General Information

Mission Information

Project name	19-058_111619
Processing date	2019-11-27 22:58:22
Mission date	2019-11-16 18:54:00
Mission duration	04:39:04.000
Processing mode	IN-Fusion Trimble RTX Nav

Rover Hardware Information

Product	POS AV 610 VER6 HW2.5-12
Serial number	S/N6675
IMU type	57
Receiver type	BD982
Antenna type	AV39

Project File List

Rover Data Files

File name	File type
191116_185341_POSAV610-6675.raw	POS Data

Input Files

File Name	File type
Ephm3200.19g	GLONASS Broadcast Ephemeris
Ephm3200.19n	GPS Broadcast Ephemeris

Output Files

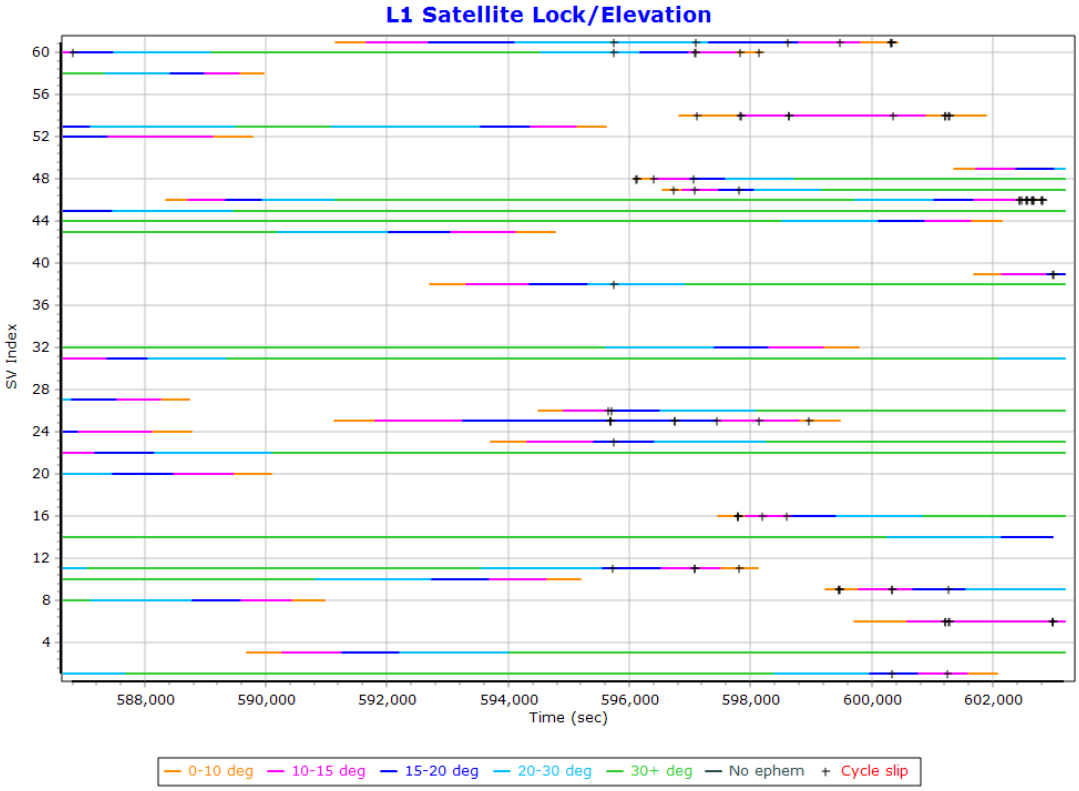
Filename	File type
sbet_19-058_111619.out	SBET Trajectory File
export_19-058_111619.out	Custom Smoothed BET Export Output

Rover Data Summary

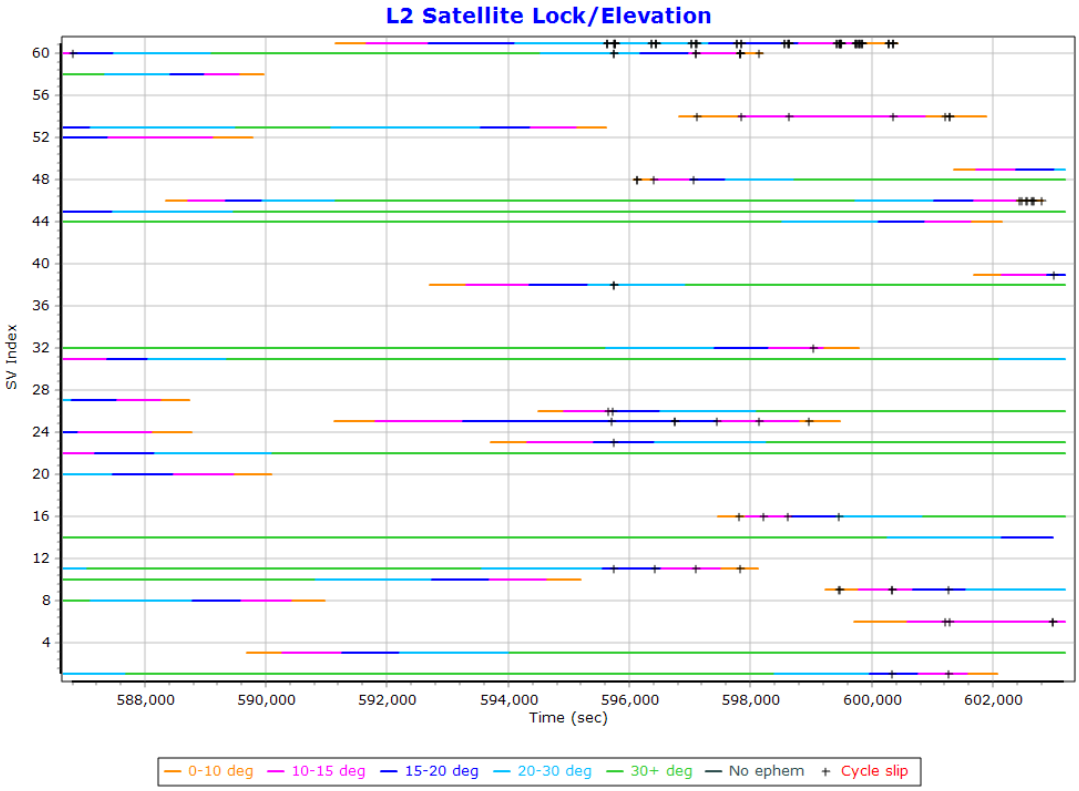
First raw data file	191116_185341_POSAV610-6675.raw		
Last raw data file	191116_185341_POSAV610-6675.raw		
Start GPS week	2079		
Start time	586421.053 (11/16/2019 18:53:41)		
End time	603165.896 (11/16/2019 23:32:45)		
Start of fine alignment	586740.933 (11/16/2019 18:59:00)		
Available subsystems	Primary GNSS, Gimbal, IMU		
POS Event Input	None		
Correction data	Trimble RTX		
IMU Installation Lever Arms & Mounting Angles			
Gimbal to IMU lever arm [m]	0.000	0.000	0.000
Gimbal to IMU mounting angles [deg]	0.000	0.000	0.000
Gimbal to Primary GNSS lever arm [m]	-0.233	-0.013	-0.922
Gimbal 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

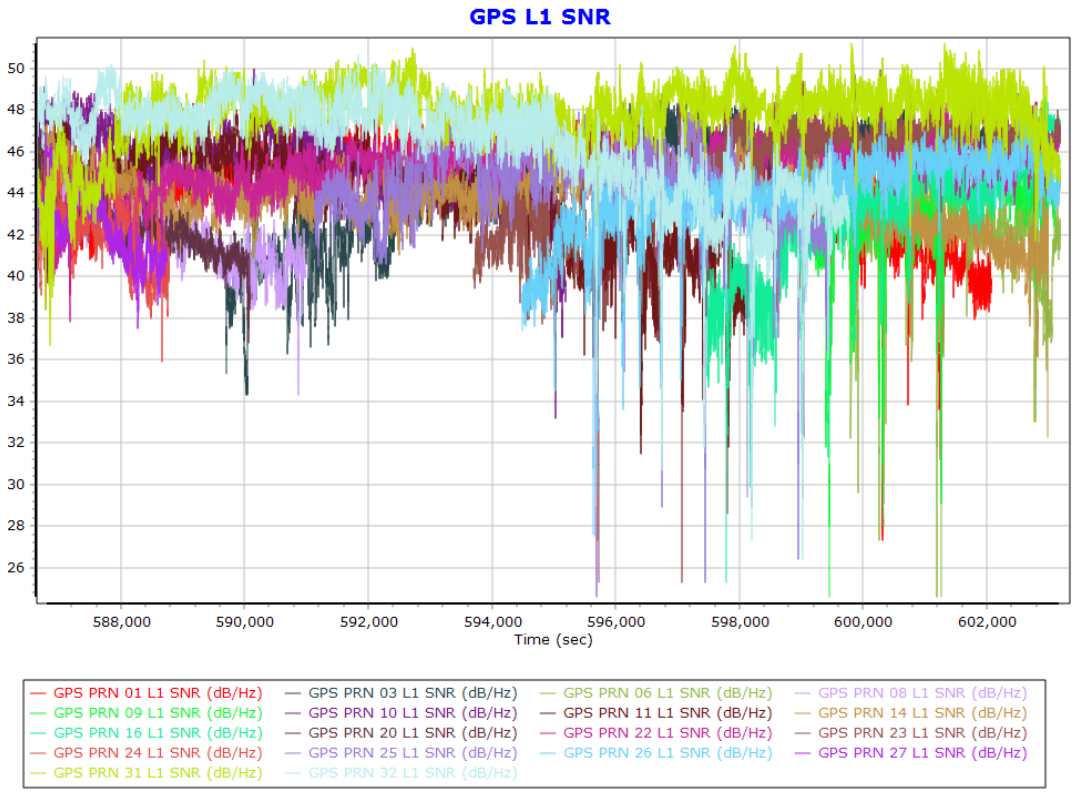
L1 Satellite Lock/Elevation



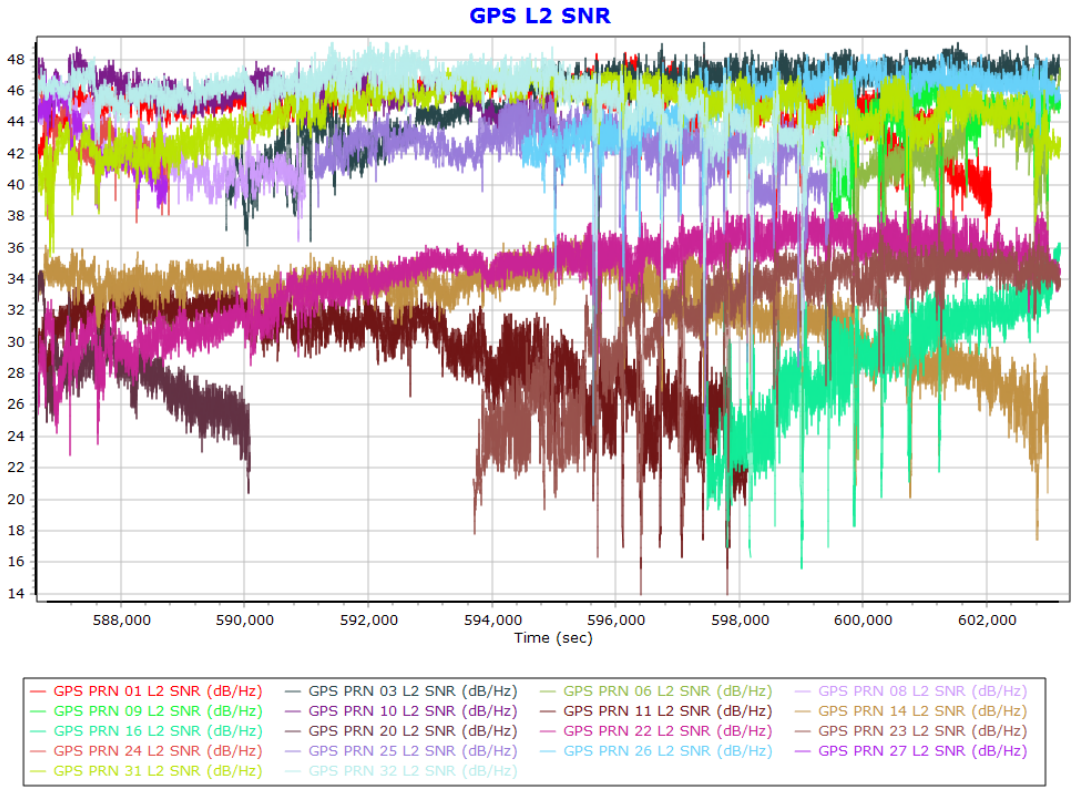
L2 Satellite Lock/Elevation



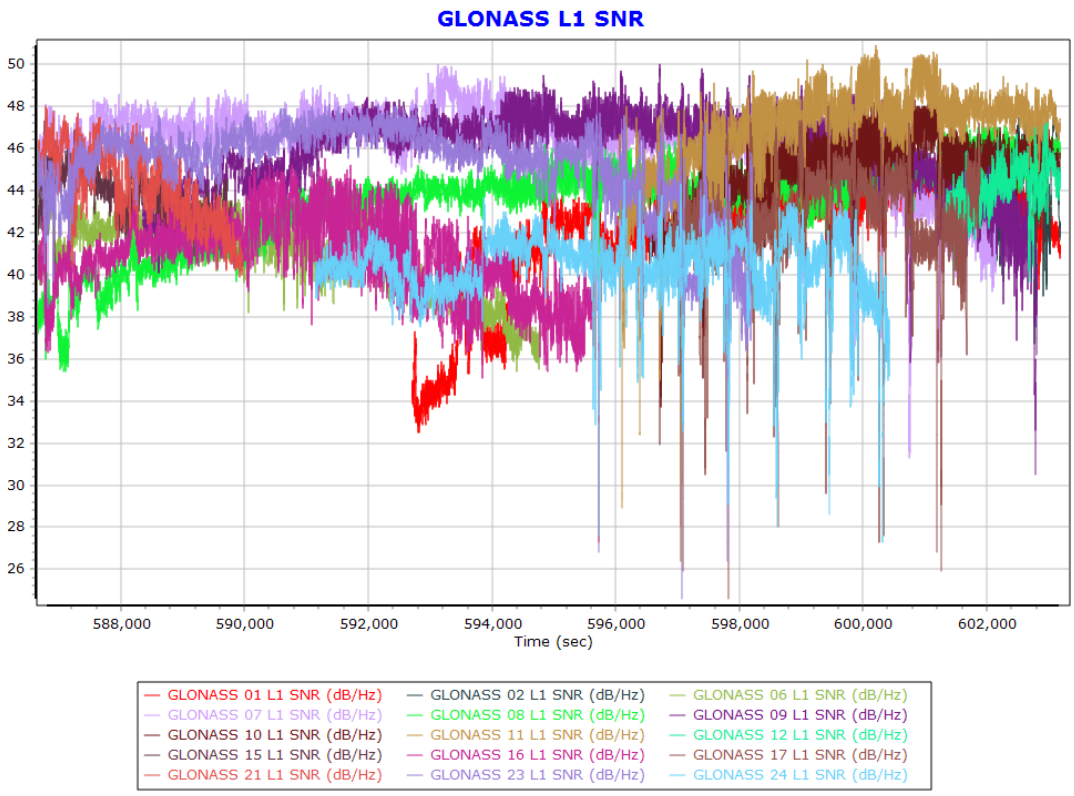
GPS L1 SNR



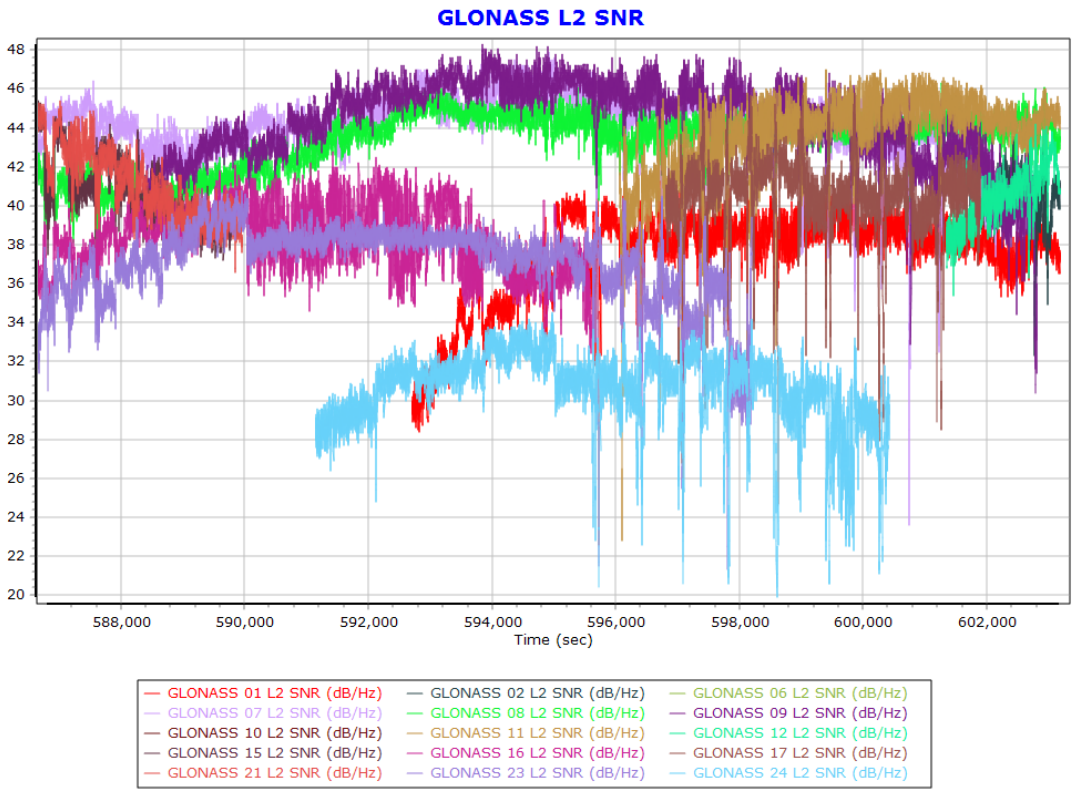
GPS L2 SNR



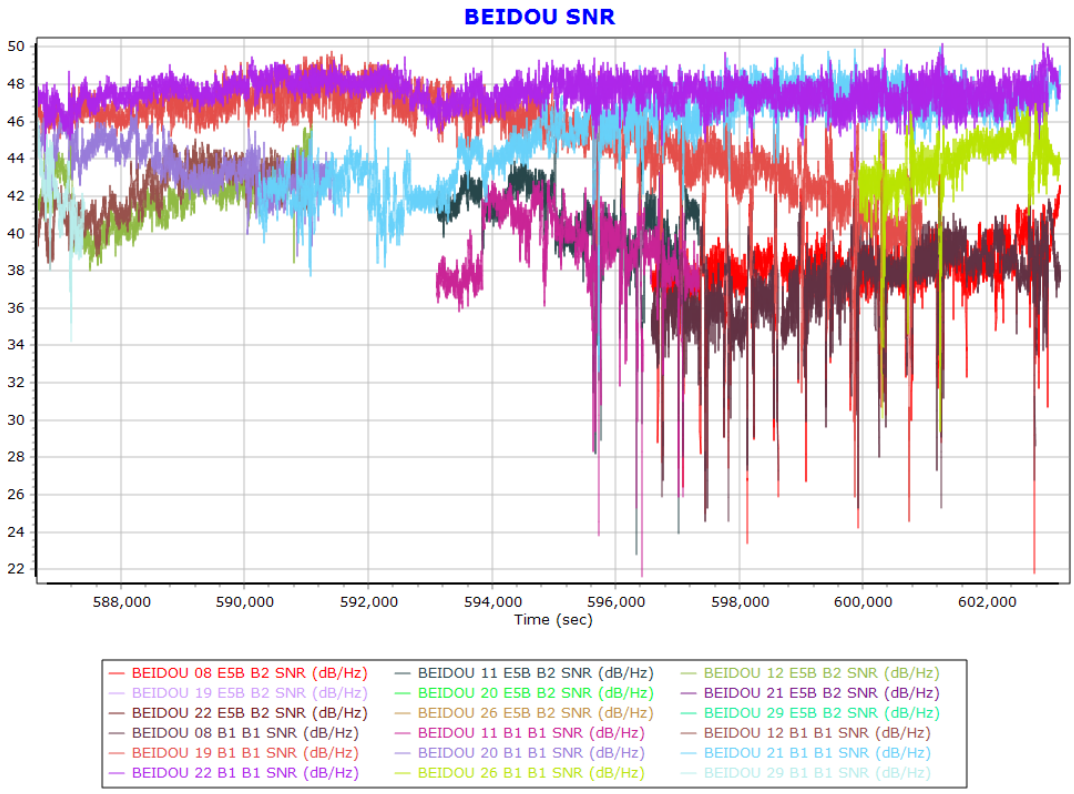
GLONASS L1 SNR



GLONASS L2 SNR

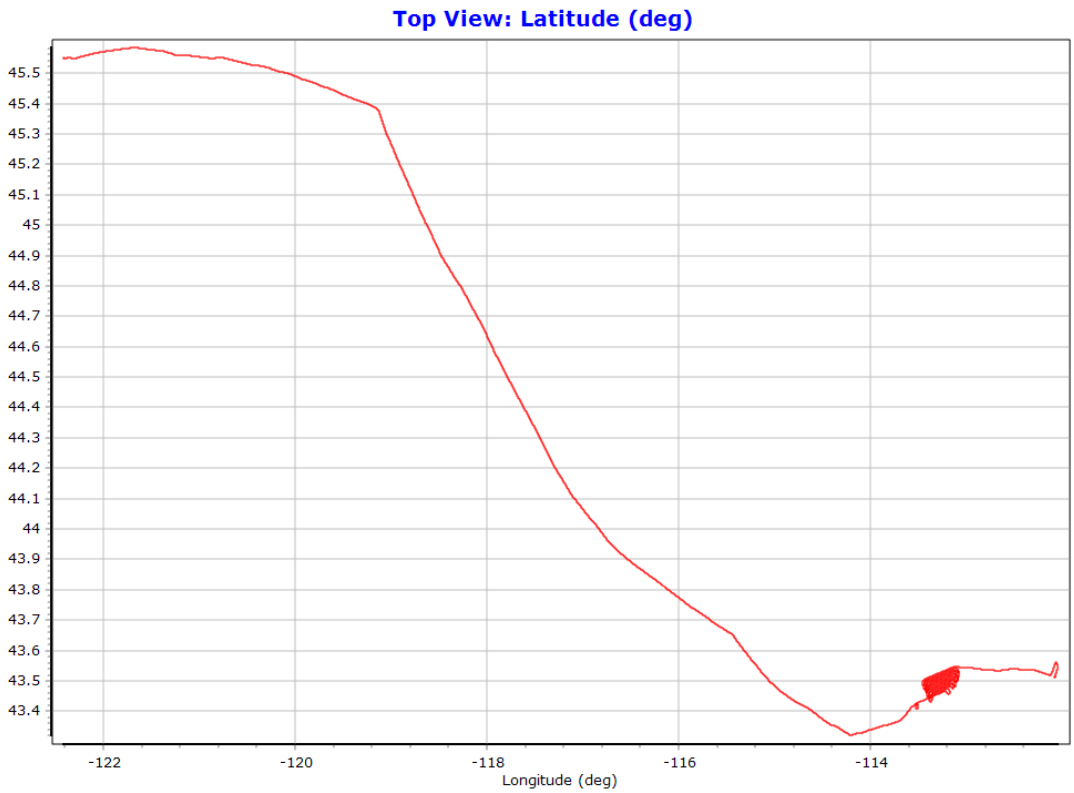


BEIDOU SNR

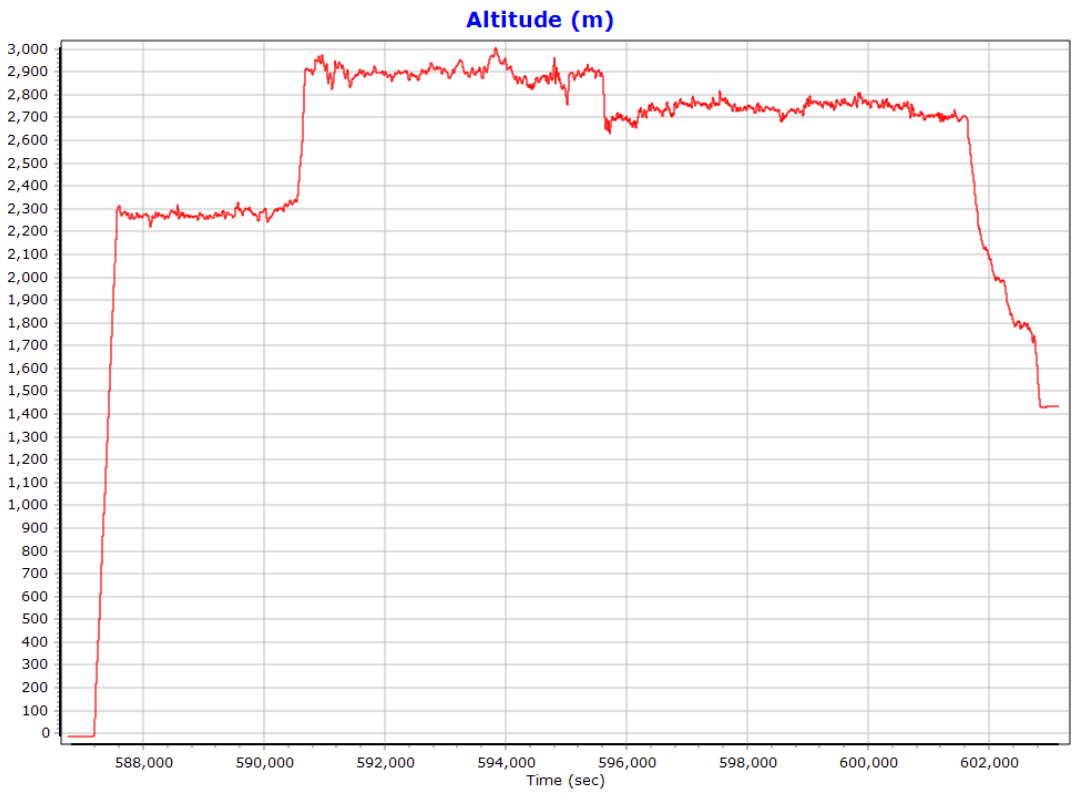

BEIDOU SNR
50
48
46
44
42
40
38
36
34
32
30
28
26
24
22
588,000
590,000
592,000
594,000
596,000
598,000
600,000
602,000
Time (sec)
BEIDOU 08 E5B B2 SNR (dB/Hz)
BEIDOU 11 E5B B2 SNR (dB/Hz)
BEIDOU 12 E5B B2 SNR (dB/Hz)
BEIDOU 19 E5B B2 SNR (dB/Hz)
BEIDOU 20 E5B B2 SNR (dB/Hz)
BEIDOU 21 E5B B2 SNR (dB/Hz)
BEIDOU 22 E5B B2 SNR (dB/Hz)
BEIDOU 26 E5B B2 SNR (dB/Hz)
BEIDOU 29 E5B B2 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 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 26 B1 B1 SNR (dB/Hz)
BEIDOU 29 B1 B1 SNR (dB/Hz)

Trajectory Information

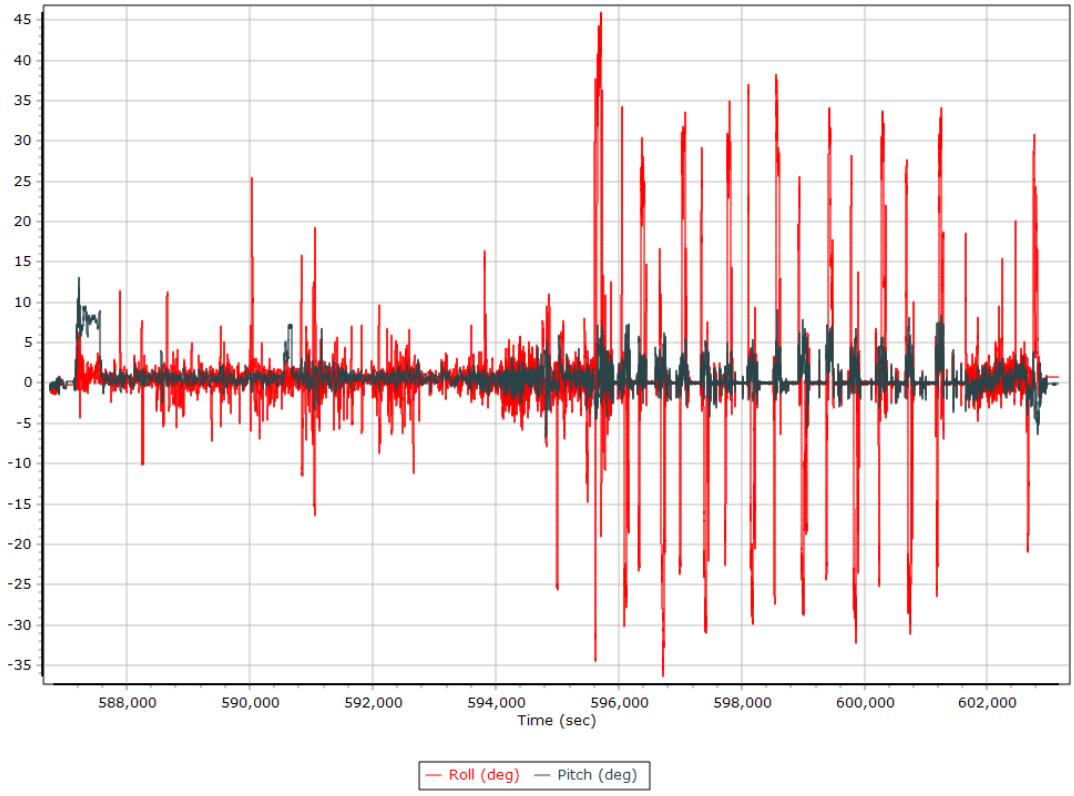
Top View



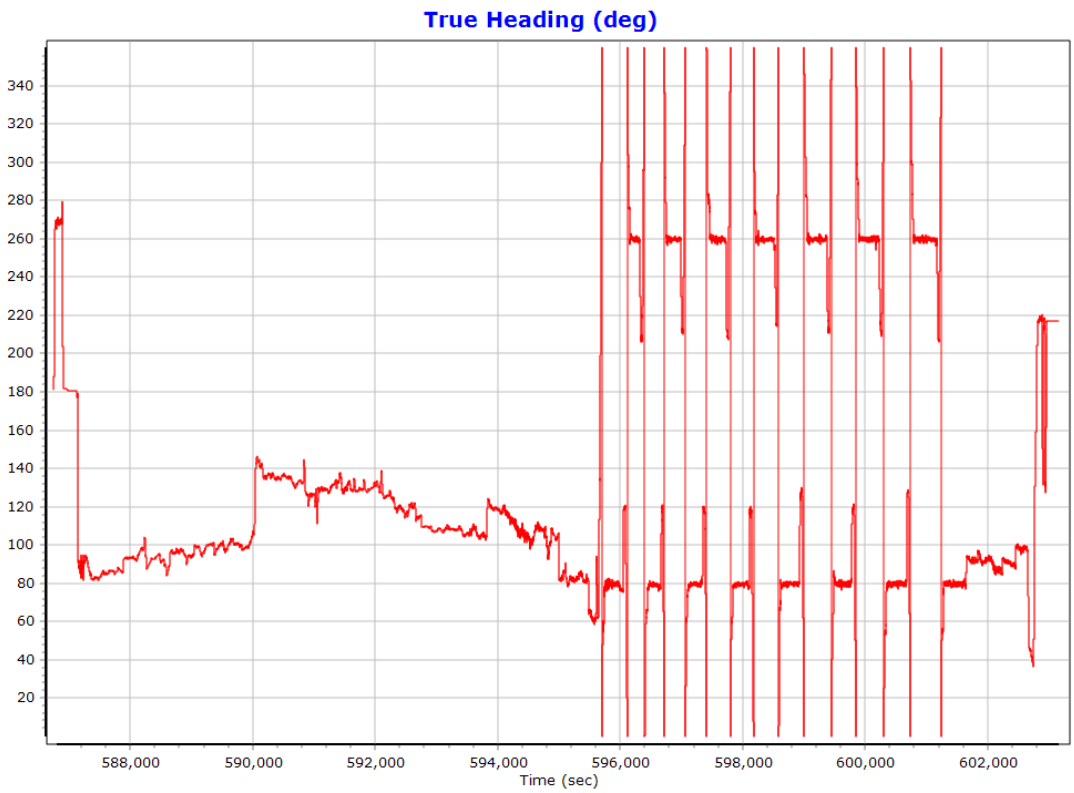
Altitude



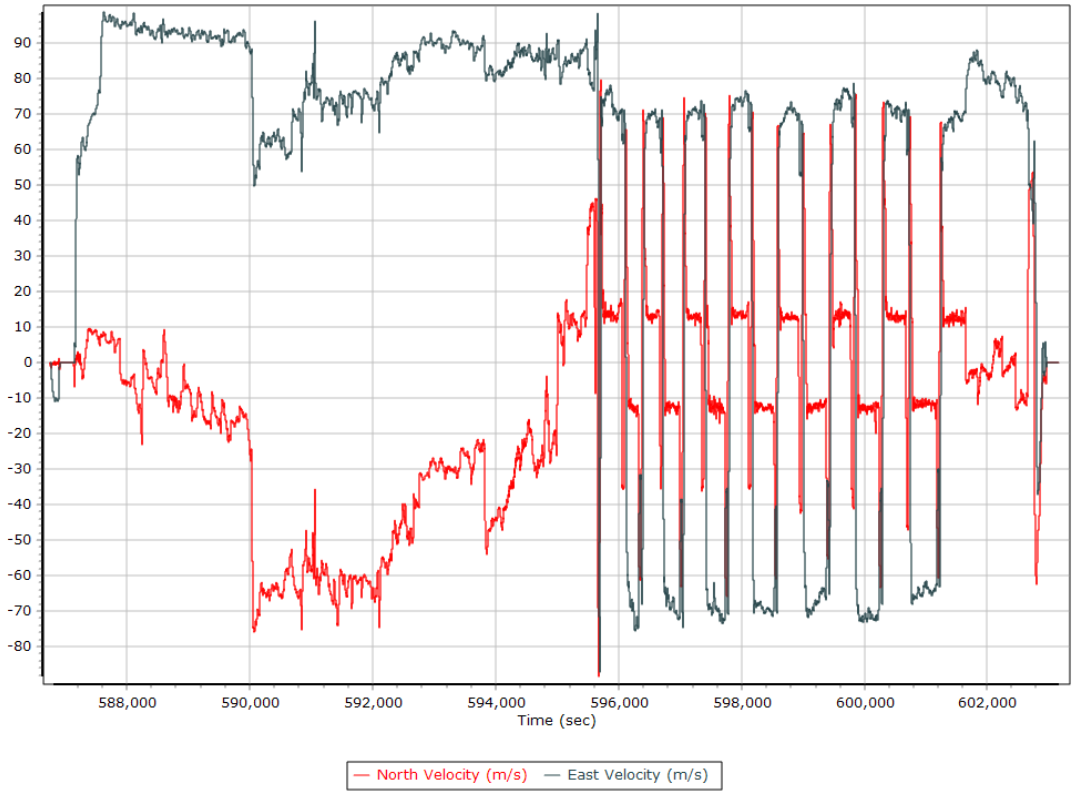
Roll/Pitch



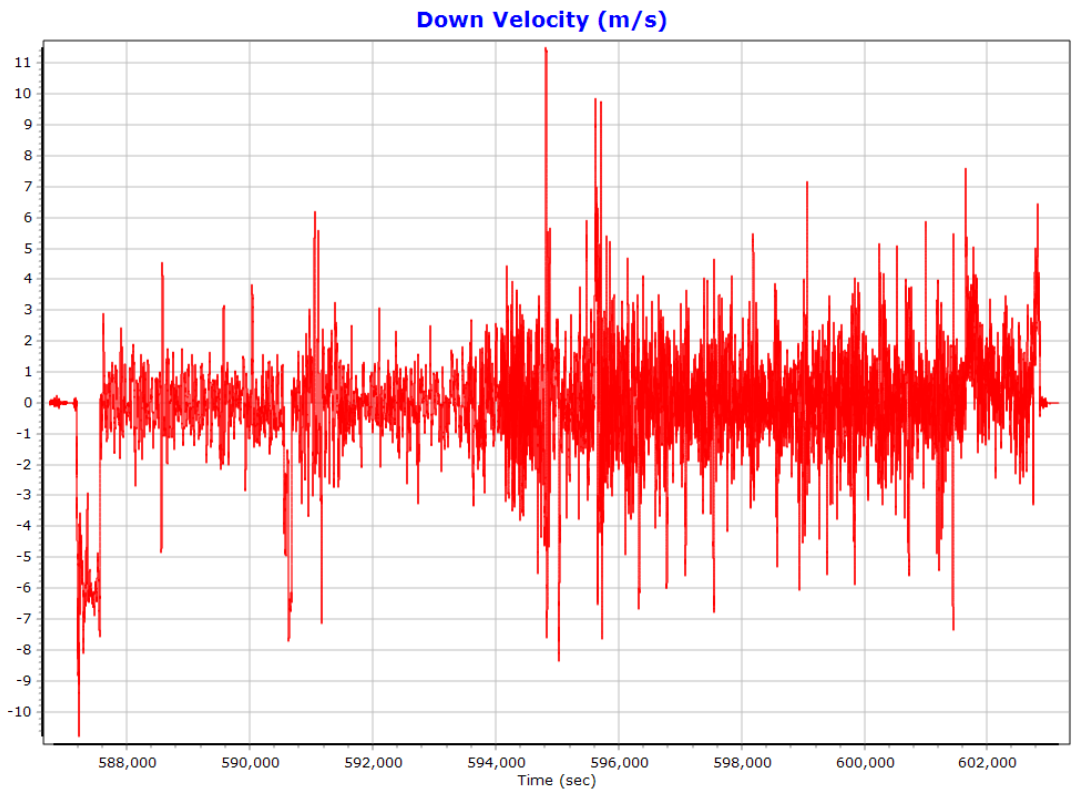
Heading



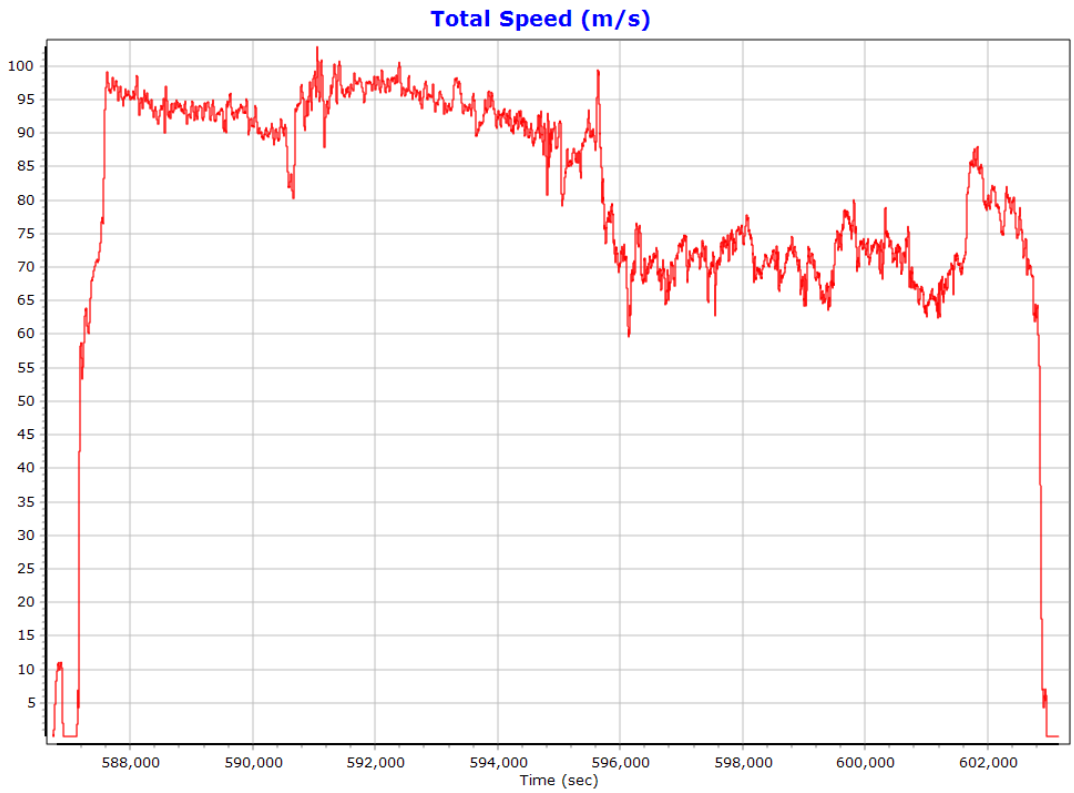
North/East Velocity



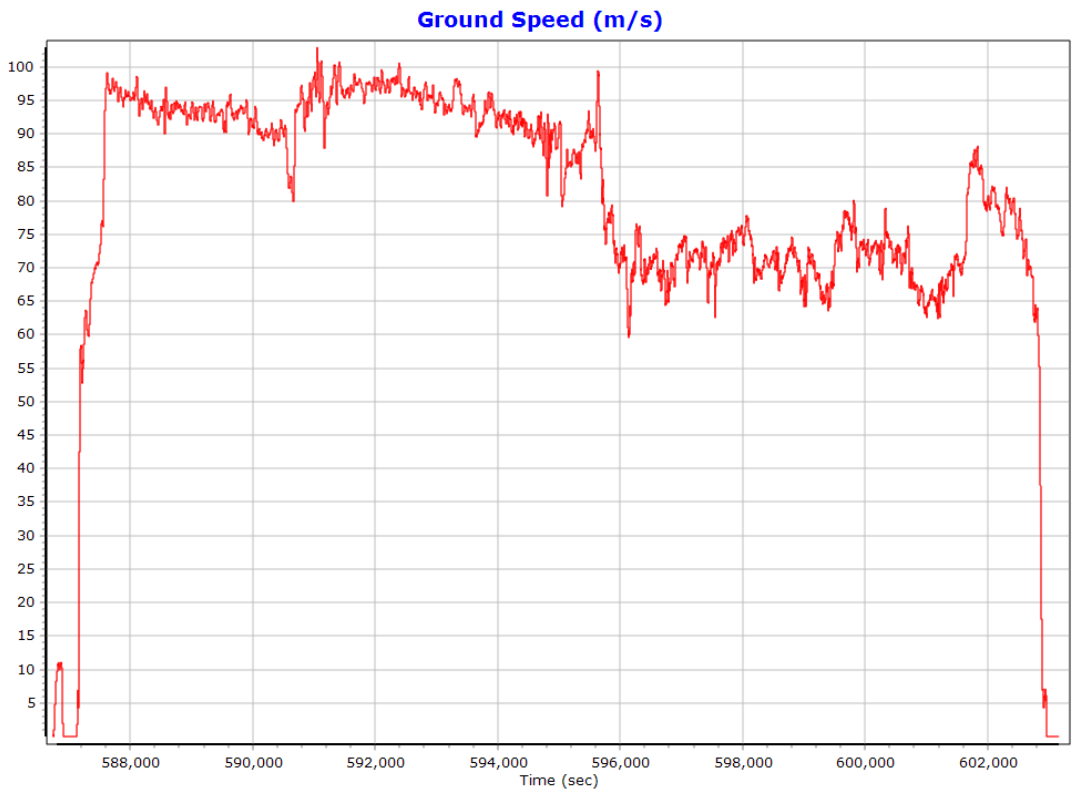
Down Velocity



Total Speed

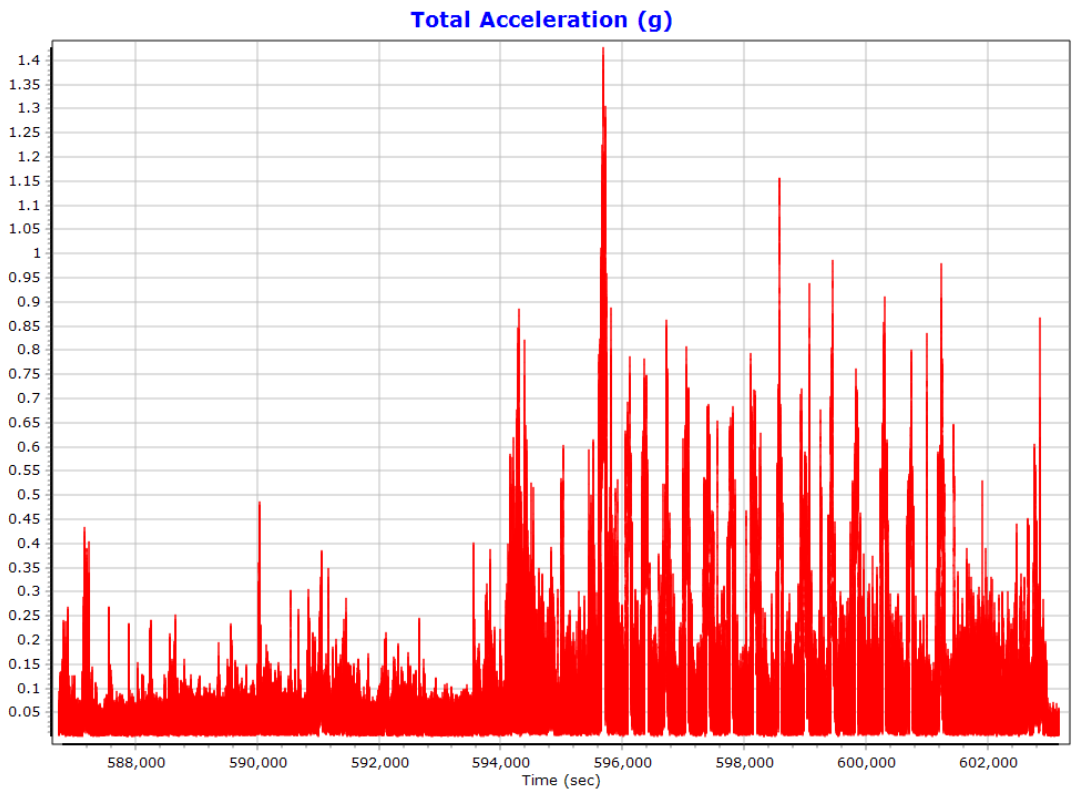


Ground Speed

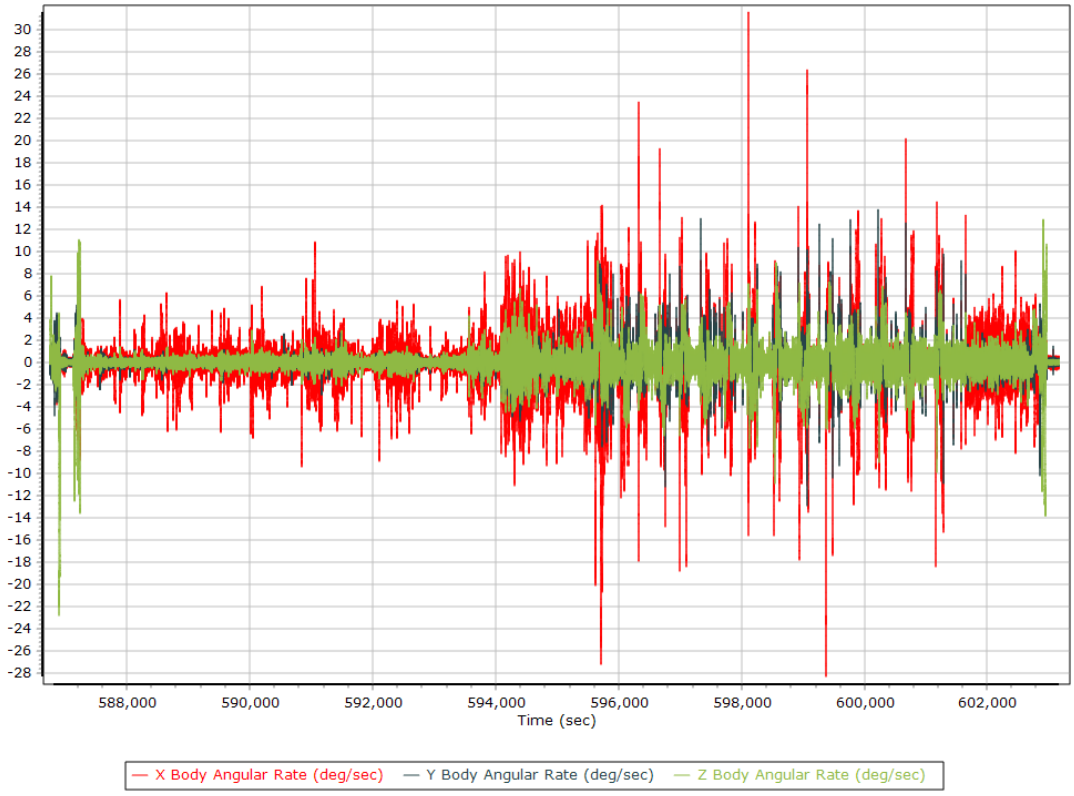


Body Acceleration

Total Body Acceleration



Body Angular Rate



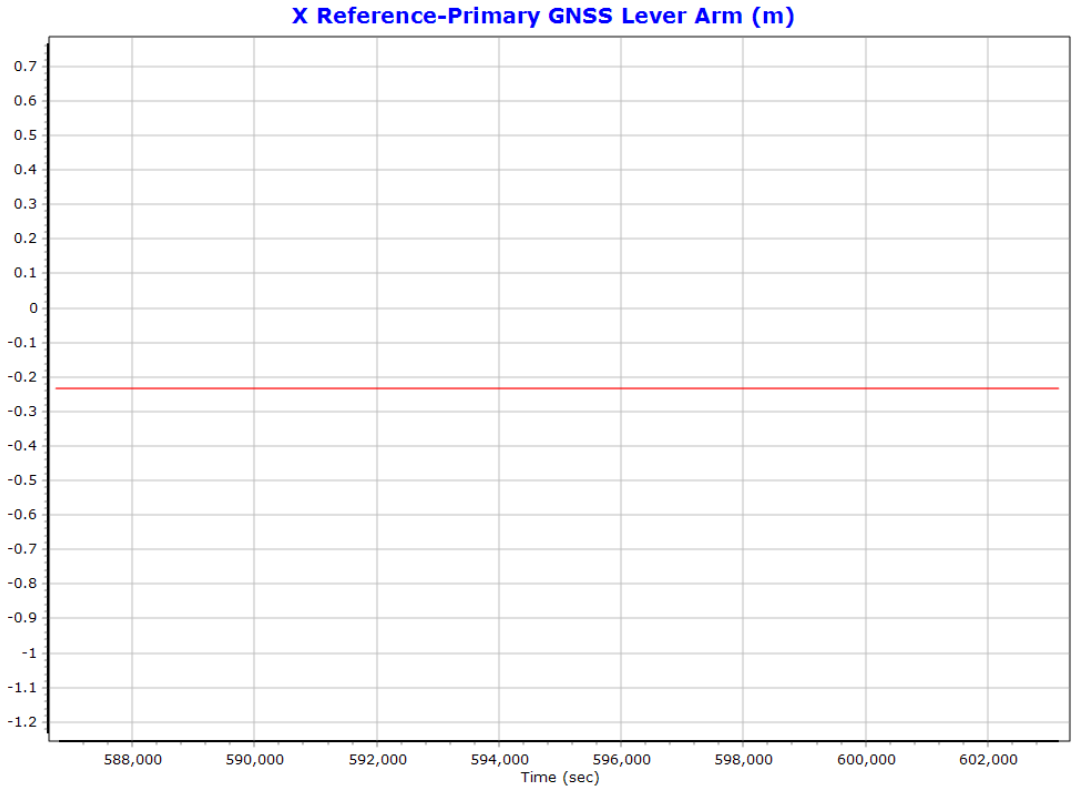
GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion Trimble RTX Nav		
Stabilized mount	True		
Processing start time	586422.000 (11/16/2019 18:53:42)		
Processing end time	603166.000 (11/16/2019 23:32:46)		
Initial attitude source	Real-Time VNAV/RNAV Attitude		
IMU Sensor Context	Processing with Onboard IMU		
Gimbal to IMU lever arm [m]	0.000	0.000	0.000
Gimbal to IMU mounting angles [deg]	0.000	0.000	0.000
Gimbal to Primary GNSS lever arm [m]	-0.233	-0.013	-0.922
Gimbal 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

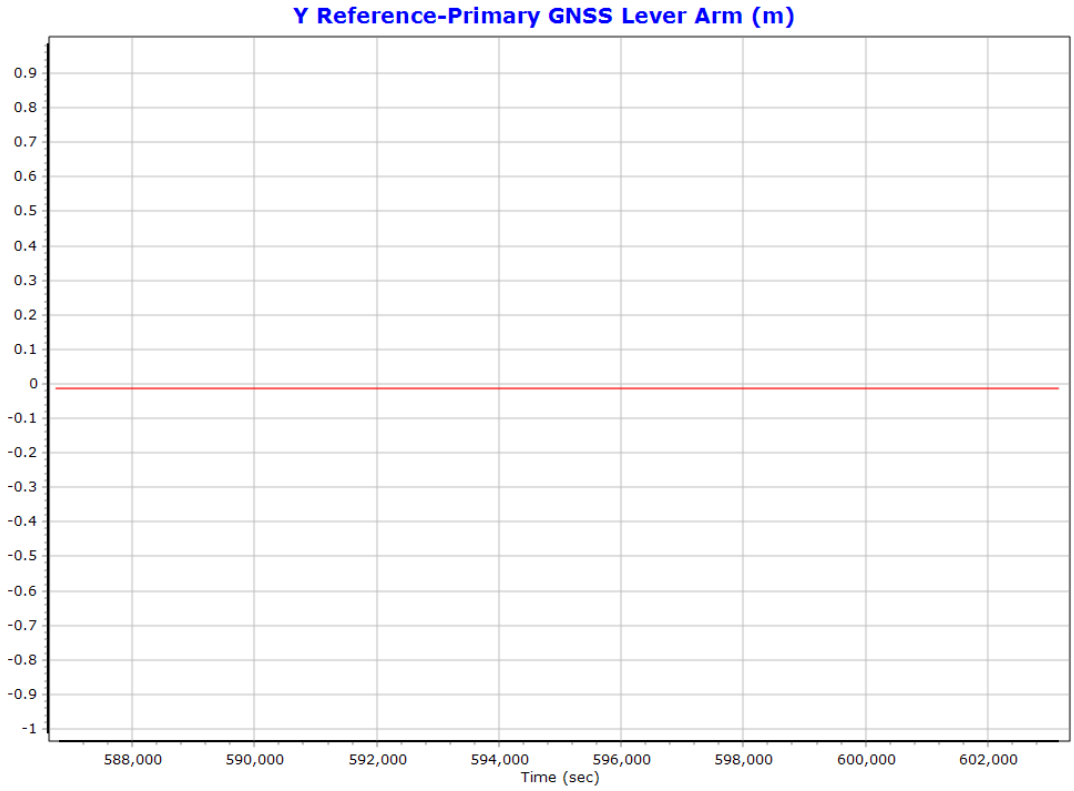
Calibrated Installation Parameters

Reference-Primary GNSS Lever Arm

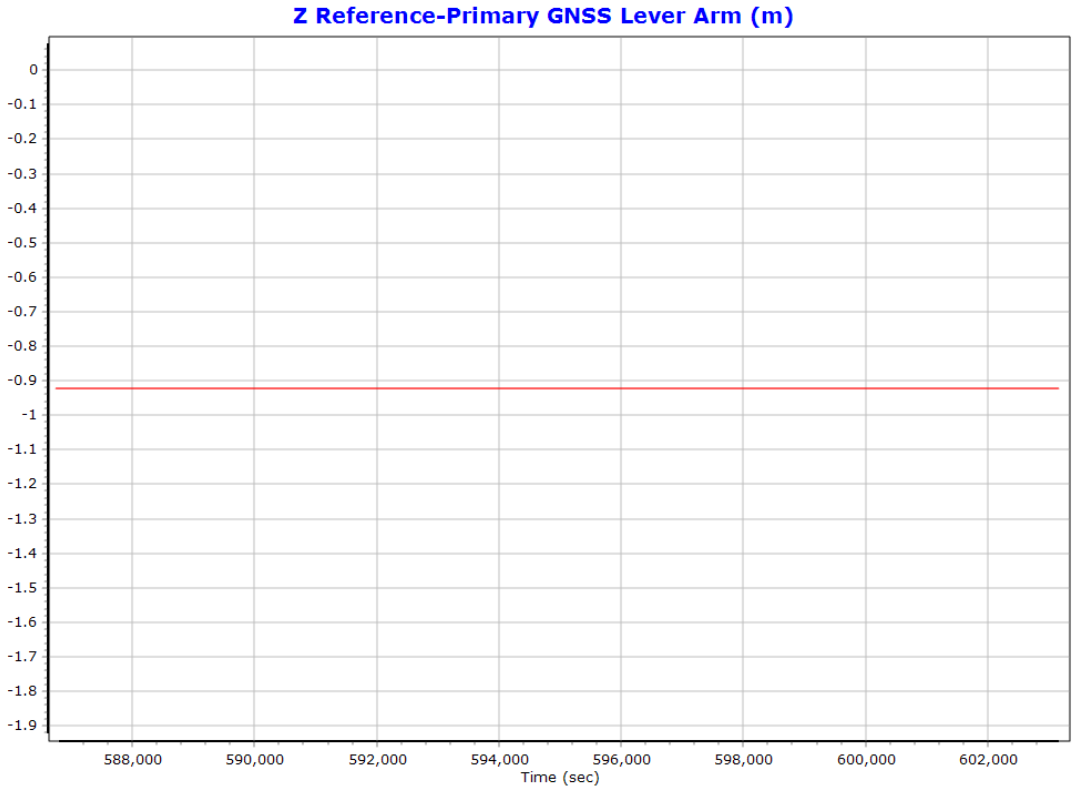
X Reference-Primary GNSS Lever Arm (m)



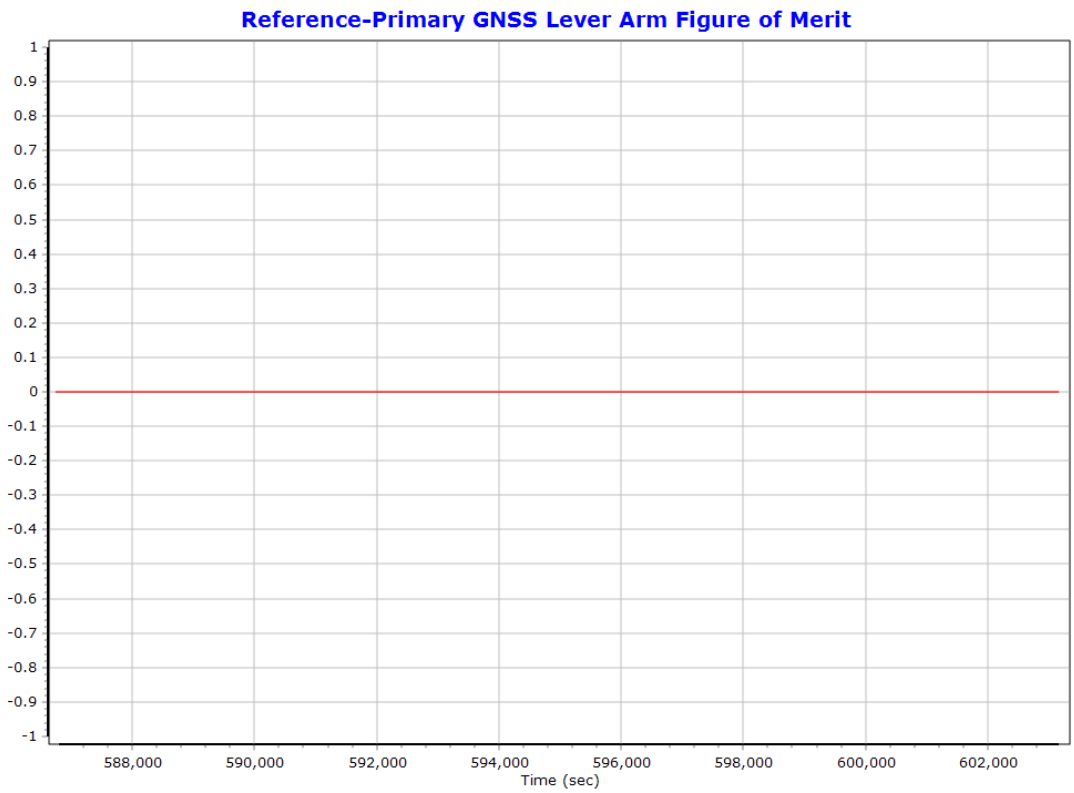
Y Reference-Primary GNSS Lever Arm (m)



Z Reference-Primary GNSS Lever Arm (m)



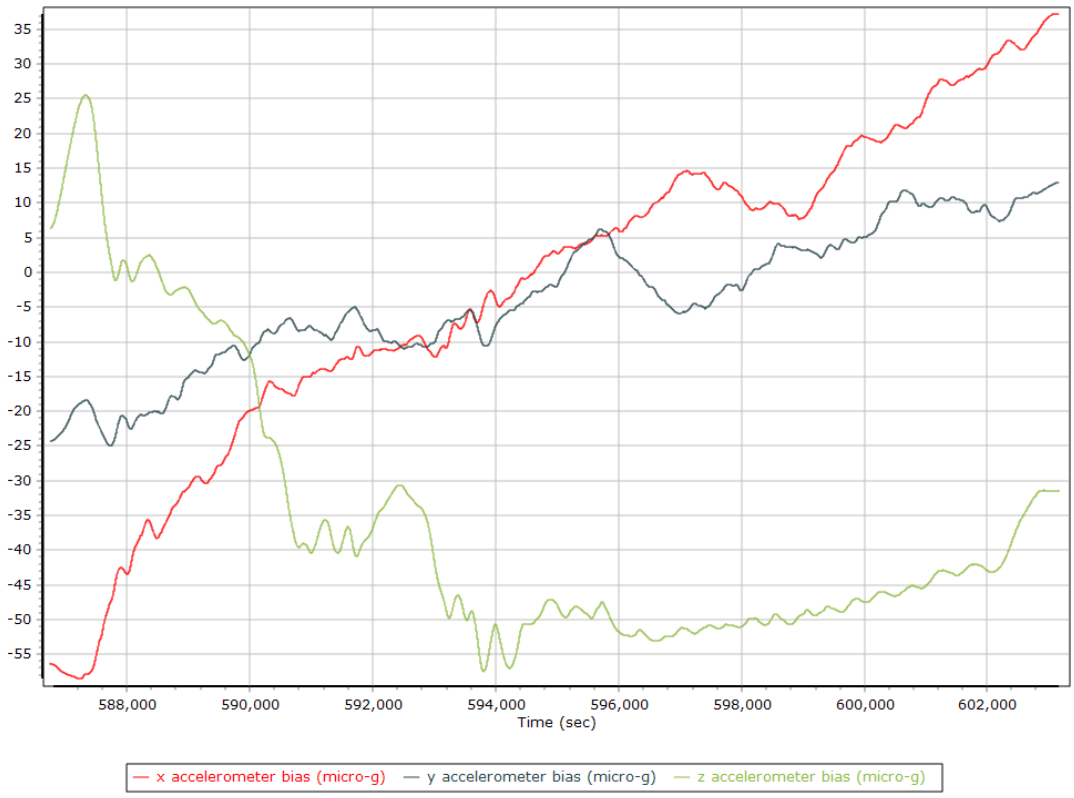
Reference-Primary GNSS Lever Arm Figure of Merit



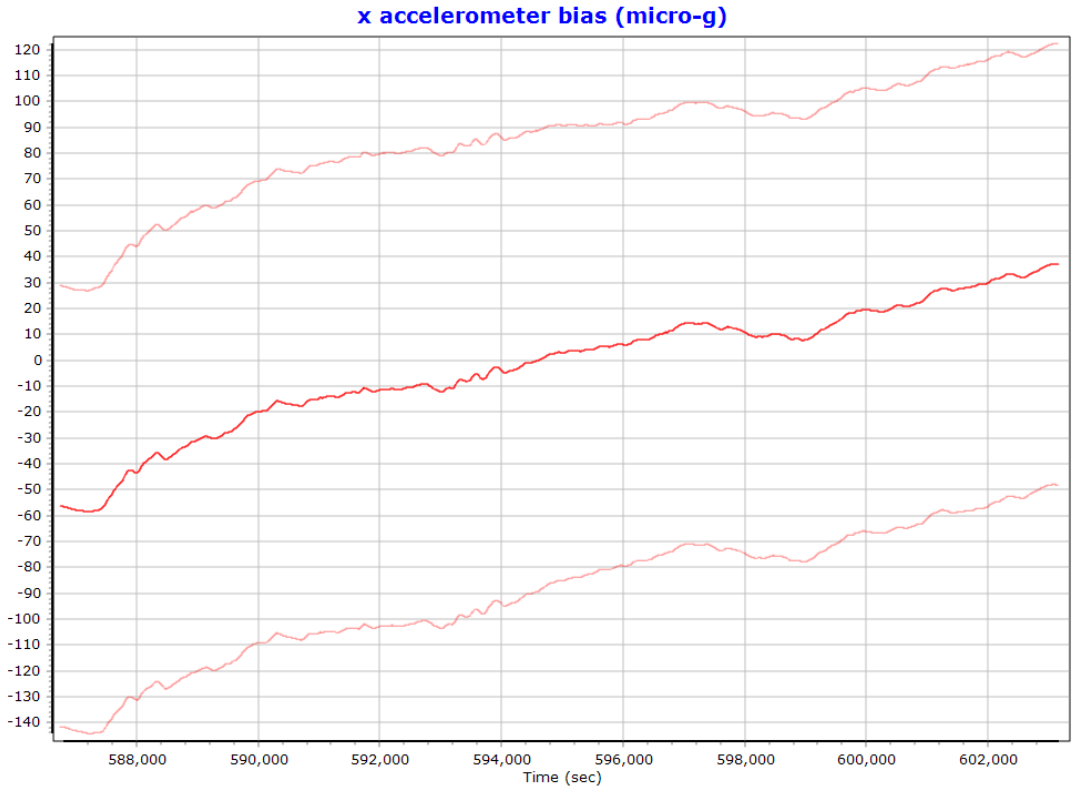
Smoothed IN-Fusion QC

Smoothed Estimated Errors, Reference Frame

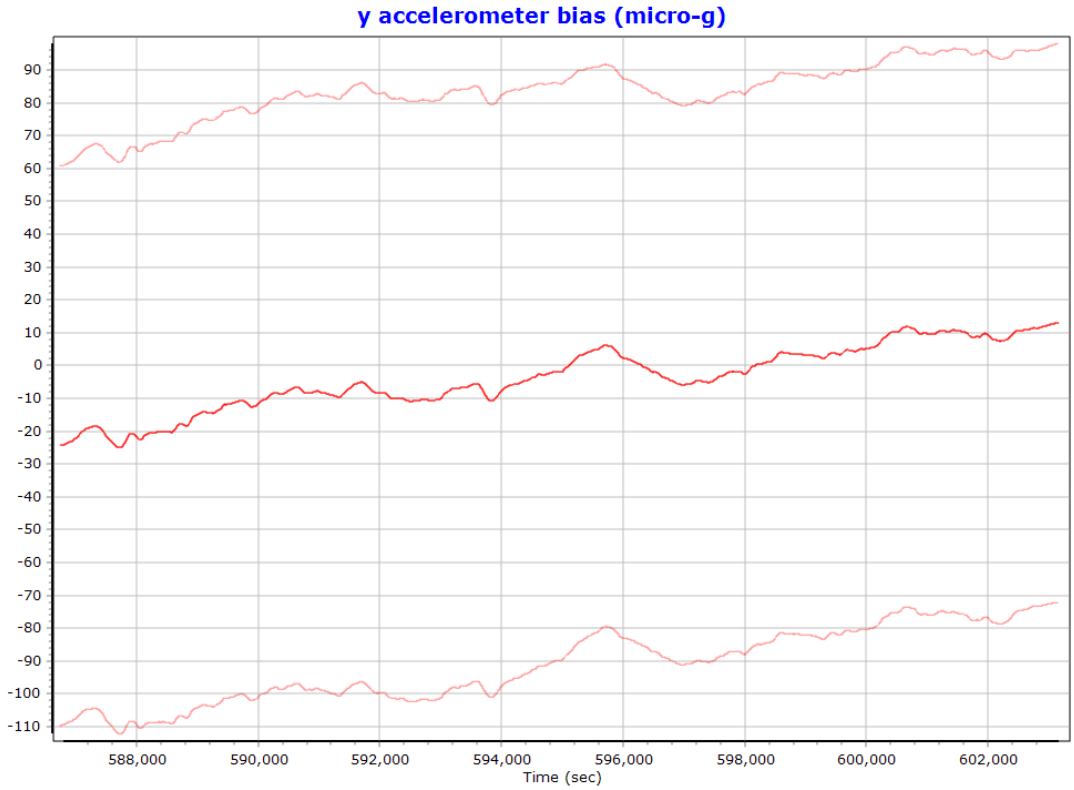
Accelerometer Bias (micro-g)



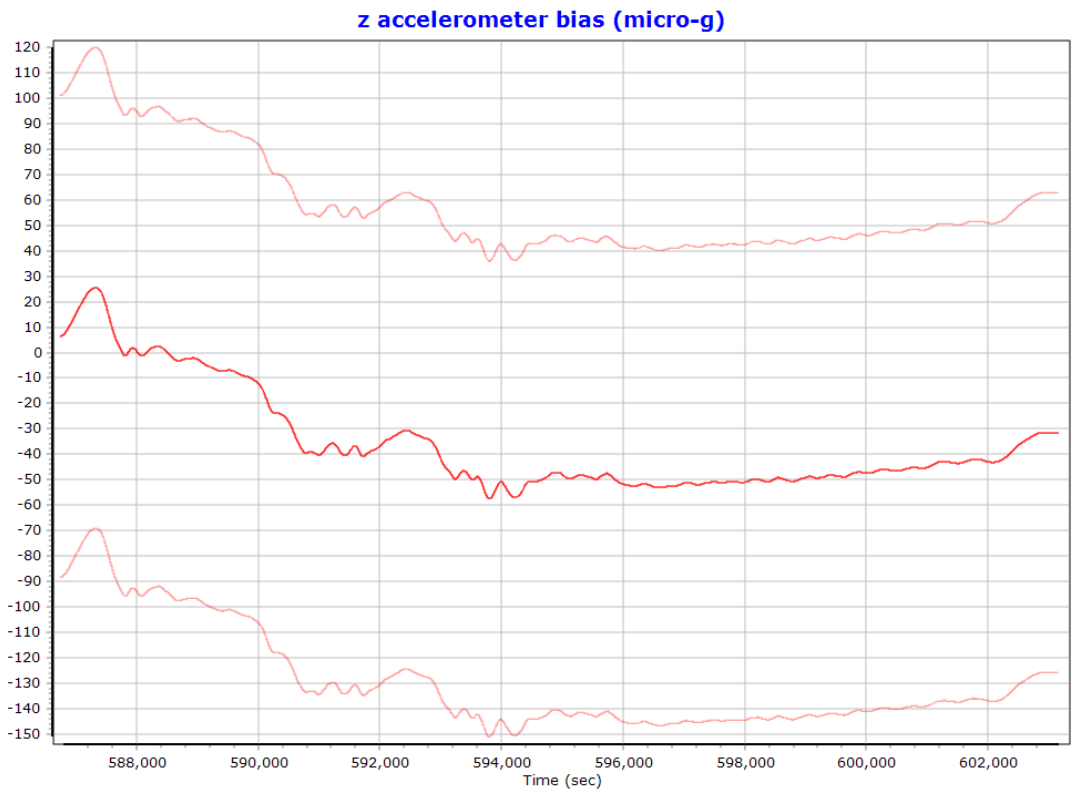
X Accelerometer Bias (micro-g)



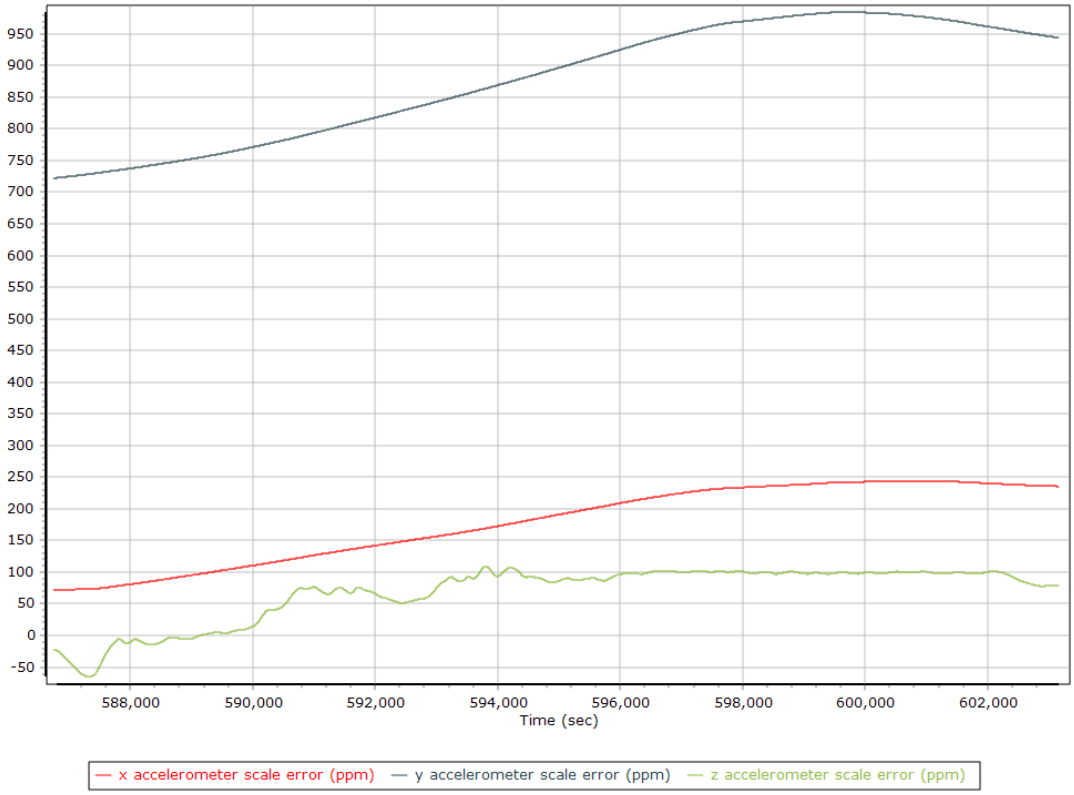
Y Accelerometer Bias (micro-g)



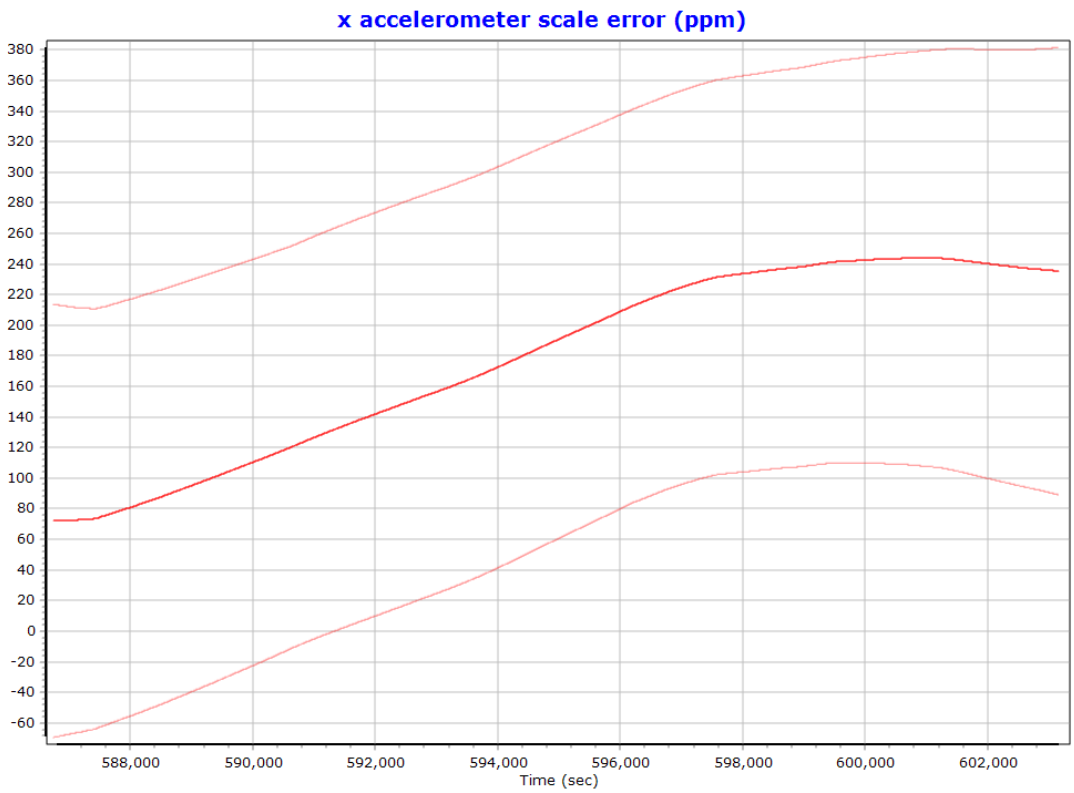
Z Accelerometer Bias (micro-g)



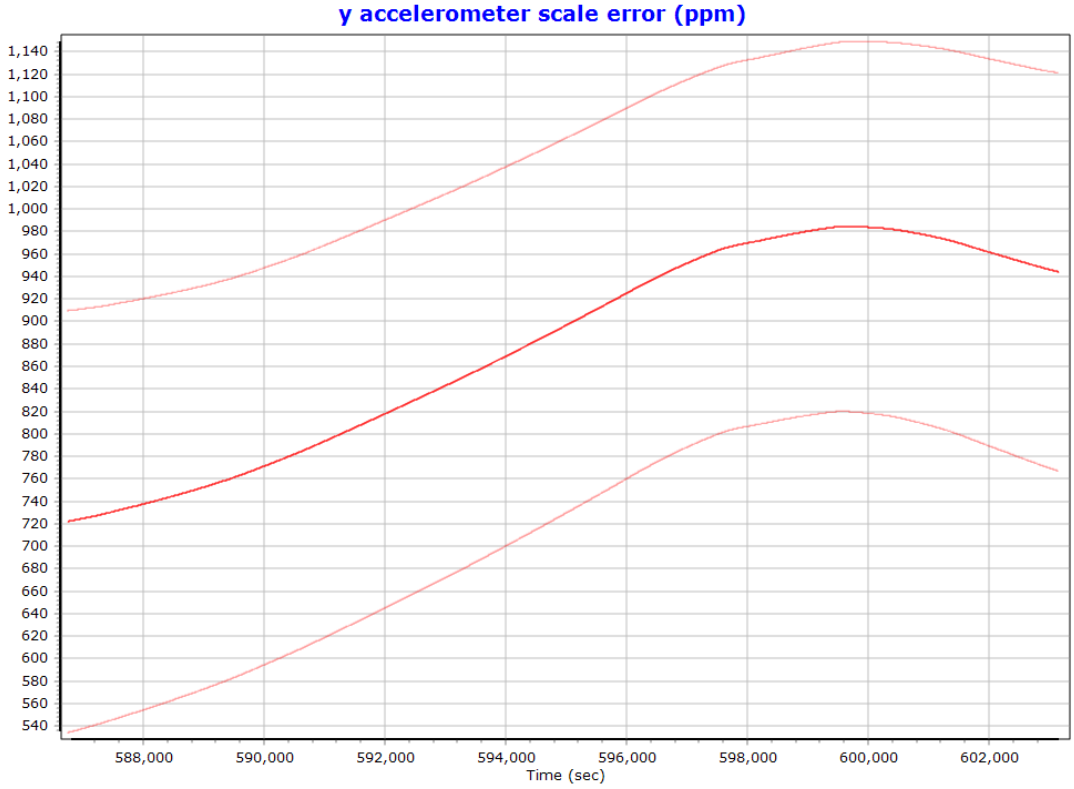
Accelerometer Scale Error (ppm)



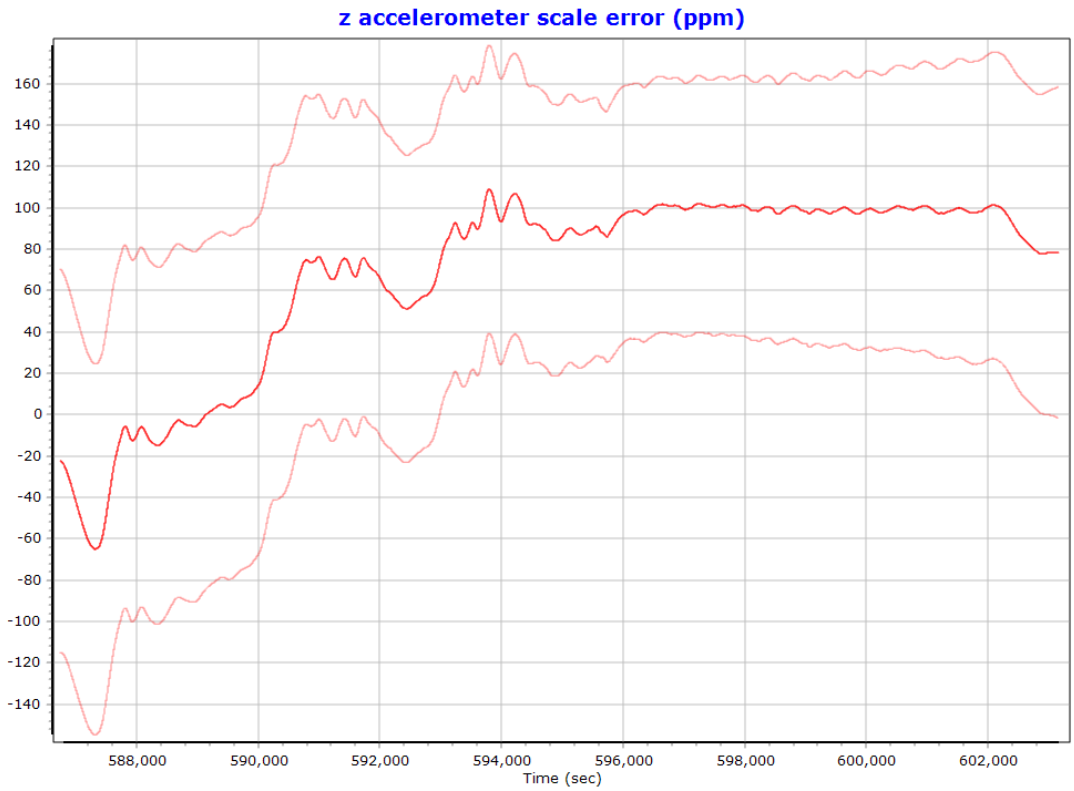
X Accelerometer Scale Error (ppm)



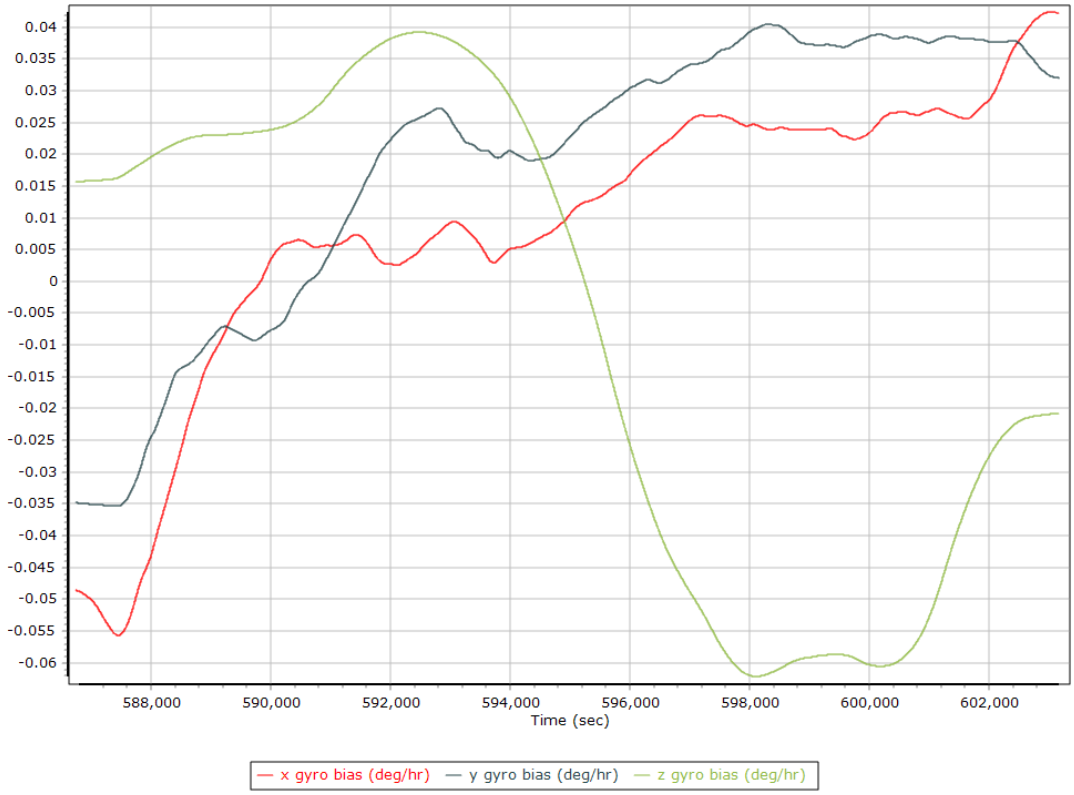
Y Accelerometer Scale Error (ppm)



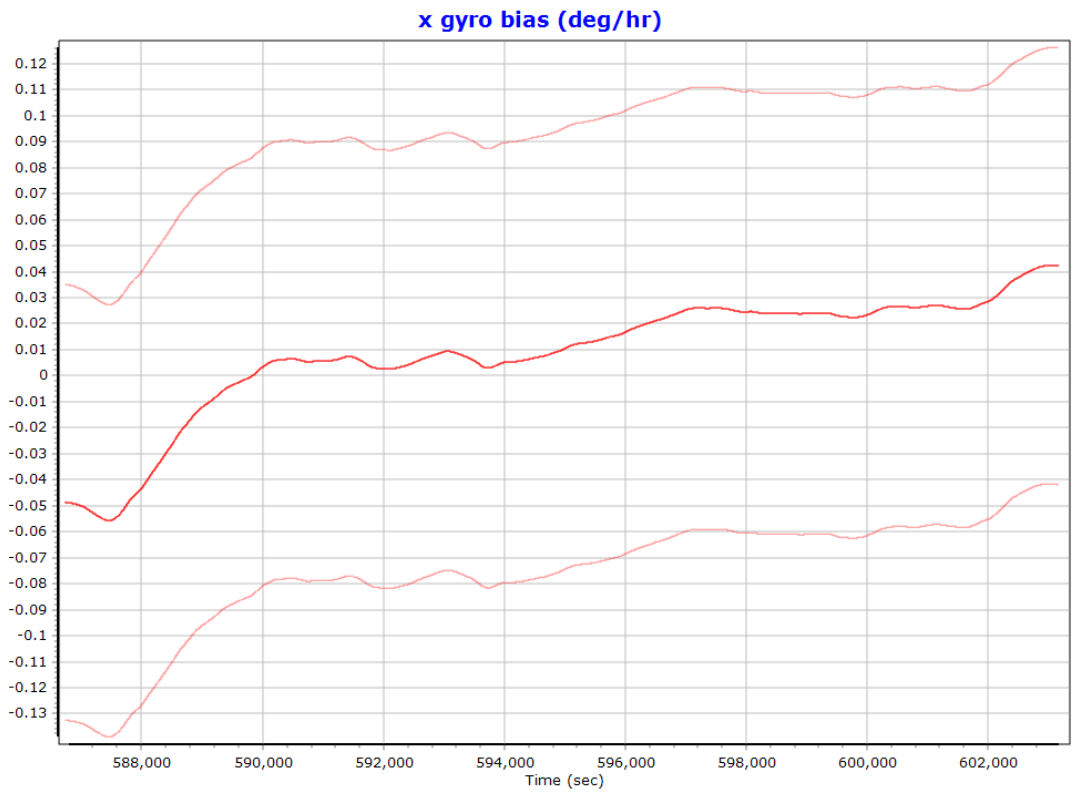
Z Accelerometer Scale Error (ppm)



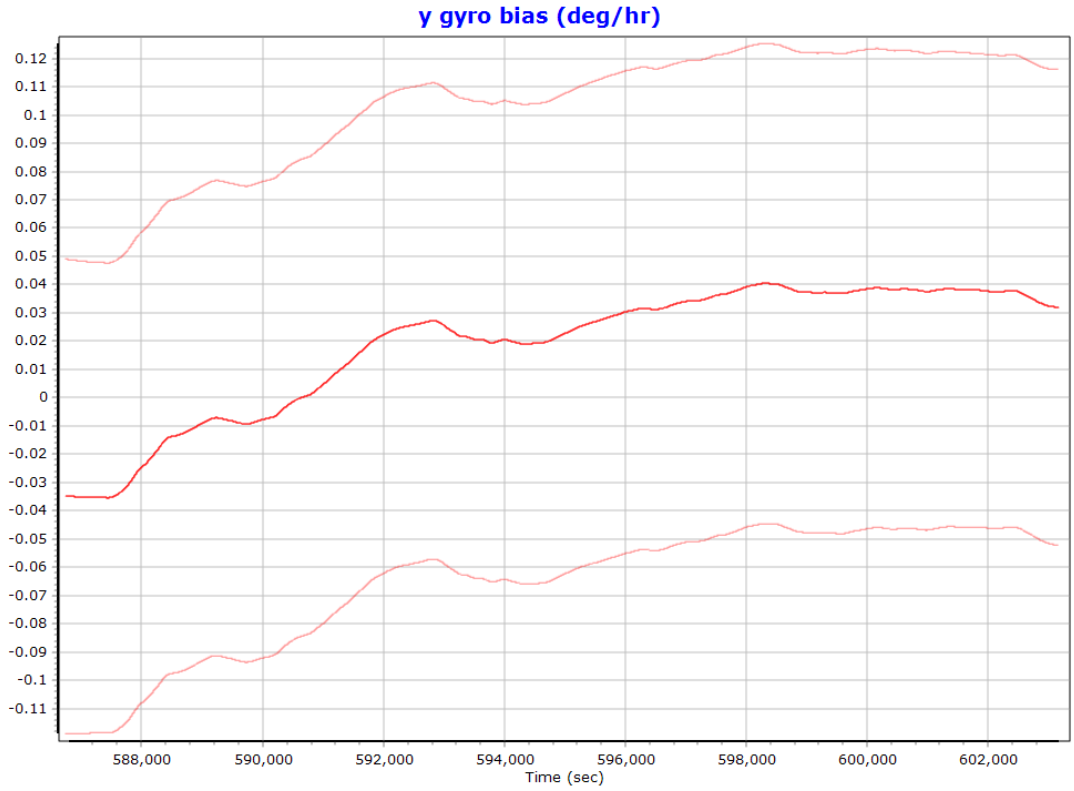
Gyro Bias (deg/h)



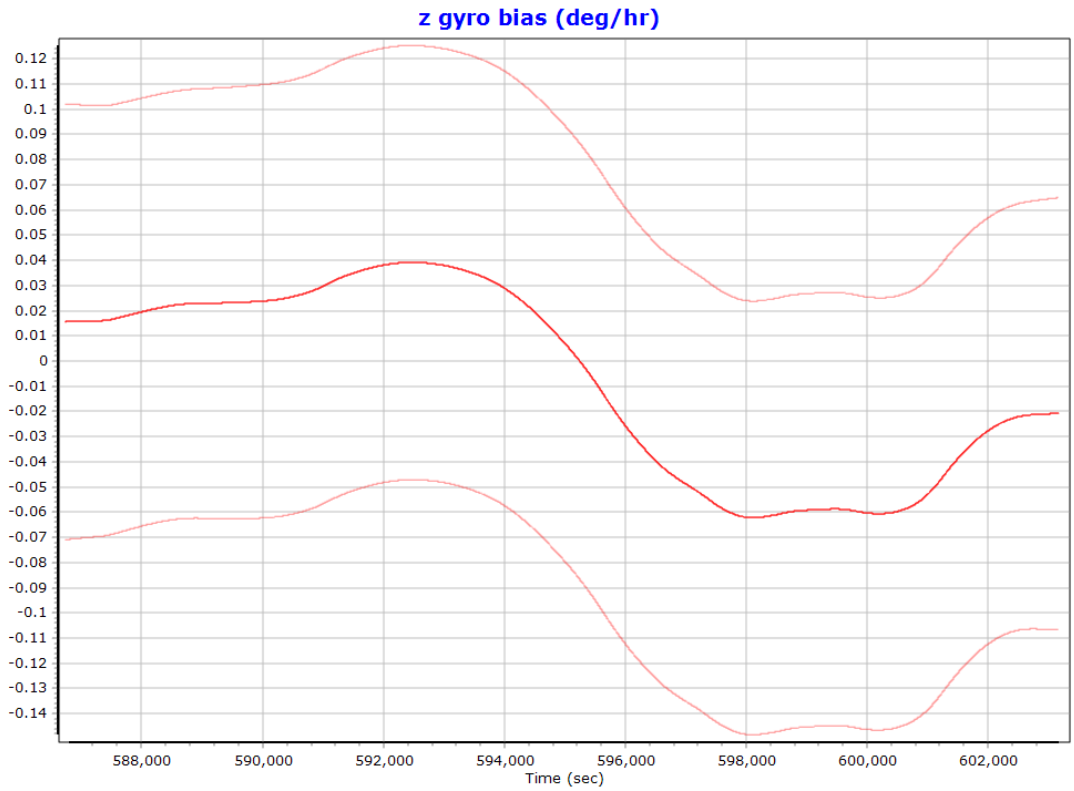
X Gyro Bias (deg/h)



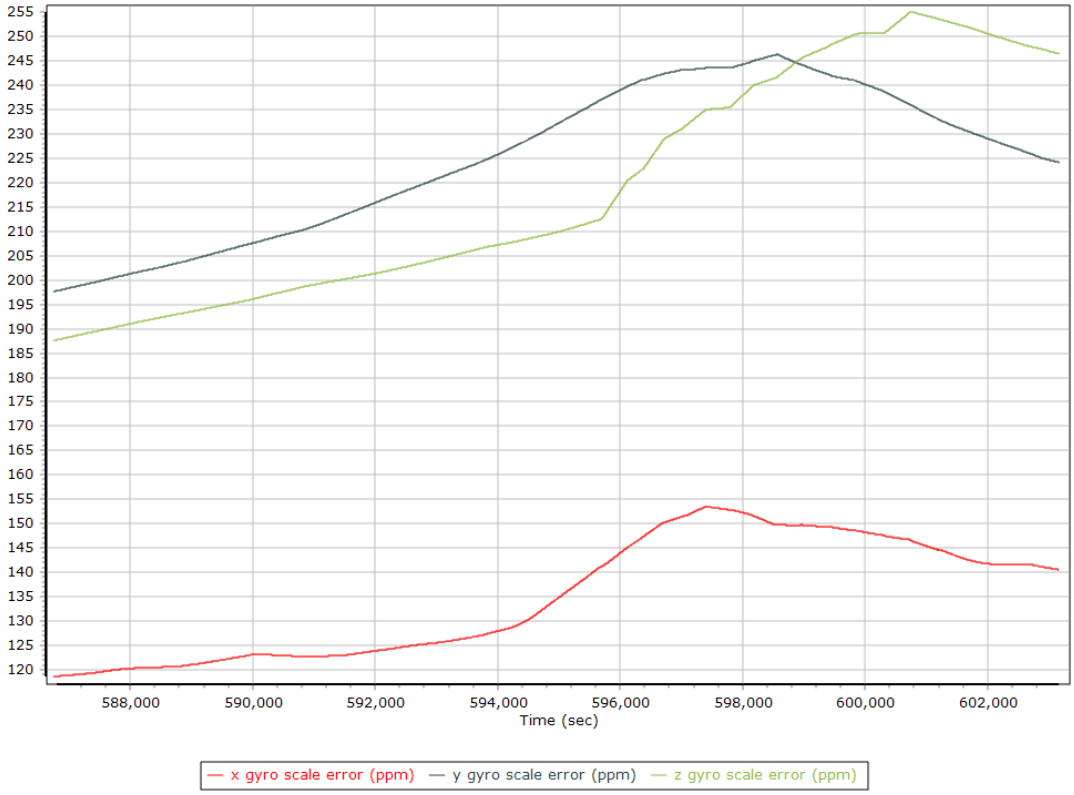
Y Gyro Bias (deg/h)



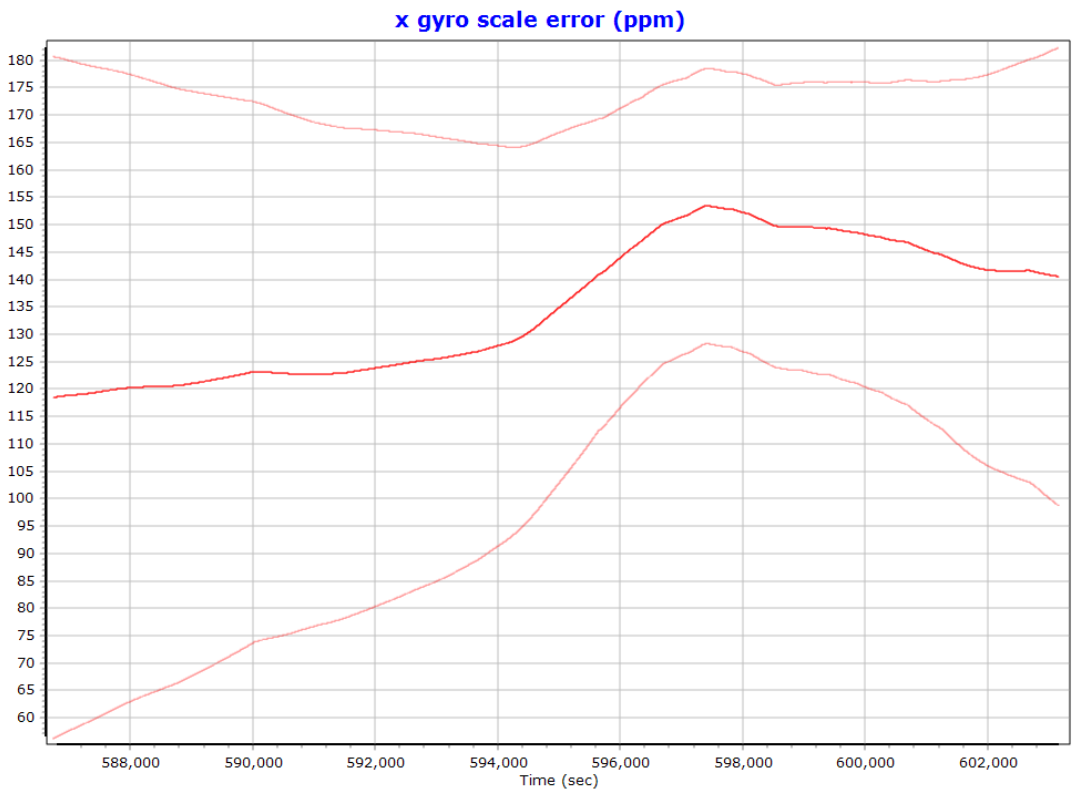
Z Gyro Bias (deg/h)



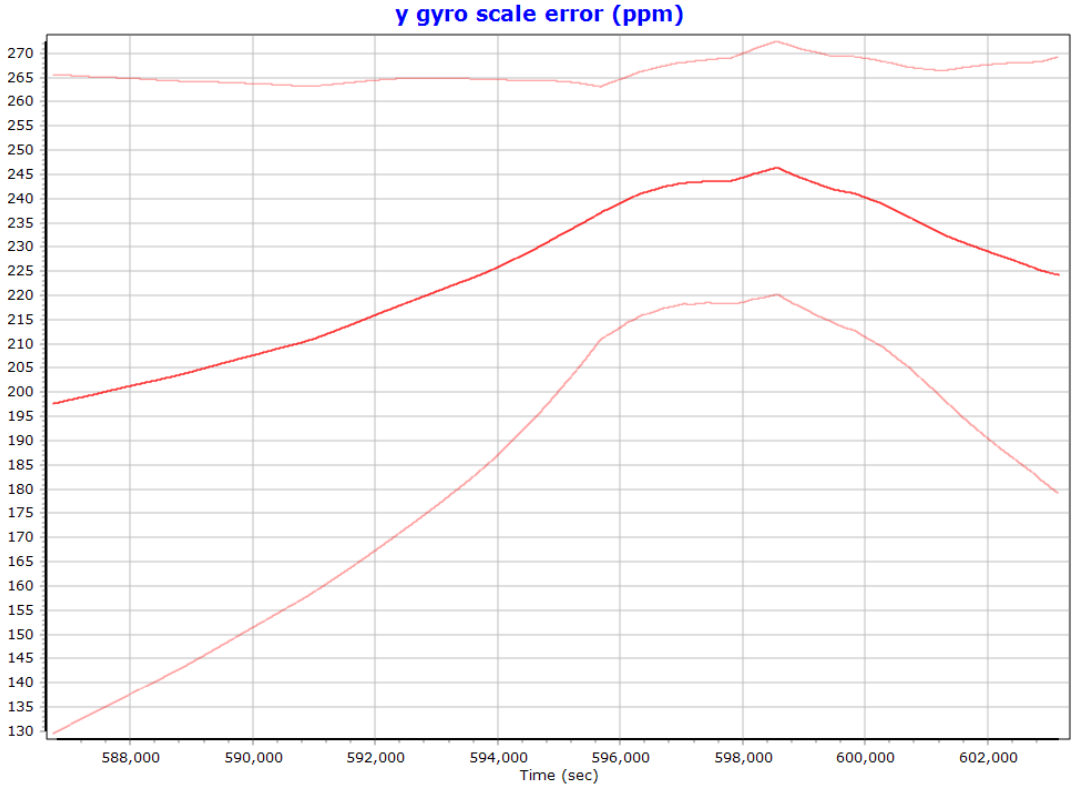
Gyro Scale Error (ppm)



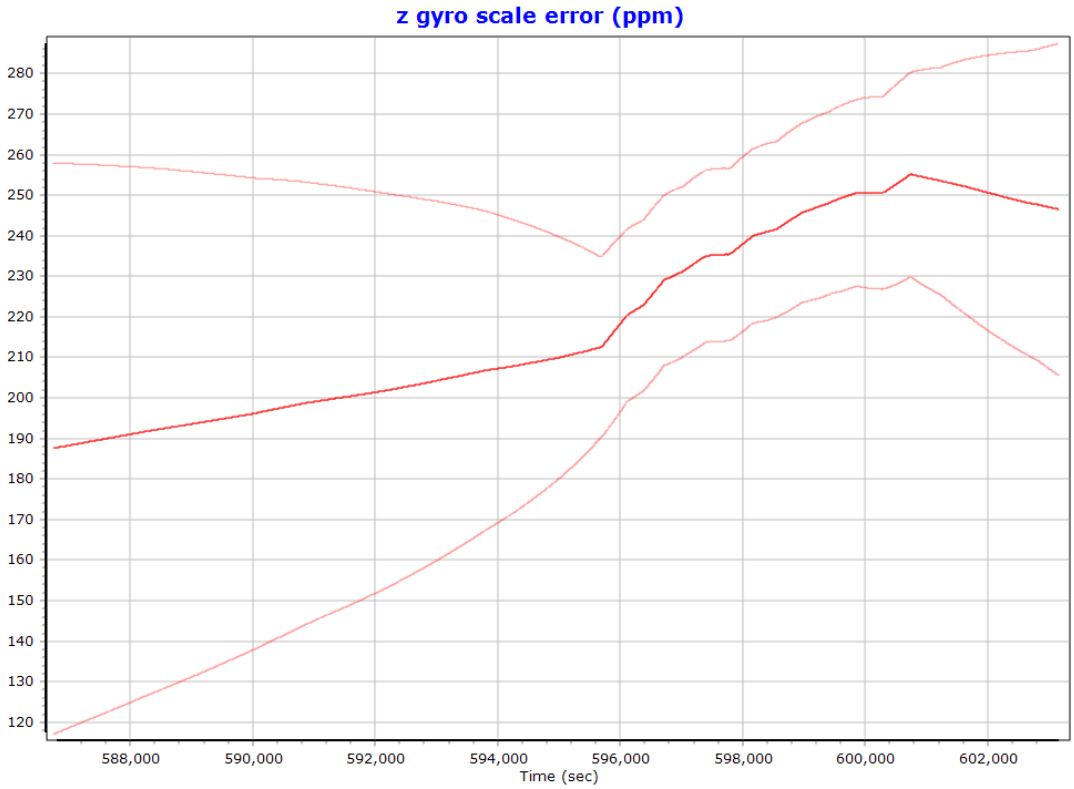
X Gyro Scale Error (ppm)



Y Gyro Scale Error (ppm)

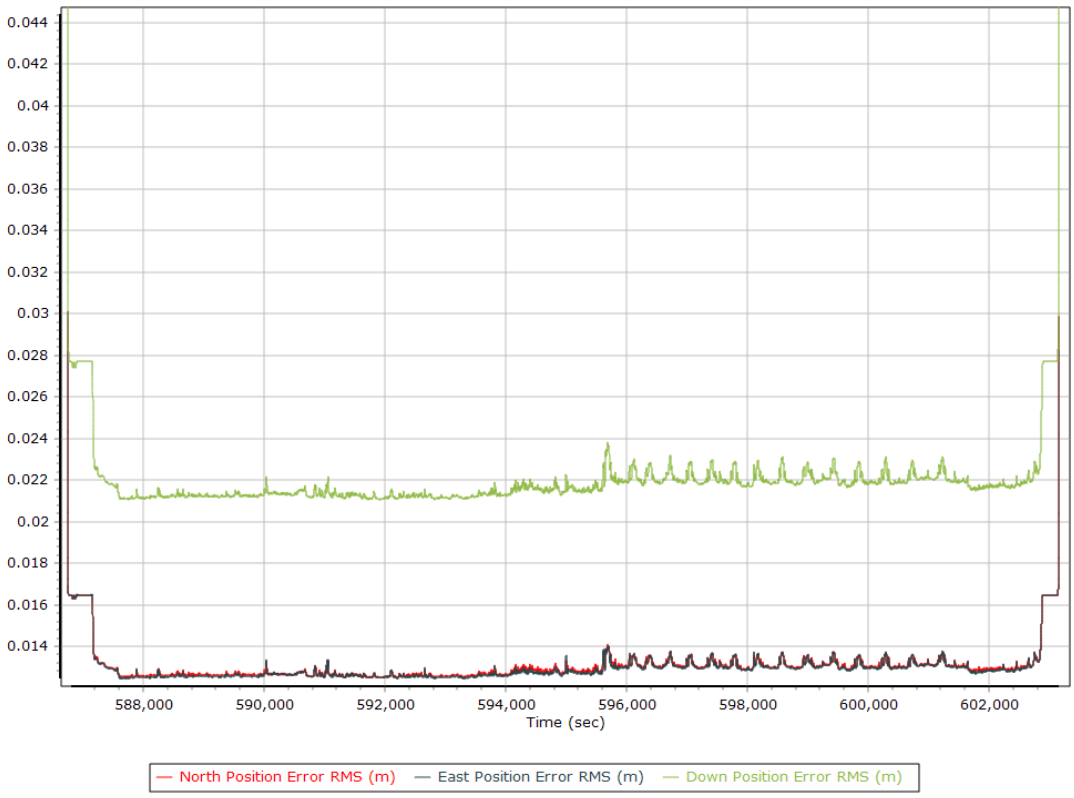


Z Gyro Scale Error (ppm)

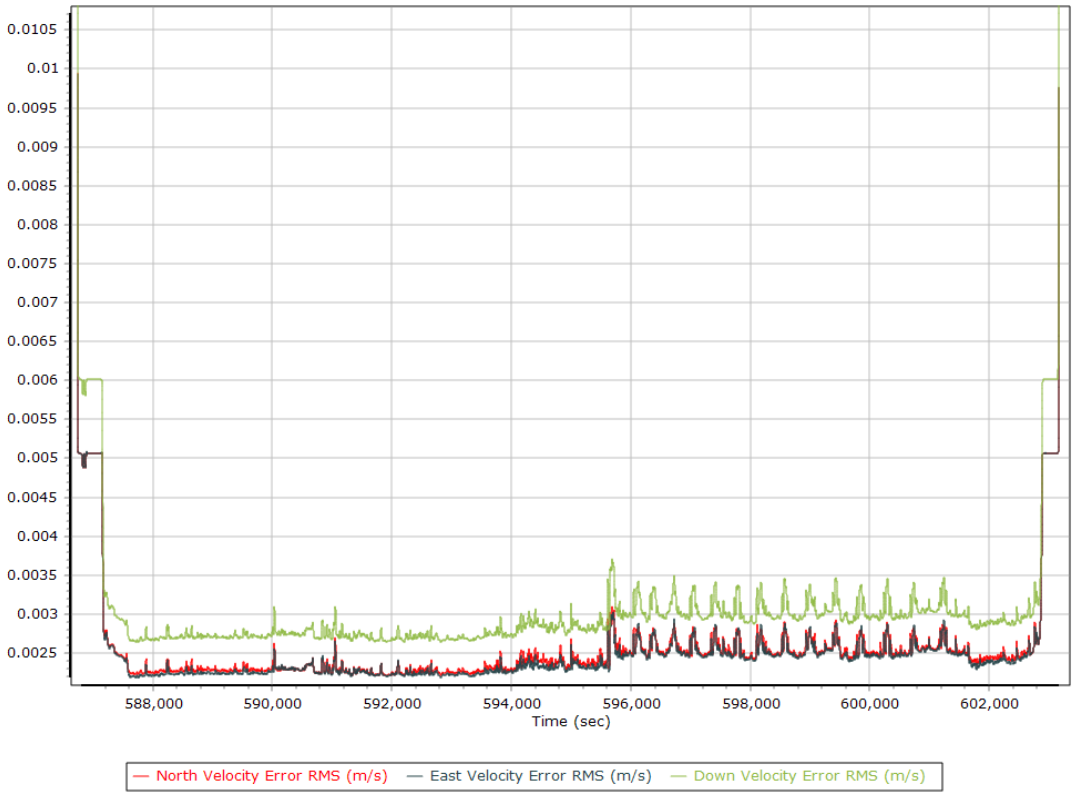


Smoothed Performance Metrics

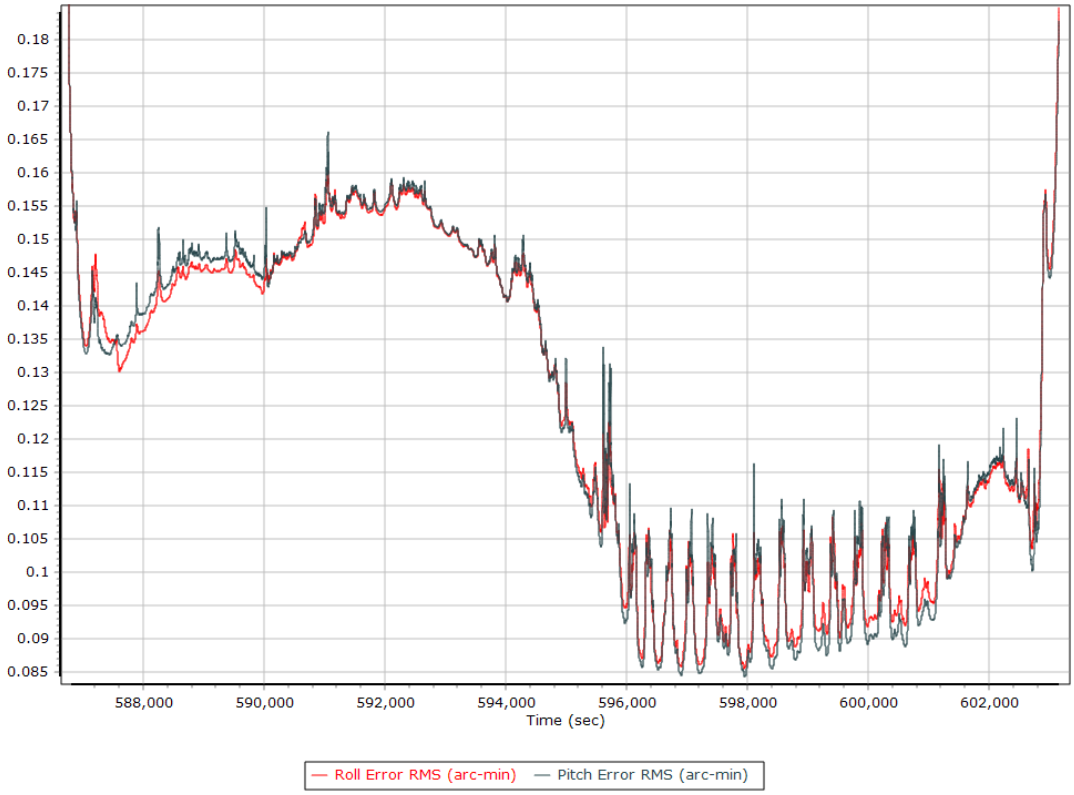
Position Error RMS (m)



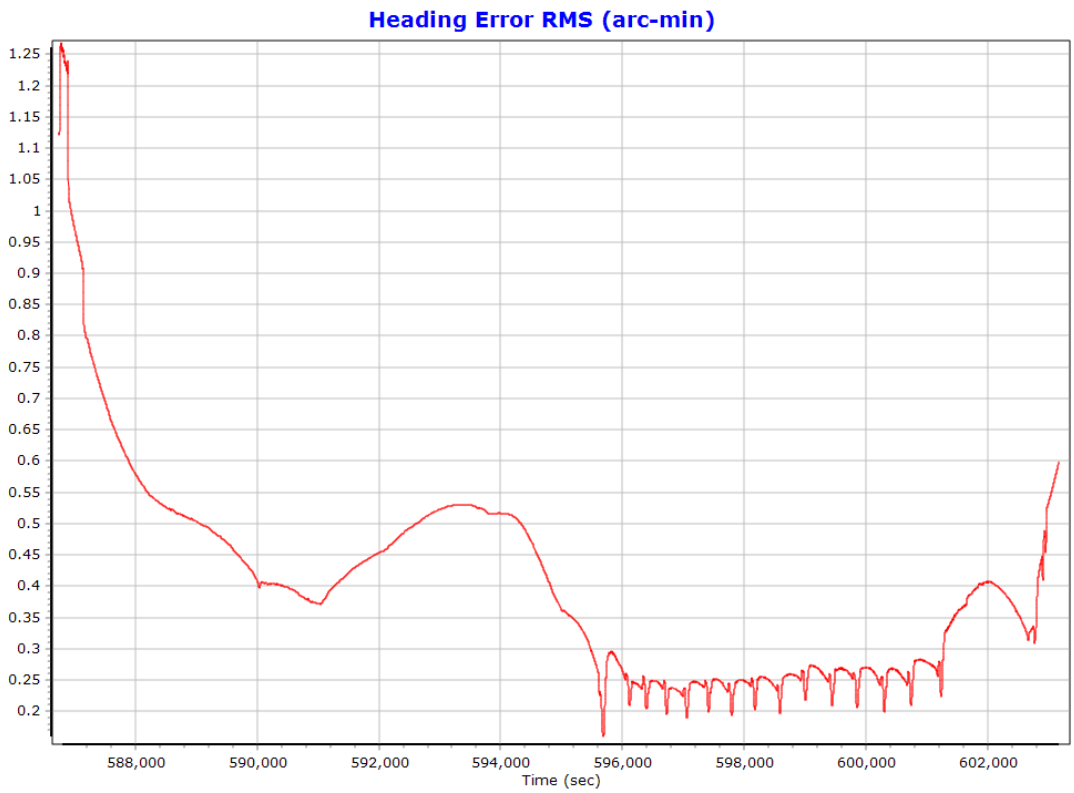
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)



Heading Error RMS (arc-min)



Export Summary

Export file	export_19-058_111619.out		
Export format	Custom Smoothed BET		
Solution in use	Post-processed		
Output rate	All Records		
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	595648.153 (11/16/2019 21:27:28)		
Export end time	601703.557 (11/16/2019 23:08:23)		
Height option	Ellipsoid Height		
WGS84 height flag	False		
Grid	Universal Transverse Mercator		
Zone	UTM North 11 (120W to 114W)		
Datum	NAD83 (2011)		
Ellipsoid	GRS 1980		
Local Transformation	NONE		
Target Epoch	2010		

EO Summary

EO file			
EO format			
Lever arm [m]	-0.049	-0.010	-0.338
Boresight angles [arcmin]	505.761	-265.537	257.848
Output rate	All Records		
Rotation sequence	x omega	y phi	z kappa
Local shift [m]	0.000	0.000	0.000
Output units (coordinate / angle / lat & lon)	Meter	Degree	Deg Decimal
Height option	Ellipsoid Height		
WGS84 height flag	False		
Scale height option	False		
Kappa cardinal rotation [deg]	0		
Solution in use	Post-processed		
EO start time	586742.004 (11/16/2019 18:59:02)		
EO end time	603166.001 (11/16/2019 23:32:46)		
Grid	Universal Transverse Mercator		
Zone	UTM North 11 (120W to 114W)		
Datum	WGS84		
Ellipsoid	WGS84		
Local Transformation	NONE		
Target Epoch	2019.873973		