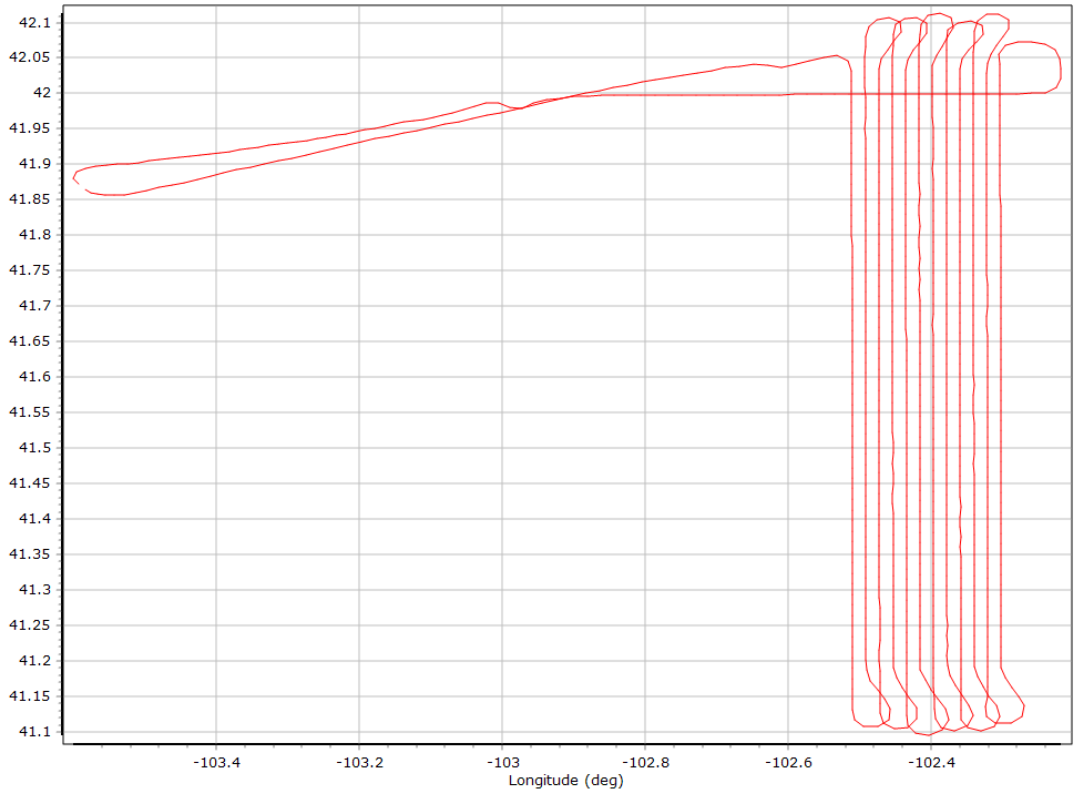


GALILEO SNR

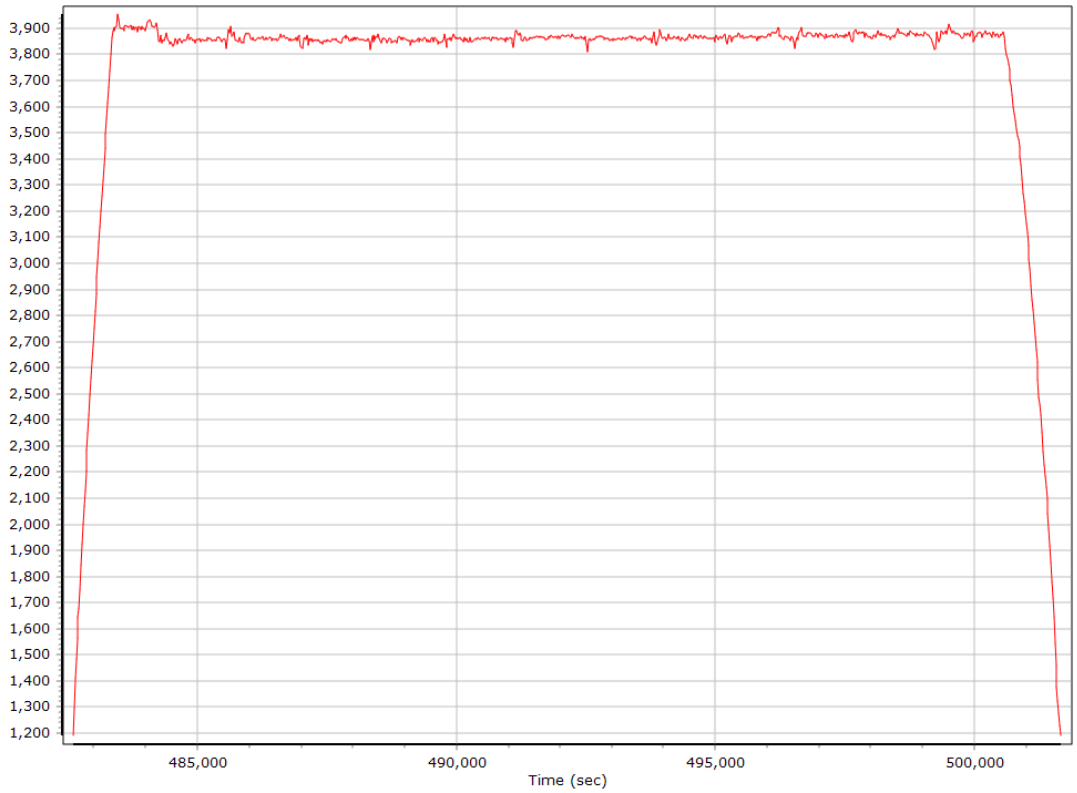

54
52
50
48
46
44
42
40
38
36
34
32
30
28
26
24
484,000
486,000
488,000
490,000
492,000
494,000
496,000
498,000
500,000
Time (sec)
GALILEO 02 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 03 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 07 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 08 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 12 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 13 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 14 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 15 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 19 L1 BOC_1_1_DP_MBOC SNR (dB/Hz)
GALILEO 21 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 33 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 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)

Smoothed Trajectory Information

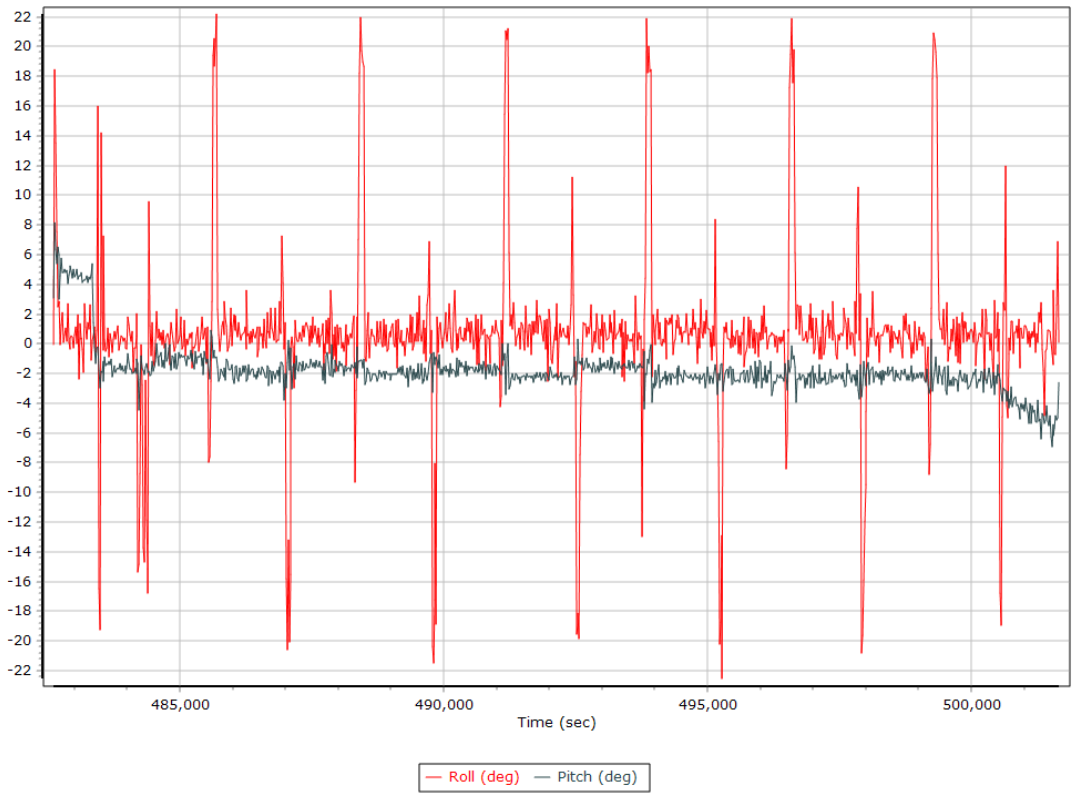
Top View



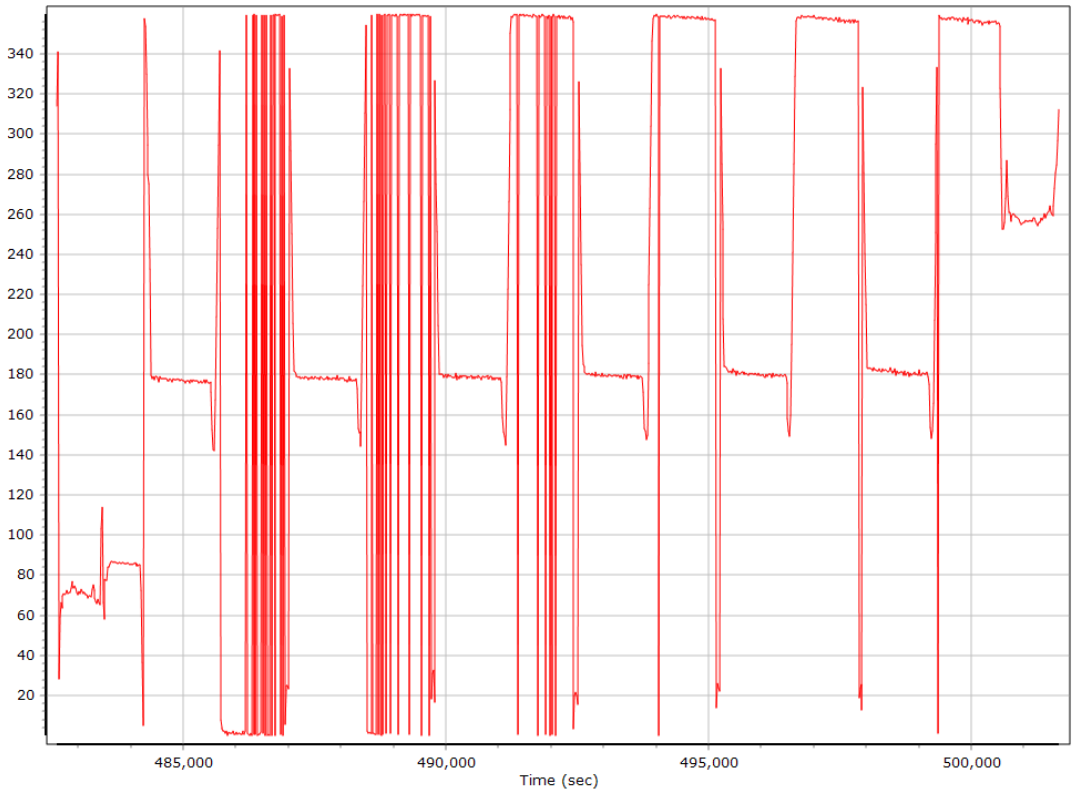
Altitude



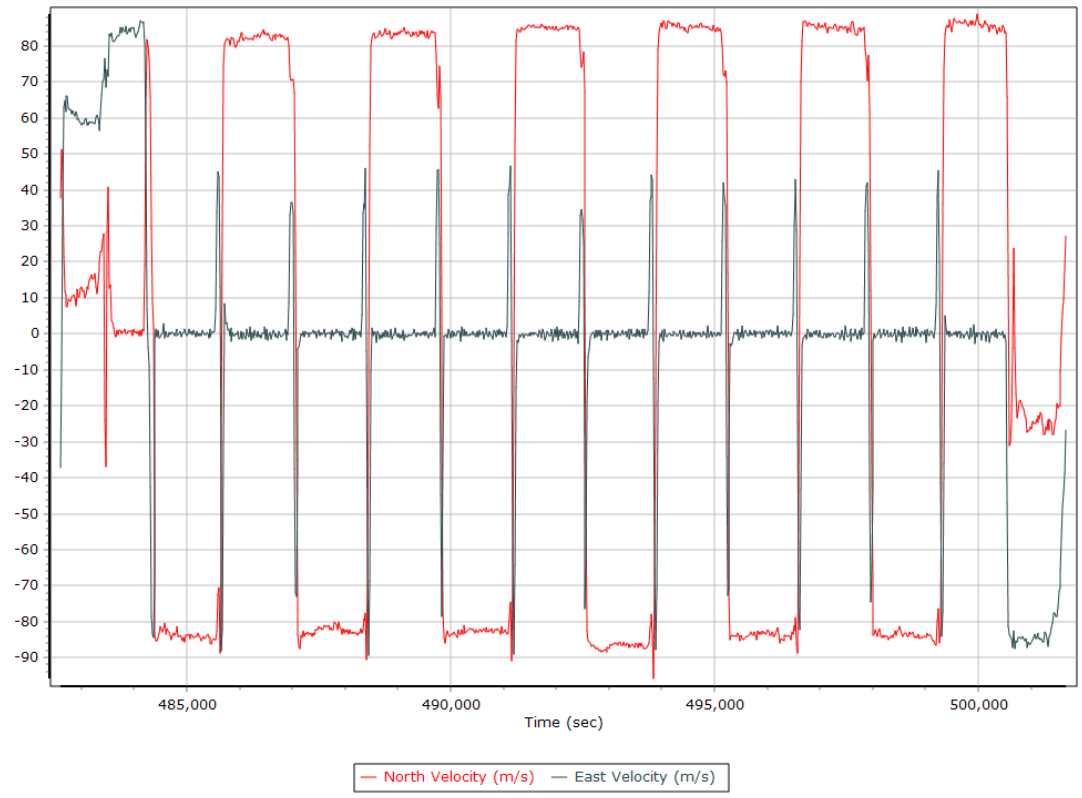
Roll/Pitch



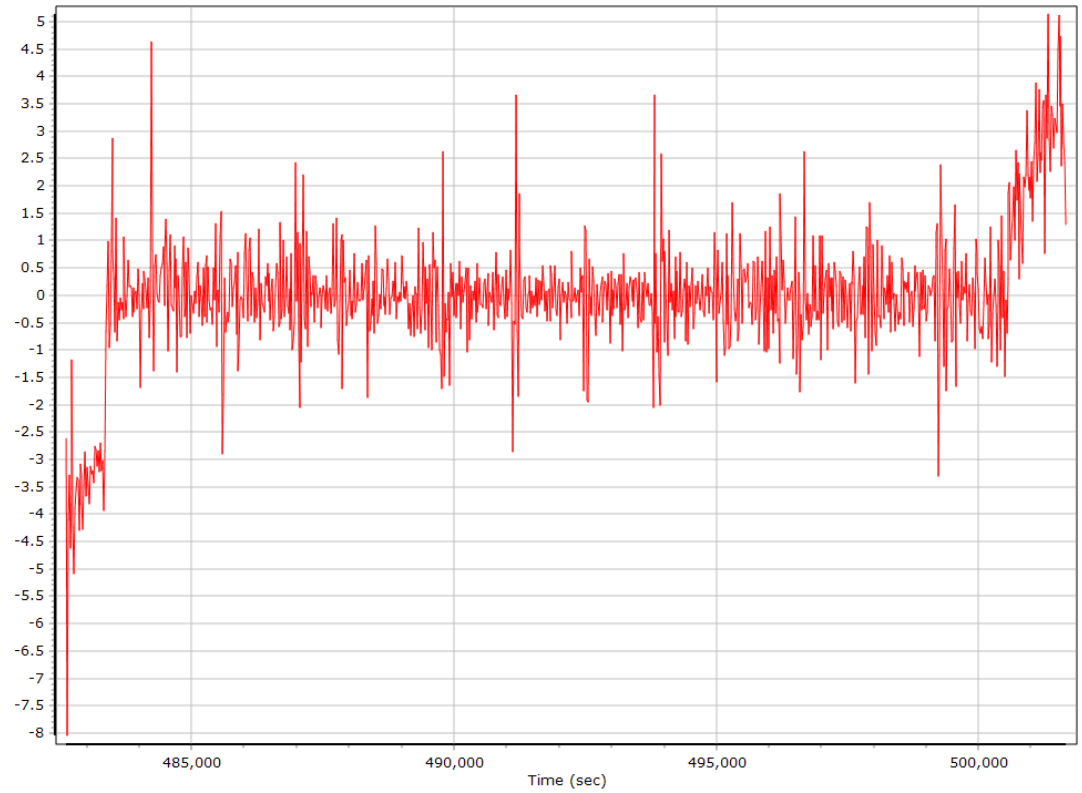
Heading



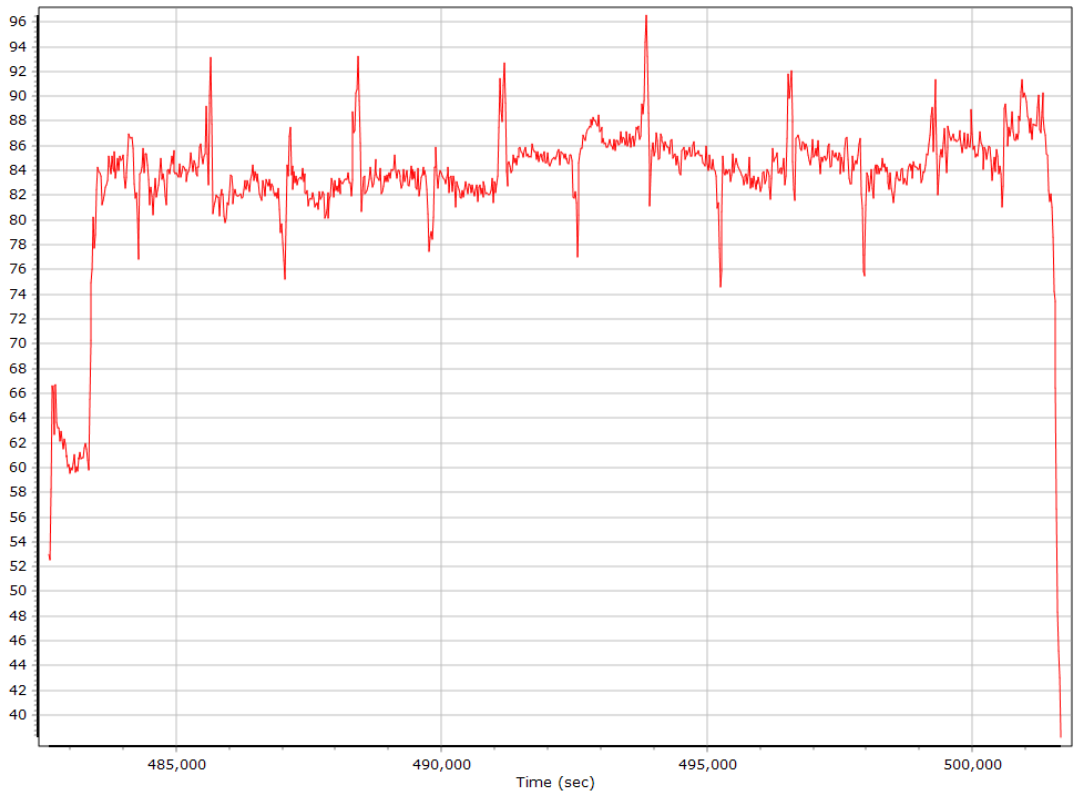
North/East Velocity



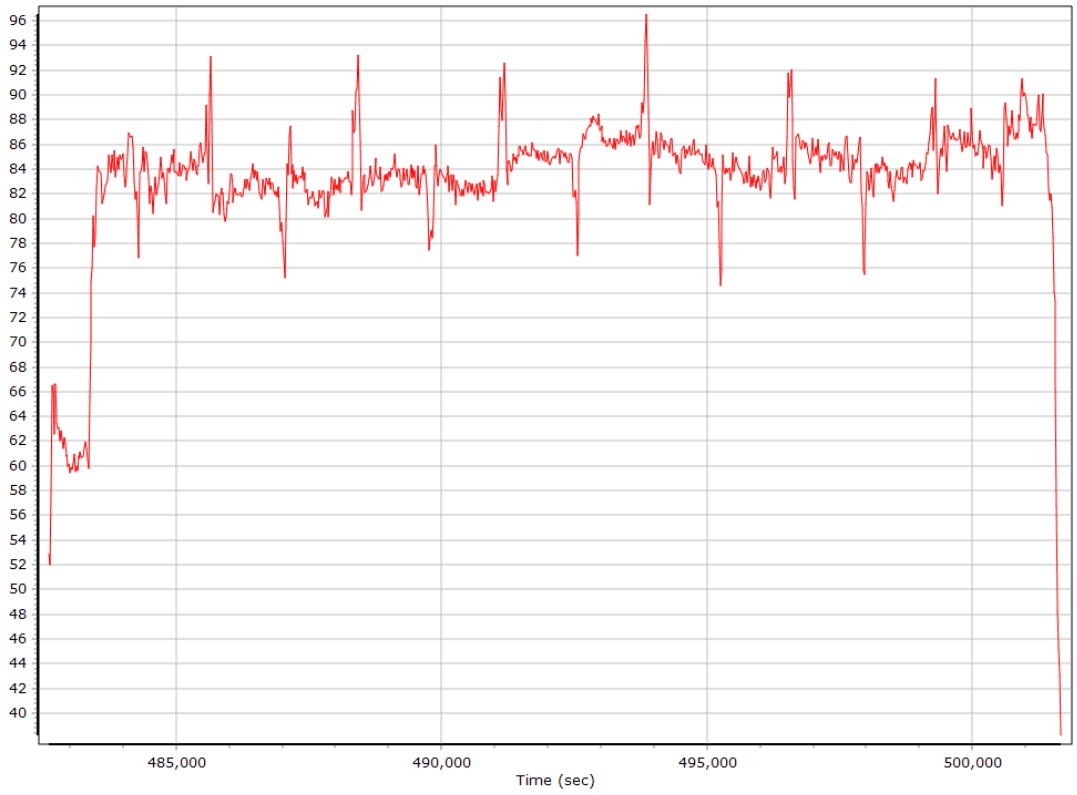
Down Velocity



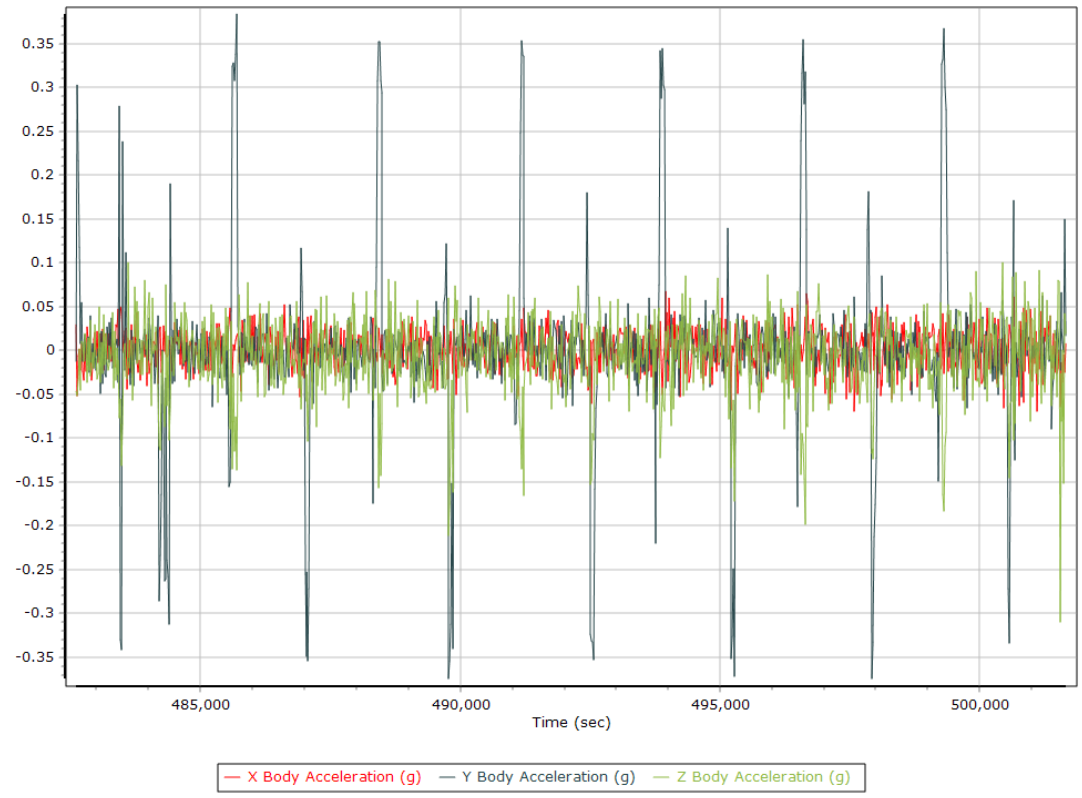
Total Speed



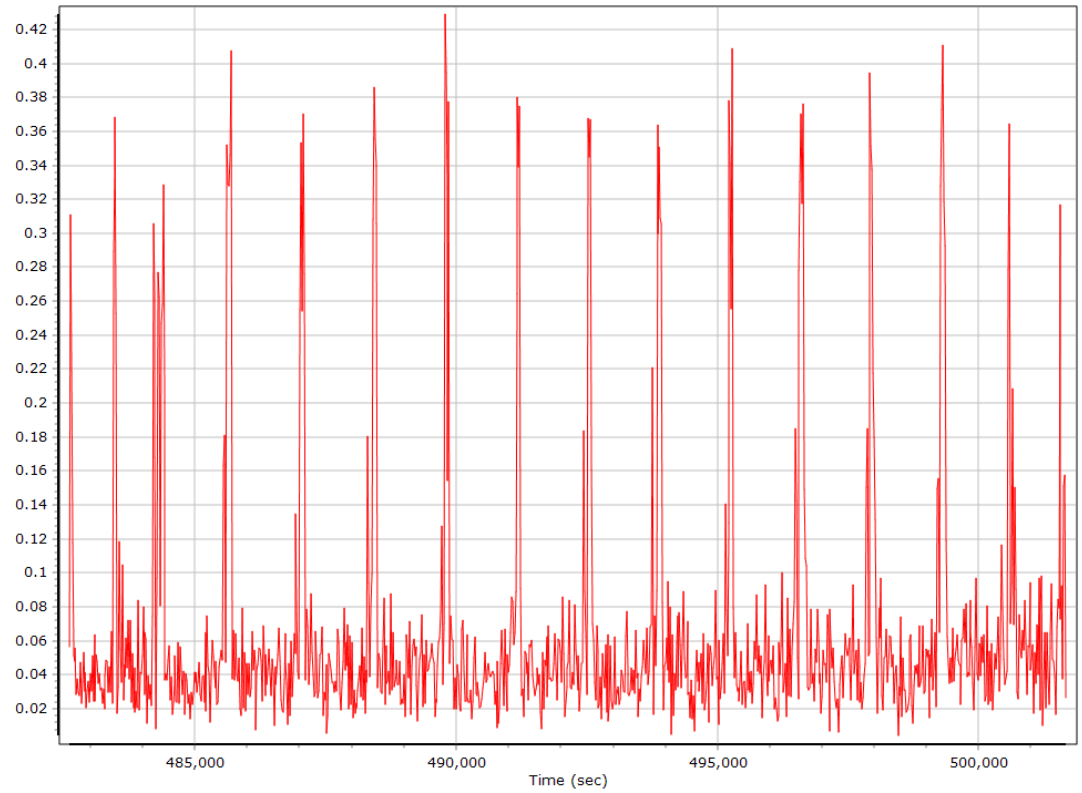
Ground Speed



Body Acceleration



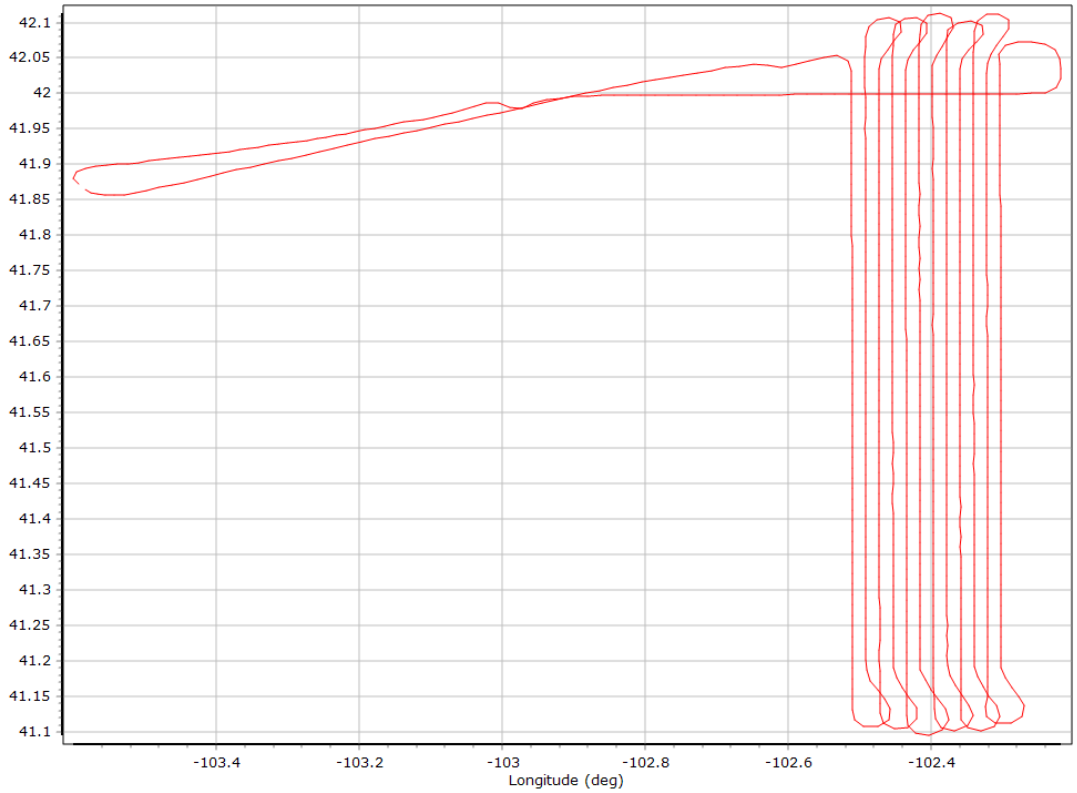
Total Body Acceleration



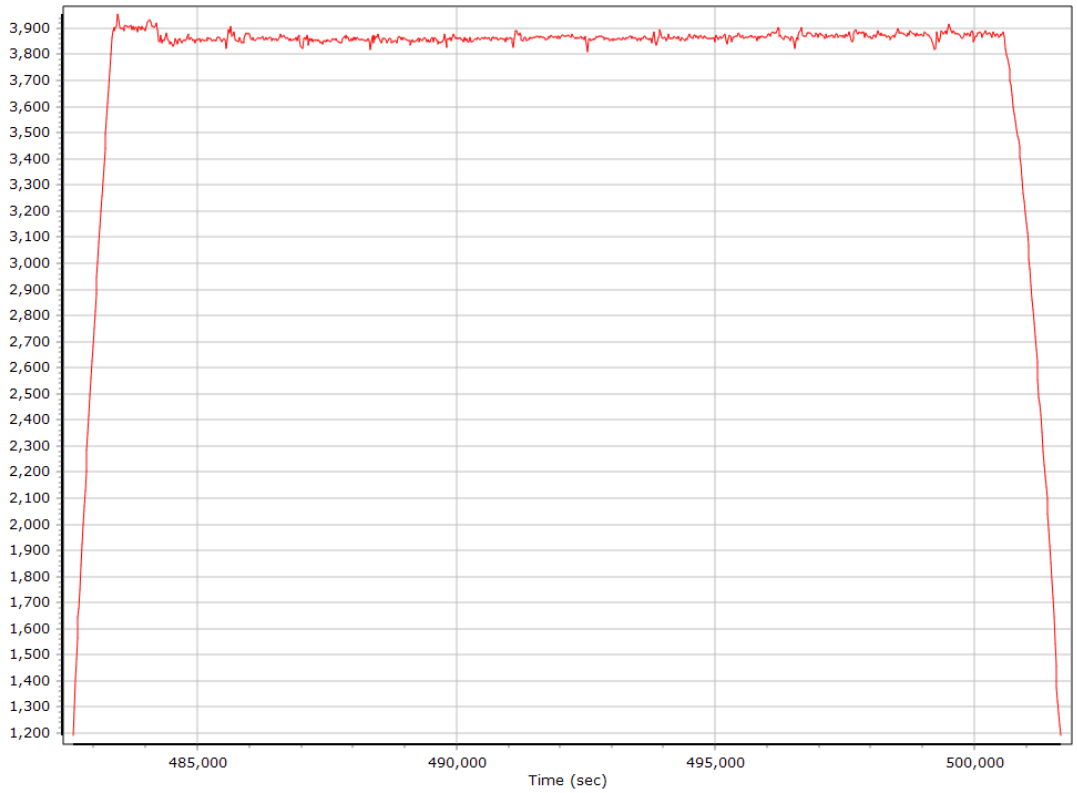
Body Angular Rate

Forward Processed Trajectory Information

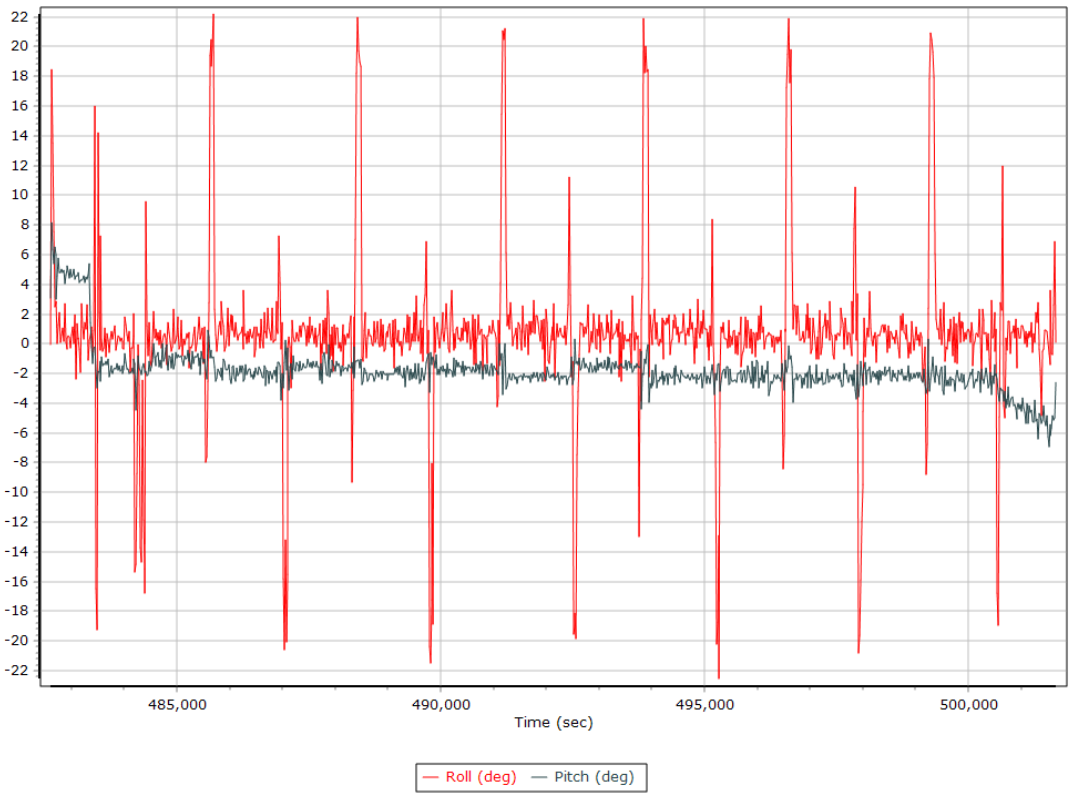
Top View



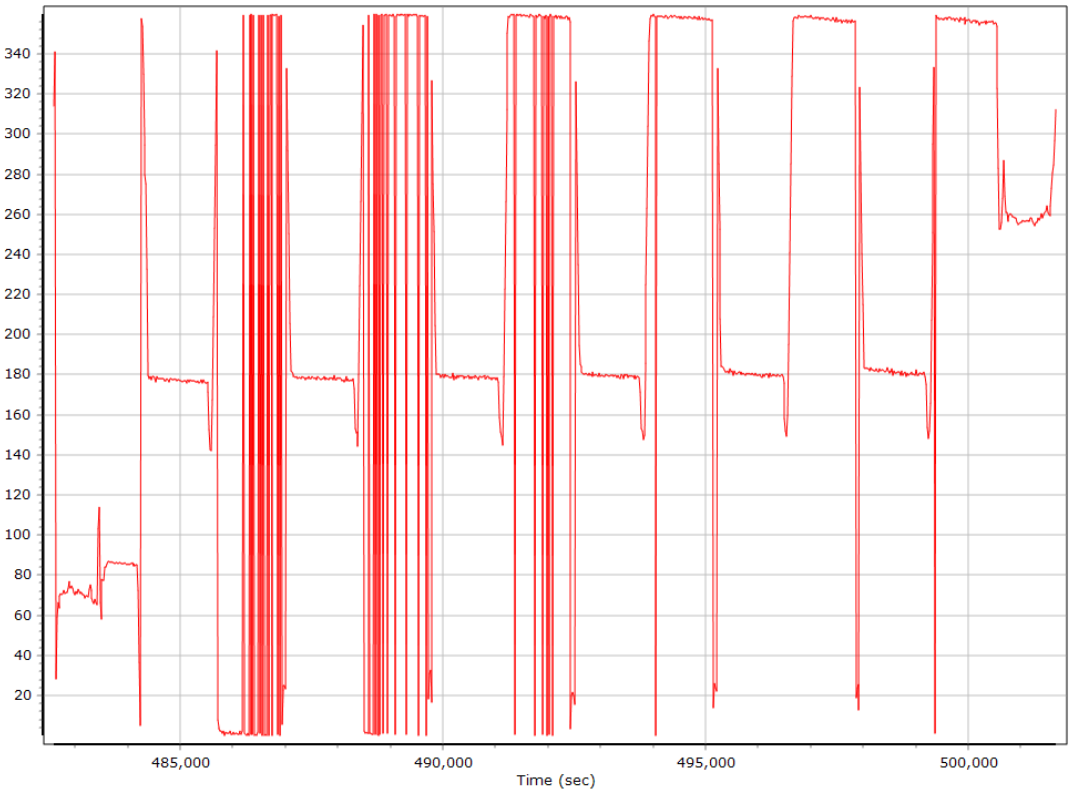
Altitude



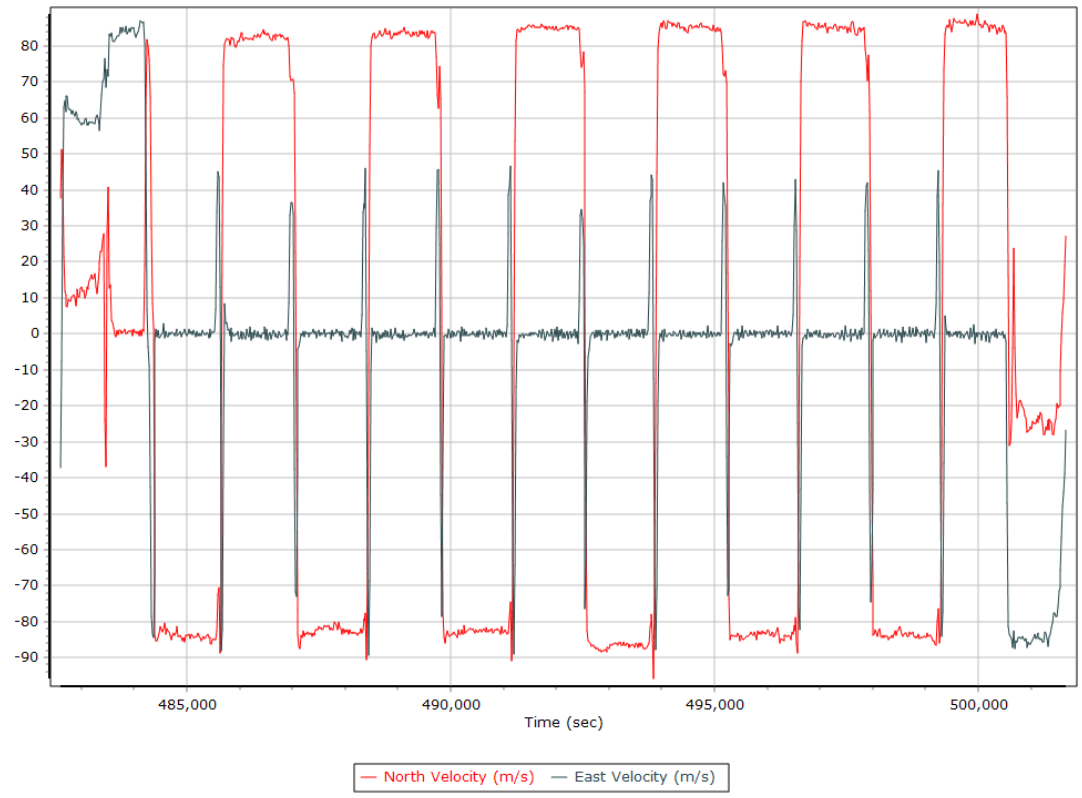
Roll/Pitch



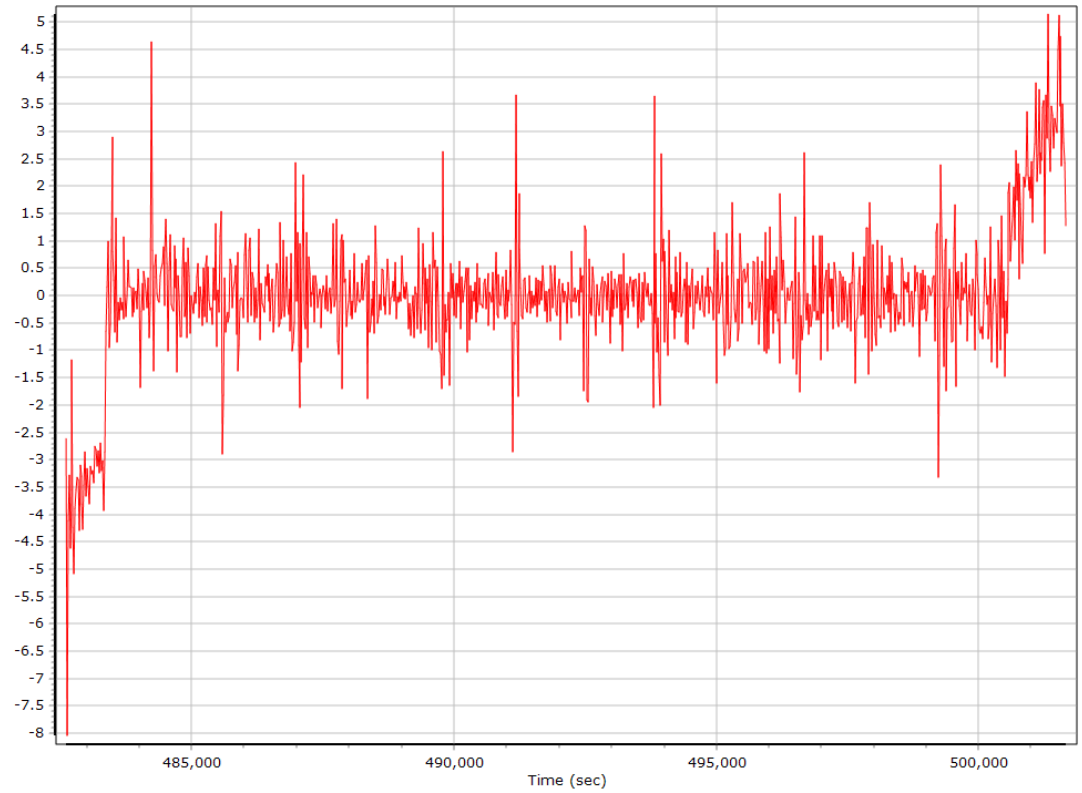
Heading



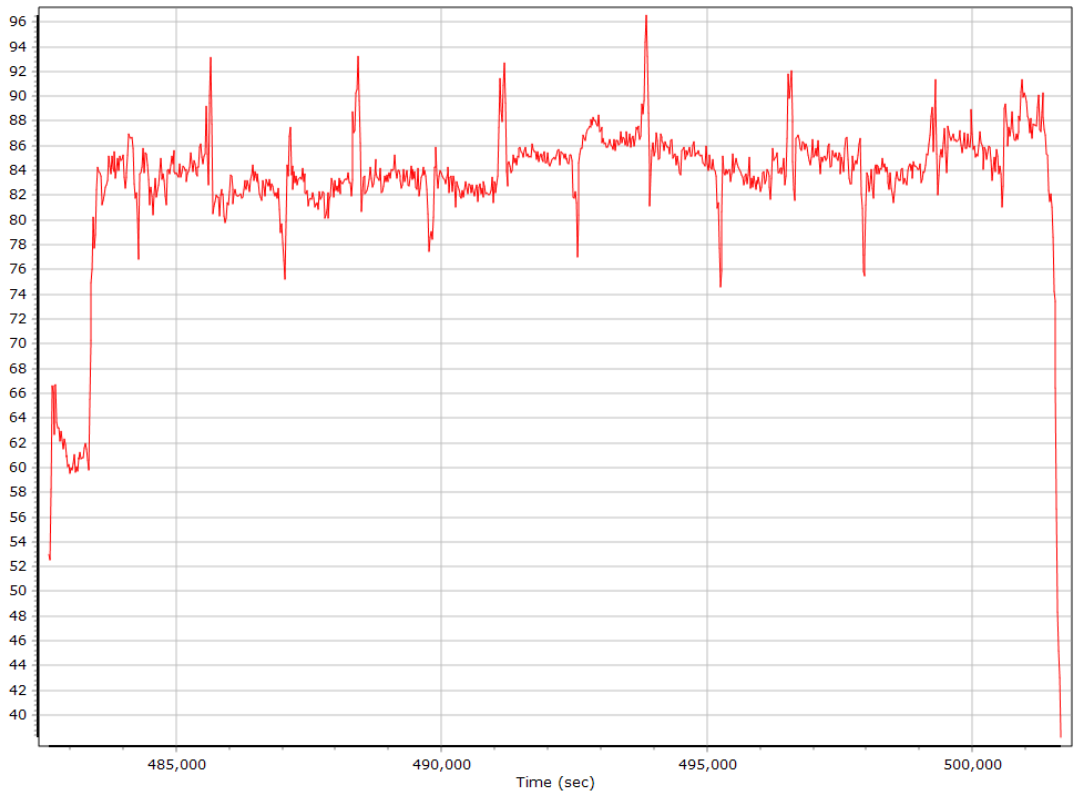
North/East Velocity



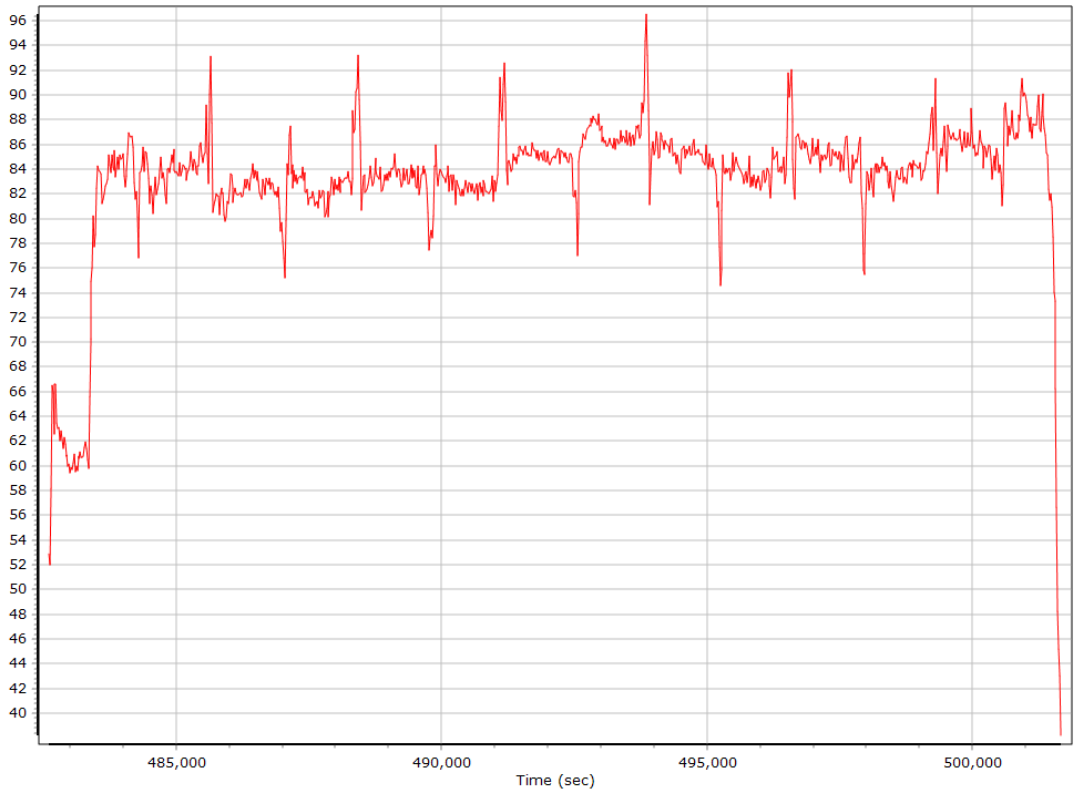
Down Velocity



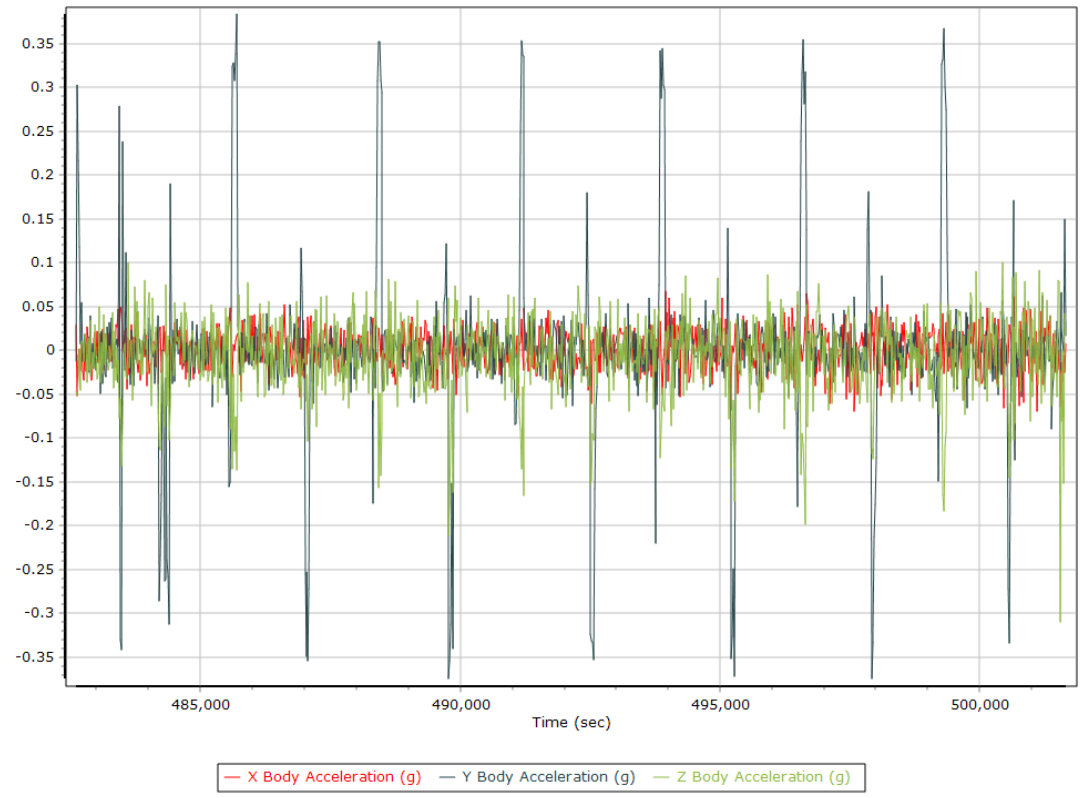
Total Speed



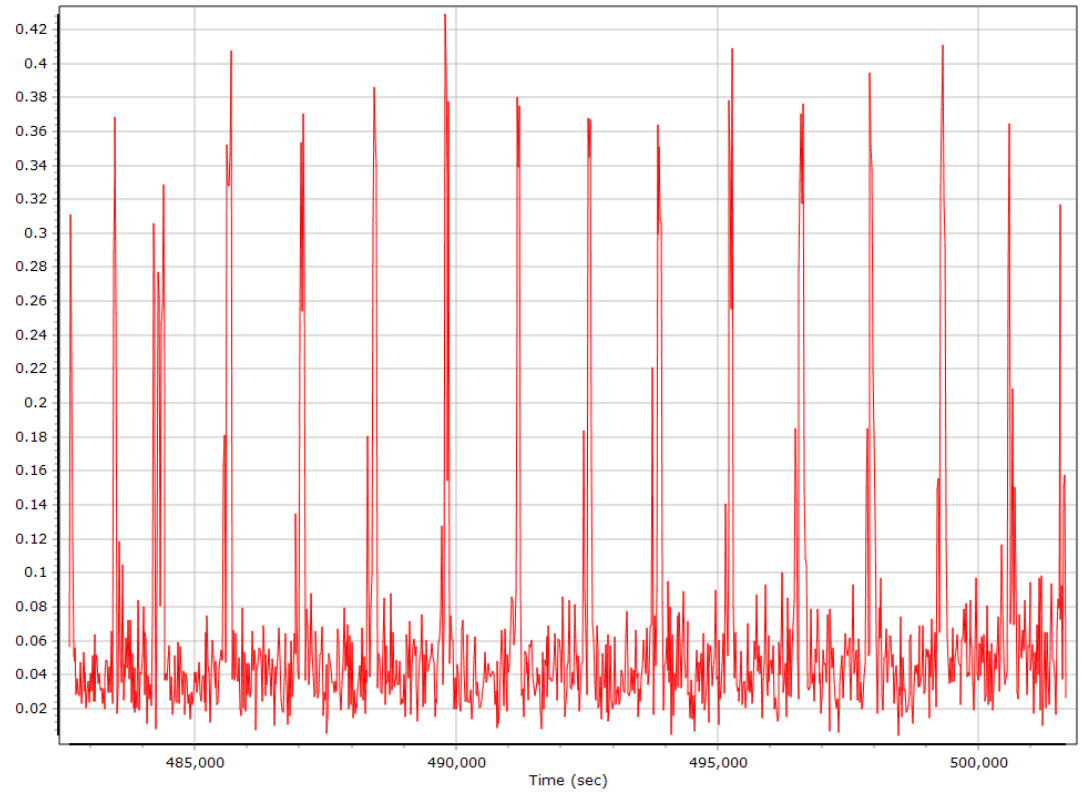
Ground Speed



Body Acceleration



Total Body Acceleration



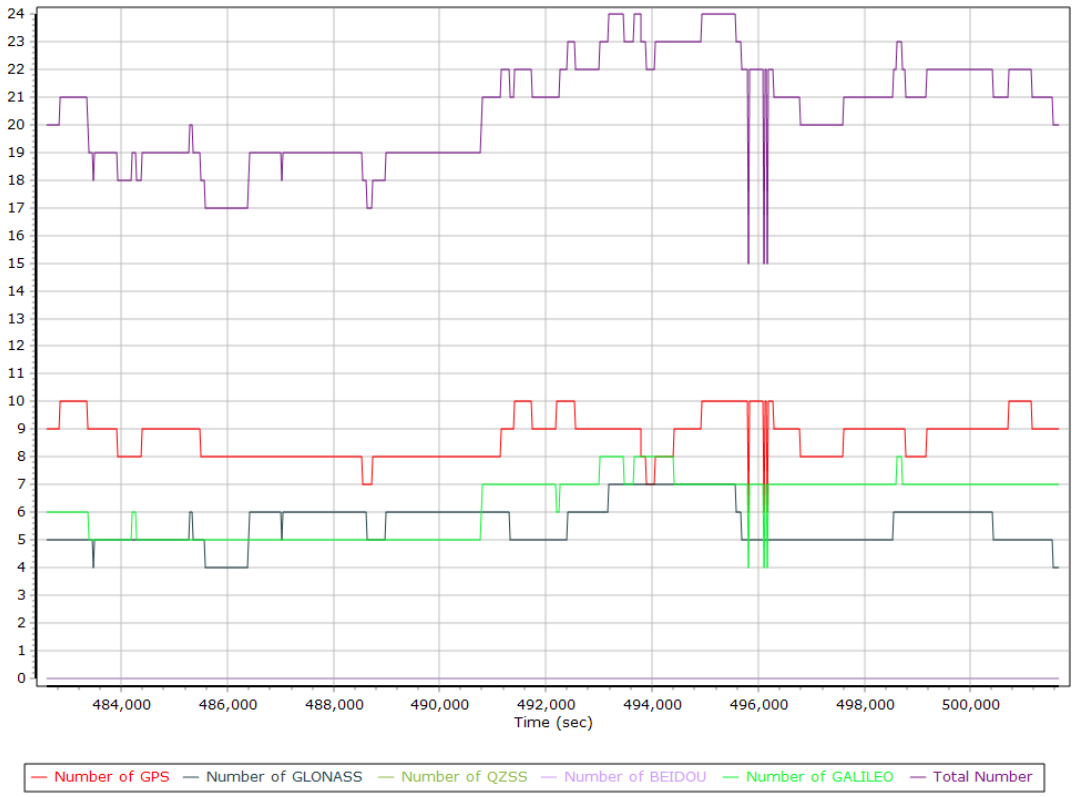
Body Angular Rate

GNSS QC

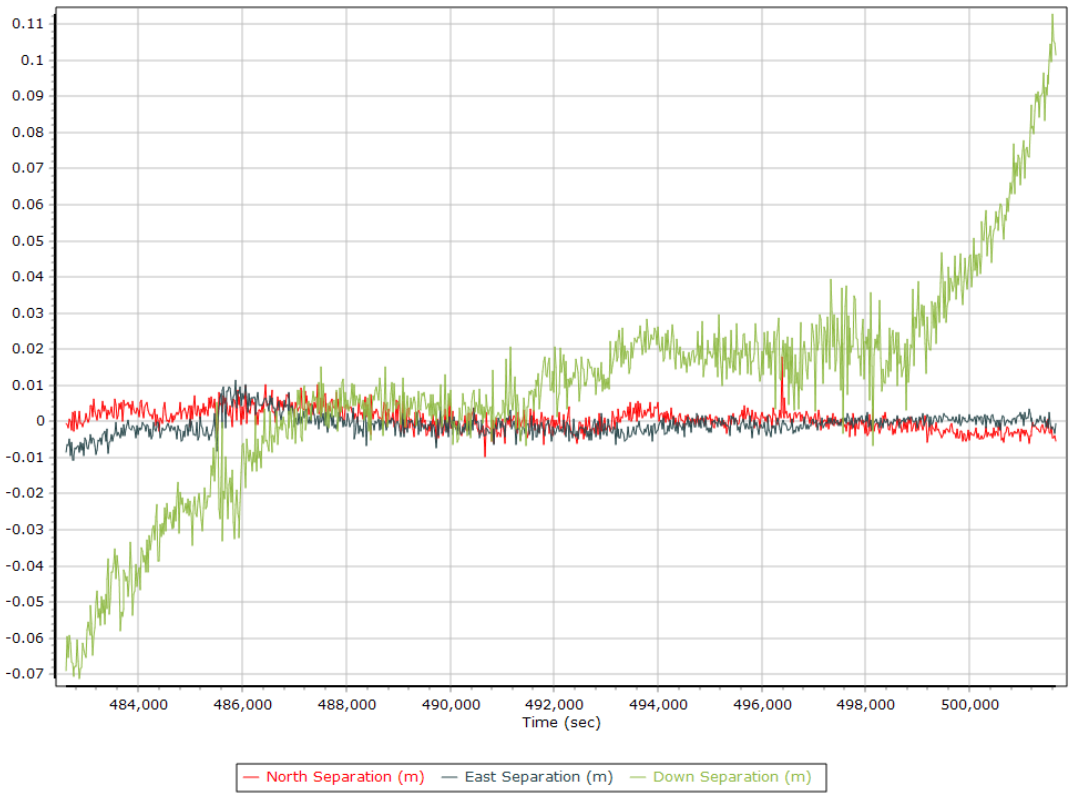
GNSS QC Statistics

Statistics	Min	Max	Mean
Baseline length (km)	0.00	0.00	
Number of GPS SV	4	10	9
Number of GLONASS SV	0	7	6
Number of QZSS SV	0	0	0
Number of BEIDOU SV	0	0	0
Number of GALILEO SV	2	8	6
Total number of SV	11	24	20
PDOP	0.98	2.60	1.21
QC Solution Gaps	1.00	1.00	
Solution Type	Fixed	Float	No solution
Epoch (sec)	19451.00	0.00	1.00
Percentage	99.99	0.00	0.01

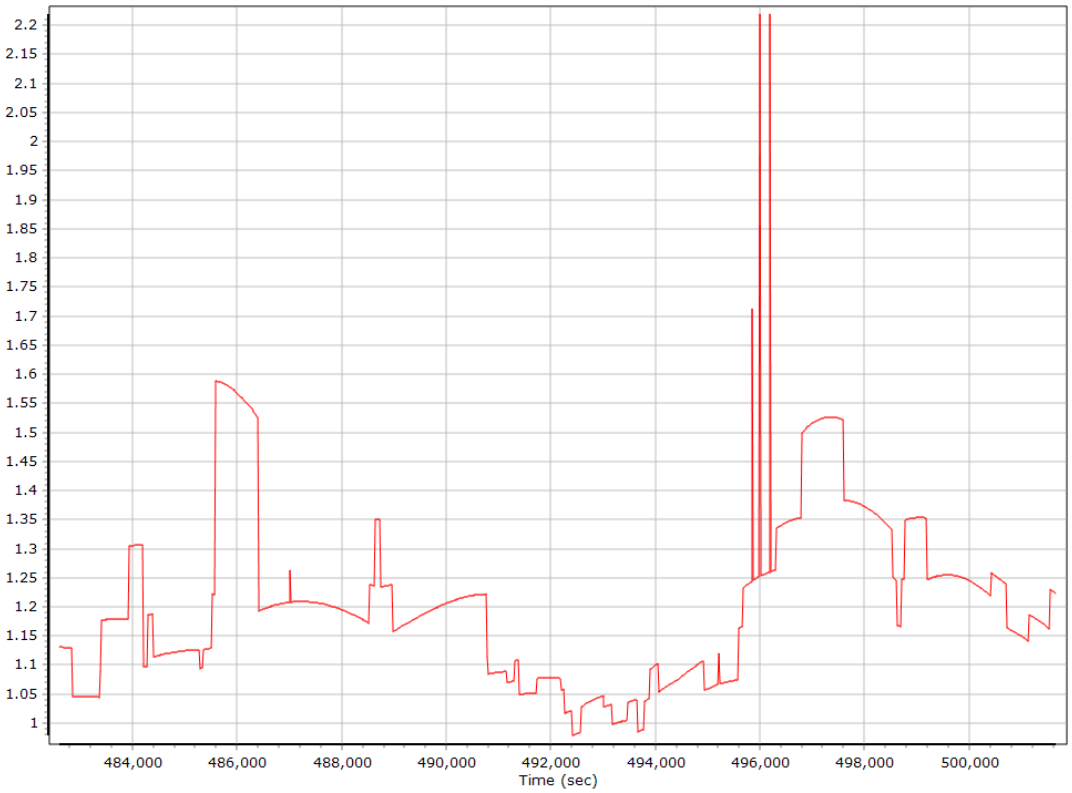
Num SVs in solution



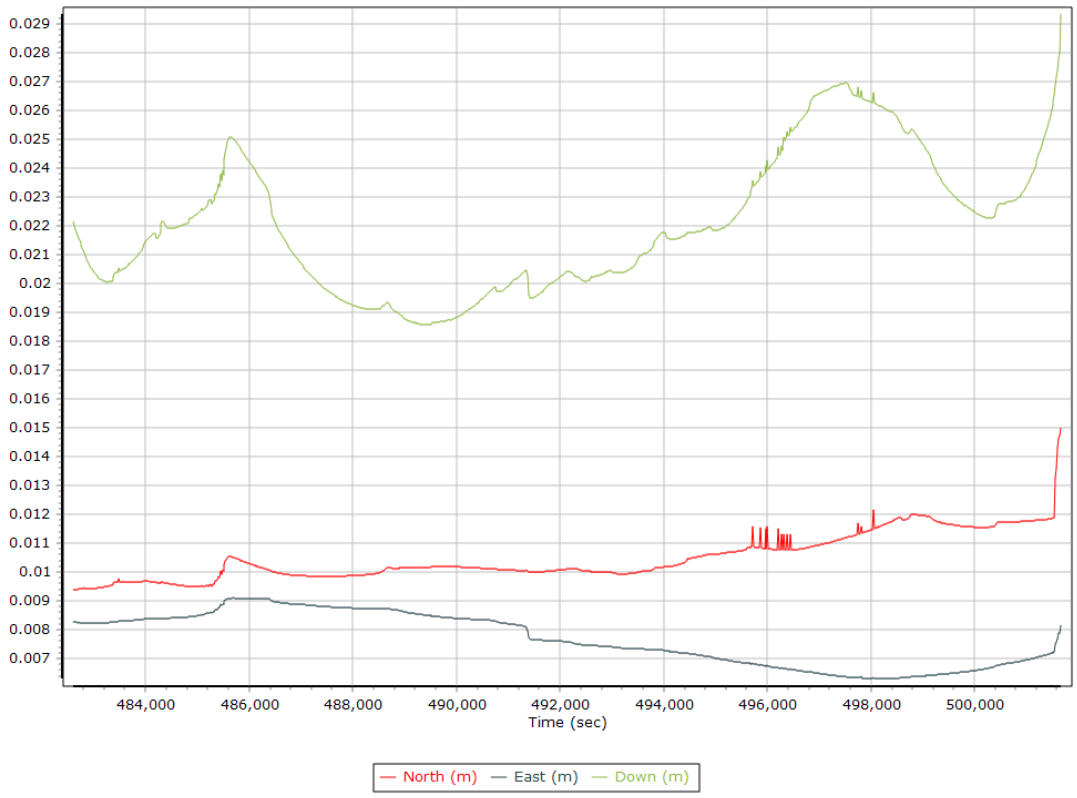
Forward/Reverse Separation



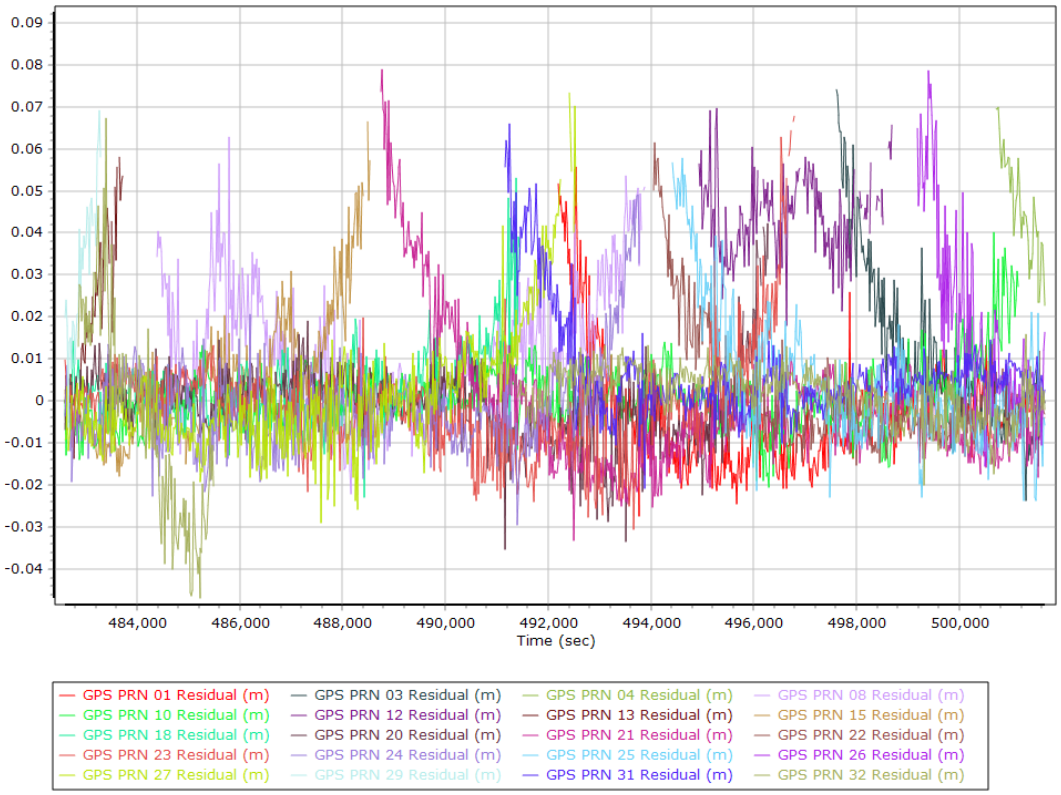
PDOP



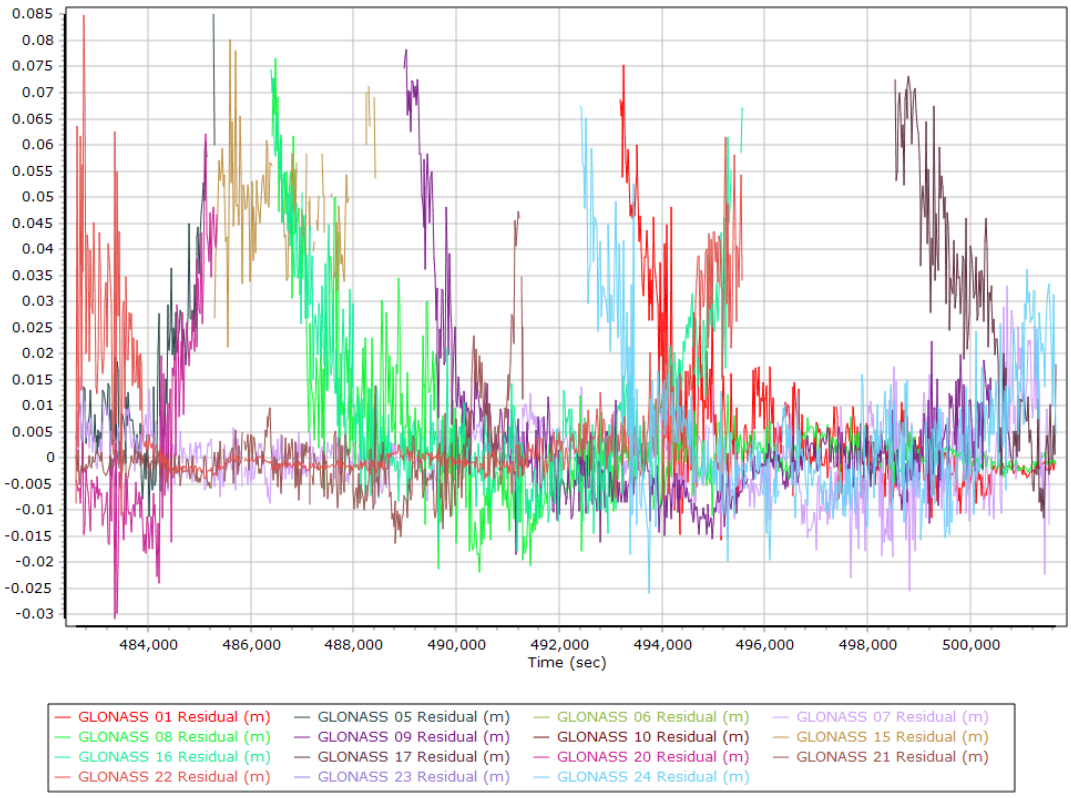
Estimated Position Accuracy



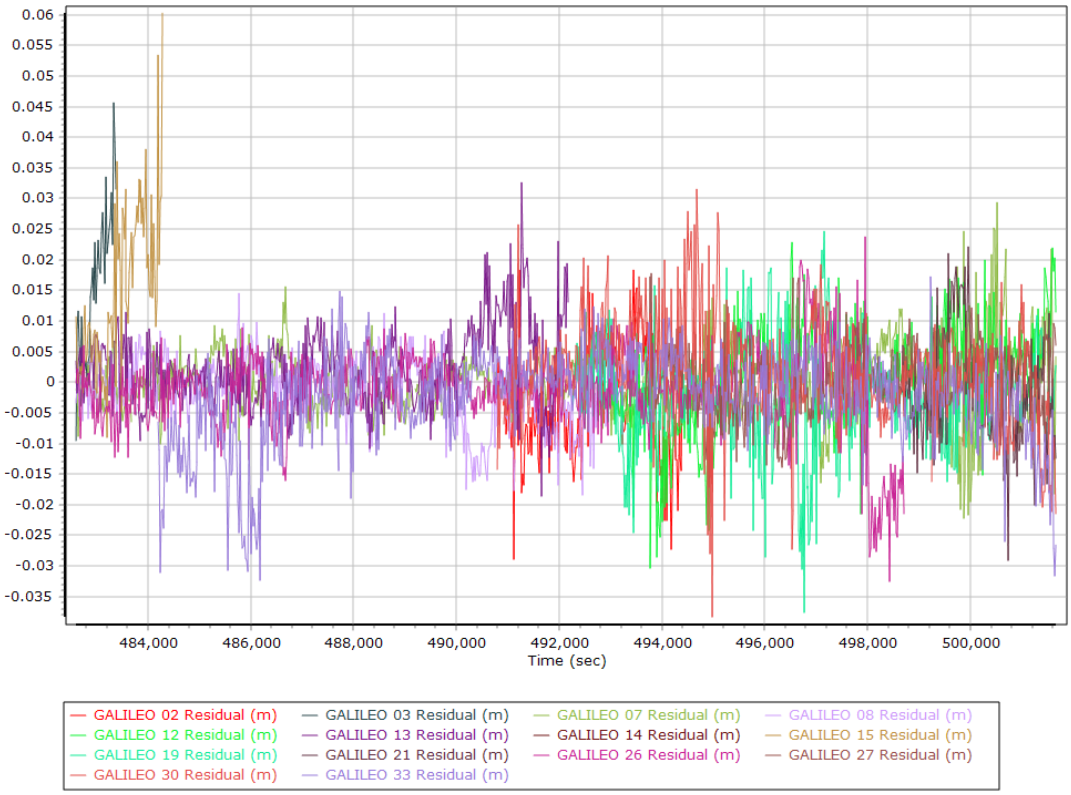
GPS Residuals



GLONASS Residuals



GALILEO Residuals



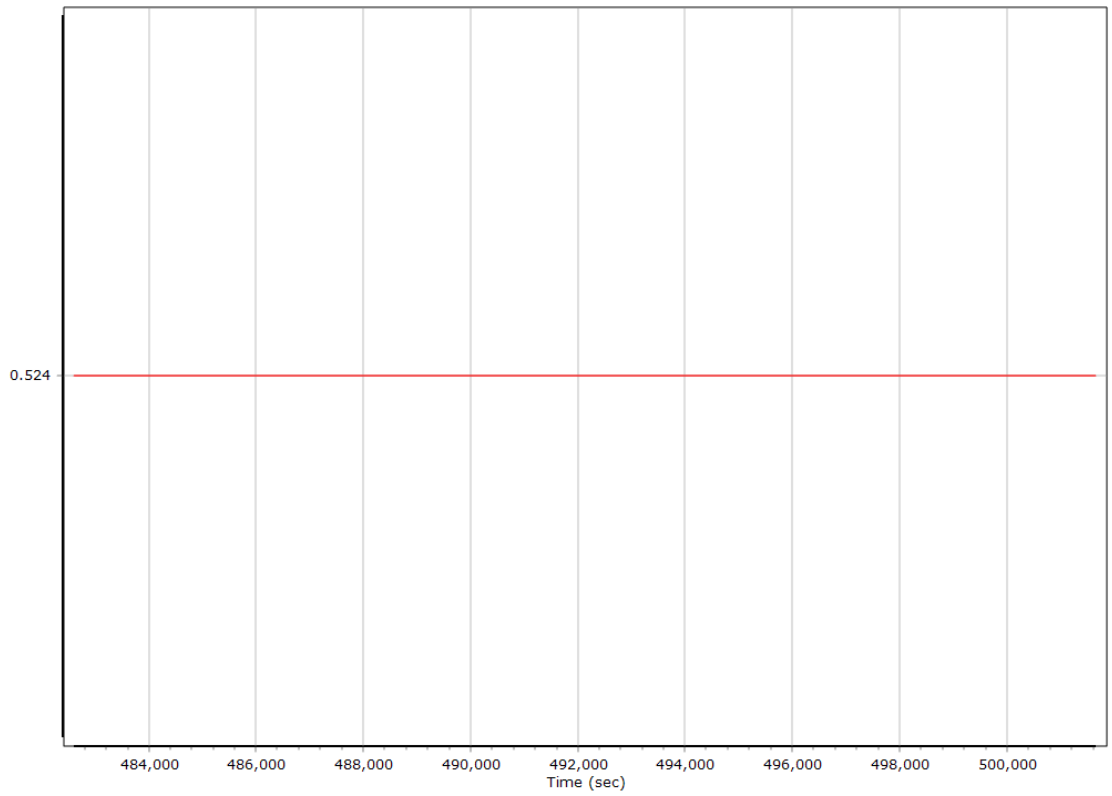
GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion PP-RTX		
Stabilized mount	False		
Processing start time	482212.000 (12/4/2020 1:56:52 PM)		
Processing end time	501681.000 (12/4/2020 7:21:21 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)	0.524	-0.458	-0.967
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

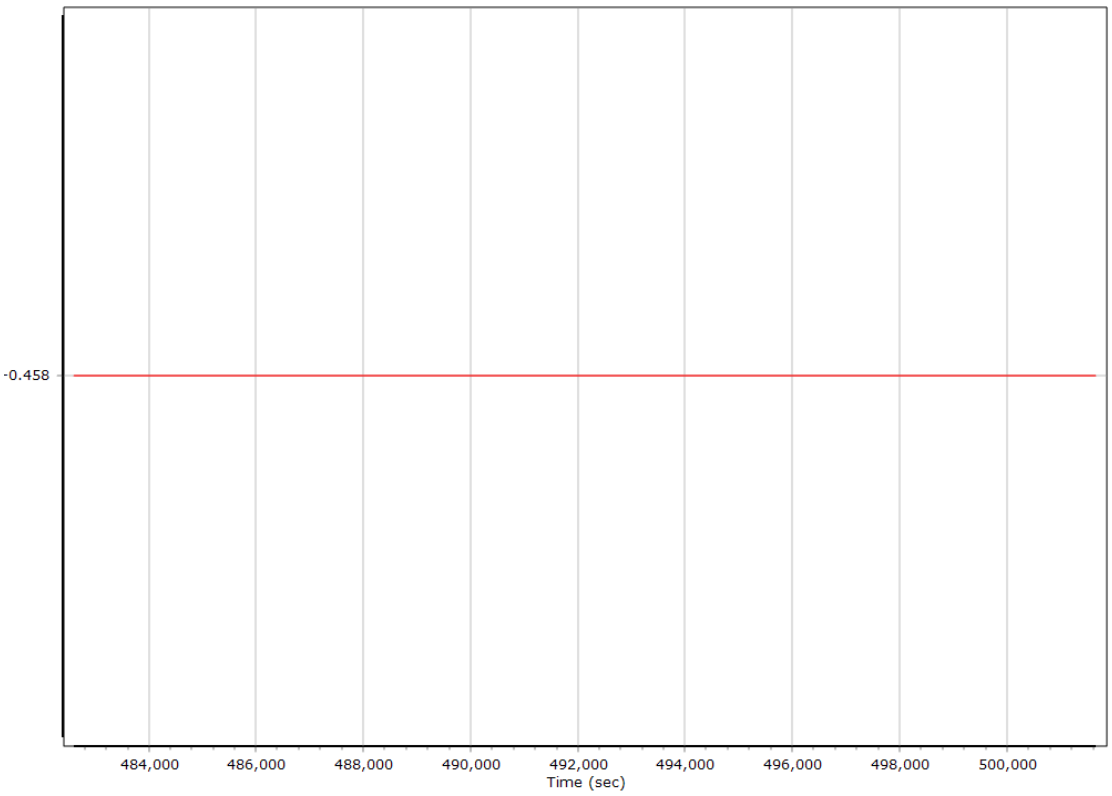
Calibrated Installation Parameters

Reference-Primary GNSS Lever Arm (m)

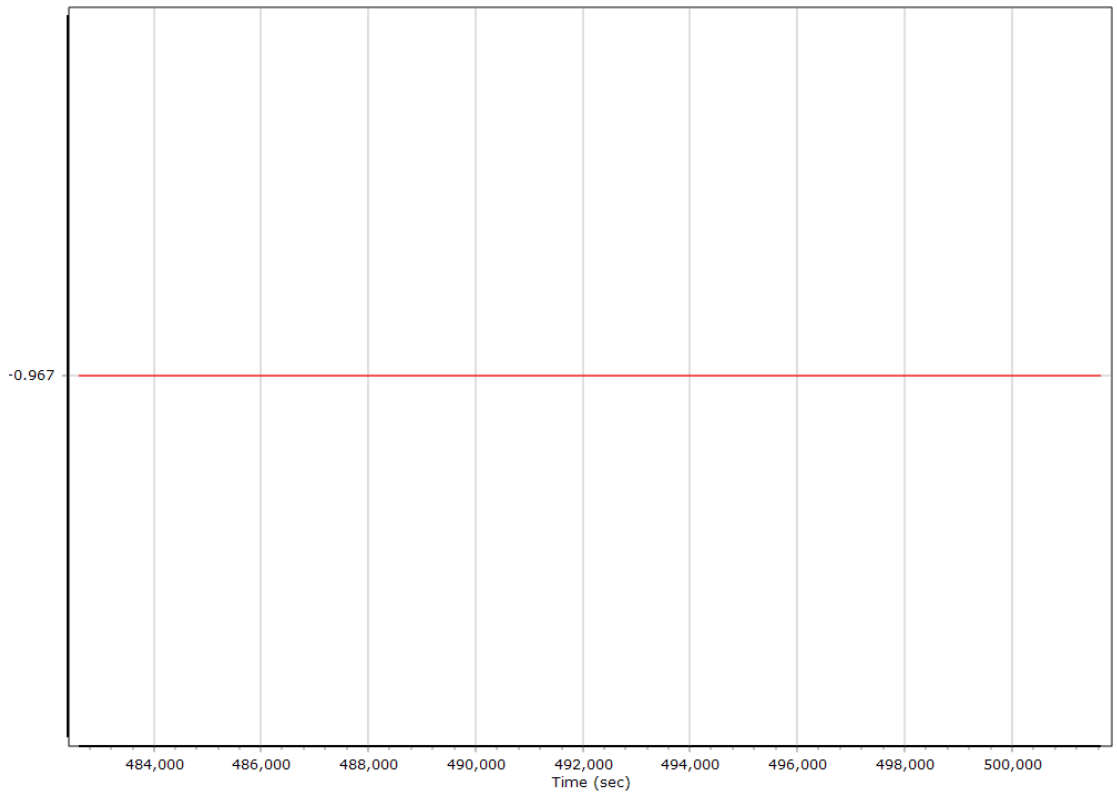
X Reference-Primary GNSS Lever Arm (m)



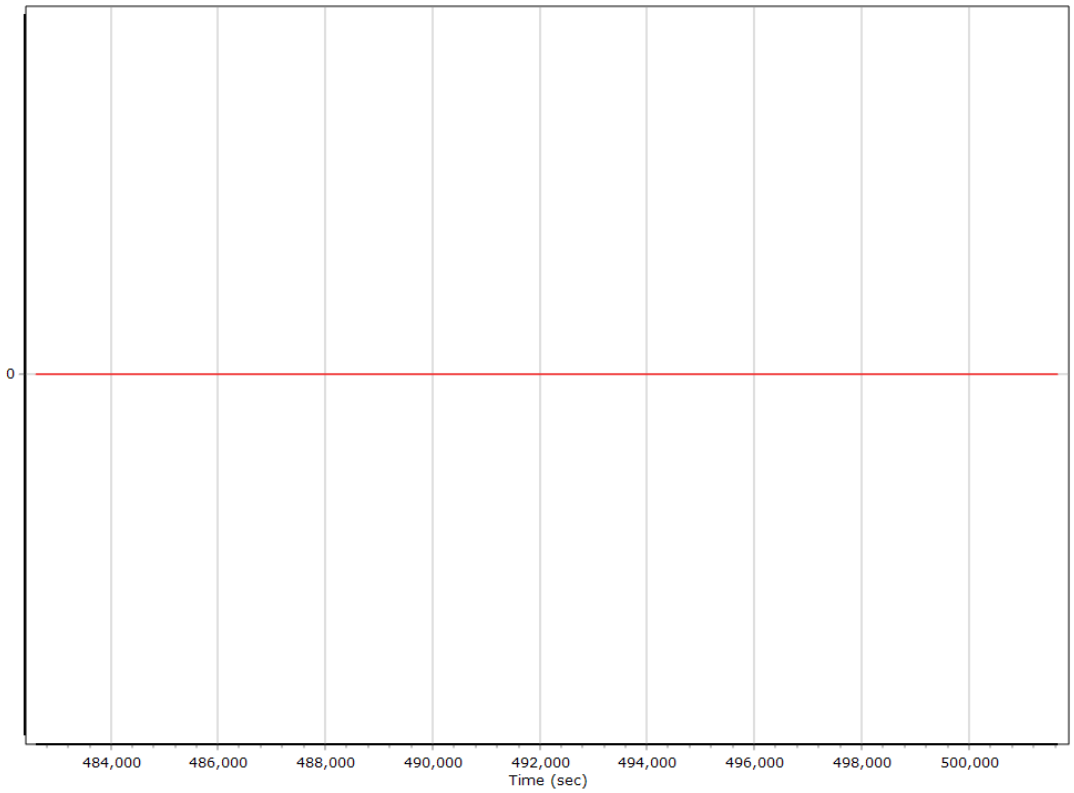
Y Reference-Primary GNSS Lever Arm (m)



Z Reference-Primary GNSS Lever Arm (m)



Reference-Primary GNSS Lever Arm Figure of Merit

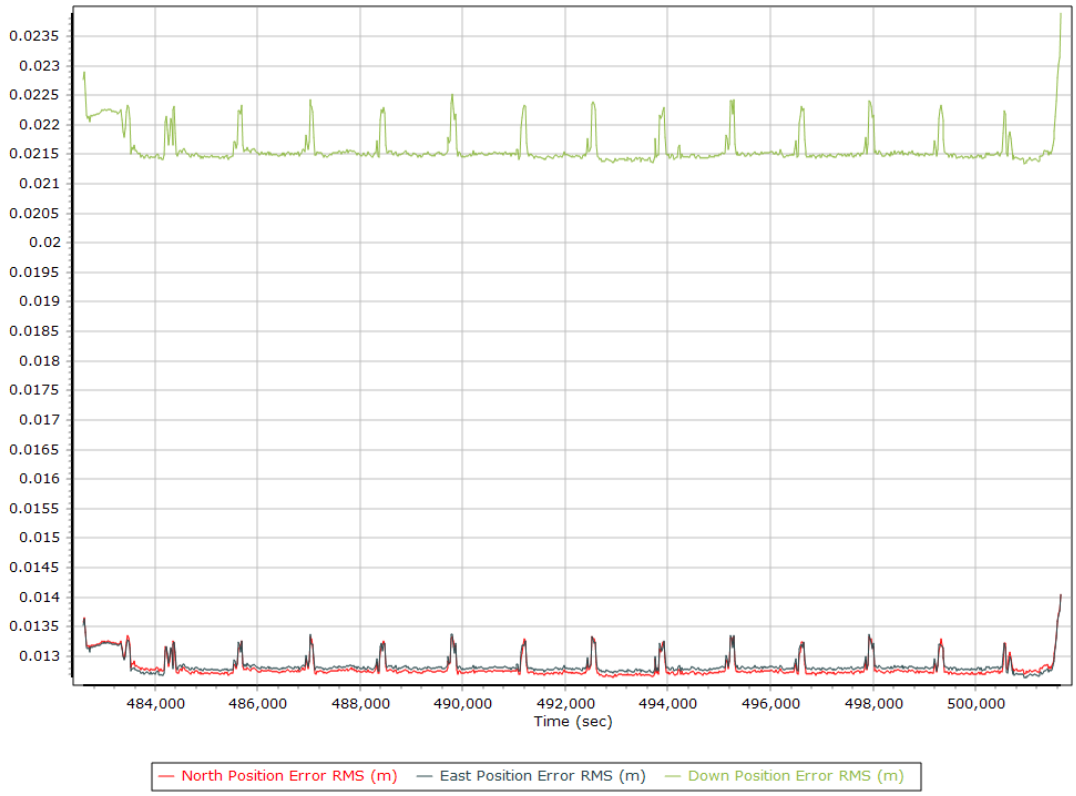


IN-Fusion QC

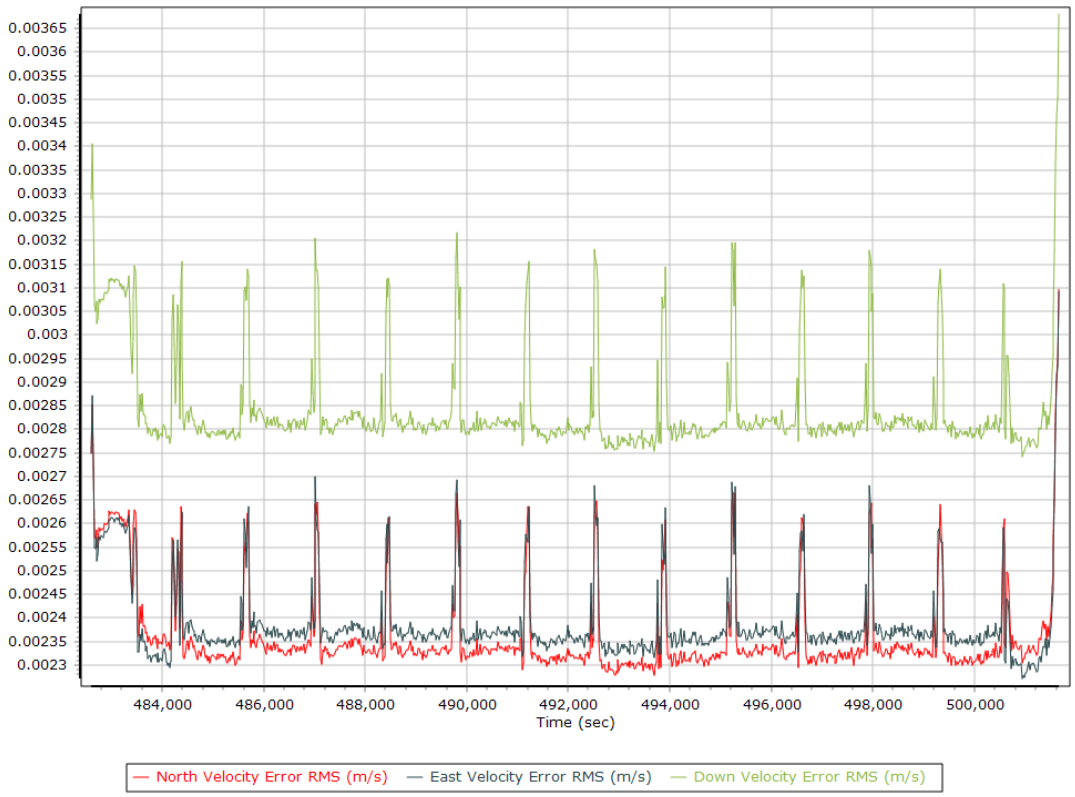
Forward Processed Estimated Errors, Reference Frame

Smoothed Performance Metrics

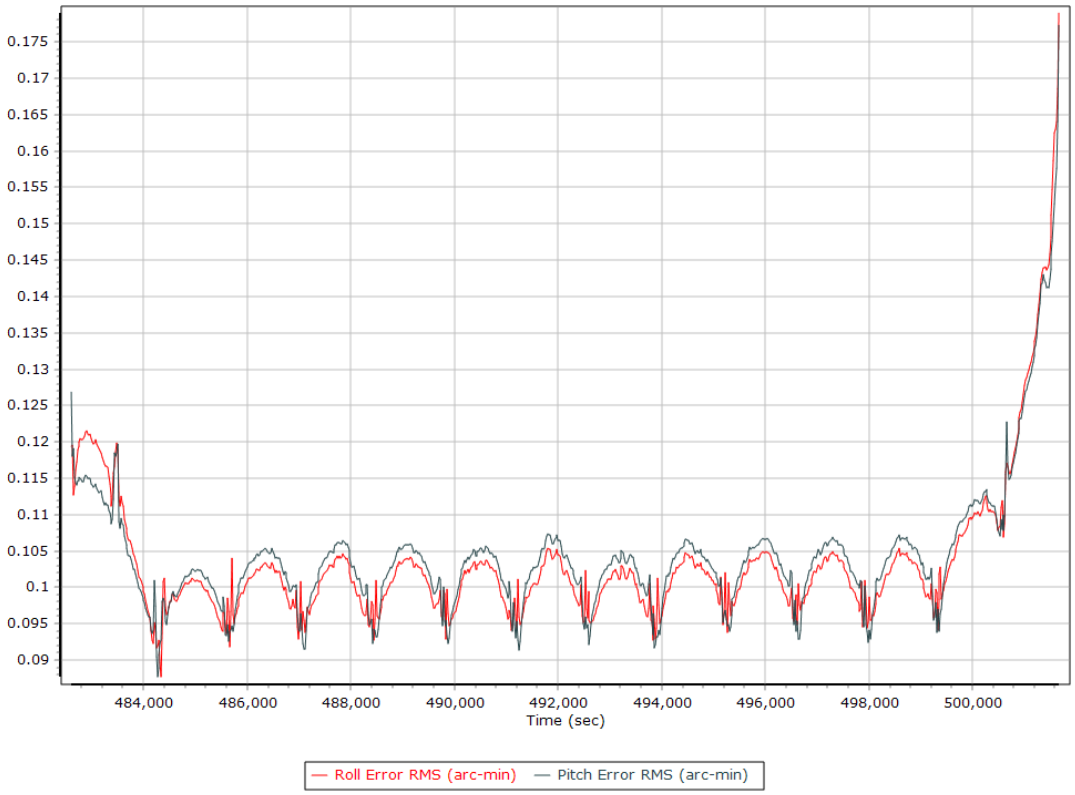
Position Error RMS (m)



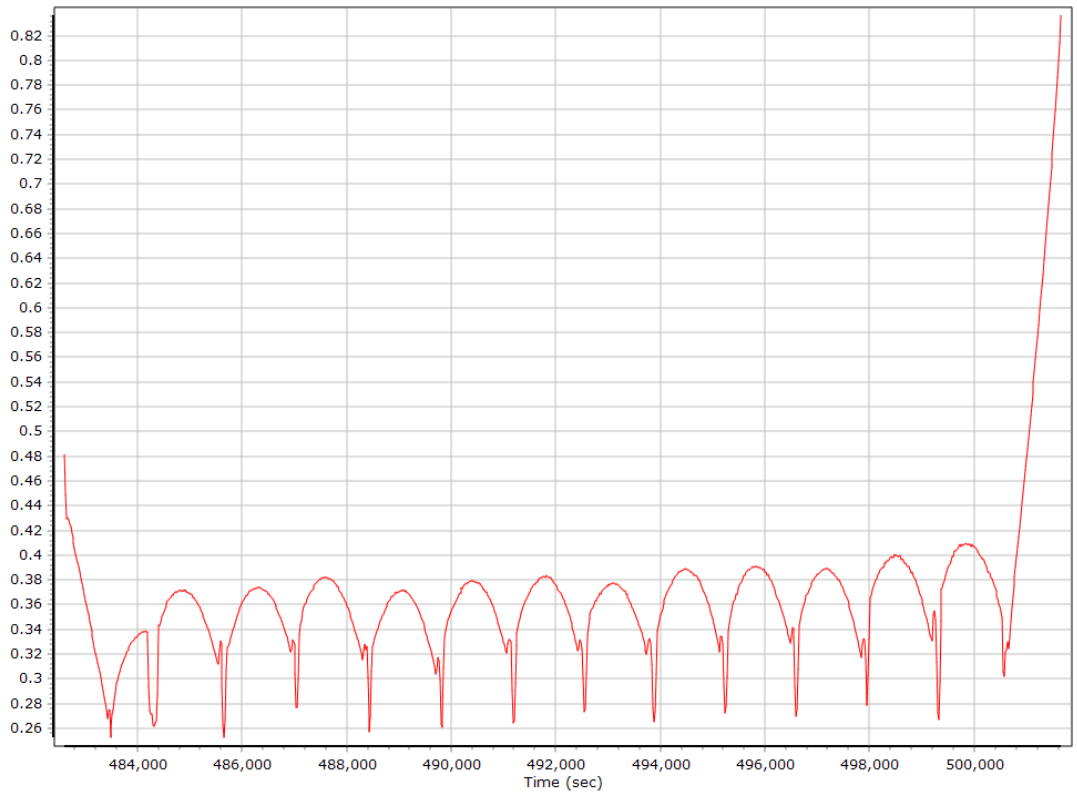
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

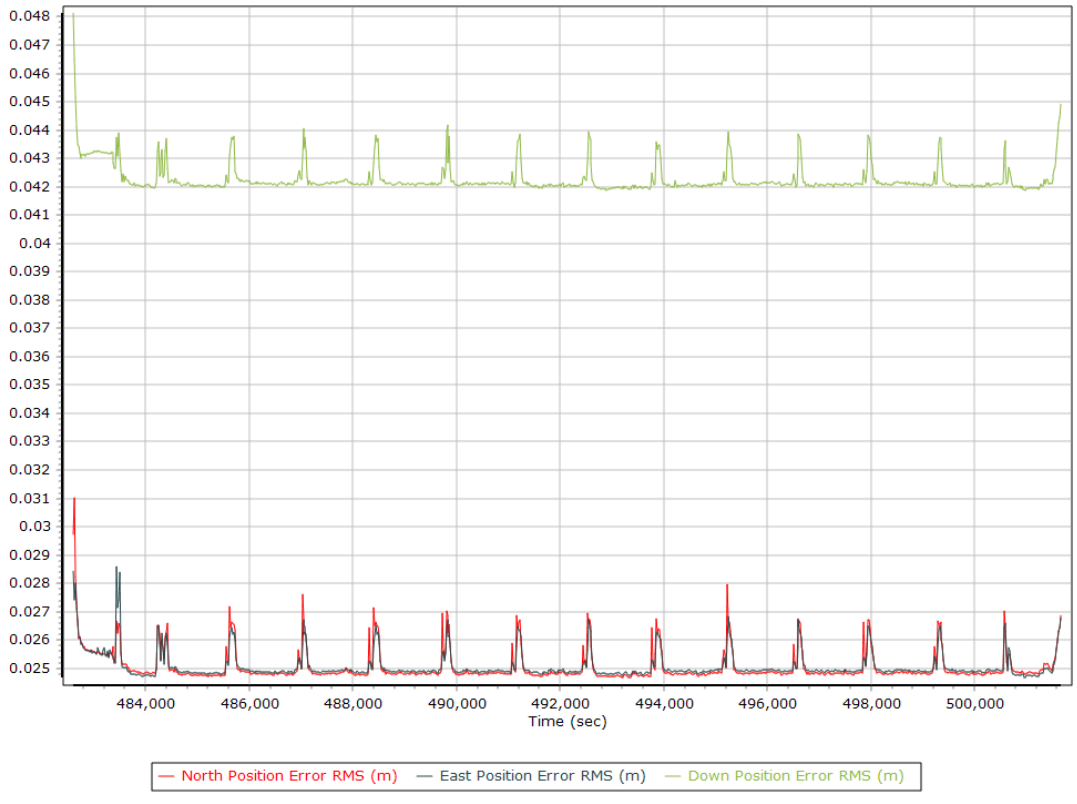


Heading Error RMS (arc-min)

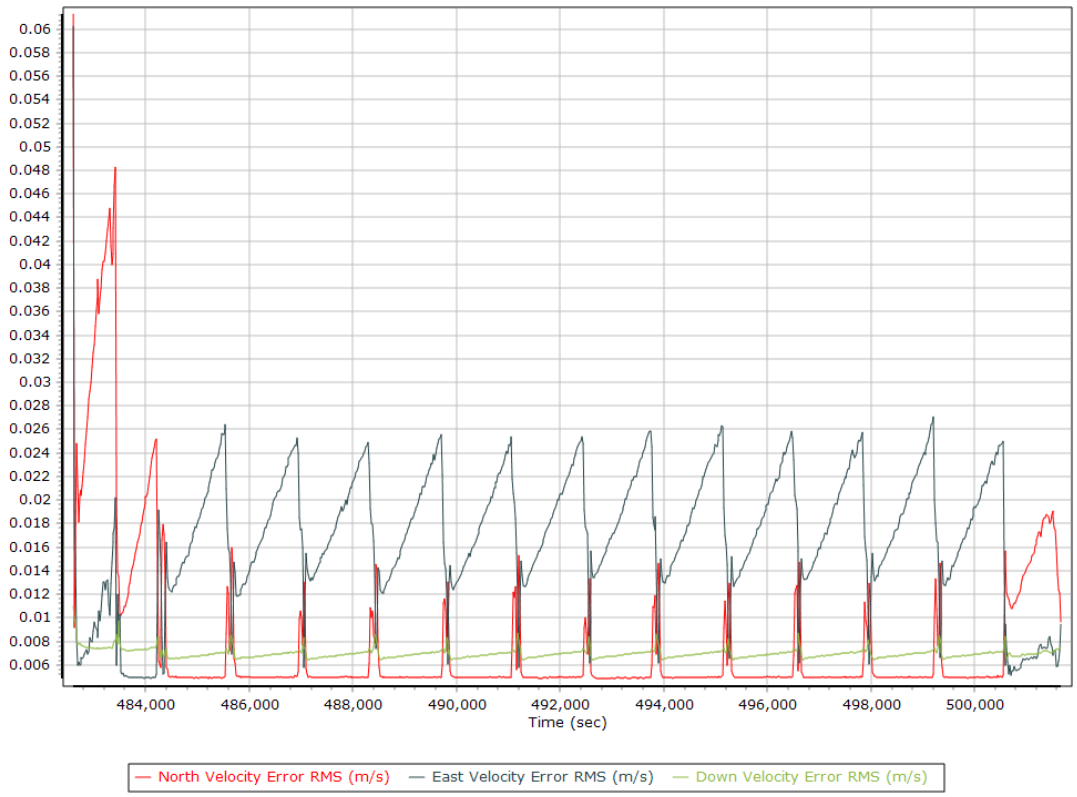


Forward Processed Performance Metrics

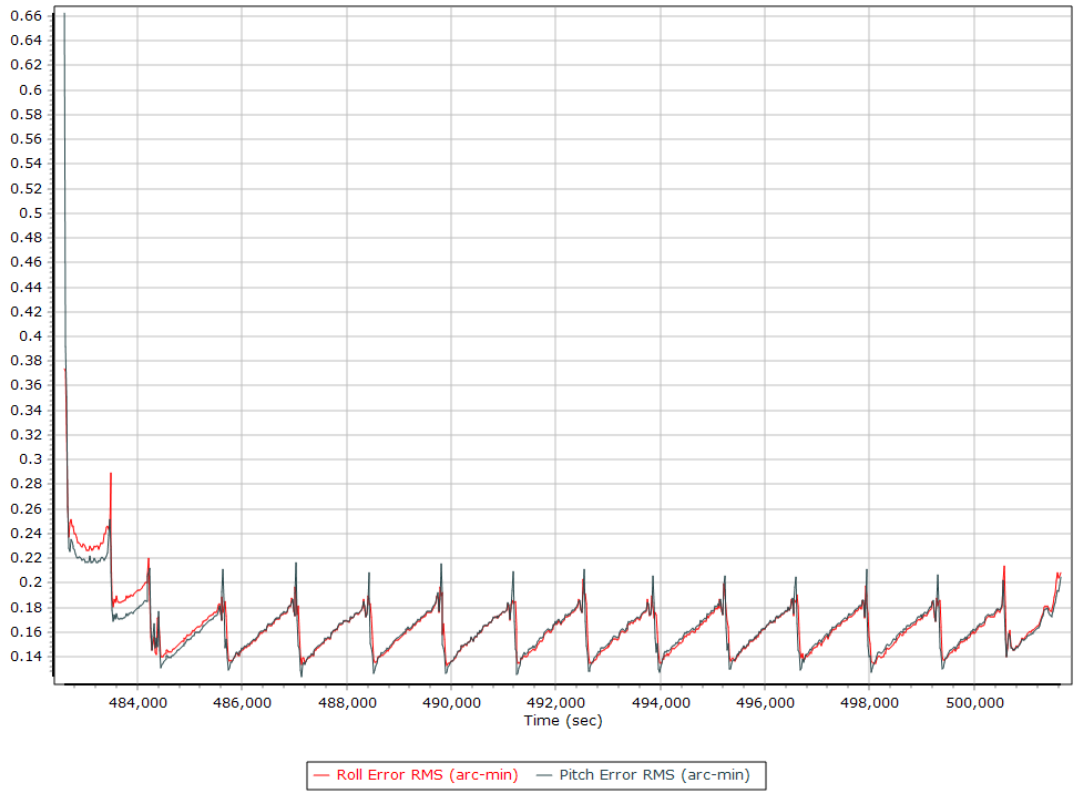
Position Error RMS (m)



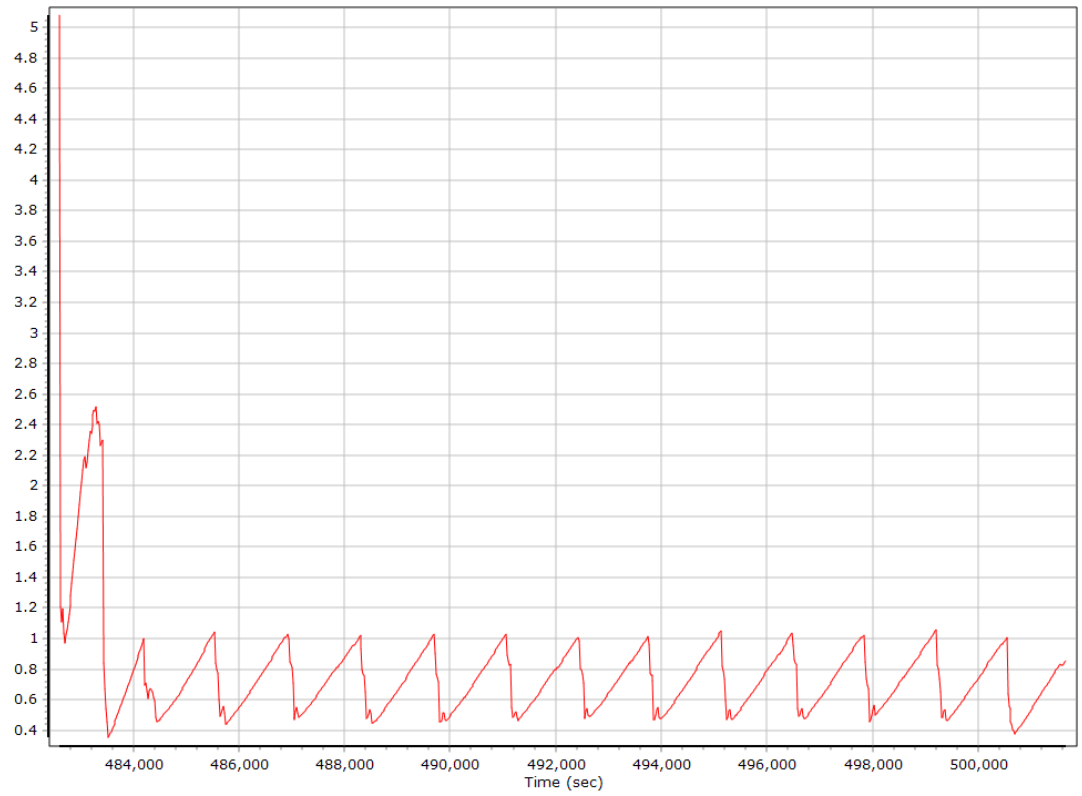
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

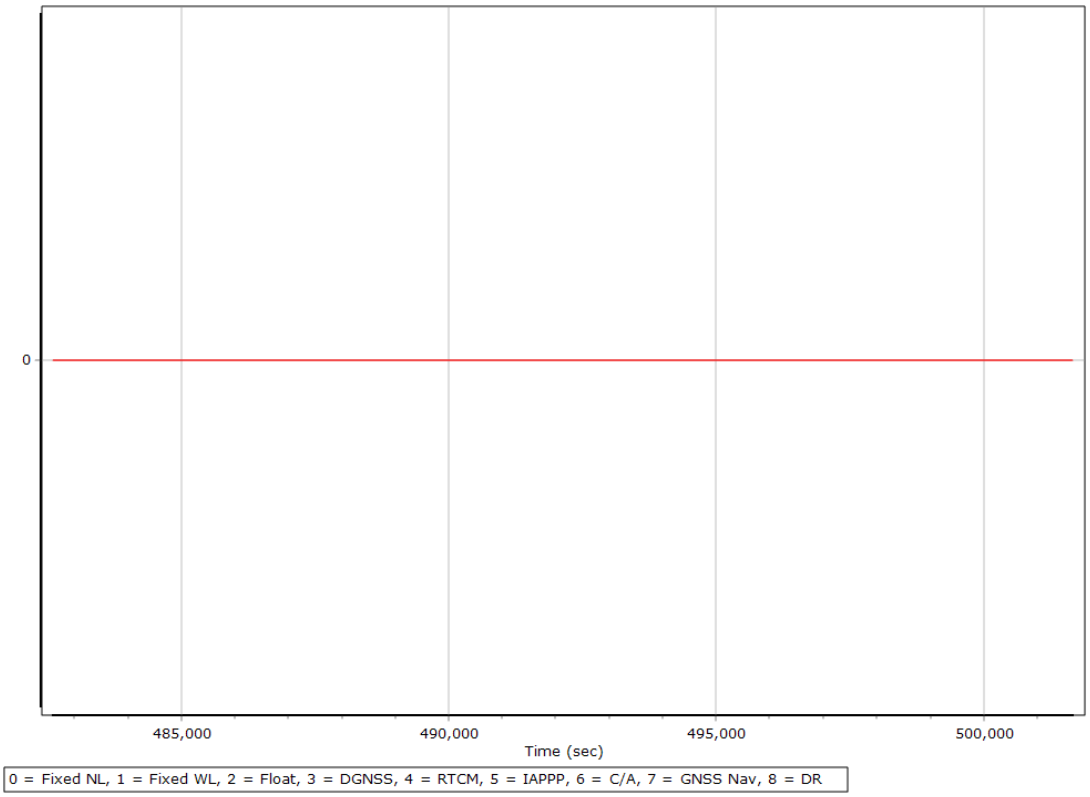


Heading Error RMS (arc-min)

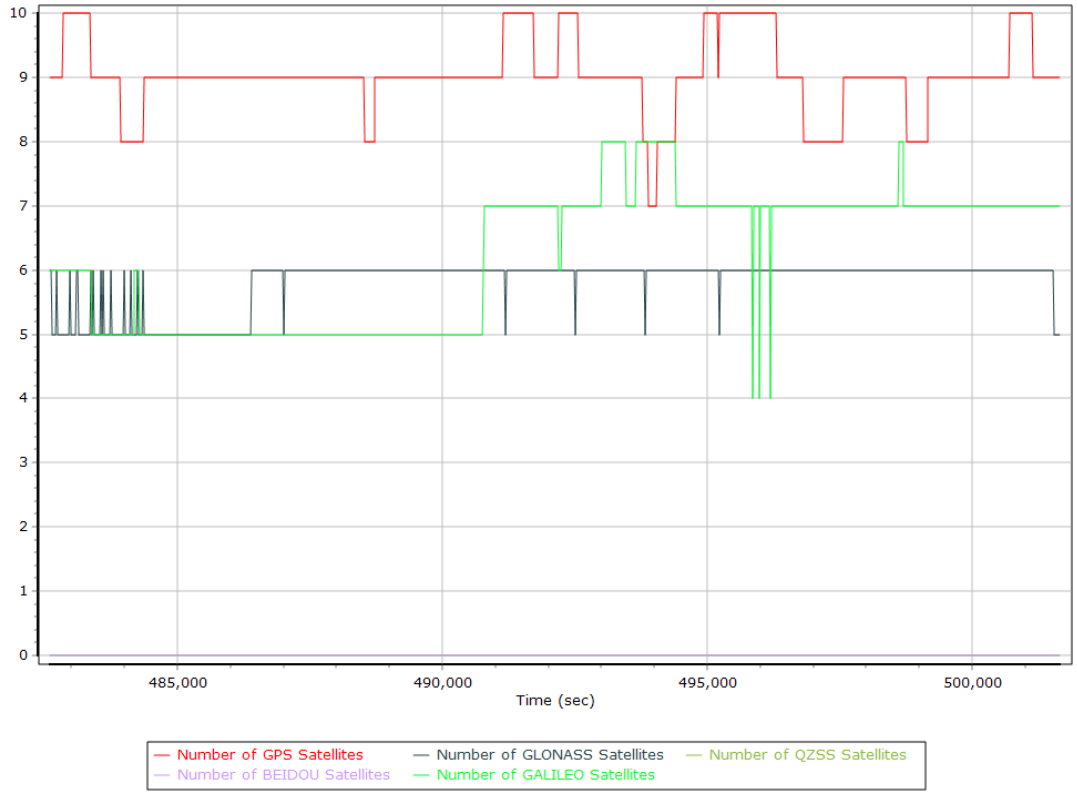


Forward Processed Solution Status

Processing Mode



Number of Satellites



Baseline Length