General Information

Mission Information

Project name	13284-1808_20190104a
Processing date	2019-01-07 15:21:49
Mission date	2019-01-04 13:37:16
Mission duration	03:25:21.000
Processing mode	IN-Fusion SmartBase
GPS Station	ASB

Rover Hardware Information

Product	POS AV 610 VER6 HW2.5-12
Serial number	S/N9865
IMU type	57
Receiver type	BD982
Antenna type	AV37

Project File List

Rover Data Files

File name	File type
190104_133657_INS-GPS_1.raw	POS Data

Input Files

File Name	File type
Ephm0040.19g	GLONASS Broadcast Ephemeris
Ephm0040.19n	GPS Broadcast Ephemeris
nybt004f00.19g	GLONASS Broadcast Ephemeris
nyws004f00.19g	GLONASS Broadcast Ephemeris
nysm004f00.19o	GNSS SingleBase
nysm004f00.19n	GPS Broadcast Ephemeris
nysm004f00.19g	GLONASS Broadcast Ephemeris
nypf004f00.19o	GNSS SingleBase
nypf004f00.19n	GPS Broadcast Ephemeris
nypf004f00.19g	GLONASS Broadcast Ephemeris
nylp004f00.19o	GNSS SingleBase
nylp004f00.19n	GPS Broadcast Ephemeris
nylp004f00.19g	GLONASS Broadcast Ephemeris
nyhb004f00.19o	GNSS SingleBase
nyws004f00.19n	GPS Broadcast Ephemeris
nyhb004f00.19n	GPS Broadcast Ephemeris
nyfs004f00.19o	GNSS SingleBase
nyfs004f00.19n	GPS Broadcast Ephemeris
nyfs004f00.19g	GLONASS Broadcast Ephemeris
nyfd004f00.19o	GNSS SingleBase
nyfd004f00.19n	GPS Broadcast Ephemeris
nyfd004f00.19g	GLONASS Broadcast Ephemeris
nydv004f00.19o	GNSS SingleBase
nydv004f00.19n	GPS Broadcast Ephemeris
nydv004f00.19g	GLONASS Broadcast Ephemeris
nybt004f00.19o	GNSS SingleBase
nybt004f00.19n	GPS Broadcast Ephemeris
nyhb004f00.19g	GLONASS Broadcast Ephemeris
nyws004f00.19o	GNSS SingleBase
cbrg0040.19o	GPS SingleBase
pwel0040.19o	GPS SingleBase
you60040.19o	GPS SingleBase
god20040.19o	GPS SingleBase
igr20344.sp3	GPS Precise Ephemeris
igr20345.sp3	GPS Precise Ephemeris
igr20346.sp3	GPS Precise Ephemeris

Output Files

Filename	File type
sbet_Mission 1.out	SBET Trajectory File
export_Mission 1.txt	ASCII Export Output

Rover Data Summary

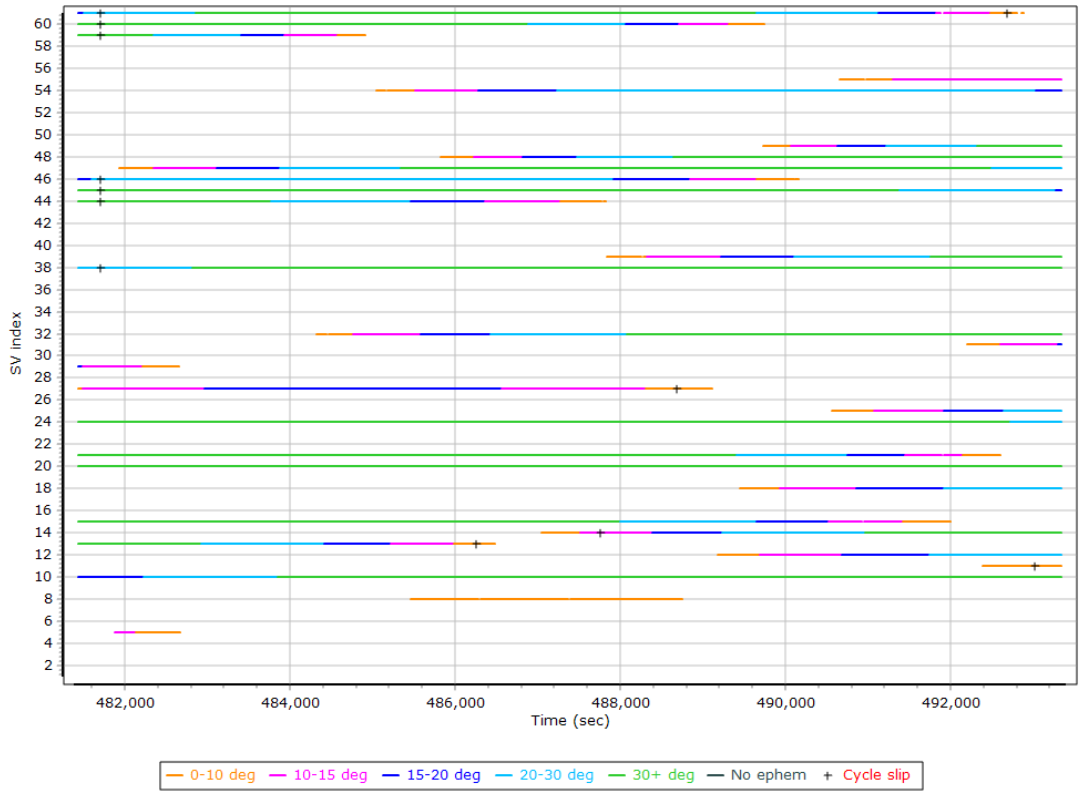
First raw data file	190104_133657_INS-GPS_1.raw		
Last raw data file	190104_133657_INS-GPS_1.raw		
Start GPS week	2034		
Start time	481017.236 (1/4/2019 1:36:57 PM)		
End time	493339.203 (1/4/2019 5:02:19 PM)		
Start of fine alignment	481373.528 (1/4/2019 1:42:53 PM)		
Available subsystems	Primary GNSS, Gimbal, IMU		
POS Event Input	Event 1 Input, Event 2 Input, Event 3 Input, Event 4 Input, Event 5 Input, Event 6 Input		
Correction data	None		
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]	0.000	0.000	0.000
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

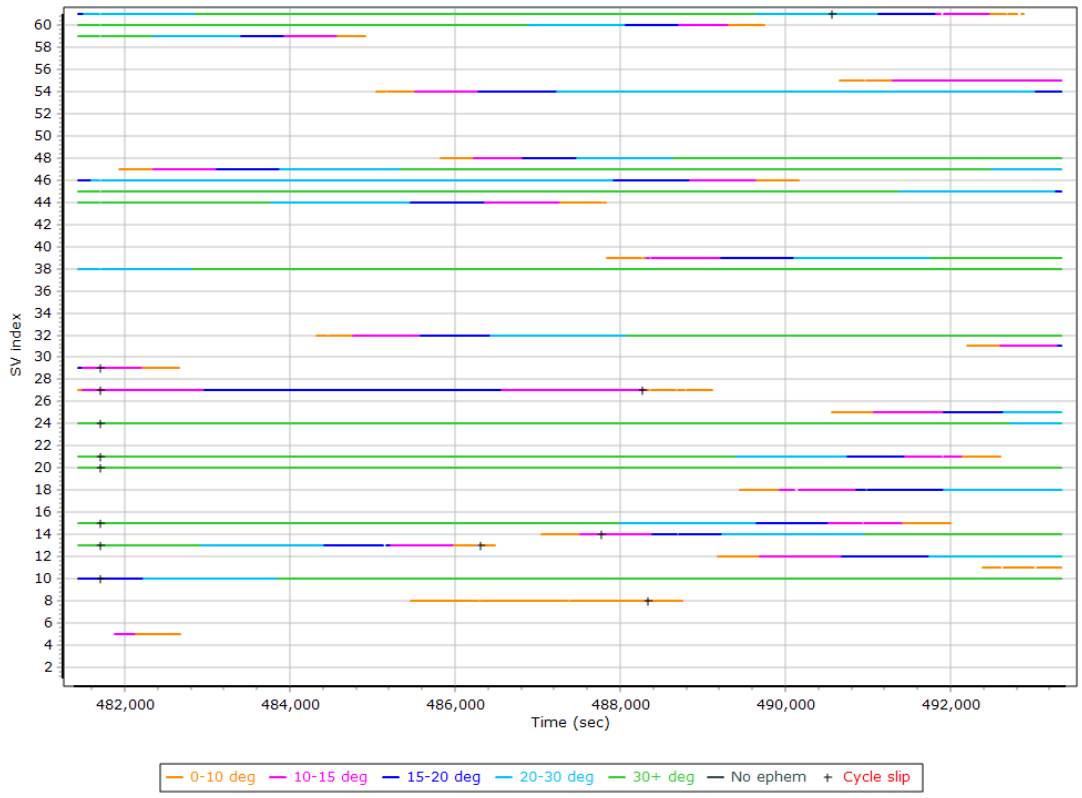
Raw IMU Import QC Summary

IMU data input file	imu_Mission 1.dat
IMU data check log file	imudt_Mission 1.log
IMU Records Processed	2463940
Termination Status	Normal
IMU Anomalies	0

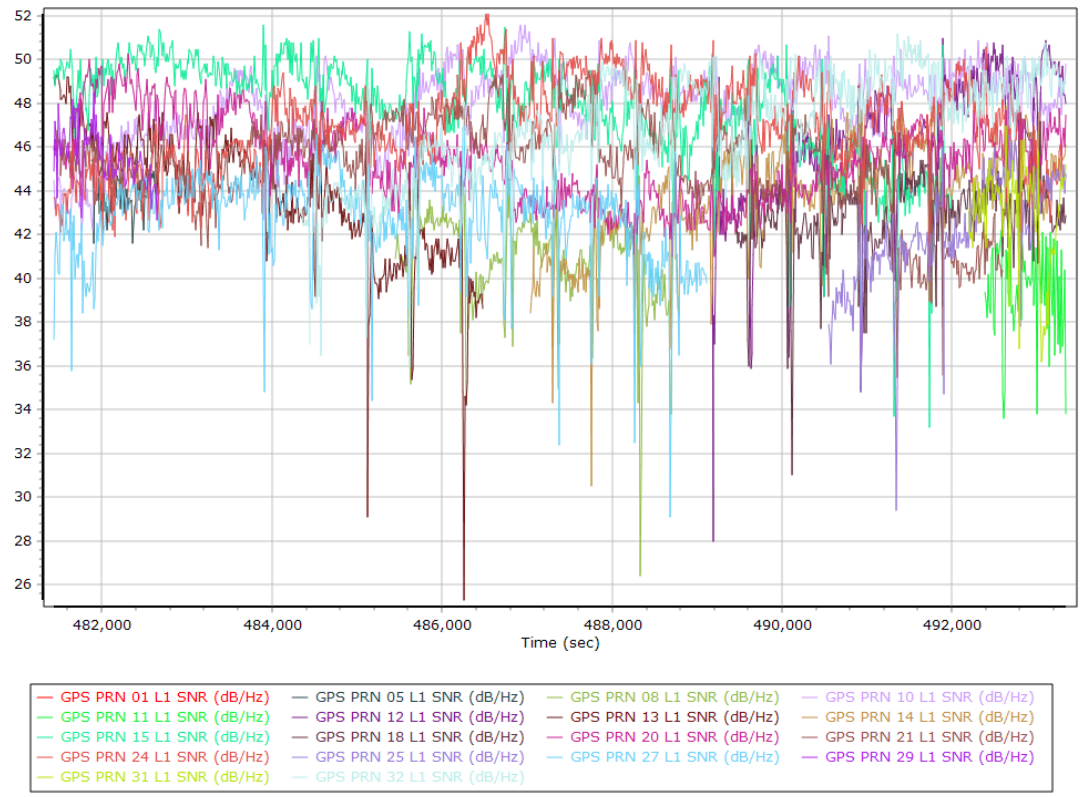
L1 Satellite Lock/Elevation



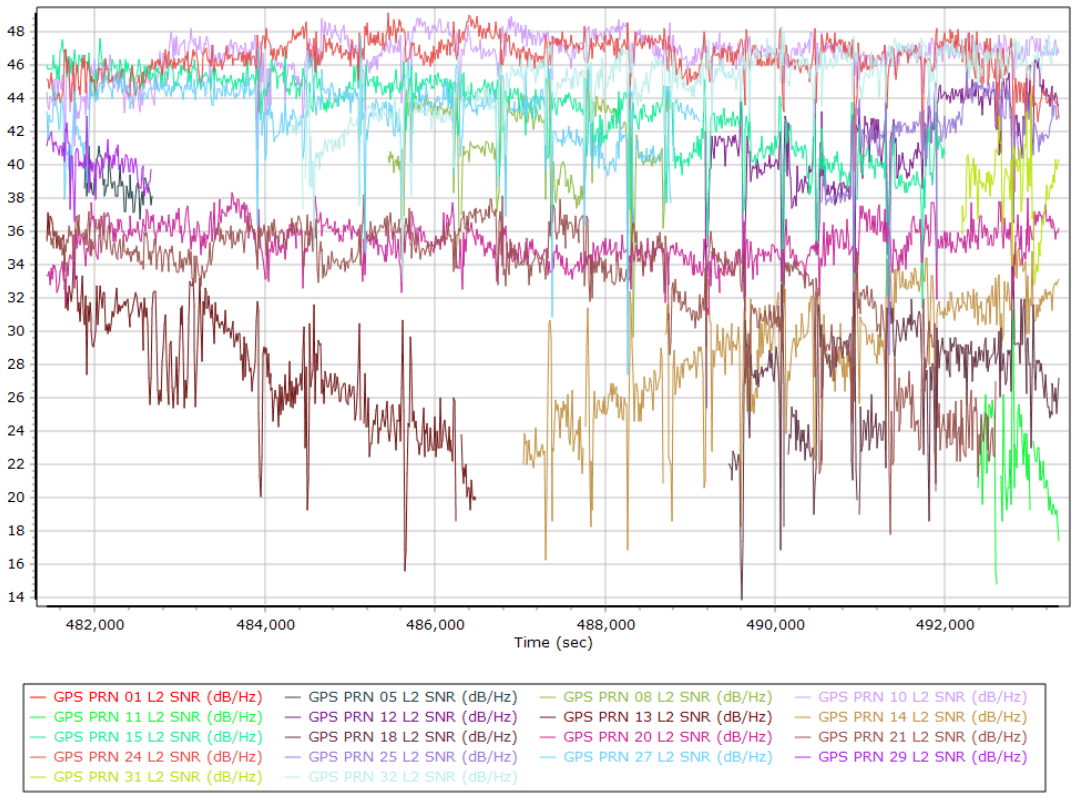
L2 Satellite Lock/Elevation



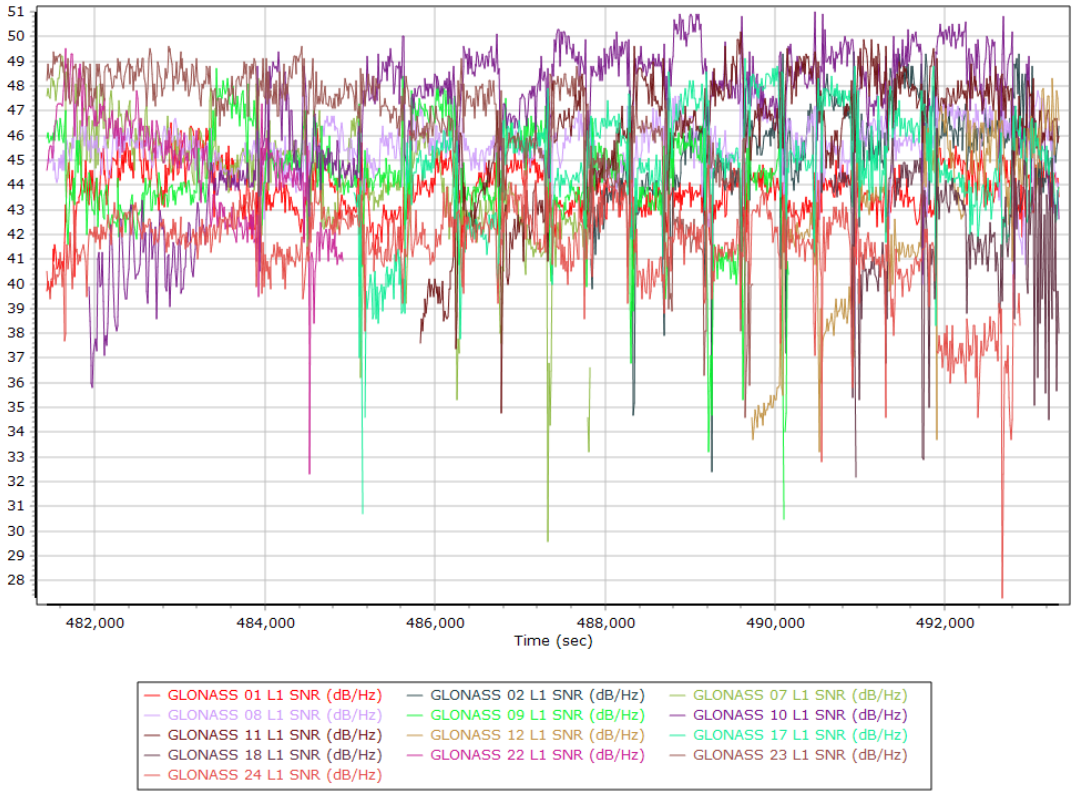
GPS L1 SNR



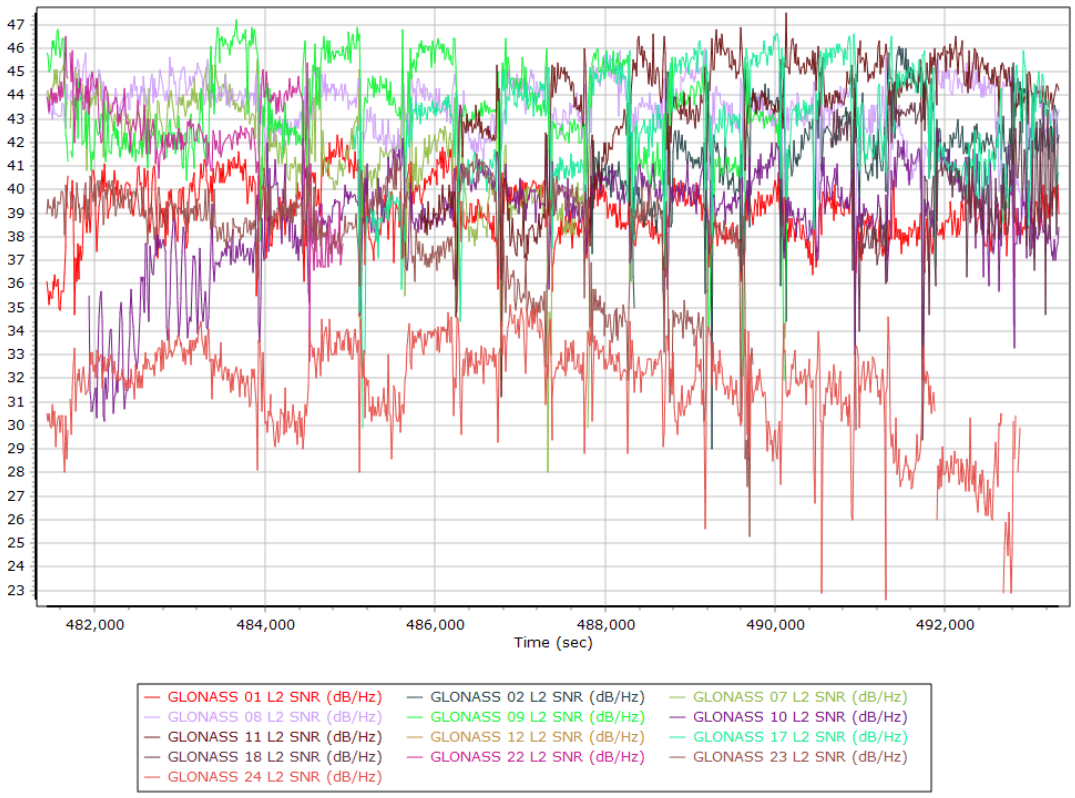
GPS L2 SNR



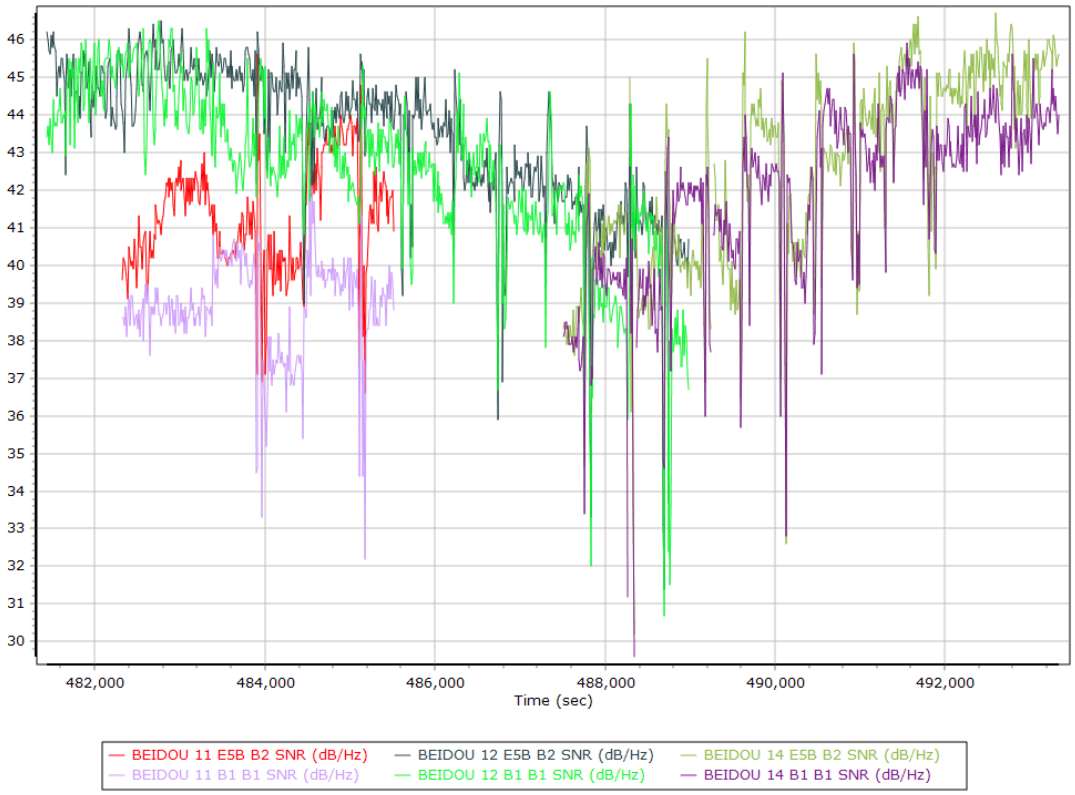
GLONASS L1 SNR



GLONASS L2 SNR

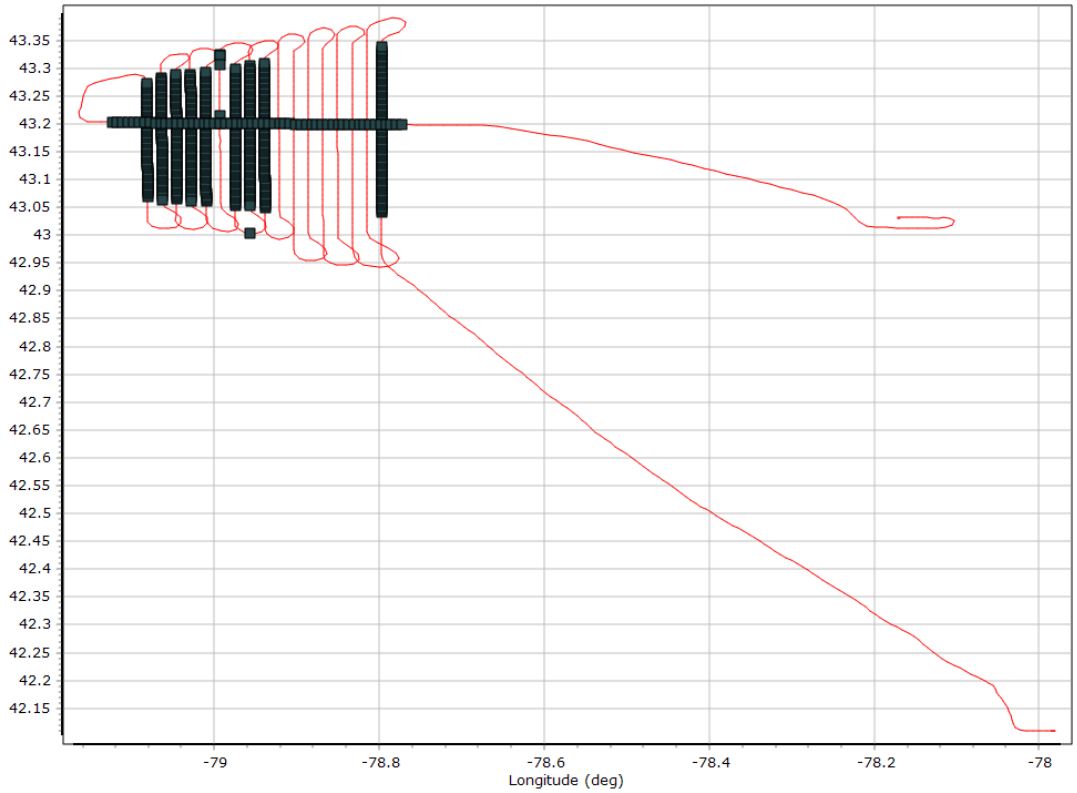


BEIDOU SNR

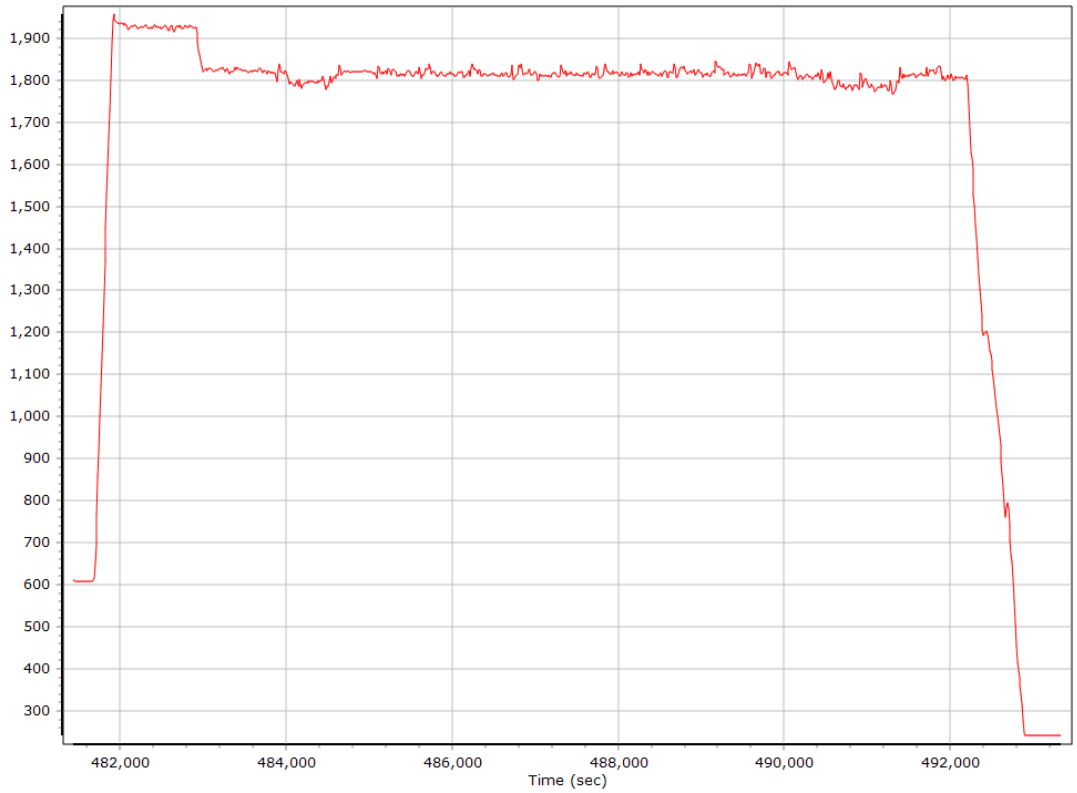


Trajectory Information

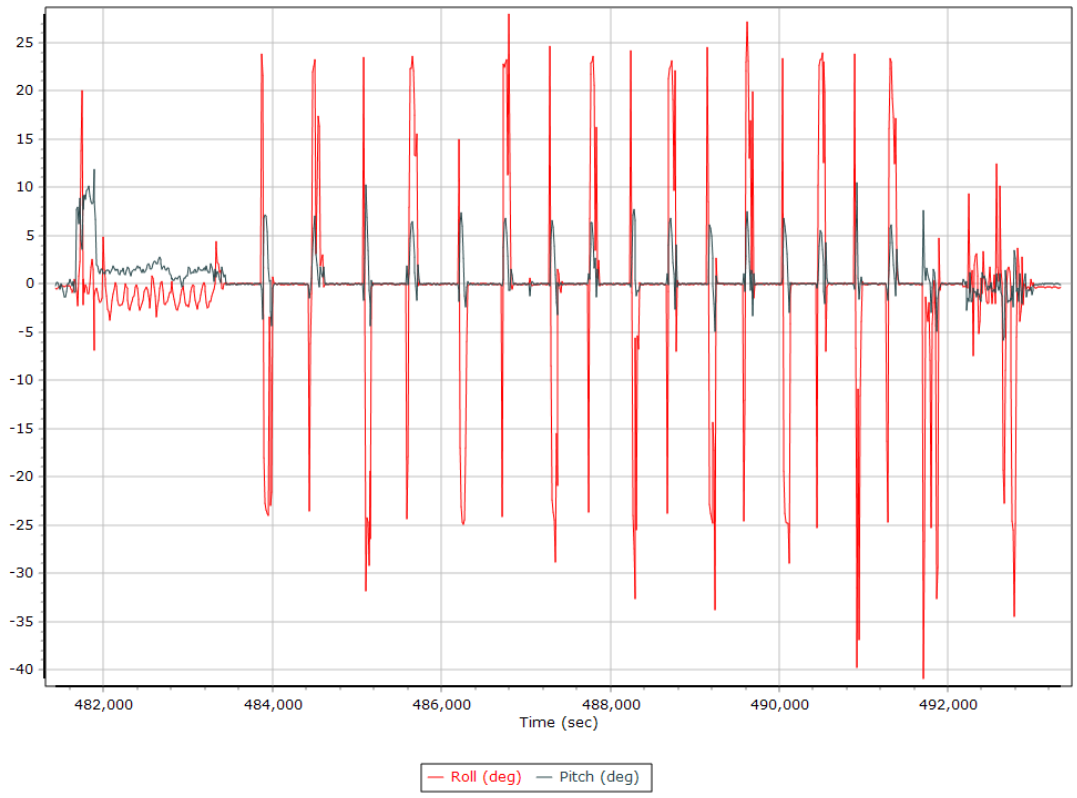
Top View



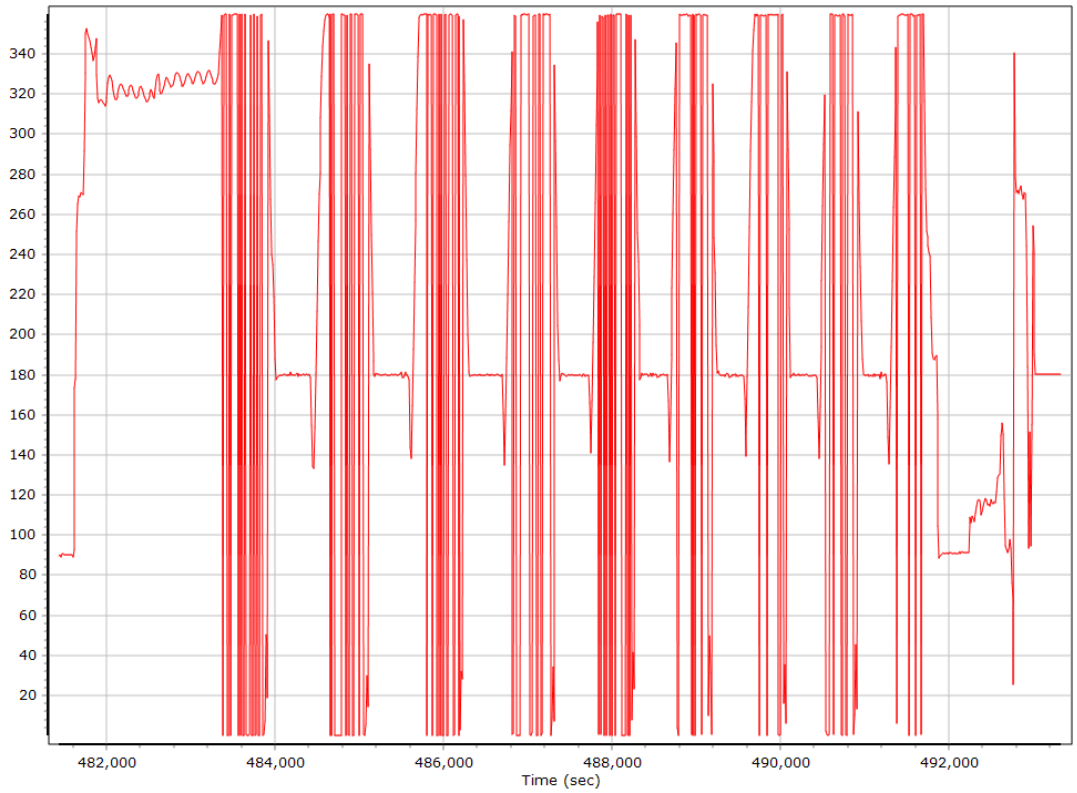
Altitude



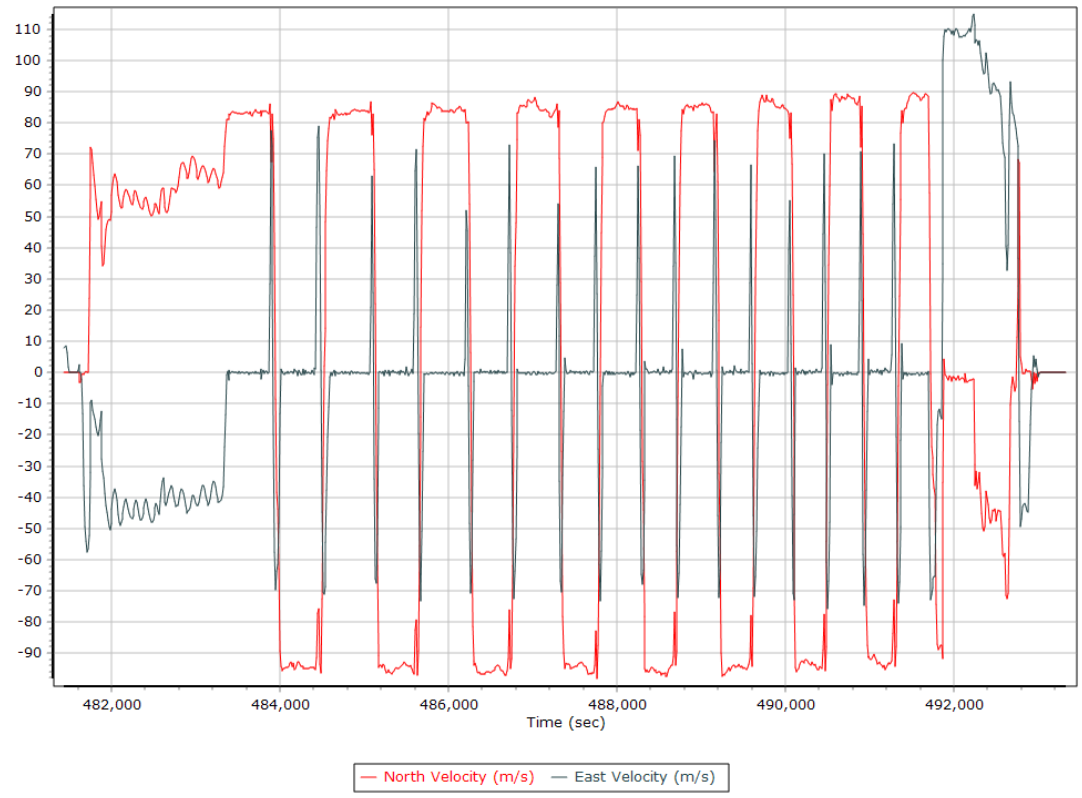
Roll/Pitch



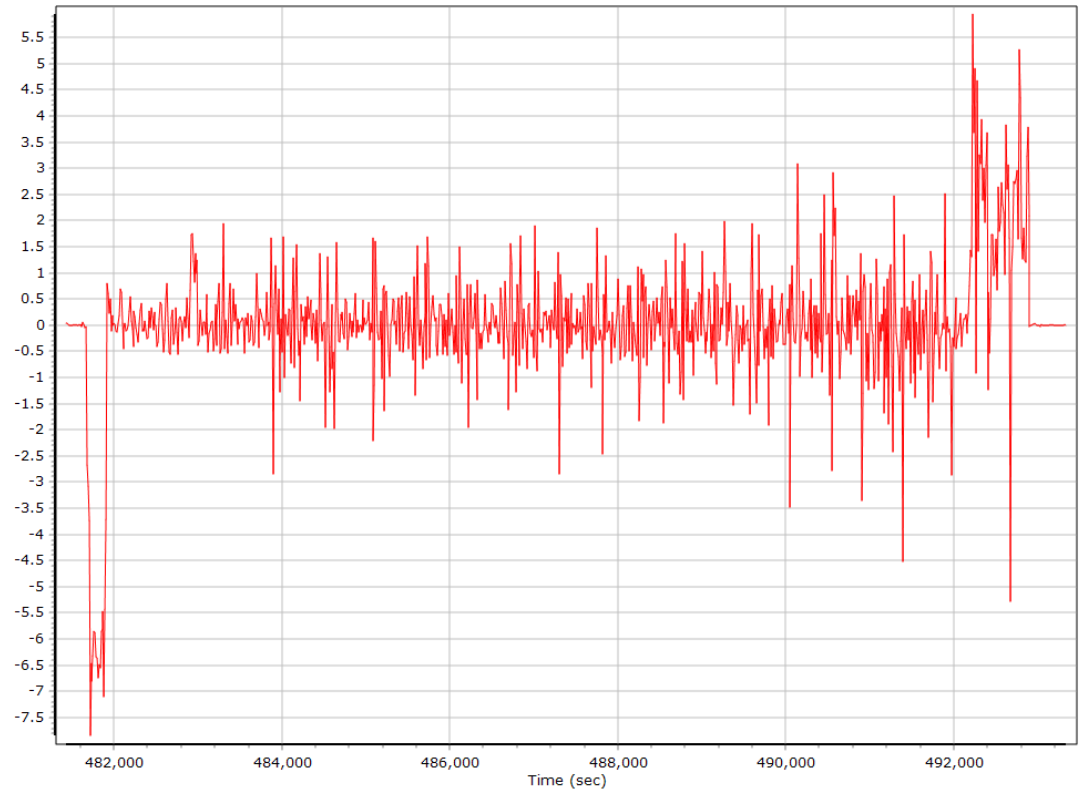
Heading



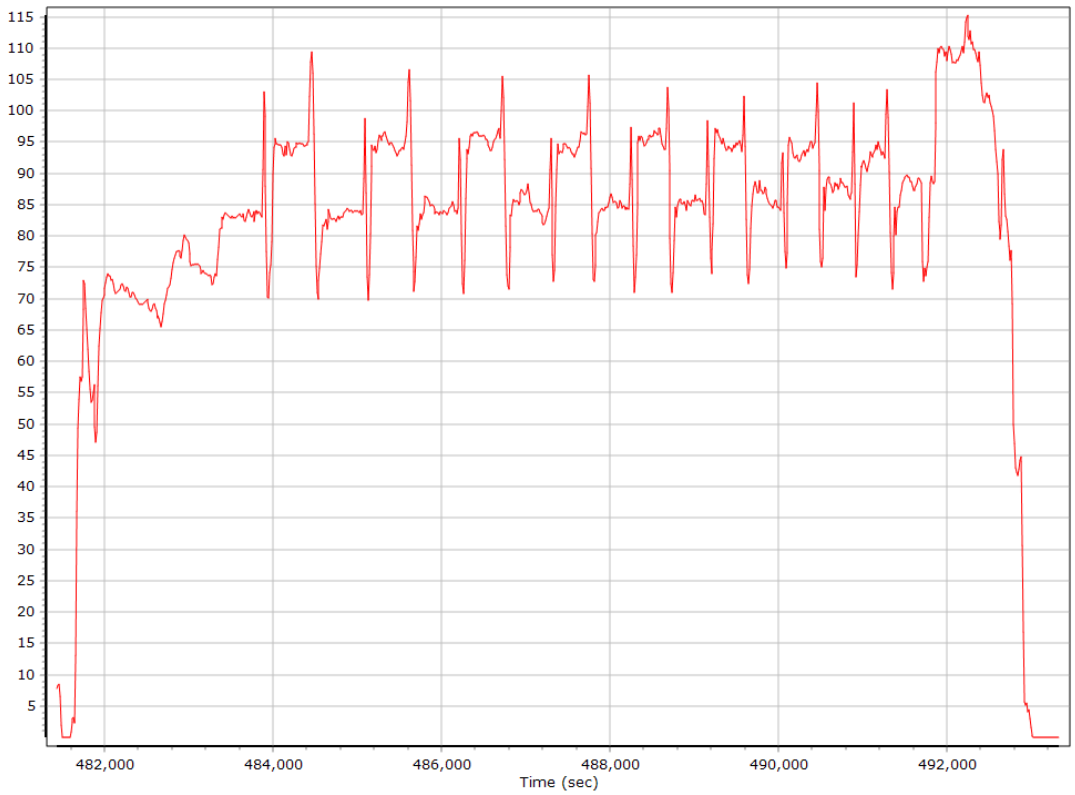
North/East Velocity



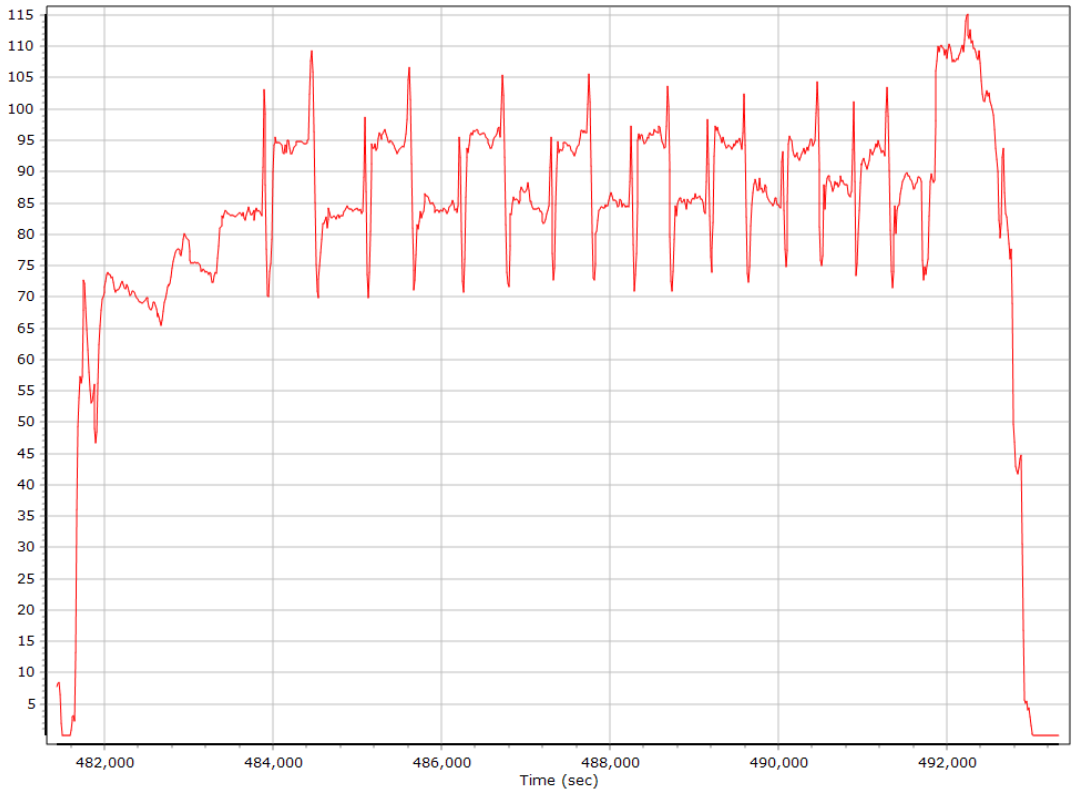
Down Velocity



Total Speed

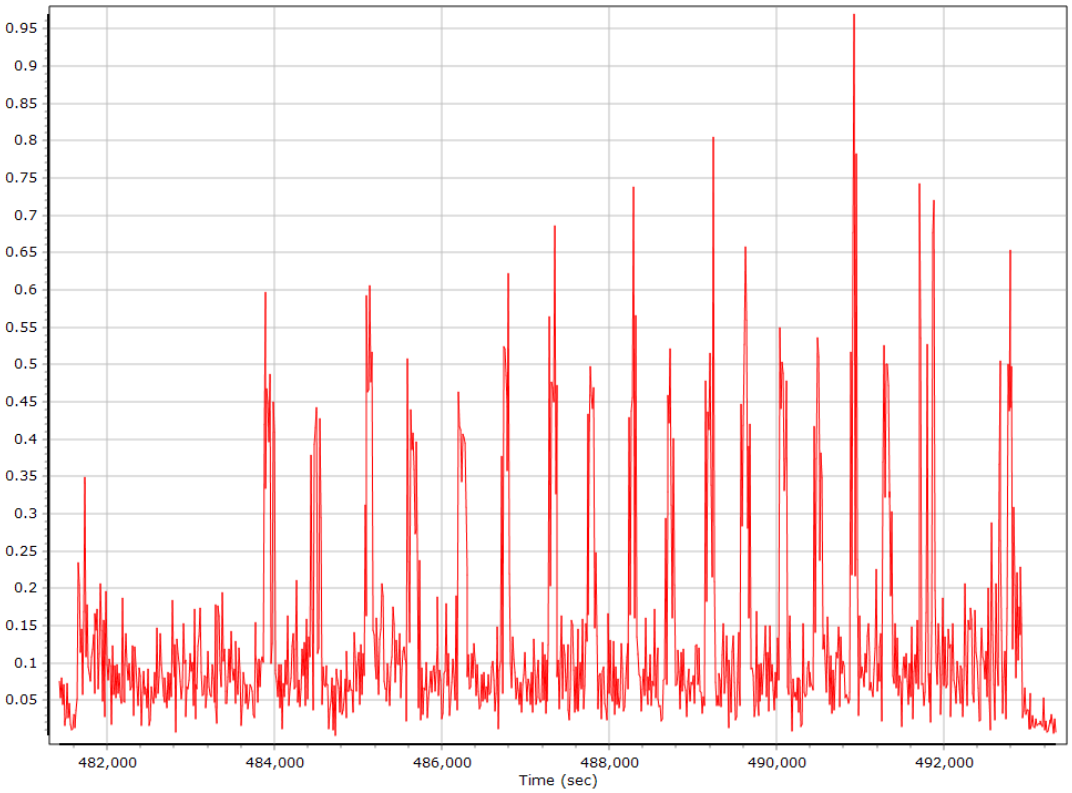


Ground Speed



Body Acceleration

Total Body Acceleration



Body Angular Rate

SmartBase Processing Summary

Smart Select Options

Archive enabled	False
User database enabled	False
Include high-rate data sites	False
Target GNSS Selection	GNSS

Basestation Selection

Date	ID	Dist	DataType	Rate	Service	Database	Status

SmartBase Results

SmartBase status	
Primary station Id	
Primary station data rate [sec]	0.0
VRS/ASB generation rate [sec]	0.0
VRS/ASB timespan	
Number of reference stations	0
Primary station GPS measurement usage [%]	0.0
Average number of satellites per epoch	0.0
Max number of GPS stations used	0
Min number of GPS stations used	0
Total full data gap [sec]	0
Total individual satellite data gap [sec]	0
GPS precise vs. broadcast ephemeris used	0.0 % / 0.0 %
Termination Status	

SmartBase Quality Check

GNSS QC

GNSS QC Statistics

Statistics	Min	Max	Mean
Baseline length [km]	4.26	118.40	
Number of GPS SV	6	10	8
Number of GLONASS SV	0	9	8
Number of QZSS SV	0	0	0
Number of BEIDOU SV	0	0	0
Total number of SV	8	18	15
PDOP	1.11	1.74	1.35
QC Solution Gaps	1.00	1.00	
Solution Type	**Fixed**	**Float**	**No solution**
Epoch (s)	12286.00	0.00	2.00
Percentage	99.98	0.00	0.02

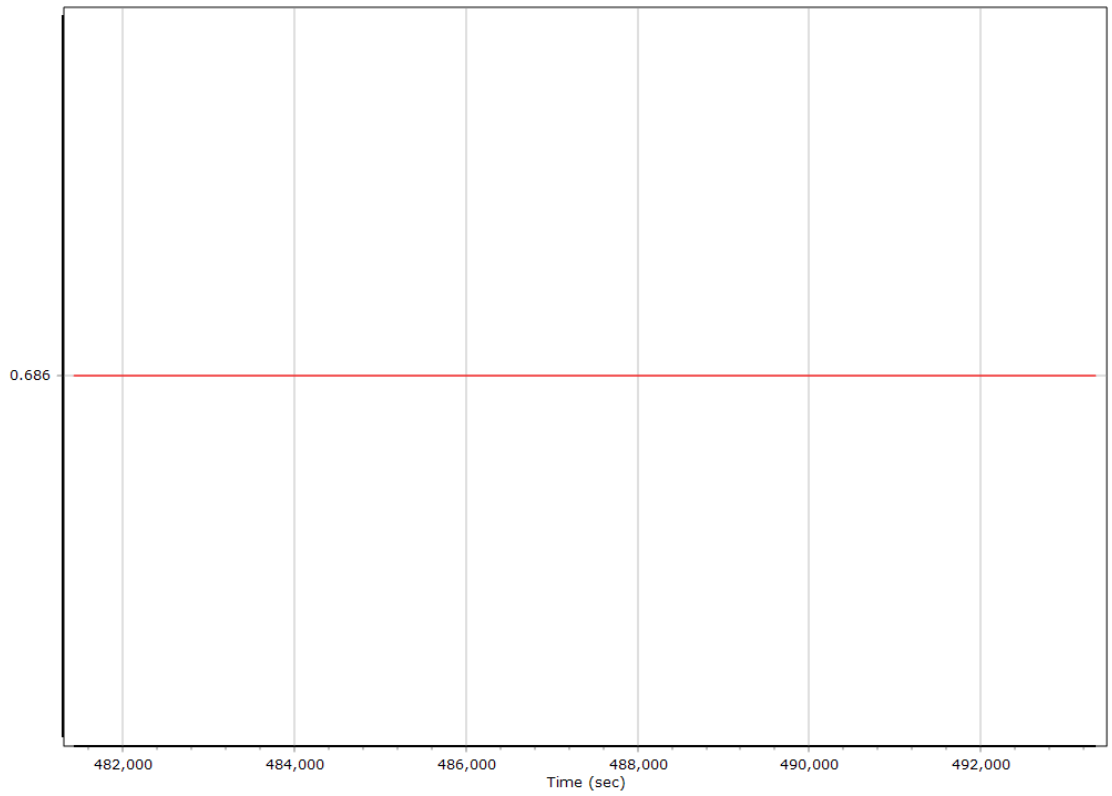
GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion SmartBase		
Stabilized mount	True		
Base station	ASB		
Processing start time	481018.000 (1/4/2019 1:36:58 PM)		
Processing end time	493339.000 (1/4/2019 5:02:19 PM)		
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]	0.686	-0.089	-0.956
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

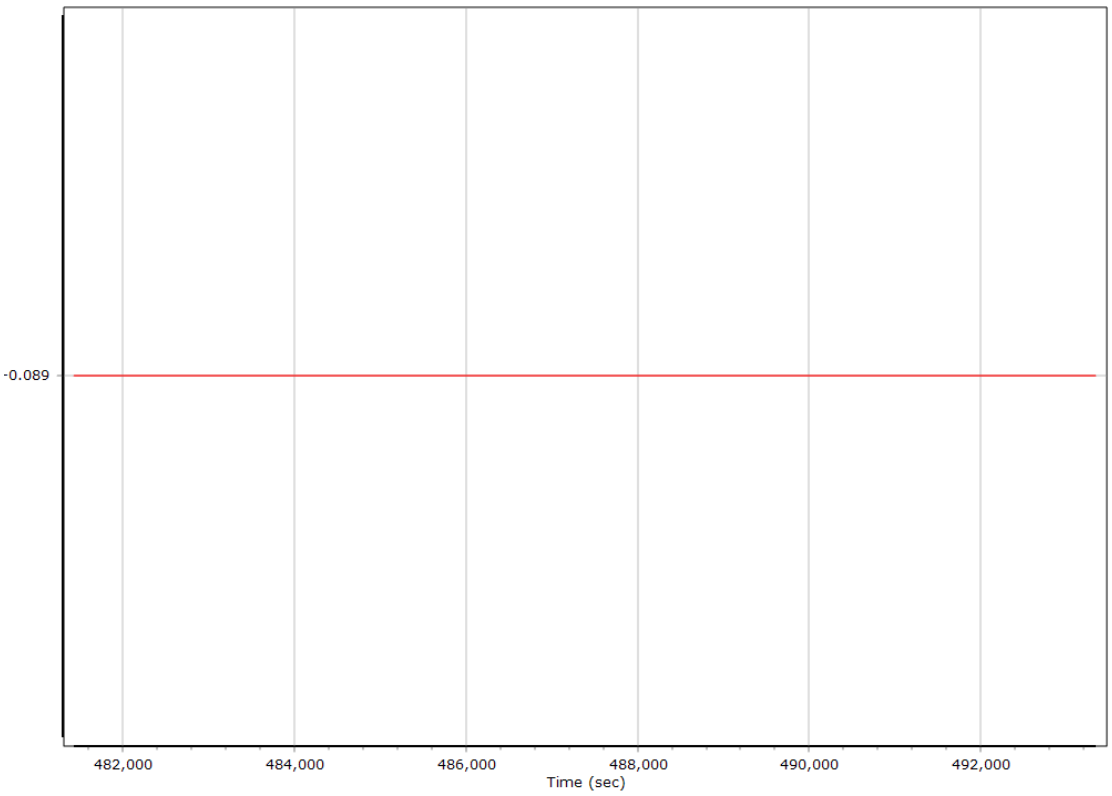
Calibrated Installation Parameters

Reference-Primary GNSS Lever Arm

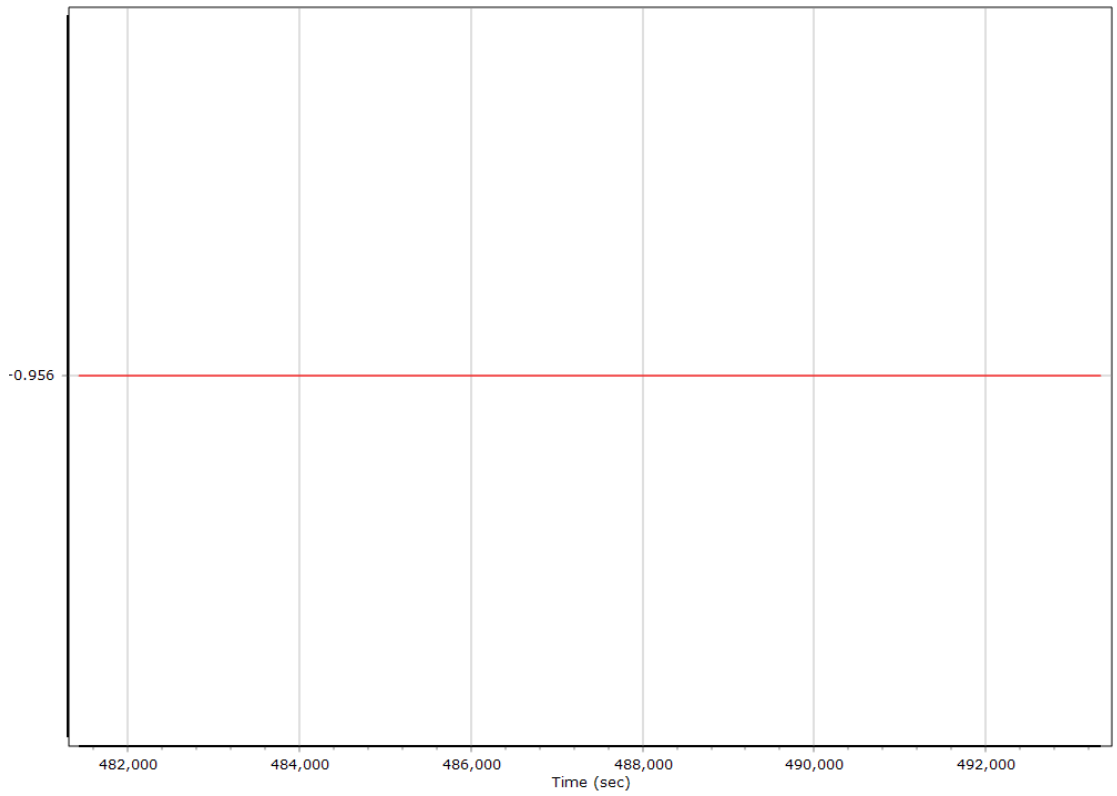
X Reference-Primary GNSS Lever Arm (m)



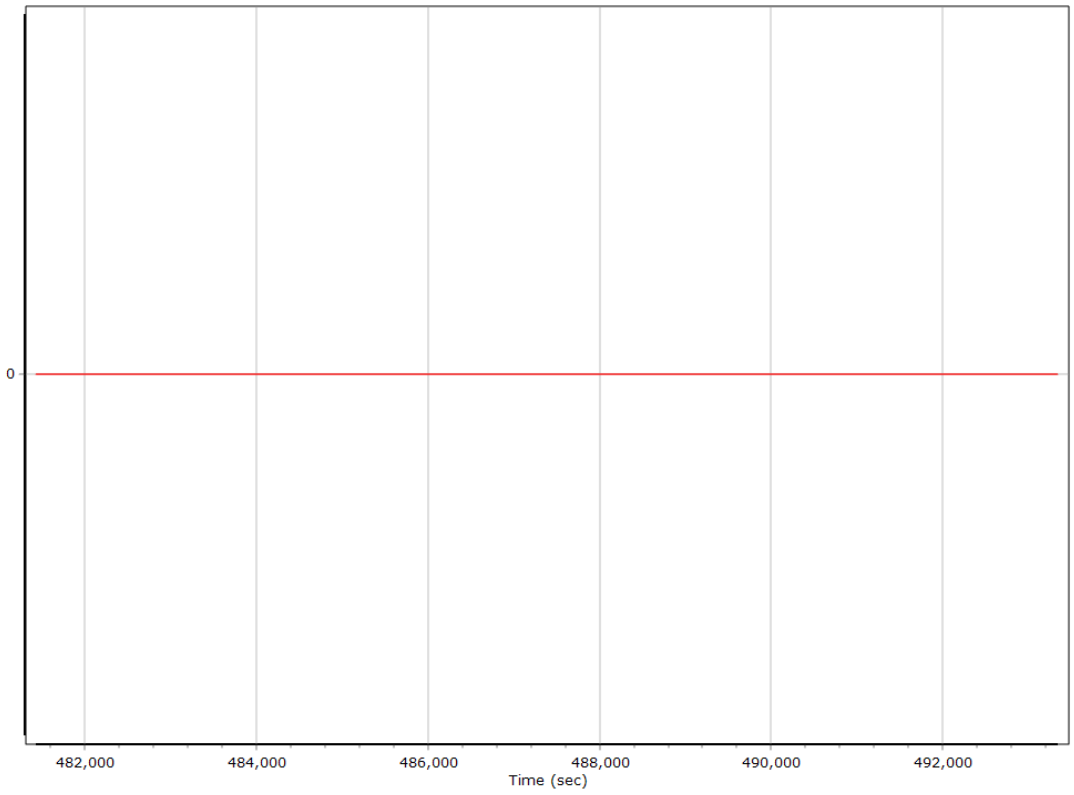
Y Reference-Primary GNSS Lever Arm (m)



Z Reference-Primary GNSS Lever Arm (m)



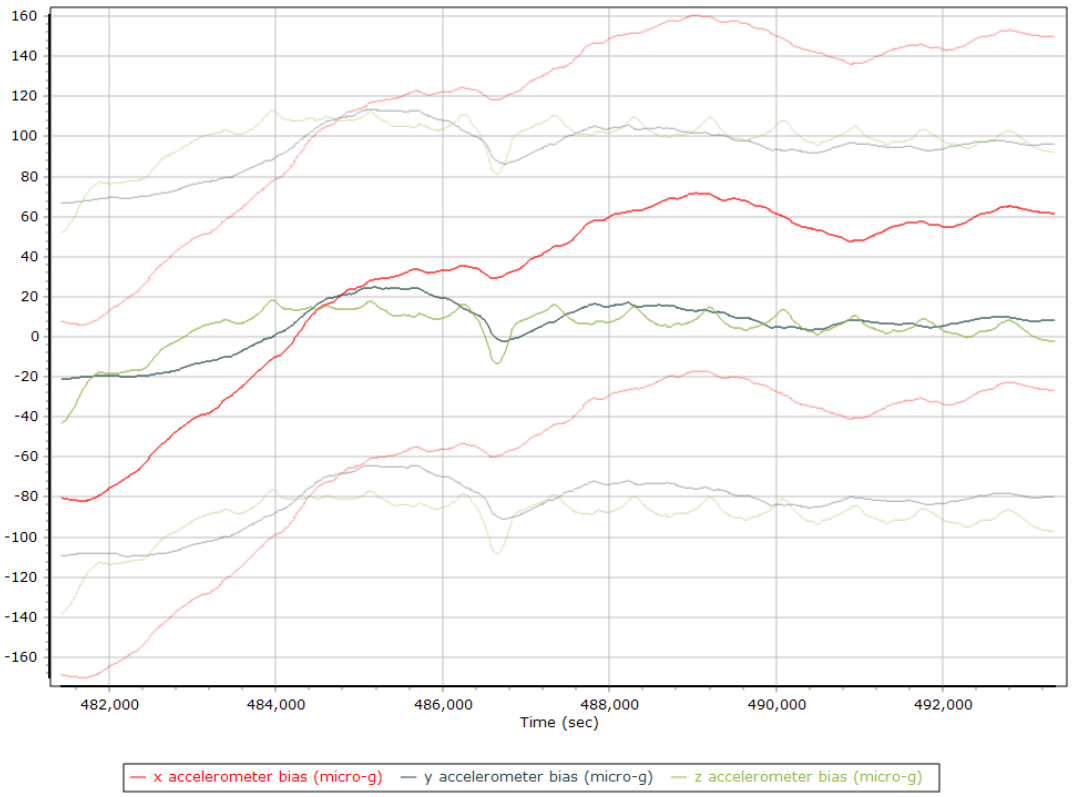
Reference-Primary GNSS Lever Arm Figure of Merit



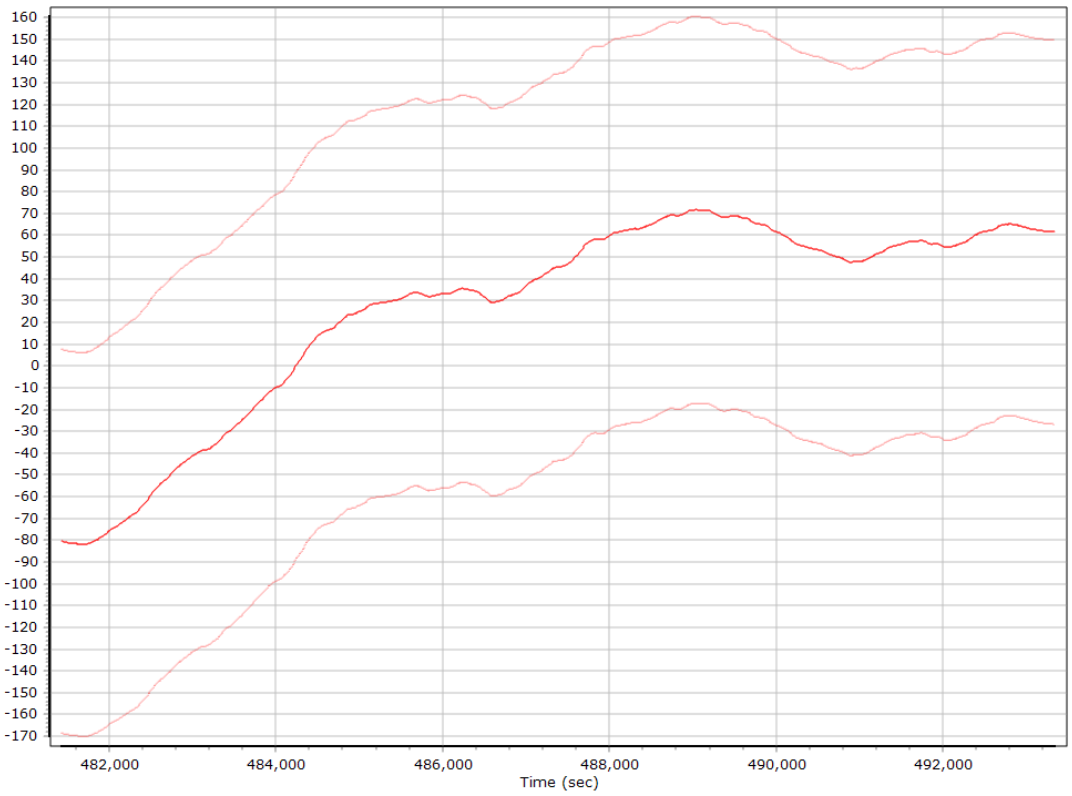
Smoothed IN-Fusion QC

Smoothed Estimated Errors, Reference Frame

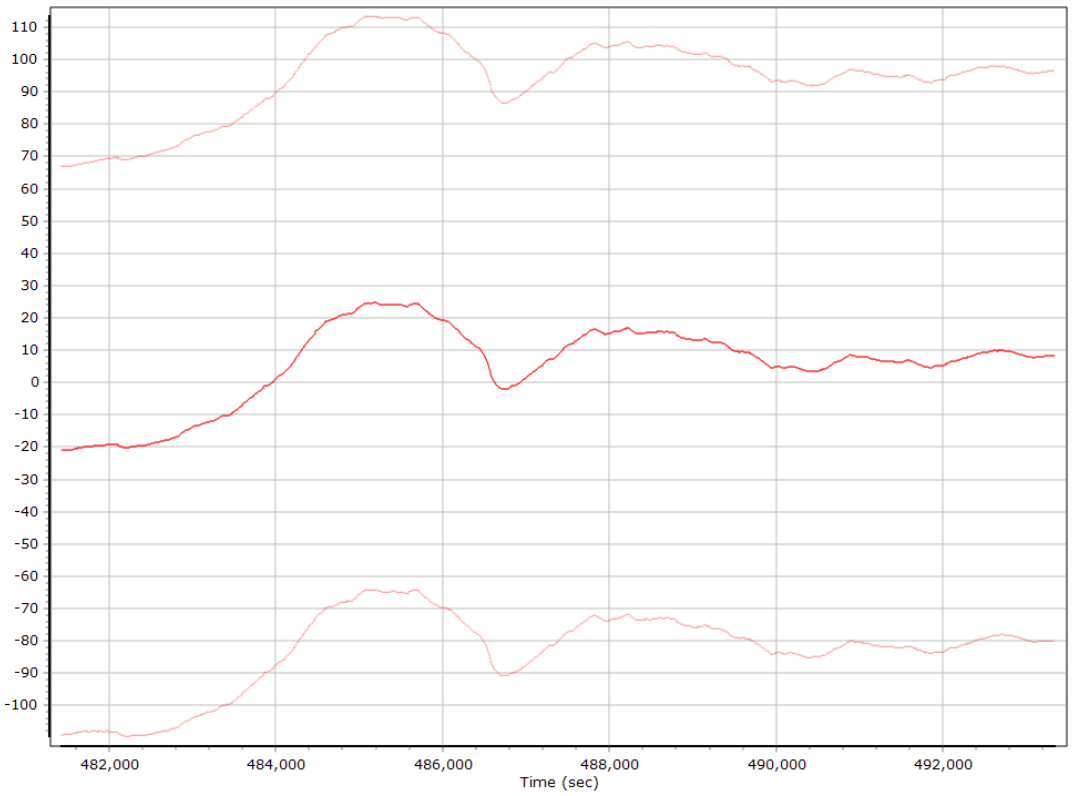
Accelerometer Bias (micro-g)



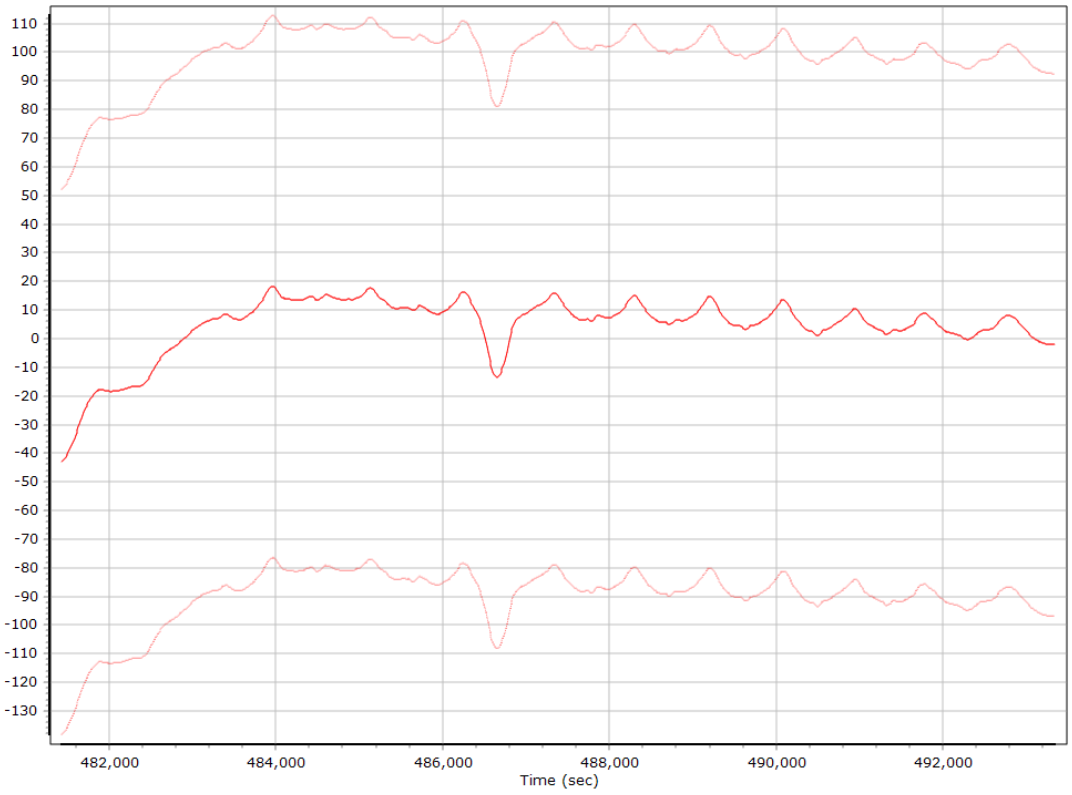
X Accelerometer Bias (micro-g)



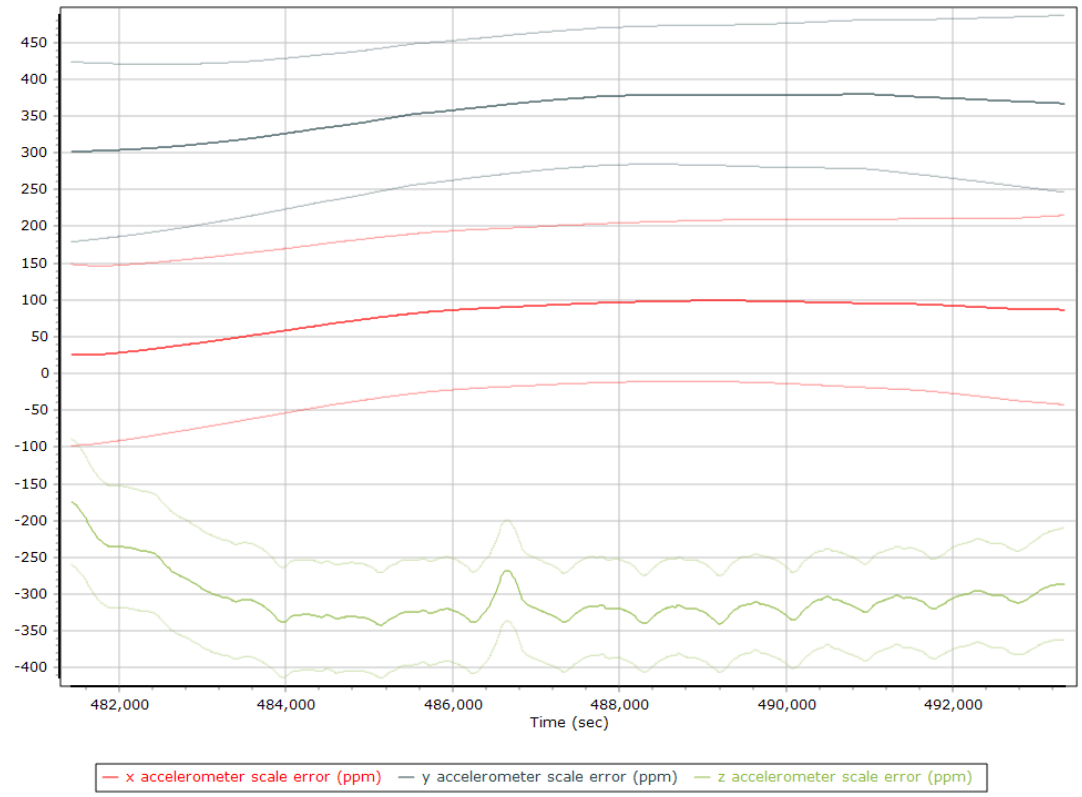
Y Accelerometer Bias (micro-g)



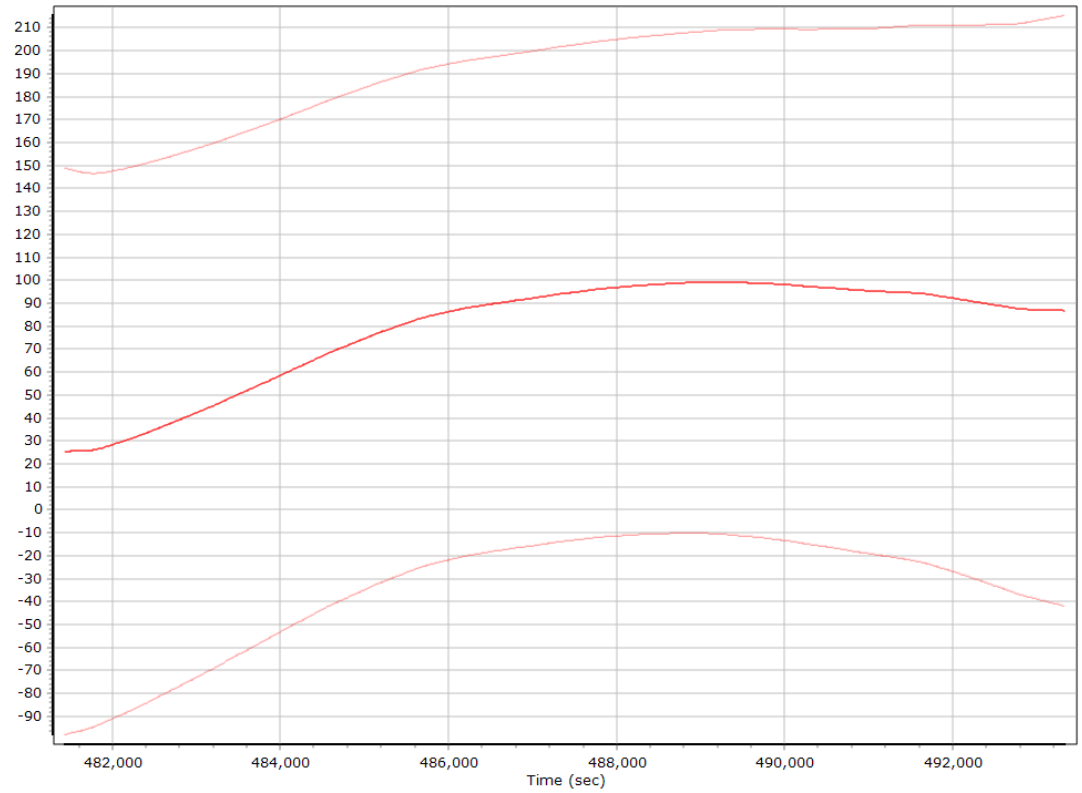
Z Accelerometer Bias (micro-g)



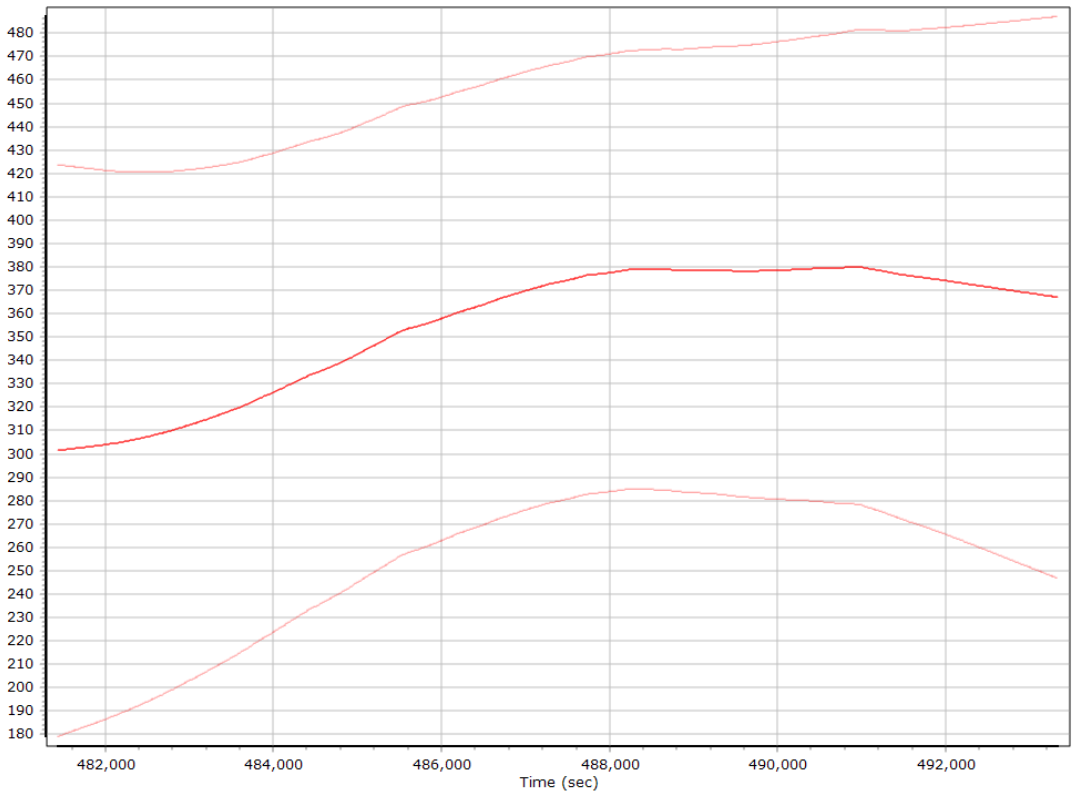
Accelerometer Scale Error (ppm)



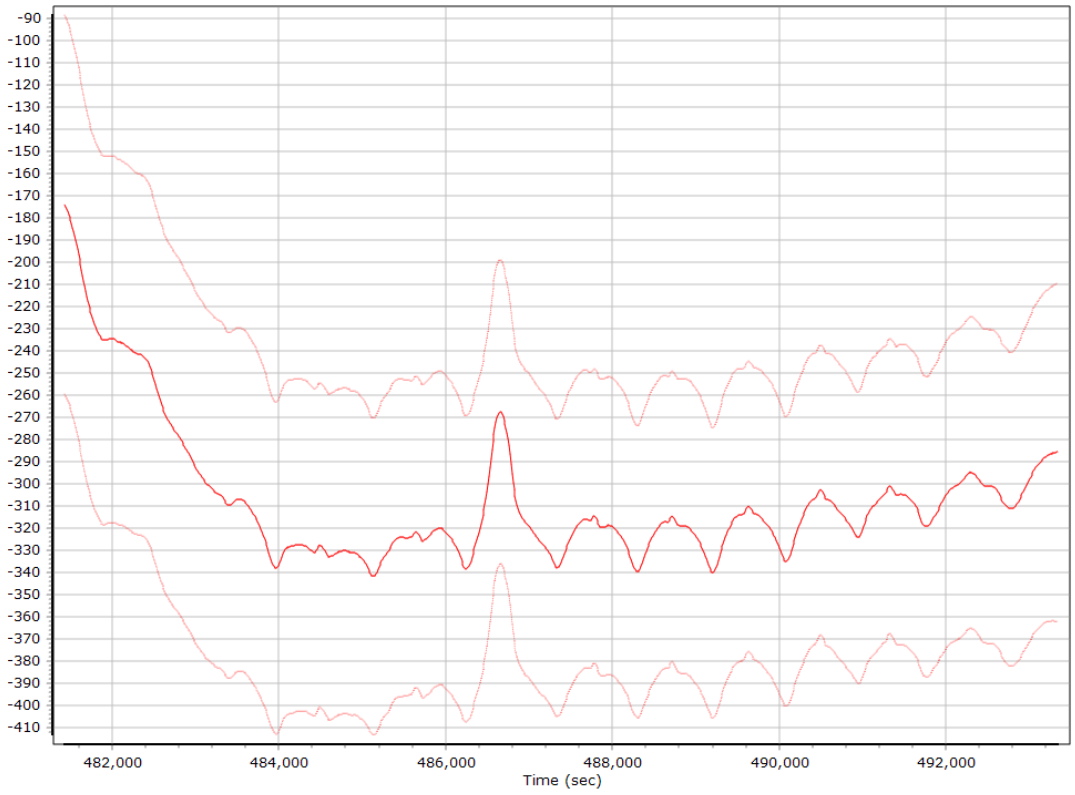
X Accelerometer Scale Error (ppm)



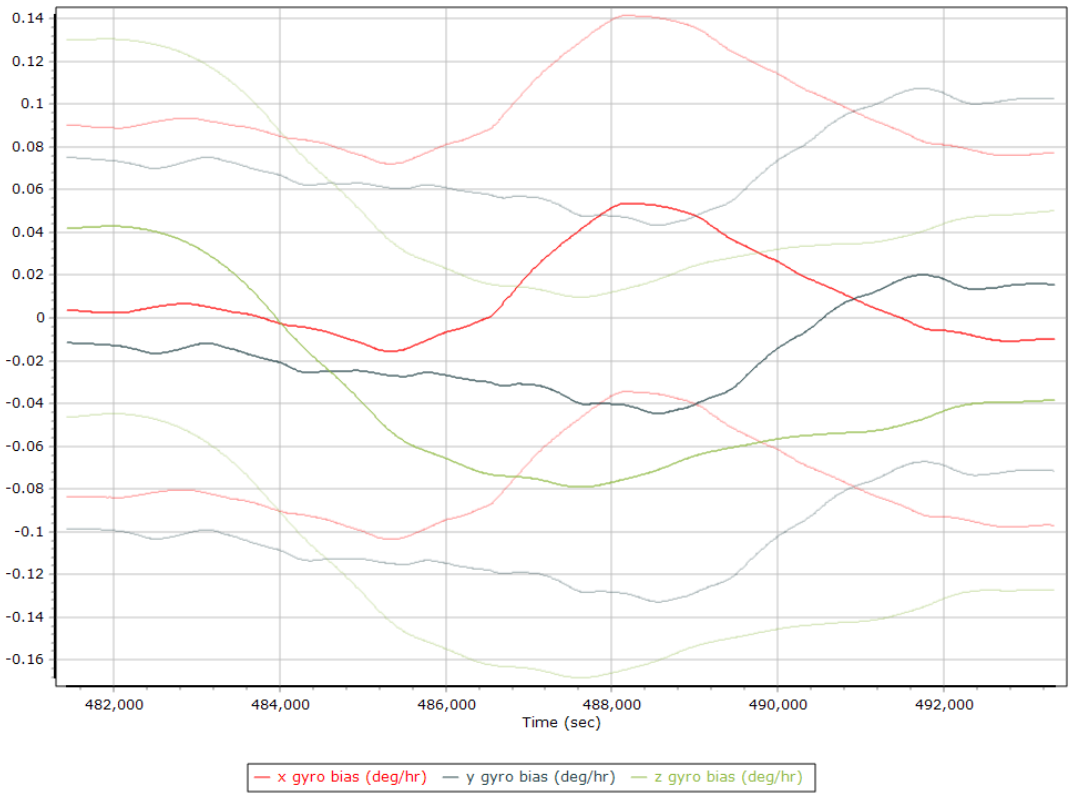
Y Accelerometer Scale Error (ppm)



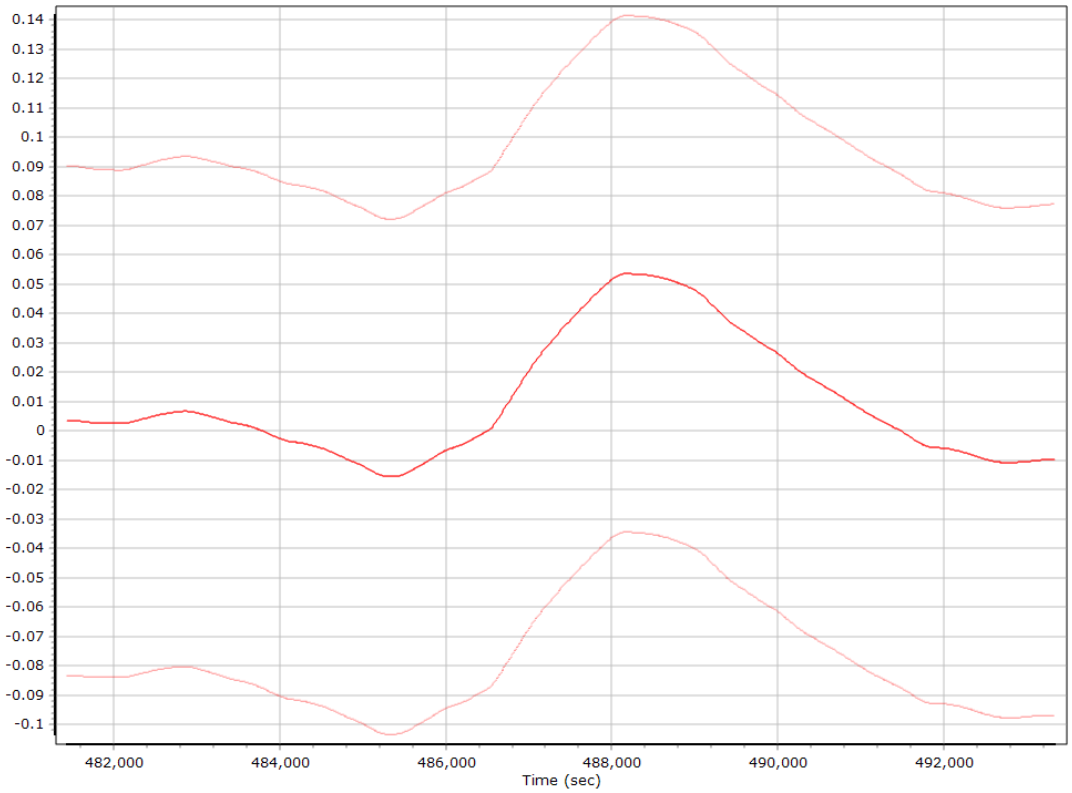
Z Accelerometer Scale Error (ppm)



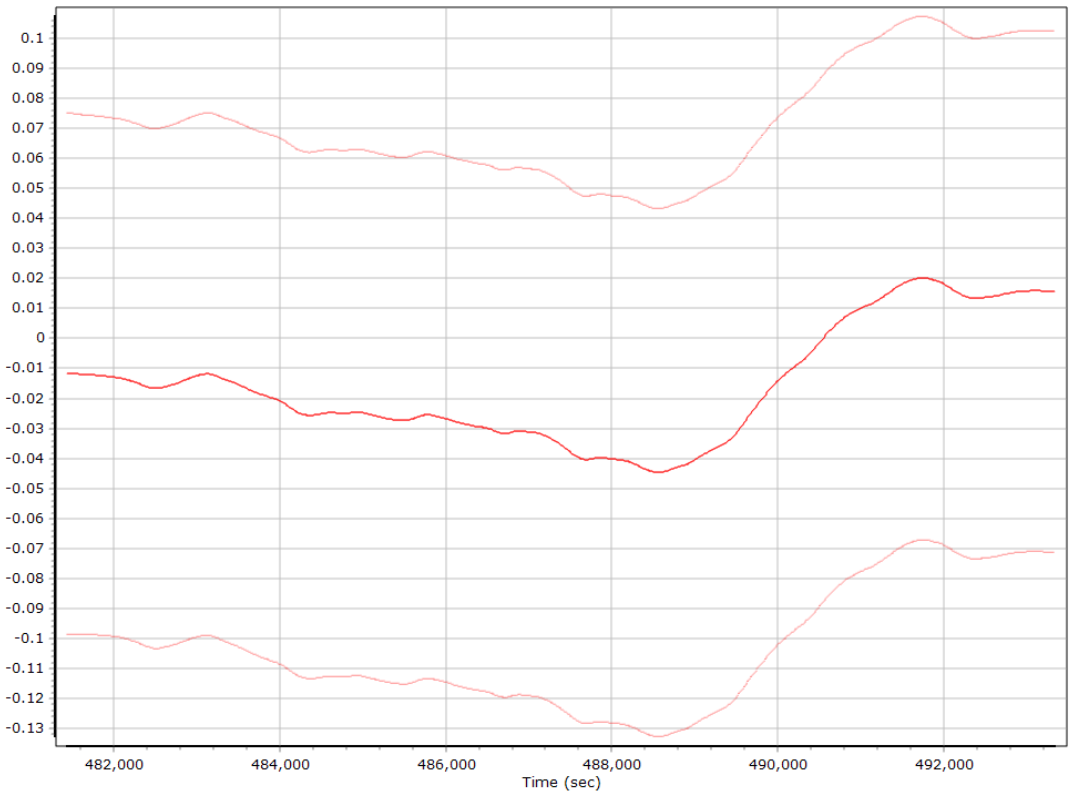
Gyro Bias (deg/h)



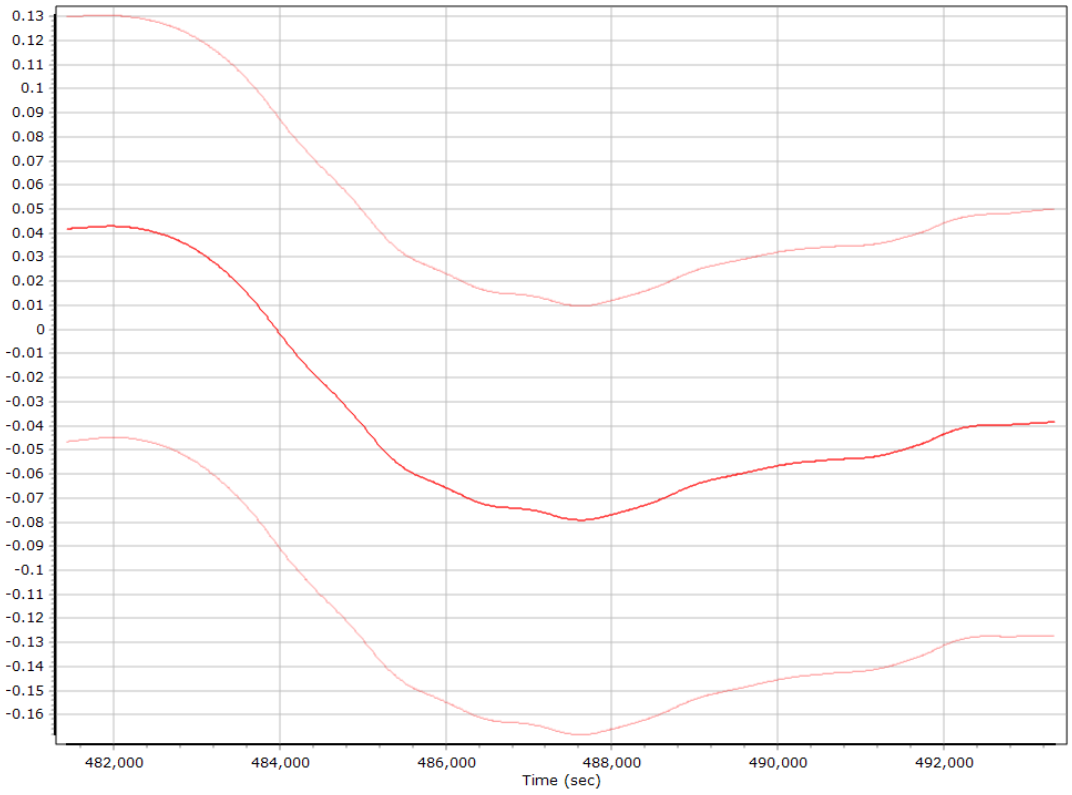
X Gyro Bias (deg/h)



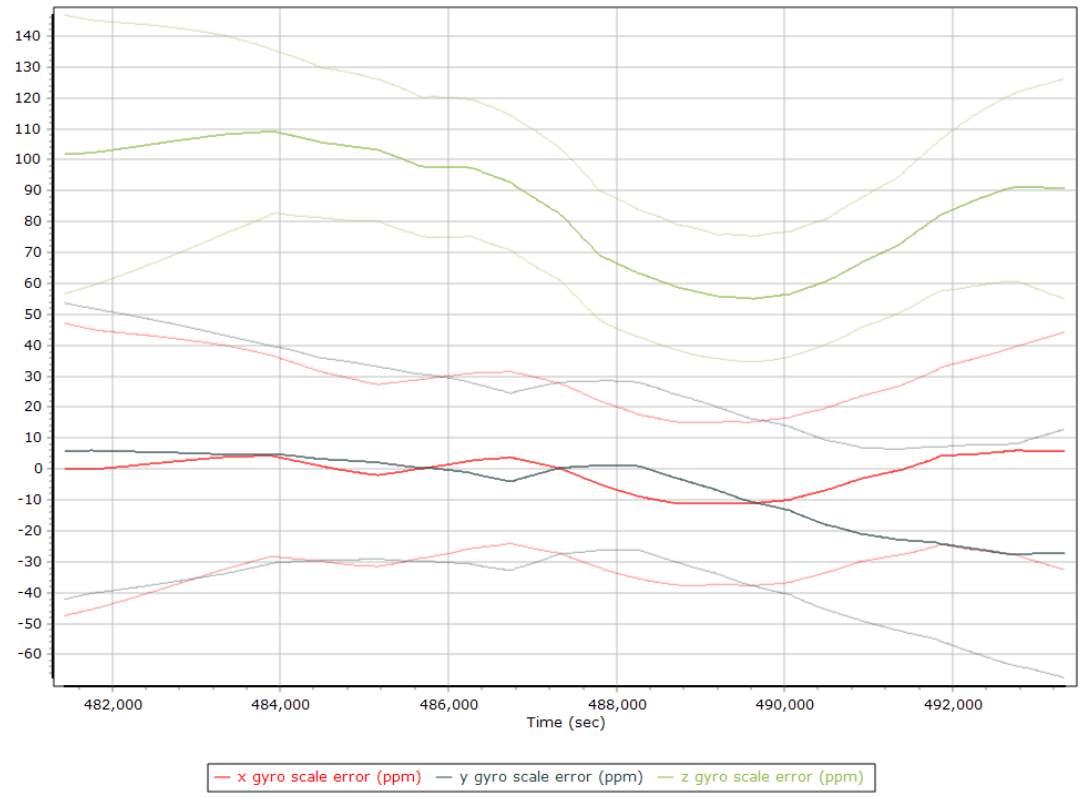
Y Gyro Bias (deg/h)



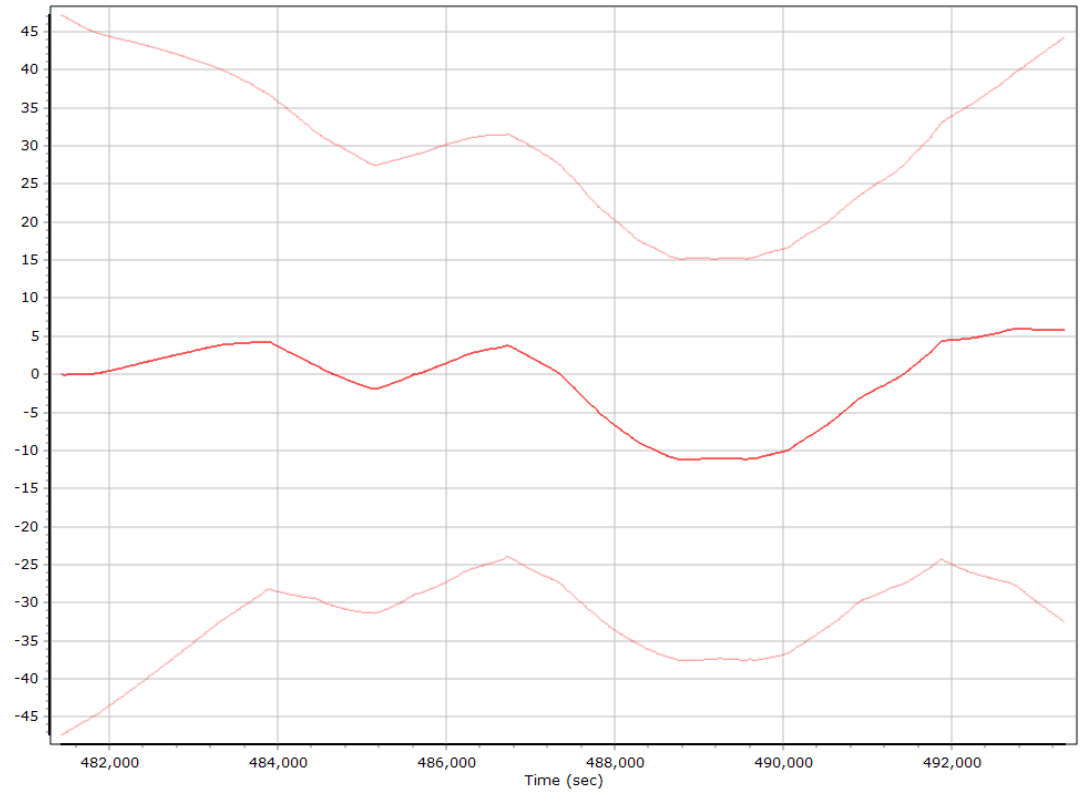
Z Gyro Bias (deg/h)



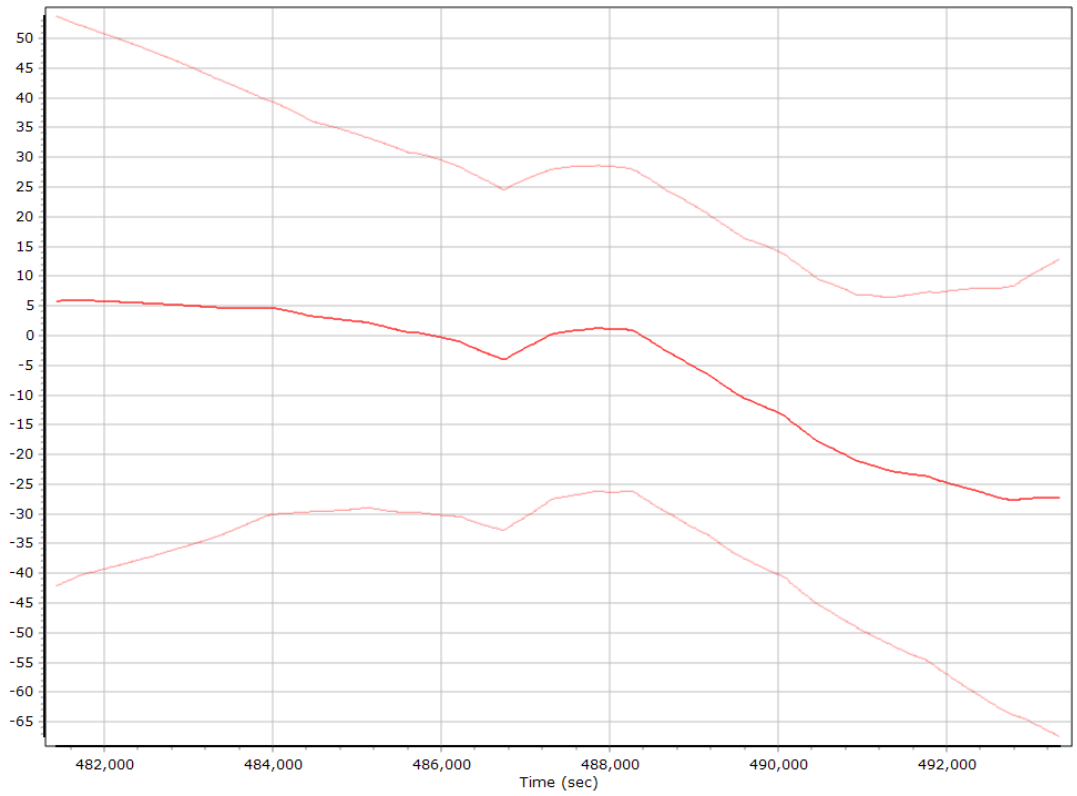
Gyro Scale Error (ppm)



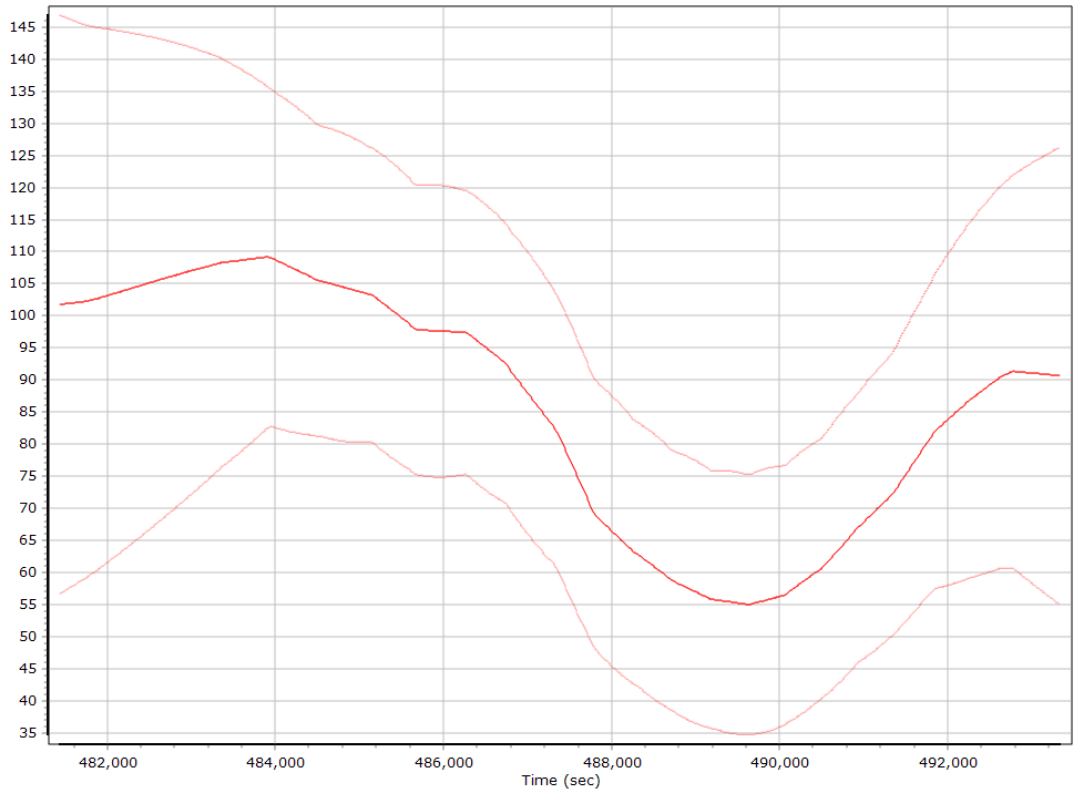
X Gyro Scale Error (ppm)



Y Gyro Scale Error (ppm)

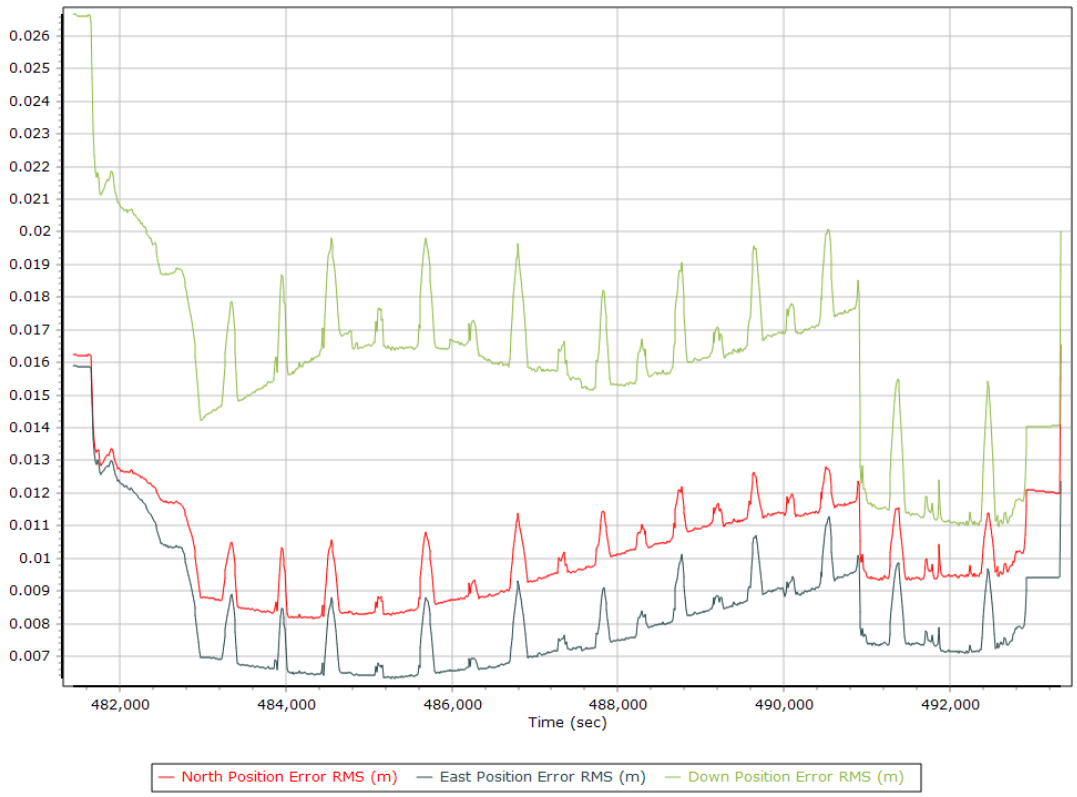


Z Gyro Scale Error (ppm)

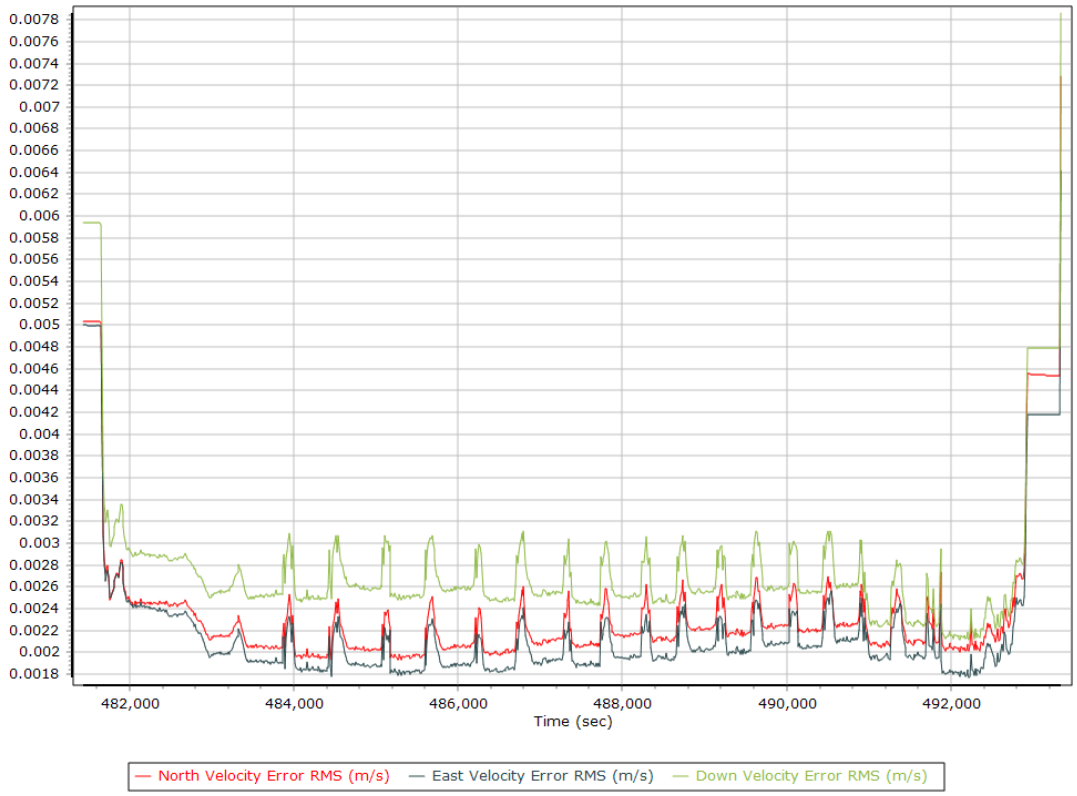


Smoothed Performance Metrics

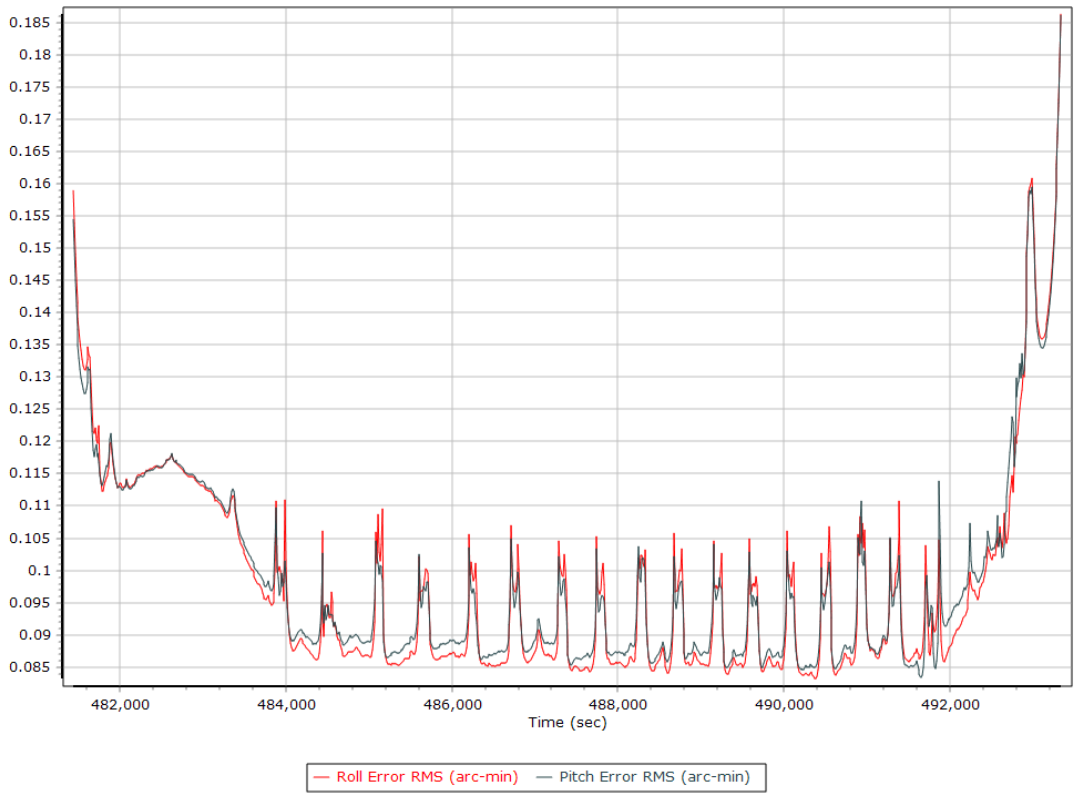
Position Error RMS (m)



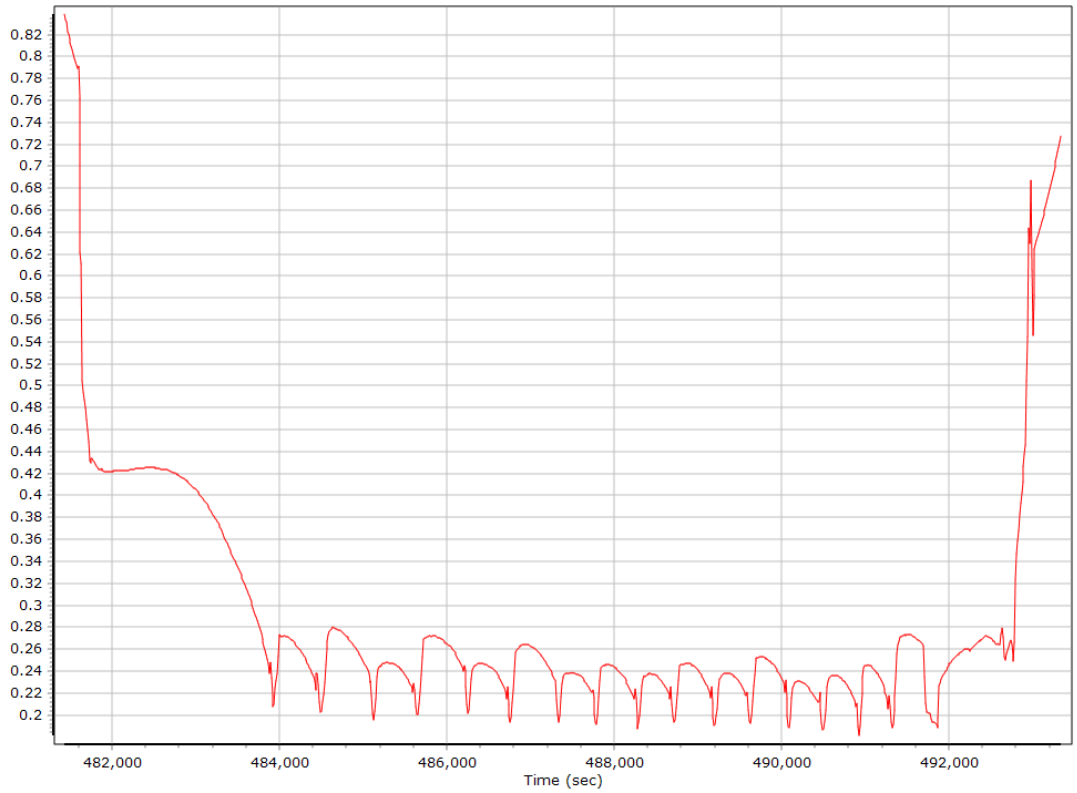
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

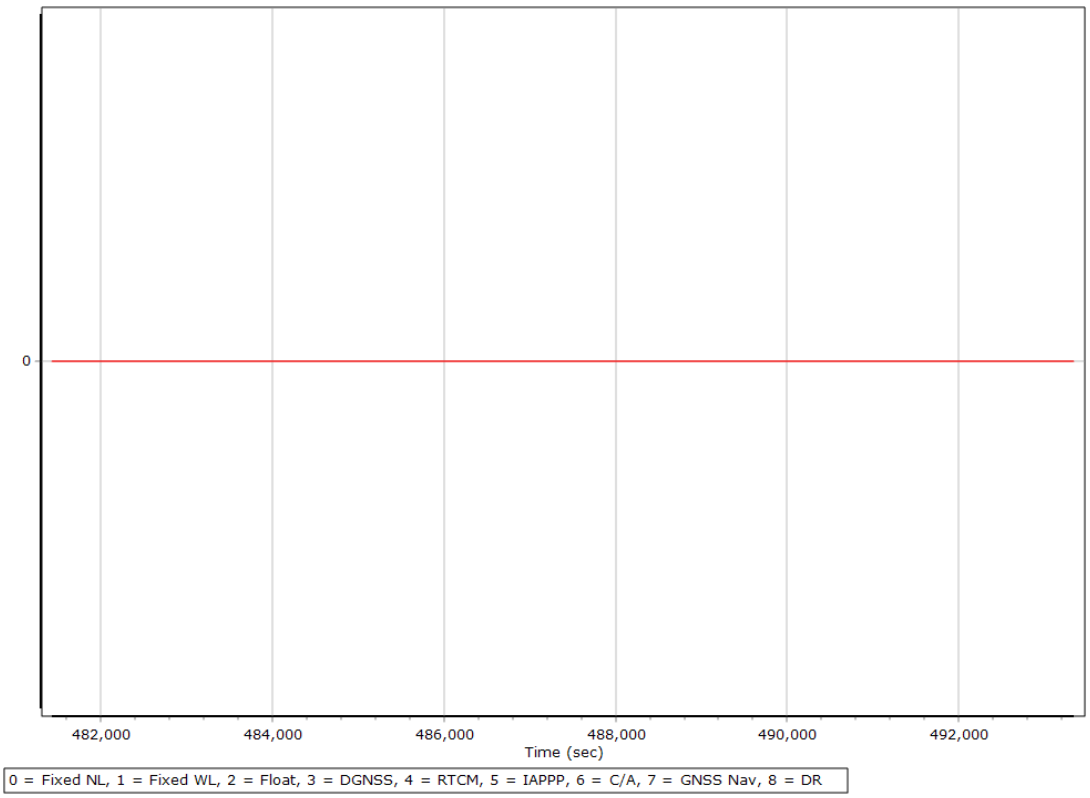


Heading Error RMS (arc-min)

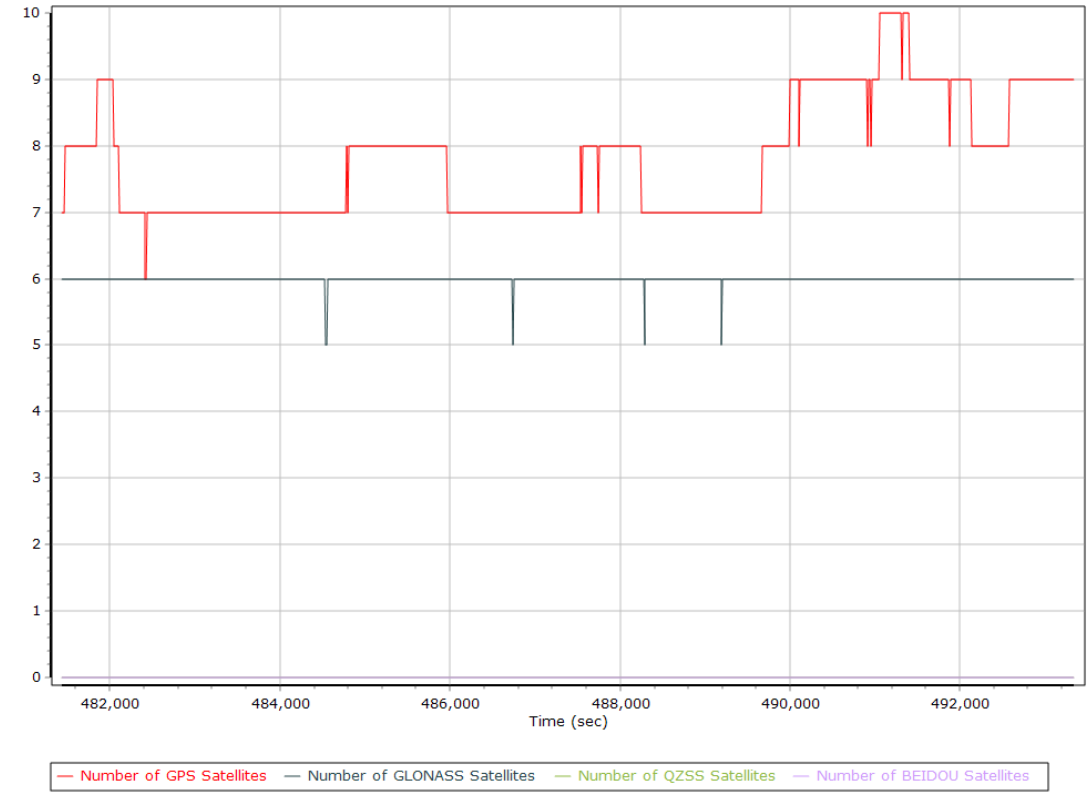


Smoothed Solution Status

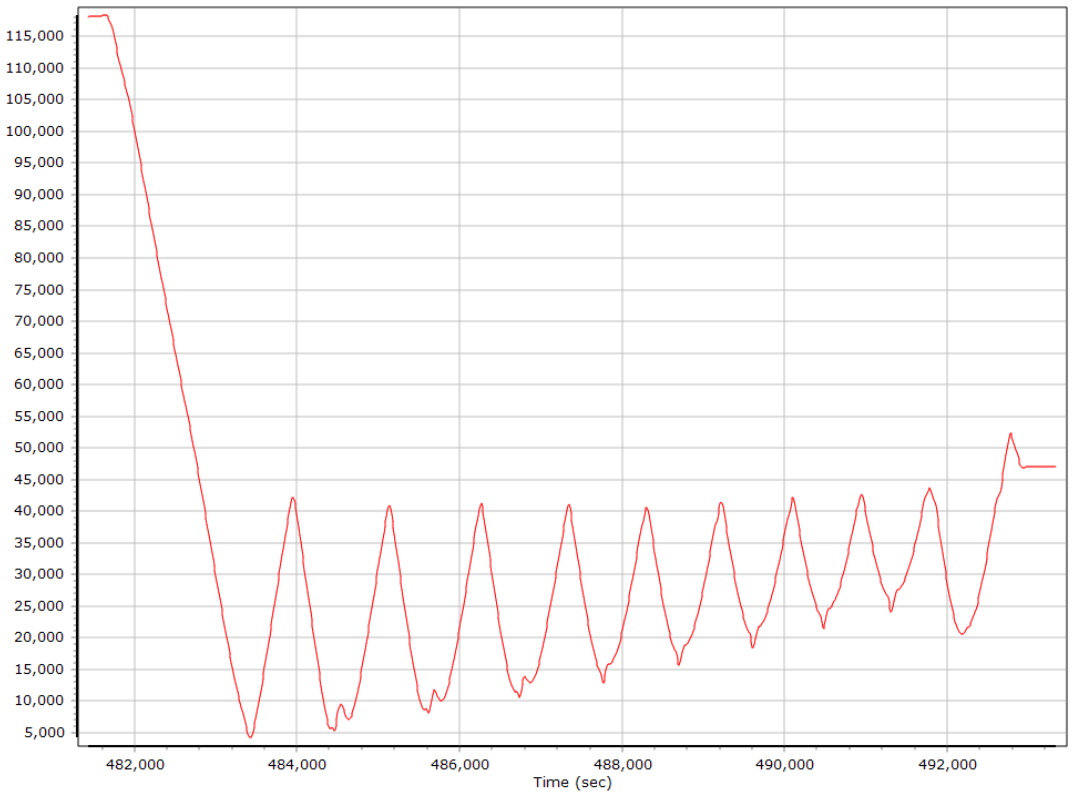
Processing Mode



Number of Satellites



Baseline Length



SBET IAKAR Separation

Export Summary

Export file	export_Mission 1.txt		
Export format	ASCII		
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	481375.004 (1/4/2019 1:42:55 PM)		
Export end time	493339.003 (1/4/2019 5:02:19 PM)		
Height option	Applanix Orthometric Height		
Geoid model	EGM96		
WGS84 height flag	False		
Grid	Albers		
Zone	US		
Datum	NAD83 (2011)		
Ellipsoid	GRS 1980		
Local Transformation	NONE		
Target Epoch	2010		

EO Summary

EO file			
EO format			
Lever arm [m]	0.000	0.000	0.000
Boresight angles [arcmin]	0.000	0.000	0.000
Output rate	Event 1 Time		
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	481375.004 (1/4/2019 1:42:55 PM)		
EO end time	493339.003 (1/4/2019 5:02:19 PM)		
Grid	Universal Transverse Mercator		
Zone	UTM North 17 (84W to 78W)		
Datum	WGS84		
Ellipsoid	WGS84		
Local Transformation	NONE		
Target Epoch	2019.008219		