

General Information

Mission Information

Project name	211114_A_5060484_nad2011_FINAL
Processing date	2021-11-15 12:59:25
Mission date	2021-11-14 16:35:13
Mission duration	02:39:30.000
Processing mode	IN-Fusion PP-RTX

Rover Hardware Information

Product	POS AV 610 VER6 HW2.5-12
Serial number	S/N12118
IMU type	57
Receiver type	BD982
Antenna type	AV39

Project File List

Rover Data Files

File name	File type
211114a.035	POS Data
211114a.036	POS Data
211114a.037	POS Data
211114a.038	POS Data
211114a.039	POS Data
211114a.040	POS Data
211114a.041	POS Data
211114a.042	POS Data
211114a.043	POS Data
211114a.044	POS Data
211114a.045	POS Data
211114a.046	POS Data
211114a.047	POS Data
211114a.048	POS Data
211114a.049	POS Data
211114a.050	POS Data
211114a.051	POS Data
211114a.052	POS Data
211114a.053	POS Data
211114a.054	POS Data
211114a.055	POS Data
211114a.056	POS Data

Input Files

File Name	File Type
Ephm3180.21g	GLONASS Broadcast Ephemeris
Ephm3180.21n	GPS Broadcast Ephemeris

Output Files

Filename	File type
sbet_211114_A_5060484_nad2011_FINAL.out	SBET Trajectory File

Rover Data Summary

First raw data file	211114a.035		
Last raw data file	211114a.056		
Start GPS week	2184		
Start time	17.247 (11/14/2021 00:00:17)		
End time	69283.414 (11/14/2021 19:14:43)		
Start of fine alignment	59898.661 (11/14/2021 16:38:18)		
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)	0.683	-0.546	-1.101
Reference to Primary GNSS lever arm std dev (m)	-1.000		
Aircraft to Reference mounting angles (deg)	0.000	0.000	0.000

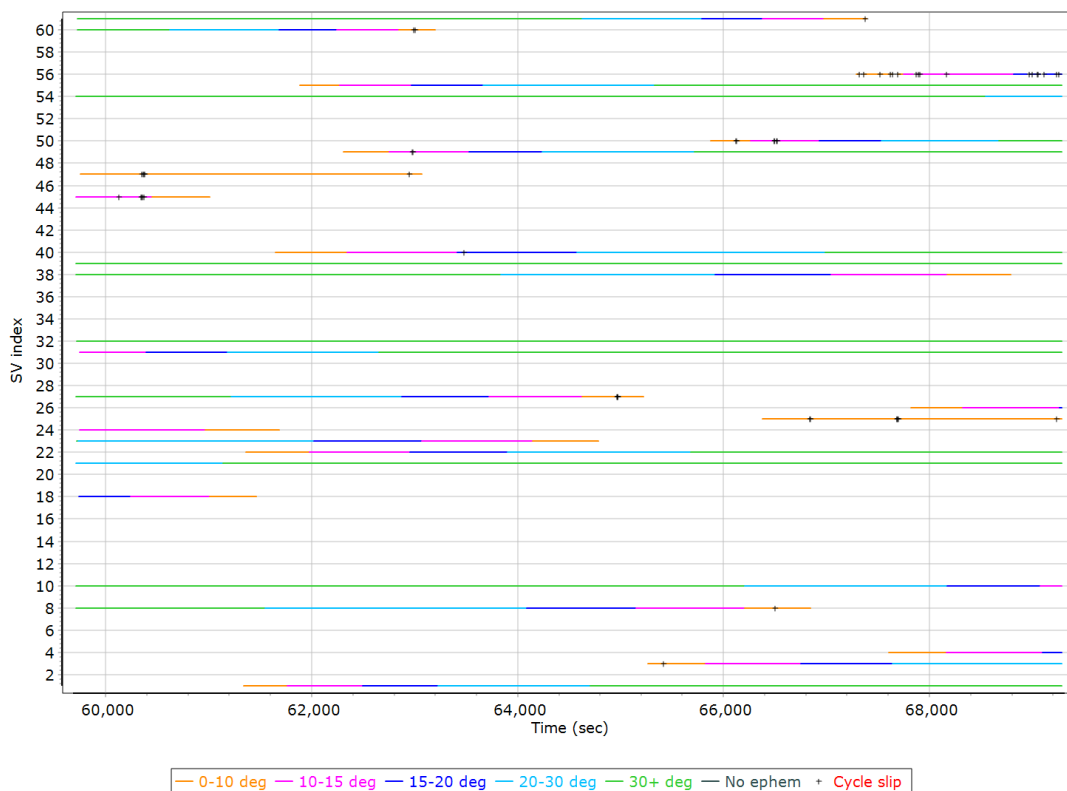
Rover Data QC

Raw IMU Import QC Summary

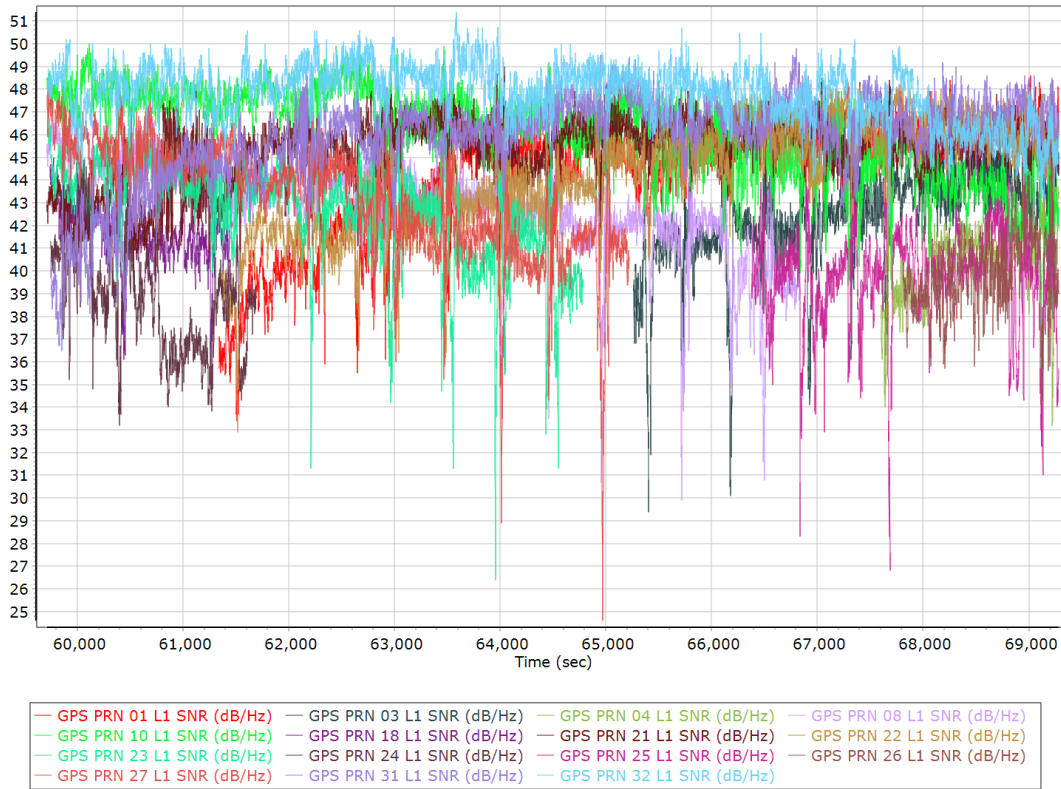
IMU data input file	imu_211114_A_5060484_nad2011_FINAL.dat
IMU data check log file	imudt_211114_A_5060484_nad2011_FINAL.log
IMU Records Processed	1913851
Termination Status	Warnings
IMU Anomalies	1
IMU Failure Messages	
59717.619 : WARNING : Gap of 59699.6271 seconds in CHECKDT input data	

Primary Observables & Satellite Data

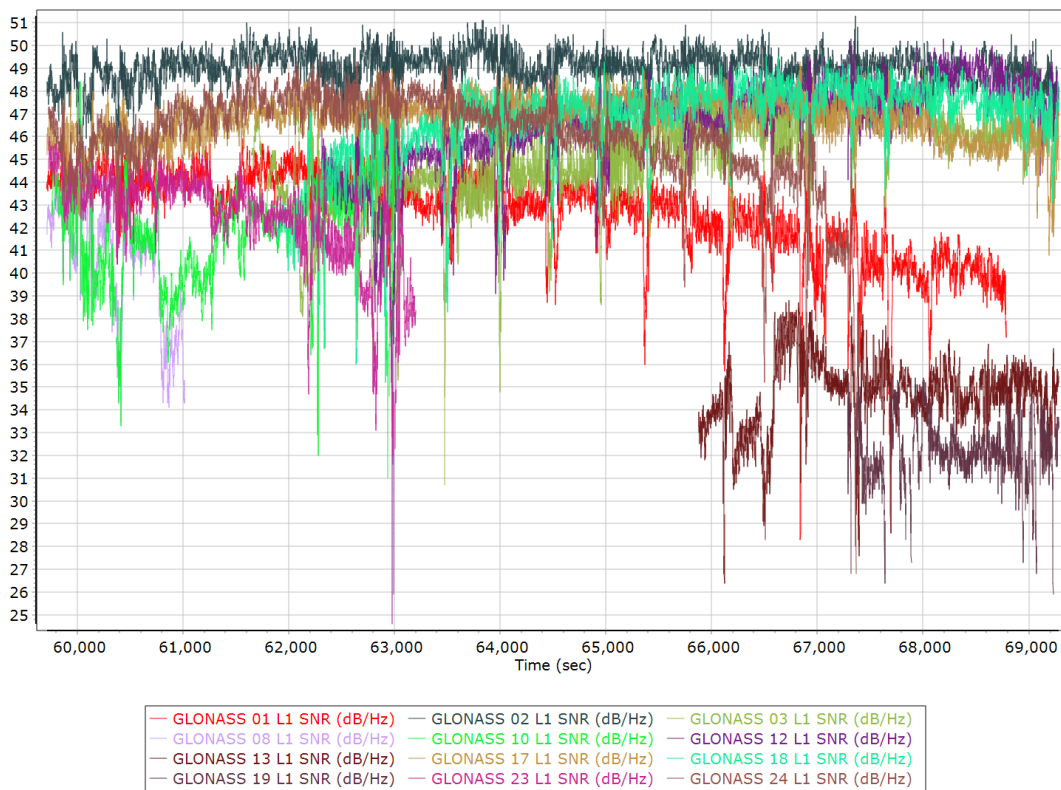
GPS/GLONASS L1 Satellite Lock/Elevation



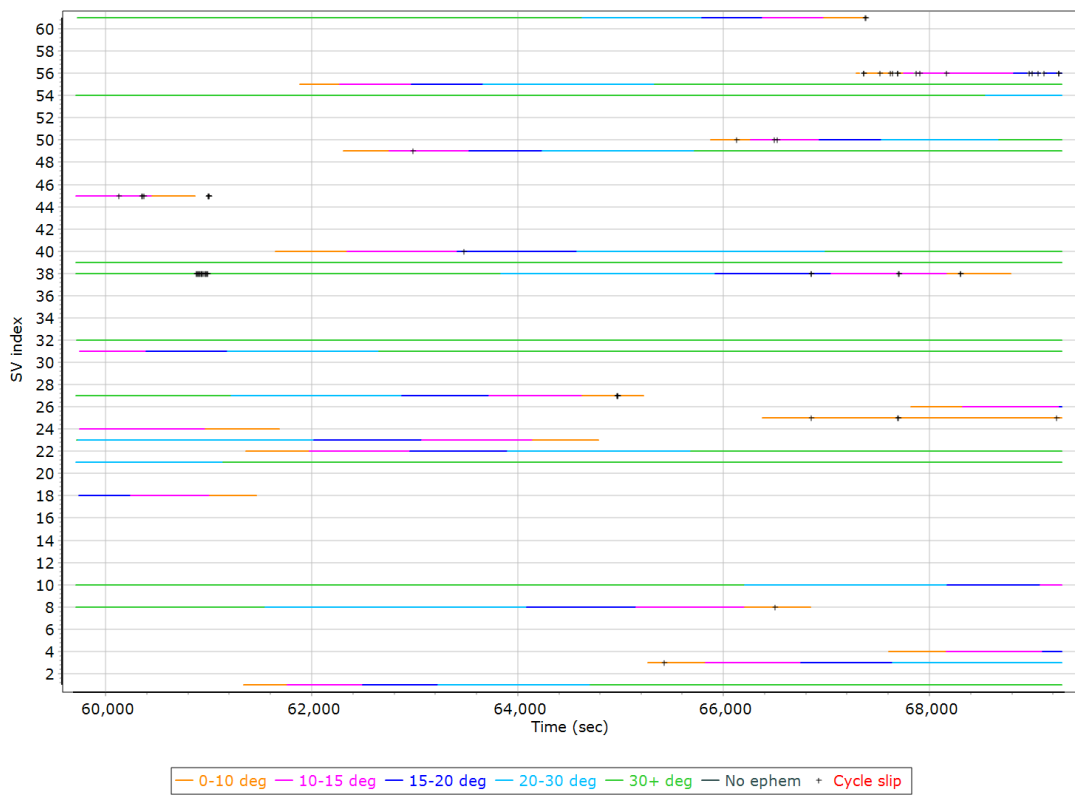
GPS L1 SNR



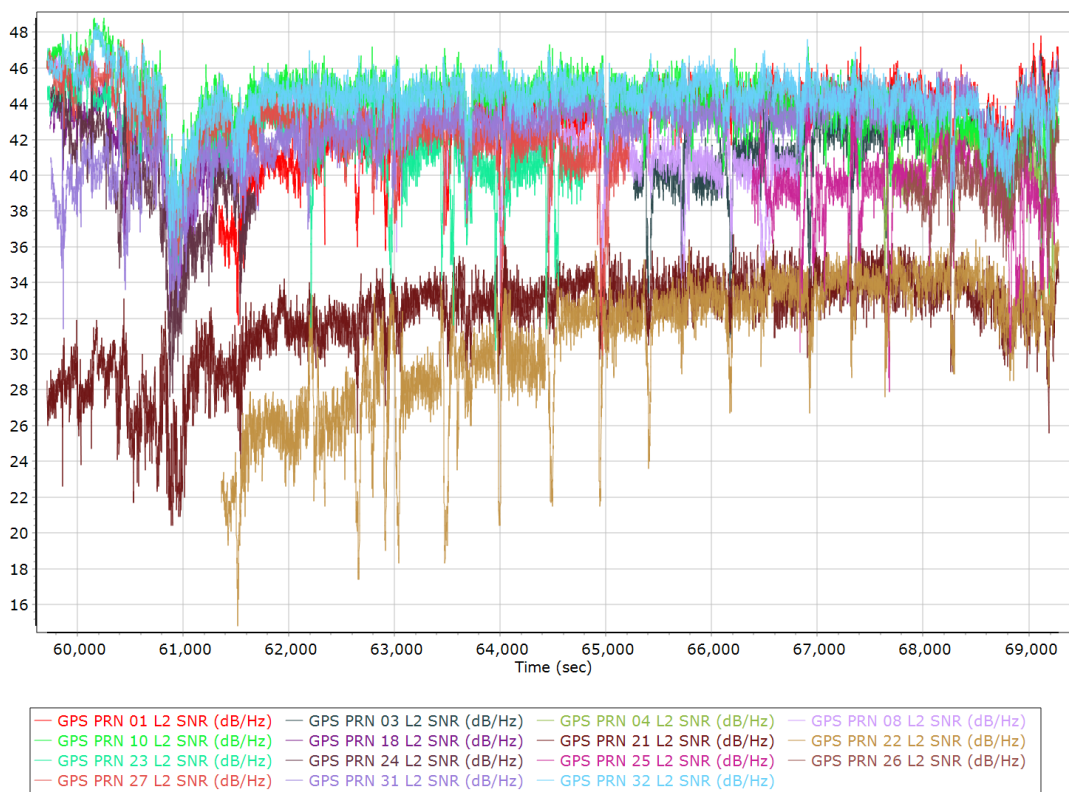
GLONASS L1 SNR



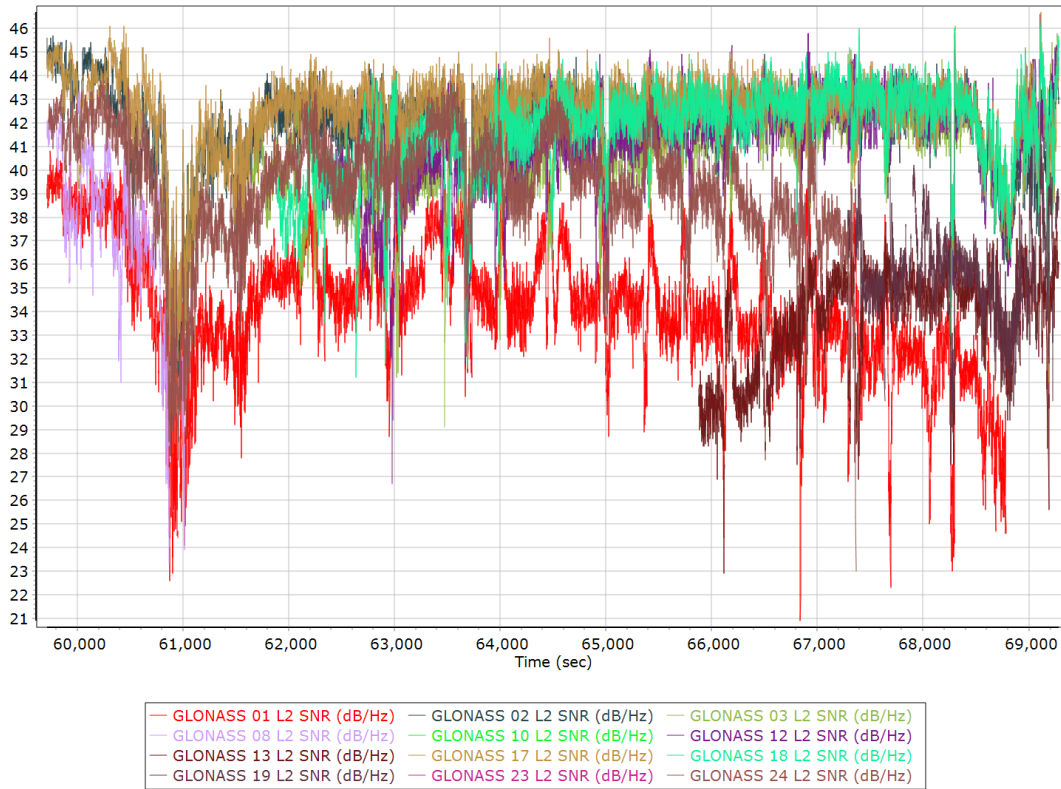
GPS/GLONASS L2 Satellite Lock/Elevation



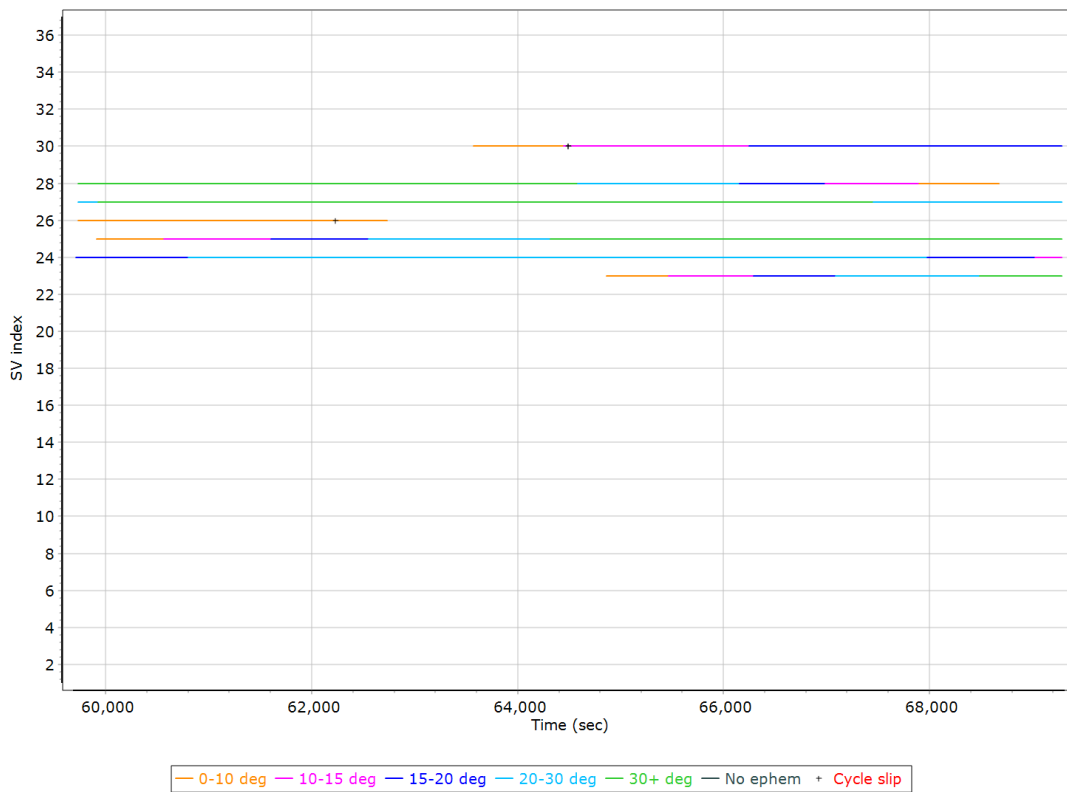
GPS L2 SNR



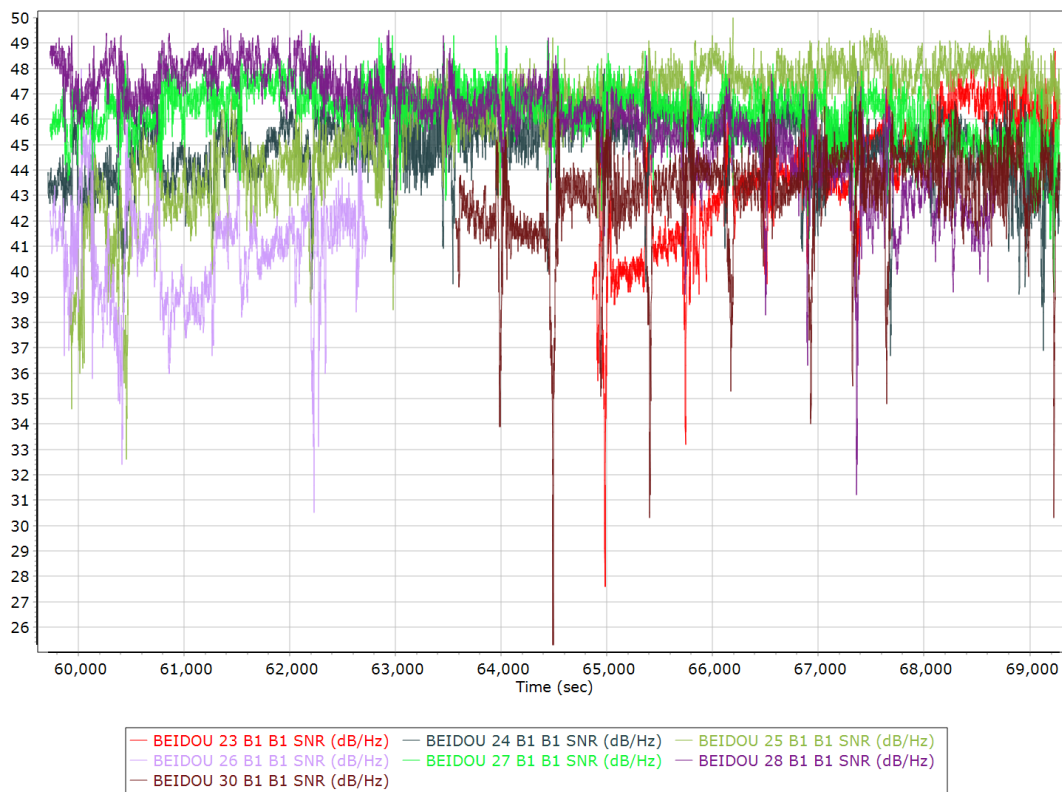
GLONASS L2 SNR



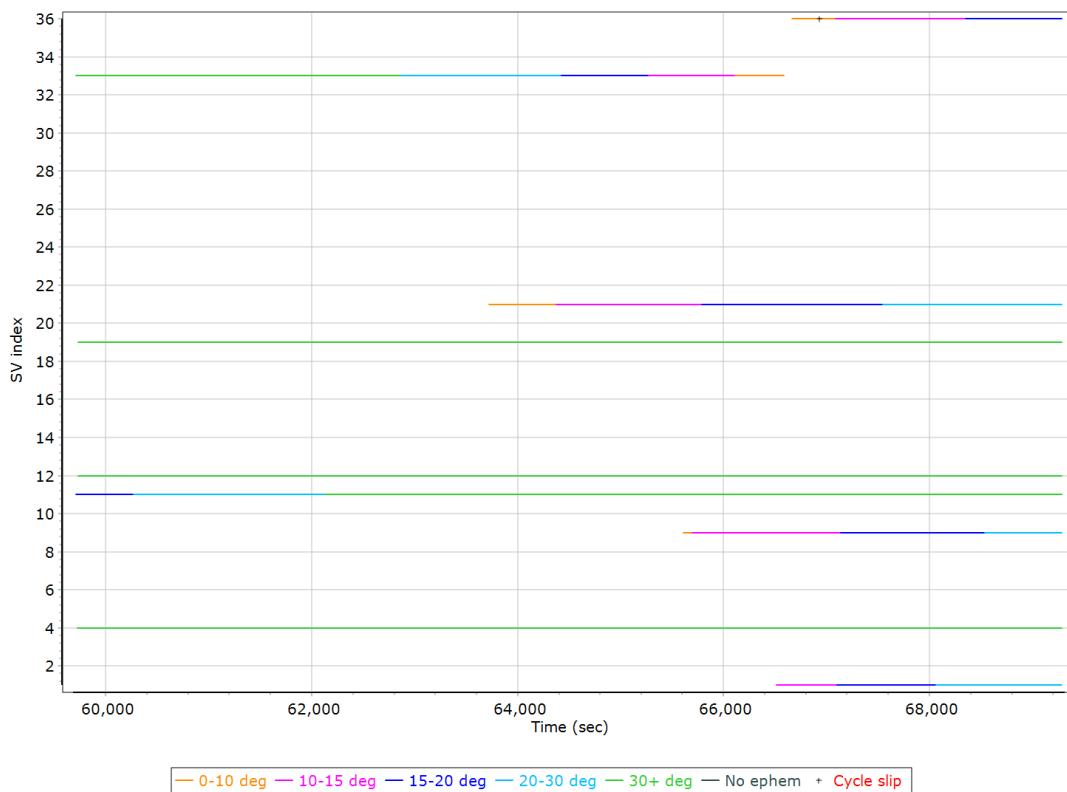
BEIDOU Satellite Lock/Elevation



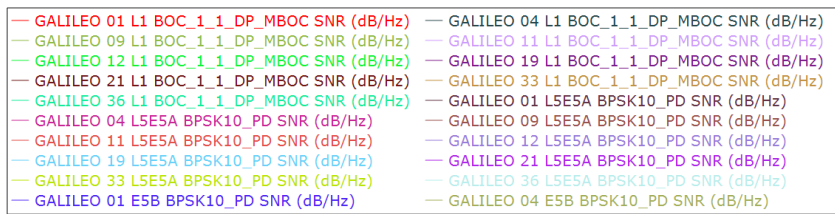
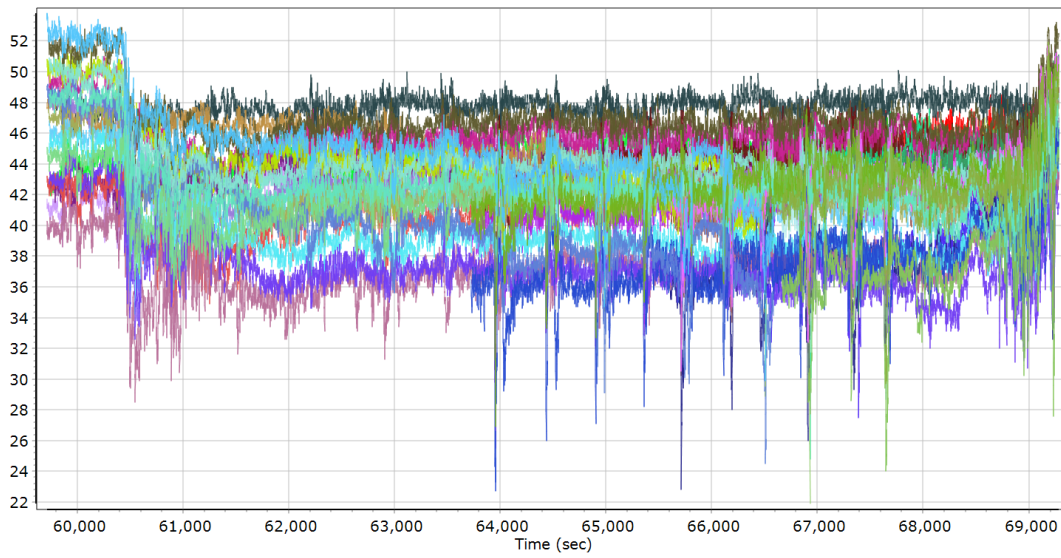
BEIDOU SNR



GALILEO Satellite Lock/Elevation

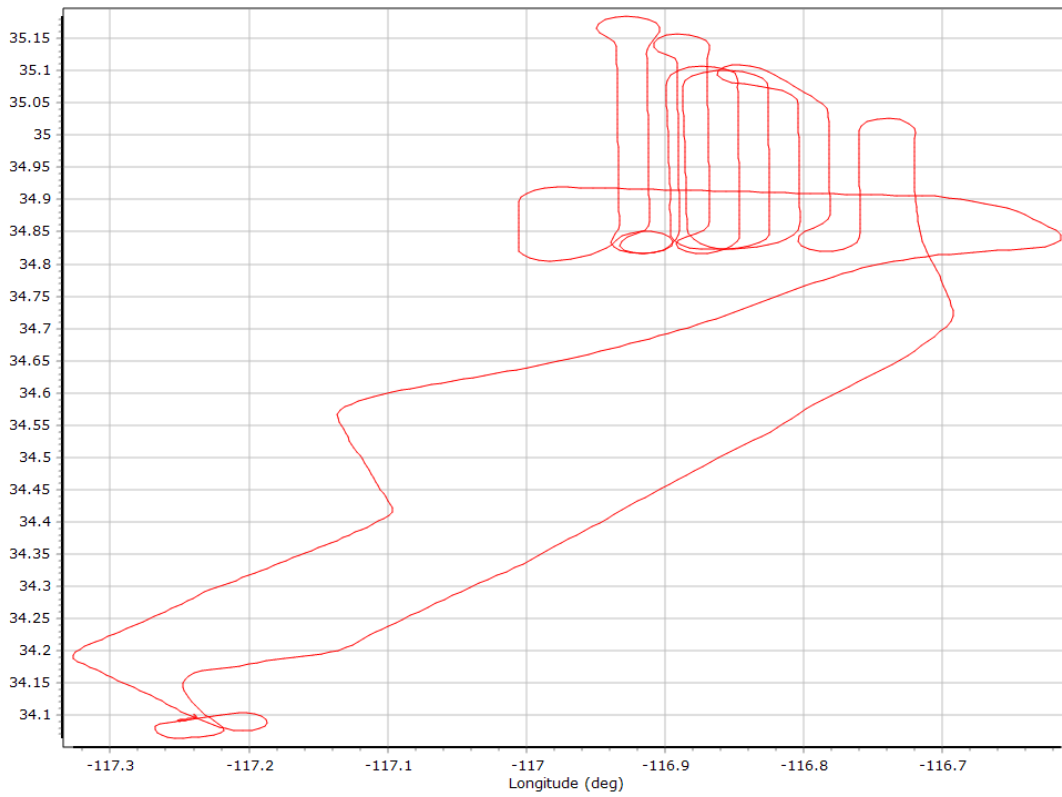


GALILEO SNR

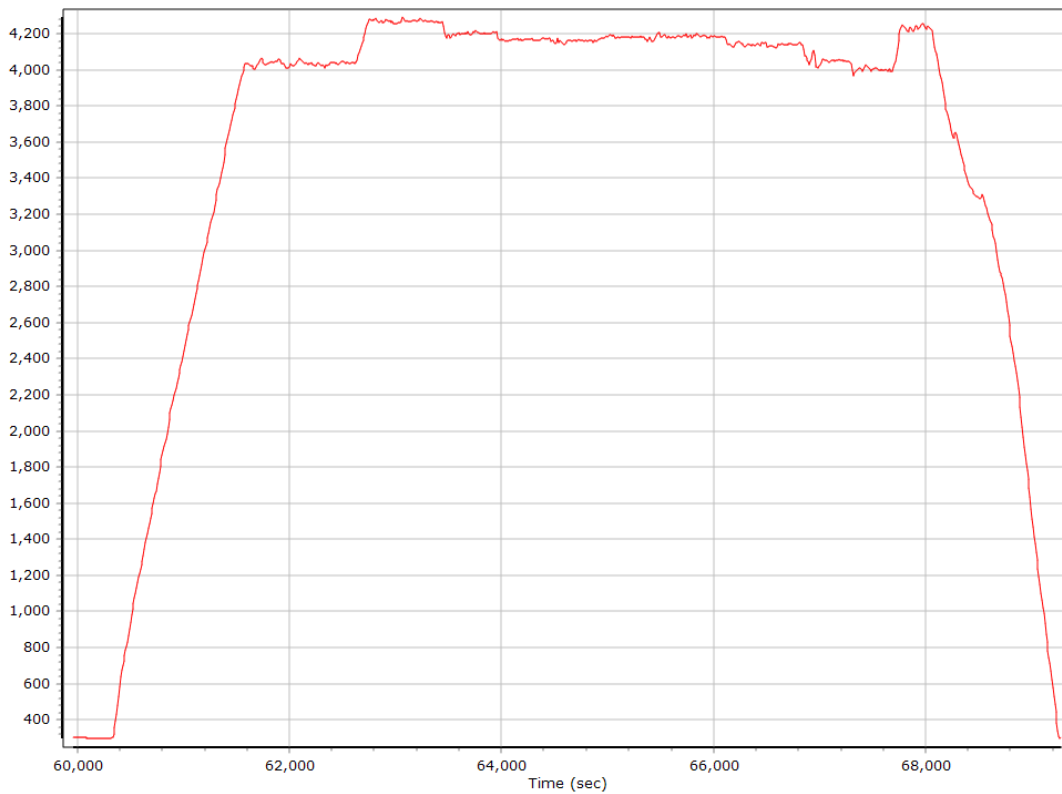


Smoothed Trajectory Information

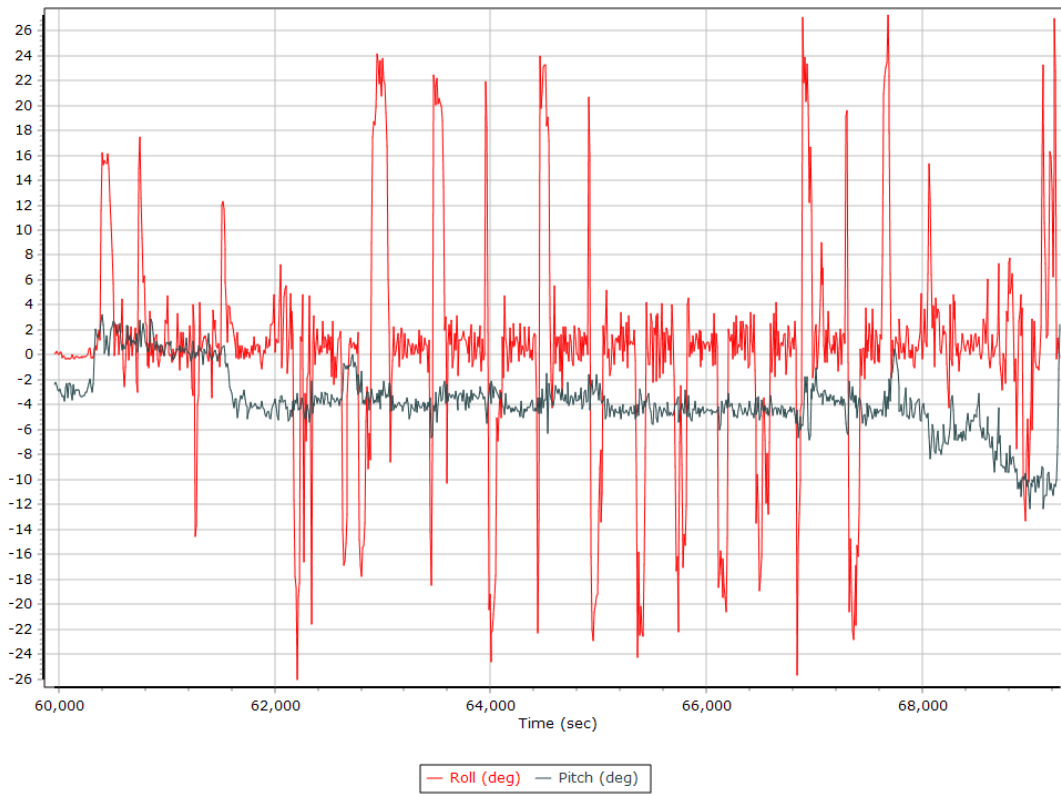
Top View



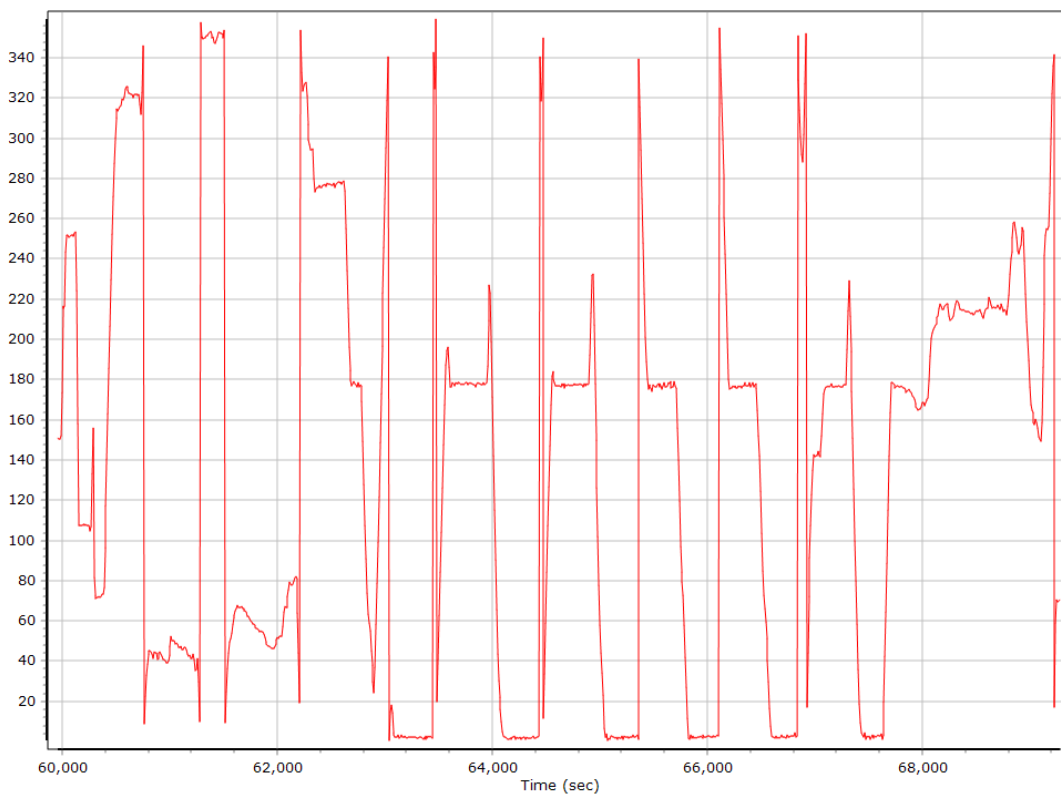
Altitude



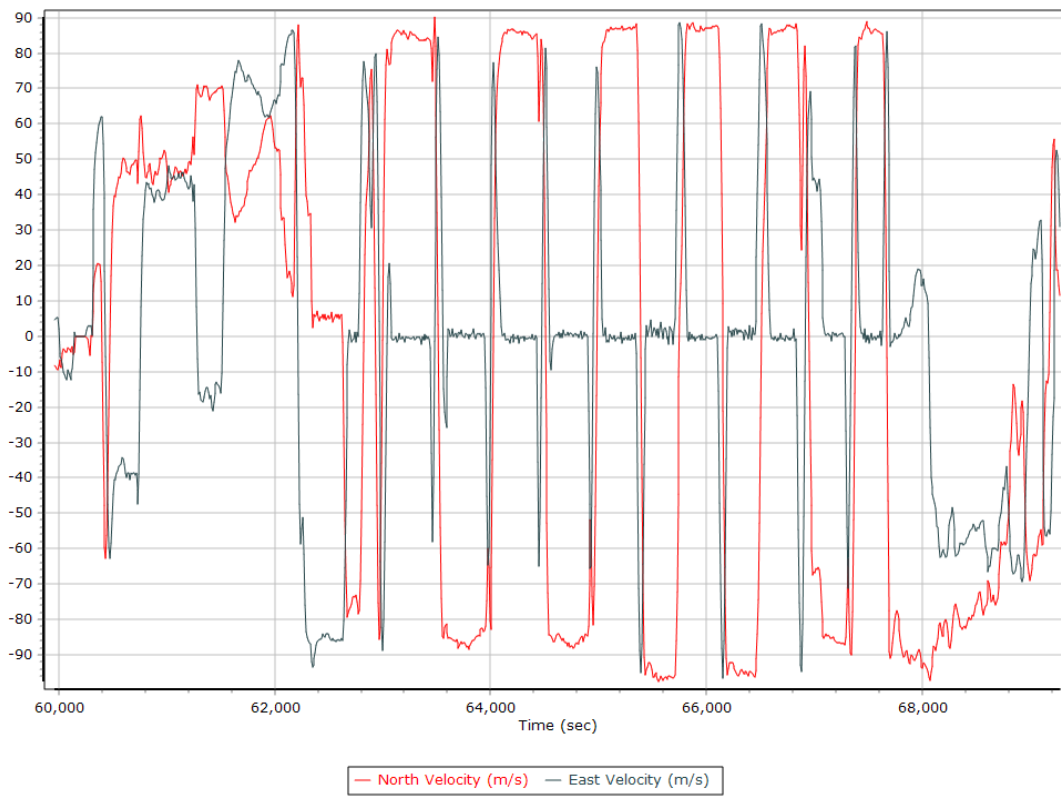
Roll/Pitch



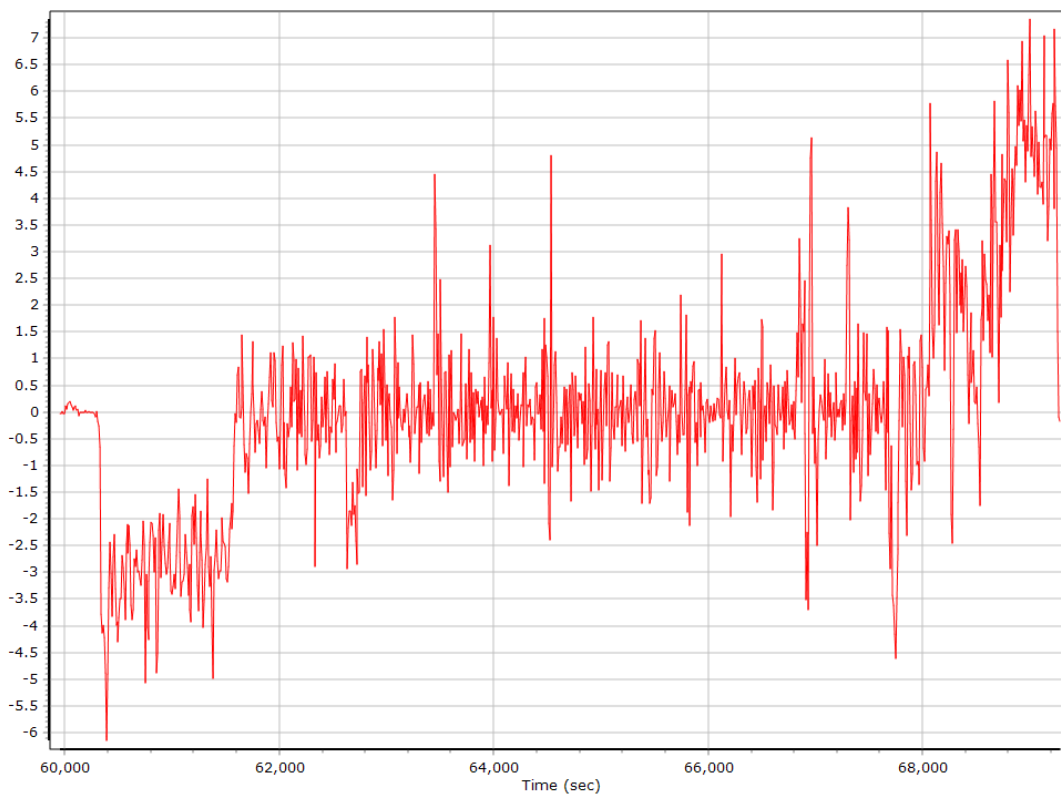
Heading



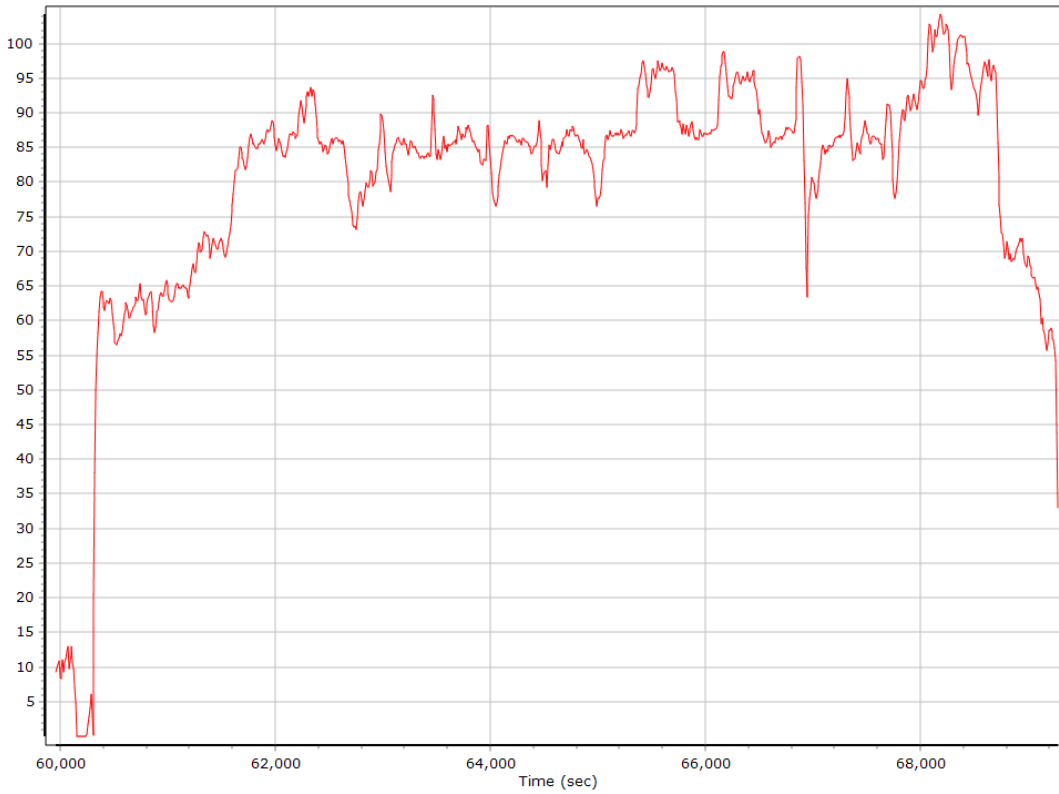
North/East Velocity



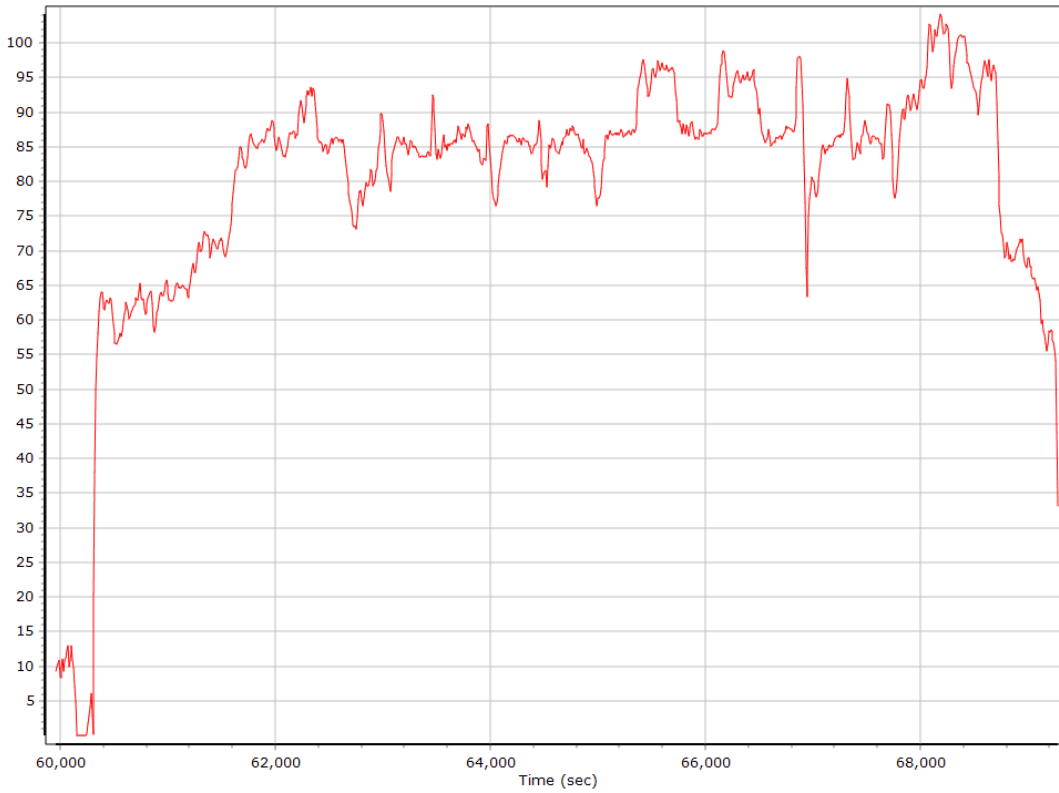
Down Velocity



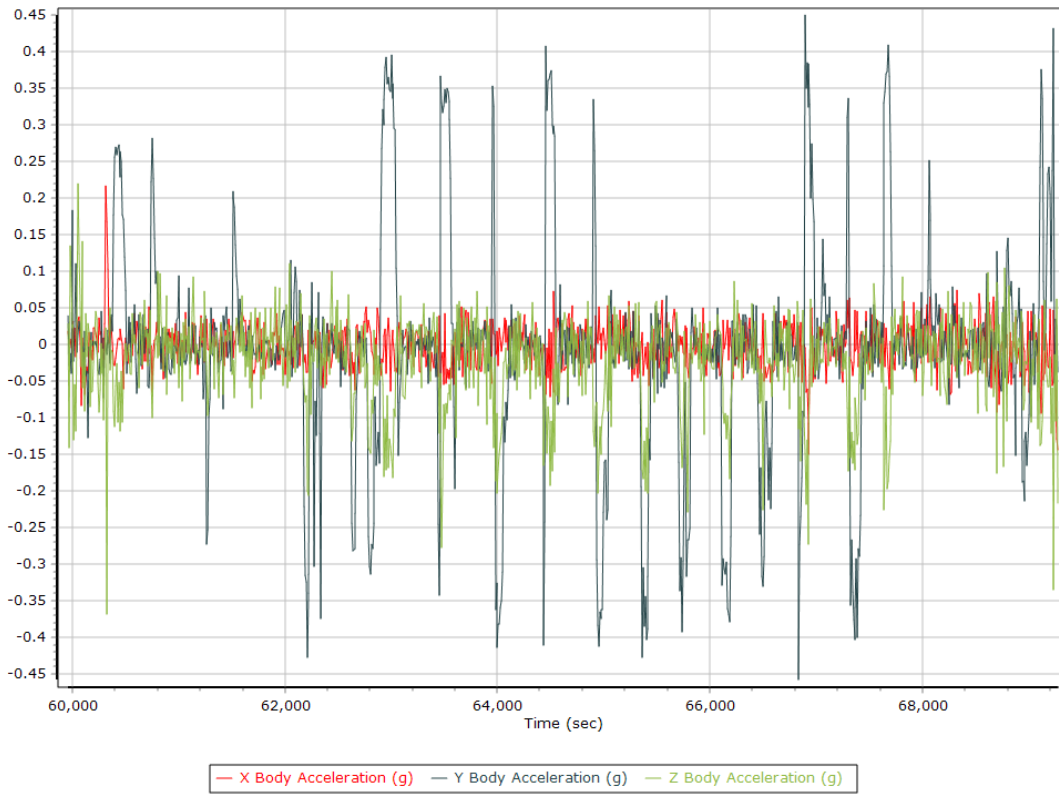
Total Speed



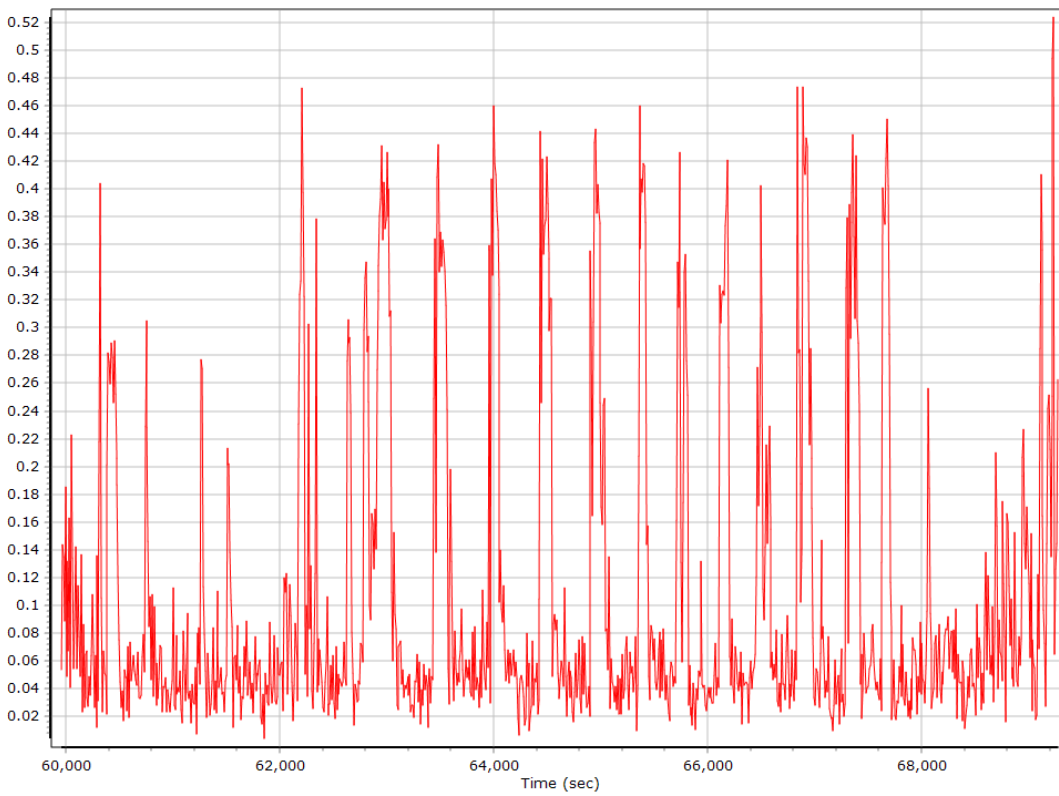
Ground Speed



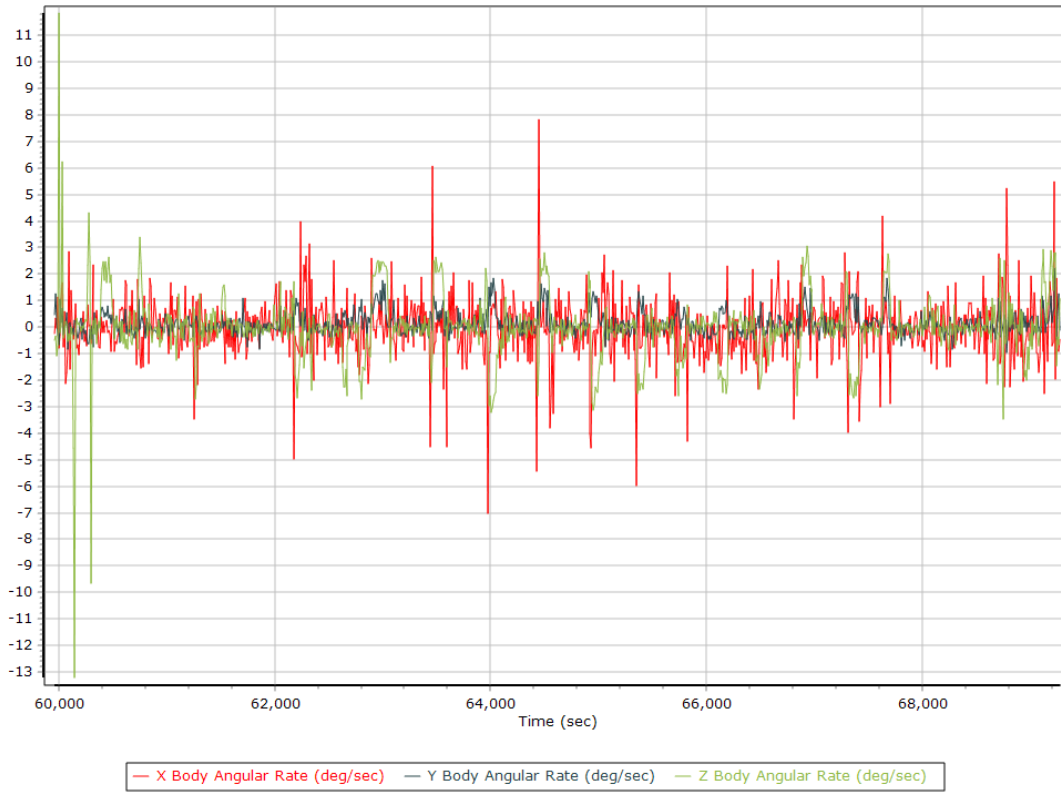
Body Acceleration



Total Body Acceleration

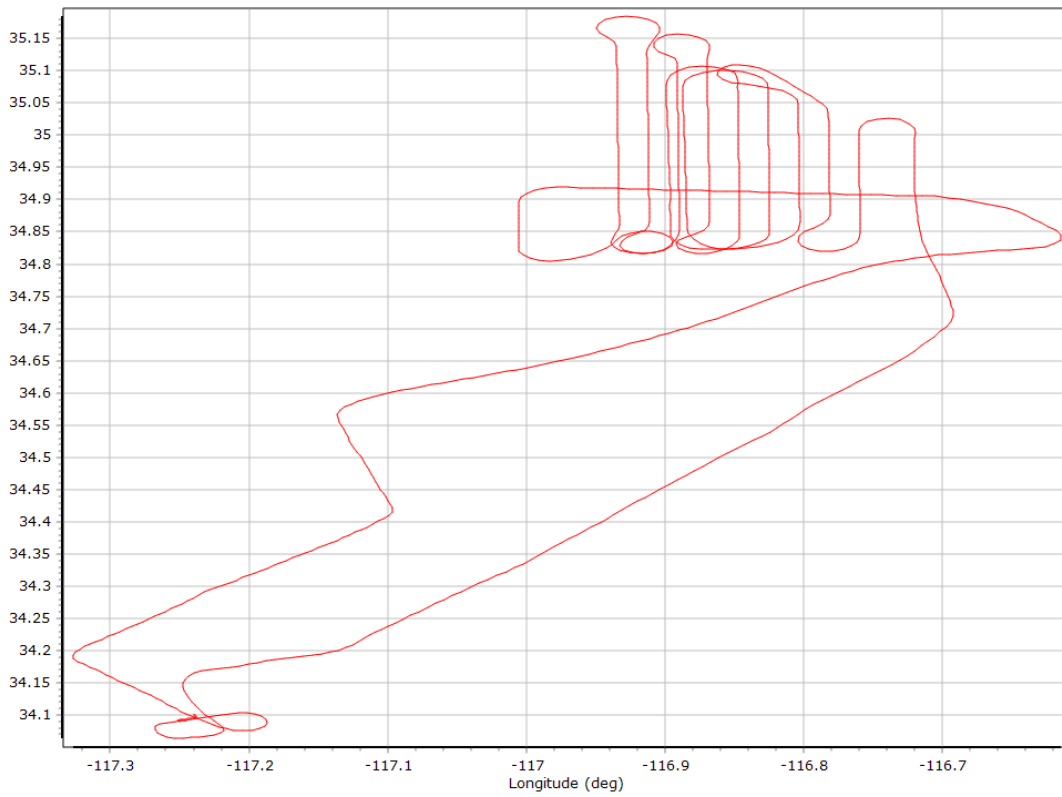


Body Angular Rate

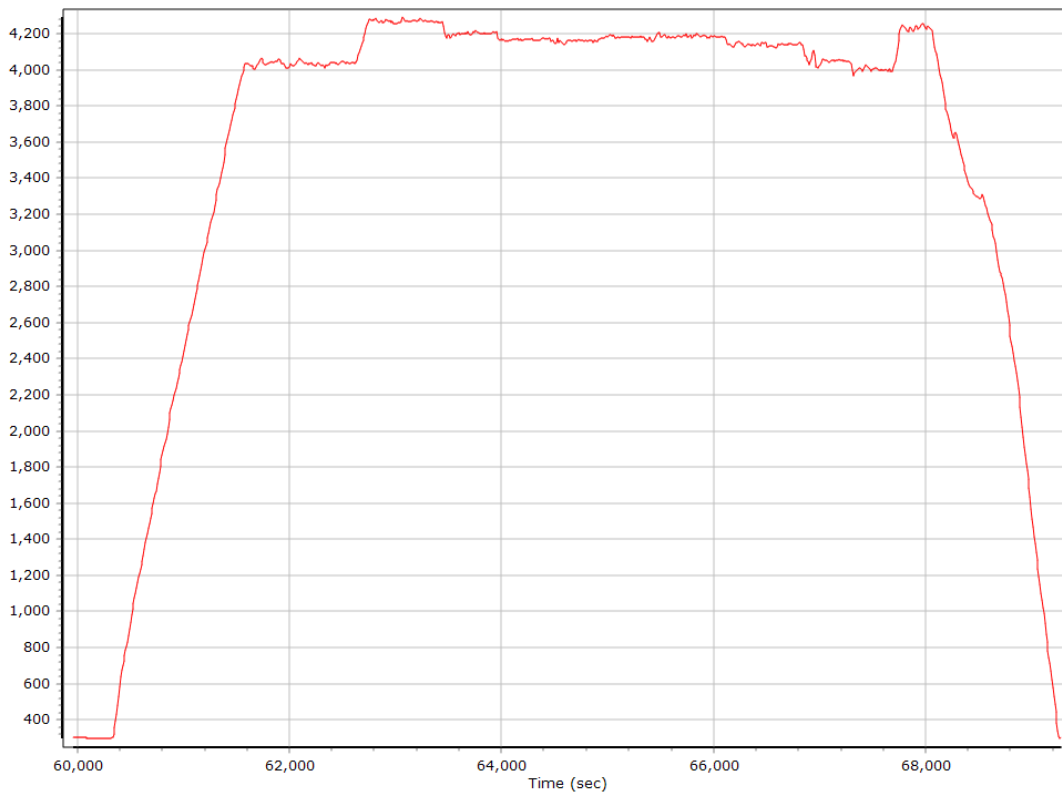


Forward Processed Trajectory Information

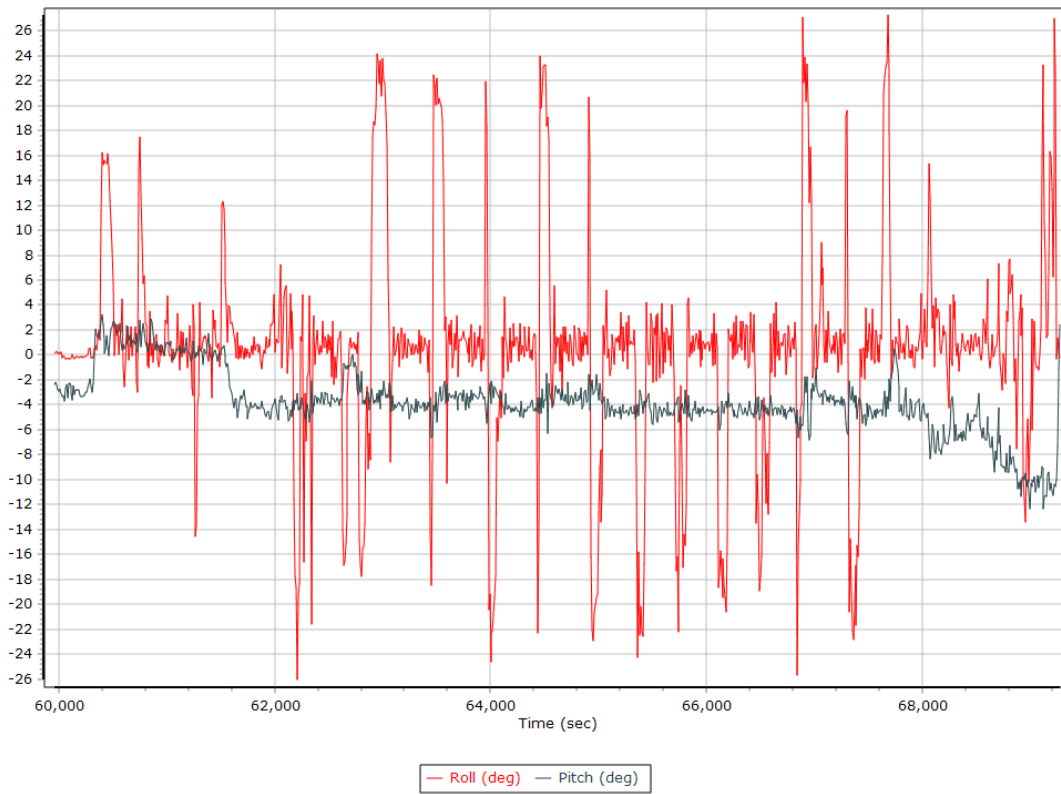
Top View



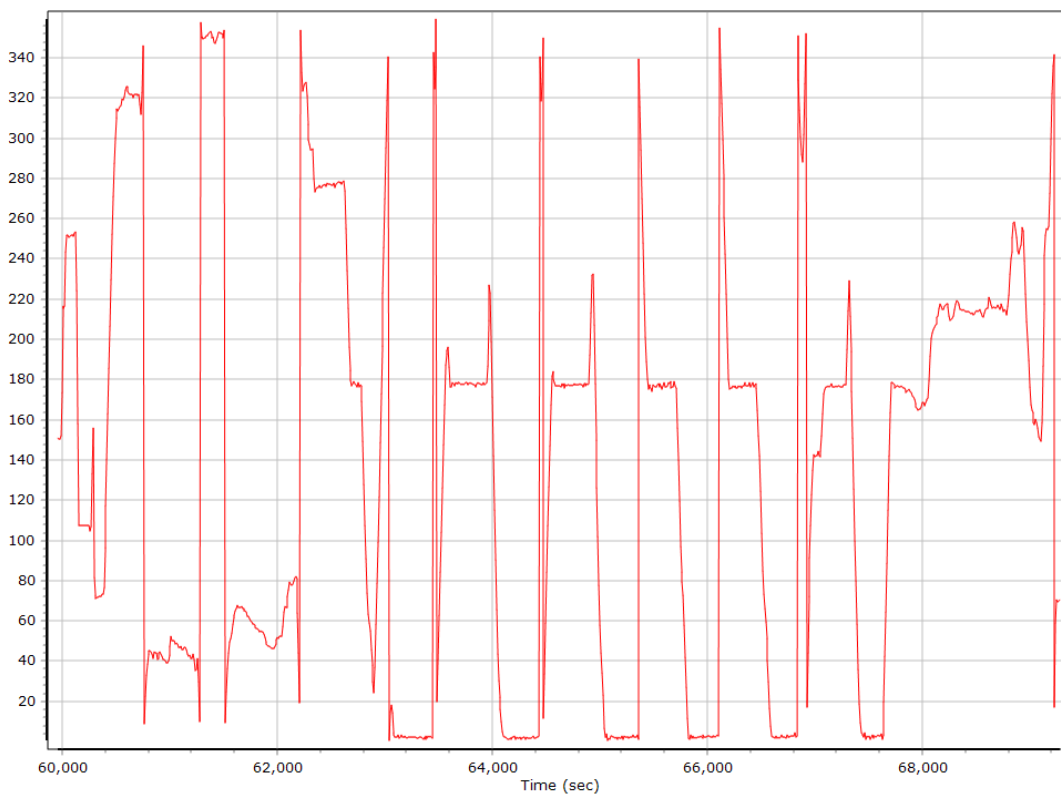
Altitude



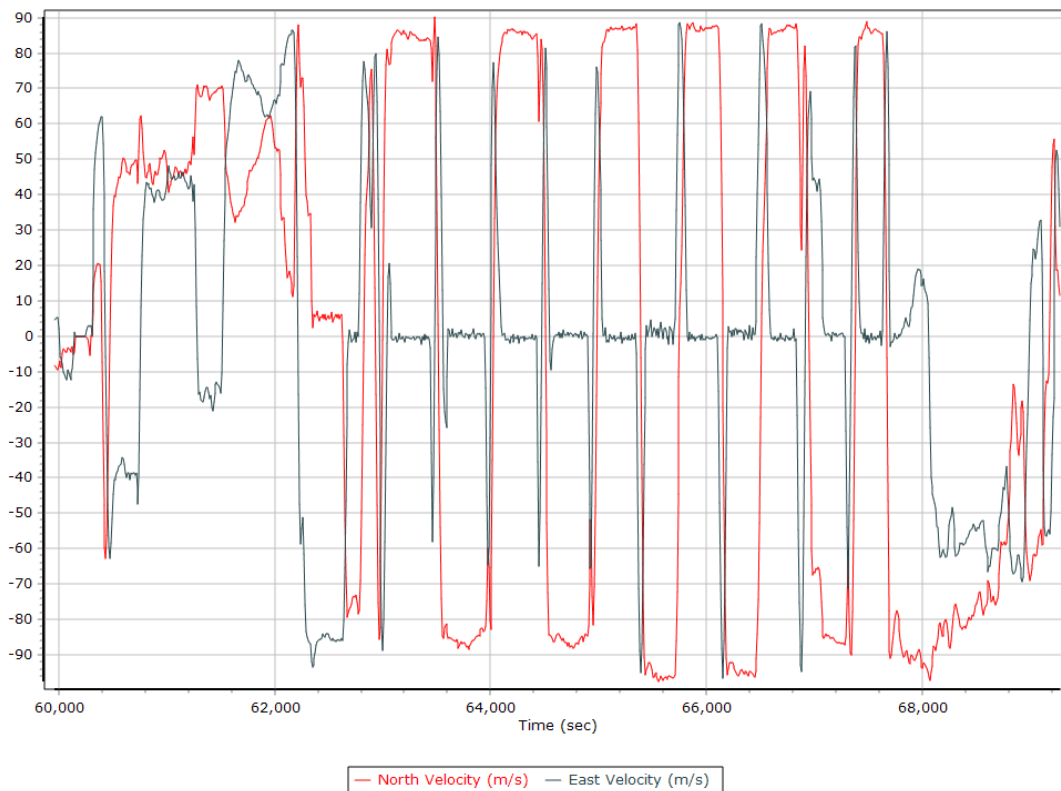
Roll/Pitch



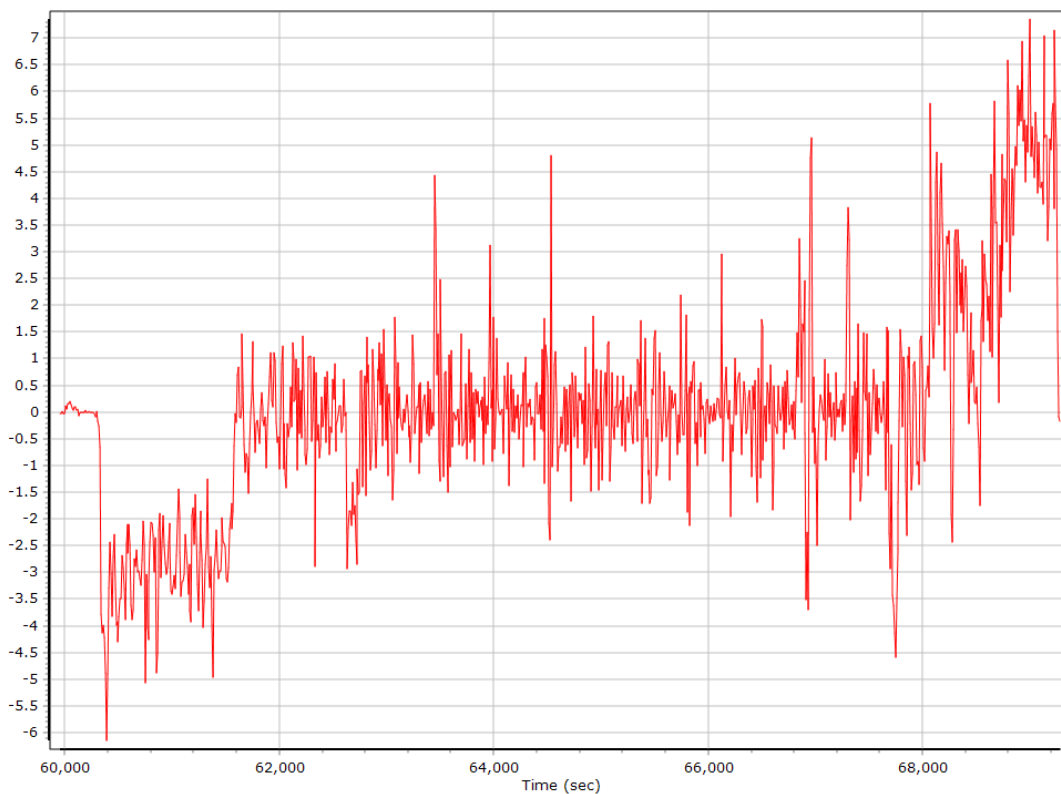
Heading



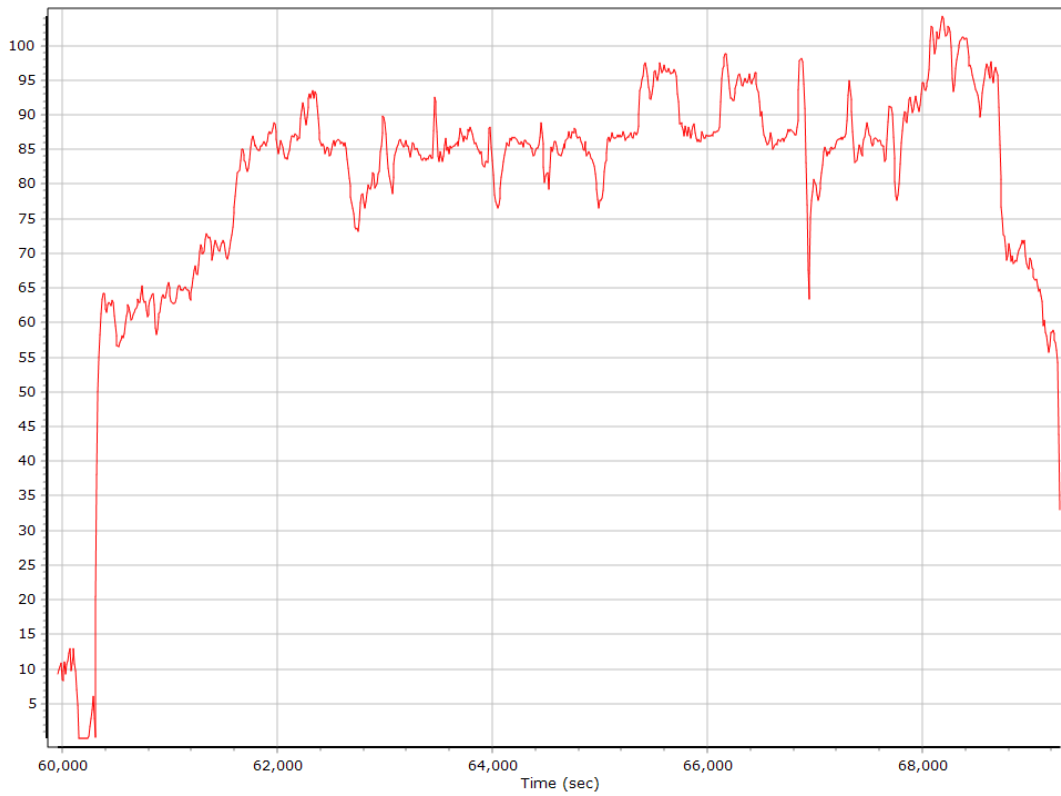
North/East Velocity



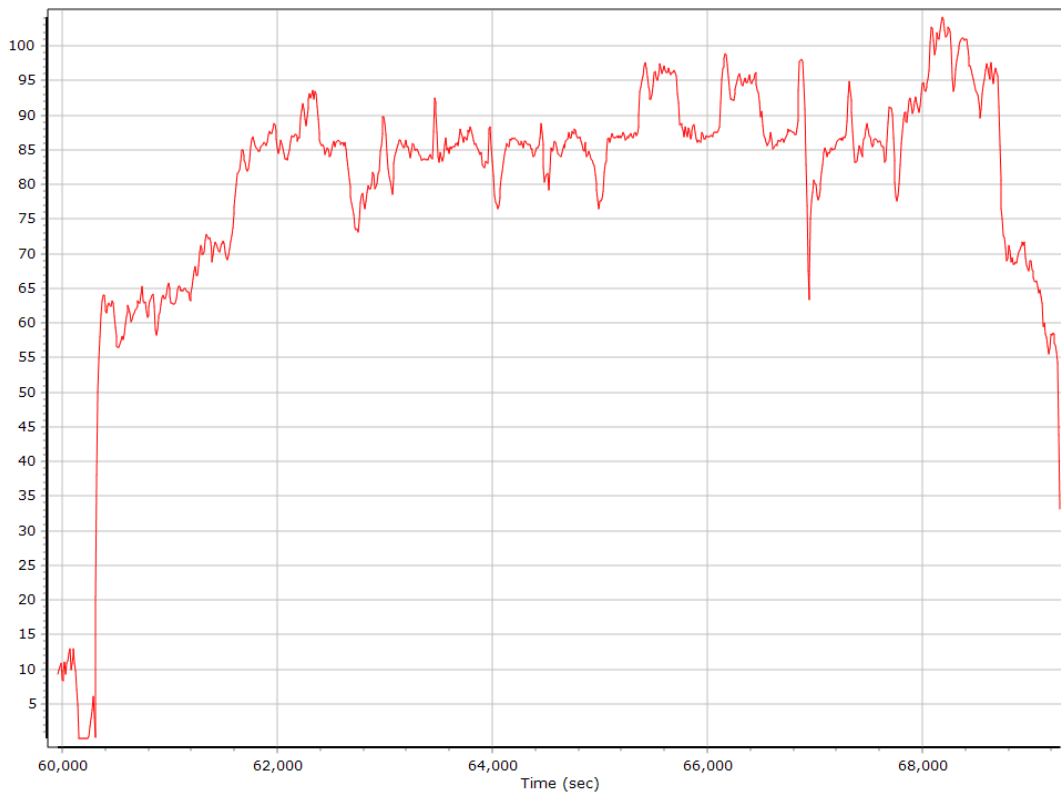
Down Velocity



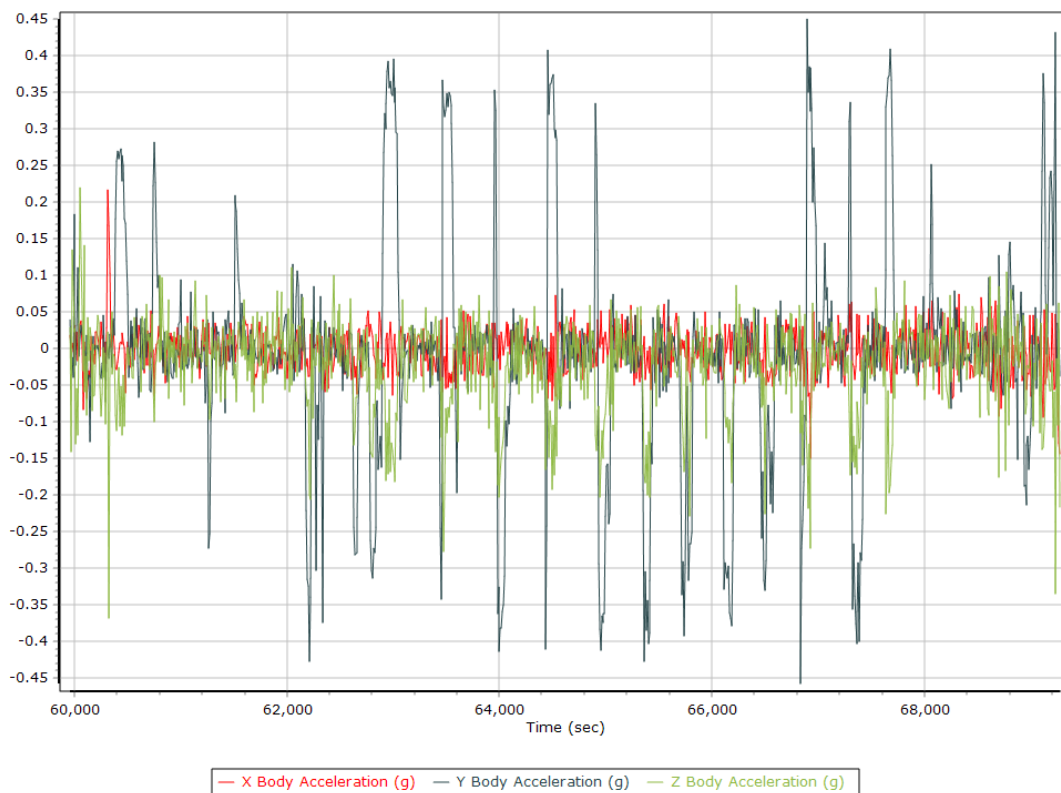
Total Speed



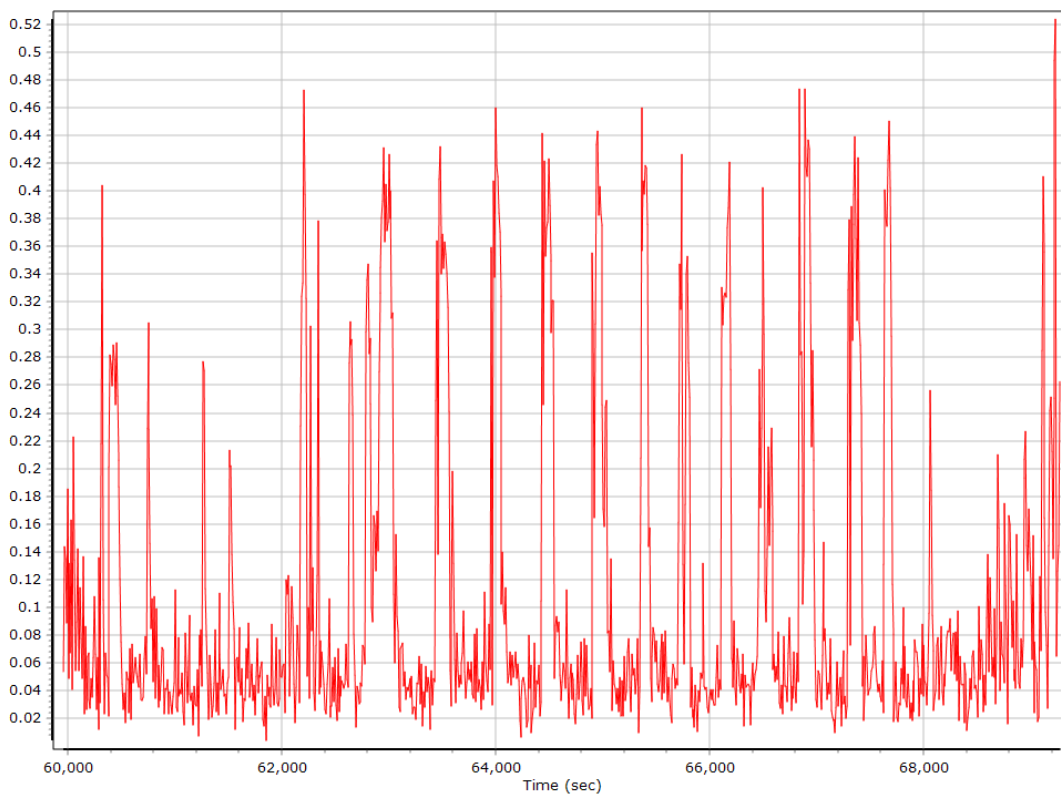
Ground Speed



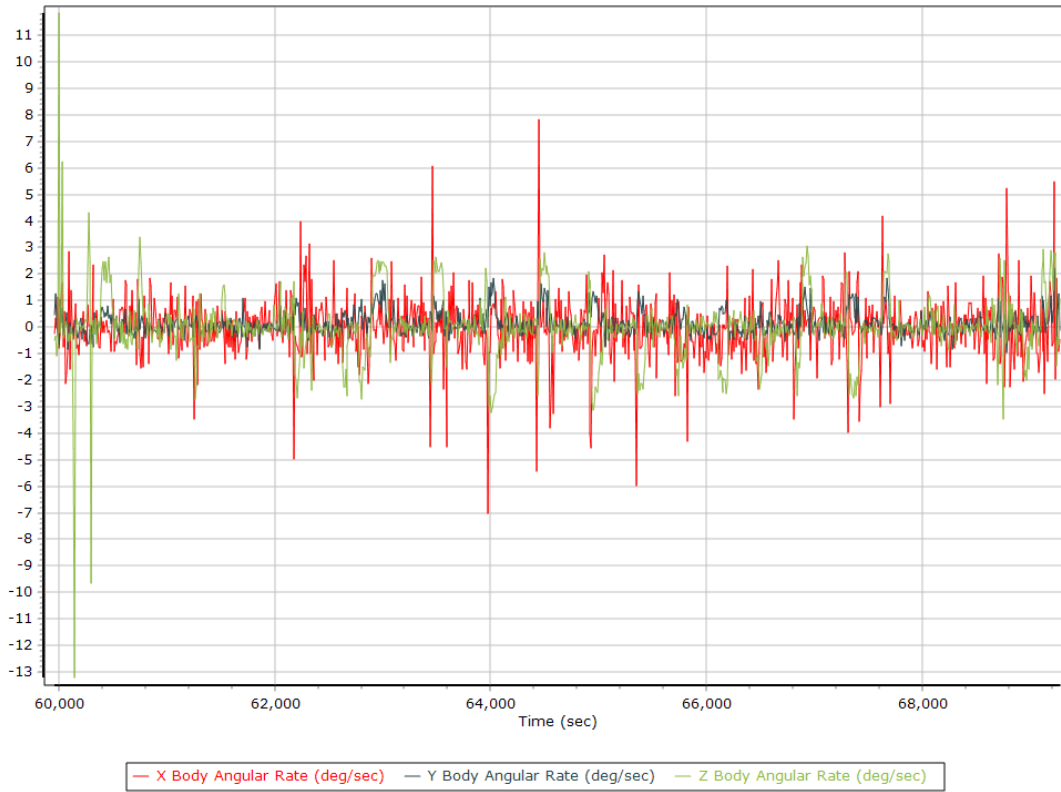
Body Acceleration



Total Body Acceleration



Body Angular Rate

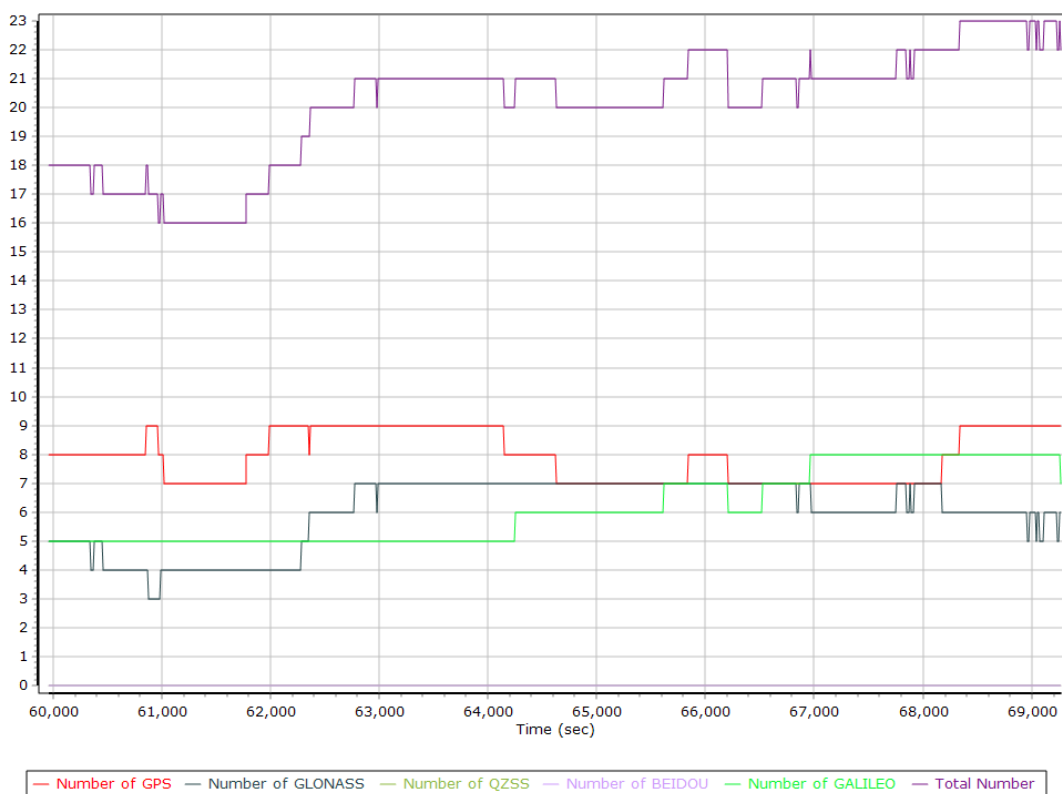


GNSS QC

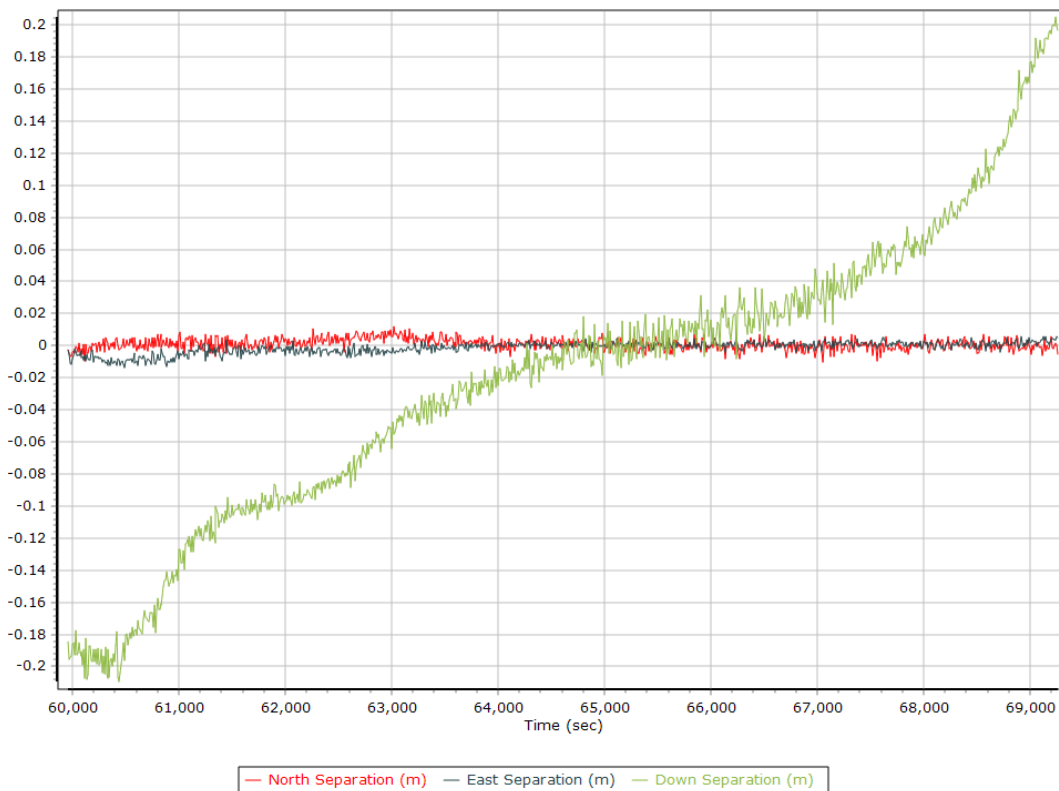
GNSS QC Statistics

Statistics	Min	Max	Mean
Baseline length (km)	0.00	0.00	
Number of GPS SV	4	9	8
Number of GLONASS SV	3	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	10	23	20
PDOP	1.09	2.28	1.27
QC Solution Gaps	0.00	0.00	
Solution Type	Fixed	Float	No solution
Epoch (sec)	9552.00	0.00	0.00
Percentage	100.00	0.00	0.00

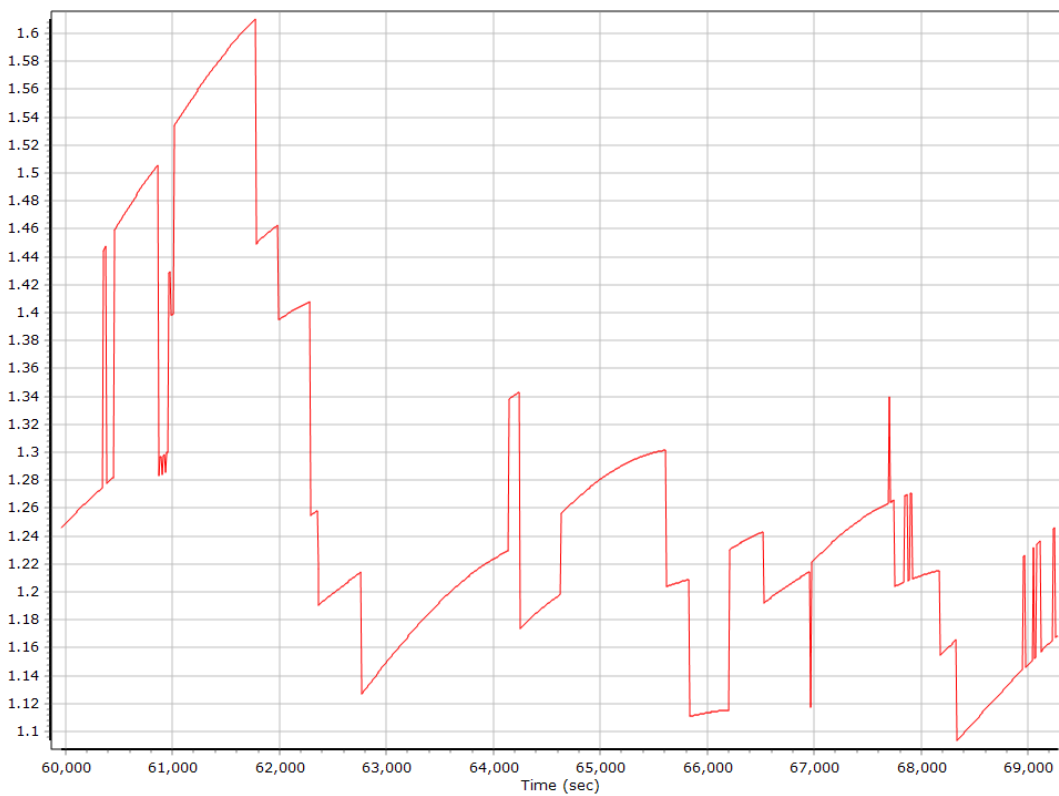
Num SVs in solution



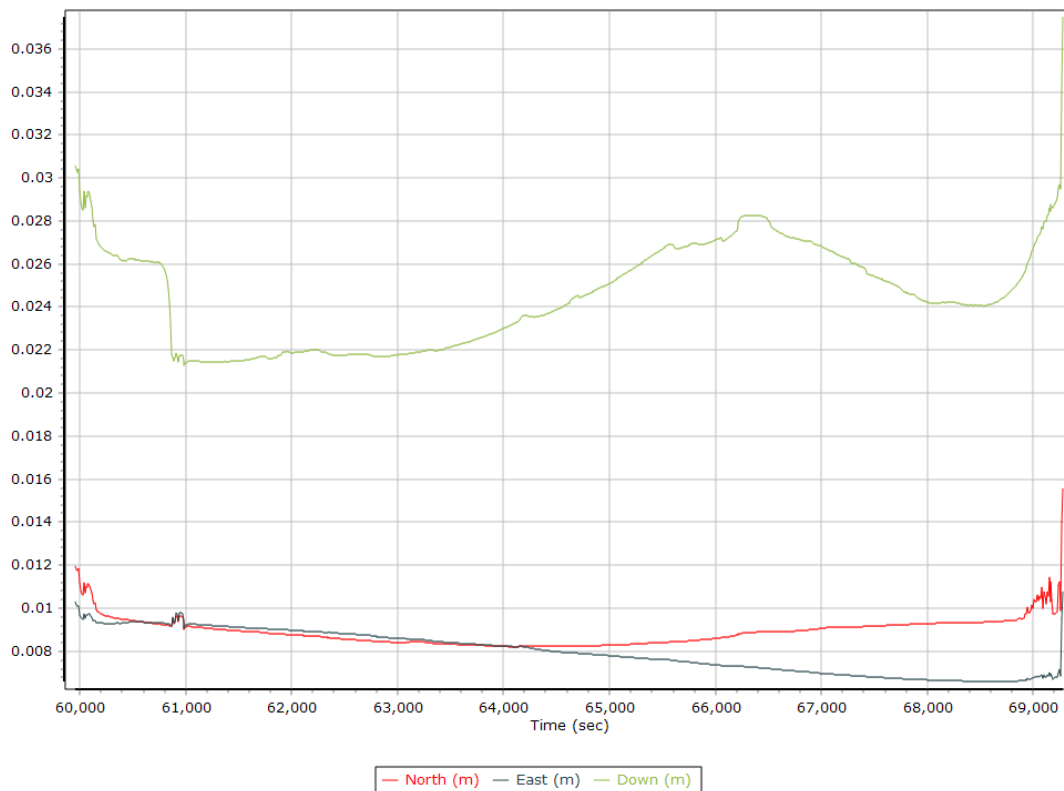
Forward/Reverse Separation



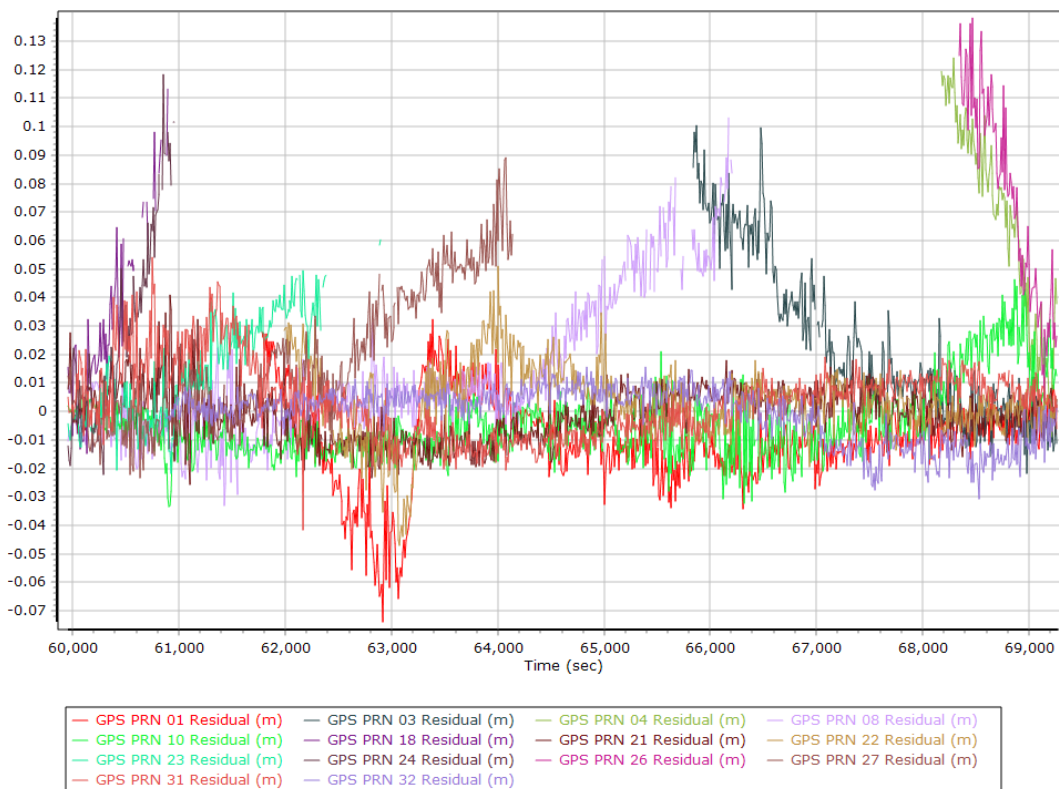
PDOP



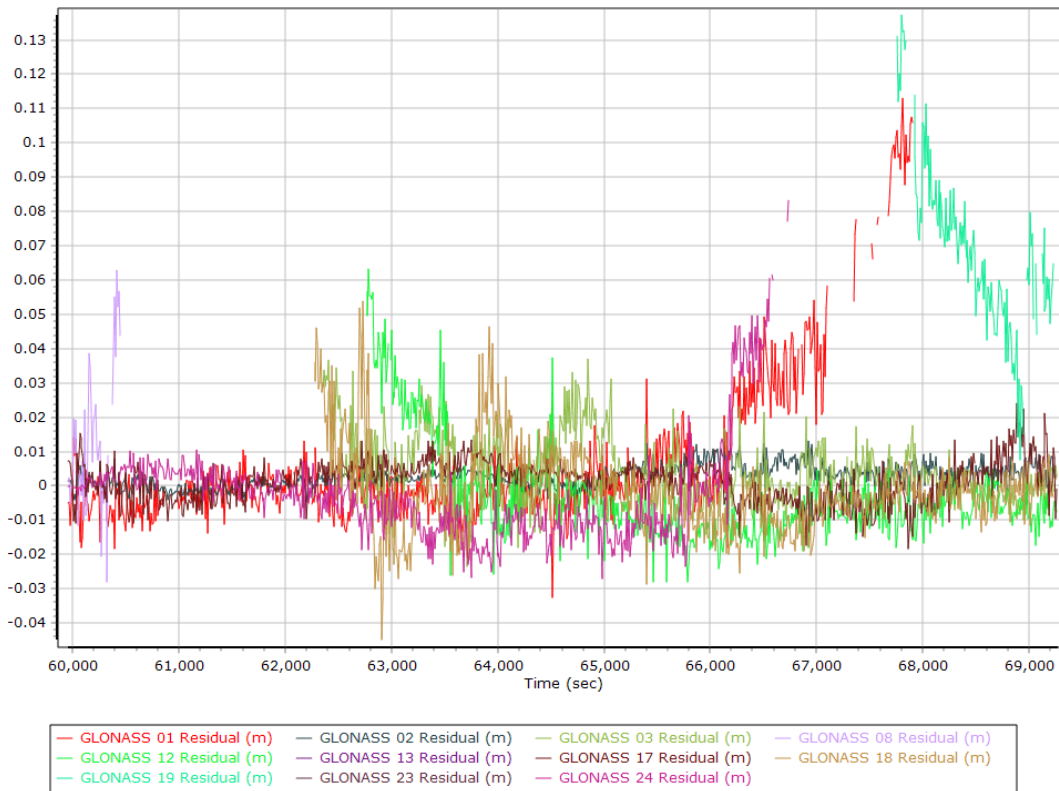
Estimated Position Accuracy



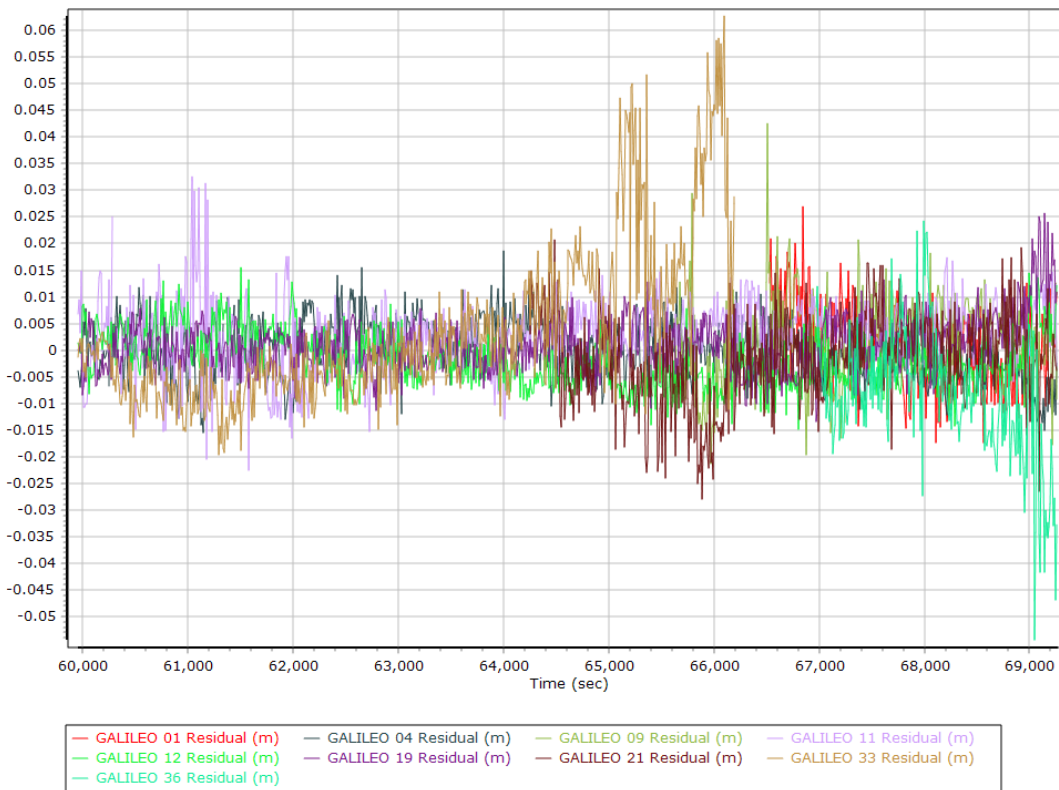
GPS Residuals



GLONASS Residuals



GALILEO Residuals



GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion PP-RTX		
Stabilized mount	False		
Processing start time	59713.000 (11/14/2021 16:35:13)		
Processing end time	69283.000 (11/14/2021 19:14:43)		
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)	0.384	-0.416	-1.087
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

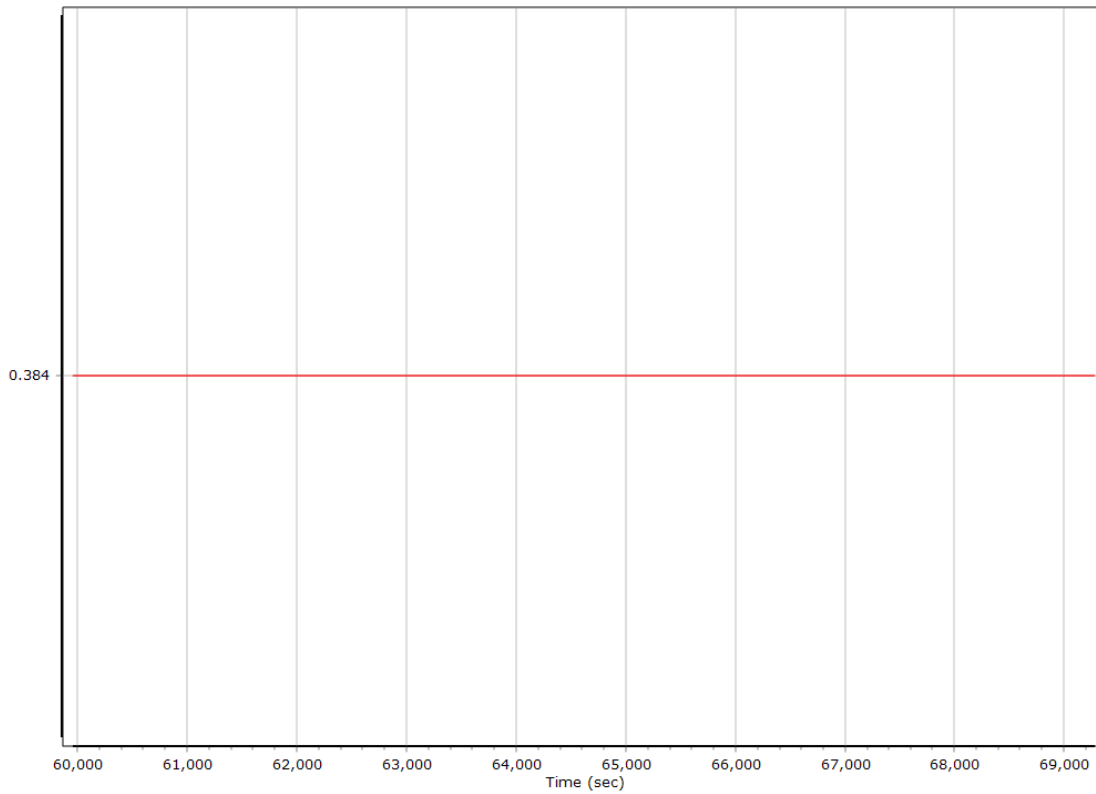
Calibrated Installation Parameters

Reference-Primary GNSS Lever Arm (m)

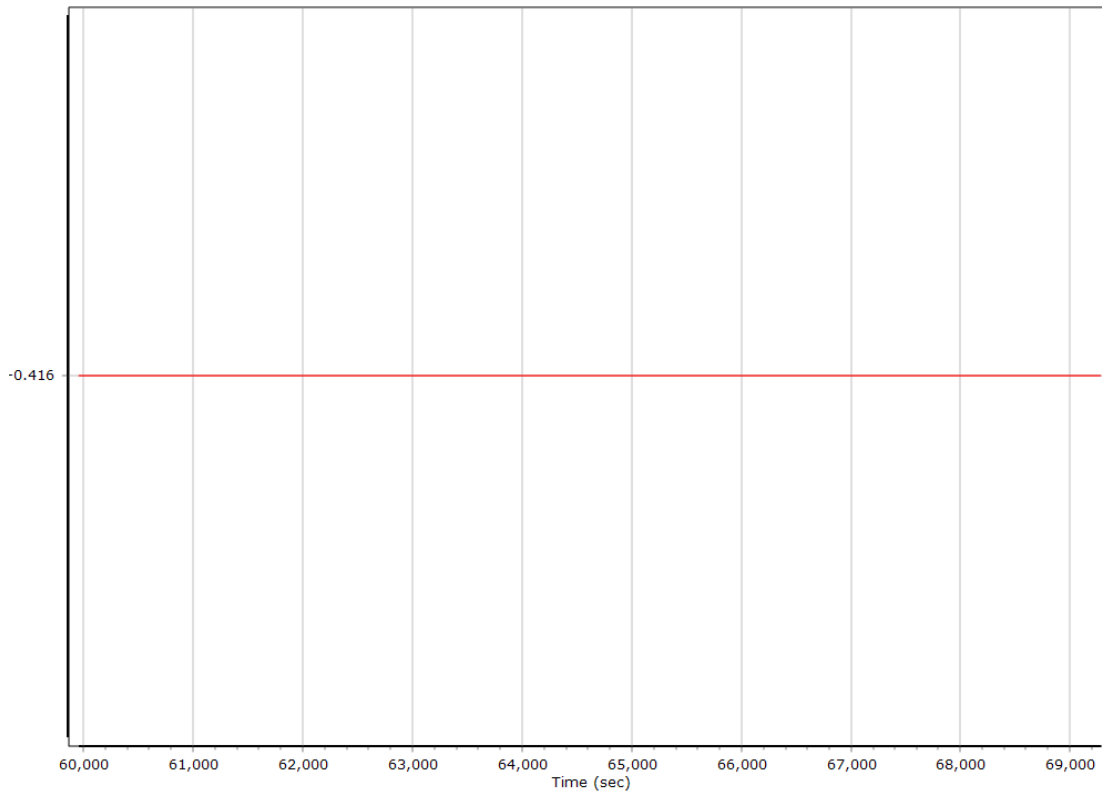
Reference-Primary GNSS Lever Arm Automatic Calibration Results

Original Reference to Primary GNSS lever arm (m)	0.386	-0.445	-1.090
Iteration 1 Reference to Primary GNSS lever arm (m)	0.384	-0.416	-1.088
Iteration 2 Reference to Primary GNSS lever arm (m)	0.384	-0.416	-1.087
Primary GNSS Lever Arm In use	Iteration 2		

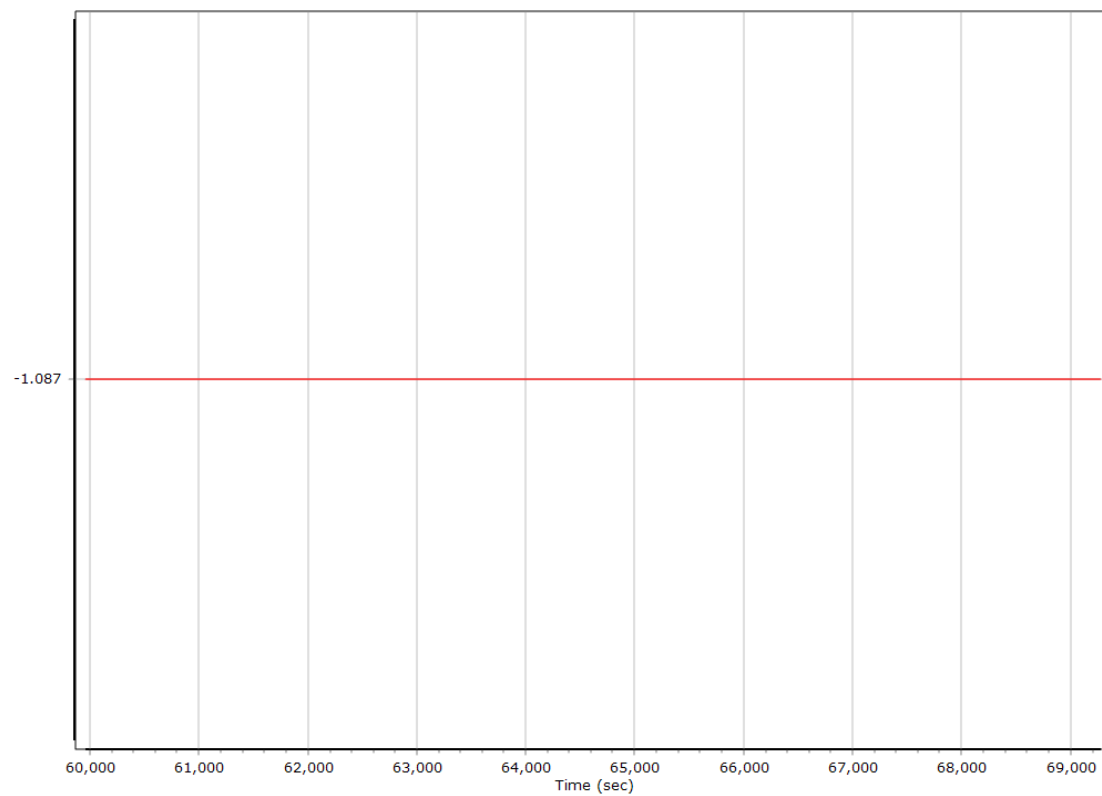
X Reference-Primary GNSS Lever Arm (m)



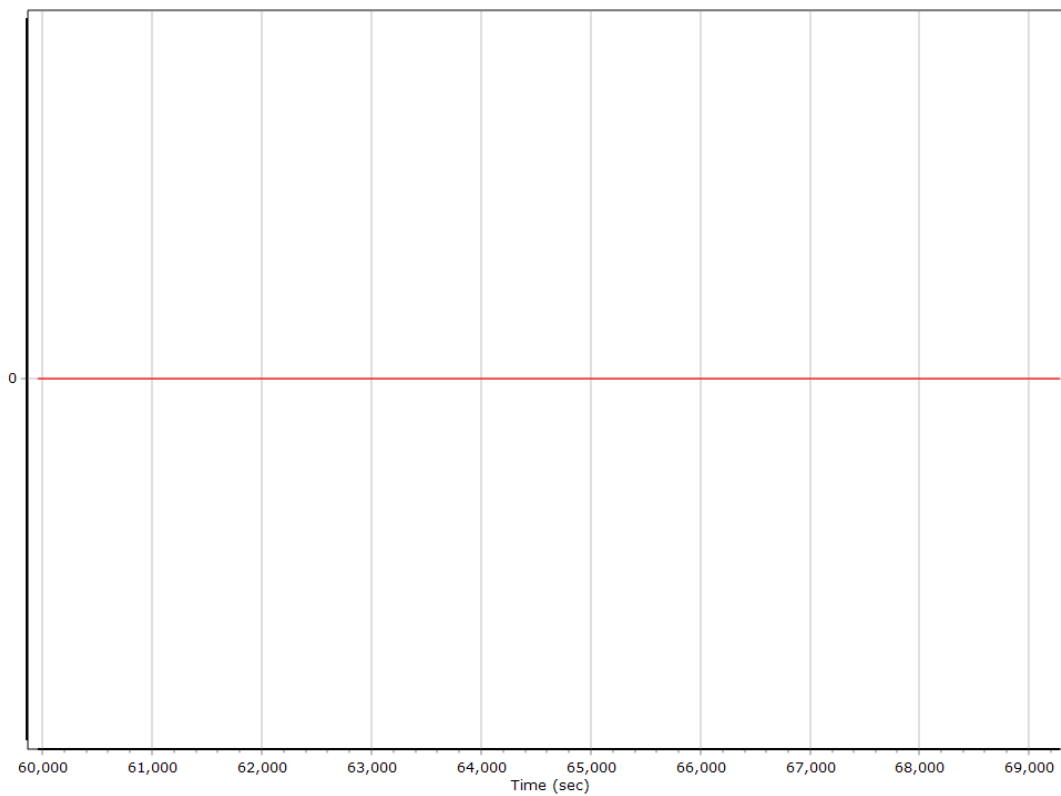
Y Reference-Primary GNSS Lever Arm (m)



Z Reference-Primary GNSS Lever Arm (m)



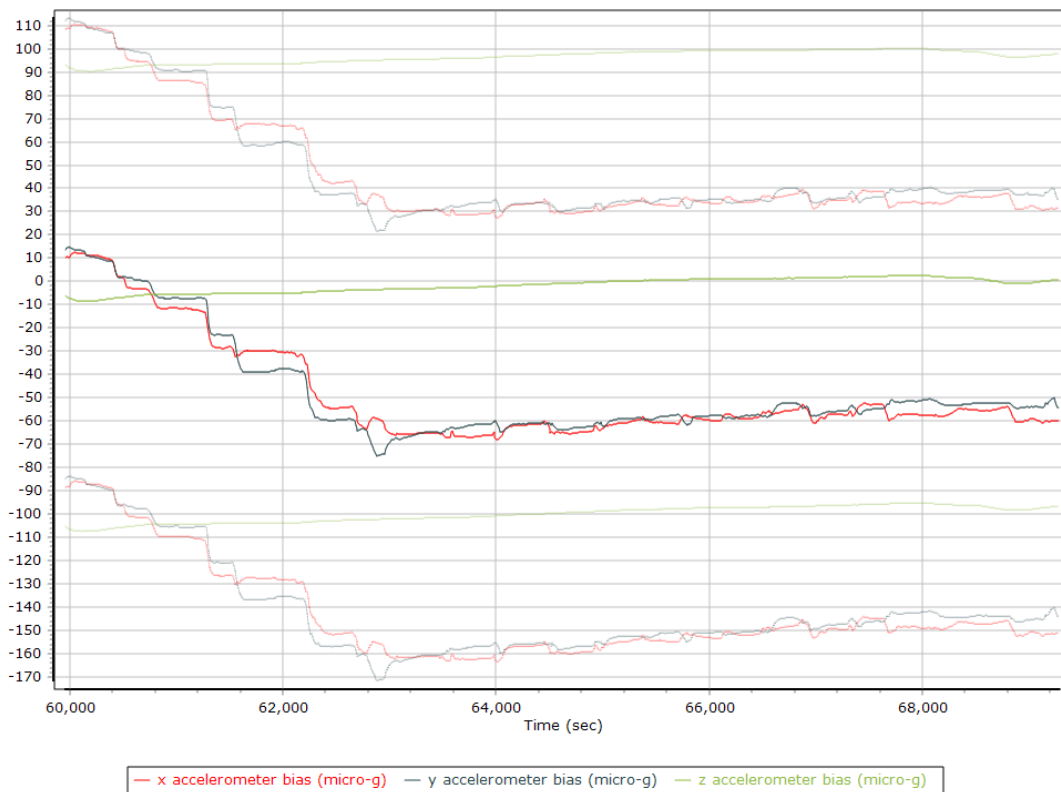
Reference-Primary GNSS Lever Arm Figure of Merit



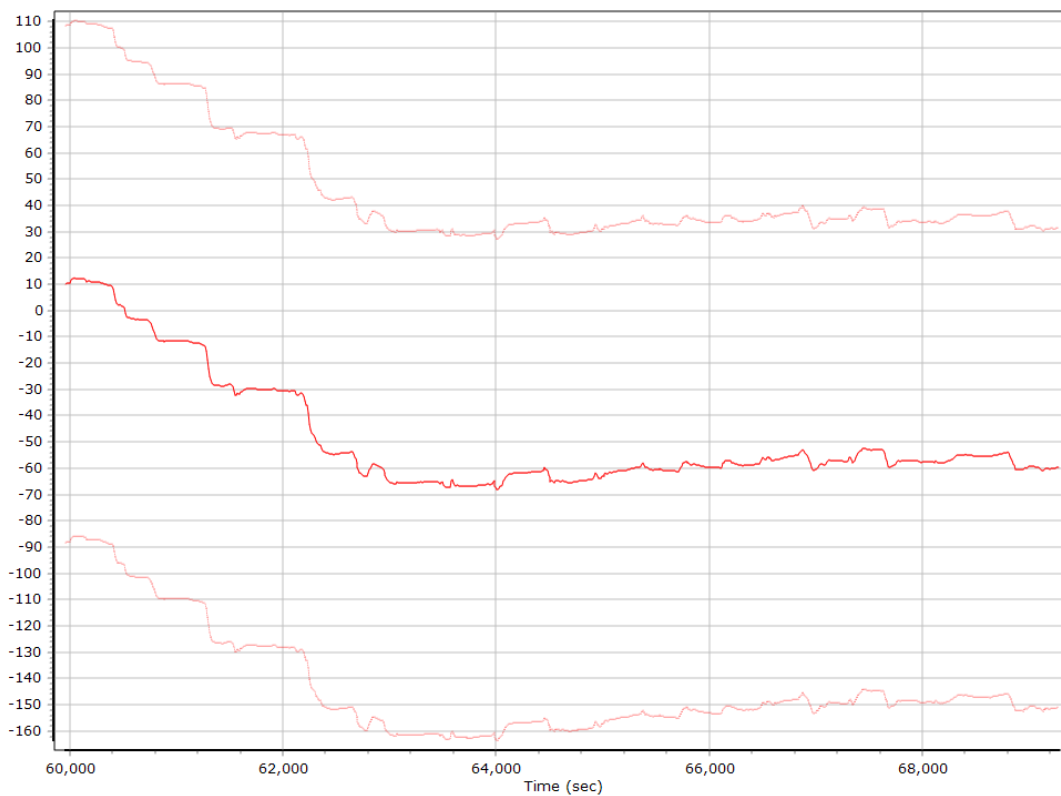
IN-Fusion QC

Forward Processed Estimated Errors, Reference Frame

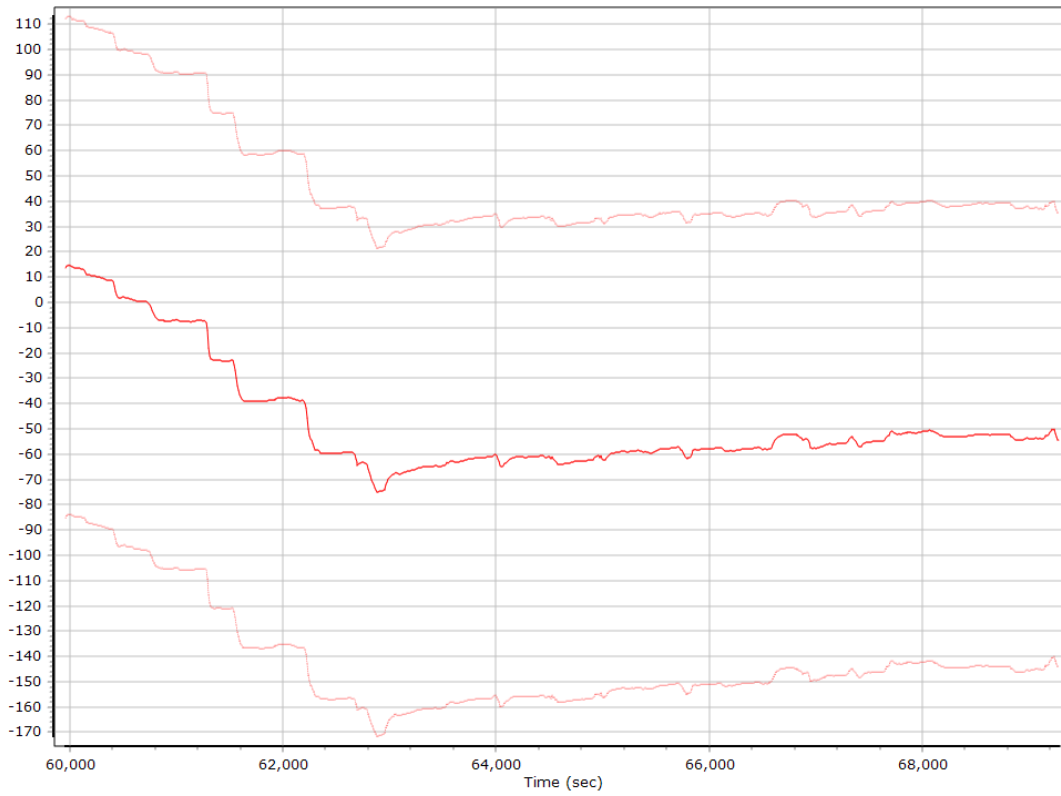
Accelerometer Bias (micro-g)



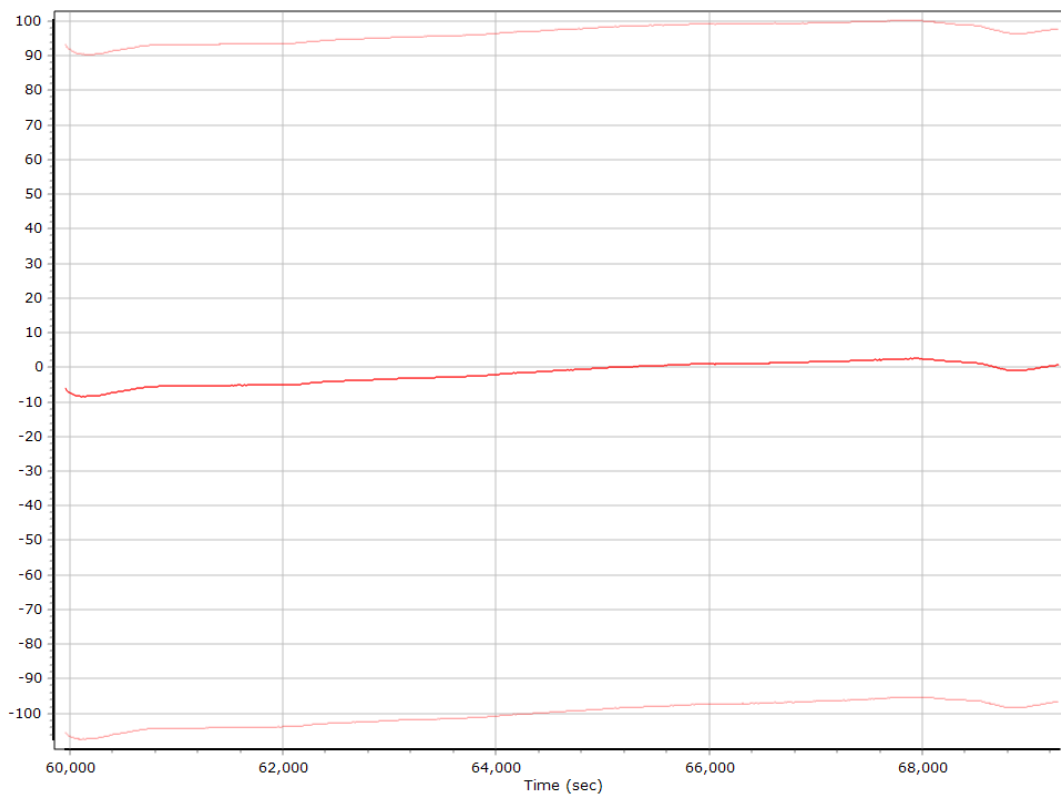
X Accelerometer Bias (micro-g)



Y Accelerometer Bias (micro-g)



Z Accelerometer Bias (micro-g)



Accelerometer Scale Error (ppm)



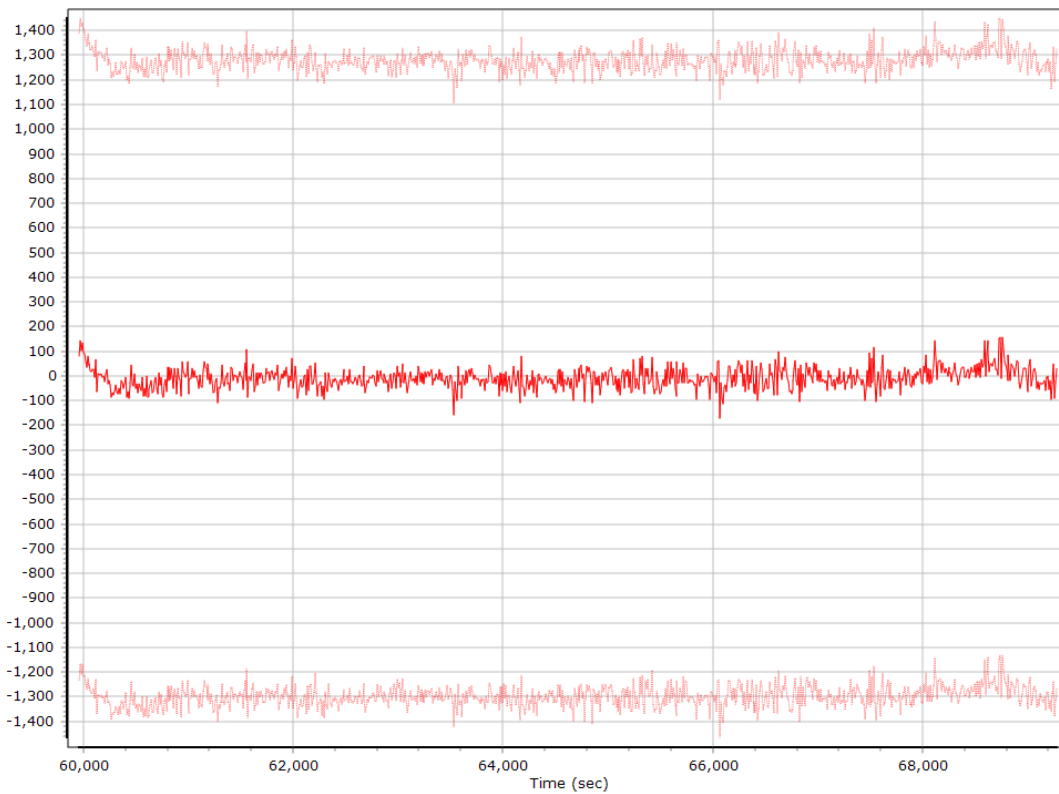
X Accelerometer Scale Error (ppm)



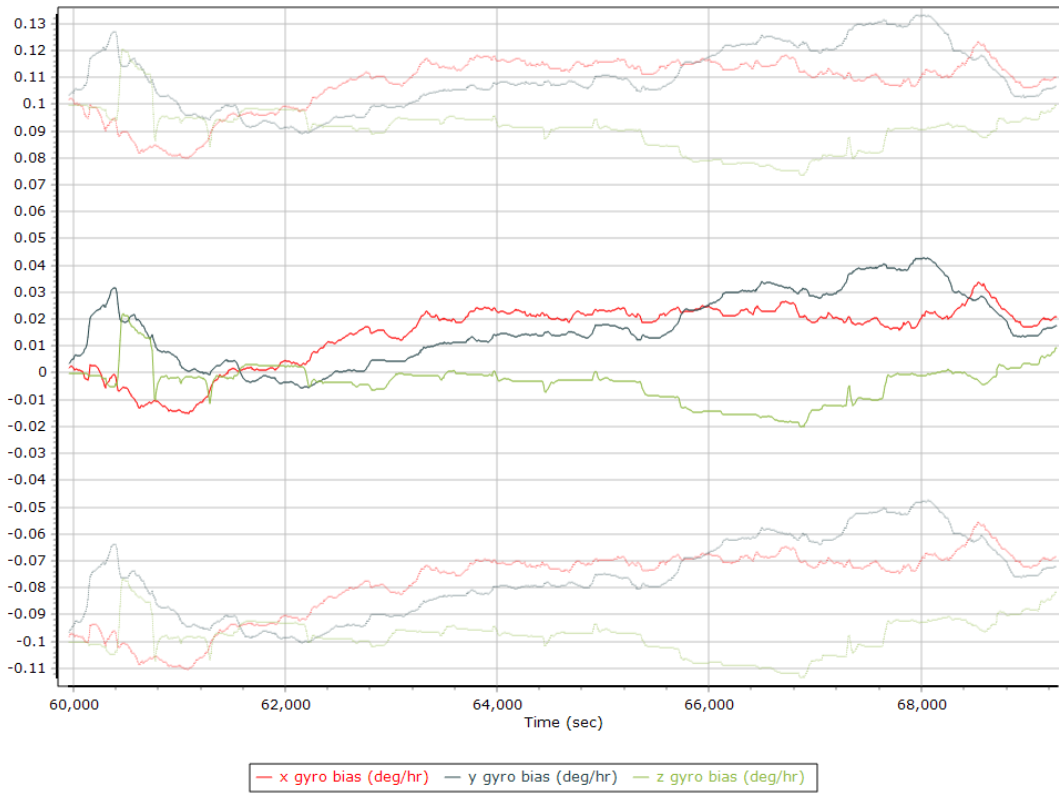
Y Accelerometer Scale Error (ppm)



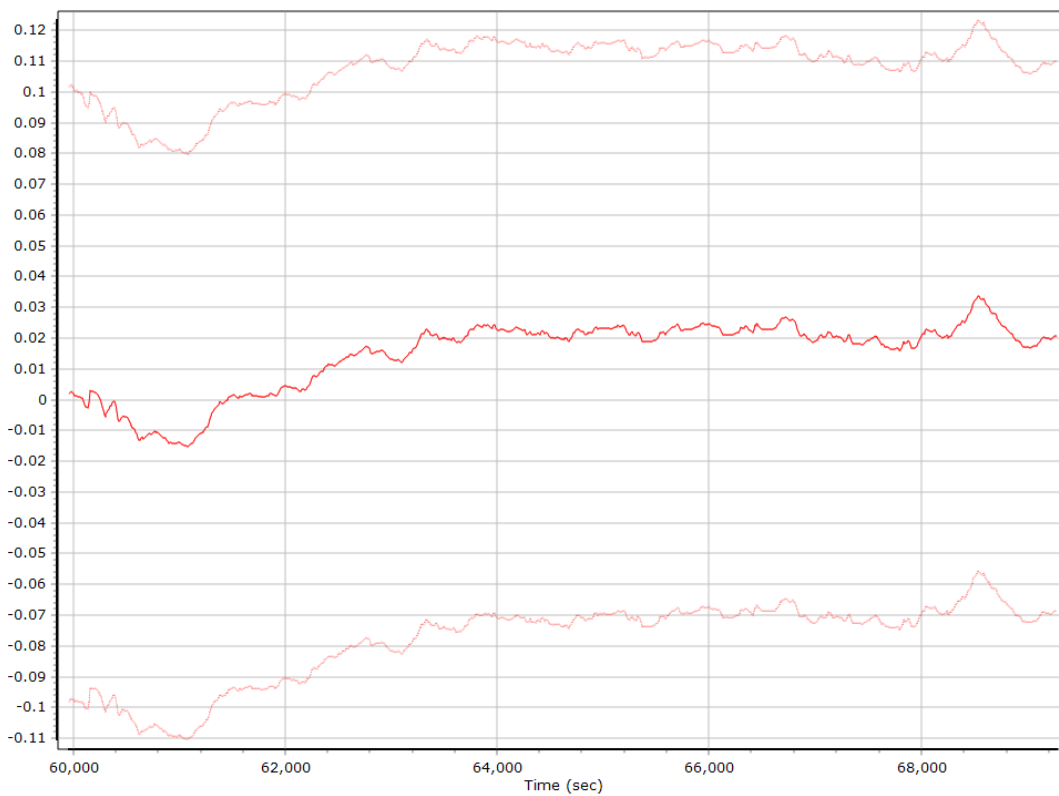
Z Accelerometer Scale Error (ppm)



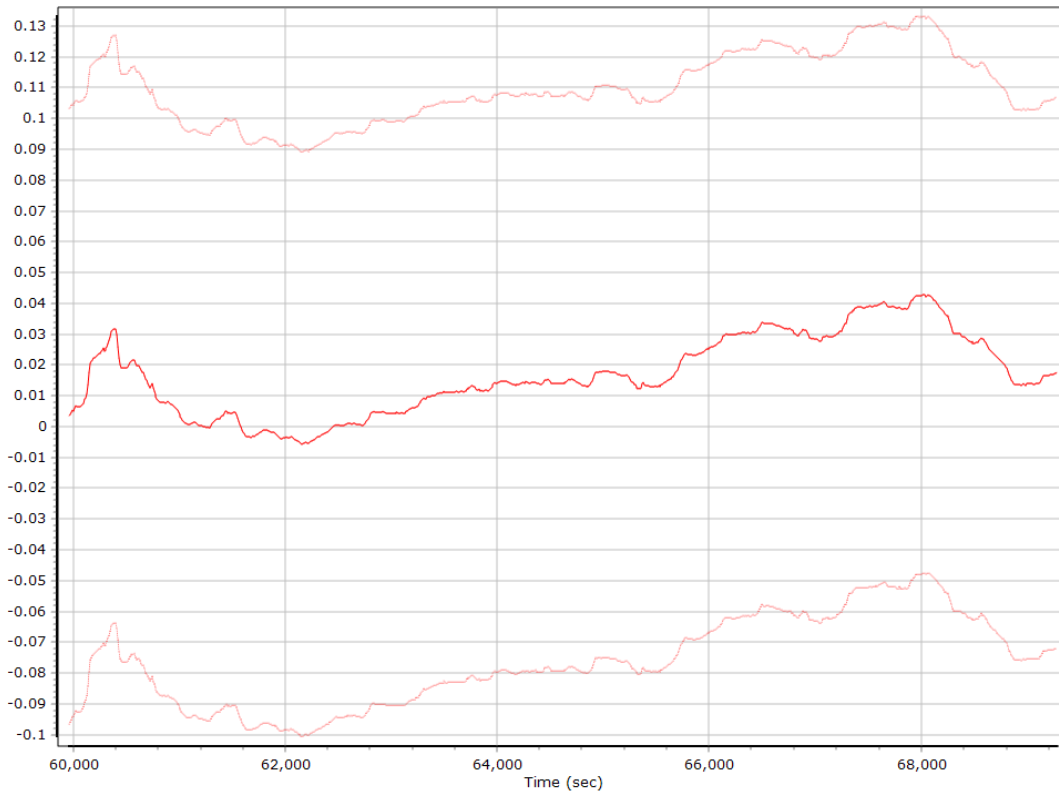
Gyro Bias (deg/h)



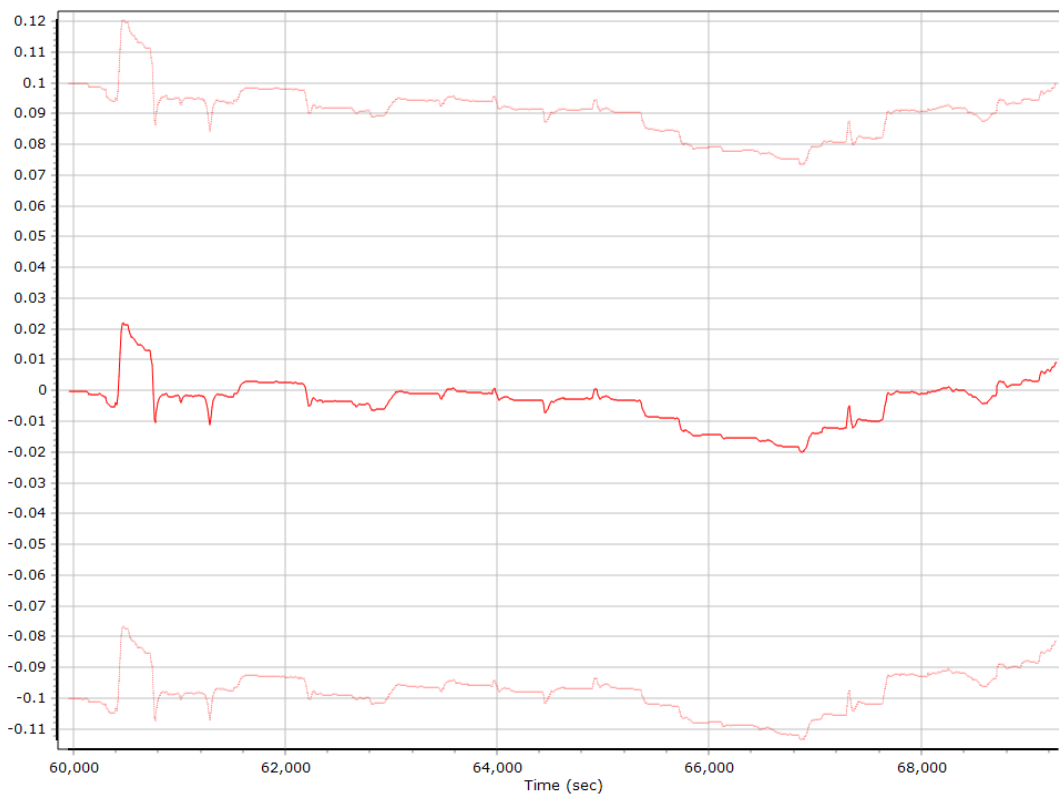
X Gyro Bias (deg/h)



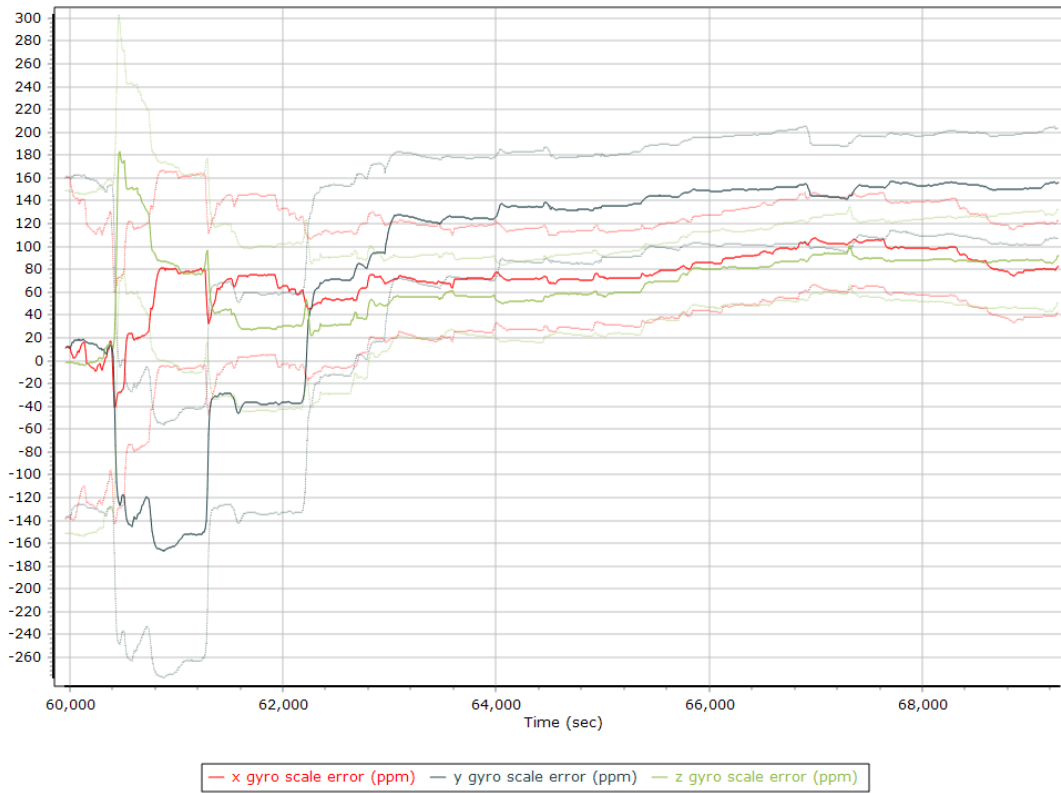
Y Gyro Bias (deg/h)



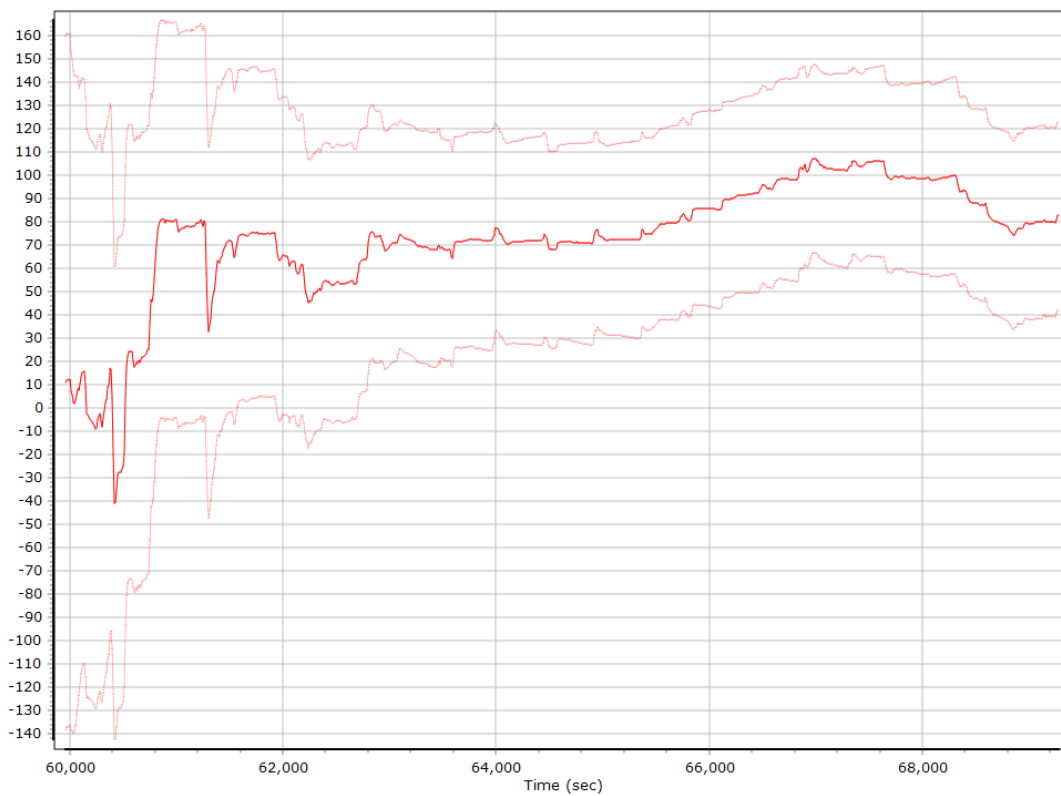
Z Gyro Bias (deg/h)



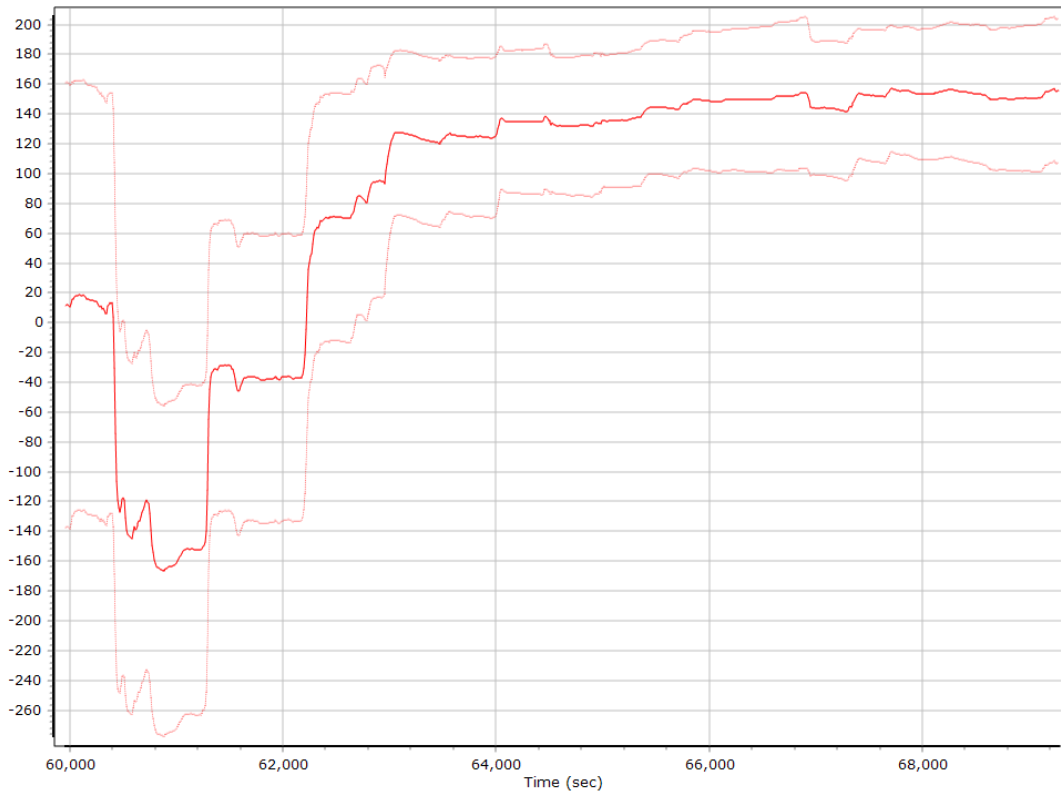
Gyro Scale Error (ppm)



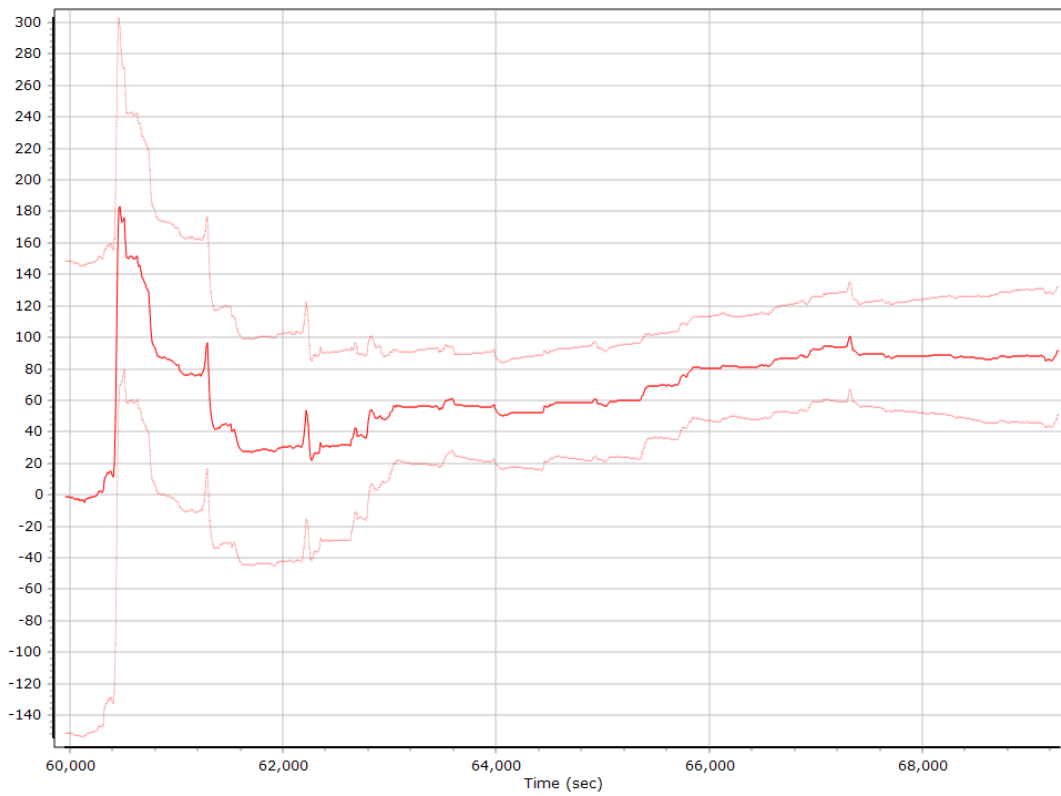
X Gyro Scale Error (ppm)



Y Gyro Scale Error (ppm)

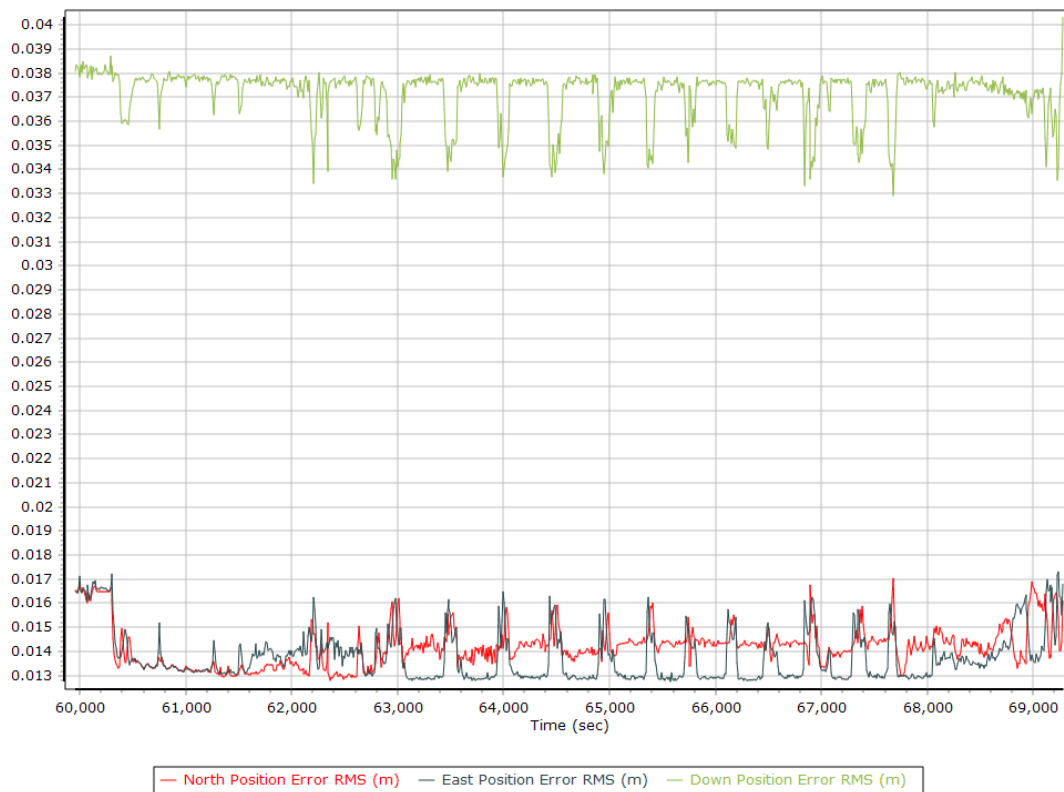


Z Gyro Scale Error (ppm)

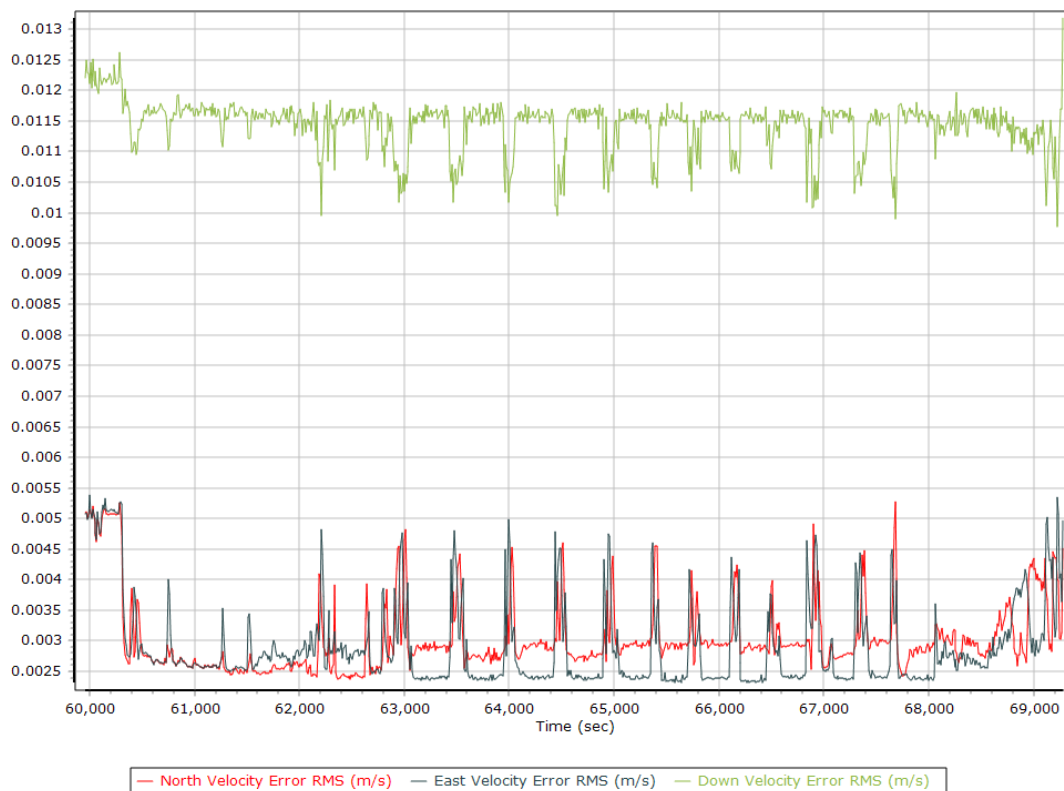


Smoothed Performance Metrics

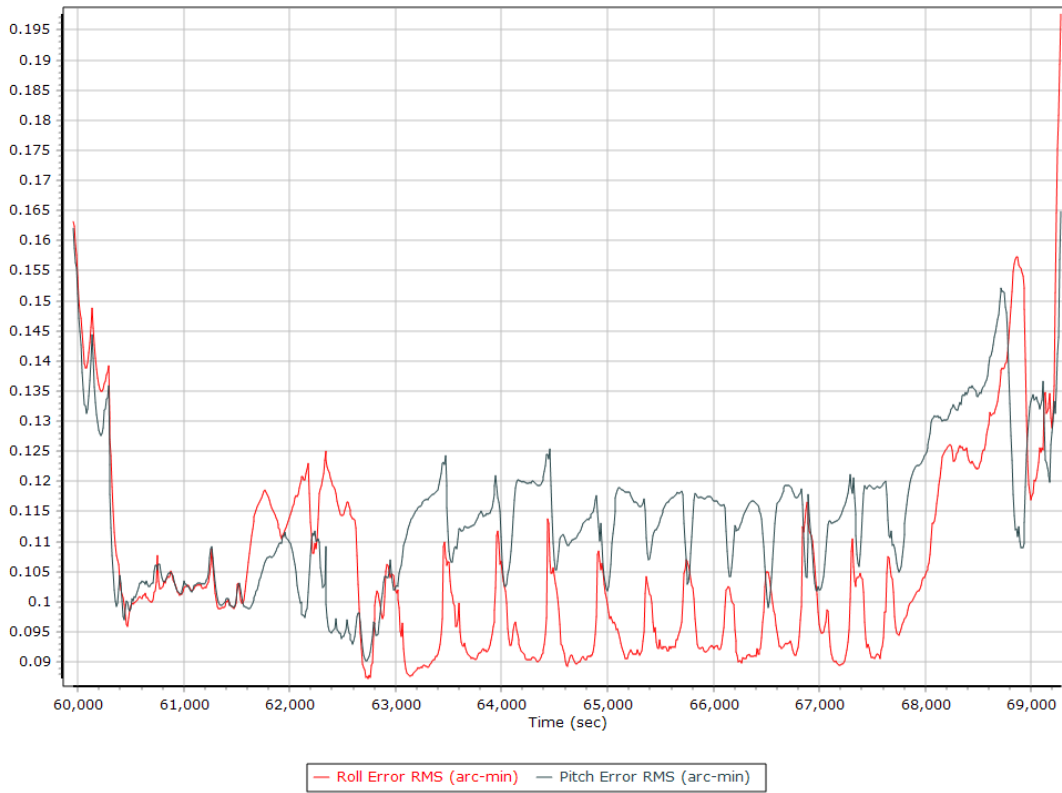
Position Error RMS (m)



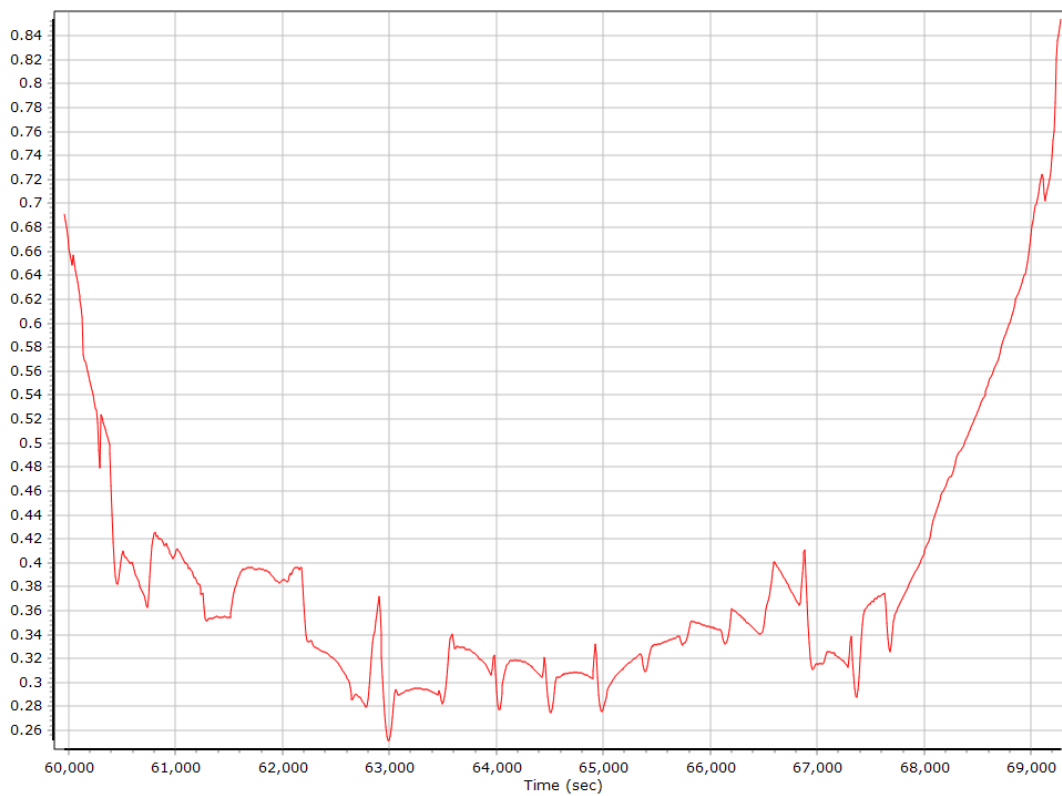
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

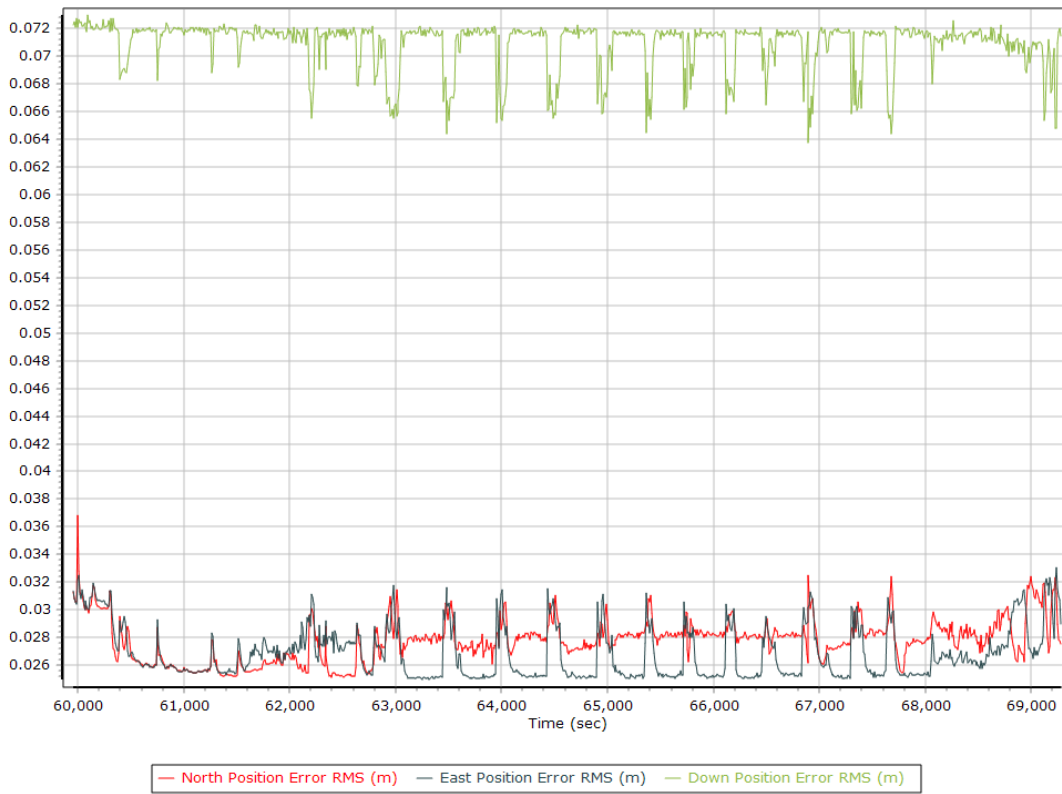


Heading Error RMS (arc-min)

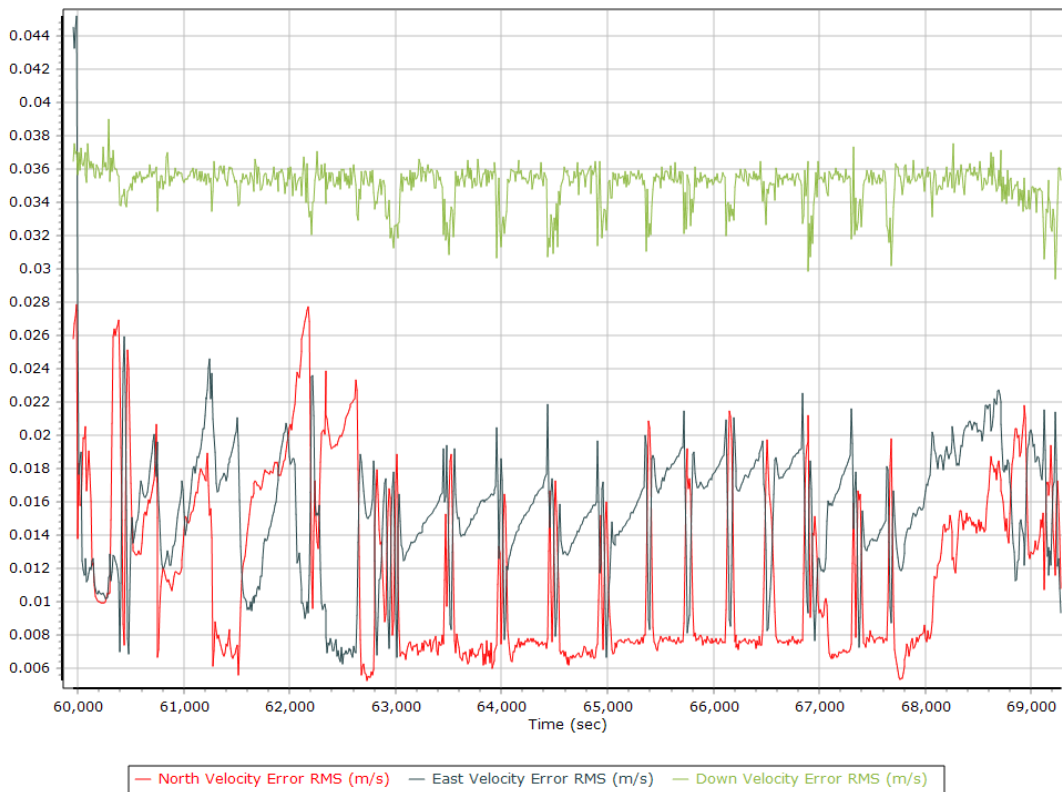


Forward Processed Performance Metrics

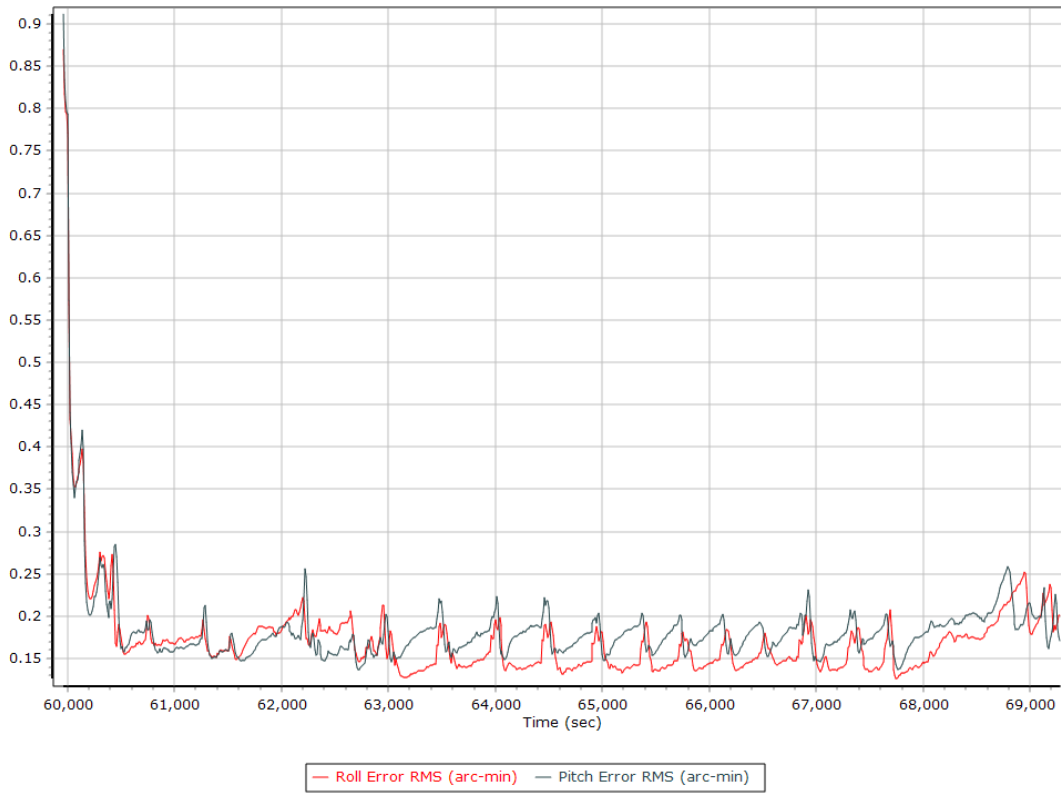
Position Error RMS (m)



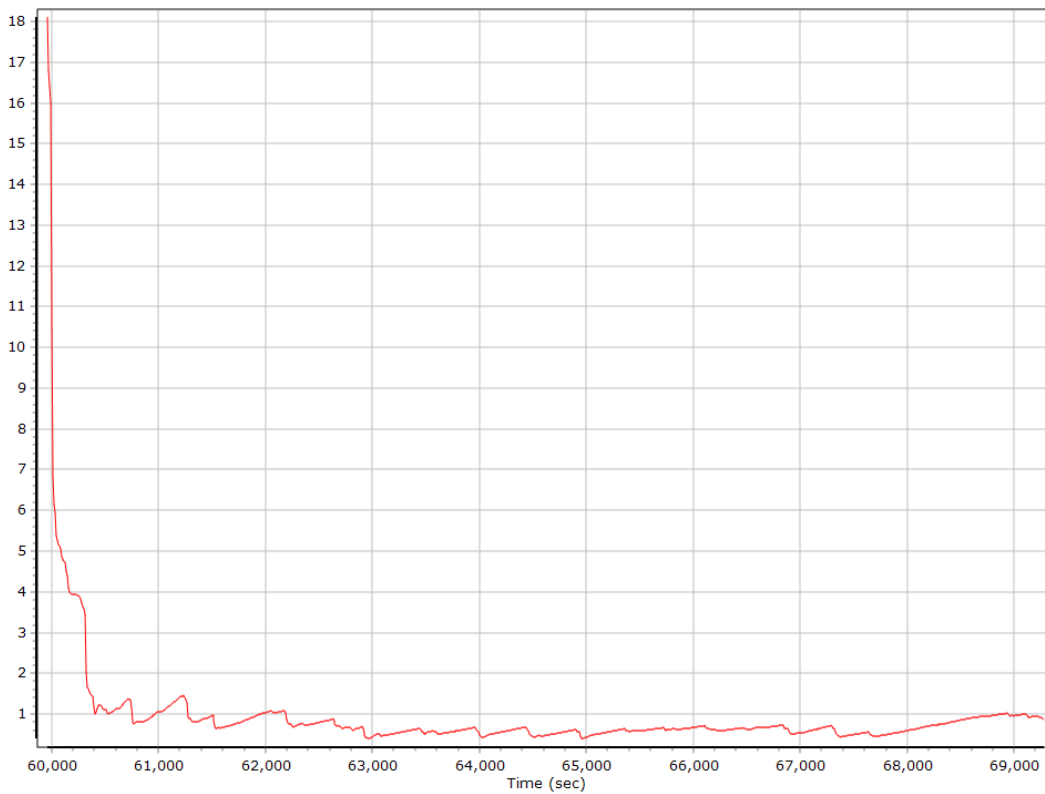
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

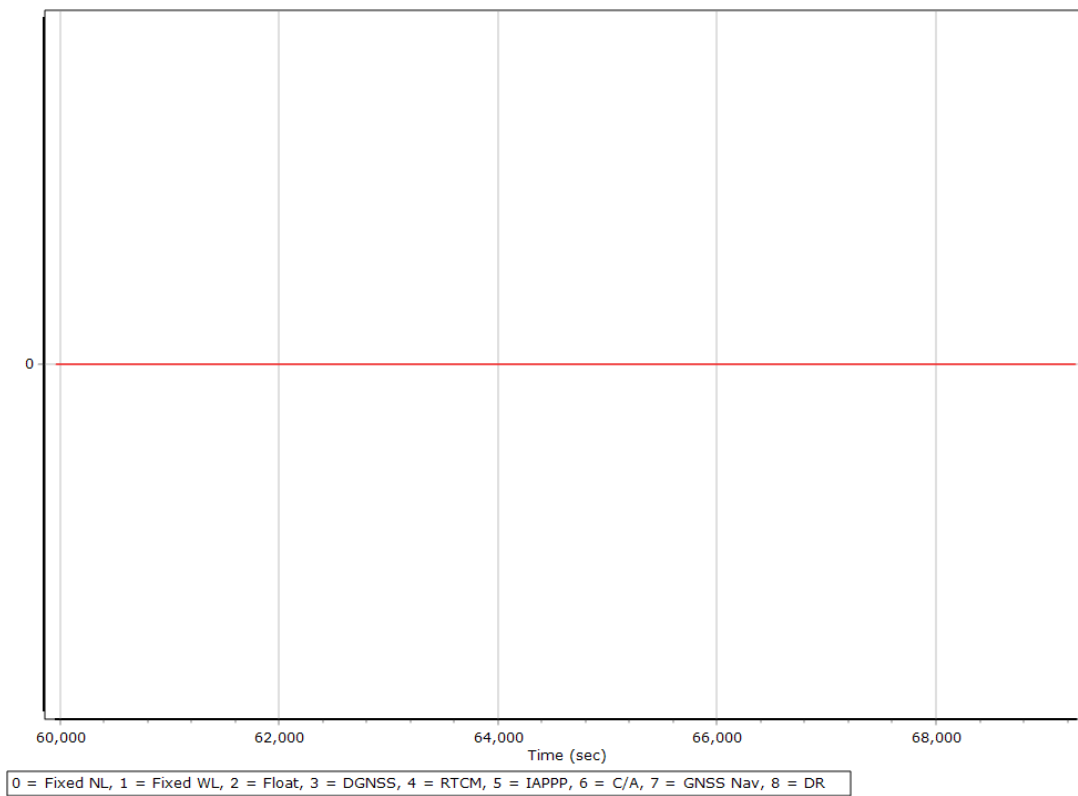


Heading Error RMS (arc-min)

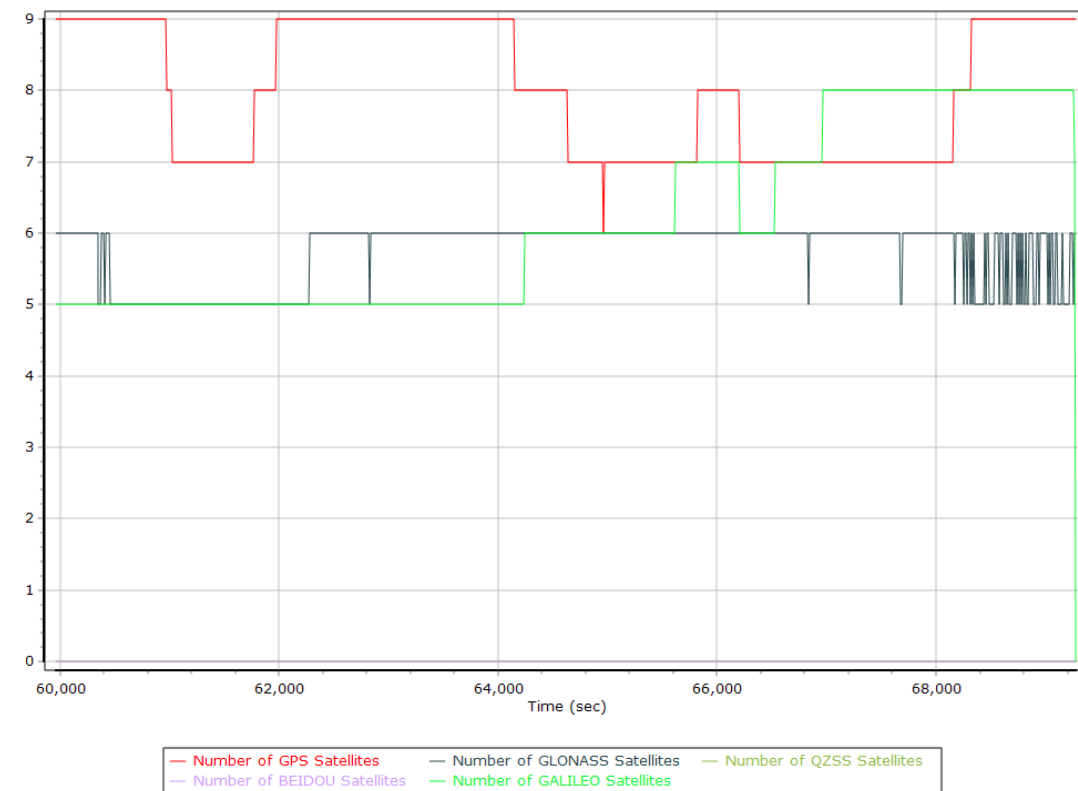


Forward Processed Solution Status

Processing Mode



Number of Satellites



Baseline Length

