General Information

Mission Information

Project name	19-058_110819
Processing date	2019-11-13 22:17:00
Mission date	2019-11-08 16:04:22
Mission duration	08:13:29.000
Processing mode	IN-Fusion Trimble RTX Nav

Rover Hardware Information

Product	POS AV 510 VER6 HW2.4-11
Serial number	S/N6310
IMU type	46
Receiver type	BD982
Antenna type	AV39

Project File List

Rover Data Files

File name	File type
191108_160403_AV510_5361.raw	POS Data

Input Files

File Name	File type
Ephm3120.19g	GLONASS Broadcast Ephemeris
Ephm3120.19n	GPS Broadcast Ephemeris
Ephm3130.19g	GLONASS Broadcast Ephemeris
Ephm3130.19n	GPS Broadcast Ephemeris

Output Files

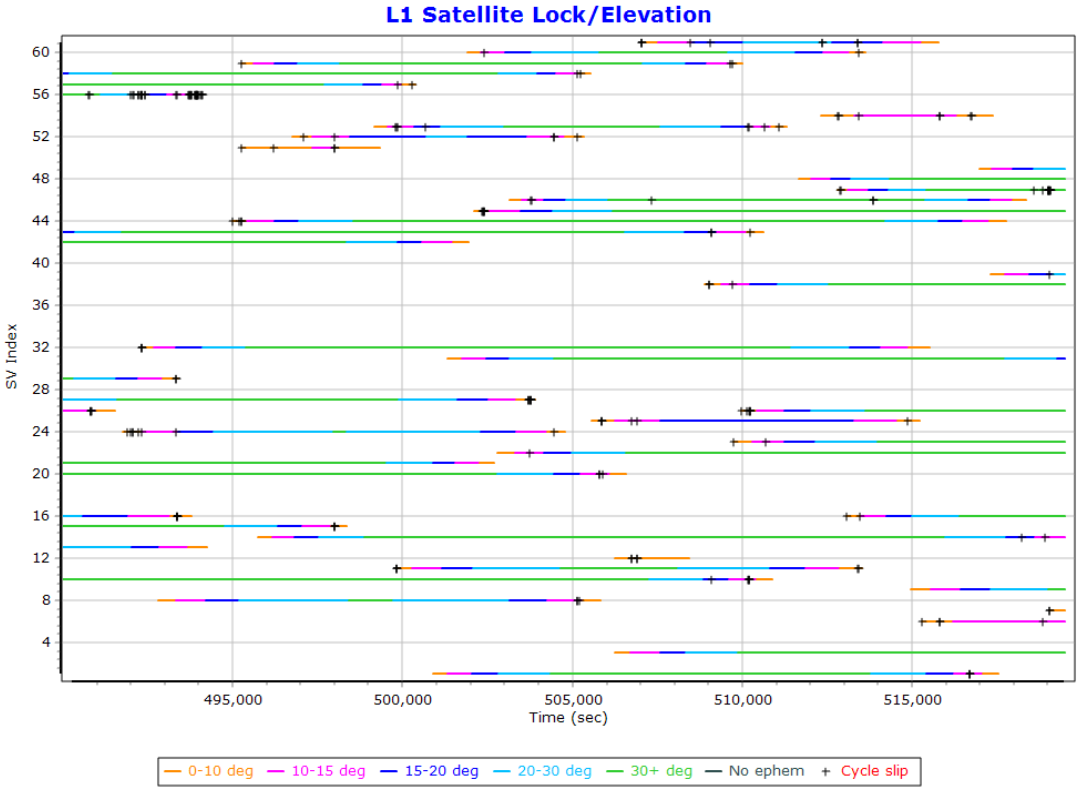
Filename	File type
sbet_19-058_110819.out	SBET Trajectory File

Rover Data Summary

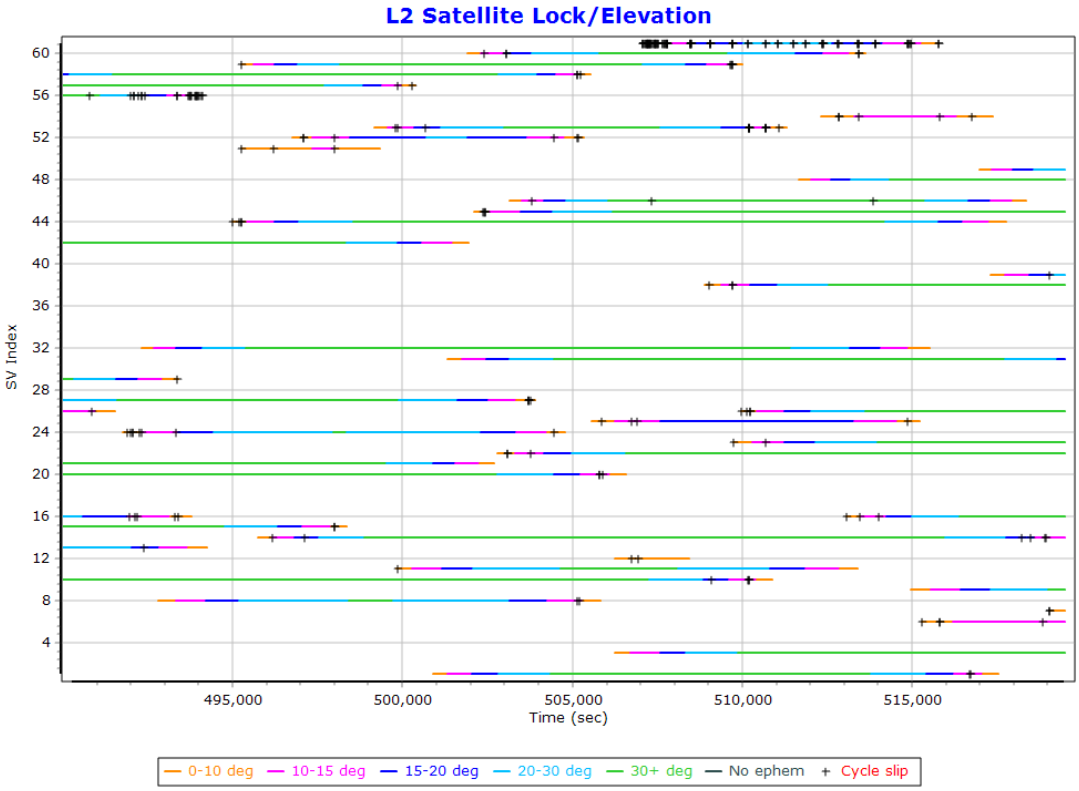
First raw data file	191108_160403_AV510_5361.raw		
Last raw data file	191108_160403_AV510_5361.raw		
Start GPS week	2078		
Start time	489843.644 (11/08/2019 16:04:03)		
End time	519449.667 (11/09/2019 00:17:29)		
Start of fine alignment	490229.297 (11/08/2019 16:10:29)		
Available subsystems	Primary GNSS, IMU		
POS Event Input	None		
Correction data	Trimble RTX		
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	0.000
Reference to Primary GNSS lever arm [m]	-0.011	0.039	-1.017
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

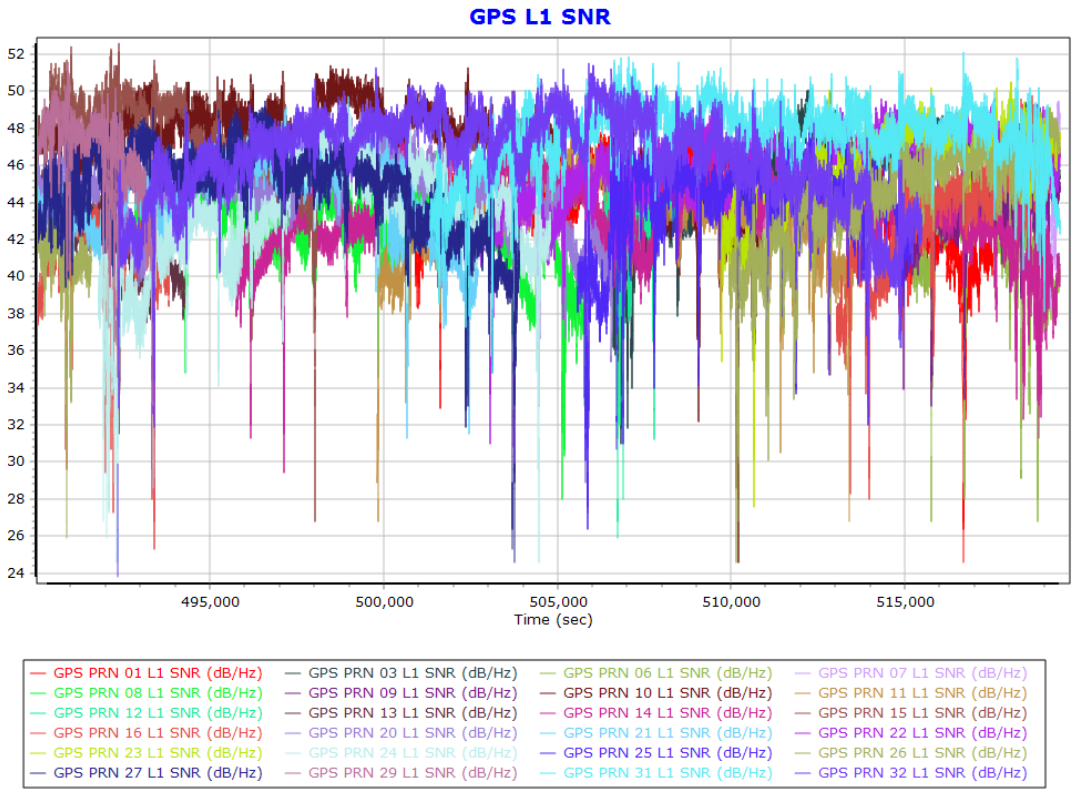
L1 Satellite Lock/Elevation



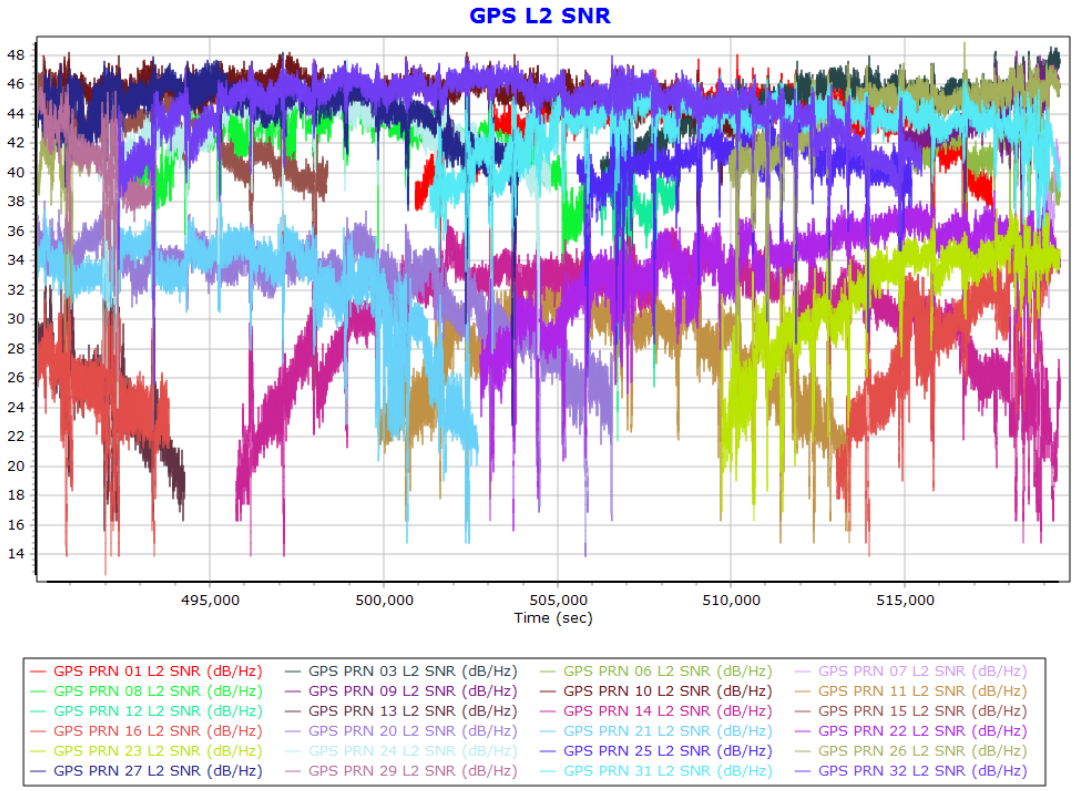
L2 Satellite Lock/Elevation



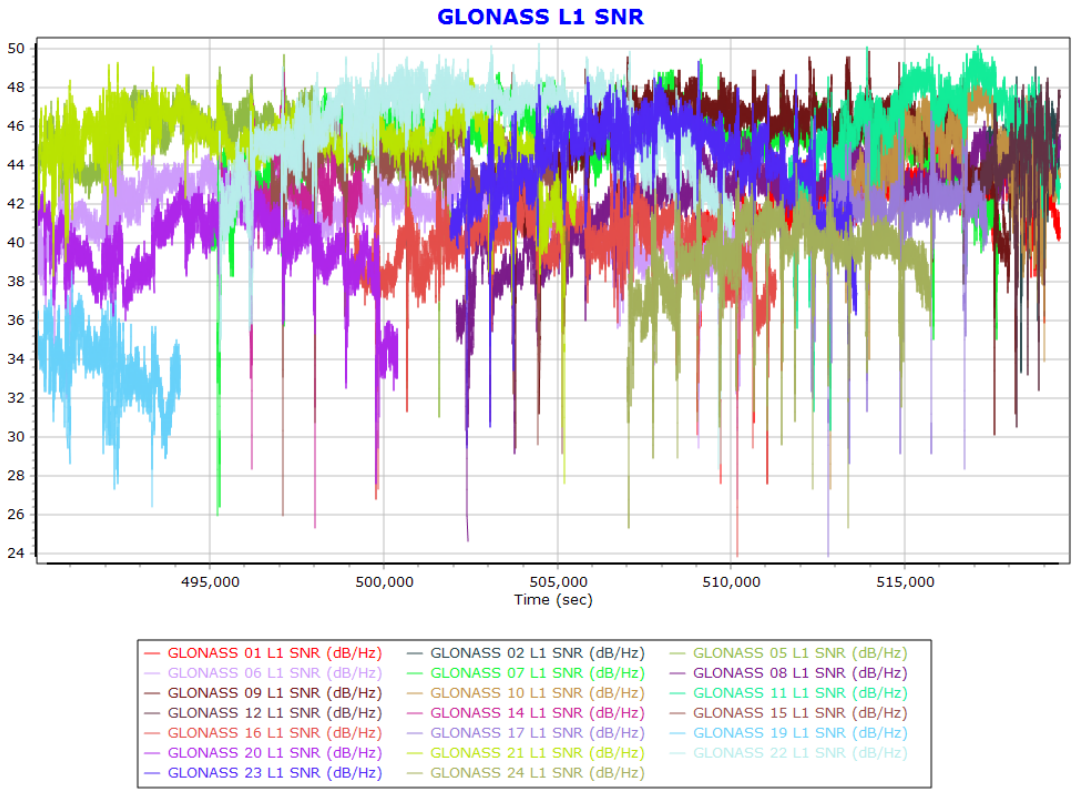
GPS L1 SNR



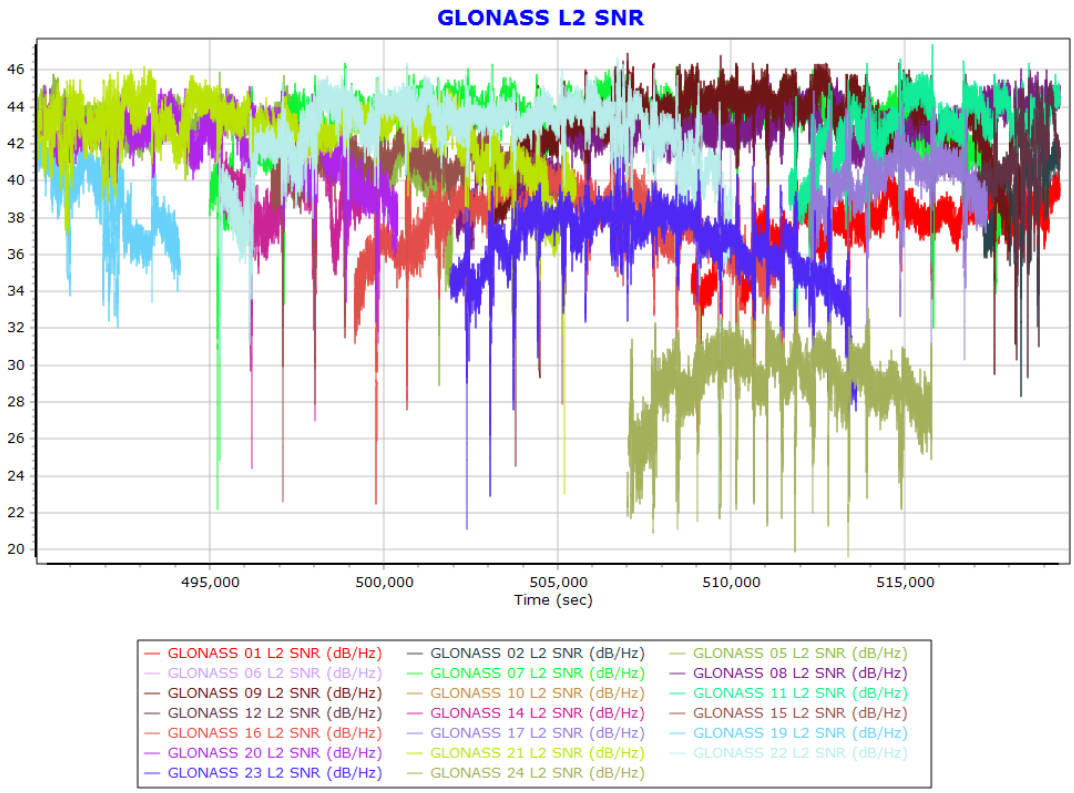
GPS L2 SNR



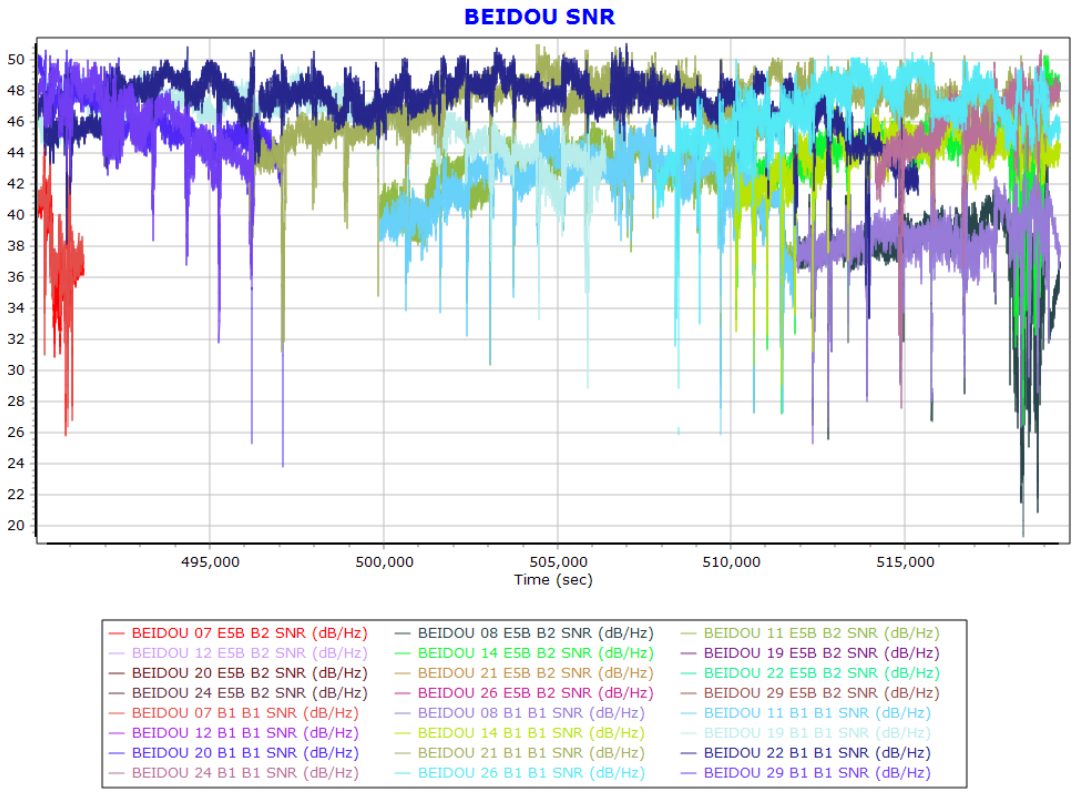
GLONASS L1 SNR



GLONASS L2 SNR

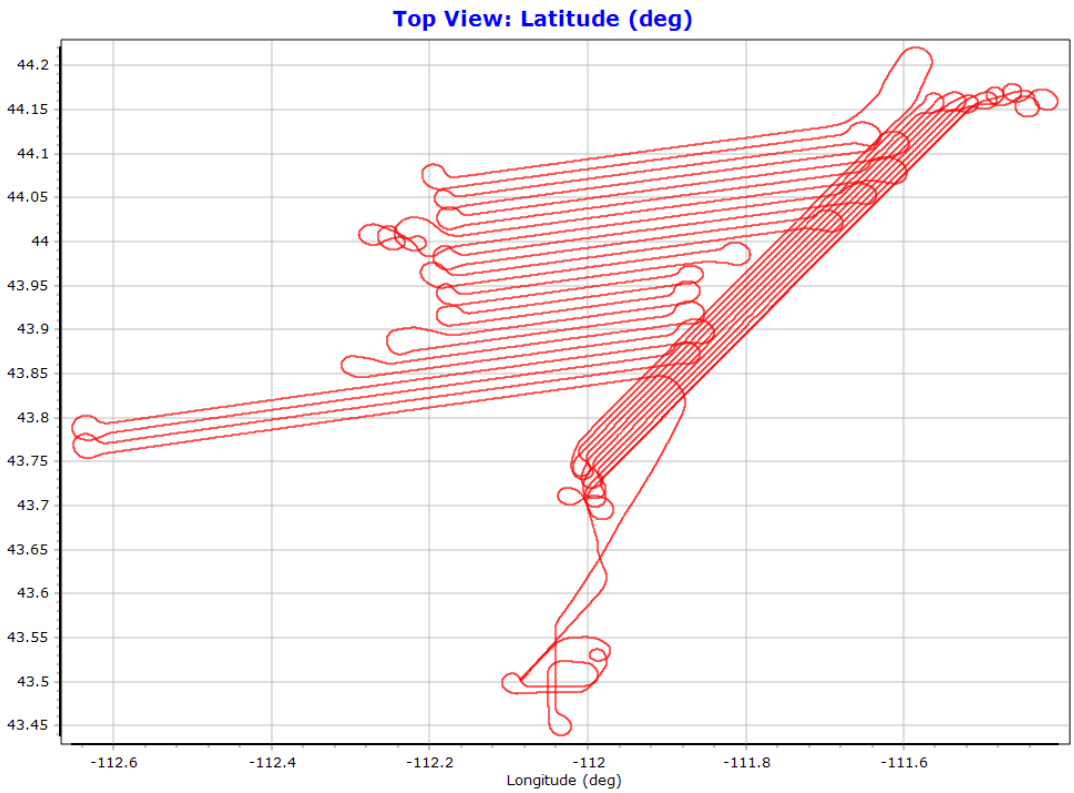


BEIDOU SNR

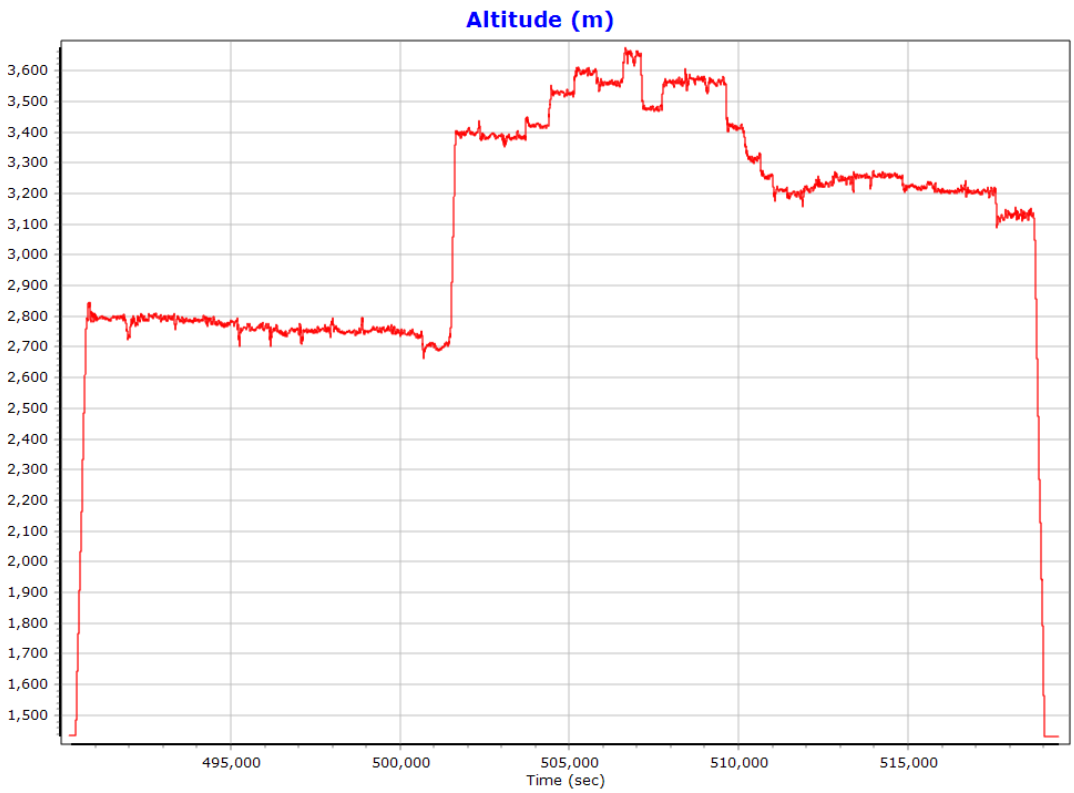

BEIDOU SNR
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
20
495,000
500,000
505,000
510,000
515,000
Time (sec)
BEIDOU 07 E5B B2 SNR (dB/Hz)
BEIDOU 08 E5B B2 SNR (dB/Hz)
BEIDOU 11 E5B B2 SNR (dB/Hz)
BEIDOU 12 E5B B2 SNR (dB/Hz)
BEIDOU 14 E5B B2 SNR (dB/Hz)
BEIDOU 19 E5B B2 SNR (dB/Hz)
BEIDOU 20 E5B B2 SNR (dB/Hz)
BEIDOU 21 E5B B2 SNR (dB/Hz)
BEIDOU 22 E5B B2 SNR (dB/Hz)
BEIDOU 24 E5B B2 SNR (dB/Hz)
BEIDOU 26 E5B B2 SNR (dB/Hz)
BEIDOU 29 E5B B2 SNR (dB/Hz)
BEIDOU 07 B1 B1 SNR (dB/Hz)
BEIDOU 08 B1 B1 SNR (dB/Hz)
BEIDOU 11 B1 B1 SNR (dB/Hz)
BEIDOU 12 B1 B1 SNR (dB/Hz)
BEIDOU 14 B1 B1 SNR (dB/Hz)
BEIDOU 19 B1 B1 SNR (dB/Hz)
BEIDOU 20 B1 B1 SNR (dB/Hz)
BEIDOU 21 B1 B1 SNR (dB/Hz)
BEIDOU 22 B1 B1 SNR (dB/Hz)
BEIDOU 24 B1 B1 SNR (dB/Hz)
BEIDOU 26 B1 B1 SNR (dB/Hz)
BEIDOU 29 B1 B1 SNR (dB/Hz)

Trajectory Information

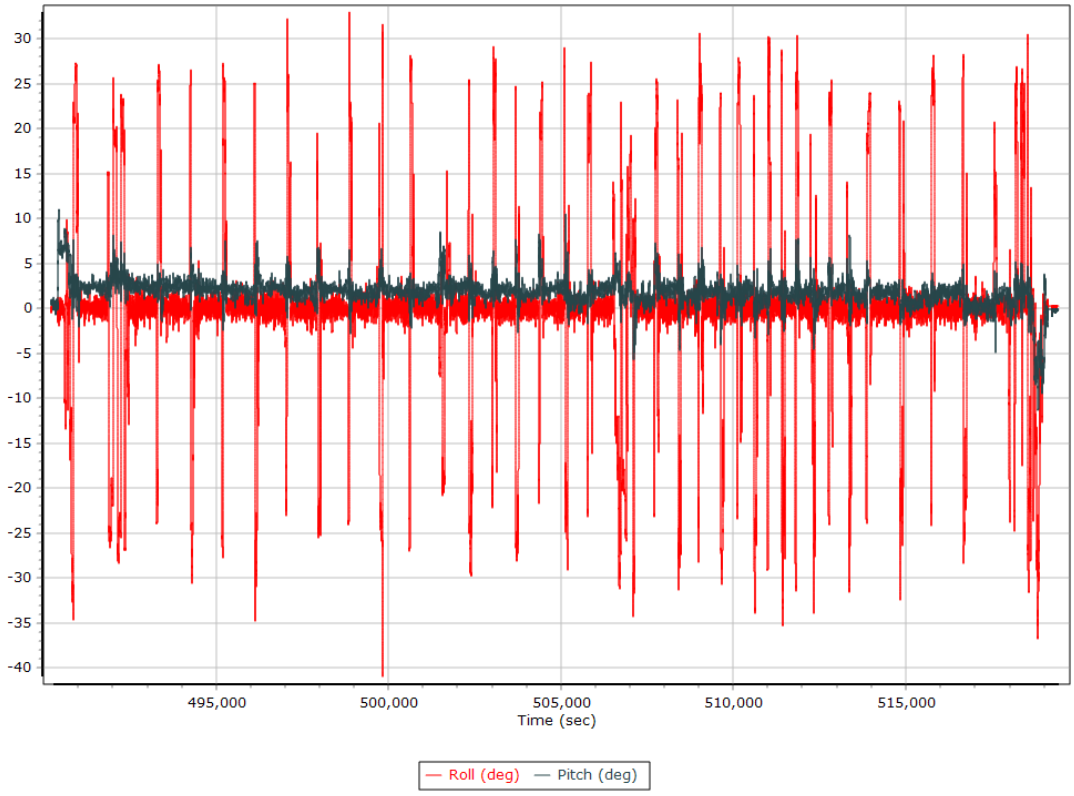
Top View



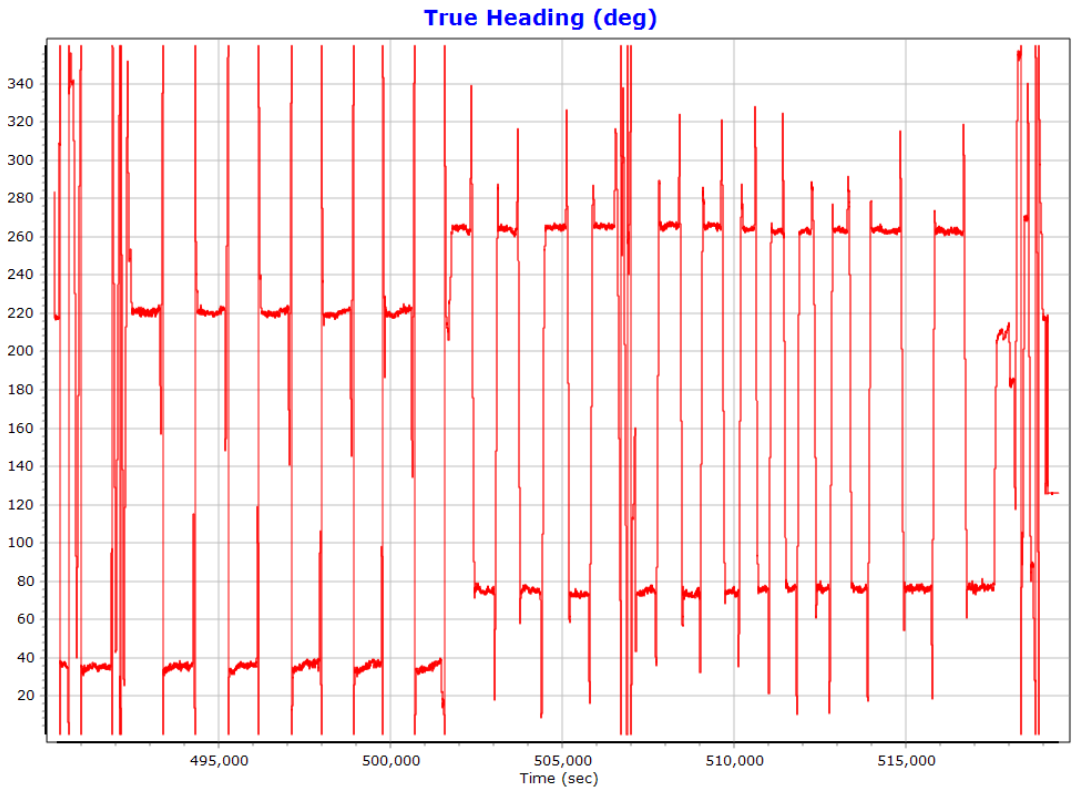
Altitude



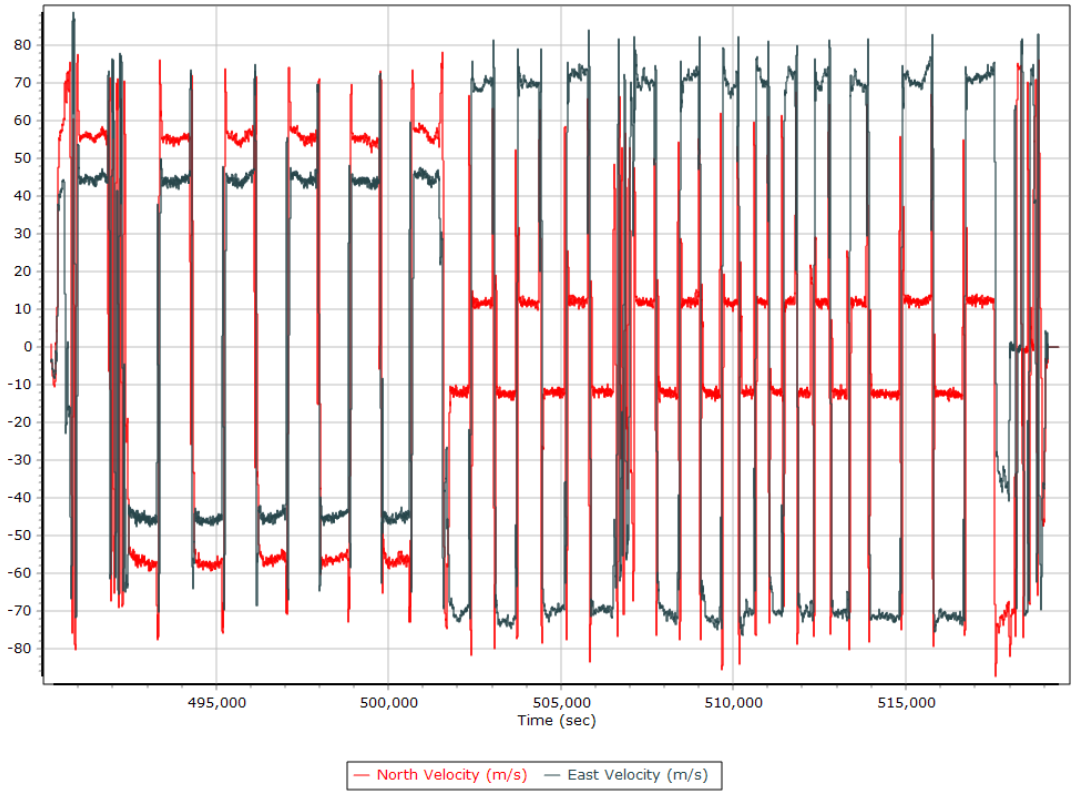
Roll/Pitch



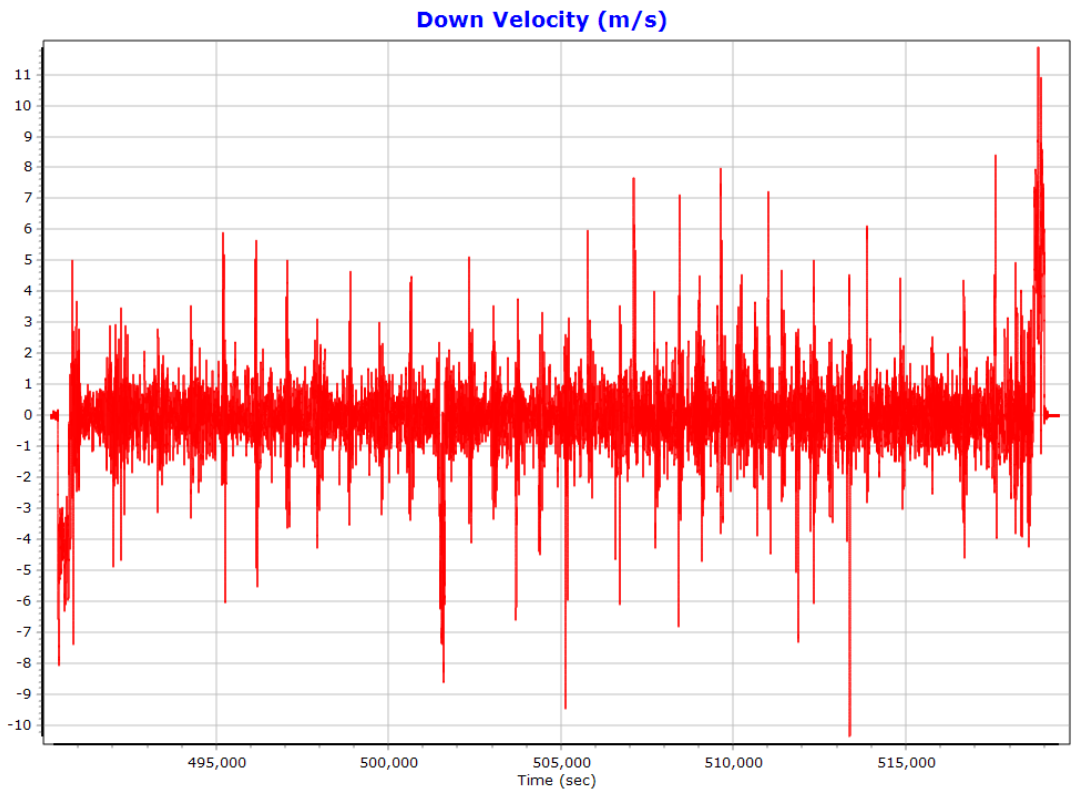
Heading



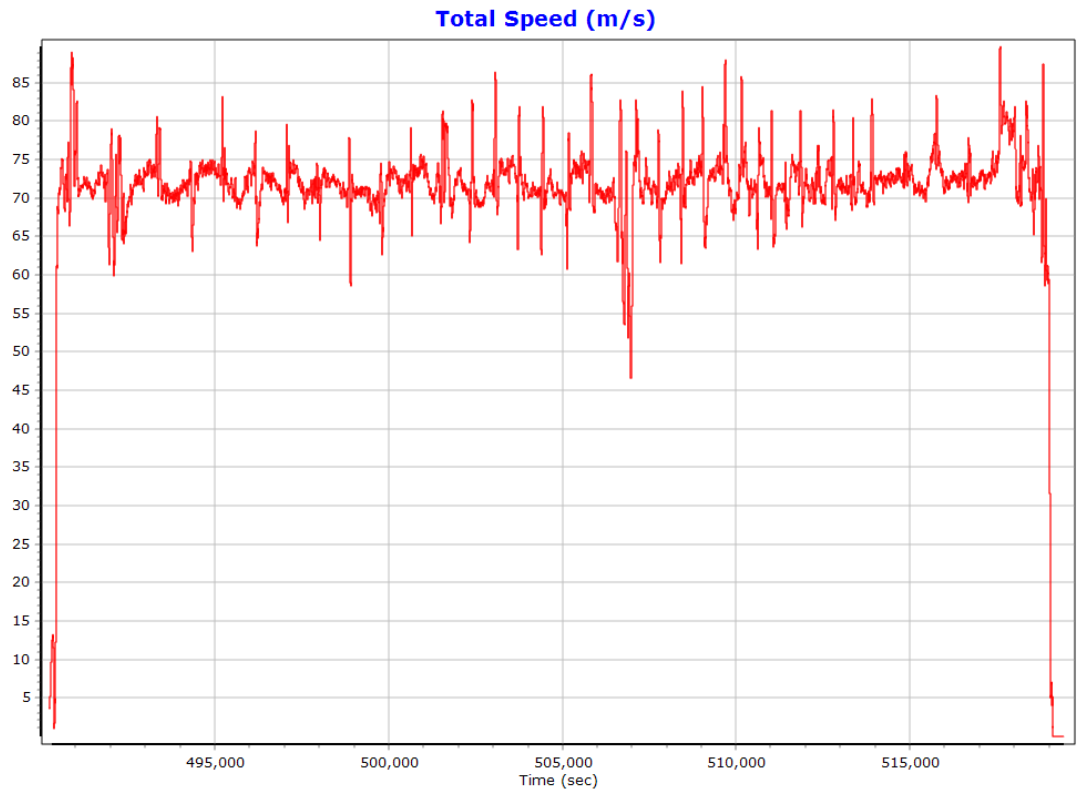
North/East Velocity



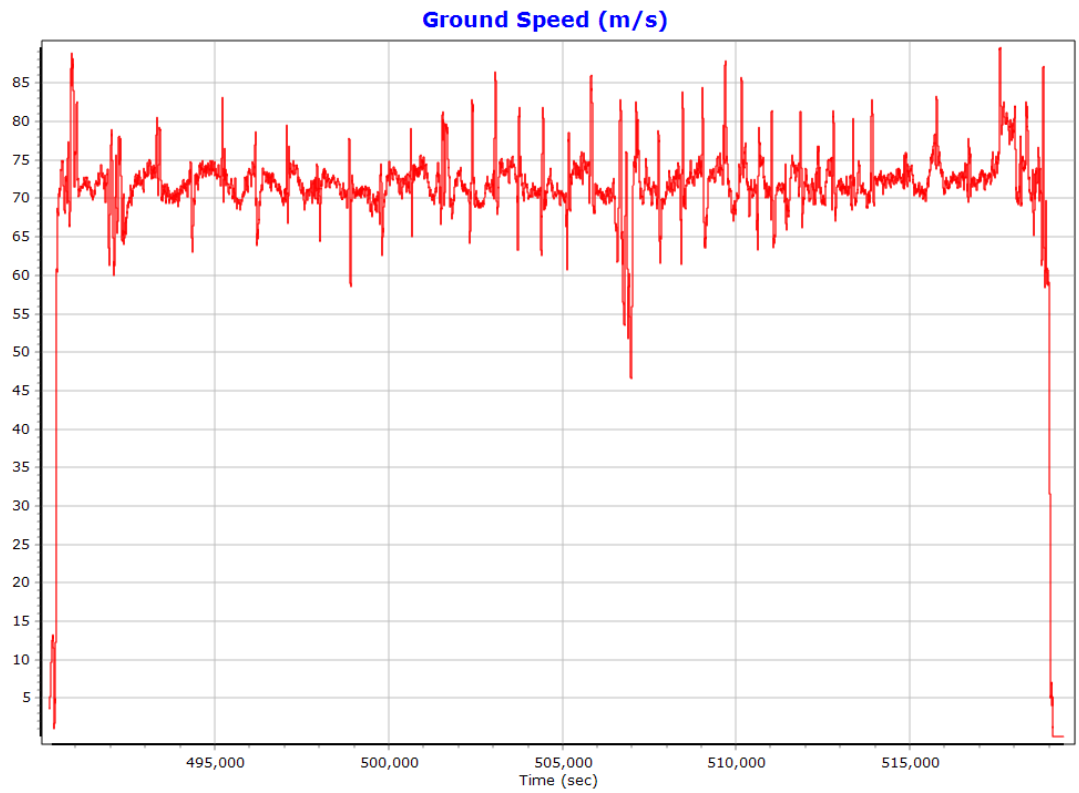
Down Velocity



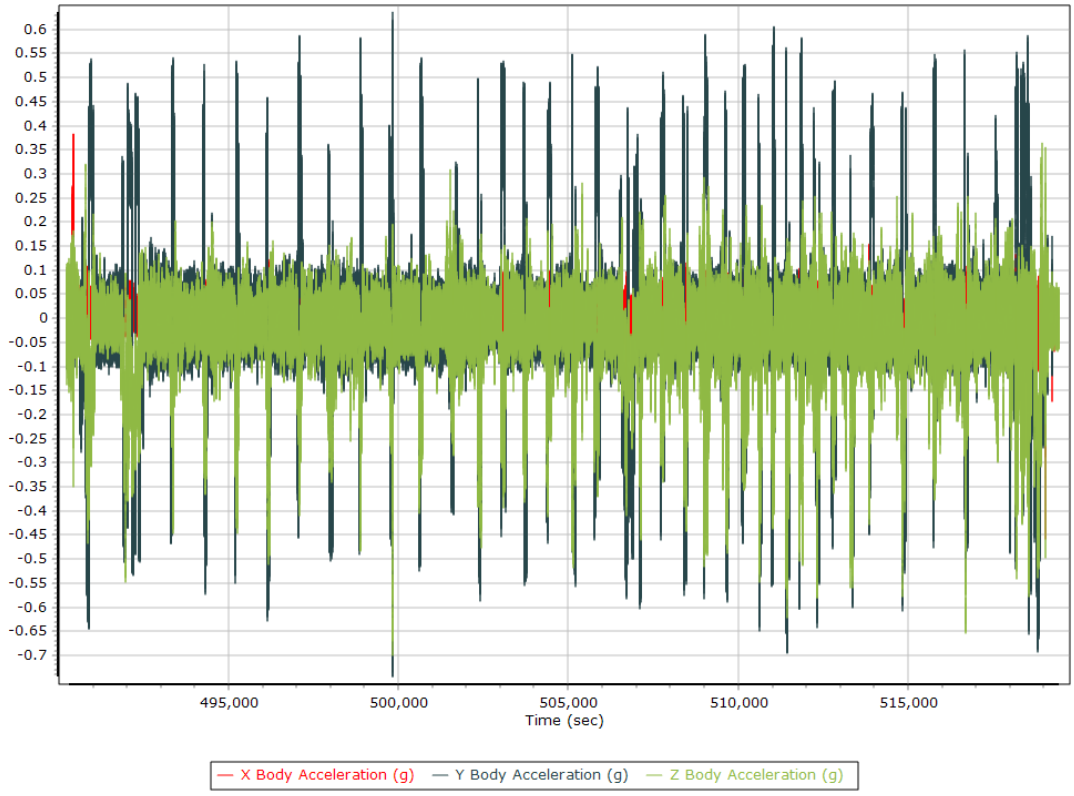
Total Speed



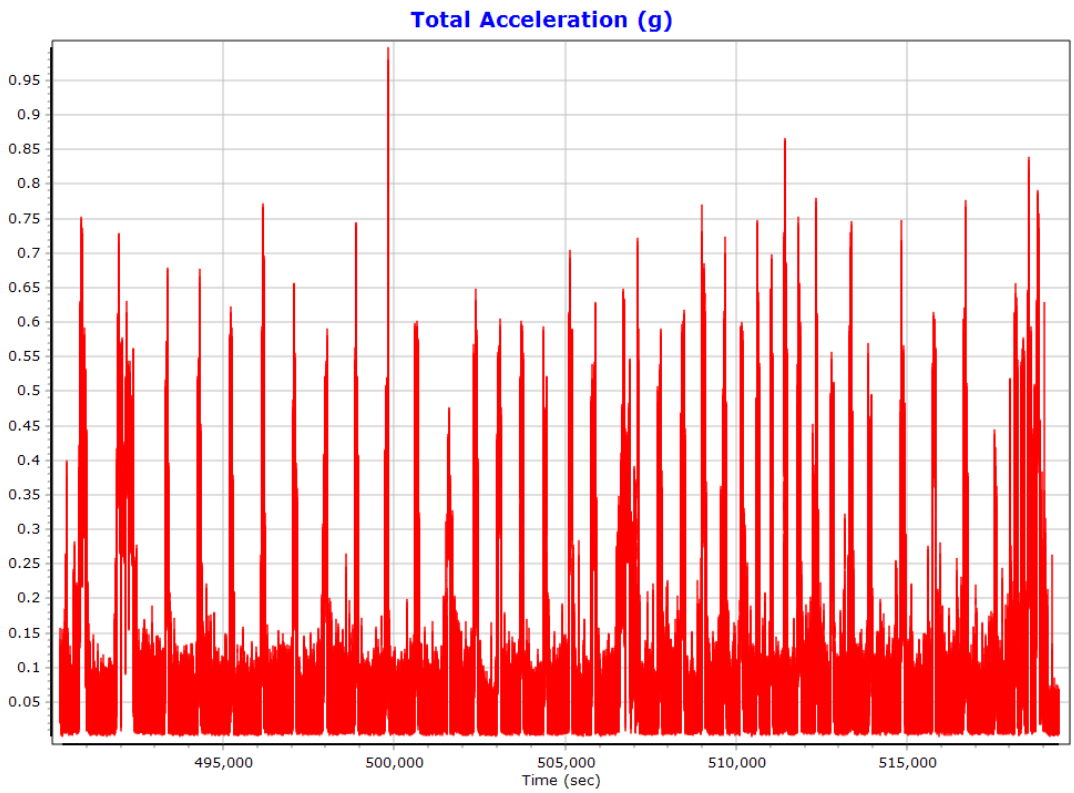
Ground Speed



Body Acceleration



Total Body Acceleration



Body Angular Rate

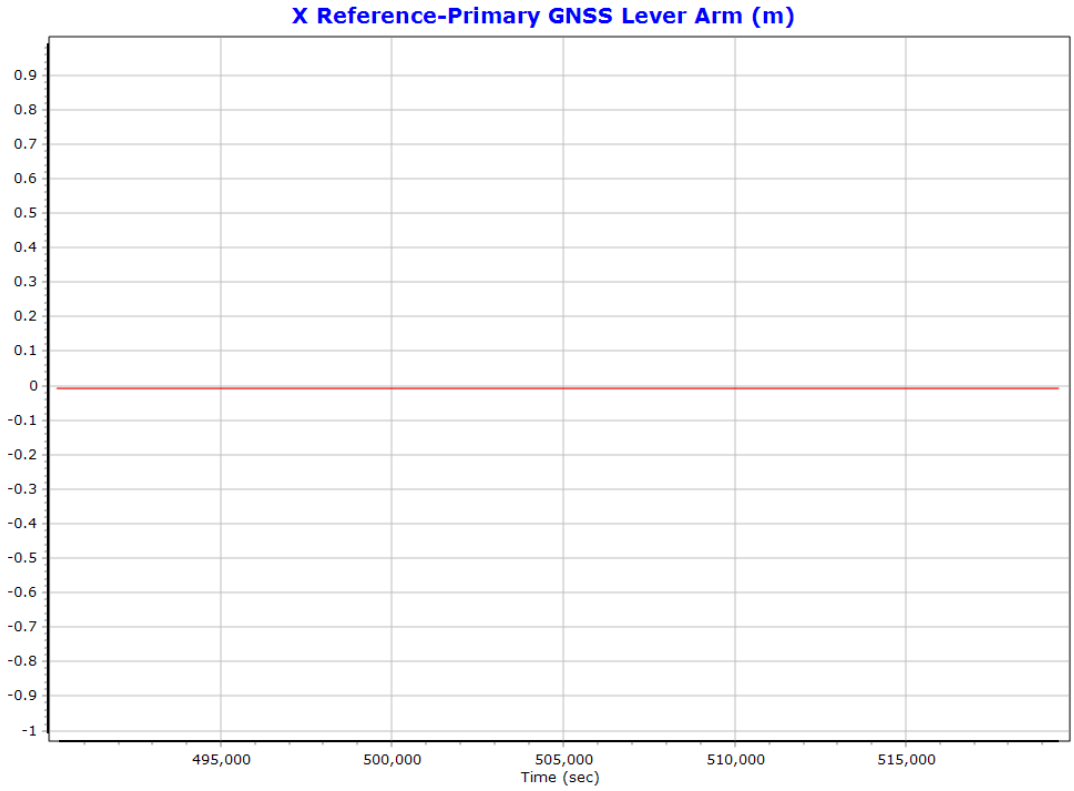
GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion Trimble RTX Nav		
Stabilized mount	False		
Processing start time	489844.000 (11/08/2019 16:04:04)		
Processing end time	519453.000 (11/09/2019 00:17:33)		
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	0.000
Reference to Primary GNSS lever arm [m]	-0.008	0.046	-1.014
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

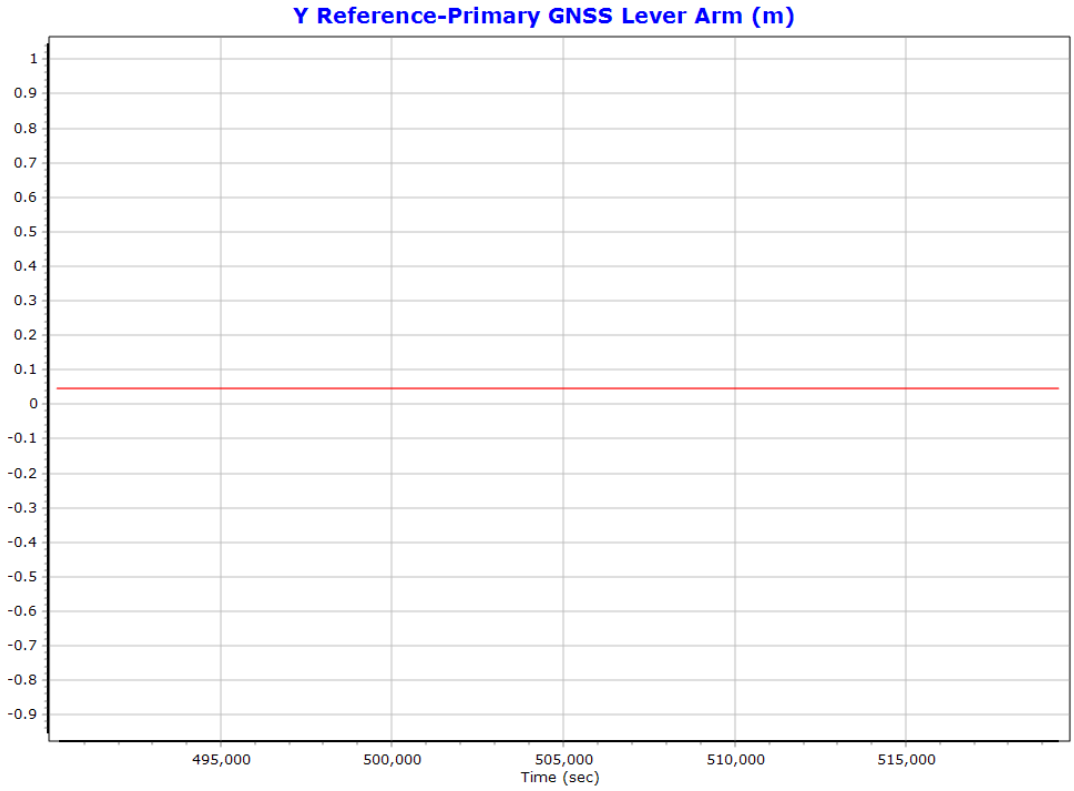
Calibrated Installation Parameters

Reference-Primary GNSS Lever Arm

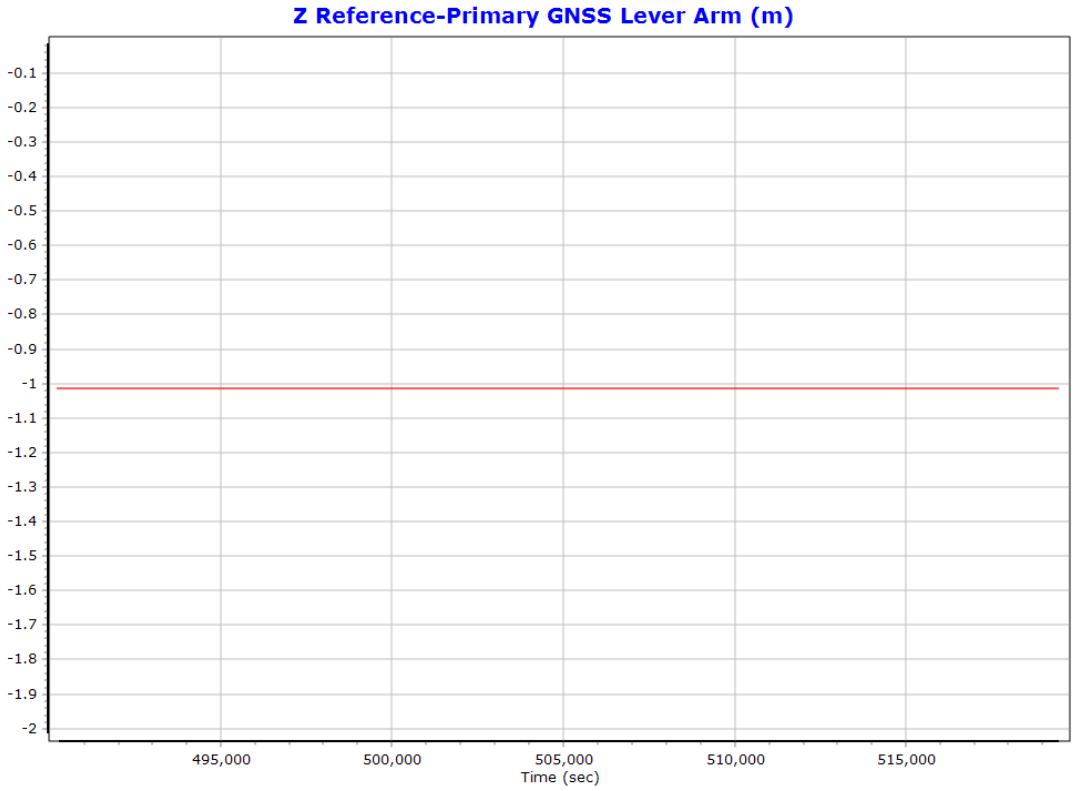
X Reference-Primary GNSS Lever Arm (m)



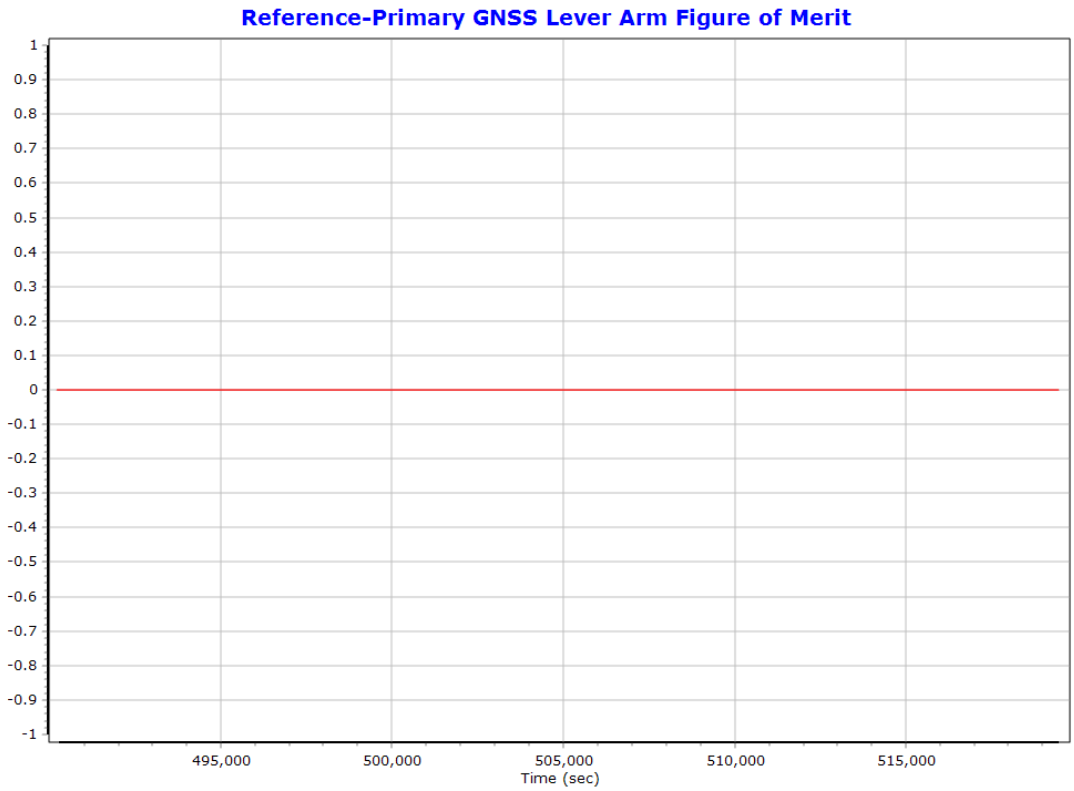
Y Reference-Primary GNSS Lever Arm (m)



Z Reference-Primary GNSS Lever Arm (m)



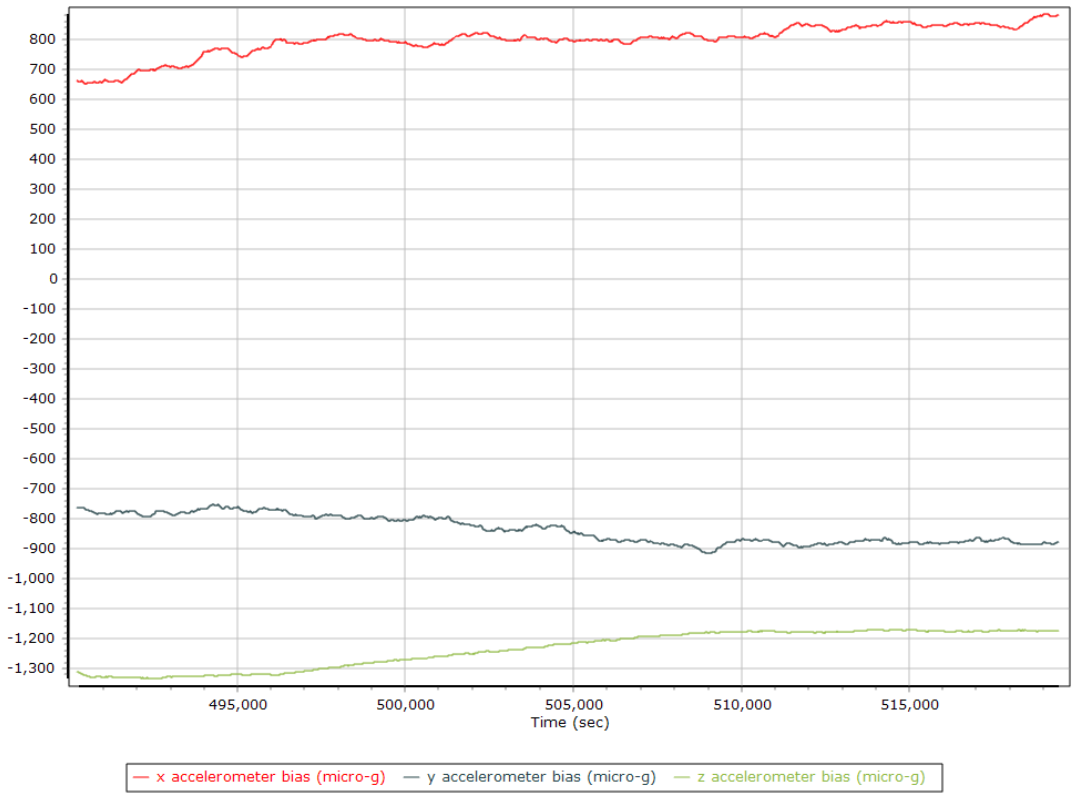
Reference-Primary GNSS Lever Arm Figure of Merit



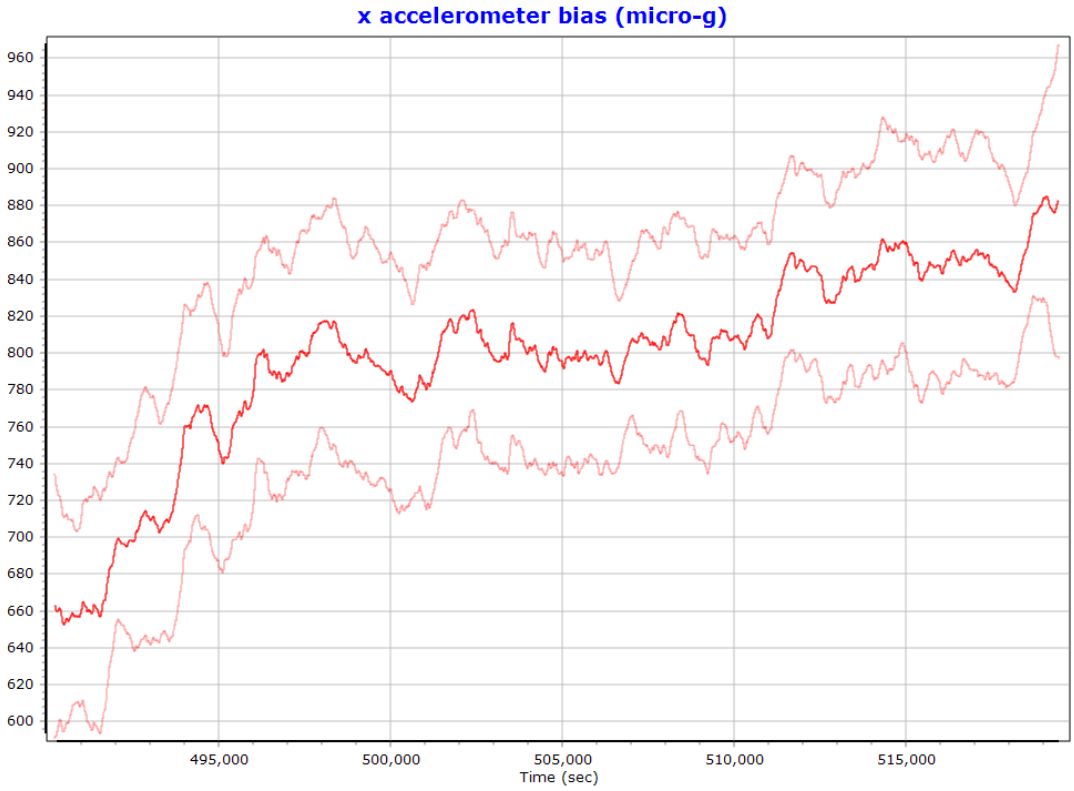
Smoothed IN-Fusion QC

Smoothed Estimated Errors, Reference Frame

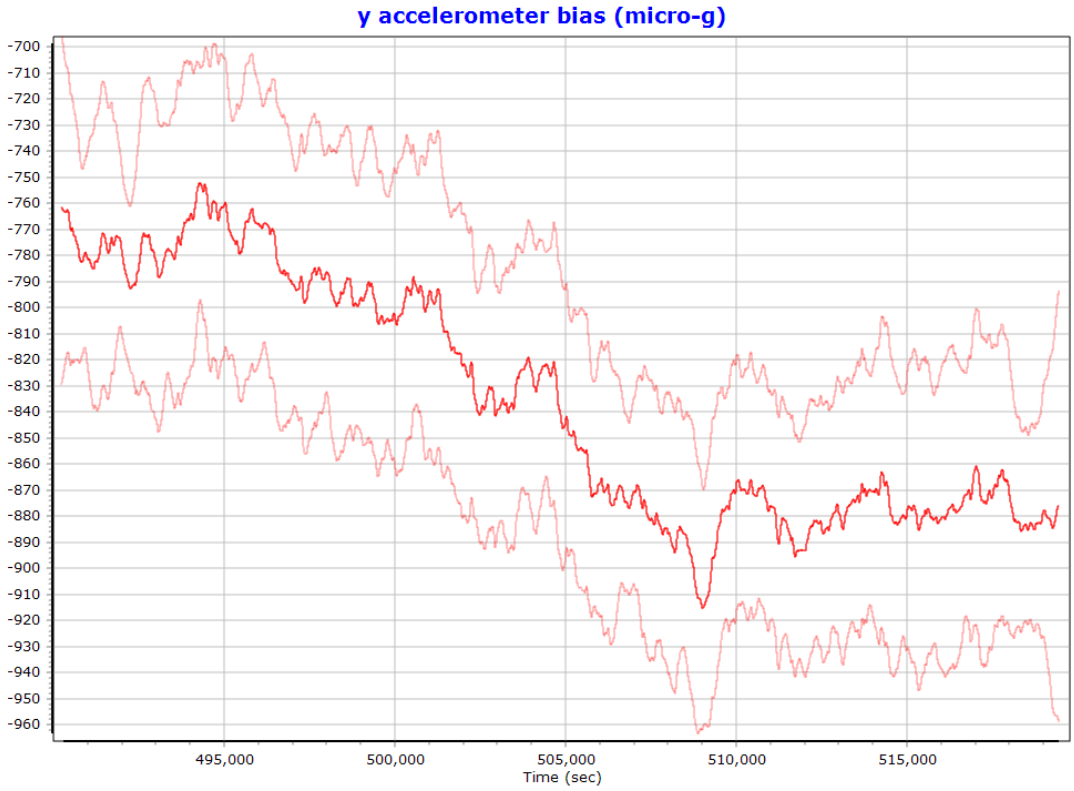
Accelerometer Bias (micro-g)



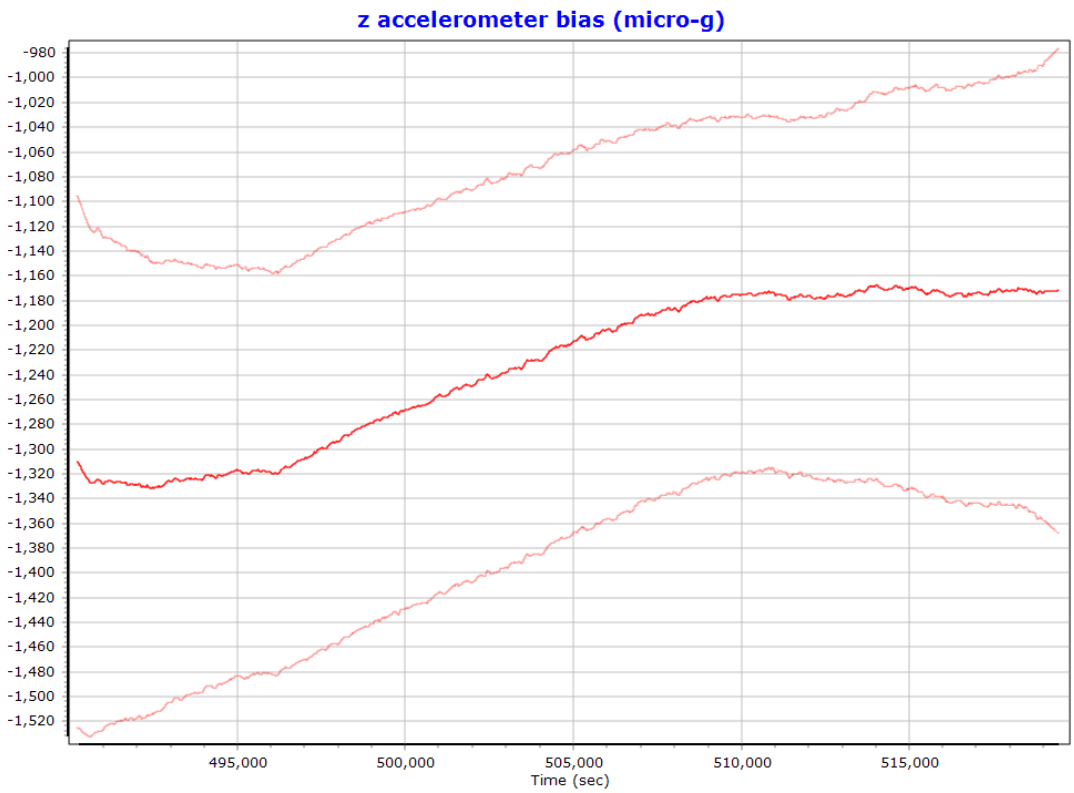
X Accelerometer Bias (micro-g)



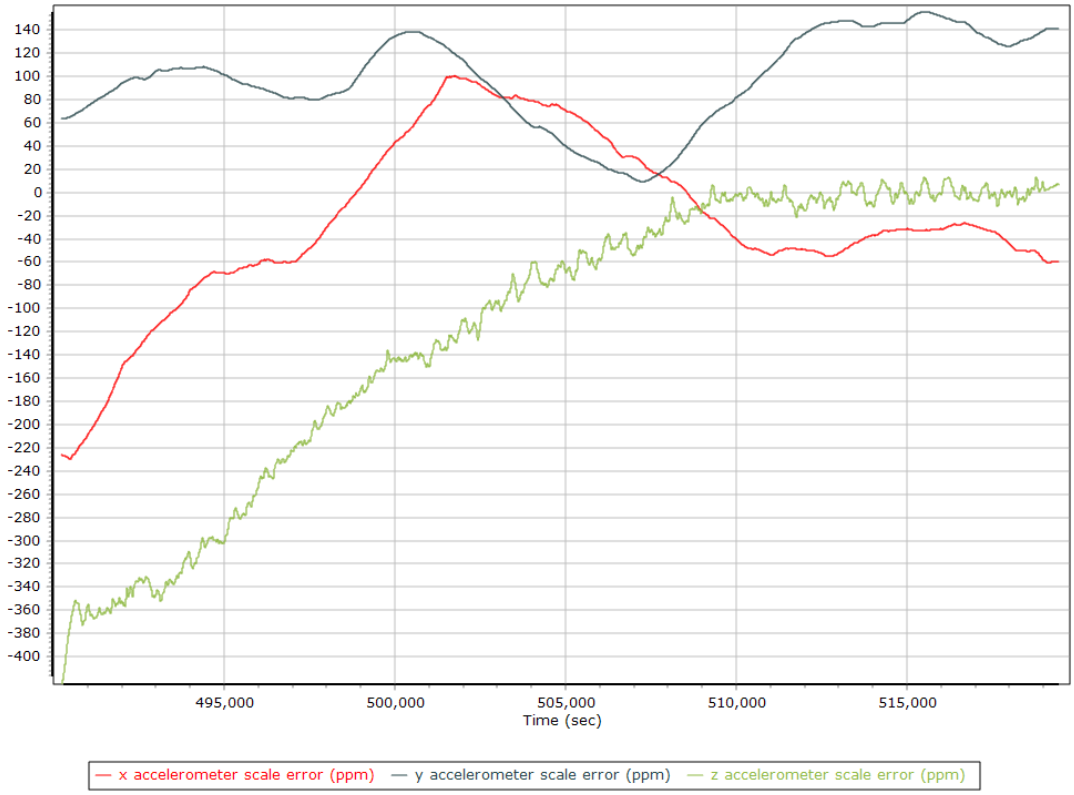
Y Accelerometer Bias (micro-g)



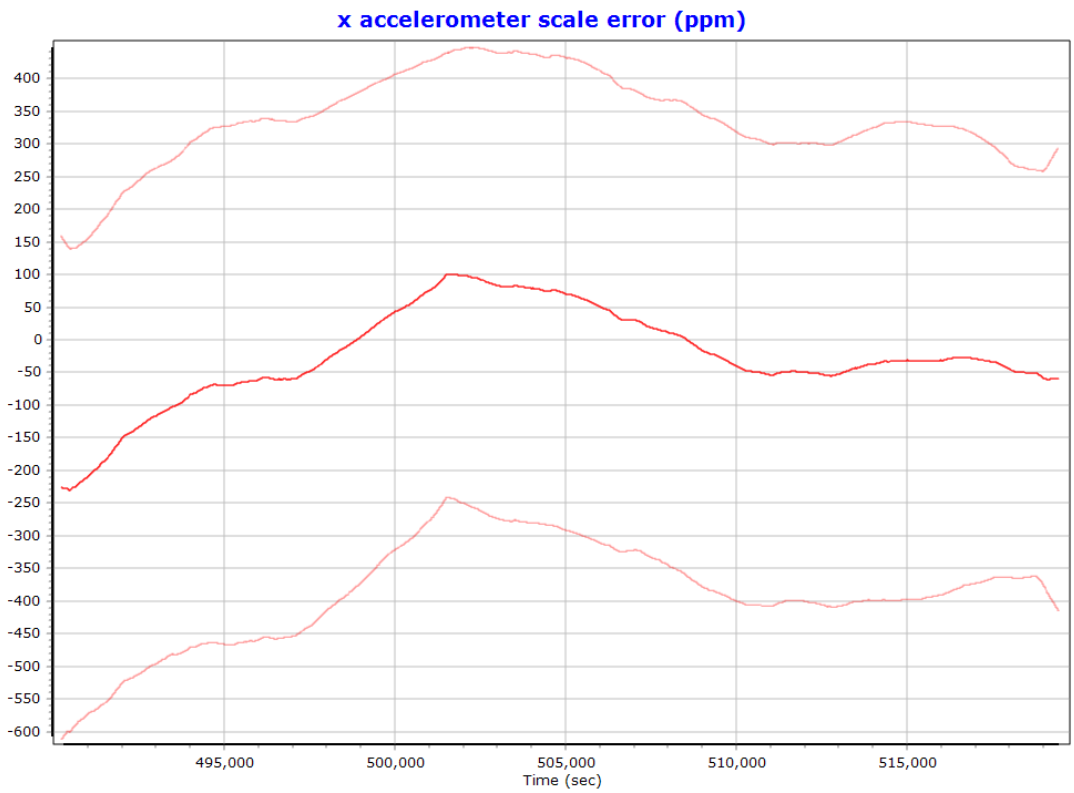
Z Accelerometer Bias (micro-g)



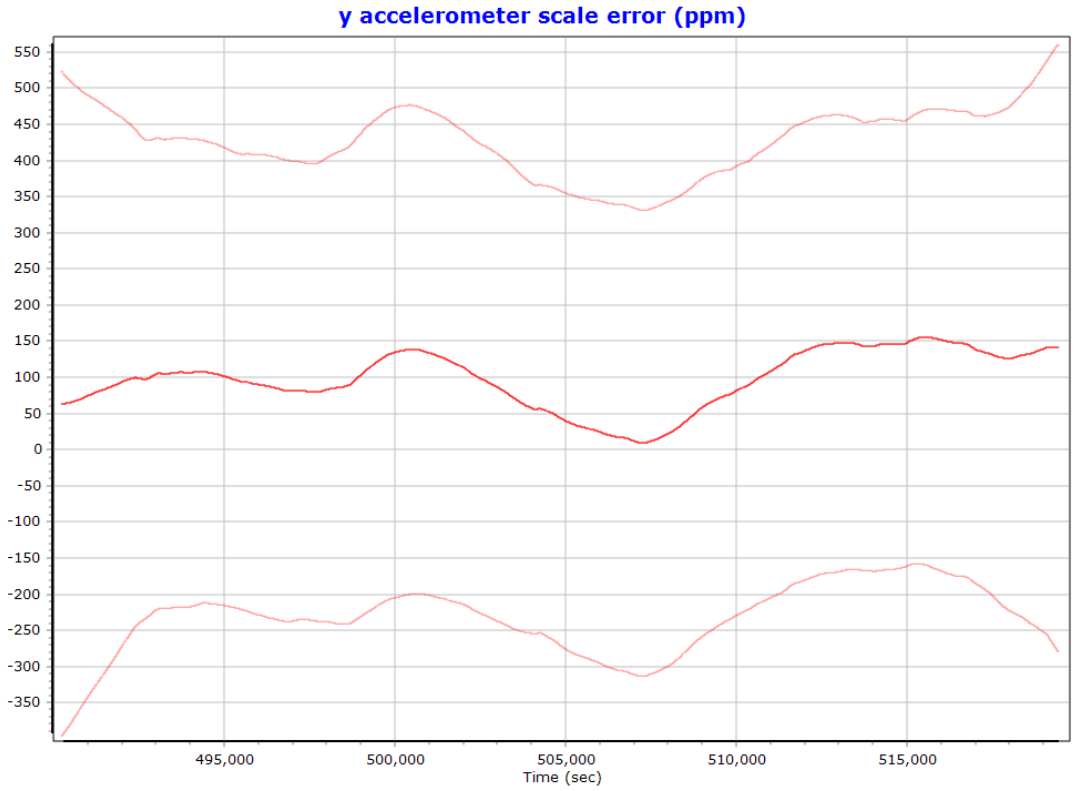
Accelerometer Scale Error (ppm)



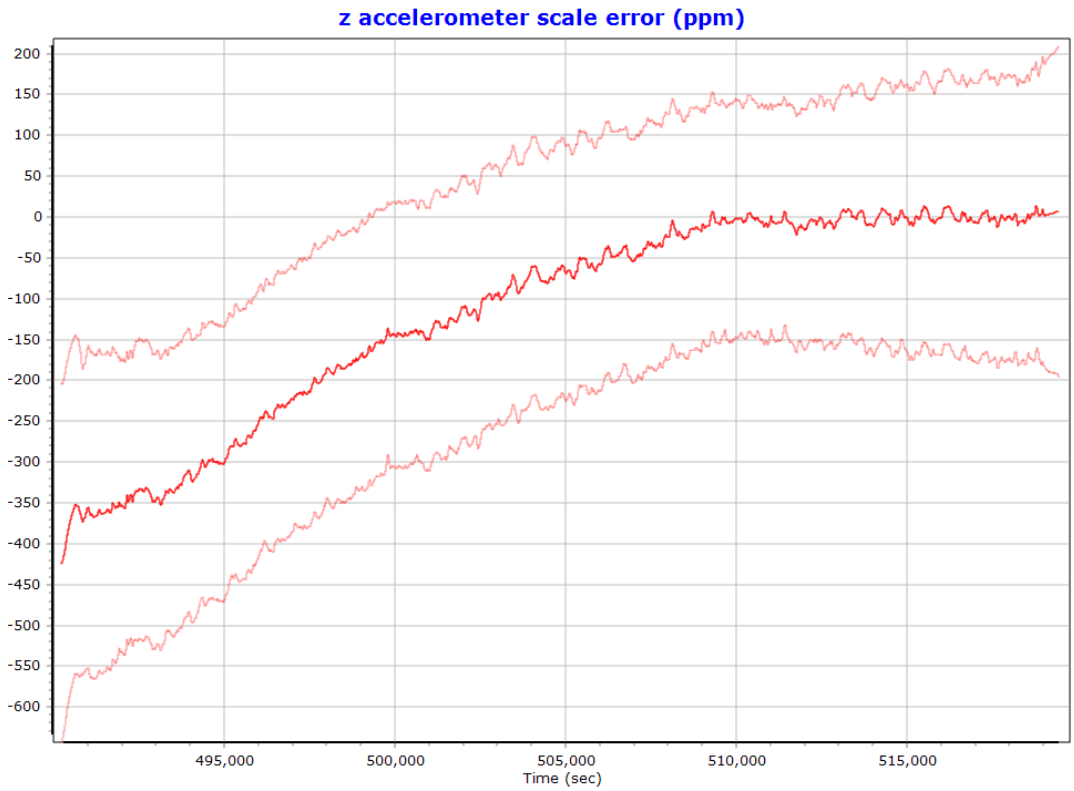
X Accelerometer Scale Error (ppm)



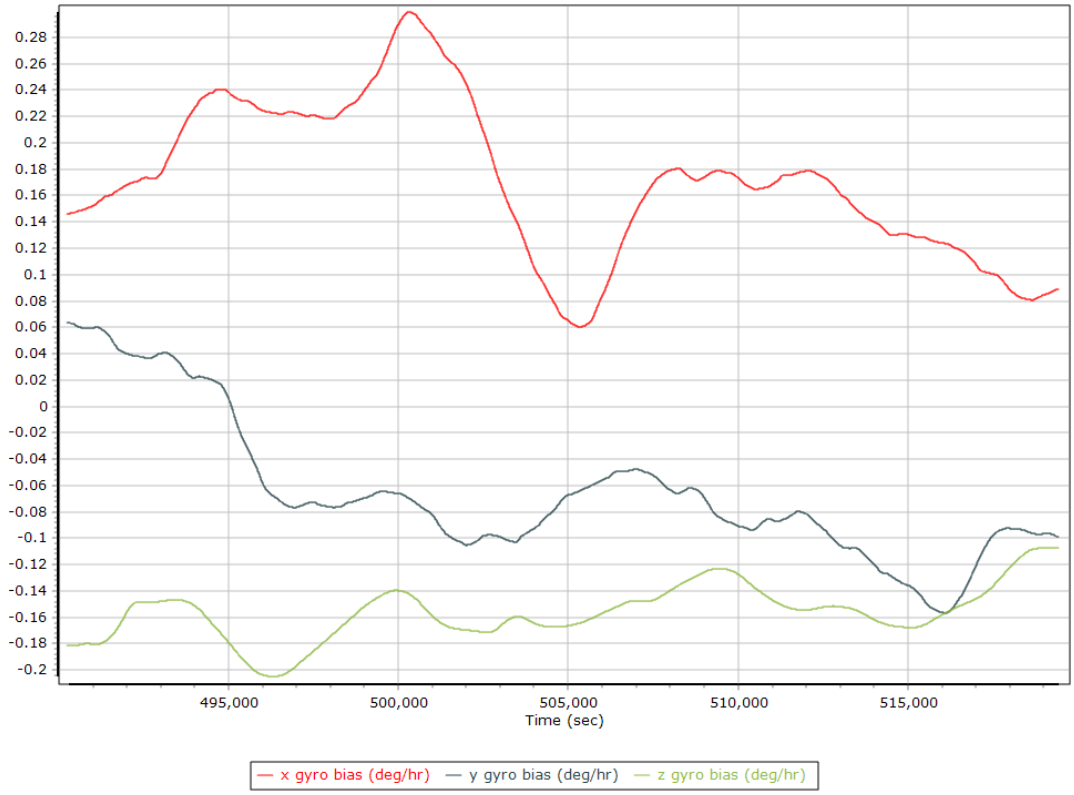
Y Accelerometer Scale Error (ppm)



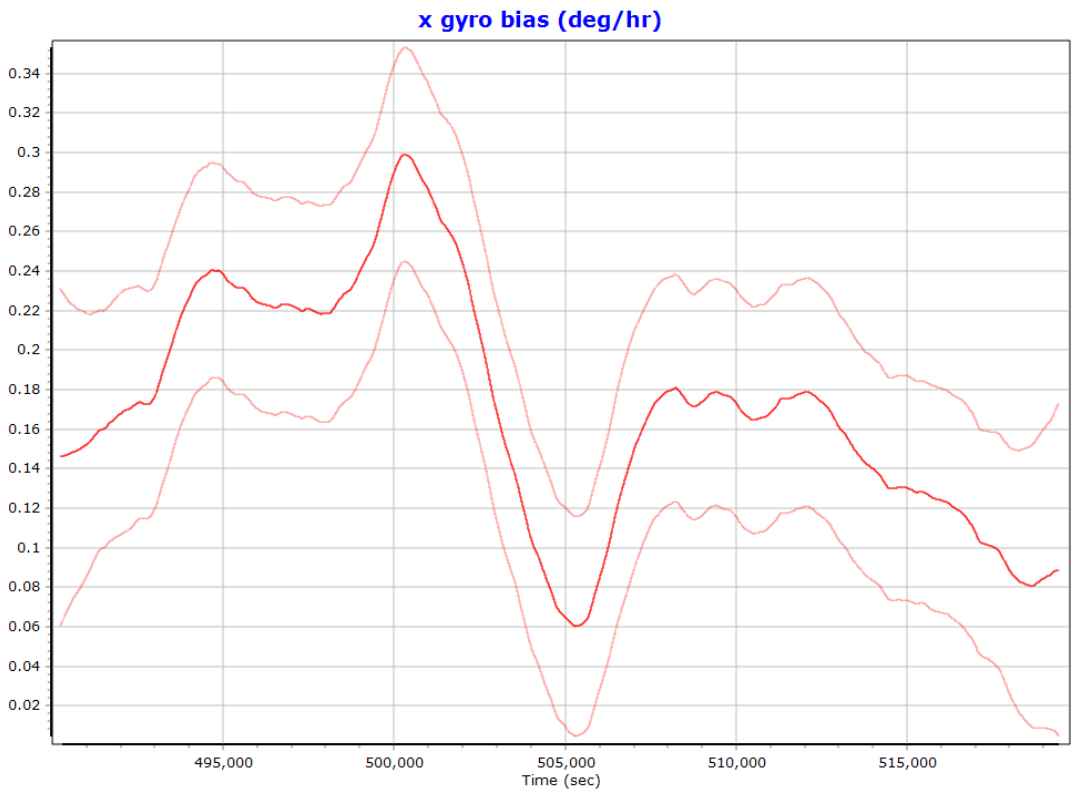
Z Accelerometer Scale Error (ppm)



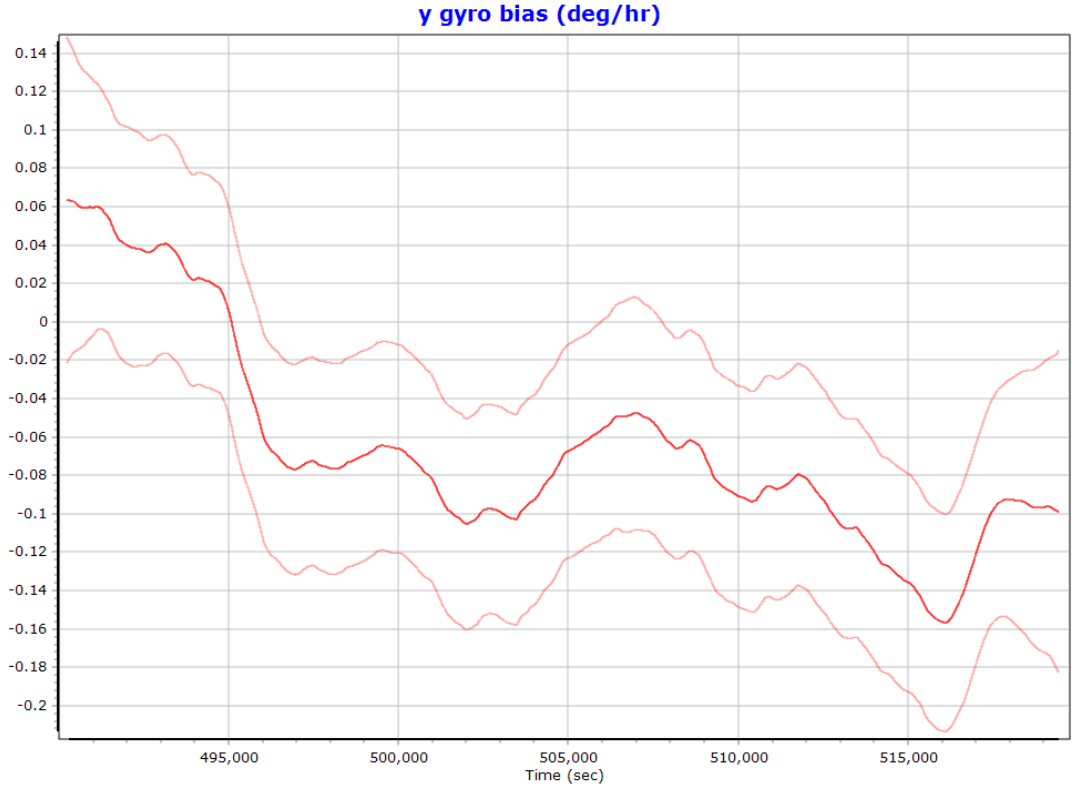
Gyro Bias (deg/h)



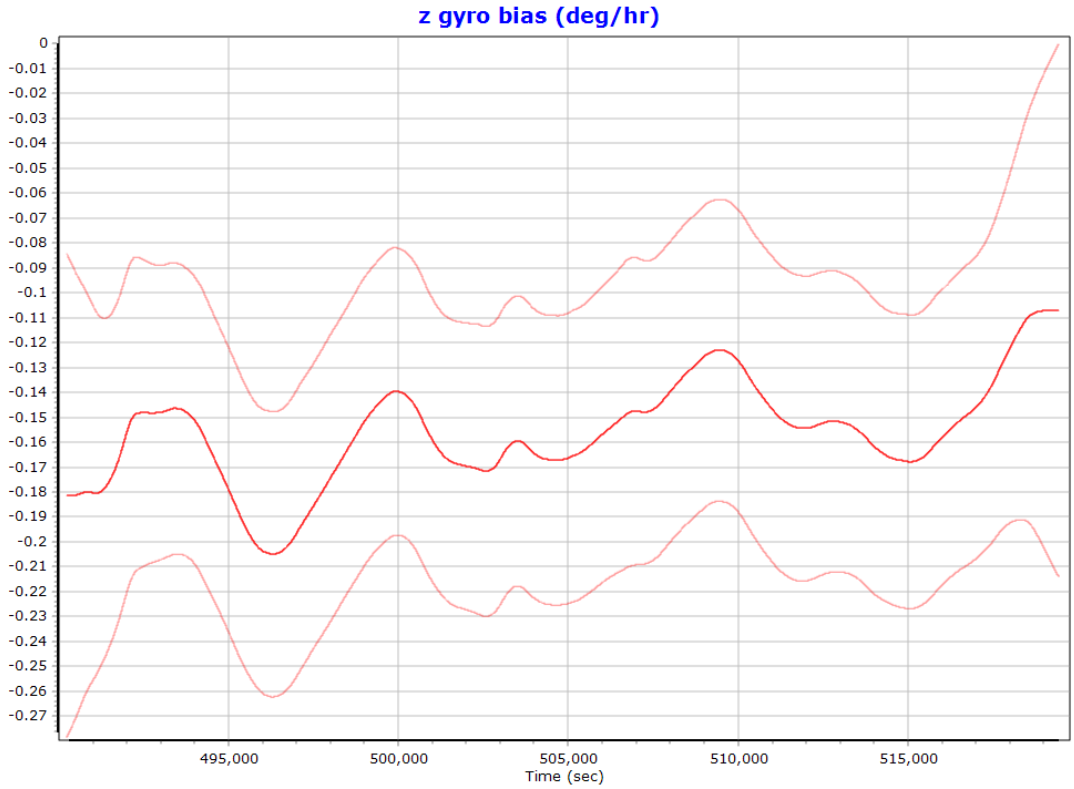
X Gyro Bias (deg/h)



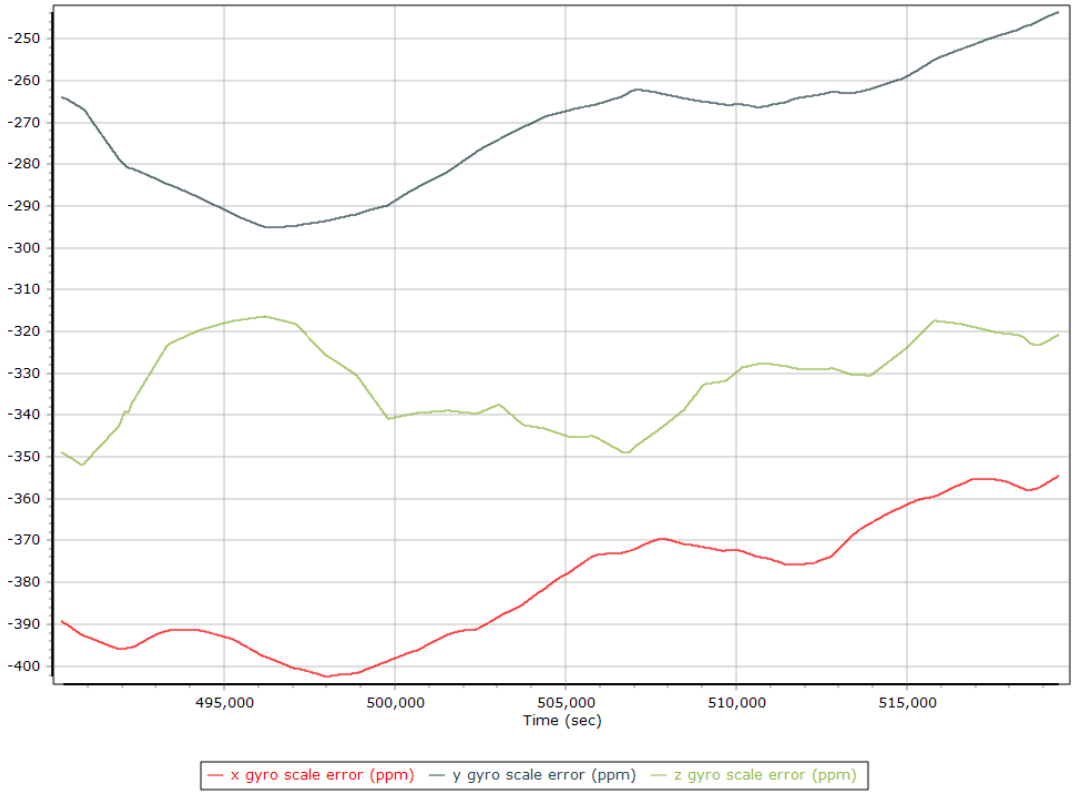
Y Gyro Bias (deg/h)



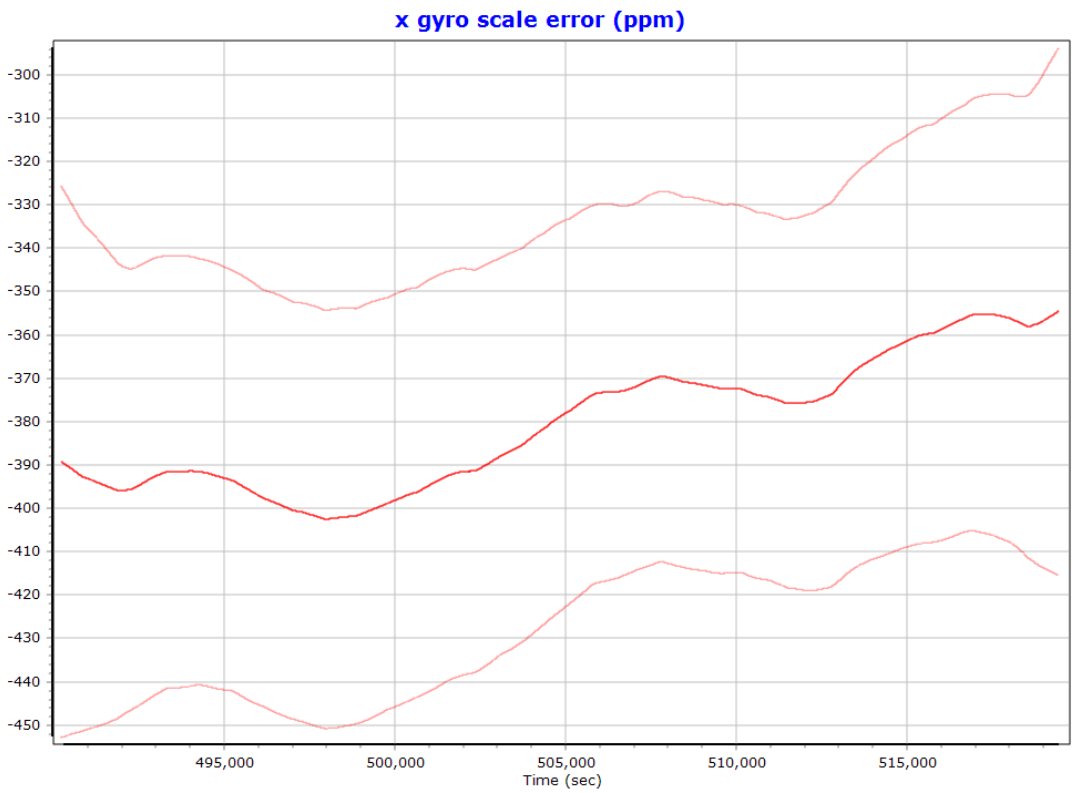
Z Gyro Bias (deg/h)



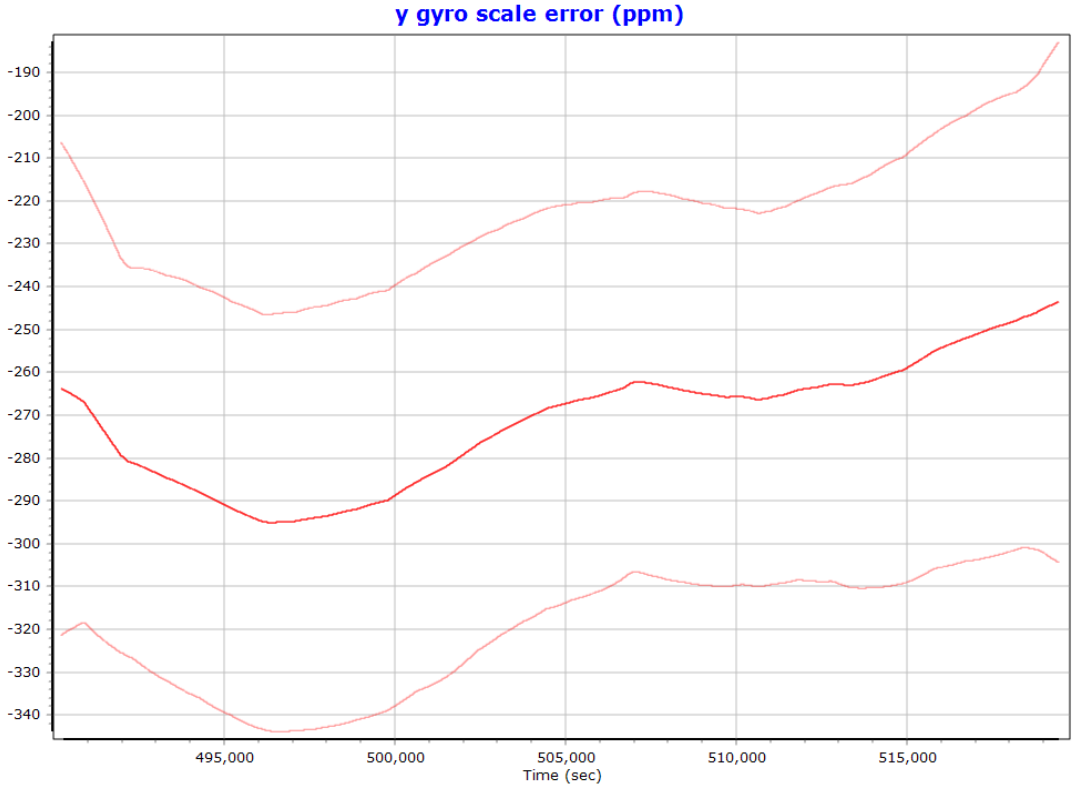
Gyro Scale Error (ppm)



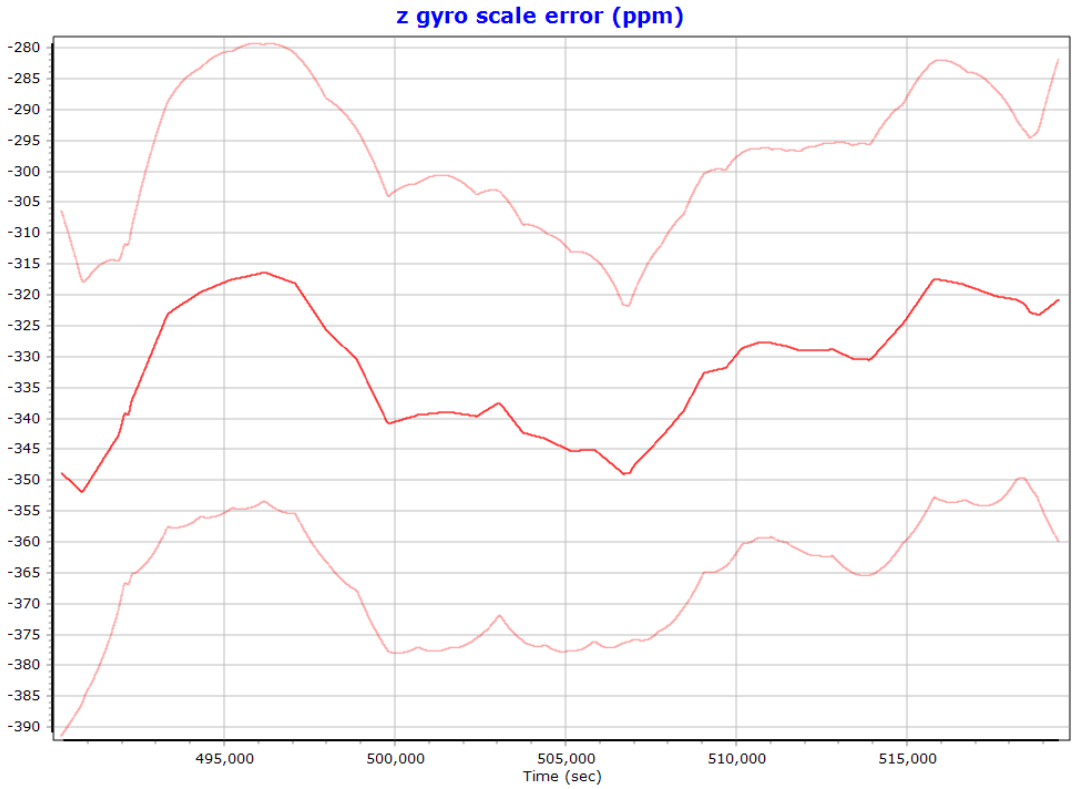
X Gyro Scale Error (ppm)



Y Gyro Scale Error (ppm)

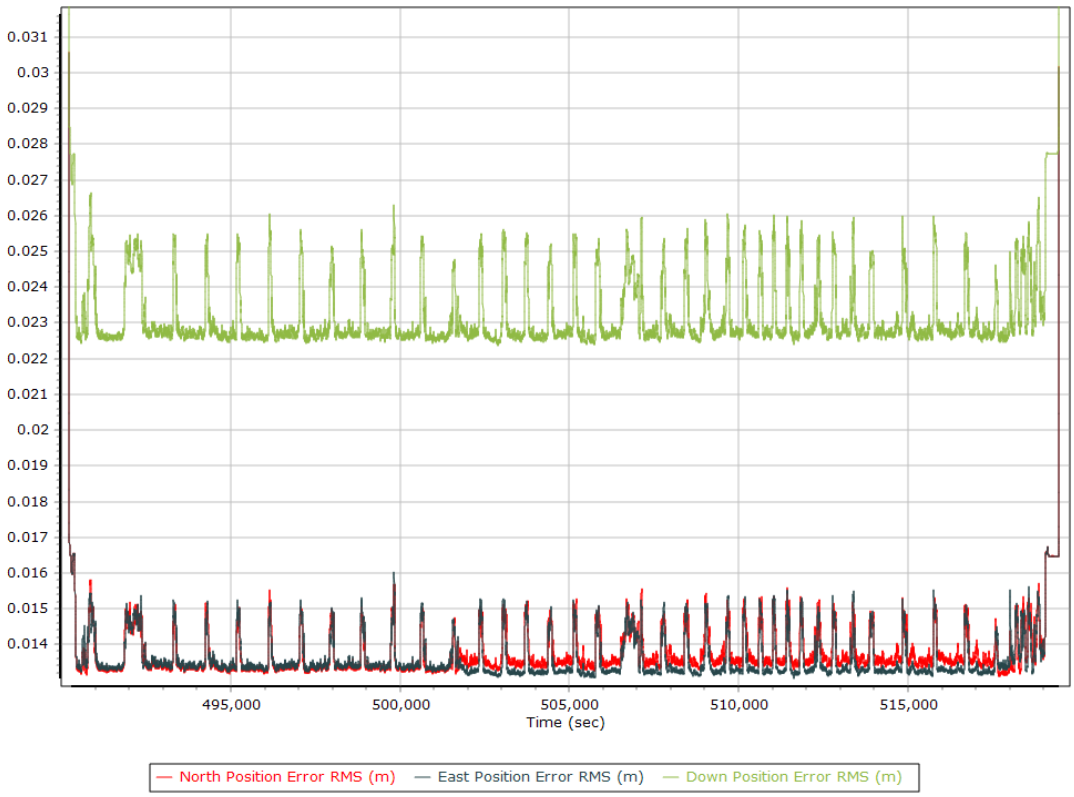


Z Gyro Scale Error (ppm)

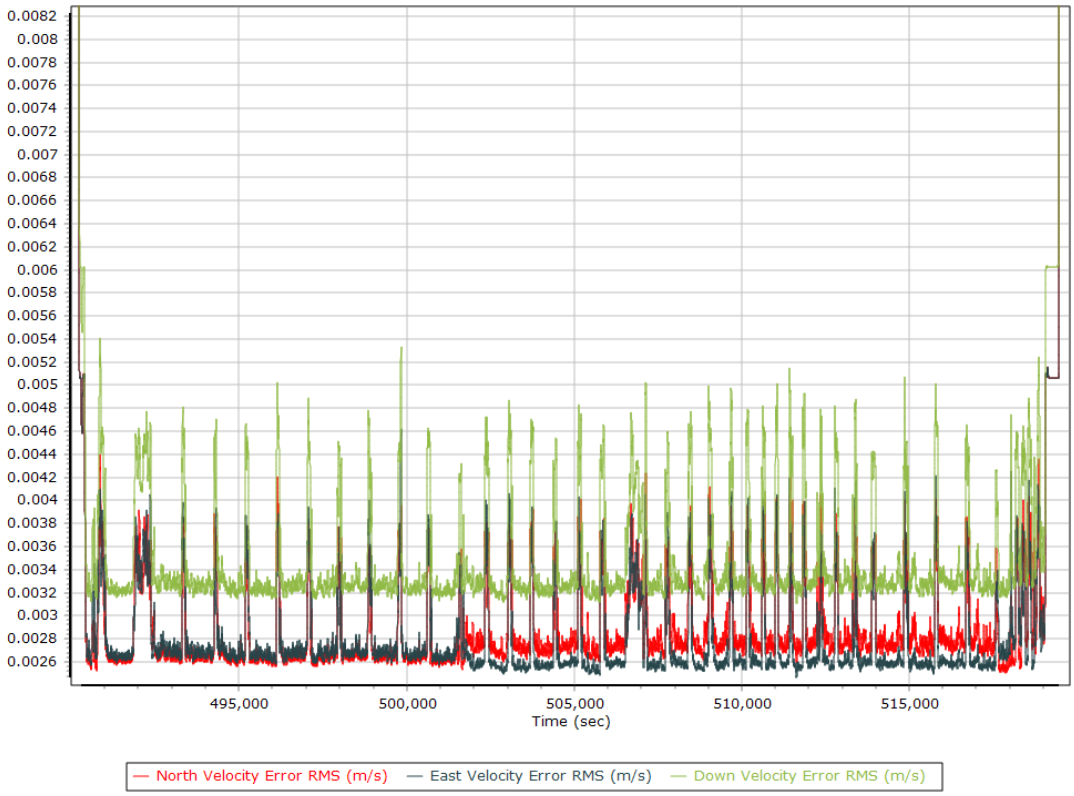


Smoothed Performance Metrics

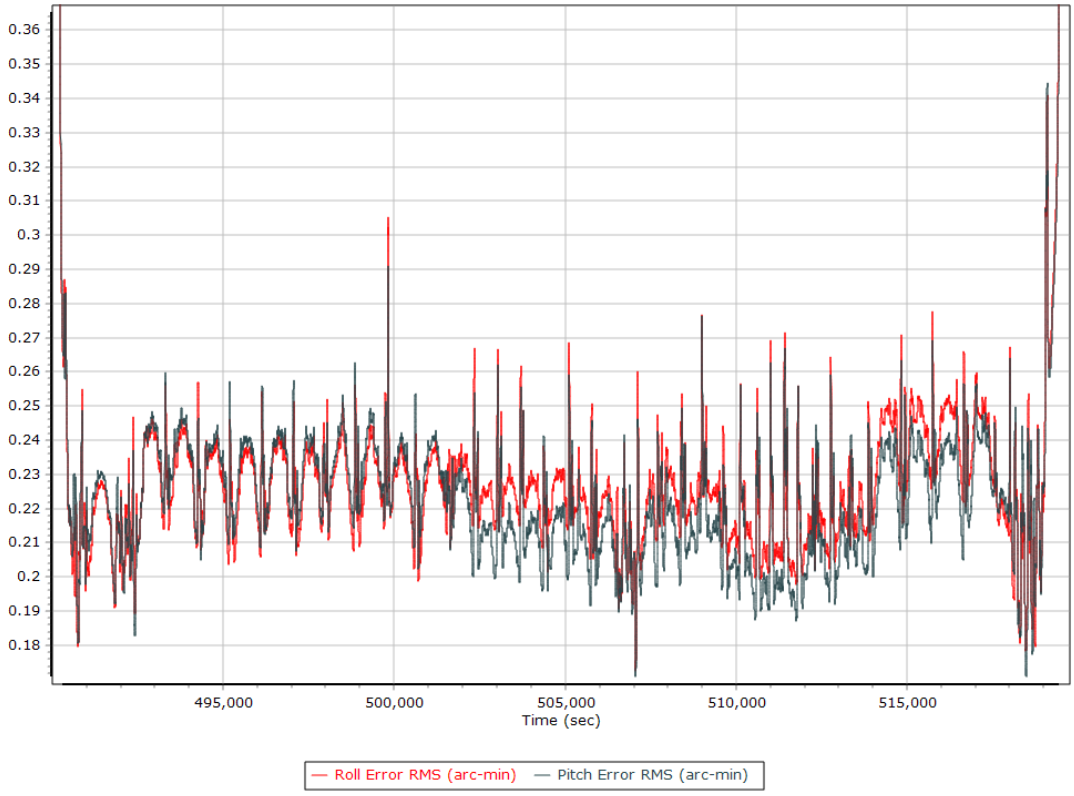
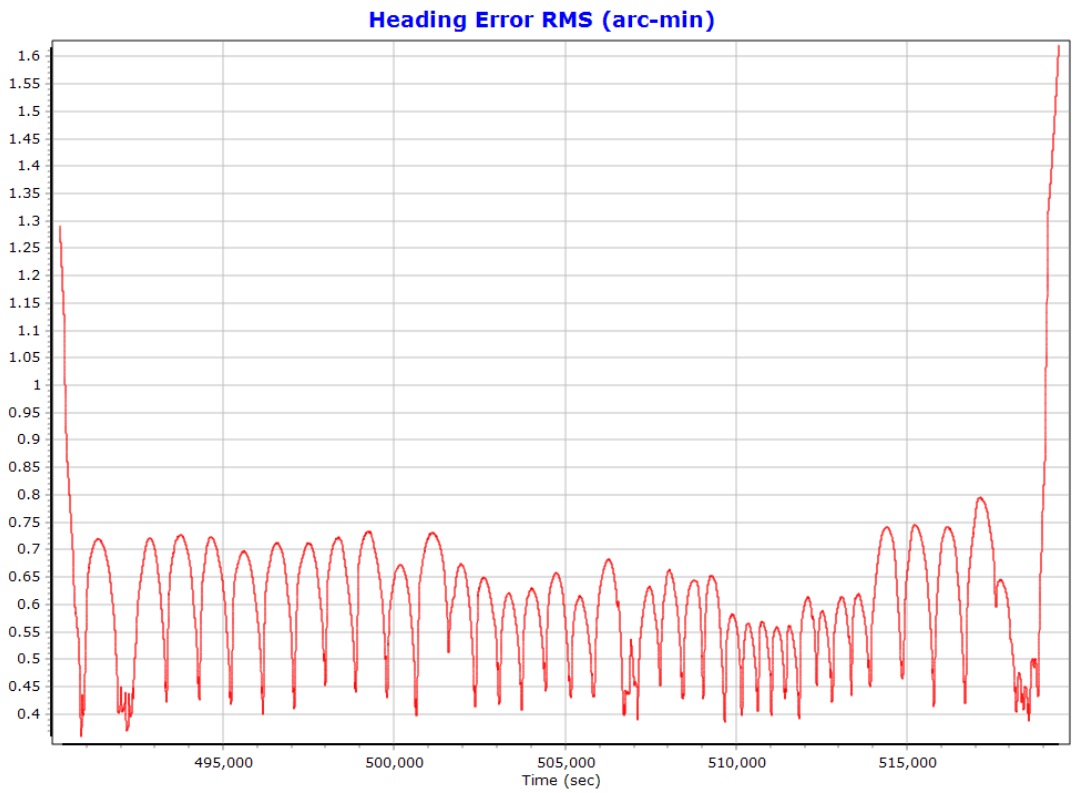
Position Error RMS (m)



Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)



Heading Error RMS (arc-min)