General Information

Mission Information

Project name	191015_A_5060380_nad2011_FINAL
Processing date	2019-10-17 17:01:05
Mission date	2019-10-15 17:12:33
Mission duration	02:52:43.919
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
survey10.pos	POS Data

Input Files

File Name	File Type
Ephm2880.19g	GLONASS Broadcast Ephemeris
Ephm2880.19n	GPS Broadcast Ephemeris

Output Files

Filename	File type
sbet_191015_A_5060380_nad2011_FINAL.out	SBET Trajectory File
sbet_191015_A_5060380_nad2011_FINAL.shp	Shapefile Export Output

Rover Data Summary

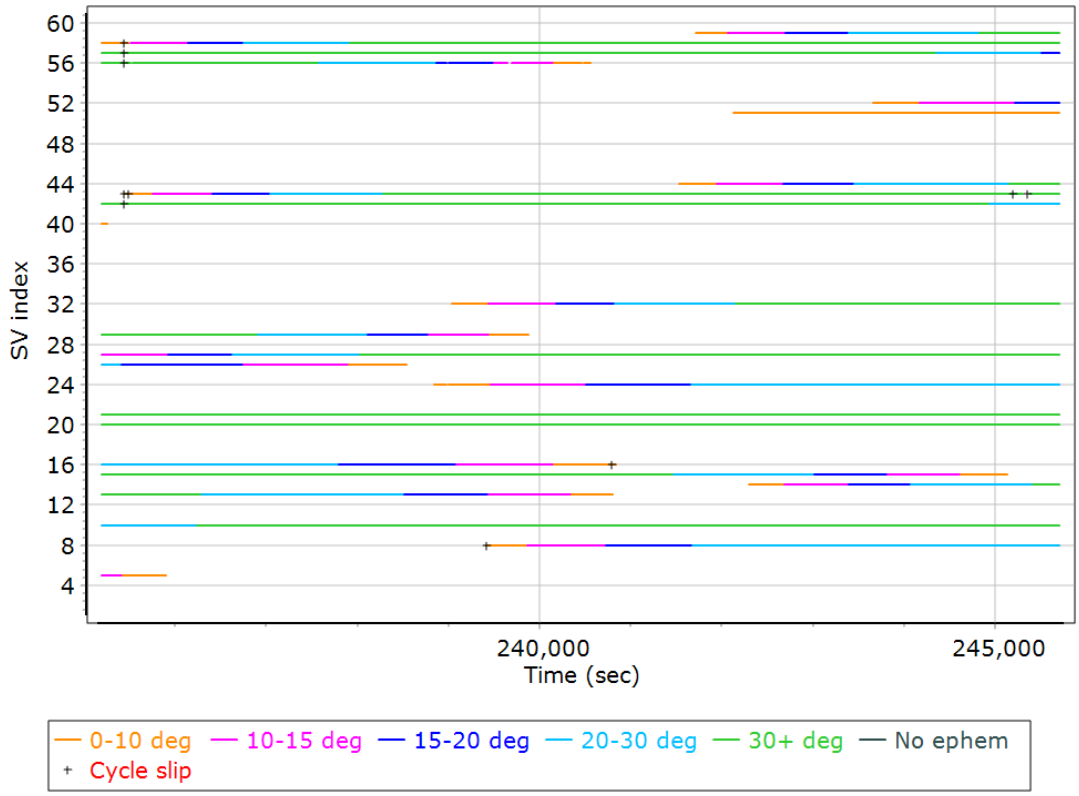
First raw data file	survey10.pos		
Last raw data file	survey10.pos		
Start GPS week	2075		
Start time	234753.008 (10/15/2019 17:12:33)		
End time	245715.961 (10/15/2019 20:15:15)		
Start of fine alignment	235139.043 (10/15/2019 17:18:59)		
Available subsystems	Primary GNSS, IMU		
POS Event Input	Event 1 Input		
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)	0.556	-0.429	-0.965
Reference to Primary GNSS lever arm std dev (m)	-1.000		
Aircraft to Reference mounting angles (deg)	0.000	0.000	0.000

Raw Data QC

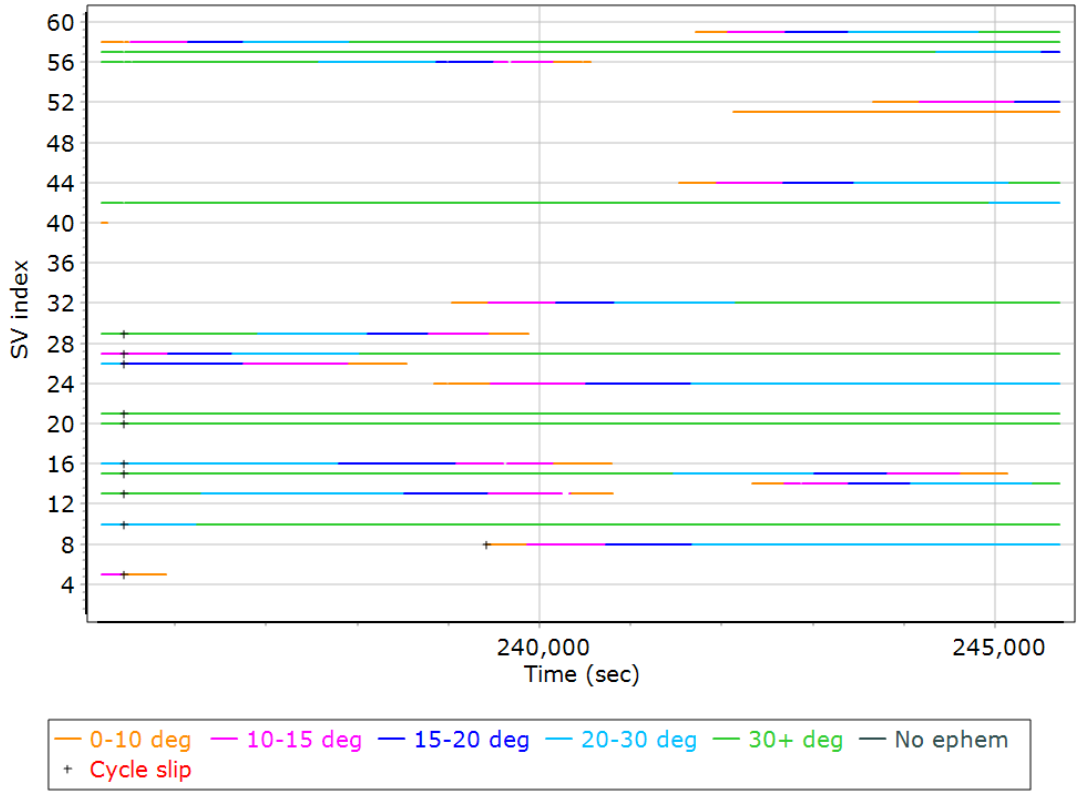
Raw IMU Import QC Summary

IMU data input file	imu_191015_A_5060380_nad2011_FINAL.dat
IMU data check log file	imudt_191015_A_5060380_nad2011_FINAL.log
IMU Records Processed	2168118
Termination Status	Warnings
IMU Anomalies	1
IMU Failure Messages	
245630.494 : WARNING : Gap of 120.9453 seconds in CHECKDT input data	

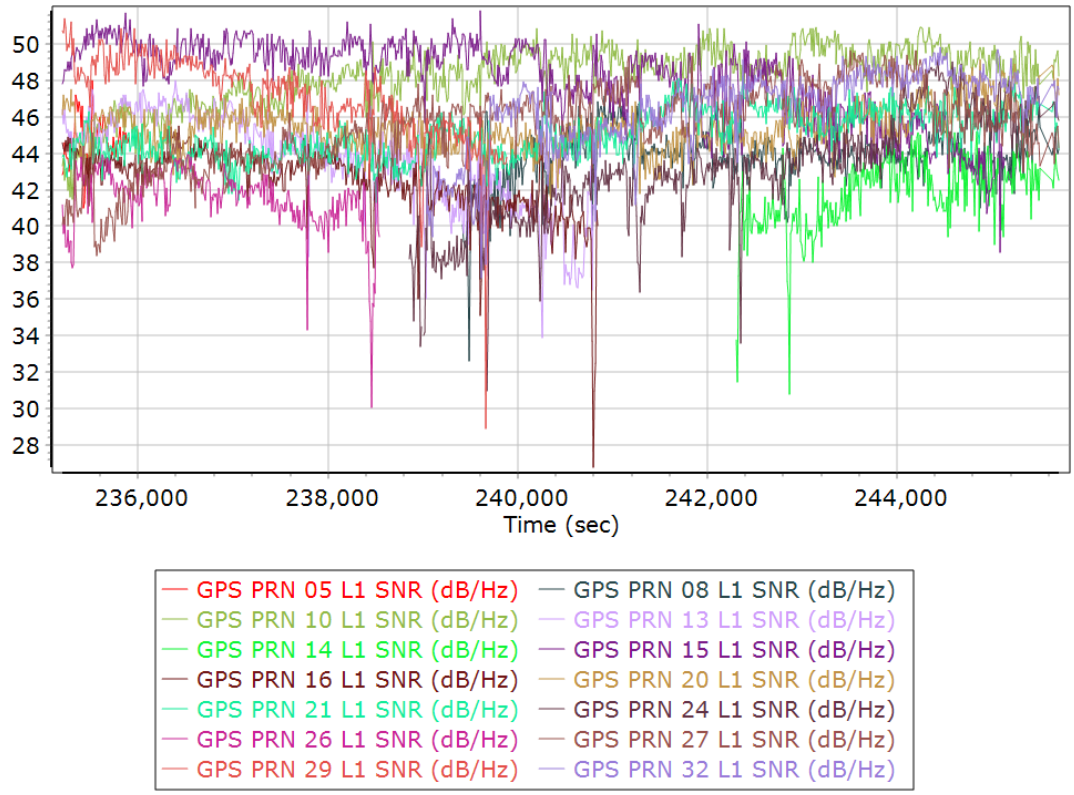
L1 Satellite Lock/Elevation



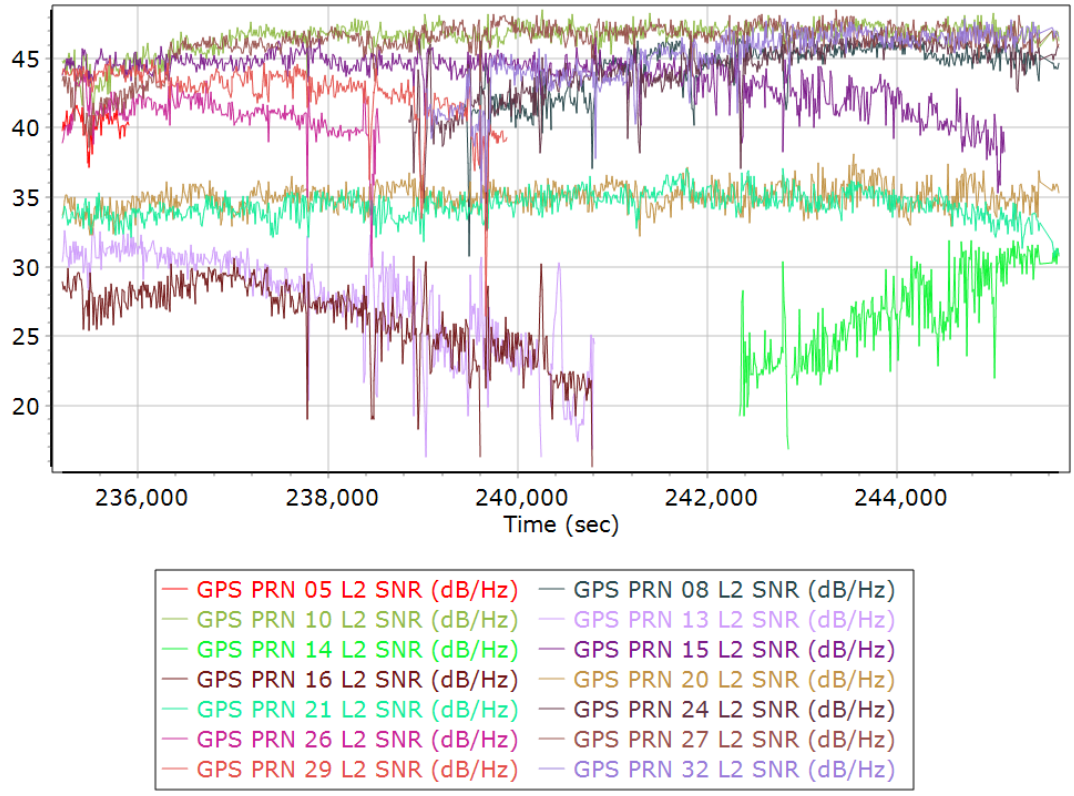
L2 Satellite Lock/Elevation



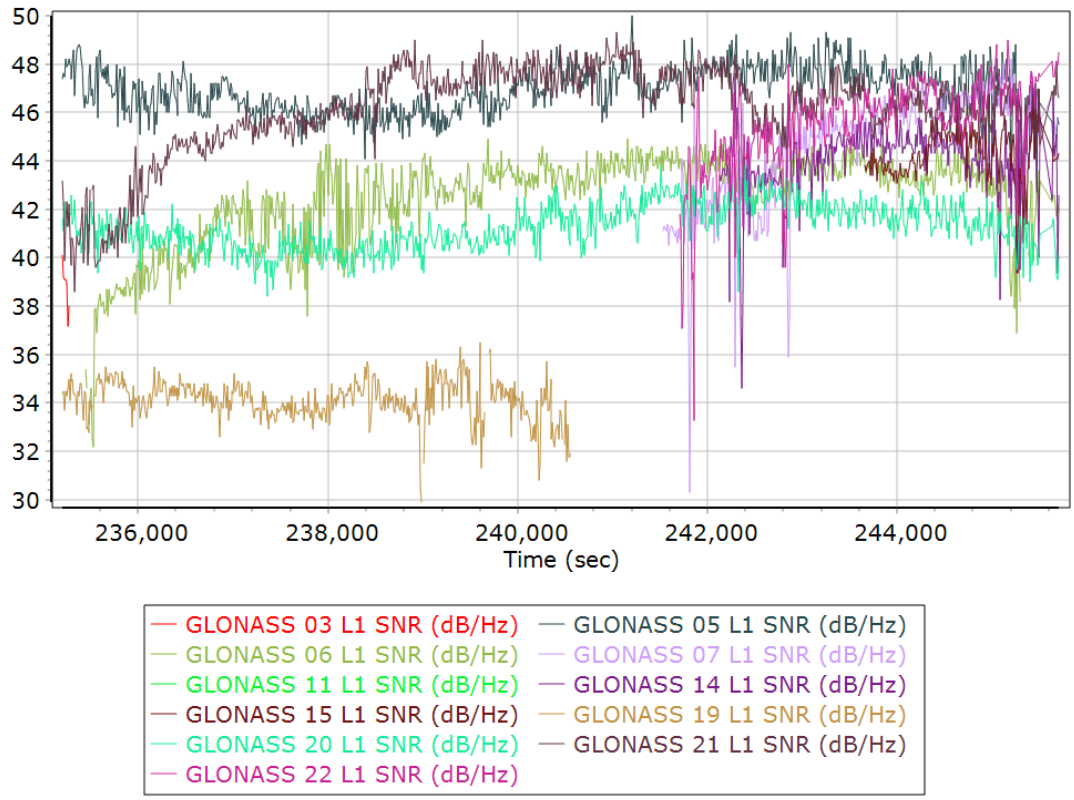
GPS L1 SNR



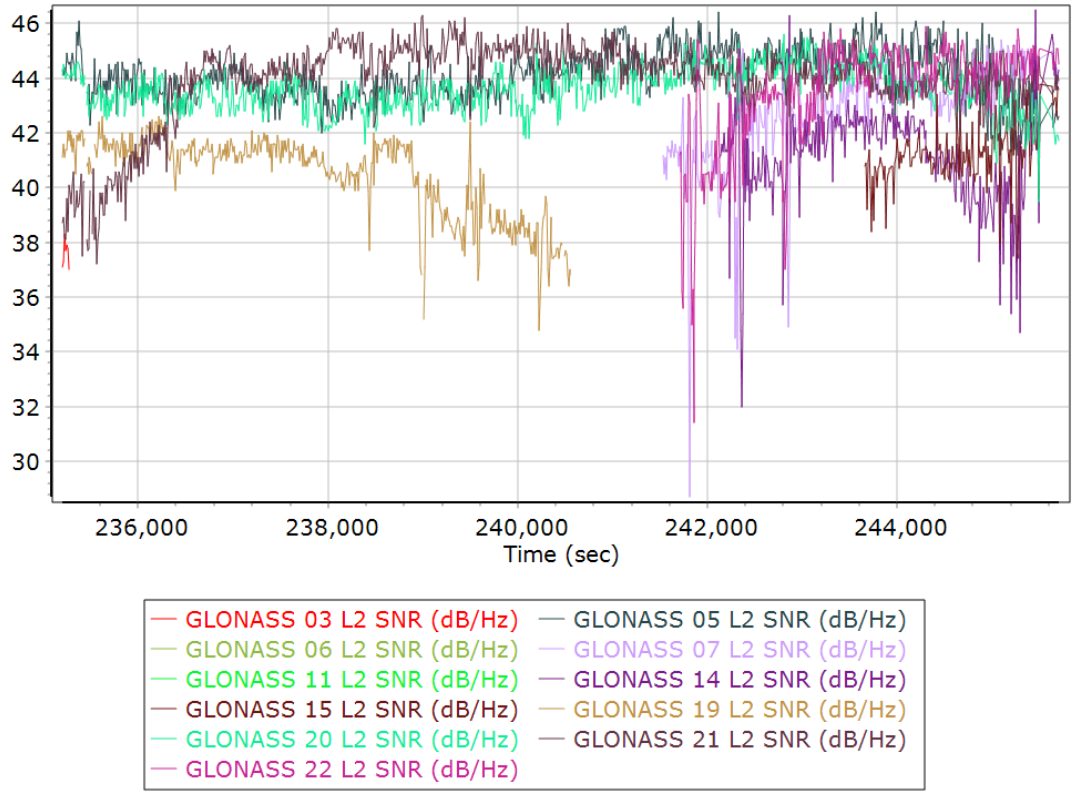
GPS L2 SNR



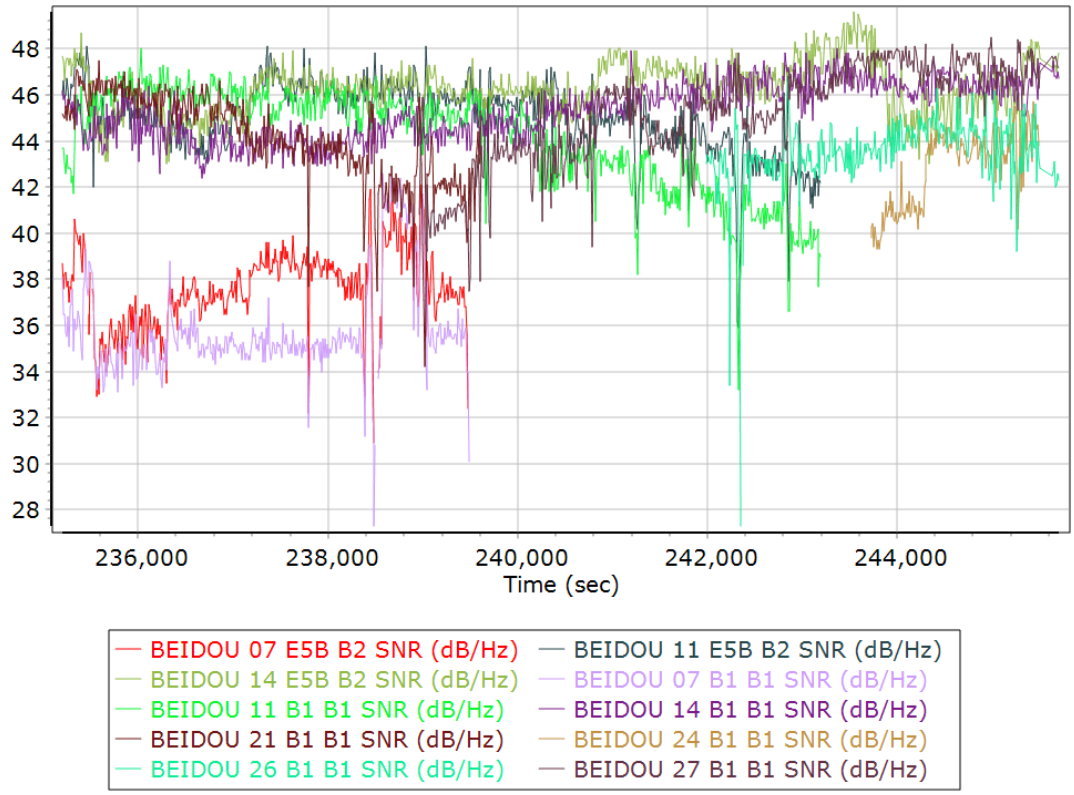
GLONASS L1 SNR



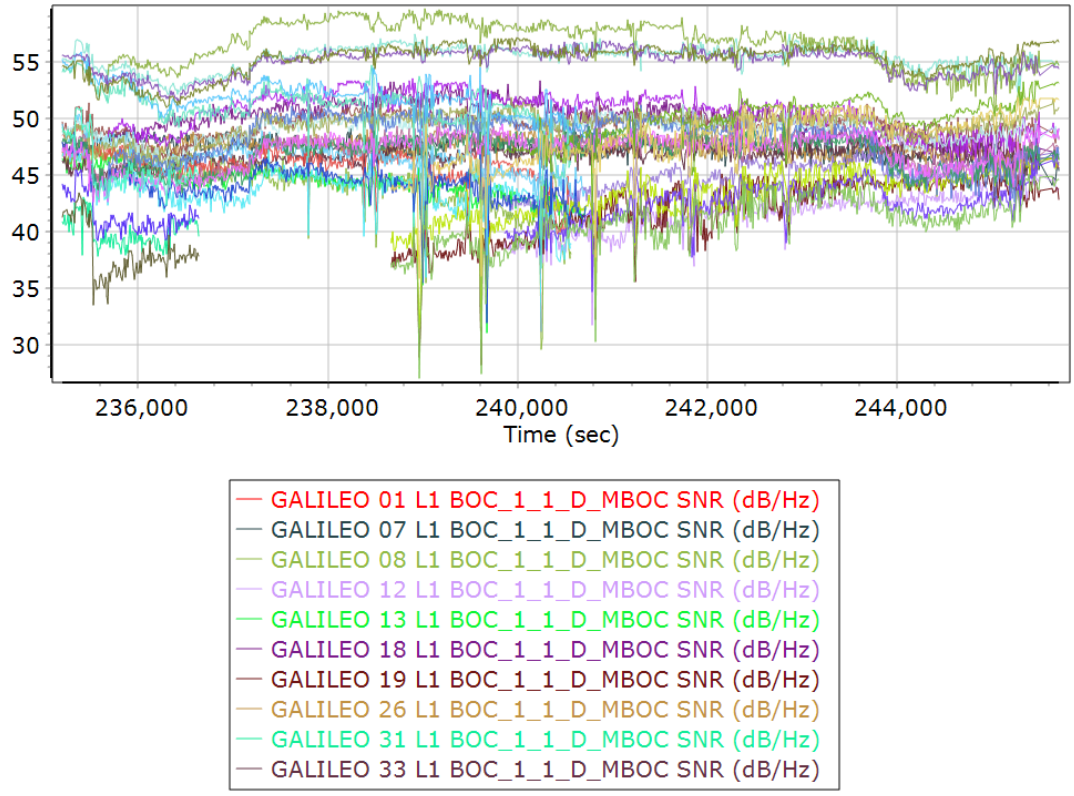
GLONASS L2 SNR



BEIDOU SNR

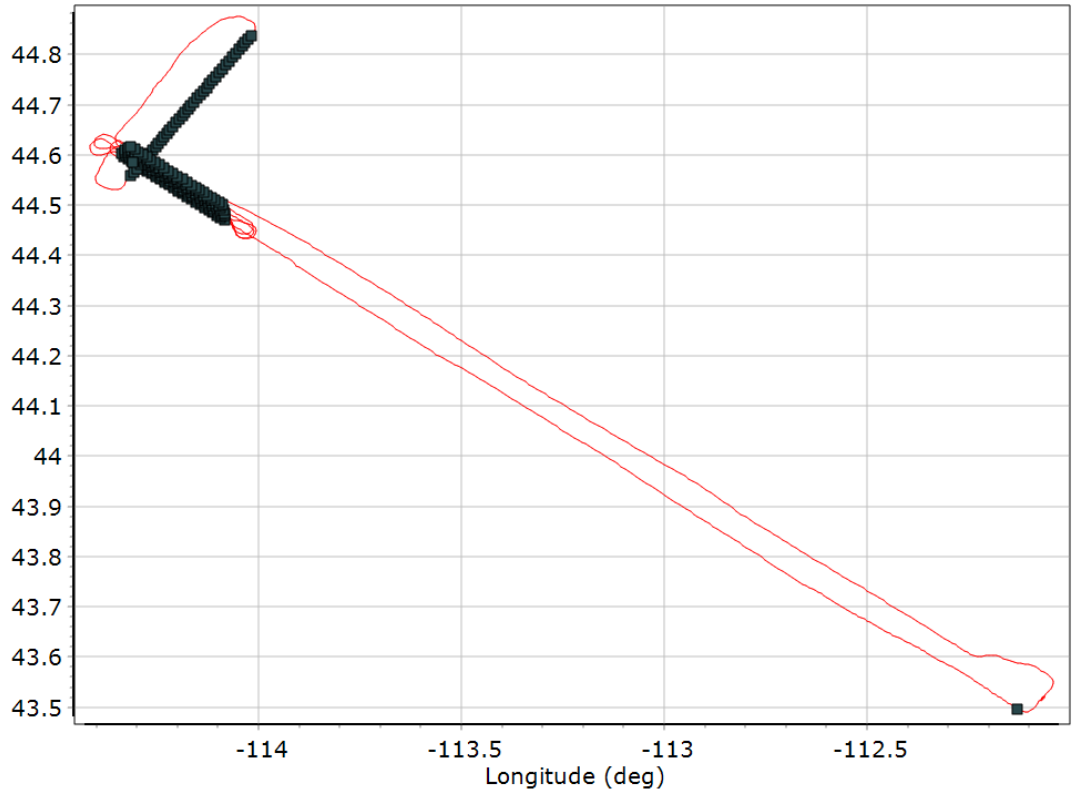


GALILEO SNR

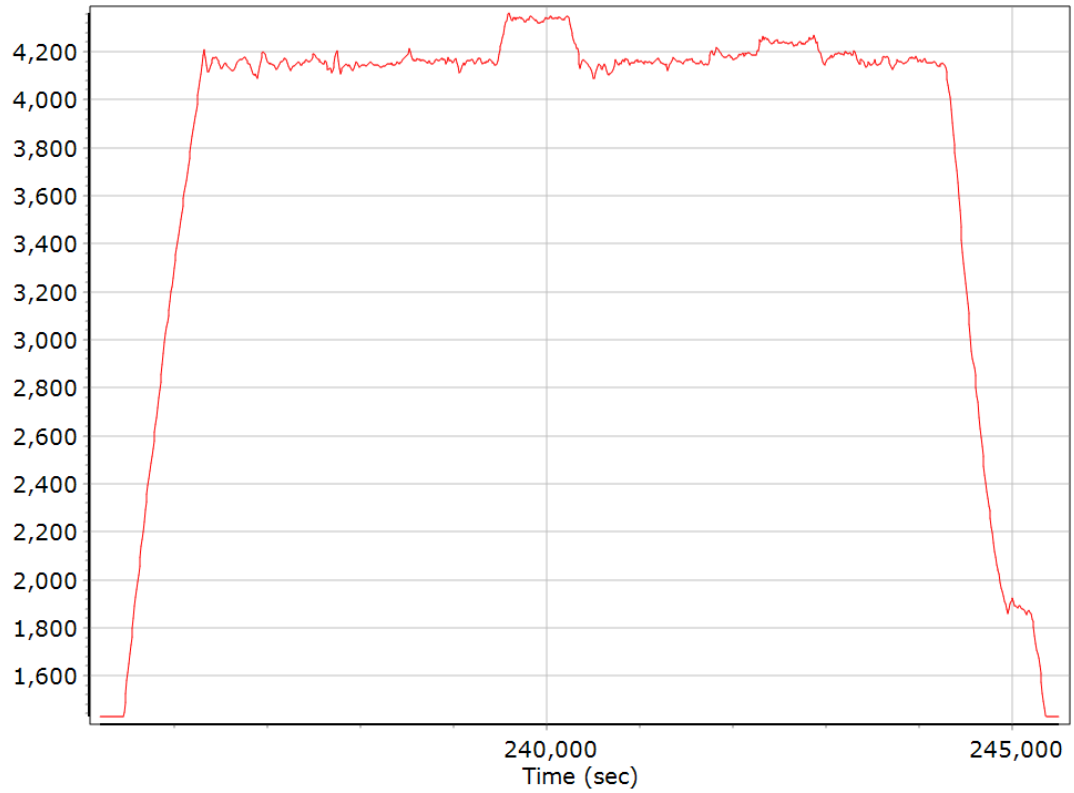

55
50
45
40
35
30
236,000
238,000
240,000
242,000
244,000
Time (sec)
GALILEO 01 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 07 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 08 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 12 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 13 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 18 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 19 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 26 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 31 L1 BOC_1_1_D_MBOC SNR (dB/Hz)
GALILEO 33 L1 BOC_1_1_D_MBOC SNR (dB/Hz)

Trajectory Information

Top View

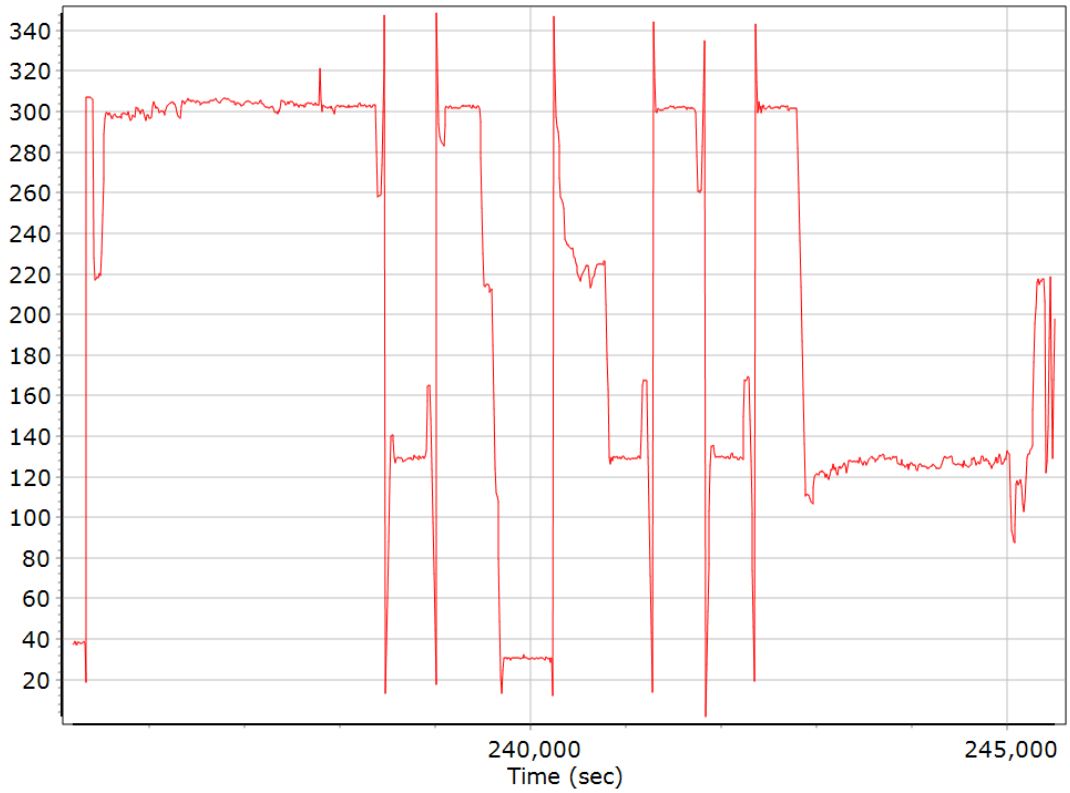


Altitude

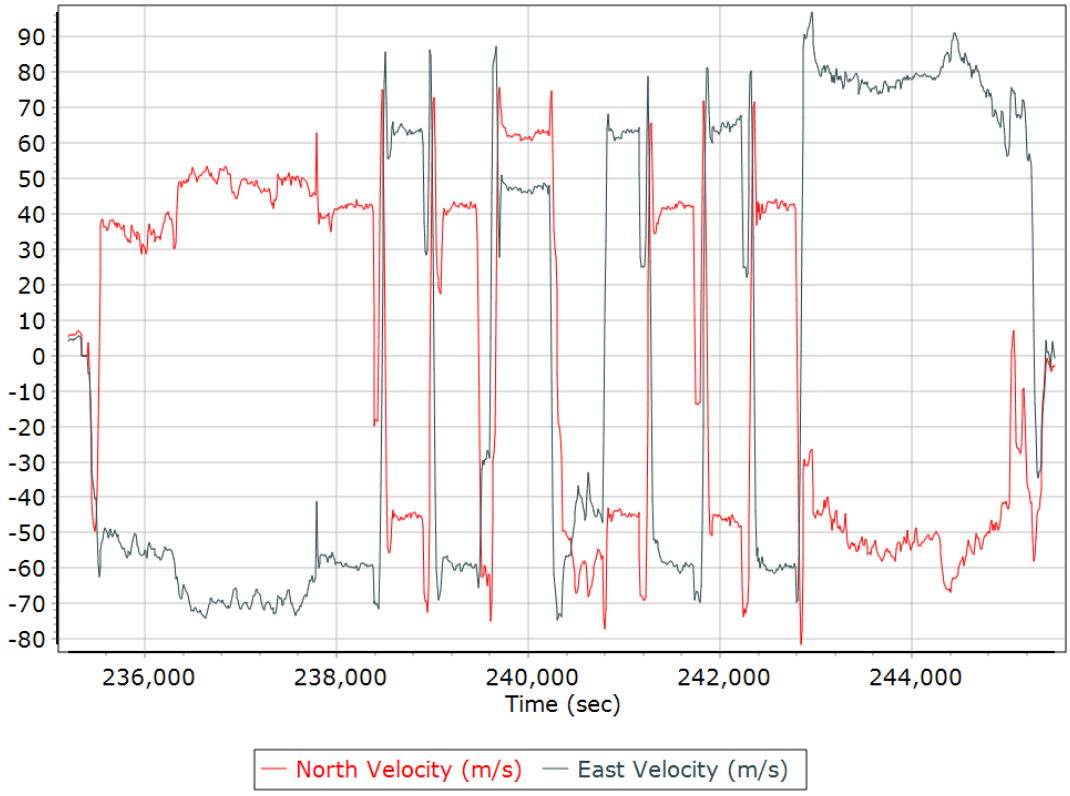


Roll/Pitch

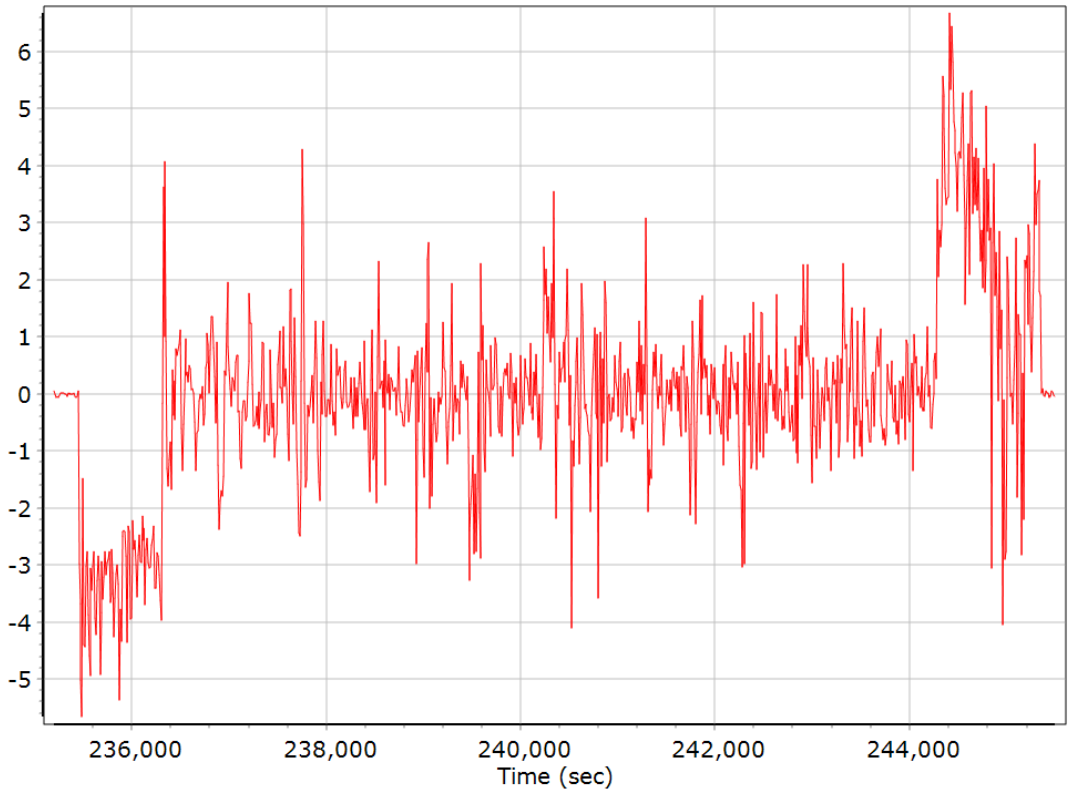
Heading



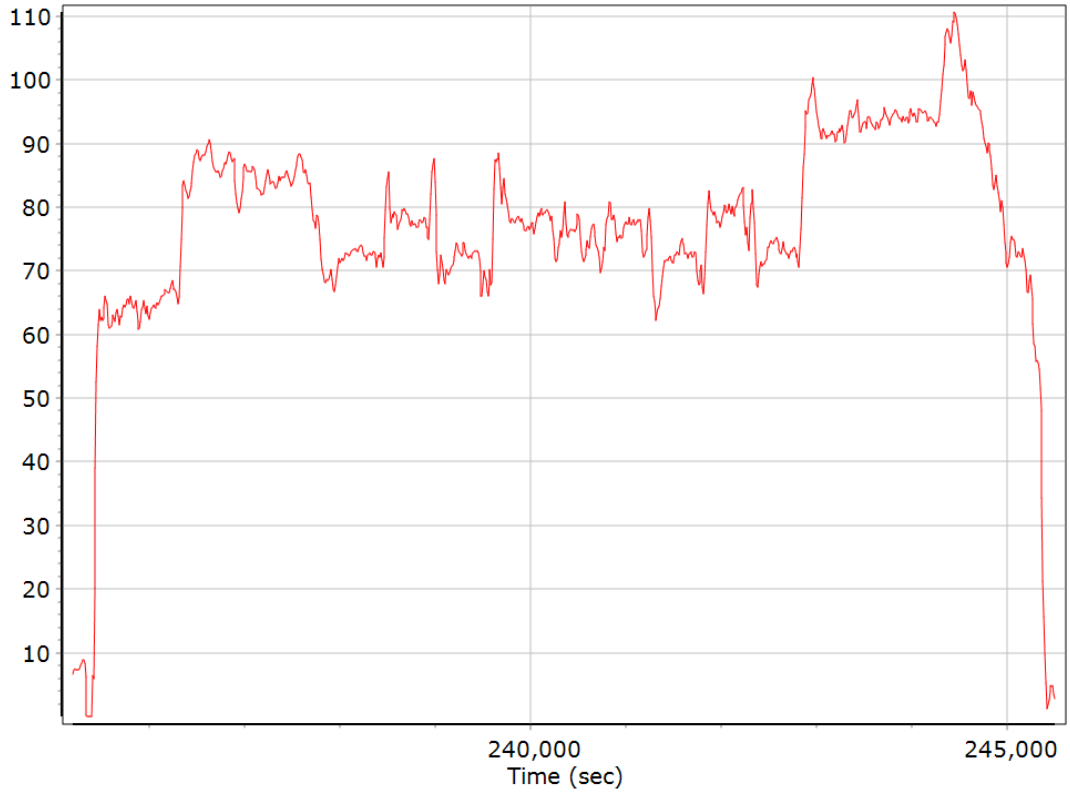
North/East Velocity



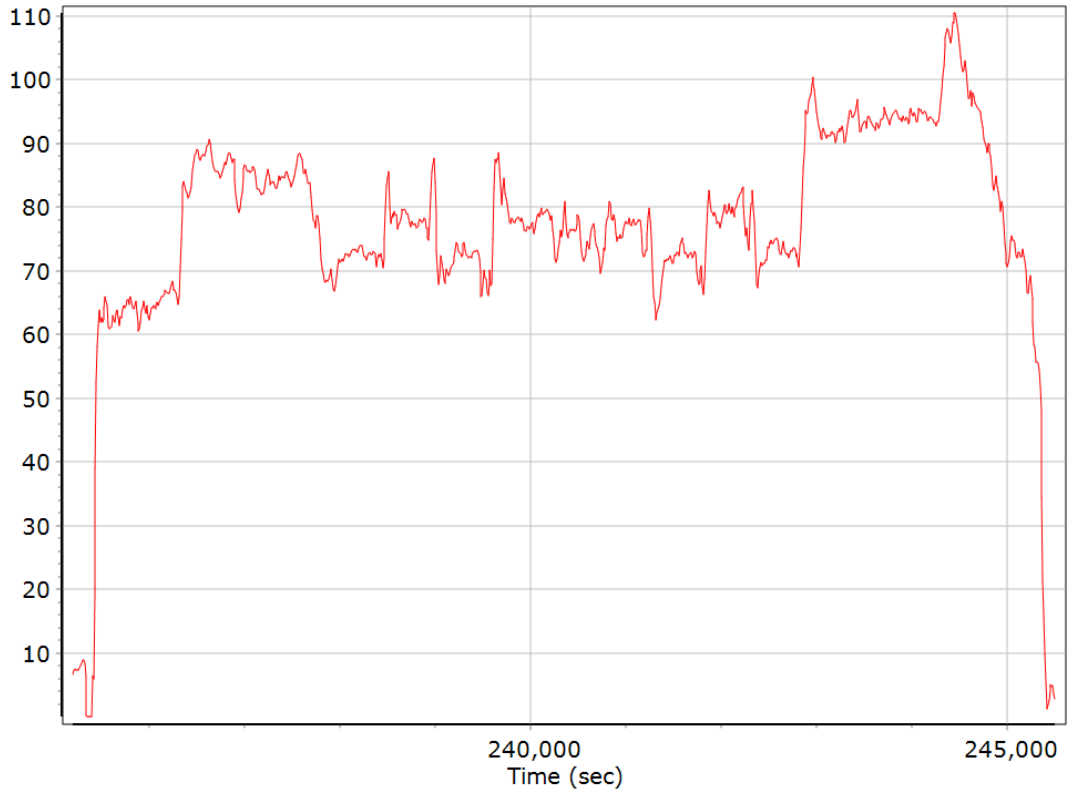
Down Velocity



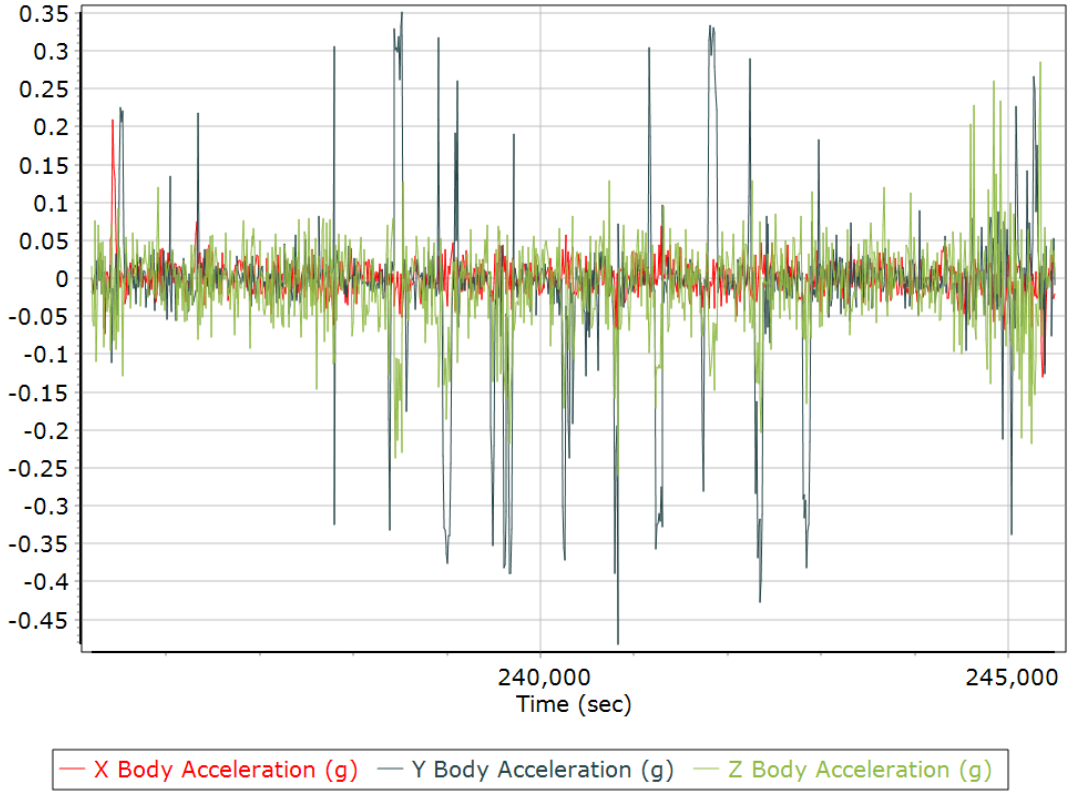
Total Speed



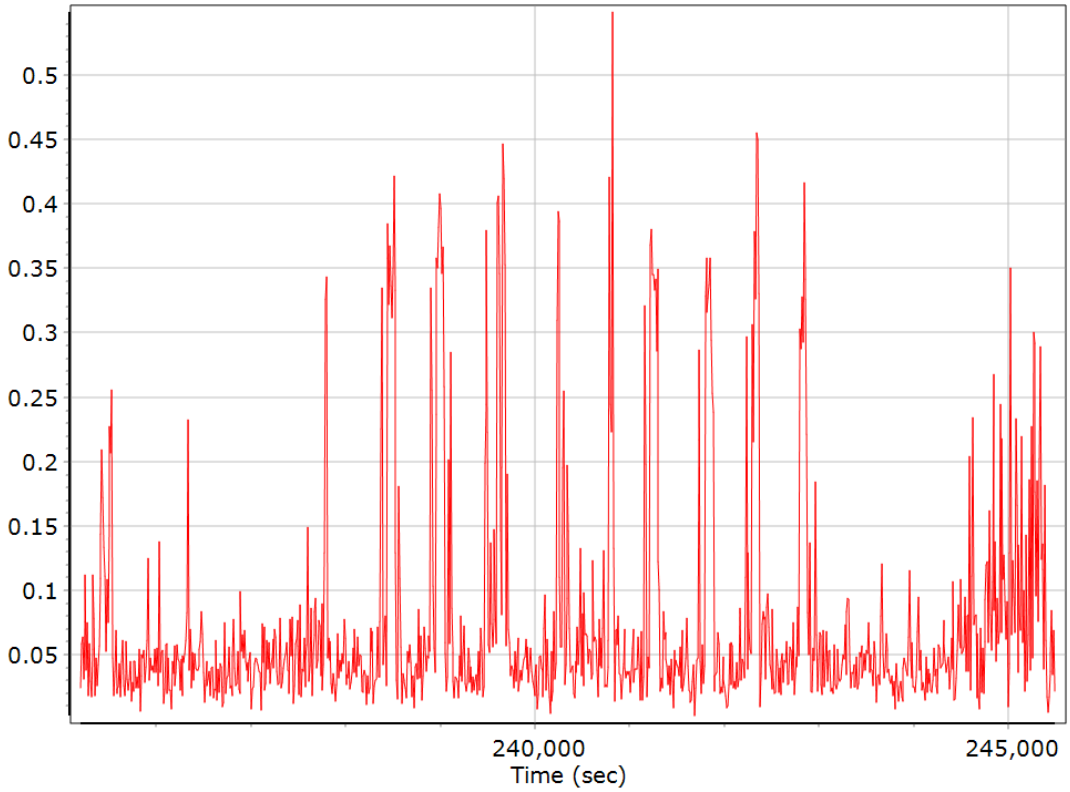
Ground Speed



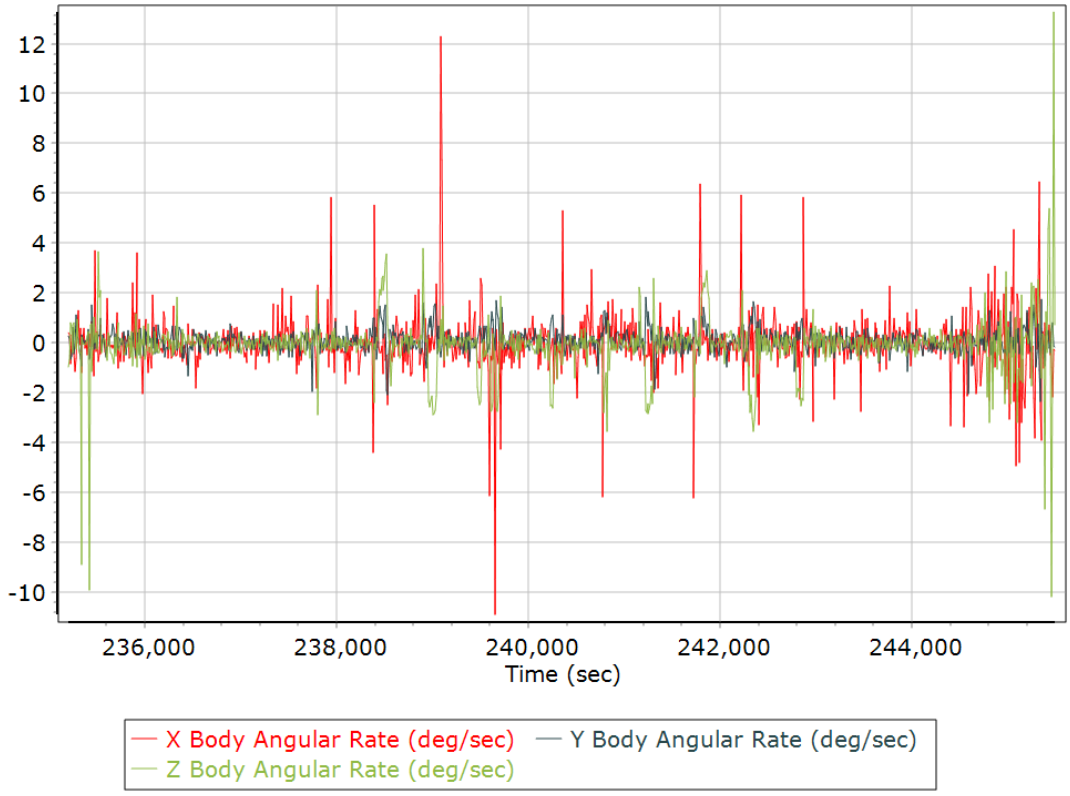
Body Acceleration



Total Body Acceleration



Body Angular Rate

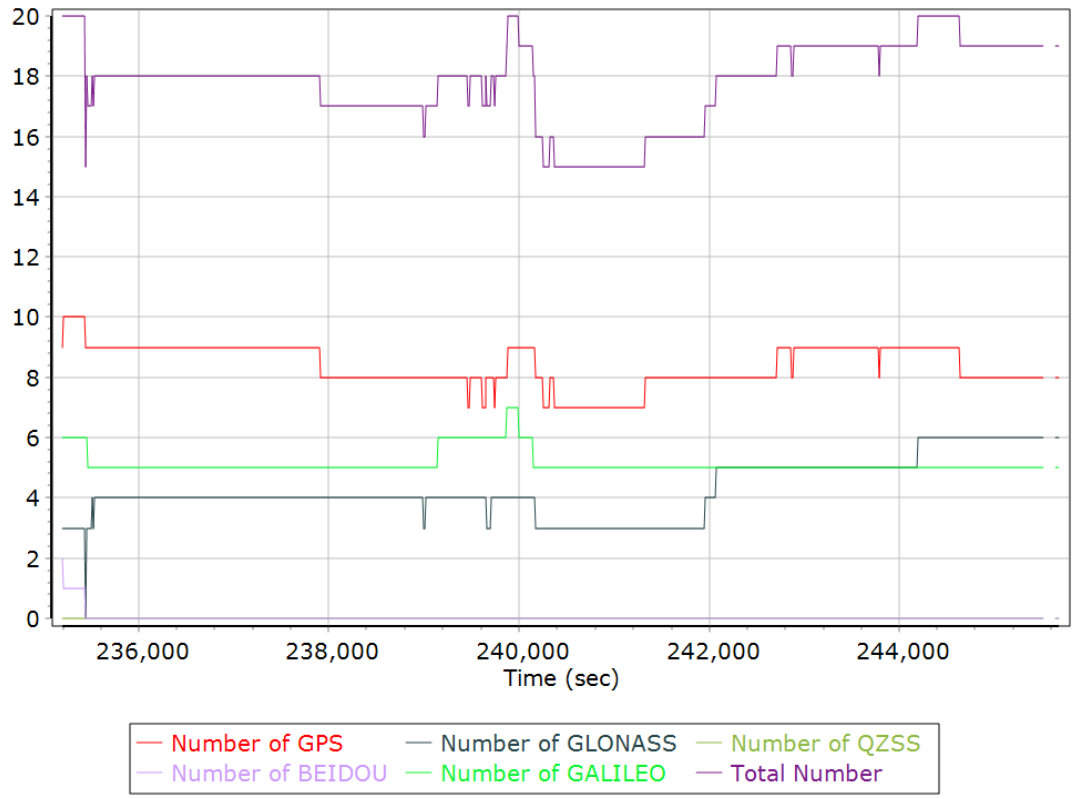


GNSS QC

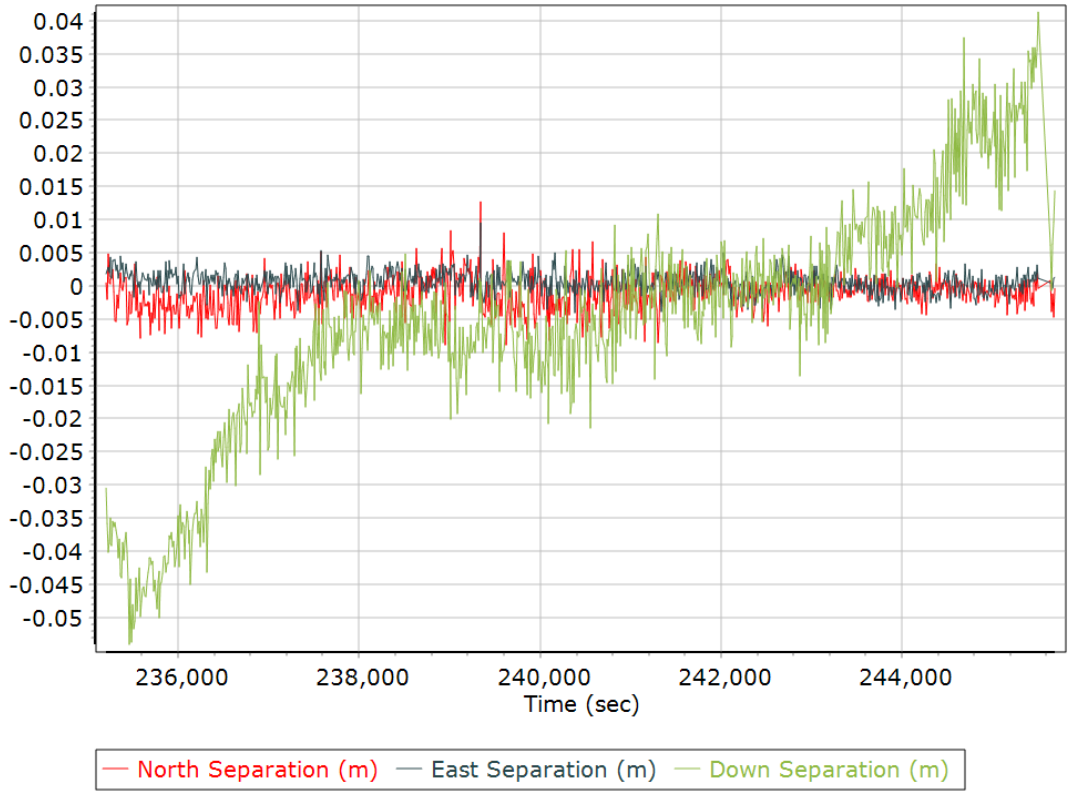
GNSS QC Statistics

Statistics	Min	Max	Mean
Baseline length (km)	0.00	0.00	
Number of GPS SV	4	10	8
Number of GLONASS SV	0	6	4
Number of QZSS SV	0	0	0
Number of BEIDOU SV	0	2	0
Number of GALILEO SV	2	7	5
Total number of SV	12	21	18
PDOP	0.93	2.50	1.26
QC Solution Gaps	126.00	126.00	
Solution Type	Fixed	Float	No solution
Epoch (sec)	10798.00	0.00	126.00
Percentage	98.85	0.00	1.15

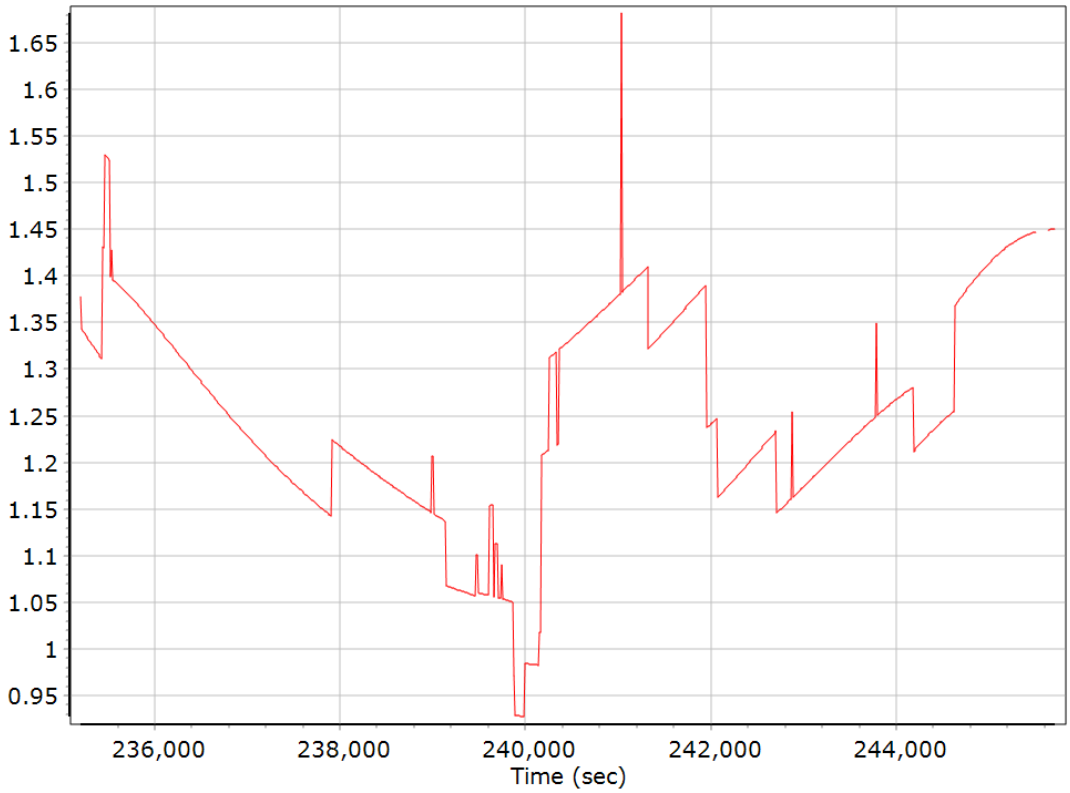
Num SVs in solution



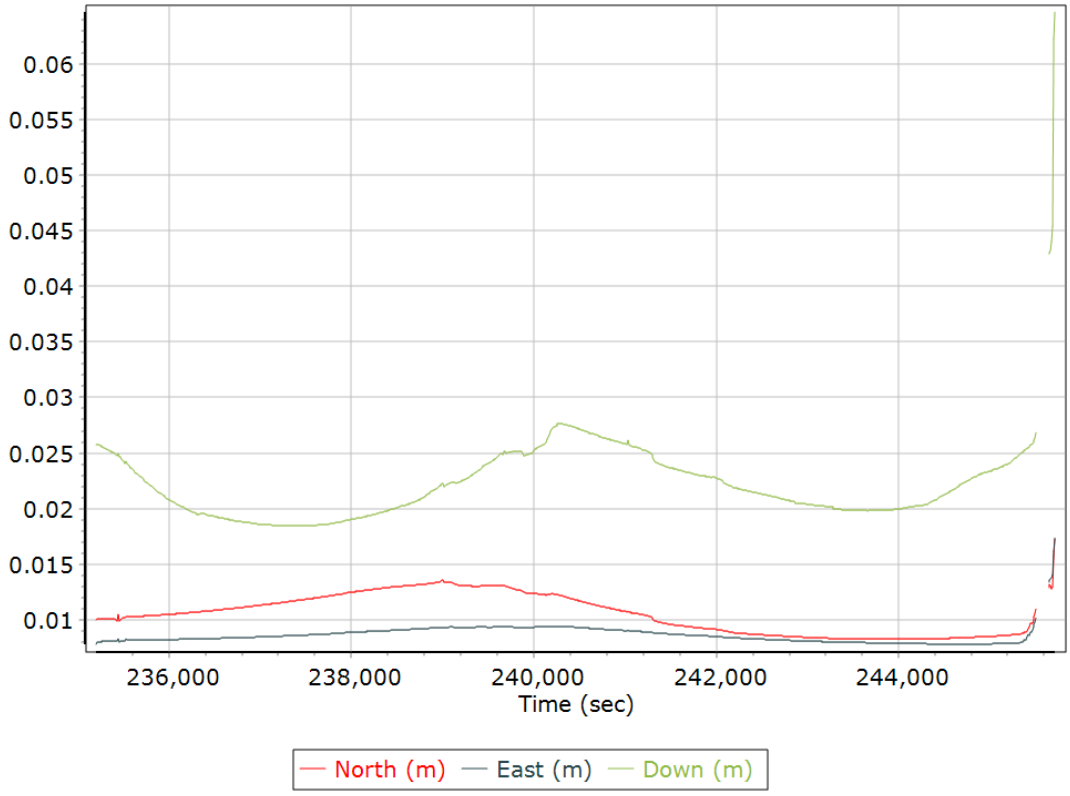
Forward/Reverse Separation



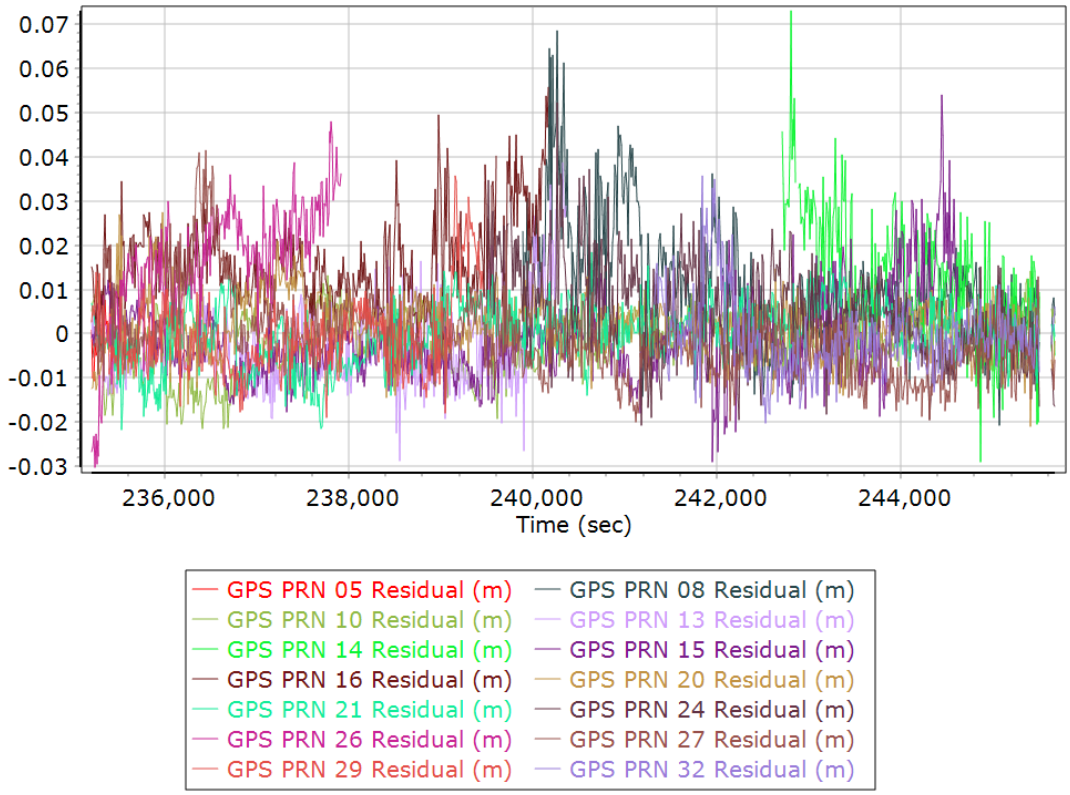
PDOP



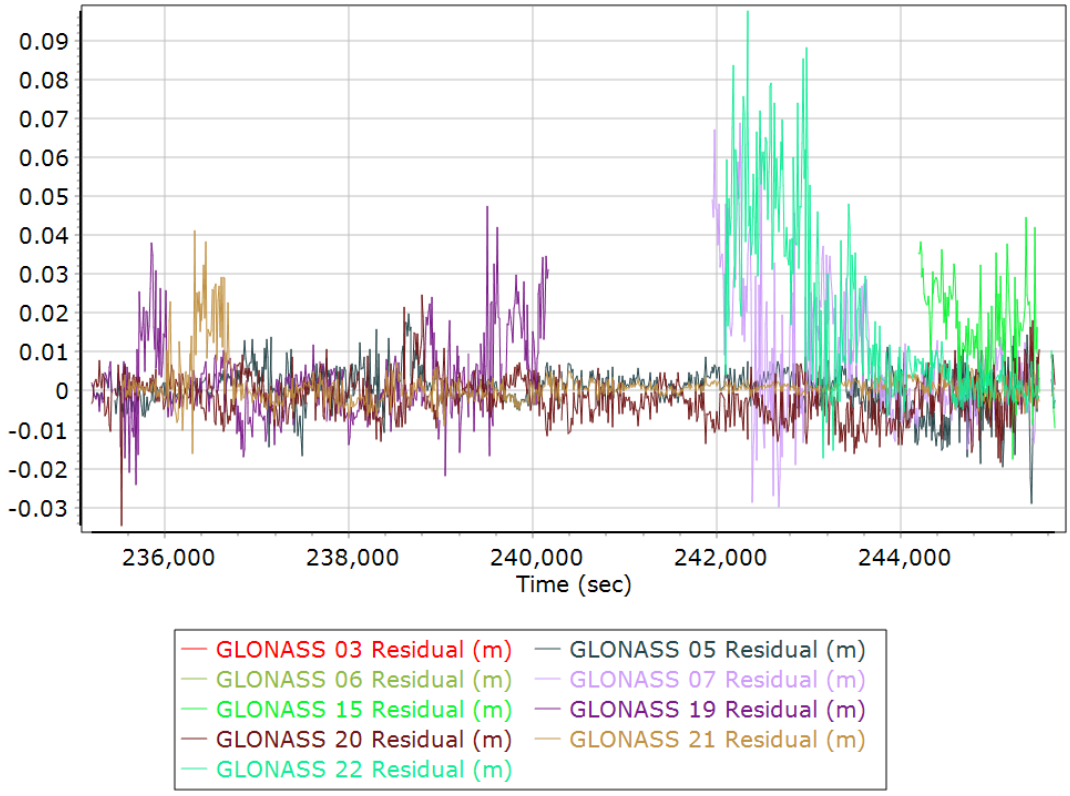
Estimated Position Accuracy



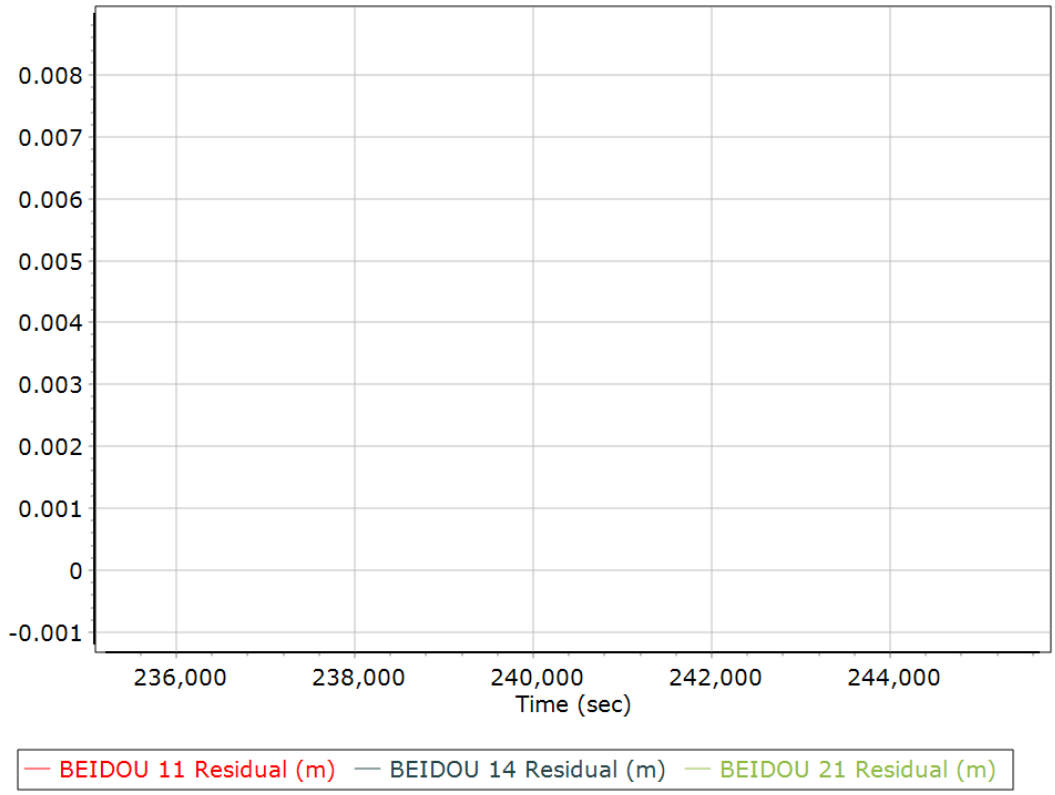
GPS Residuals



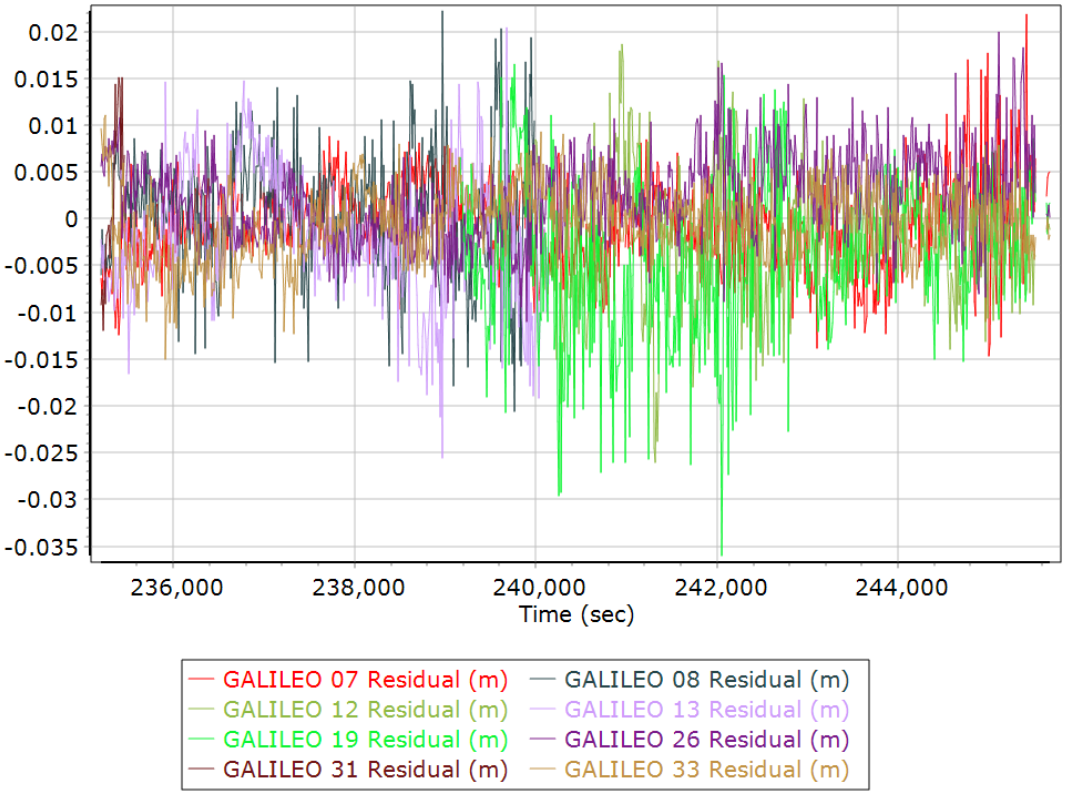
GLONASS Residuals



BEIDOU Residuals



GALILEO Residuals



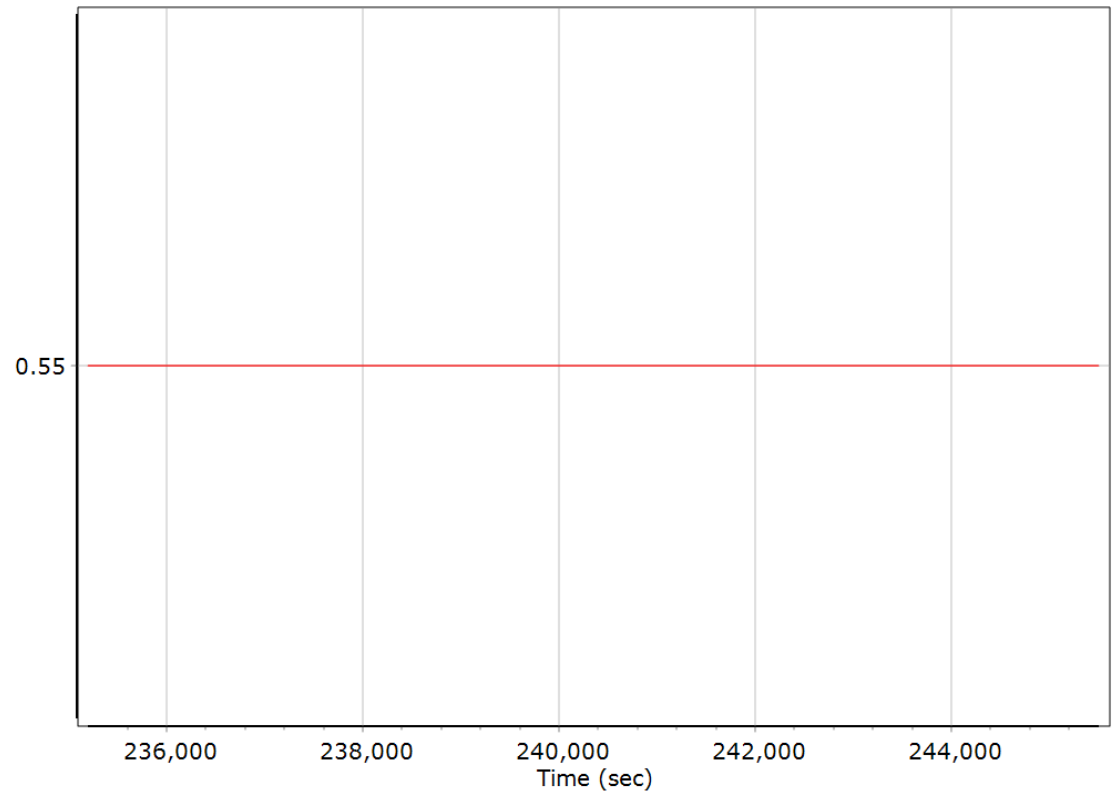
GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion PP-RTX		
Stabilized mount	False		
Processing start time	235135.078 (10/15/2019 17:18:55)		
Processing end time	245498.997 (10/15/2019 20:11:38)		
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)	0.550	-0.430	-0.963
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

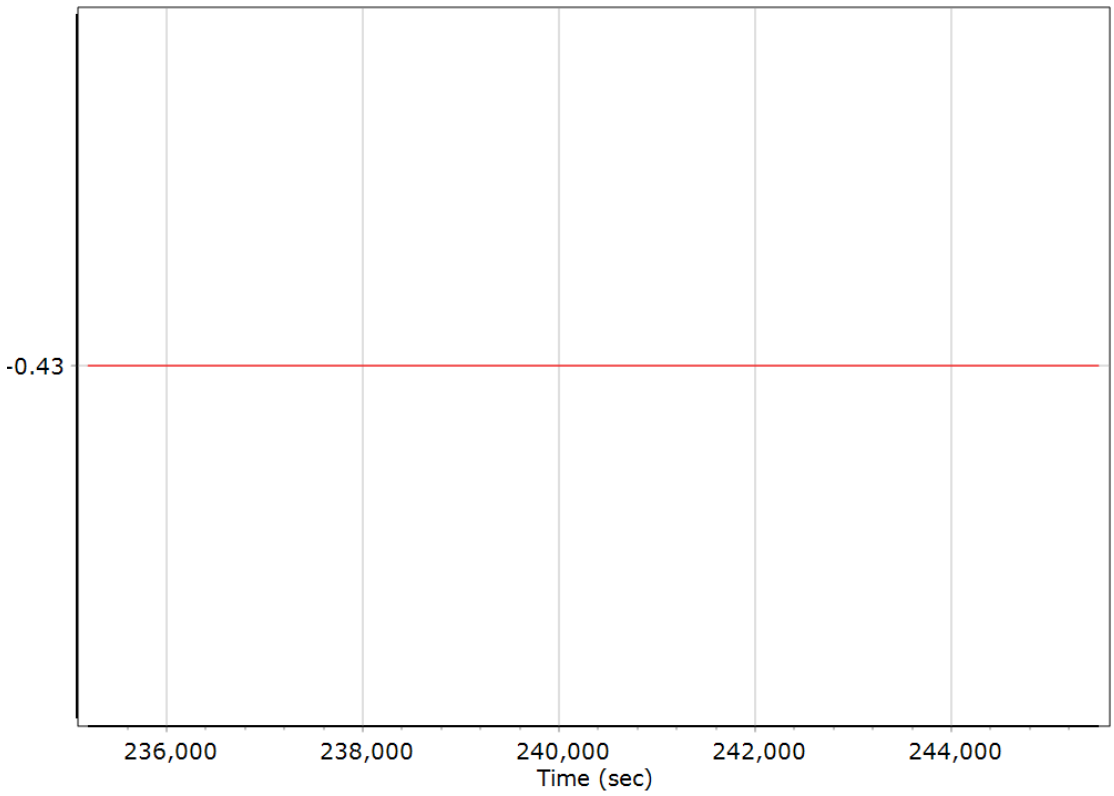
Calibrated Installation Parameters

Reference-Primary GNSS Lever Arm (m)

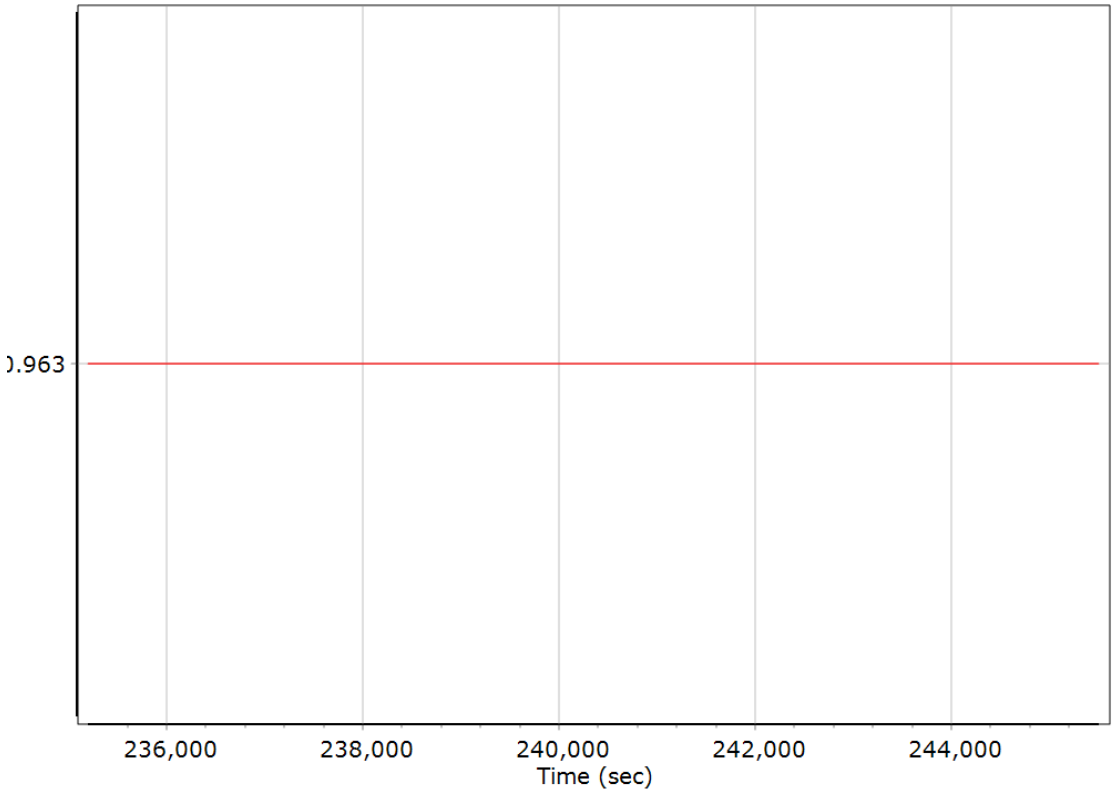
X Reference-Primary GNSS Lever Arm (m)



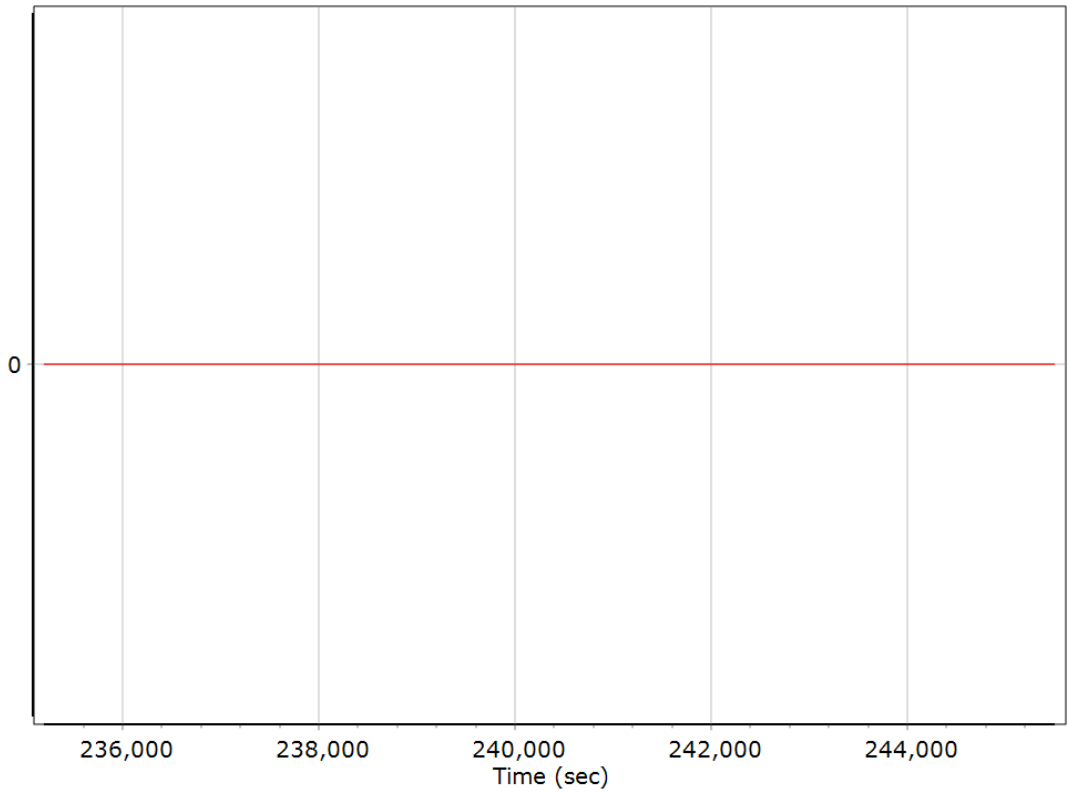
Y Reference-Primary GNSS Lever Arm (m)



Z Reference-Primary GNSS Lever Arm (m)



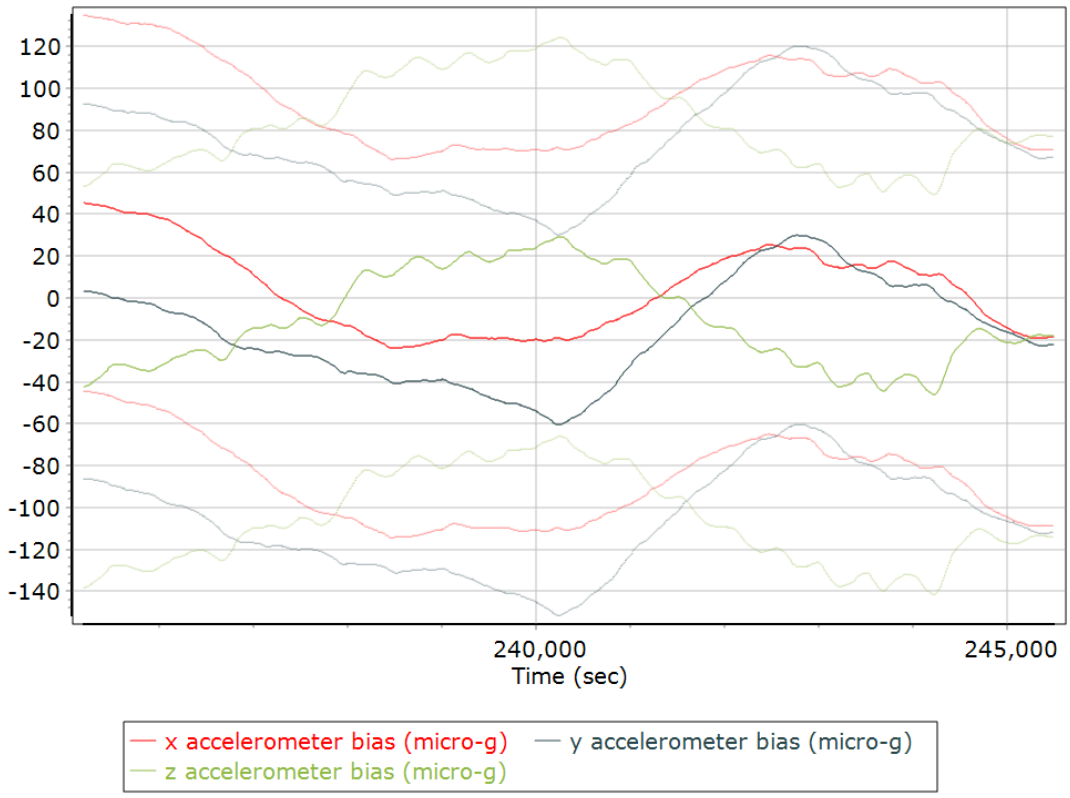
Reference-Primary GNSS Lever Arm Figure of Merit



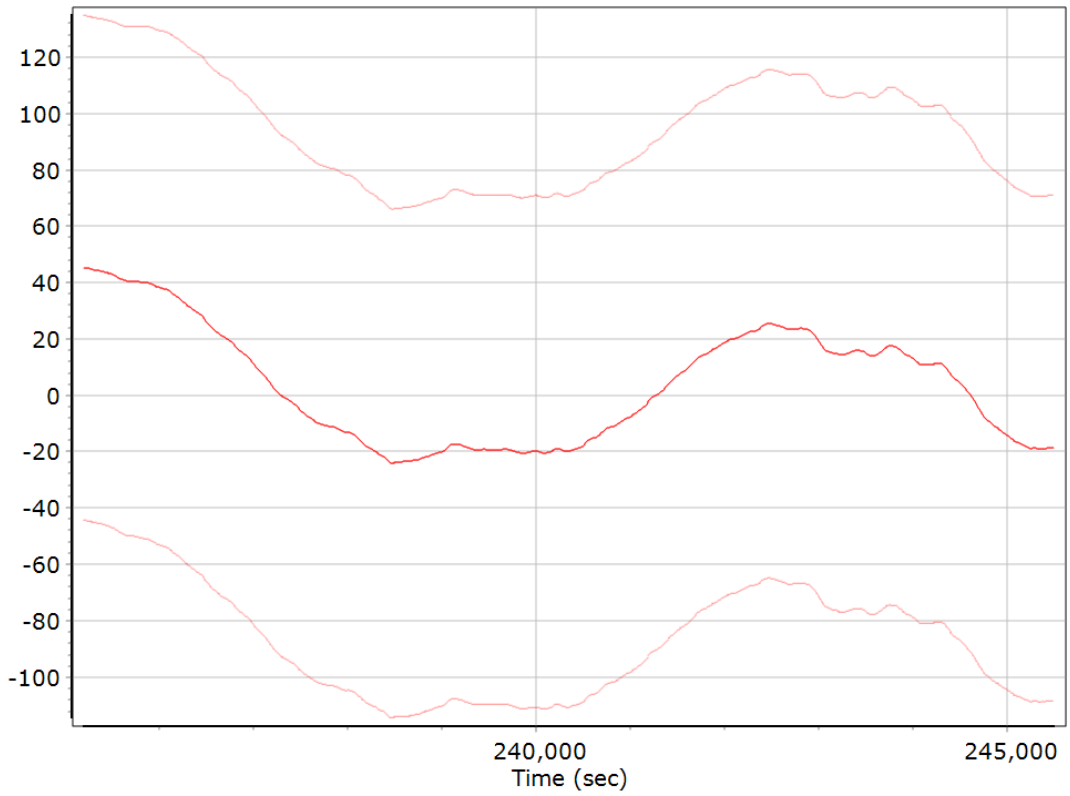
Smoothed IN-Fusion QC

Smoothed Estimated Errors, Reference Frame

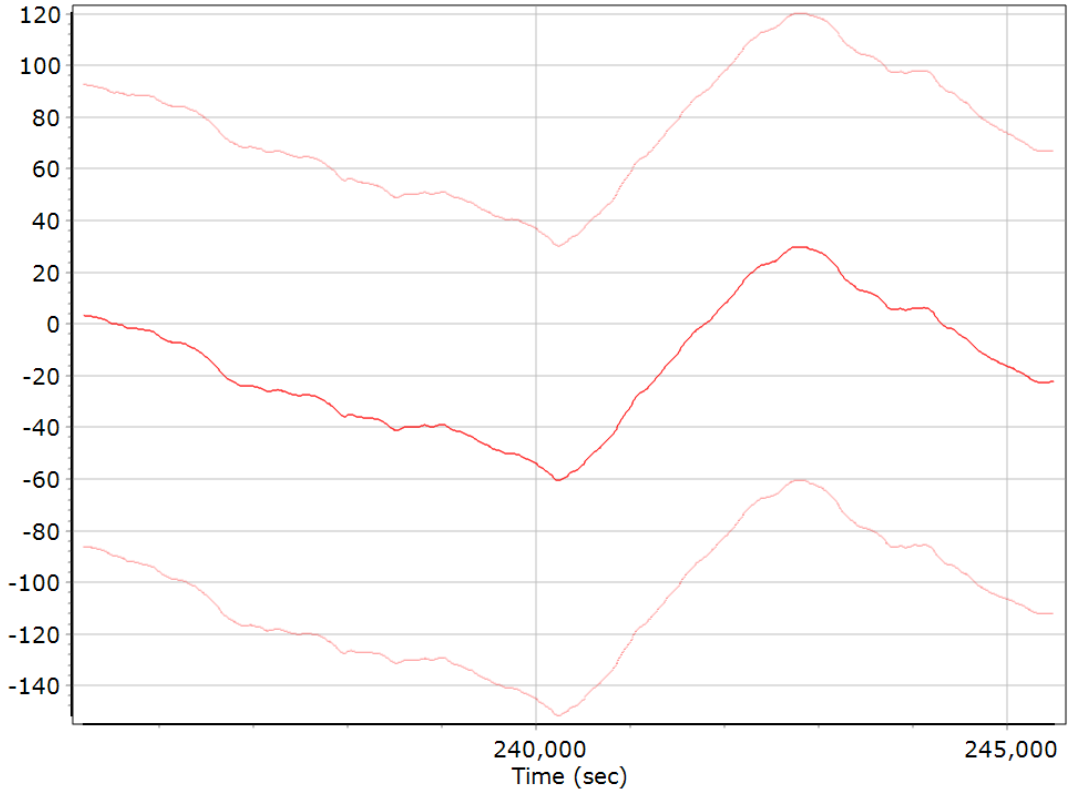
Accelerometer Bias (micro-g)



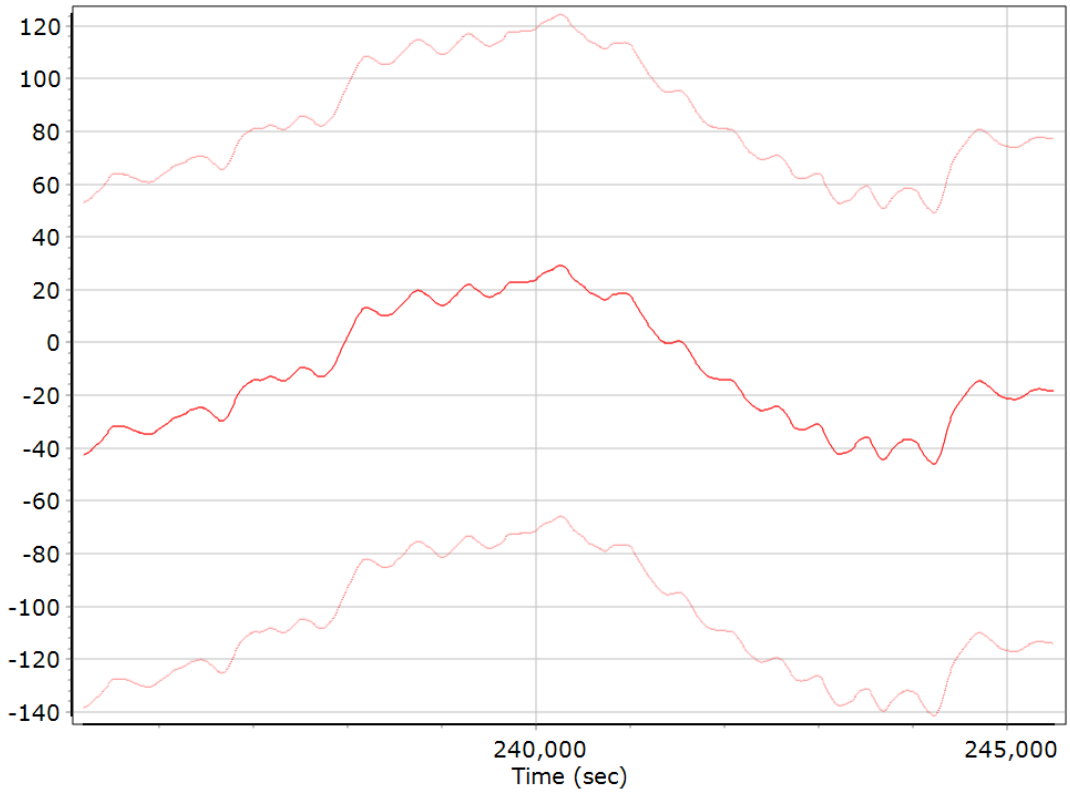
X Accelerometer Bias (micro-g)



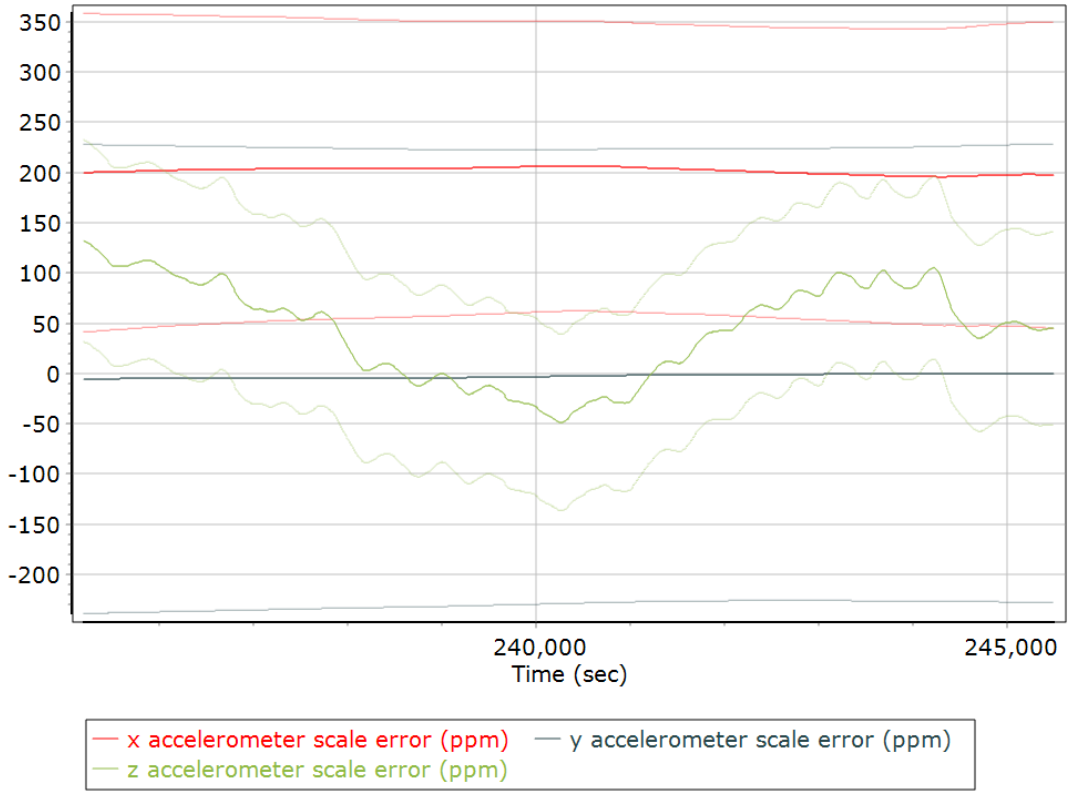
Y Accelerometer Bias (micro-g)



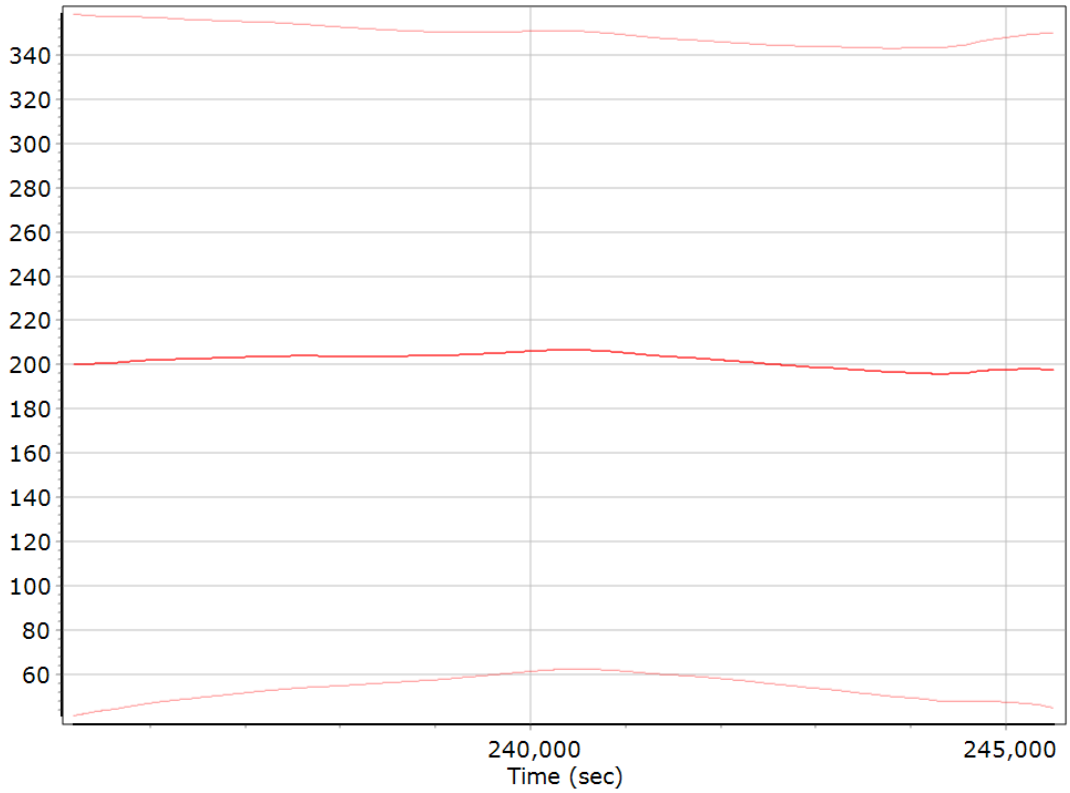
Z Accelerometer Bias (micro-g)



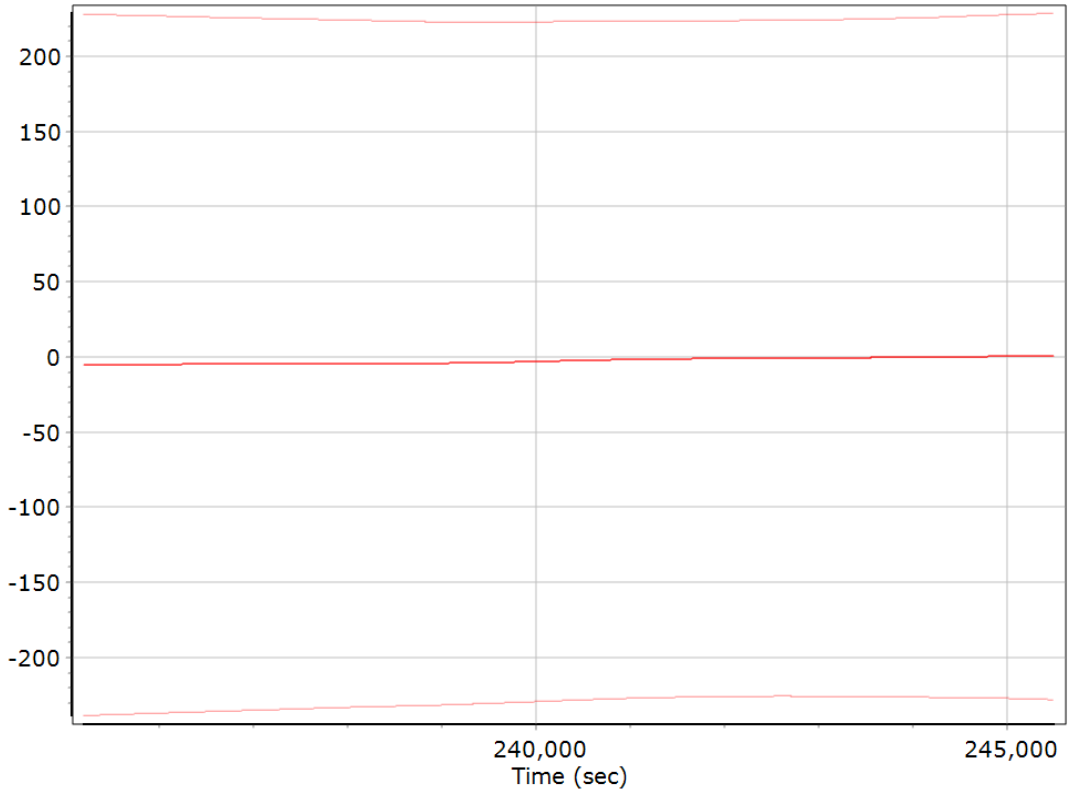
Accelerometer Scale Error (ppm)



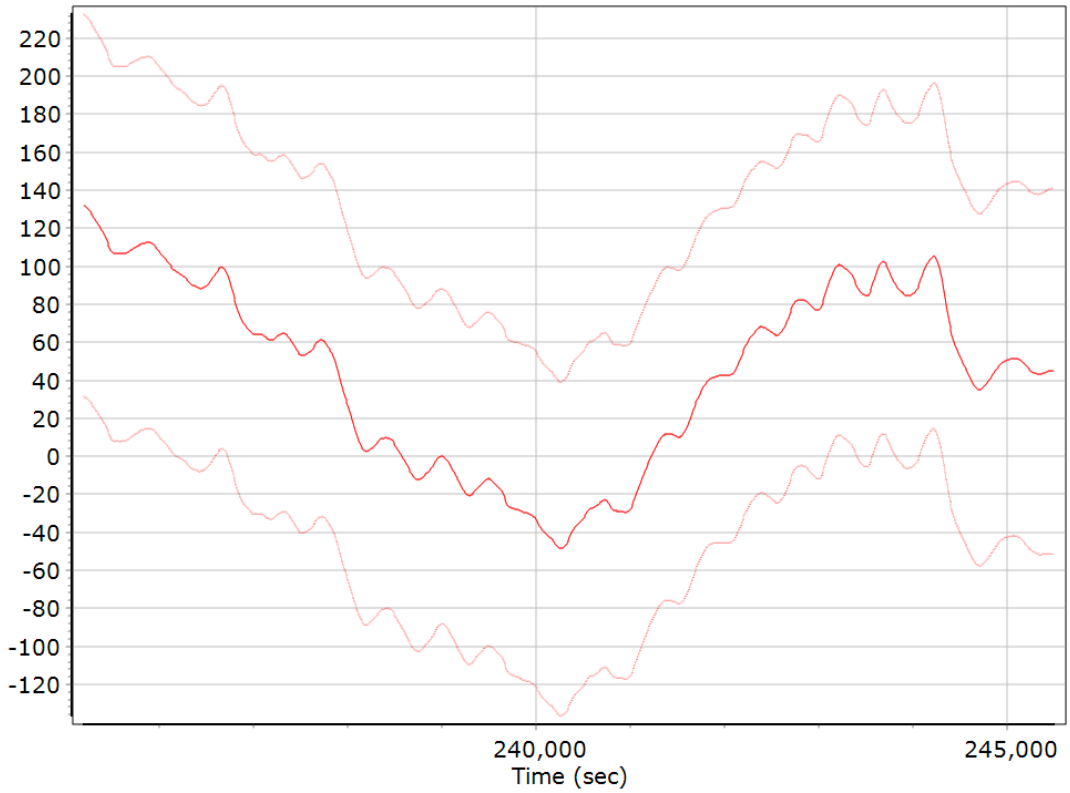
X Accelerometer Scale Error (ppm)



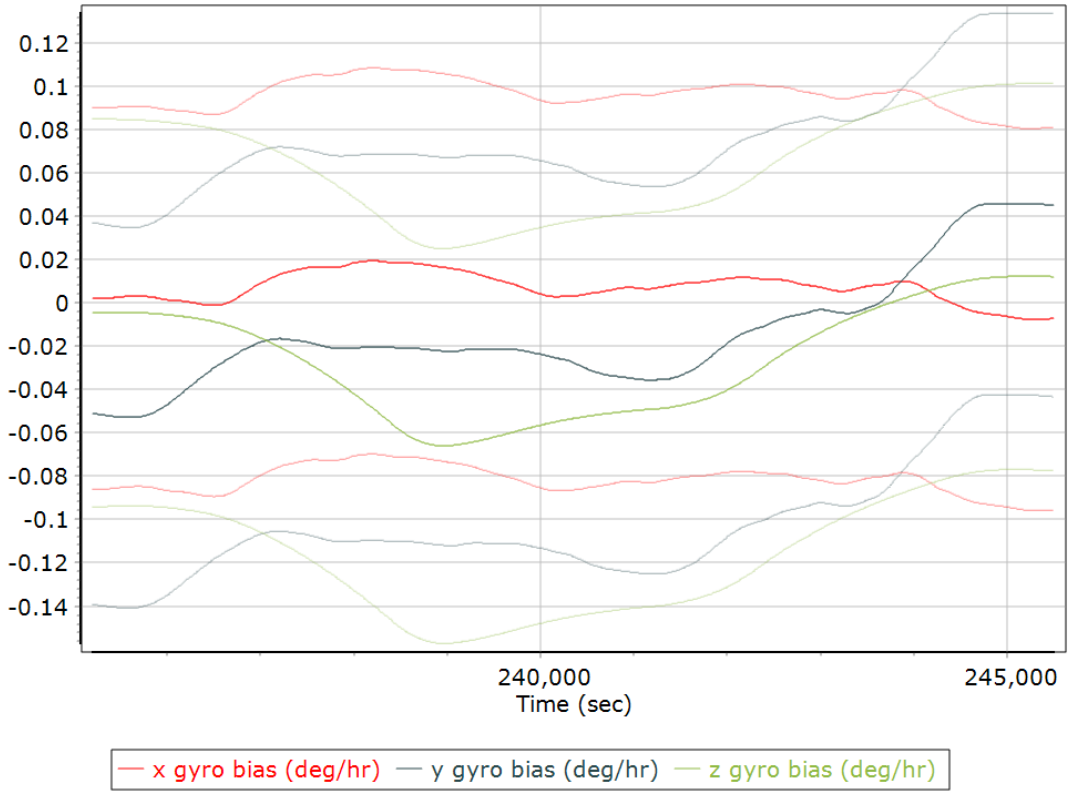
Y Accelerometer Scale Error (ppm)



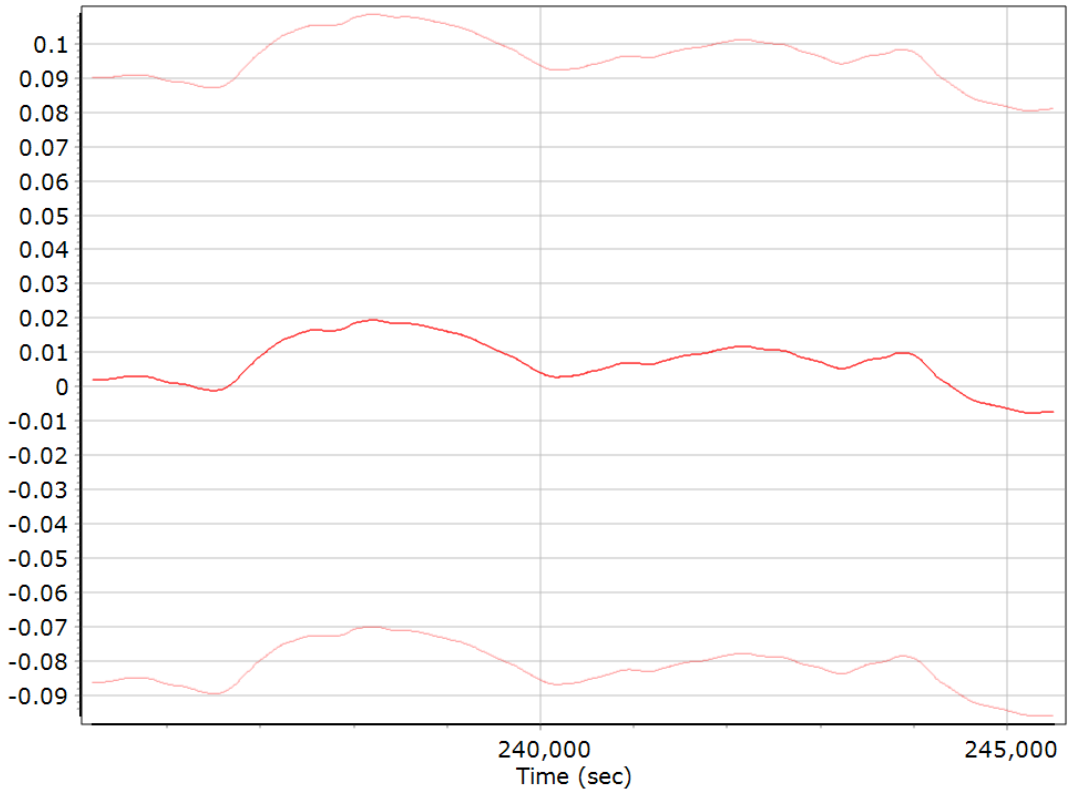
Z Accelerometer Scale Error (ppm)



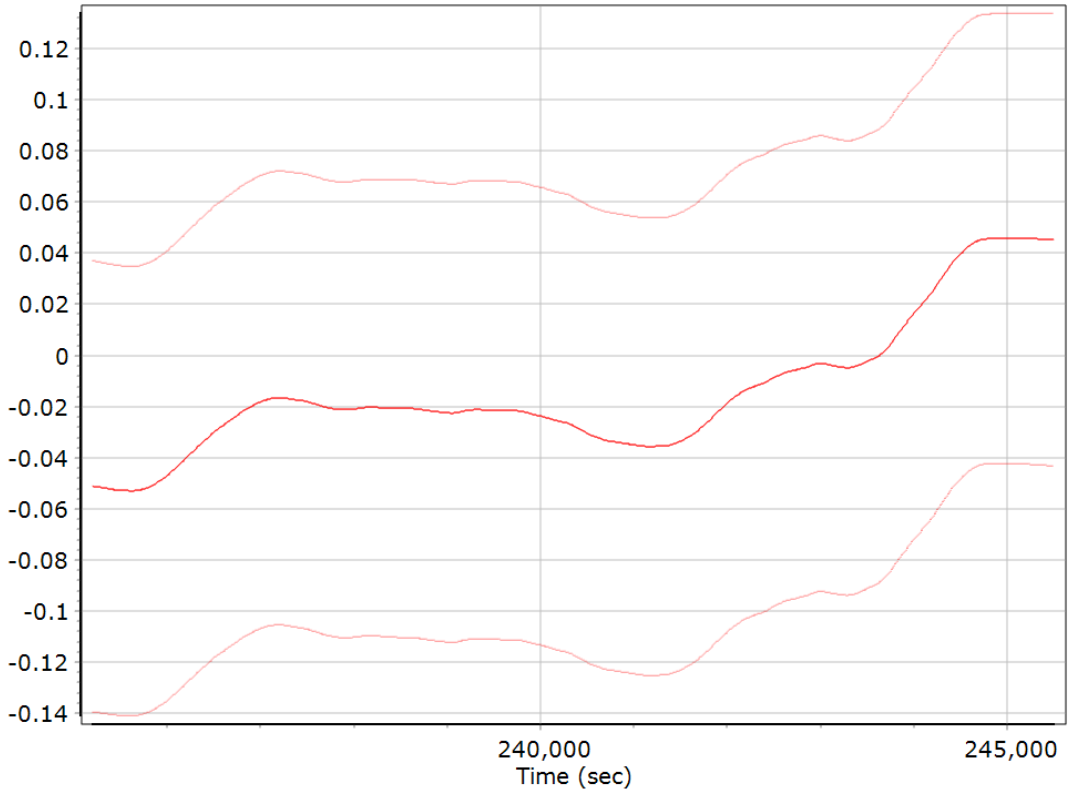
Gyro Bias (deg/h)



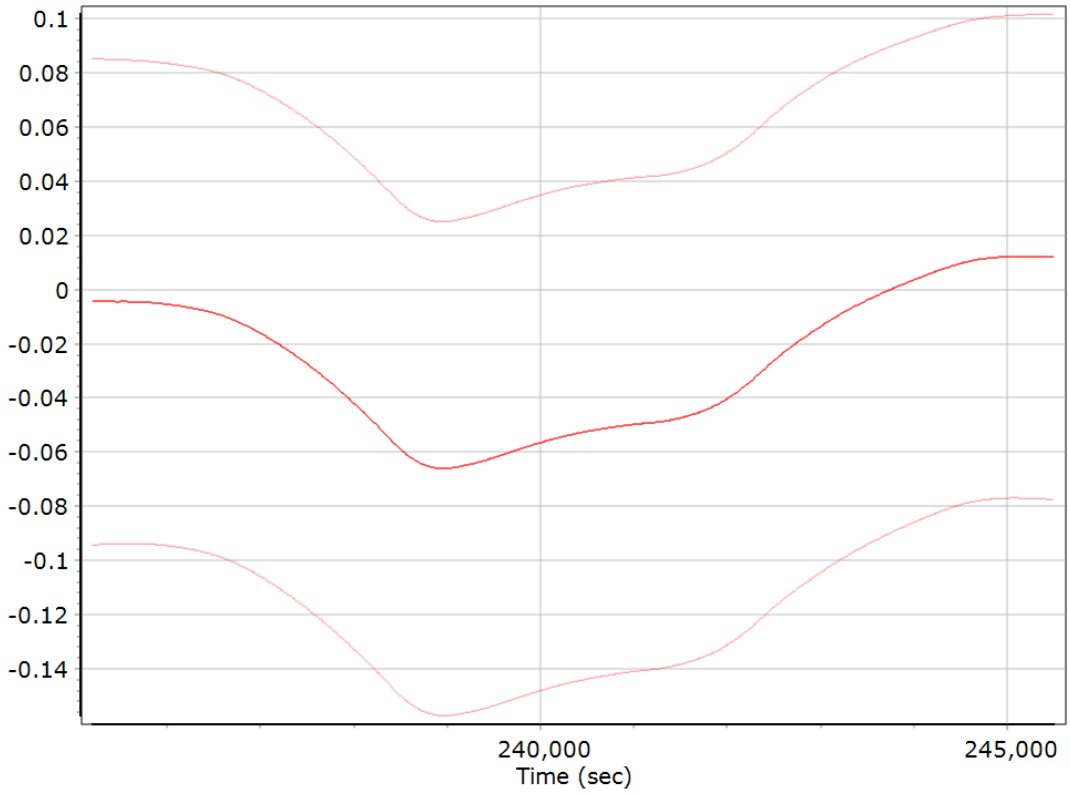
X Gyro Bias (deg/h)



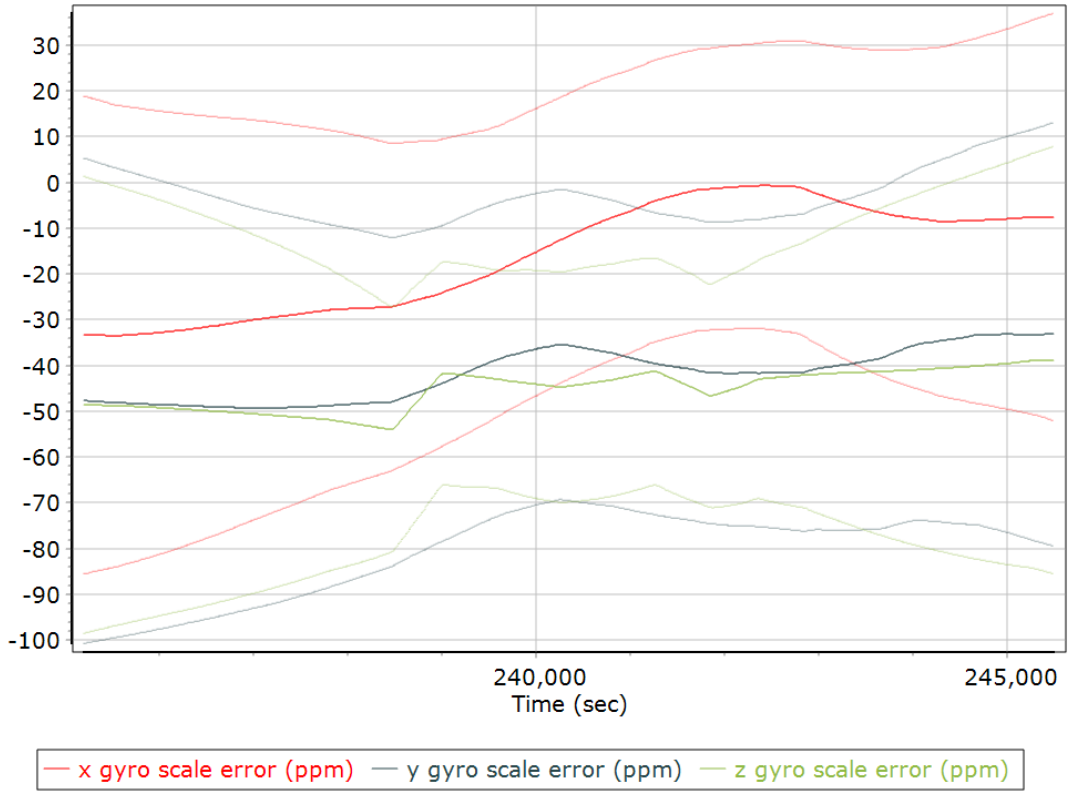
Y Gyro Bias (deg/h)



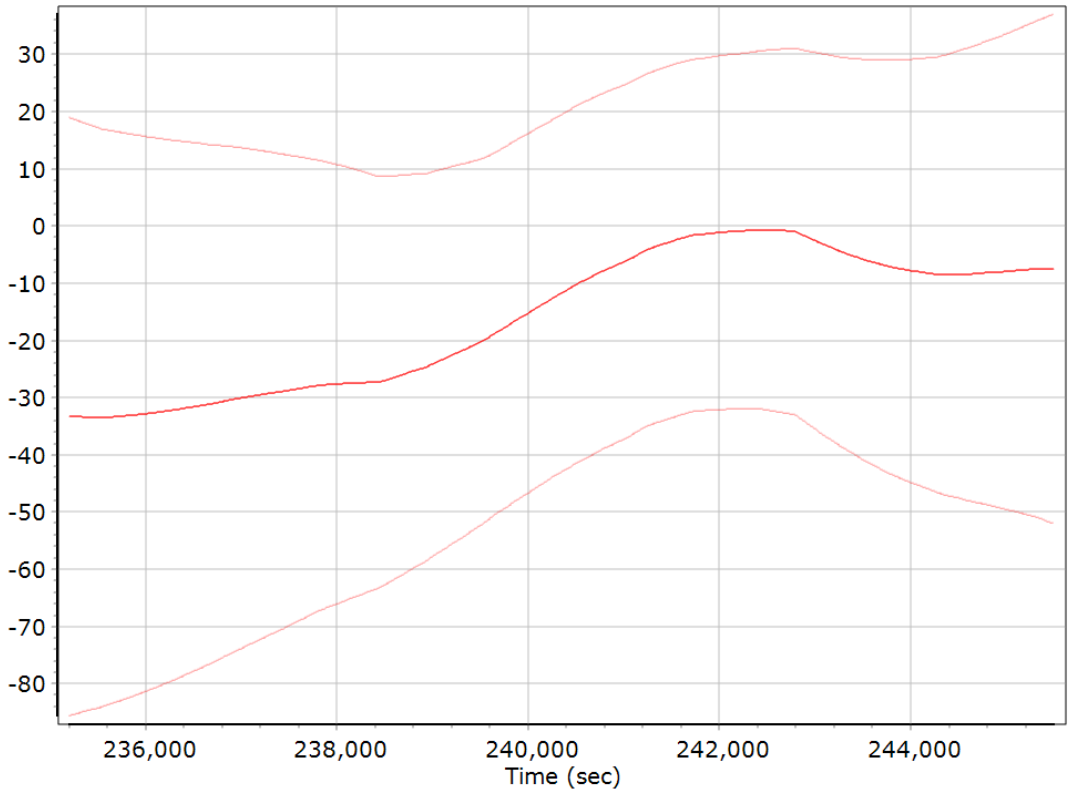
Z Gyro Bias (deg/h)



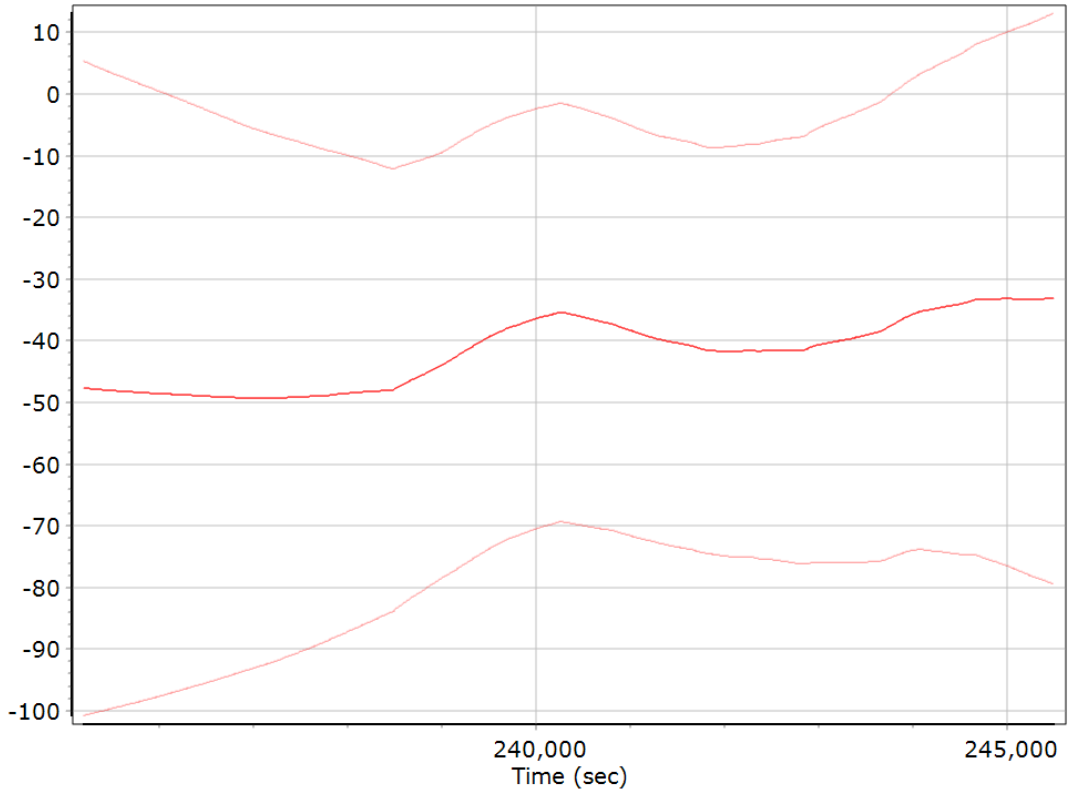
Gyro Scale Error (ppm)



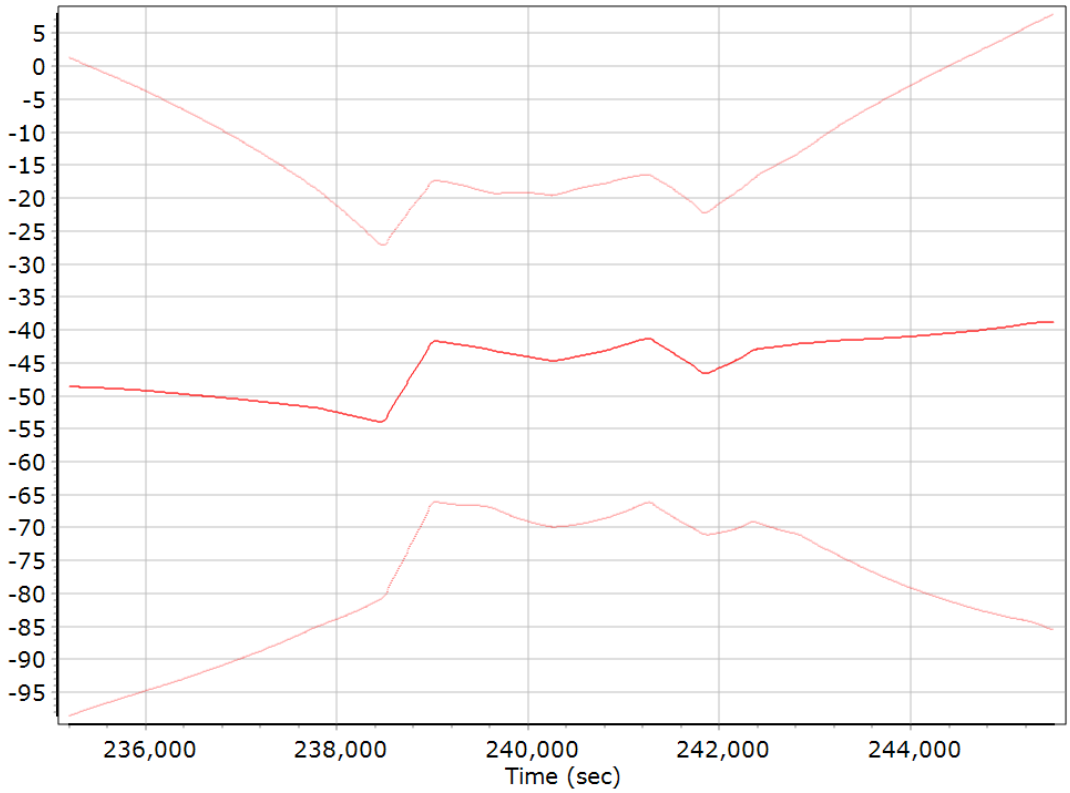
X Gyro Scale Error (ppm)



Y Gyro Scale Error (ppm)

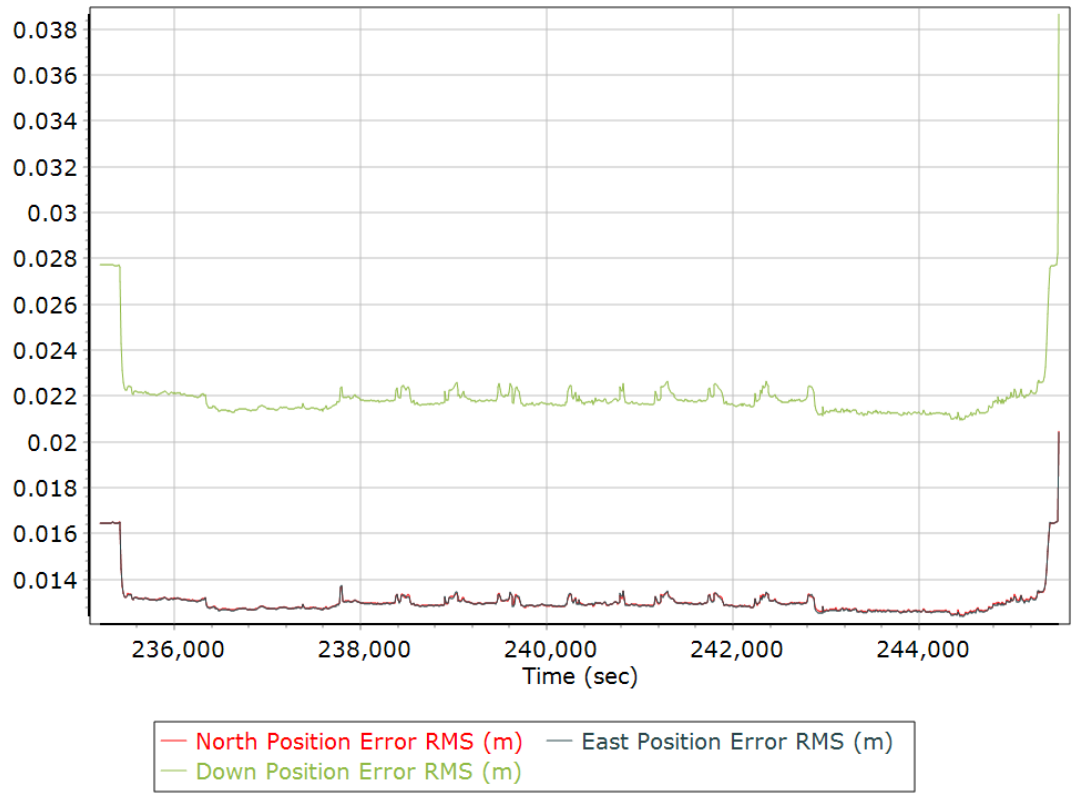


Z Gyro Scale Error (ppm)

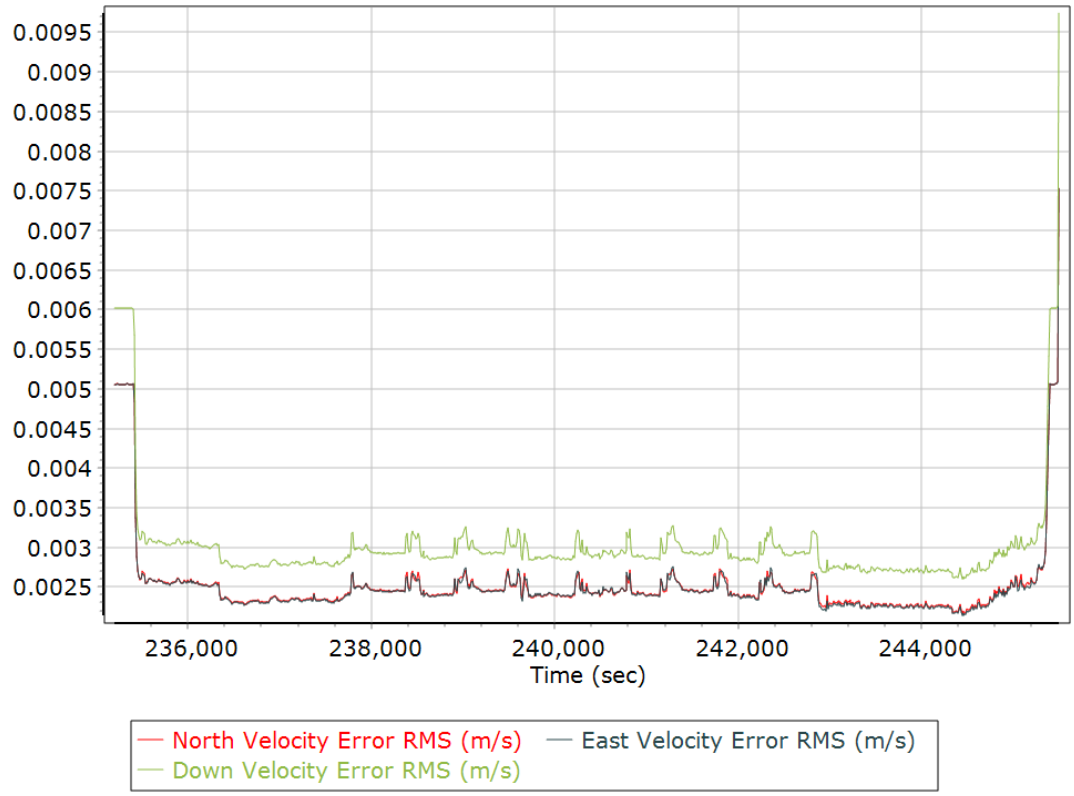


Smoothed Performance Metrics

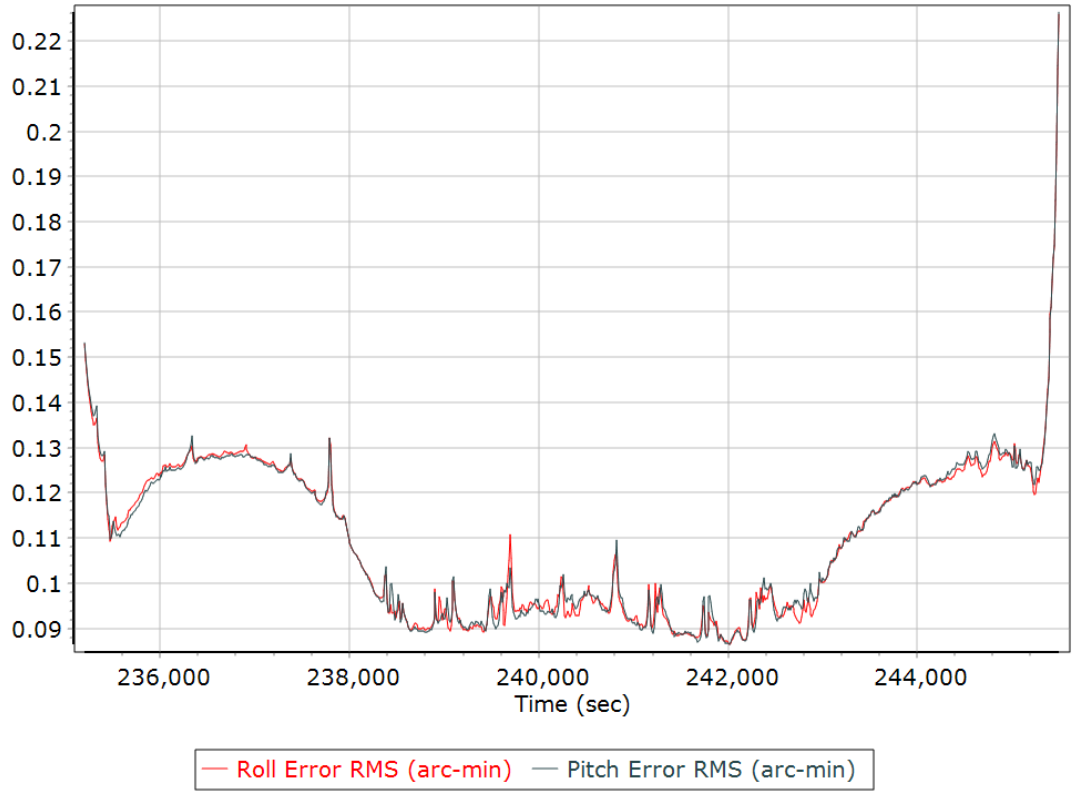
Position Error RMS (m)



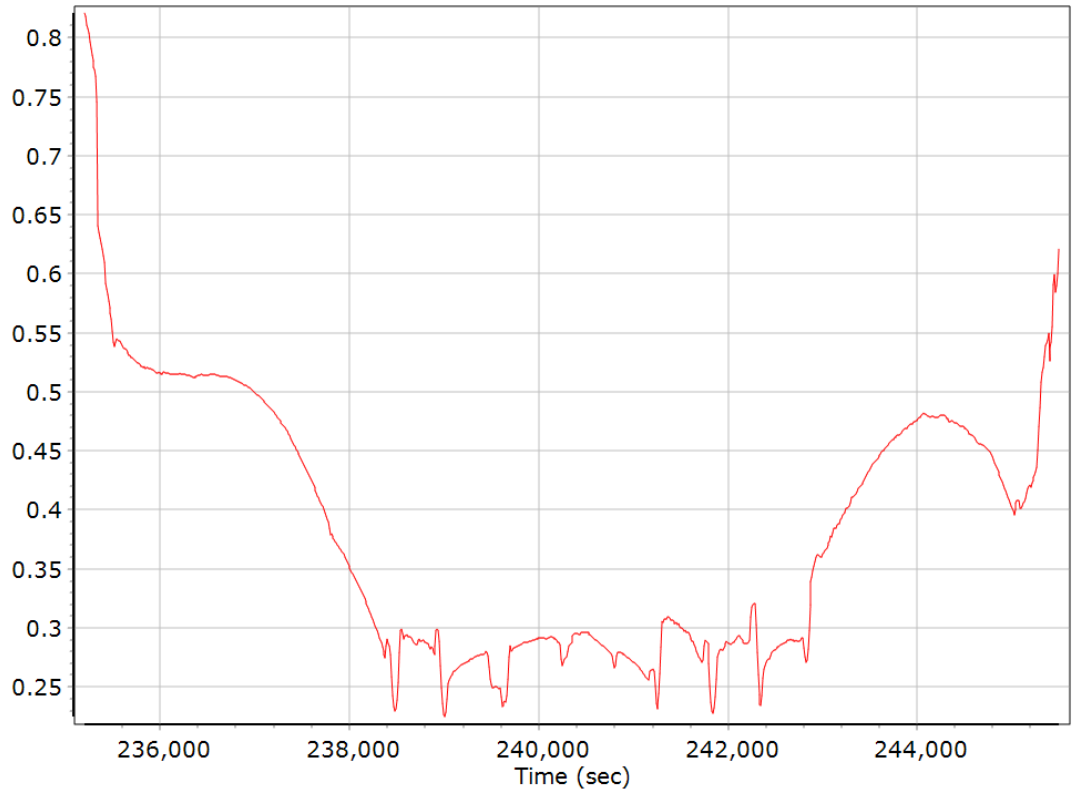
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)



Heading Error RMS (arc-min)



Export Summary

Export file	sbet_191015_A_5060380_nad2011_FINAL.shp		
Export format	Shapefile		
Solution in use	Post-processed		
Output rate	Specified Distance Interval		
Distance Interval (m)	10.000		
Reference to Output lever arm (m)	0.000	0.000	0.000
Reference mounting angles (deg)	0.000	0.000	0.000
Output units (Coordinate / Lat & Lon)	Meter	Deg Decimal	
Export start time	235140.004 (10/15/2019 17:19:00)		
Export end time	245498.997 (10/15/2019 20:11:38)		
Height option	Ellipsoid Height		
WGS84 height flag	False		
Grid	Universal Transverse Mercator		
Zone	UTM North 12 (114W to 108W)		
Datum	NAD83 (2011)		
Ellipsoid	GRS 1980		
Local Transformation	NONE		
Target Epoch	2010		