

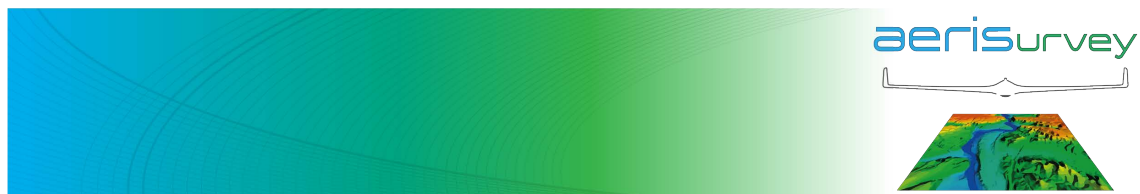
General Information

Mission Information

Project name	Survey Penalva
Processing date	2019-11-01 00:39:55
Mission date	2019-09-28 13:21:54
Mission duration	00:48:04.000
Processing mode	IN-Fusion Single Base
GPS Station	VSEU

Rover Hardware Information

Product	APX 15 AVX 210 VER0 174
Serial number	S/N001
IMU type	59
Receiver type	APX-15v3
Antenna type	AV14



Project File List

Rover Data Files

File name	File type
5743C00094201909281321.T04	T04 Rover Data

Input Files

File Name	File type
Ephm2710.19g	GLONASS Broadcast Ephemeris
Ephm2710.19n	GPS Broadcast Ephemeris
igl20725.sp3	GLONASS Precise Ephemeris
igl20726.sp3	GLONASS Precise Ephemeris
igl20730.sp3	GLONASS Precise Ephemeris
igs20725.sp3	GPS Precise Ephemeris
igs20726.sp3	GPS Precise Ephemeris
igs20730.sp3	GPS Precise Ephemeris
vseu271m.19o	GNSS SingleBase
vseu271n.19o	GNSS SingleBase
vseu271o.19o	GNSS SingleBase
vseu271p.19o	GNSS SingleBase
vseu271q.19o	GNSS SingleBase
PhotoID events.dat	2 Fields (Time, Photo ID) Photo Id File

Output Files

Filename	File type
sbt_Mission 1.out	SBET Trajectory File
event1_eo_Mission 1.txt	Applanix Standard POSEO Output

Rover Data Summary

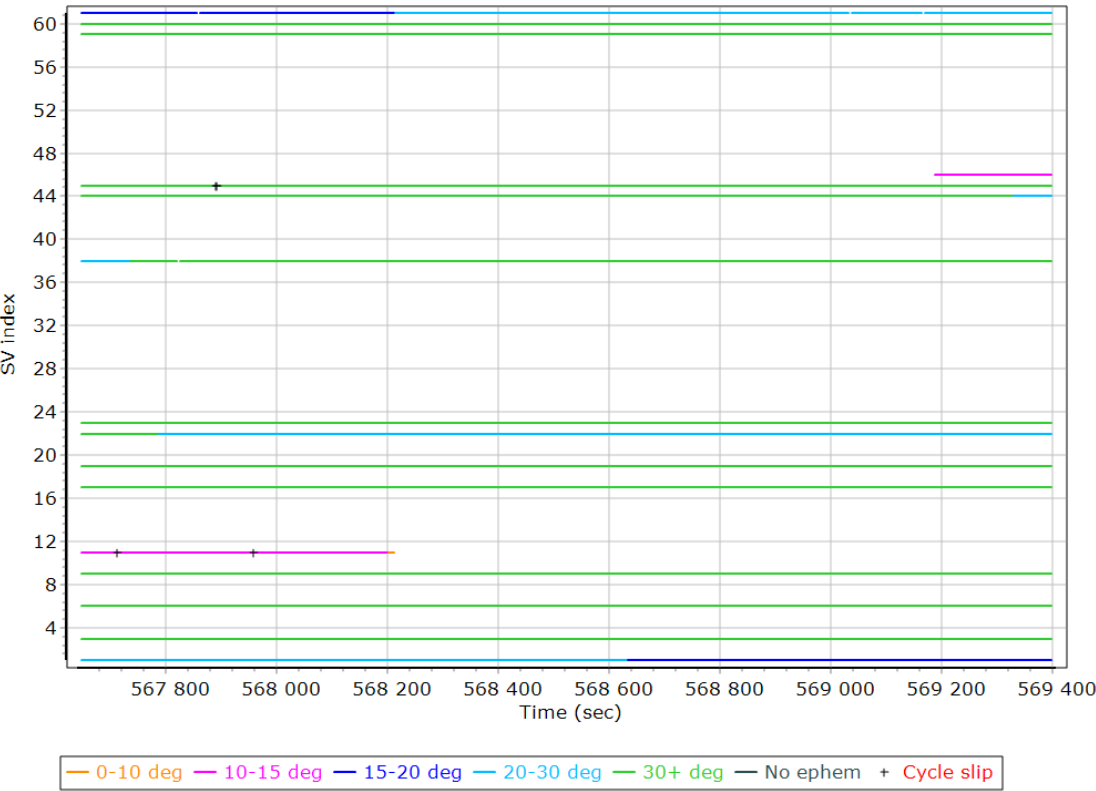
First raw data file	5743C00094201909281321.T04		
Last raw data file	5743C00094201909281321.T04		
Start GPS week	2072		
Start time	566514.000 (09/28/2019 13:21:54)		
End time	569398.000 (09/28/2019 14:09:58)		
Start of fine alignment	567587.400 (09/28/2019 13:39:47)		
Available subsystems	Primary GNSS, 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	-0.073
Reference to IMU mounting angles [deg]	0.000	0.000	180.000
Reference to Primary GNSS lever arm [m]	-0.070	0.000	-0.402
Reference to Primary GNSS lever arm std dev [m]	0.100		
Aircraft to Reference mounting angles [deg]	0.000	0.000	0.000

Raw Data QC

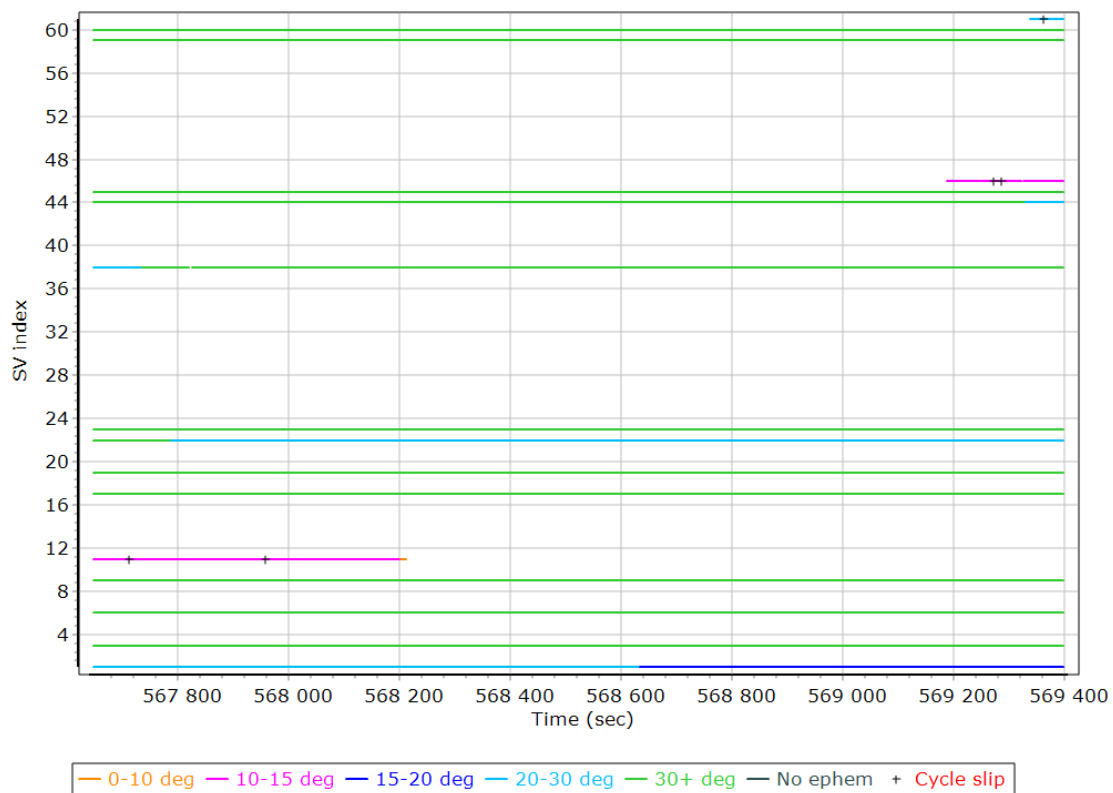
Raw IMU Import QC Summary

IMU data input file	imu_Mission 1.dat
IMU data check log file	imudt_Mission 1.log
IMU Records Processed	576805
Termination Status	Normal
IMU Anomalies	0

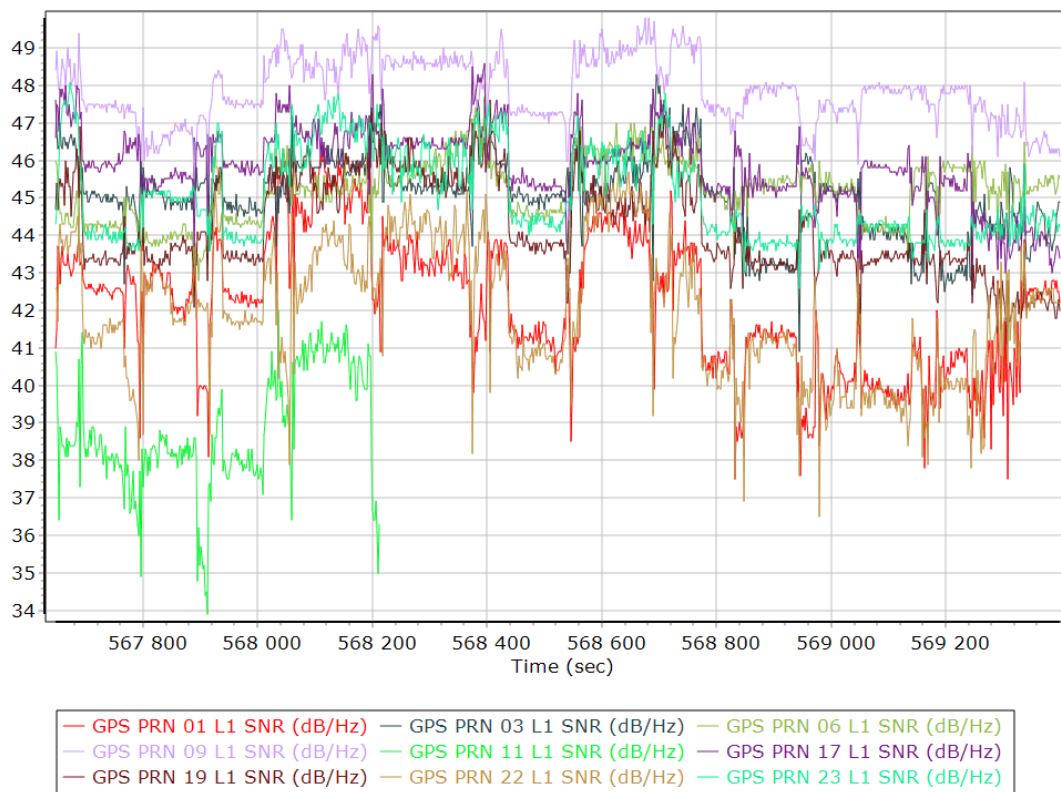
L1 Satellite Lock/Elevation



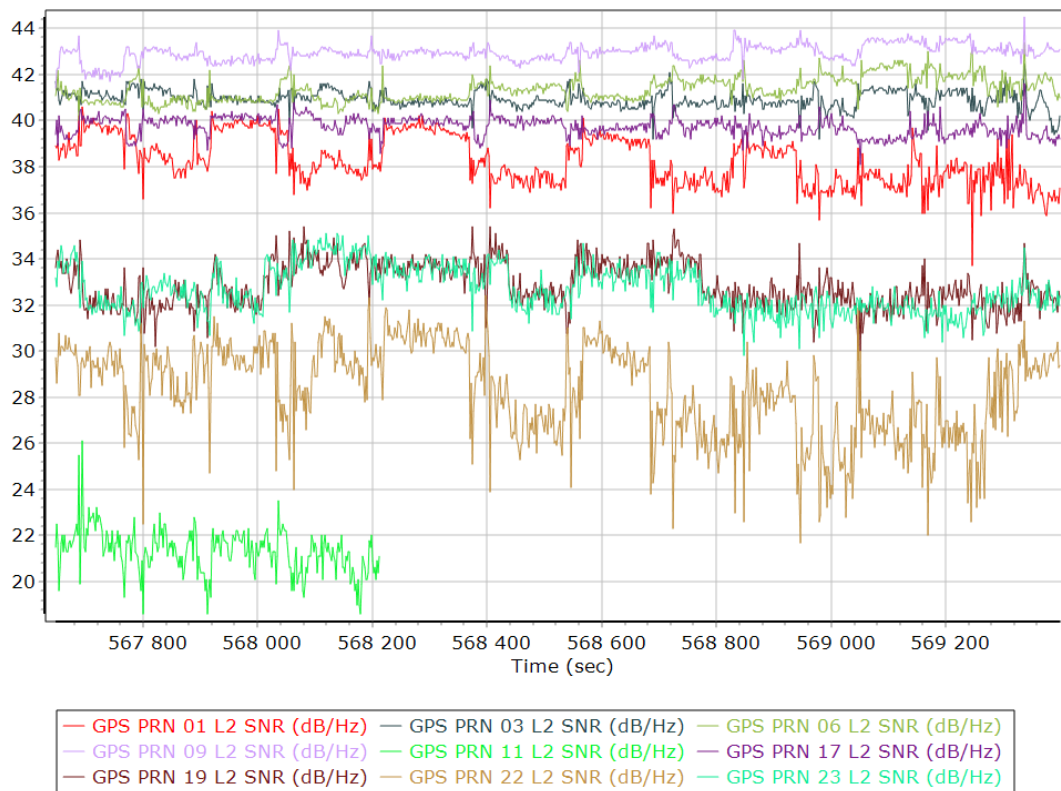
L2 Satellite Lock/Elevation



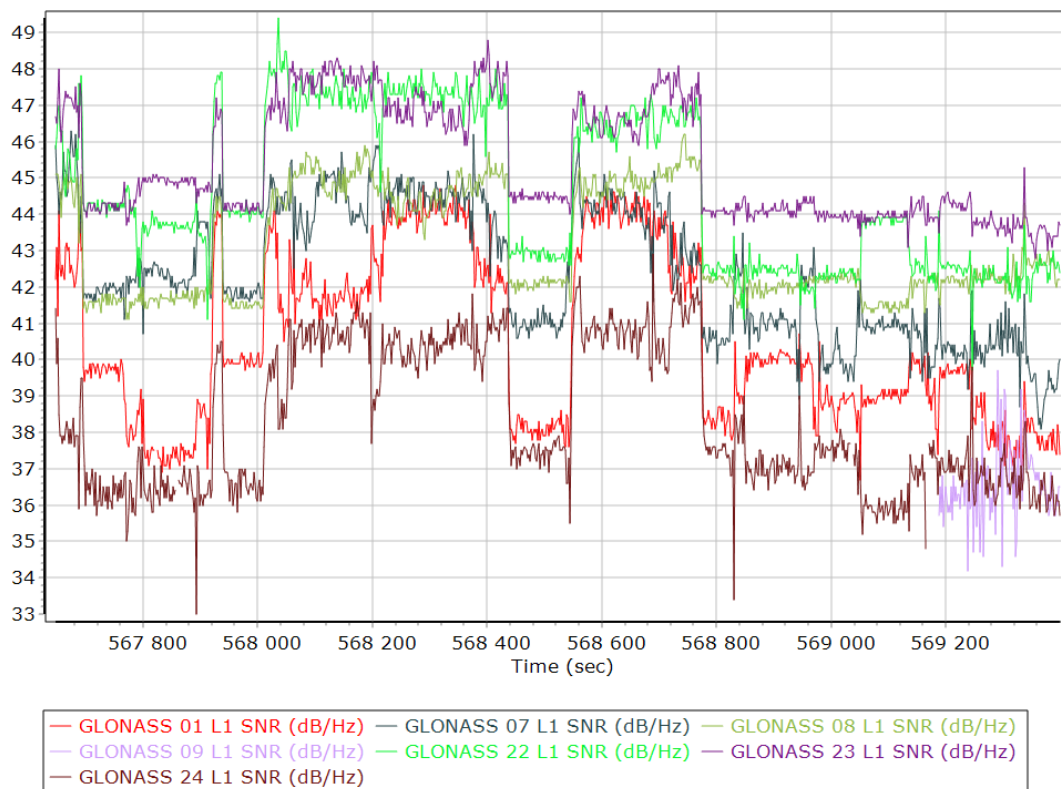
GPS L1 SNR



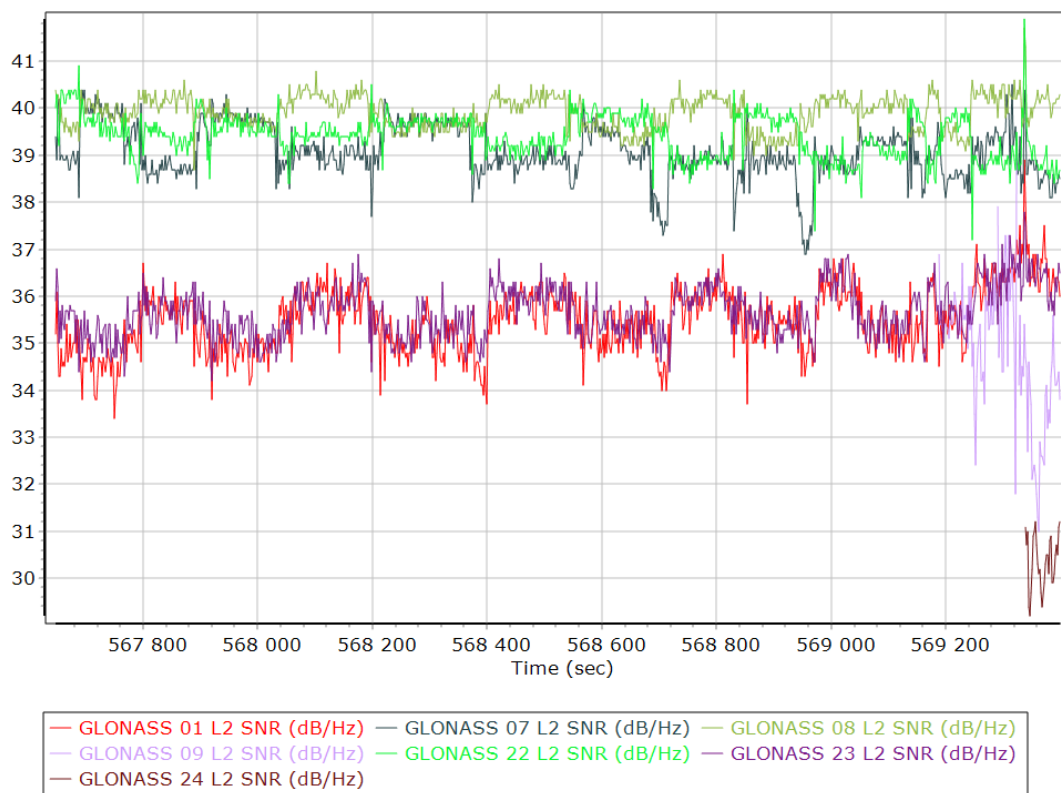
GPS L2 SNR



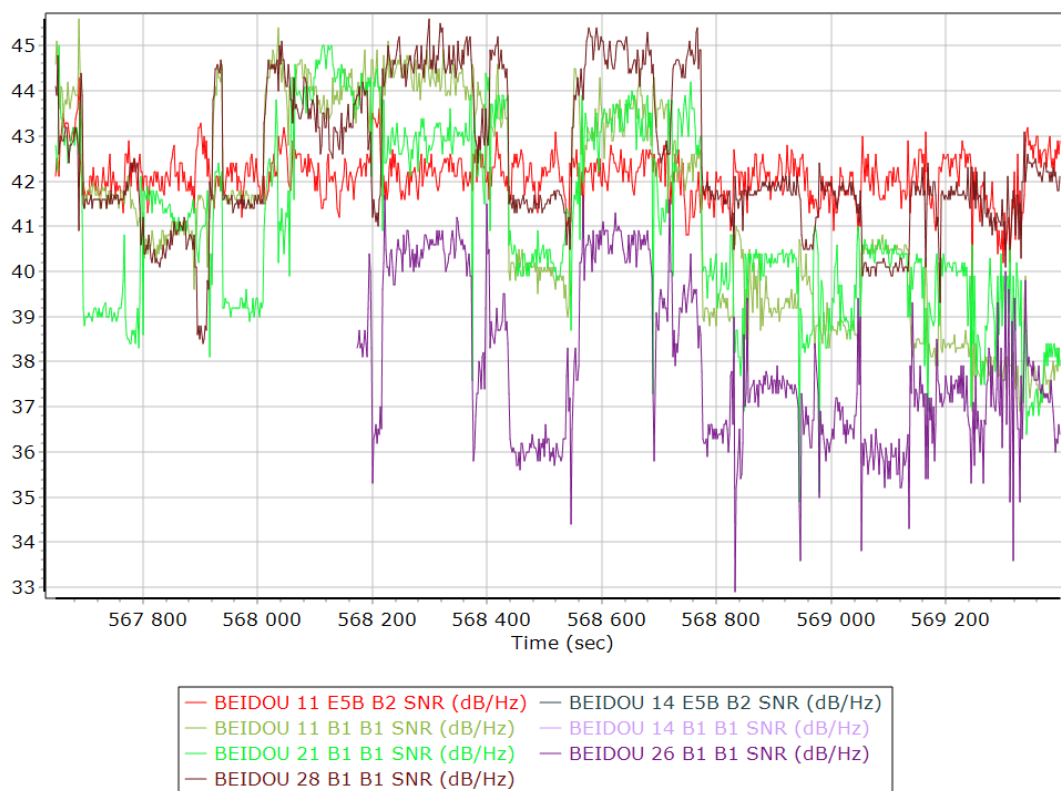
GLONASS L1 SNR



GLONASS L2 SNR

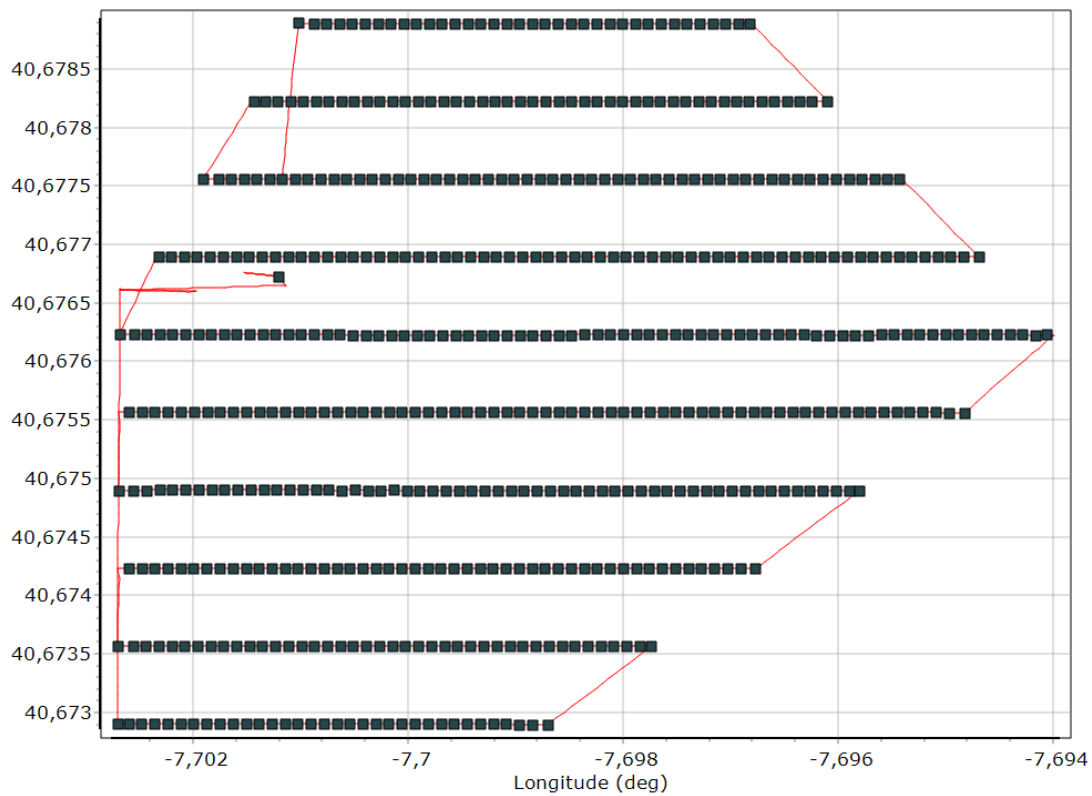


BEIDOU SNR

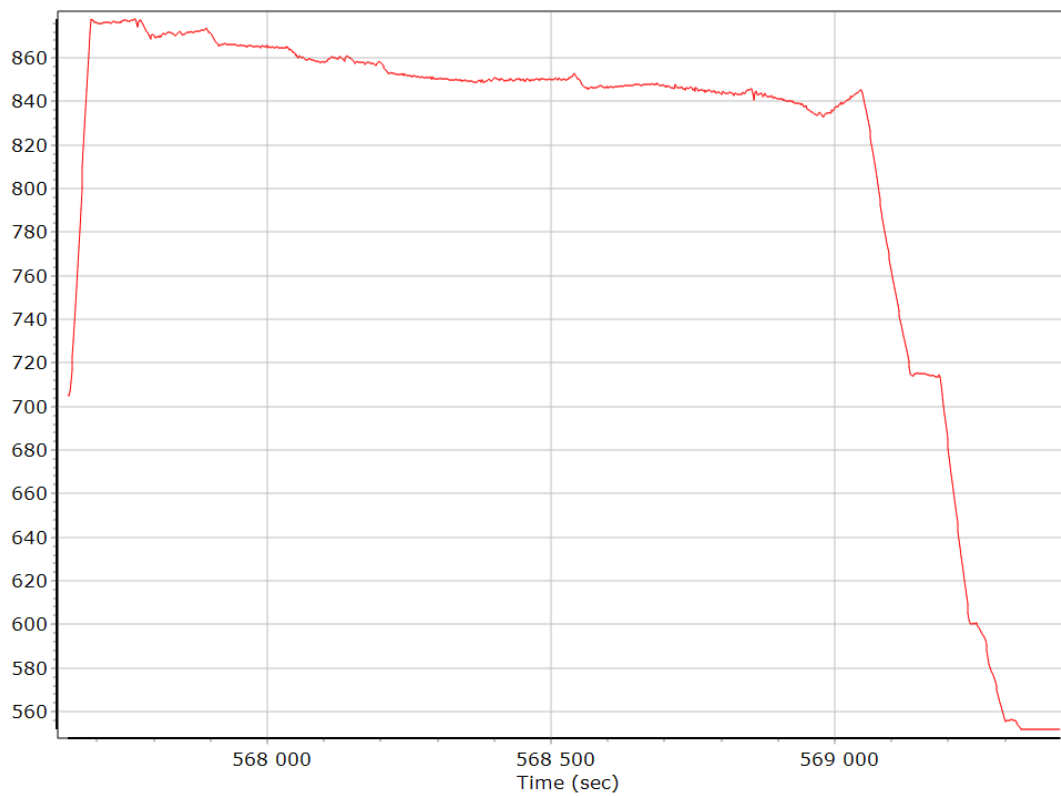


Trajectory Information

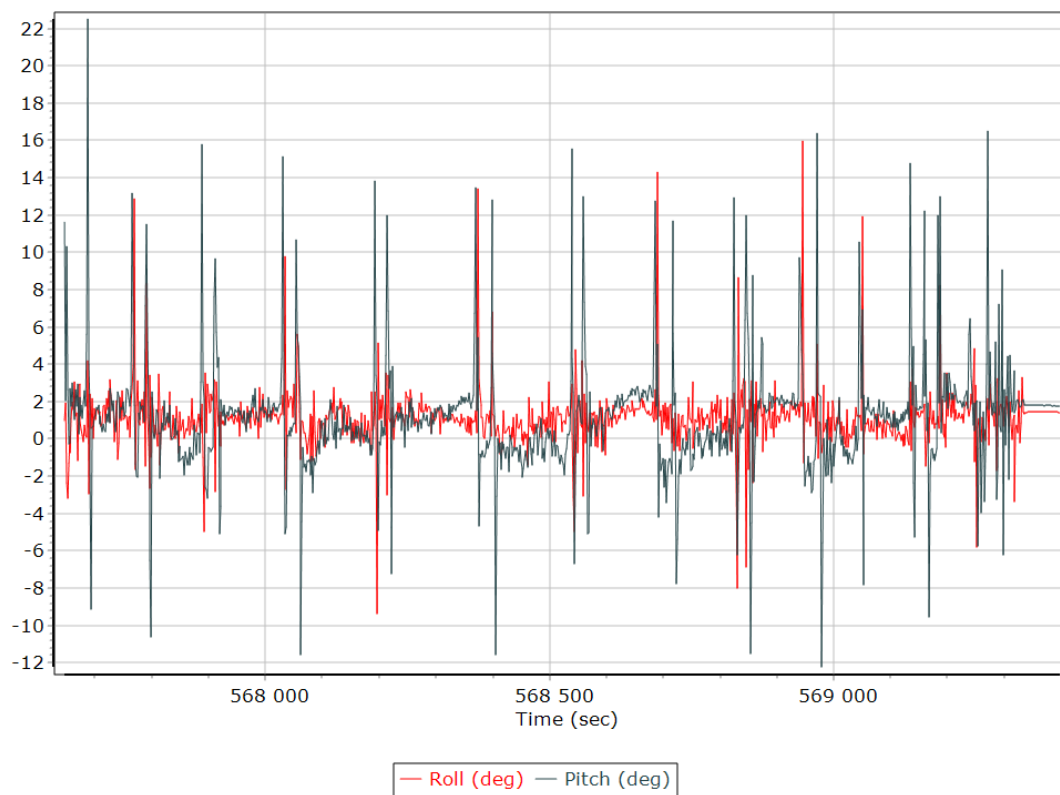
Top View



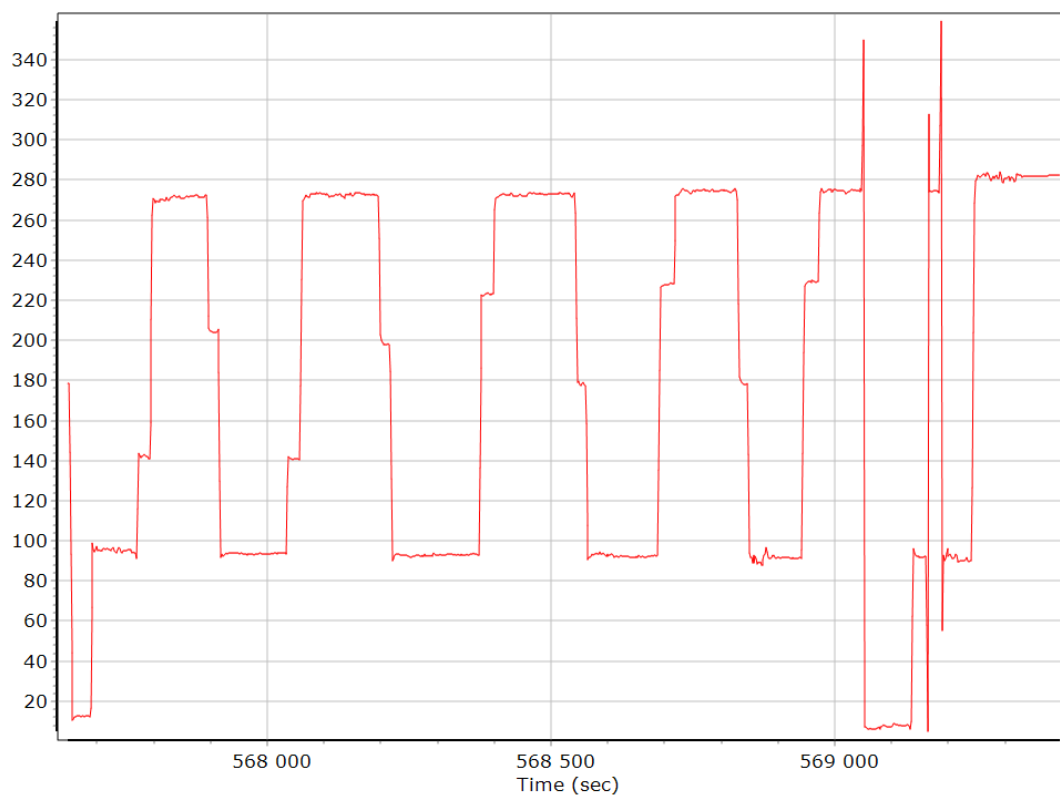
Altitude



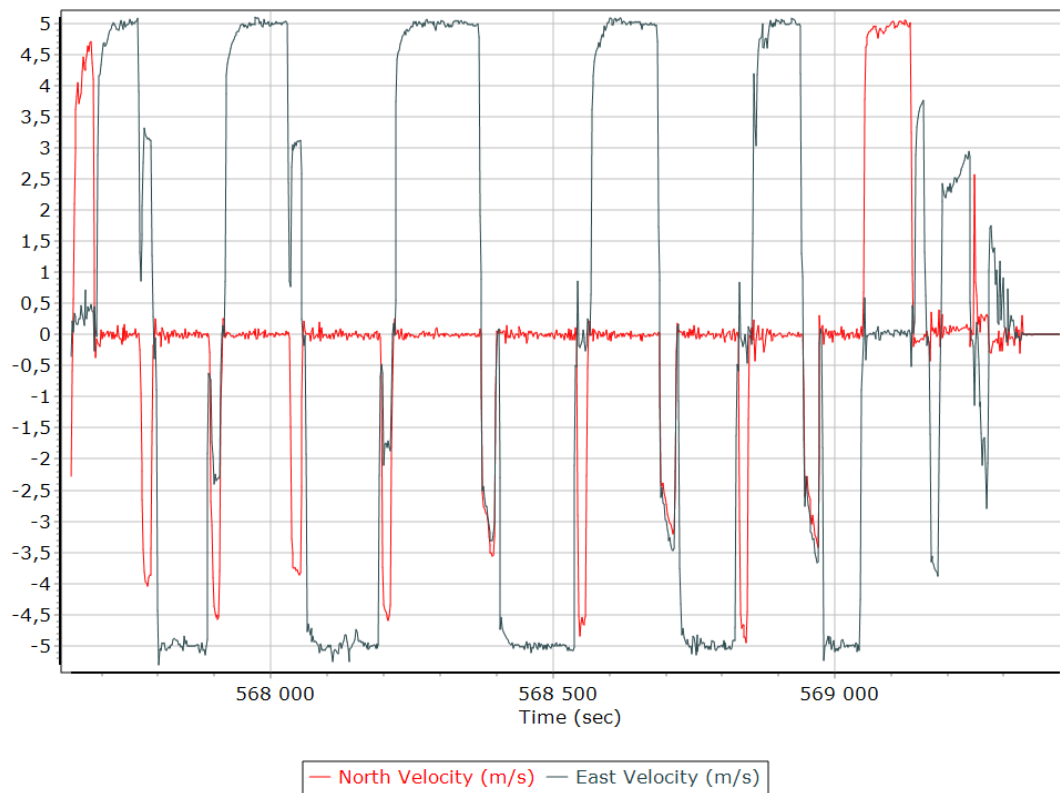
Roll/Pitch



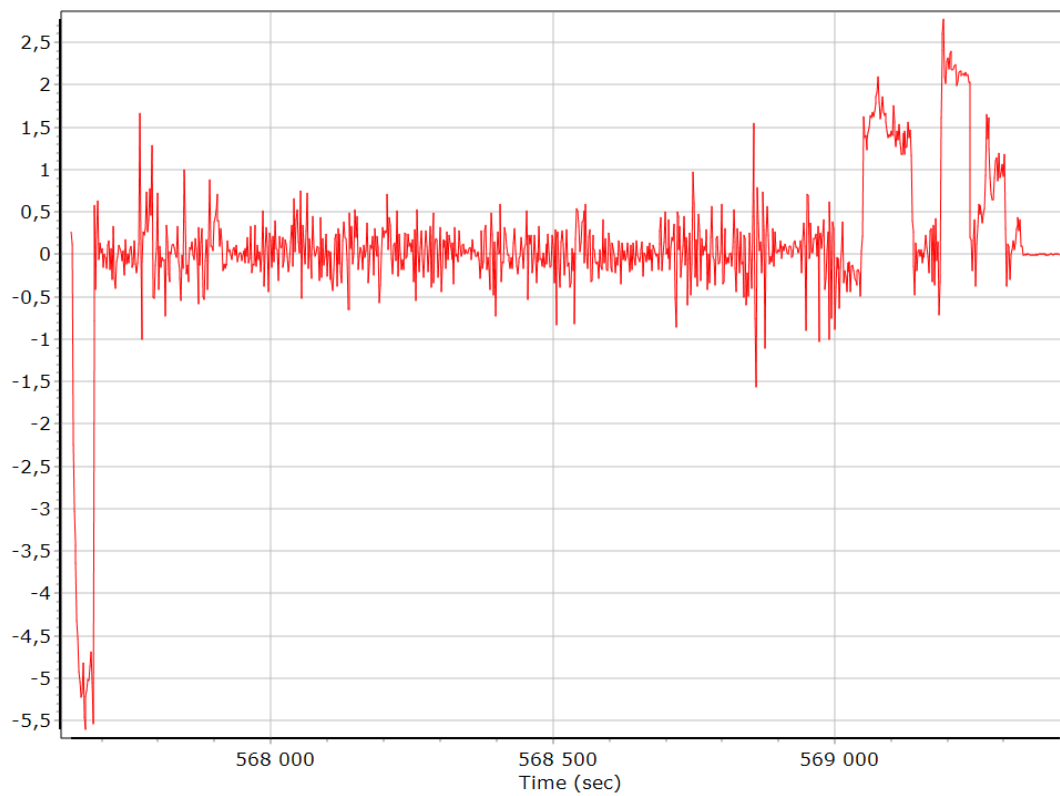
Heading



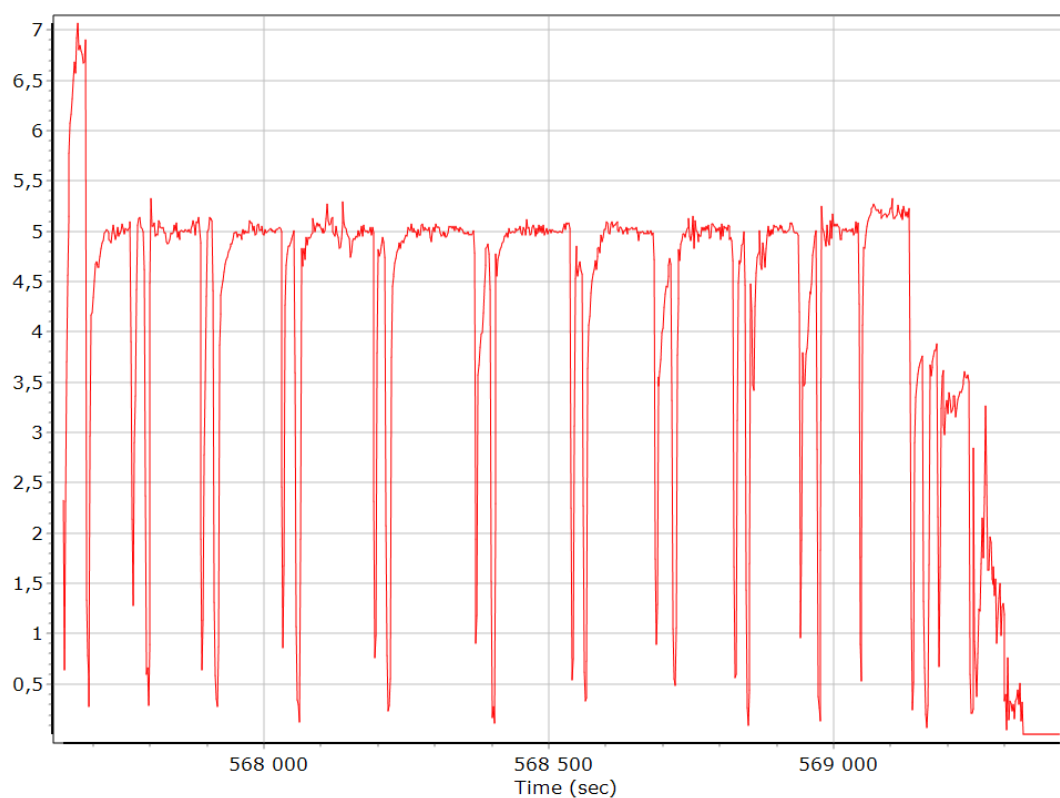
North/East Velocity



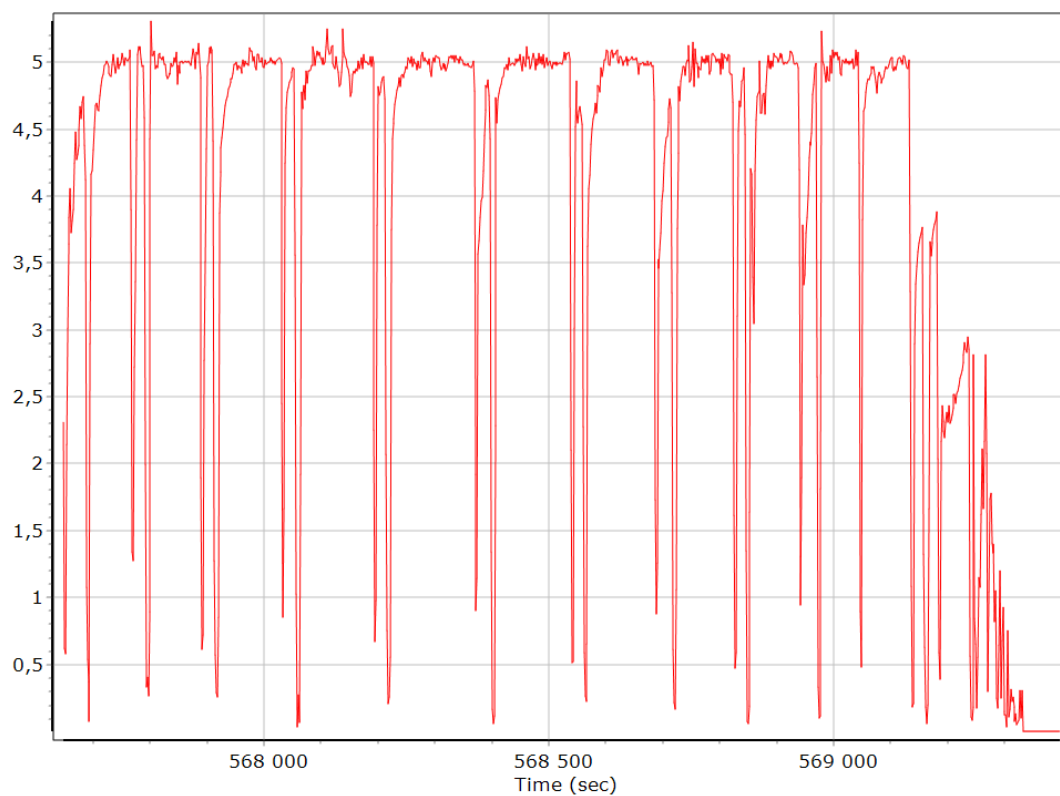
Down Velocity



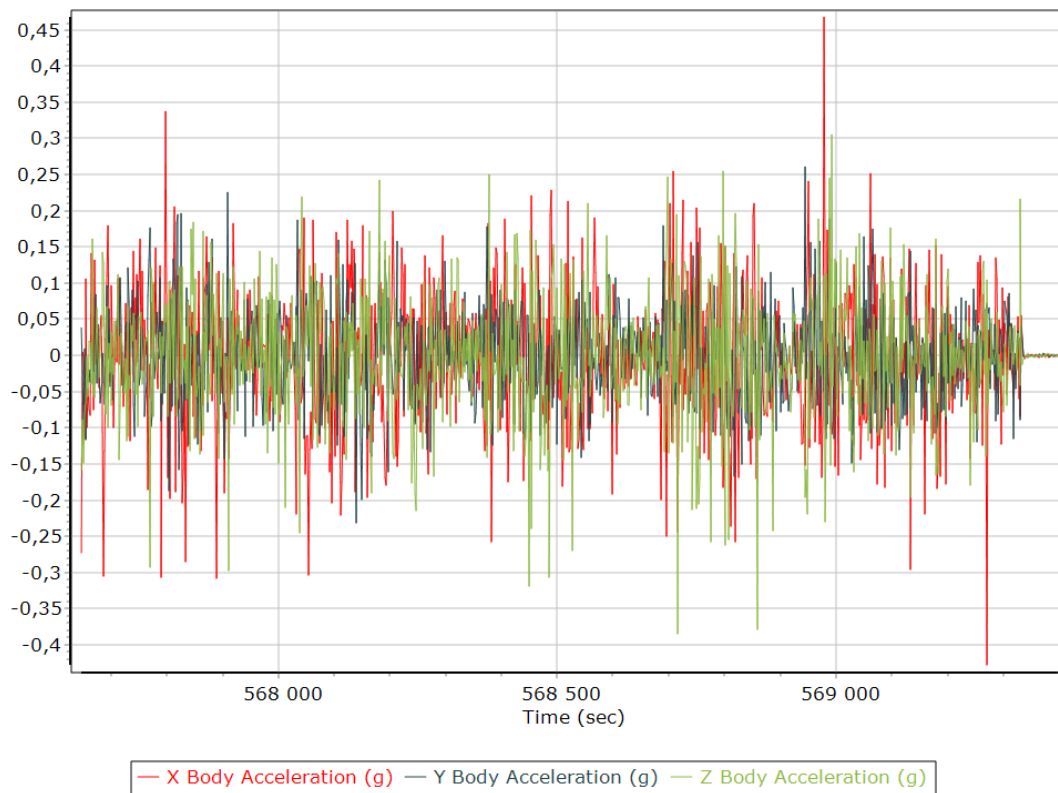
Total Speed



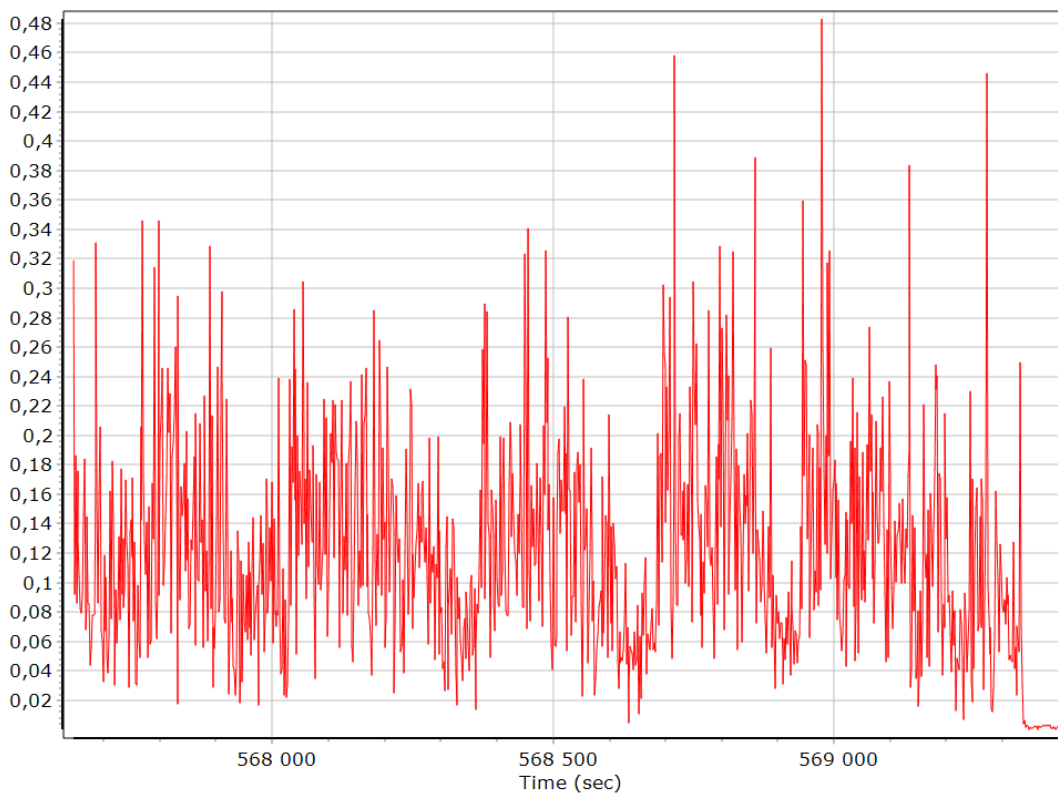
Ground Speed



Body Acceleration



Total Body Acceleration



Body Angular Rate



Base Station Information

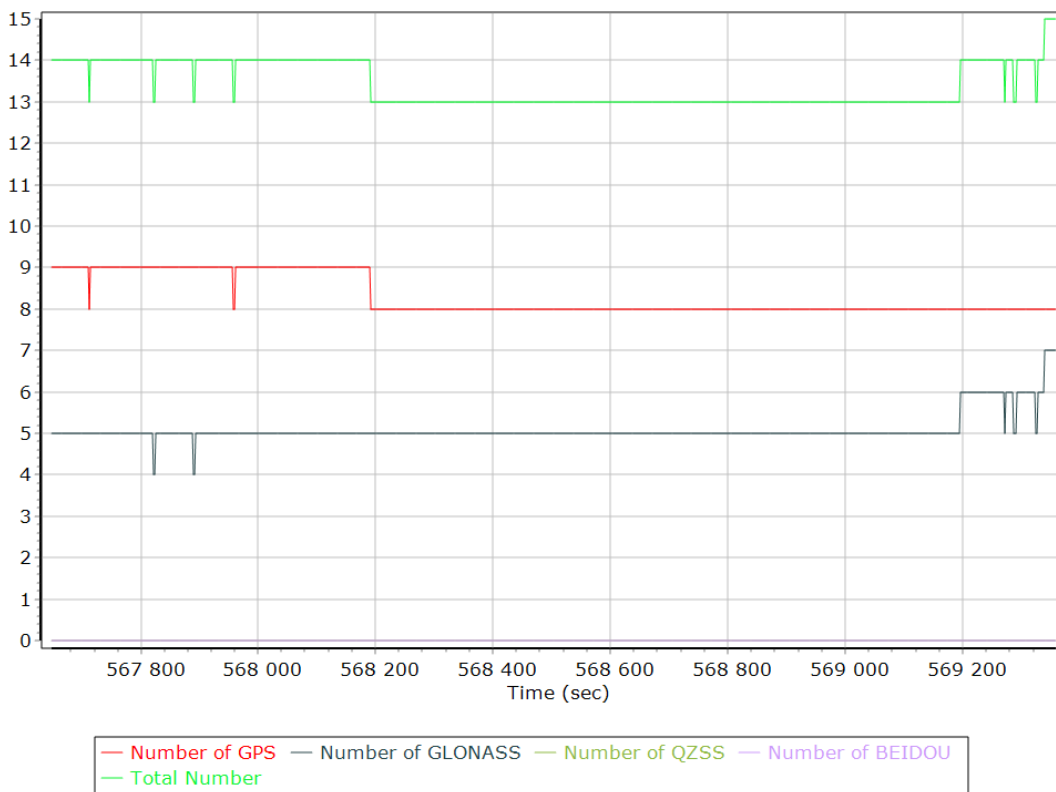
Station ID	VSEU		
Filename	vseu271m.19o, vseu271n.19o, vseu271o.19o, vseu271p.19o, vseu271q.19o		
Start date	09/28/2019 12:00:00		
End date	09/28/2019 16:59:55		
Duration	04:59:55.000		
Data type	GNSS		
Receiver manufacturer, model, serial no.	Leica	GRX1200GGPRO	355353
Antenna manufacturer, model	Leica	AX1202GG	
Antenna height [m]	0.000		
Antenna measurement method	Bottom of antenna mount		
Offset from measured point to APC [m]	0.0847		
Latitude	N40°39'11.73424"		
Longitude	W7°54'22.52956"		
Ellipsoidal height [m]	570.58300		
Frame	ETRS89		
Epoch	2017.589		
Ellipsoid	WGS84		
Velocity North [mm/y]	-0.07		
Velocity East [mm/y]	-0.96		
Velocity Up [mm/y]	-0.59		

GNSS QC

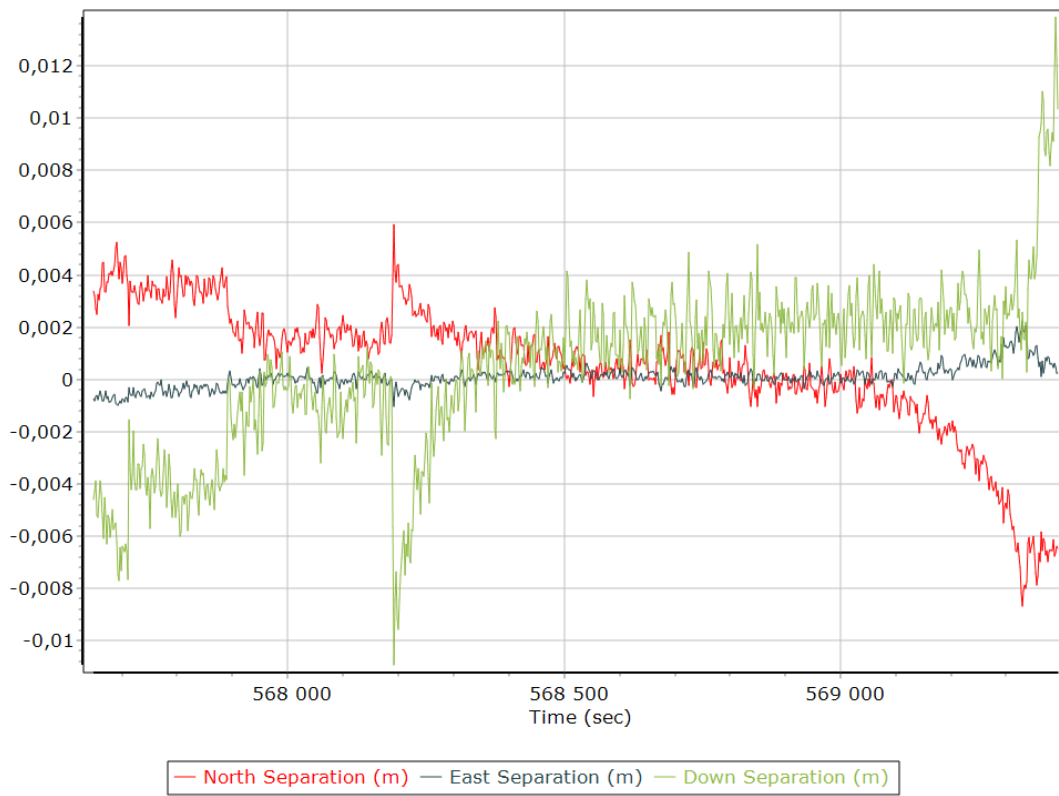
GNSS QC Statistics

Statistics	Min	Max	Mean
Baseline length [km]	17.35	18.13	
Number of GPS SV	8	9	9
Number of GLONASS SV	0	7	5
Number of QZSS SV	0	0	0
Number of BEIDOU SV	0	0	0
Total number of SV	8	15	14
PDOP	1.60	2.32	1.85
QC Solution Gaps	0.00	0.00	
Solution Type	Fixed	Float	No solution
Epoch (s)	2843.00	0.00	0.00
Percentage	100.00	0.00	0.00

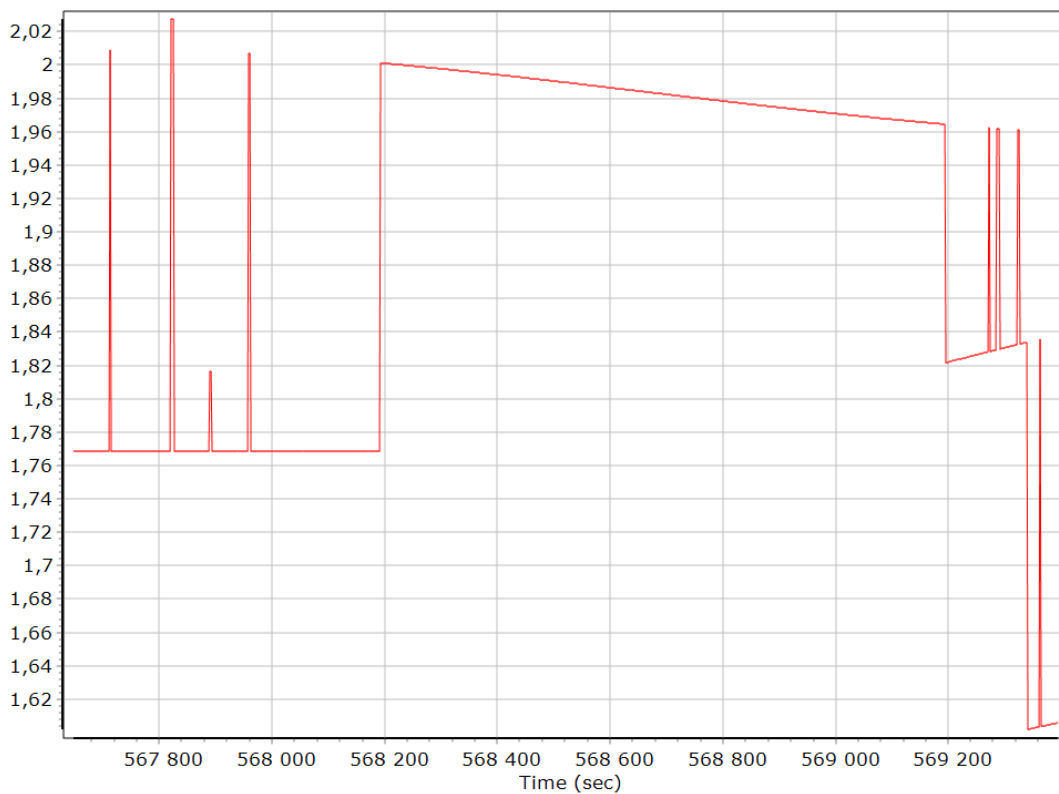
Num SVs in solution



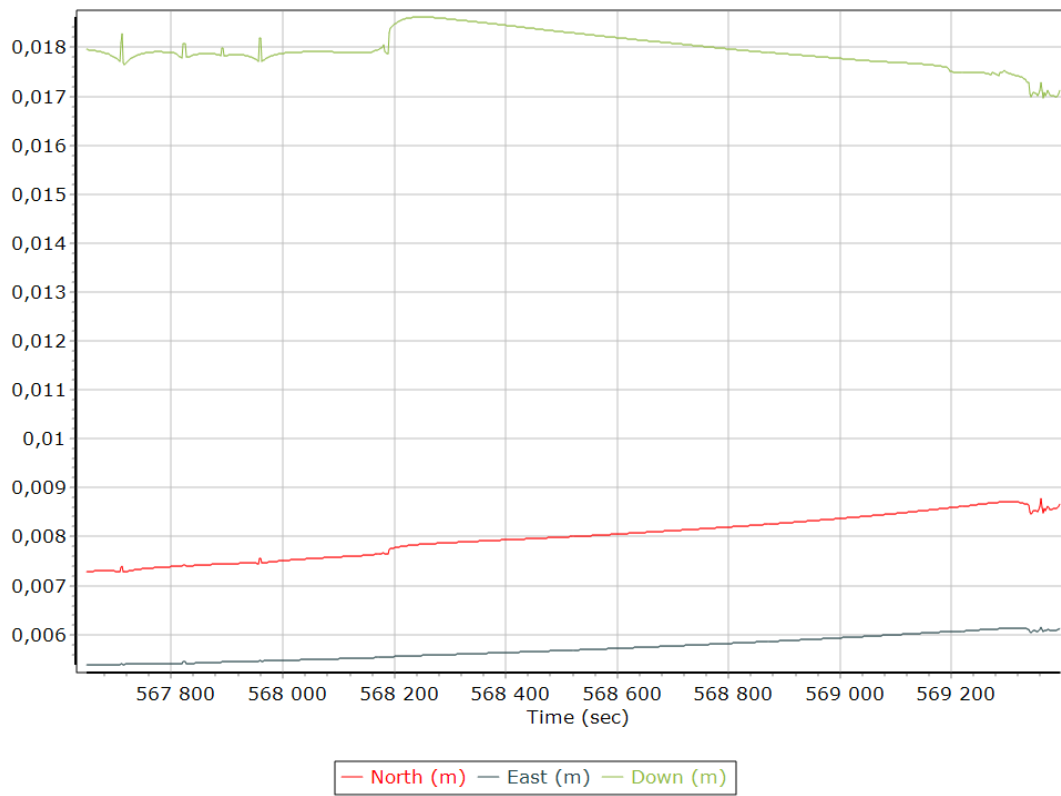
Forward/Reverse Separation



PDOP



Estimated Position Accuracy



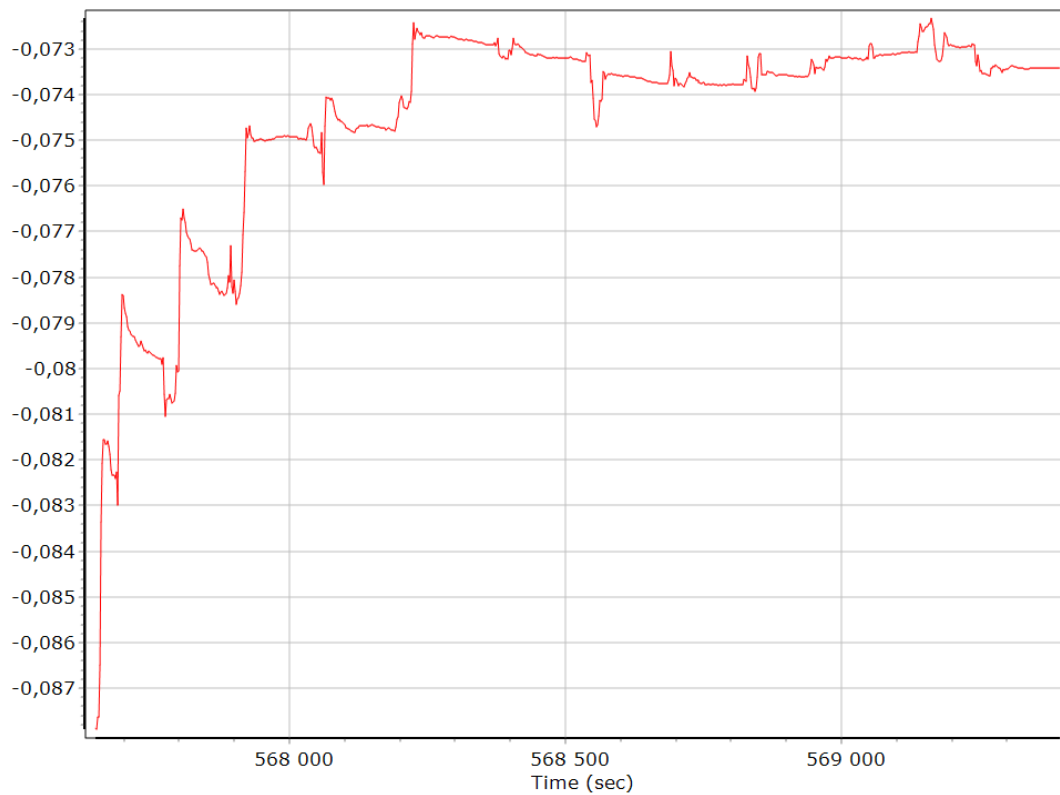
GNSS-Inertial Processor Configuration

Processing mode	IN-Fusion Single Base		
Stabilized mount	False		
Base station	VSEU		
Processing start time	566514.000 (09/28/2019 13:21:54)		
Processing end time	569398.000 (09/28/2019 14:09:58)		
Initial attitude source	Primary GNSS Track		
IMU Sensor Context	Processing with Onboard IMU		
Reference to IMU lever arm [m]	0.000	0.000	-0.073
Reference to IMU mounting angles [deg]	0.000	0.000	180.000
Reference to Primary GNSS lever arm [m]	-0.070	0.000	-0.402
Reference to Primary GNSS lever arm std dev [m]	0.100	0.100	0.100
Aircraft to Reference mounting angles [deg]	0.000	0.000	0.000

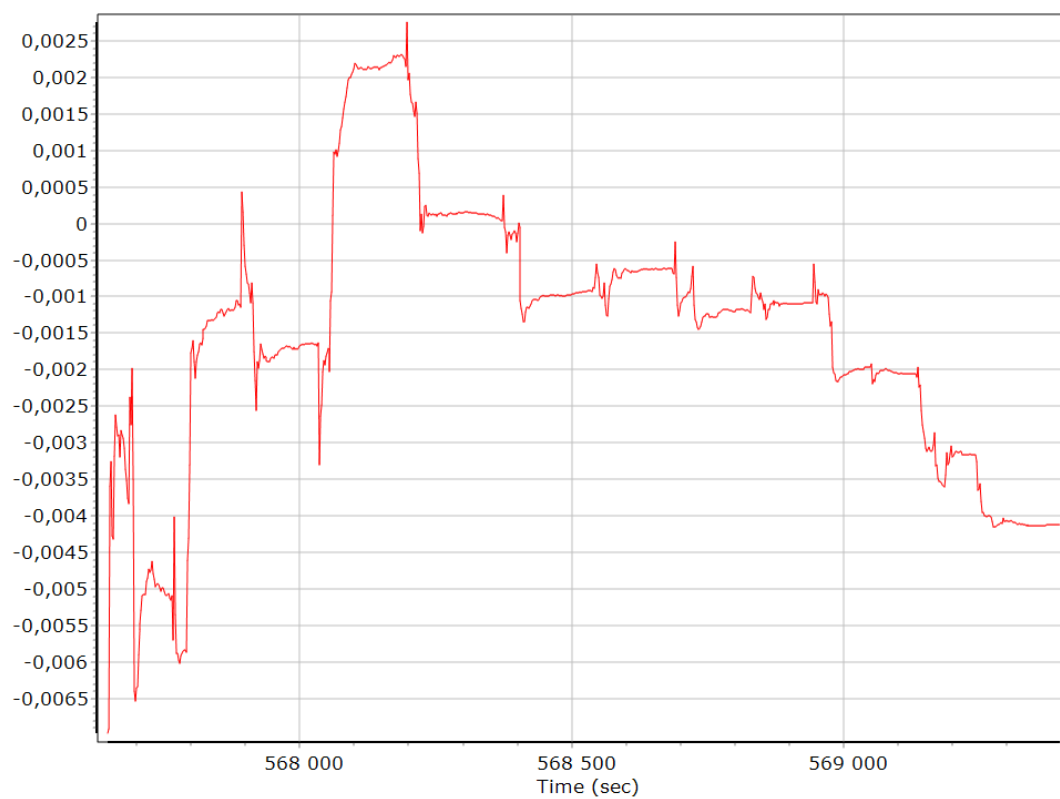
Calibrated Installation Parameters

Reference-Primary GNSS Lever Arm

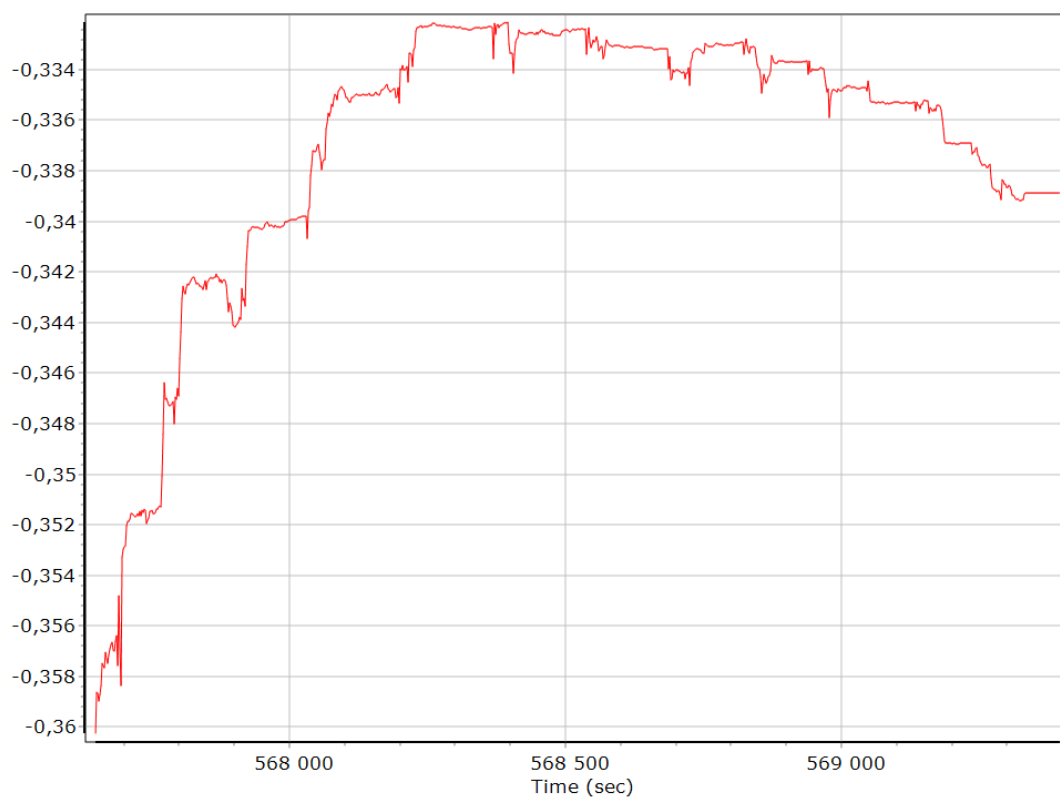
X Reference-Primary GNSS Lever Arm (m)



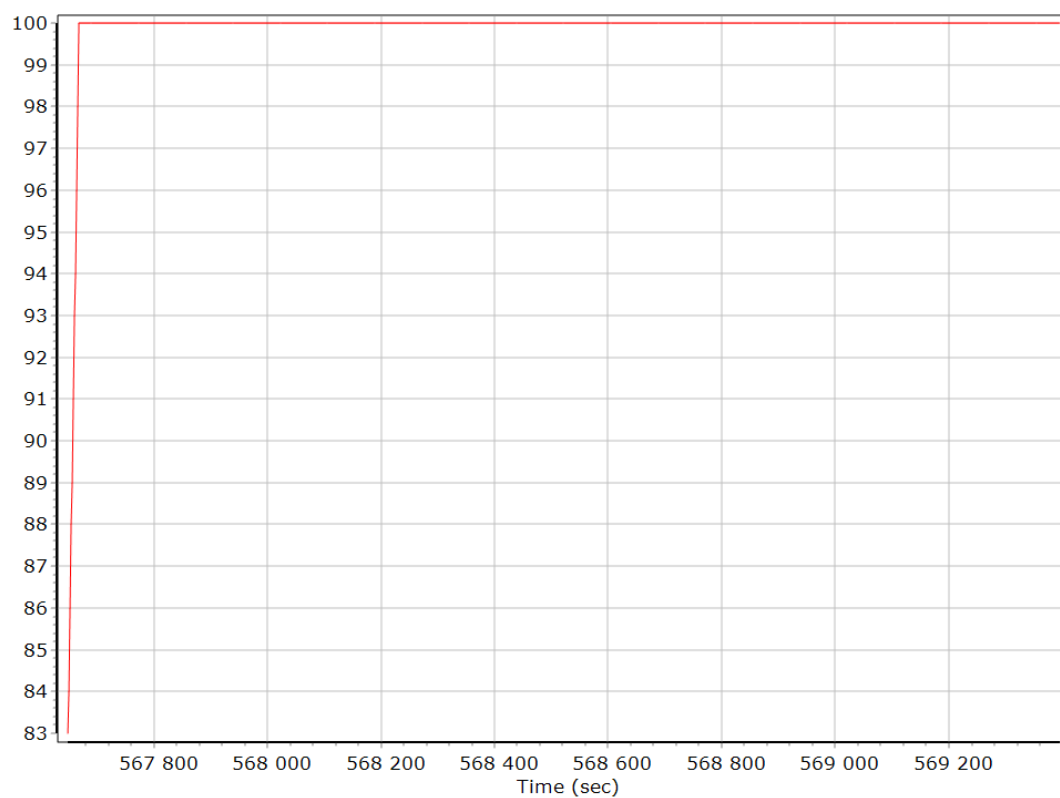
Y Reference-Primary GNSS Lever Arm (m)



Z Reference-Primary GNSS Lever Arm (m)



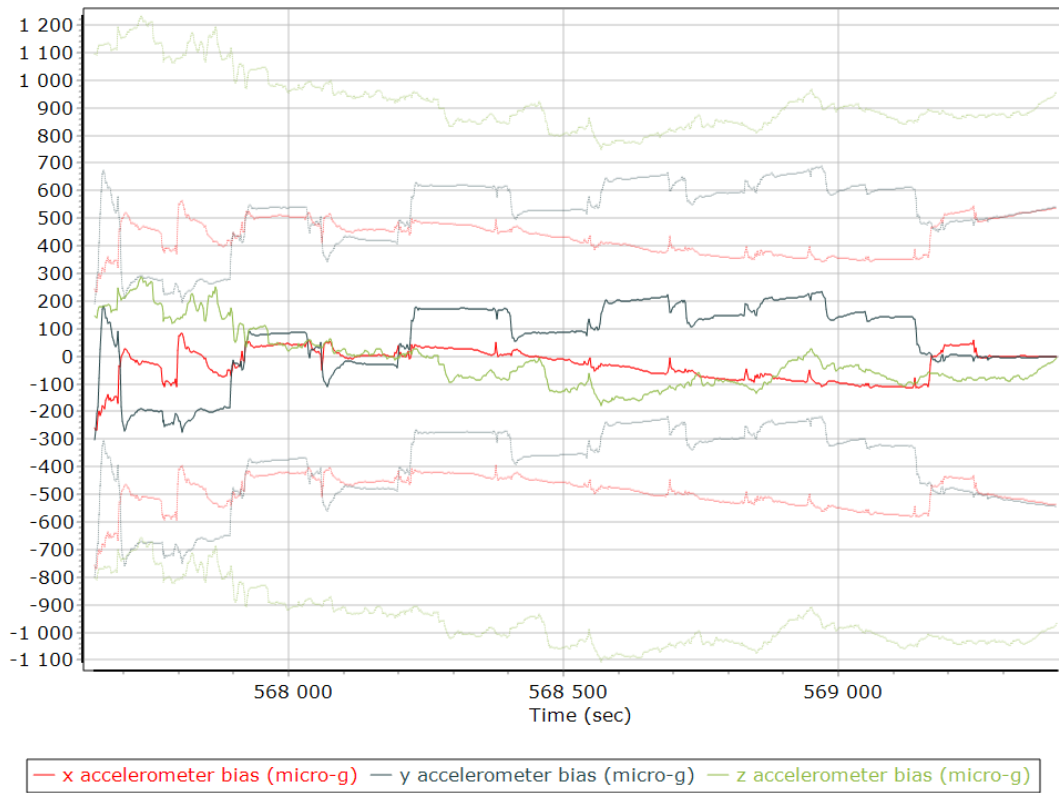
Reference-Primary GNSS Lever Arm Figure of Merit



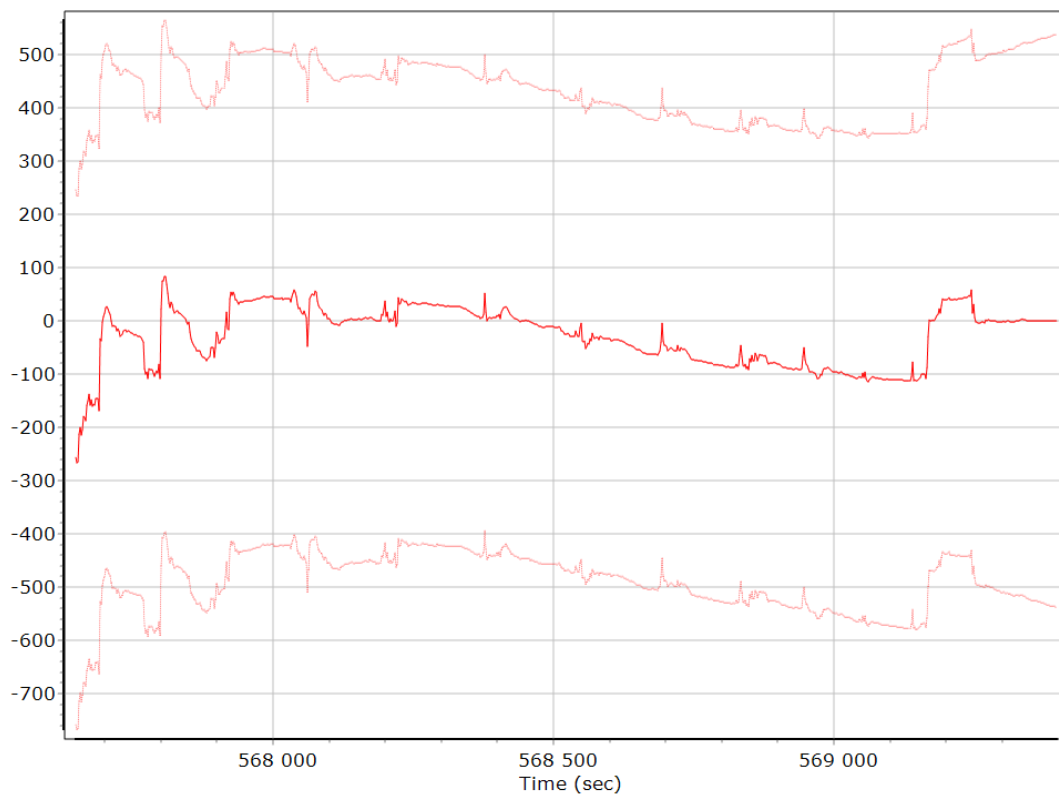
Smoothed IN-Fusion QC

Smoothed Estimated Errors, Reference Frame

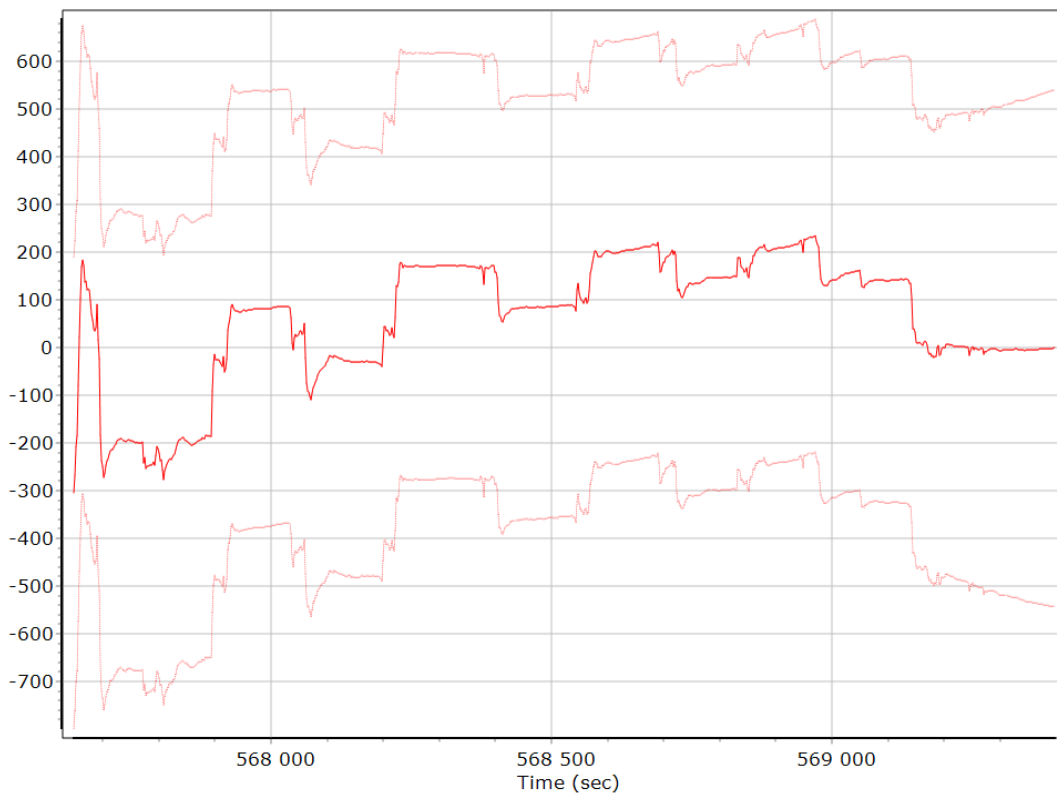
Accelerometer Bias (micro-g)



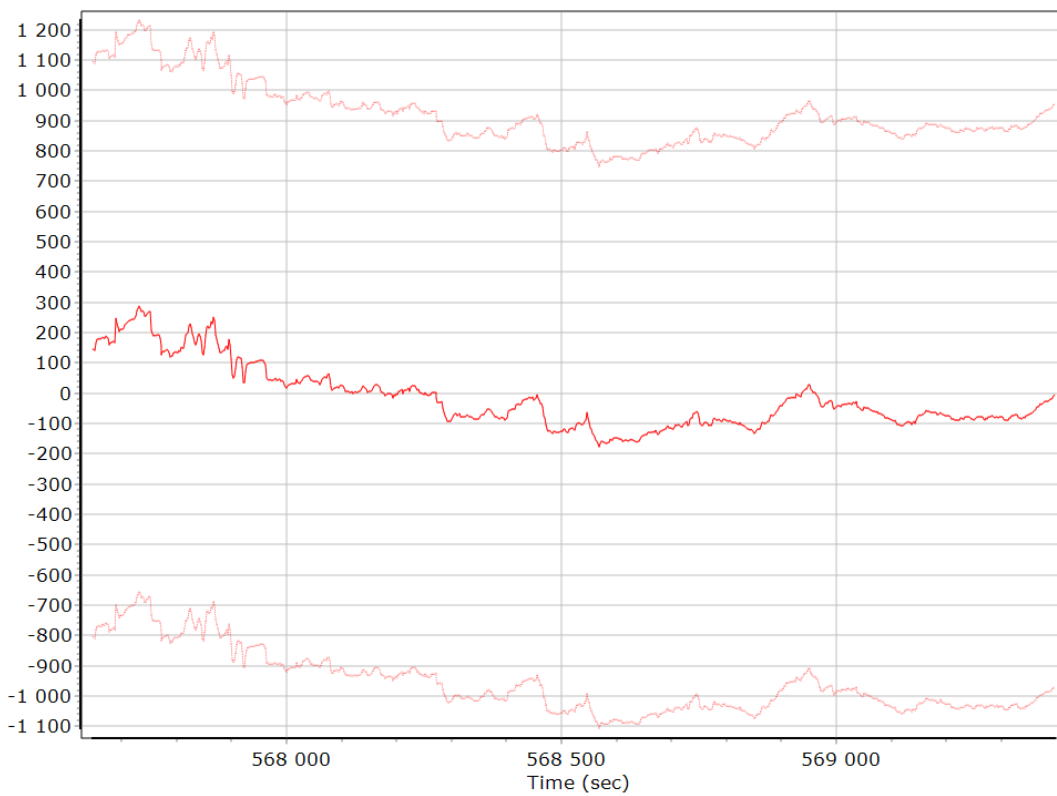
X Accelerometer Bias (micro-g)



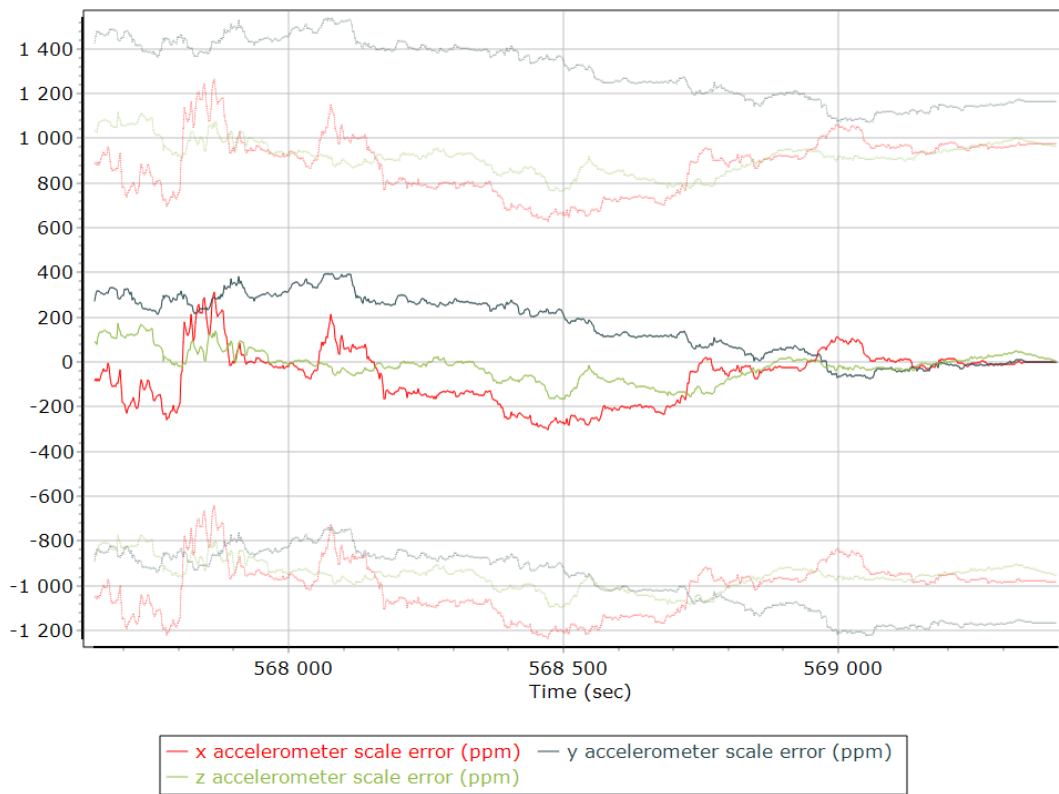
Y Accelerometer Bias (micro-g)



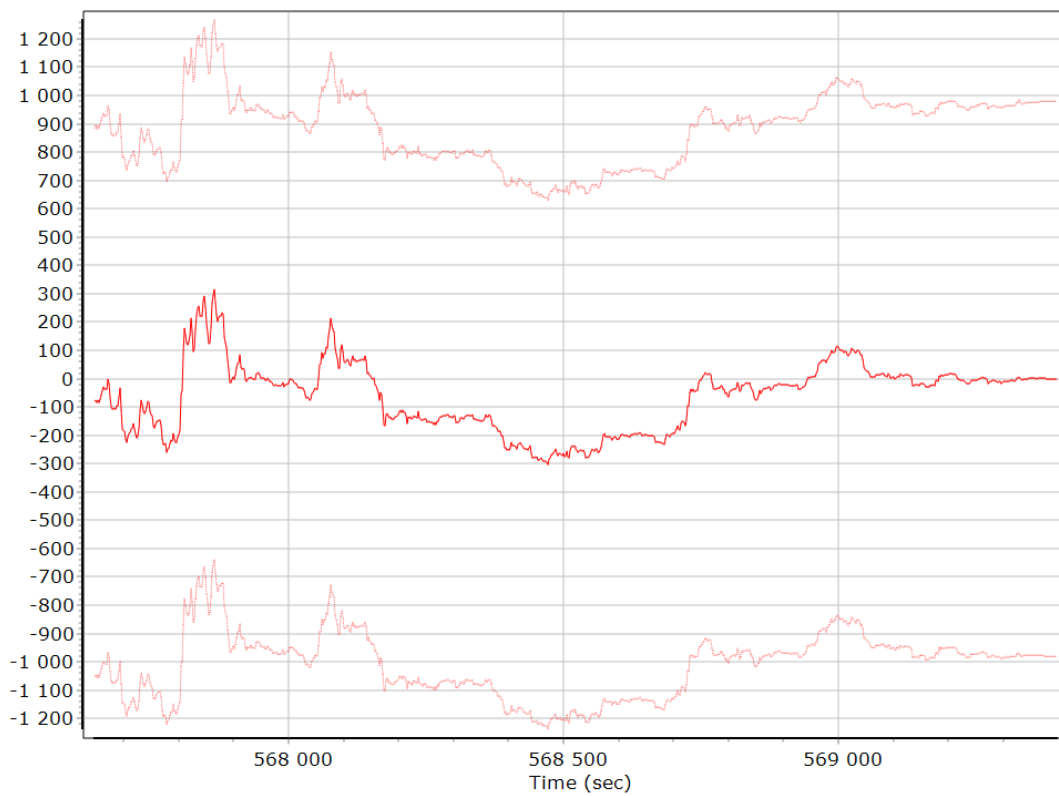
Z Accelerometer Bias (micro-g)



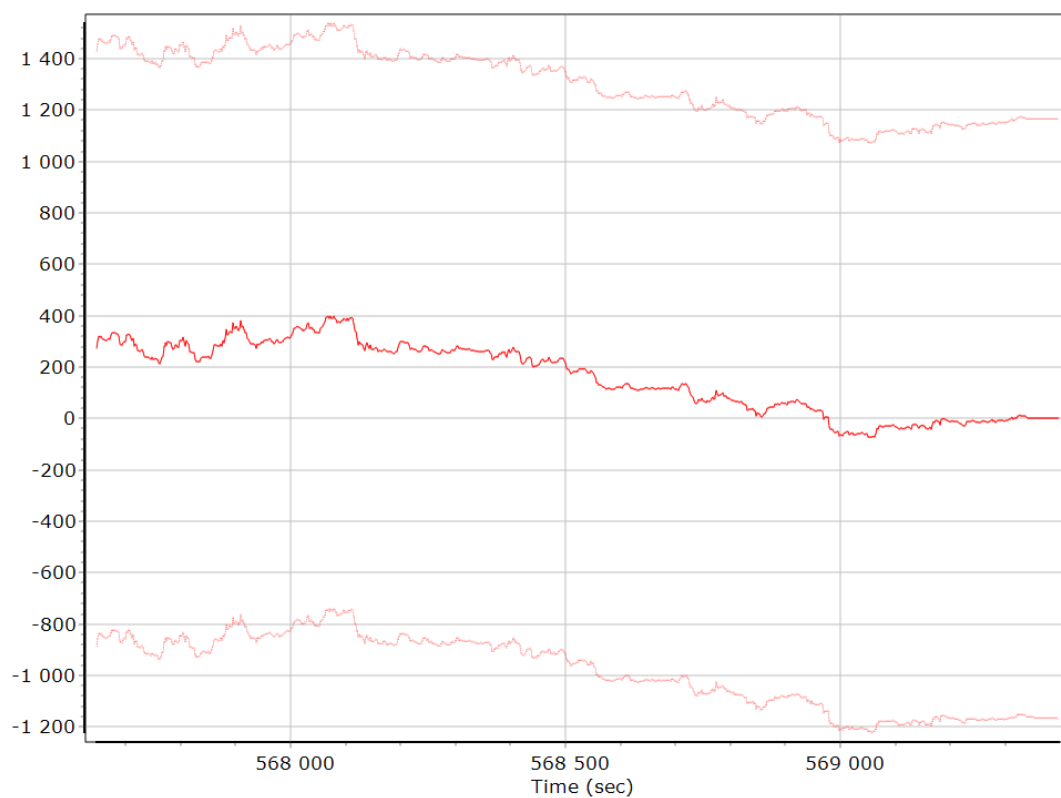
Accelerometer Scale Error (ppm)



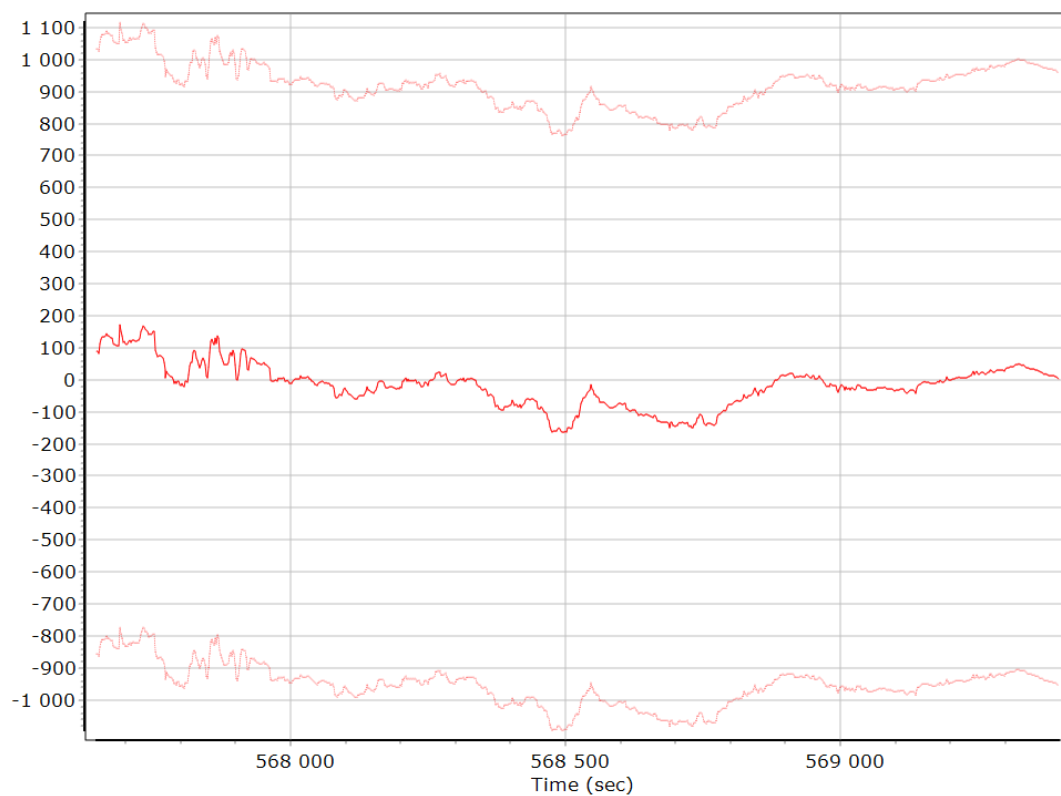
X Accelerometer Scale Error (ppm)



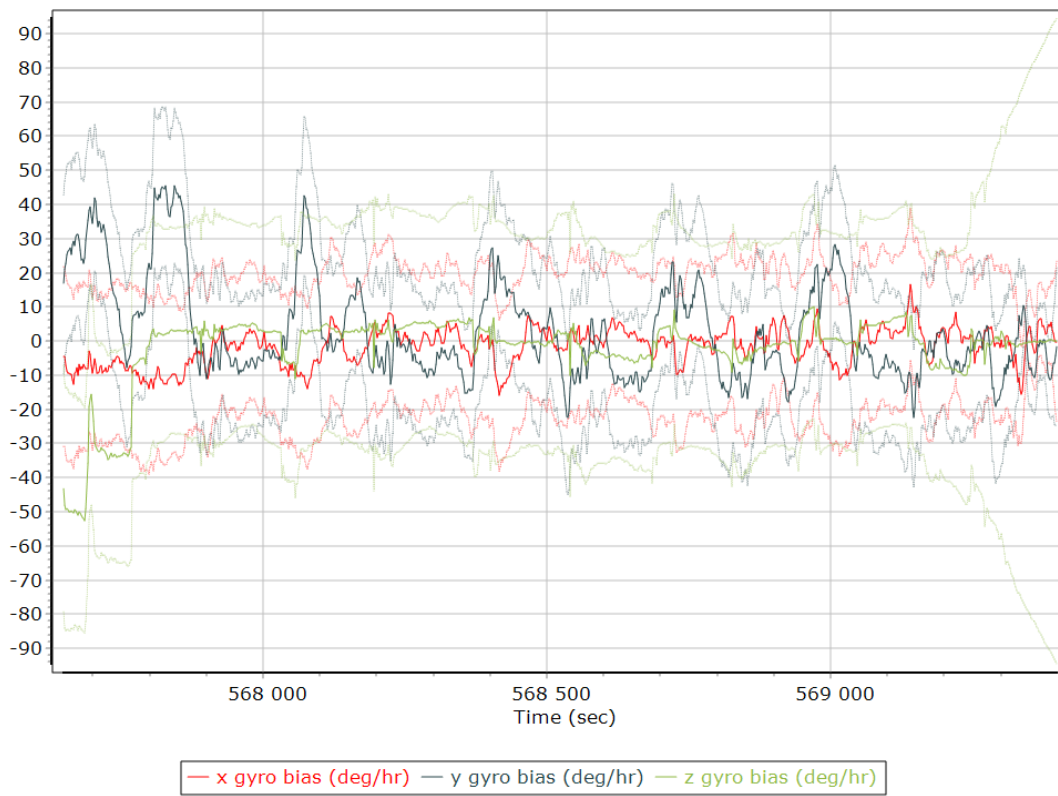
Y Accelerometer Scale Error (ppm)



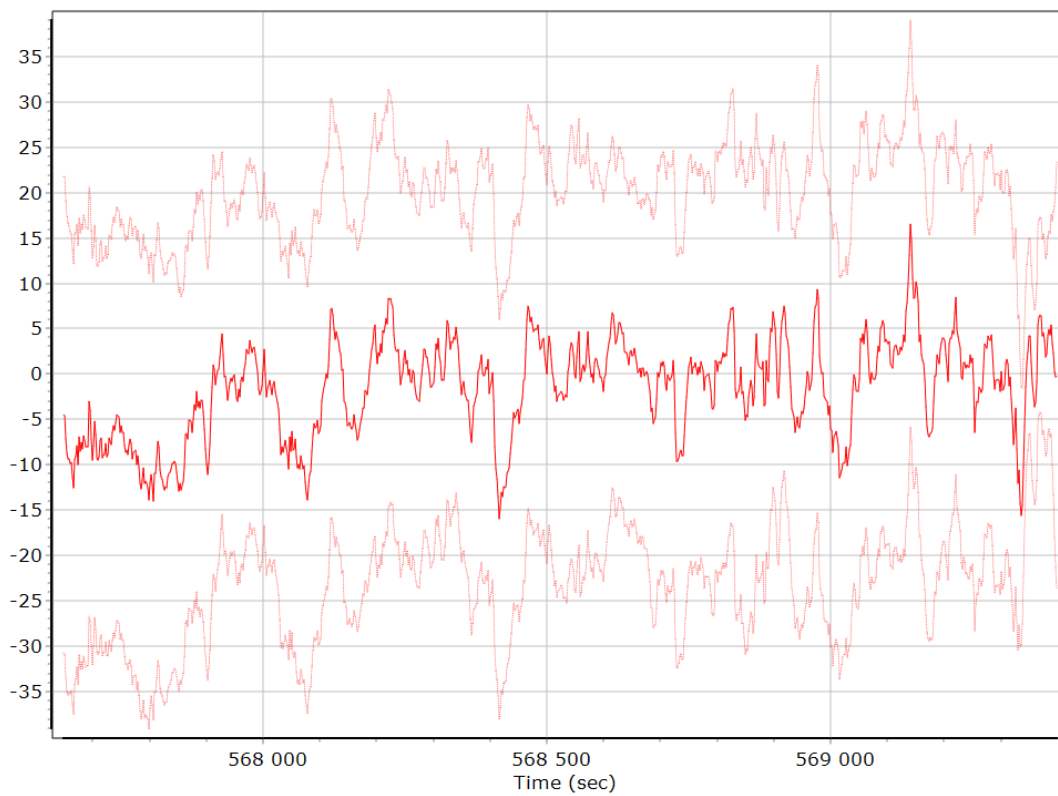
Z Accelerometer Scale Error (ppm)



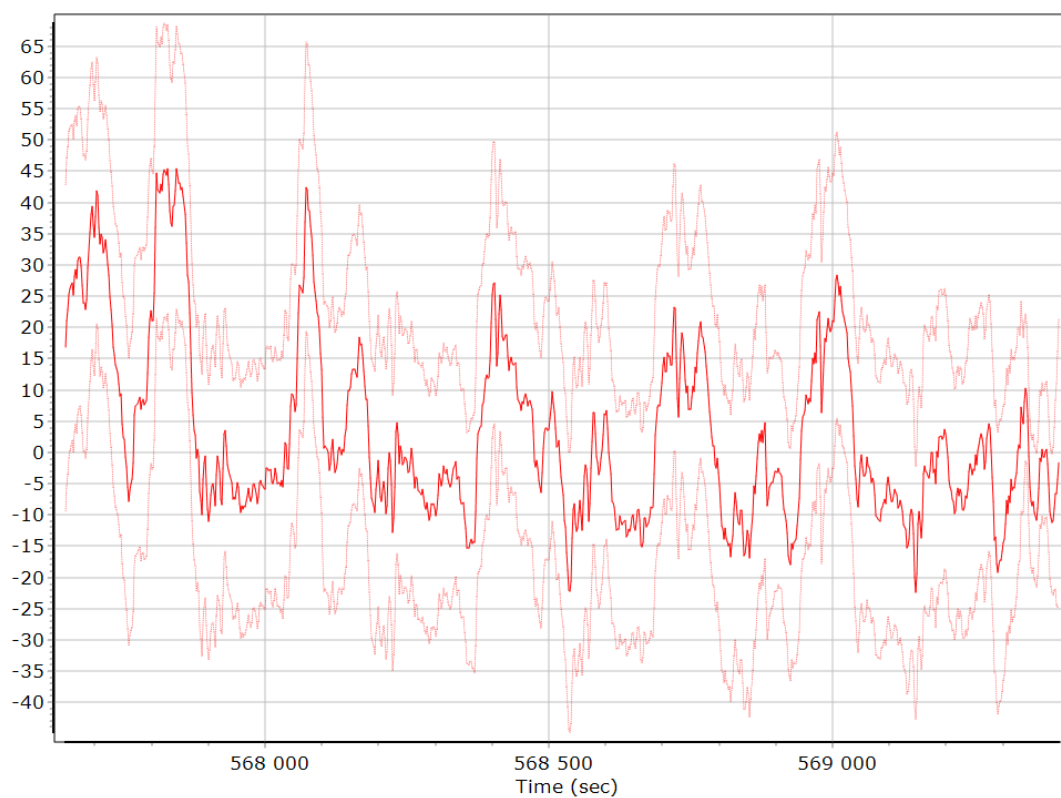
Gyro Bias (deg/h)



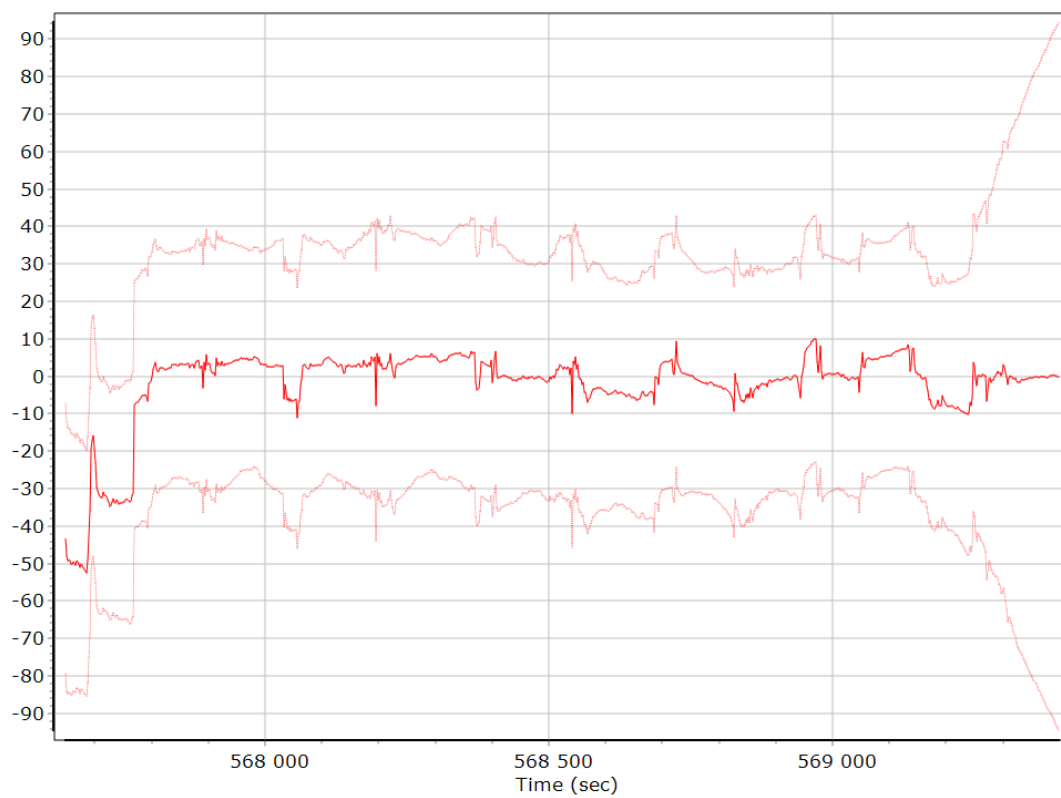
X Gyro Bias (deg/h)



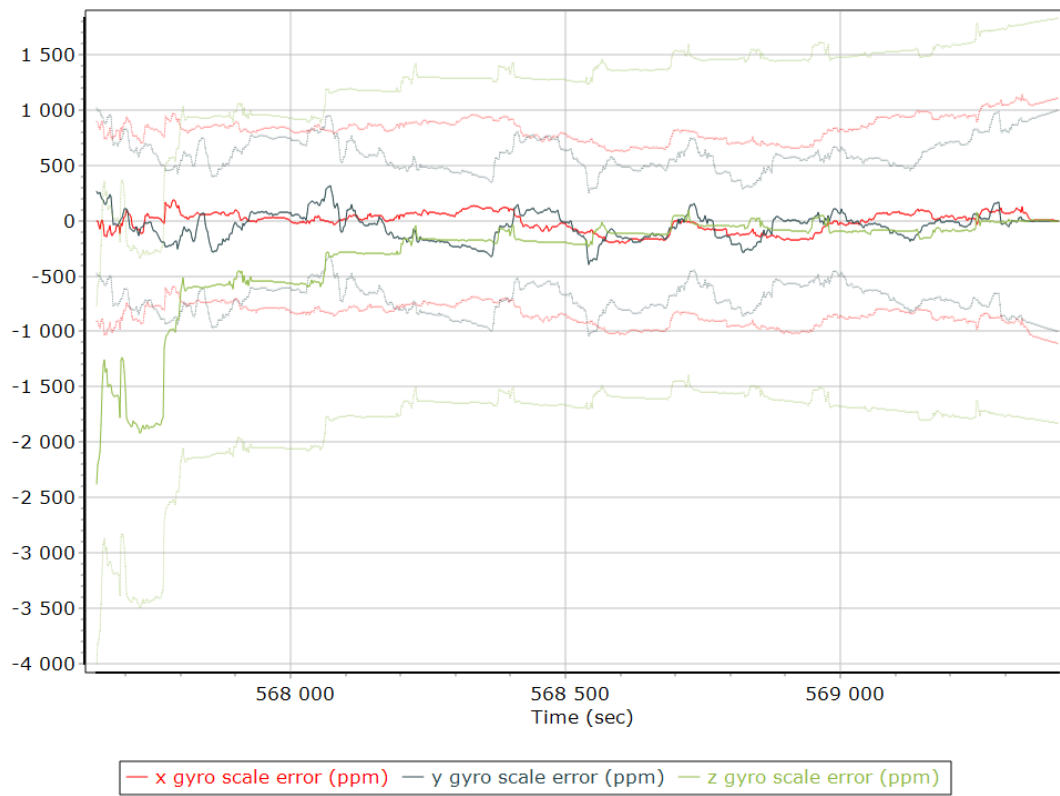
Y Gyro Bias (deg/h)



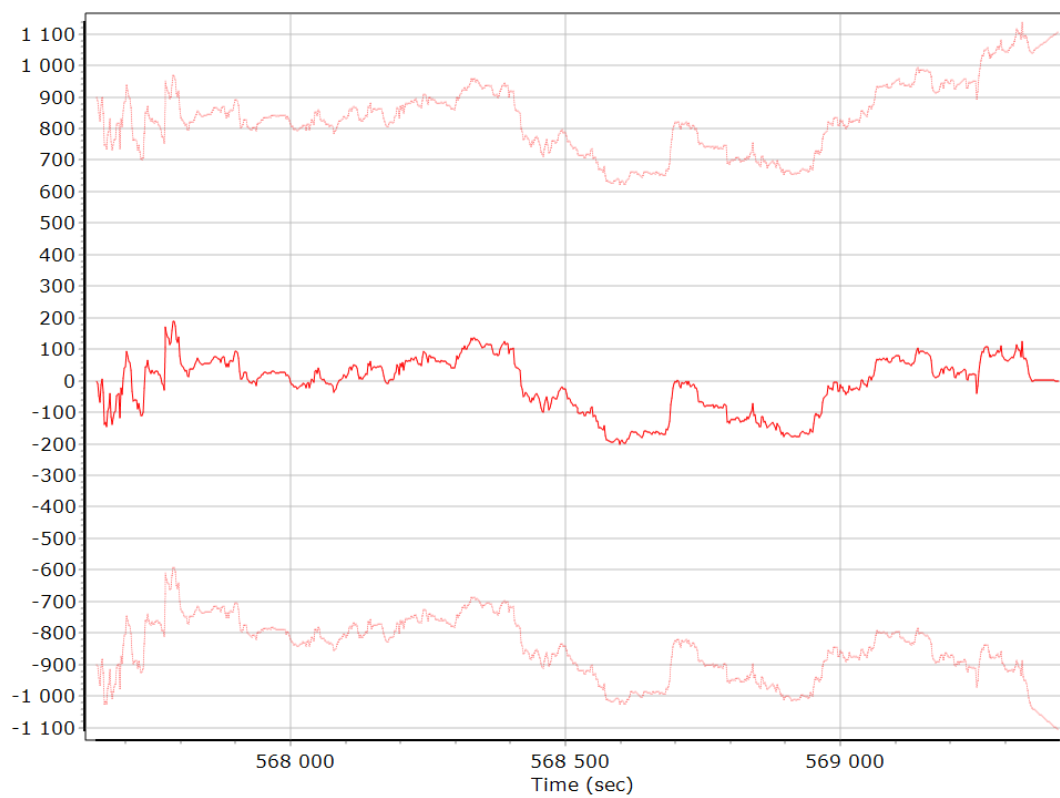
Z Gyro Bias (deg/h)



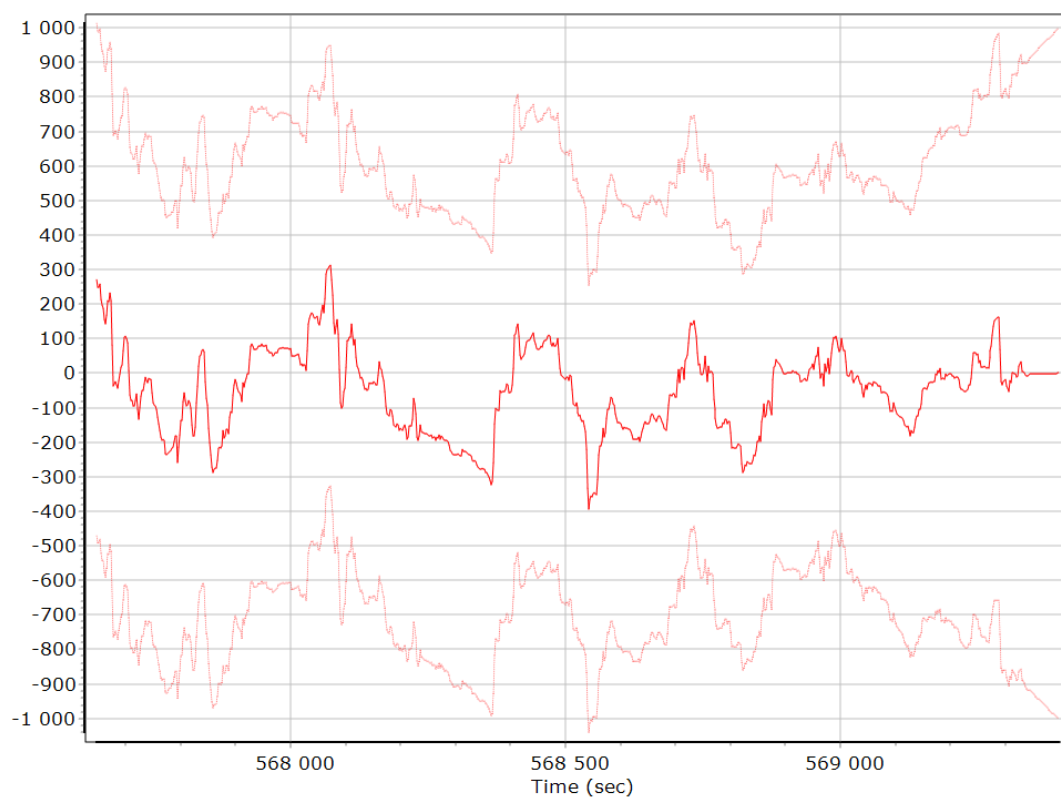
Gyro Scale Error (ppm)



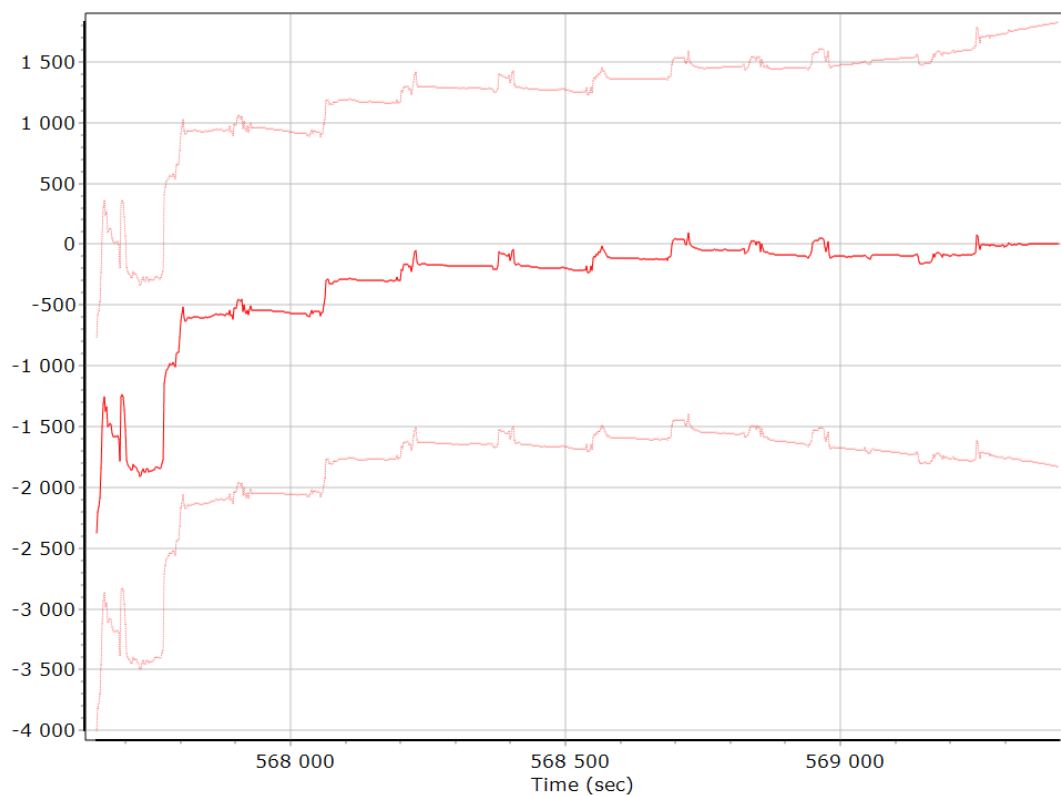
X Gyro Scale Error (ppm)



Y Gyro Scale Error (ppm)

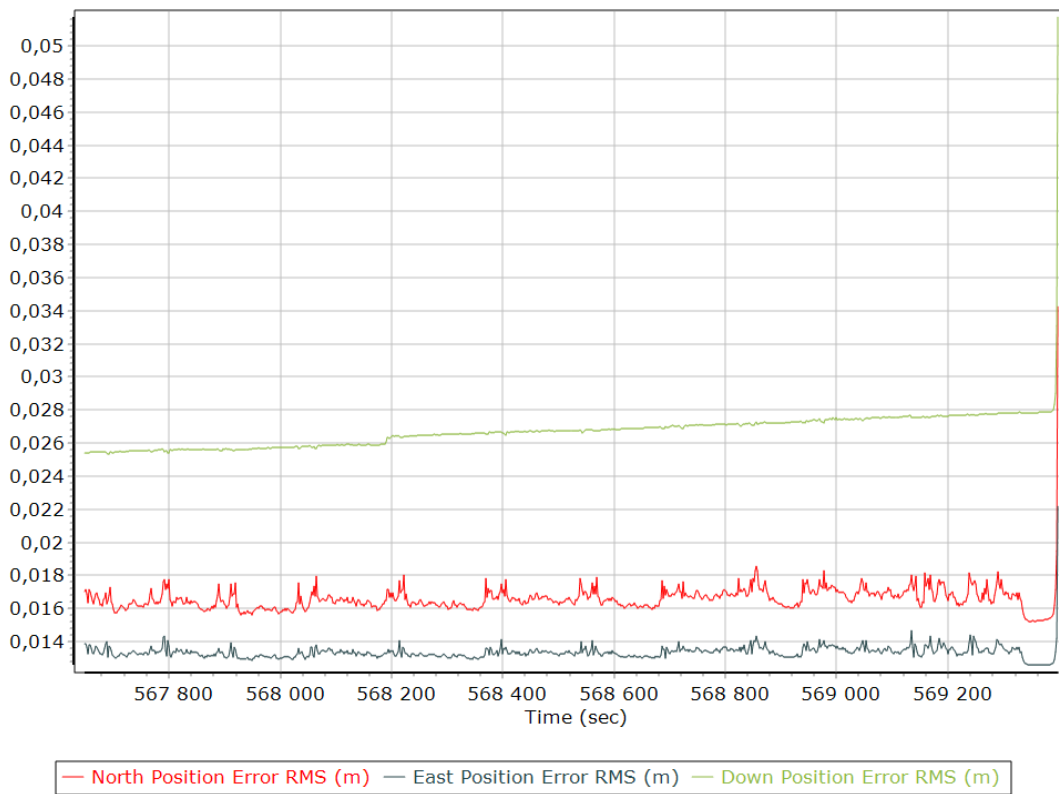


Z Gyro Scale Error (ppm)

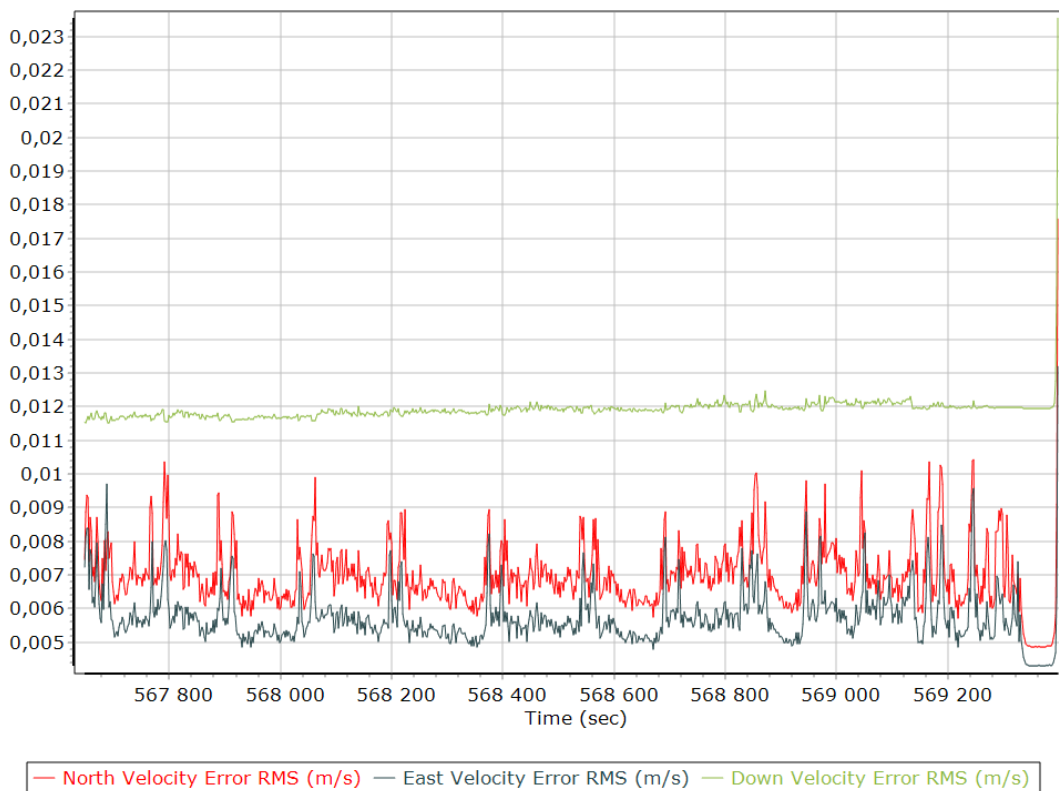


Smoothed Performance Metrics

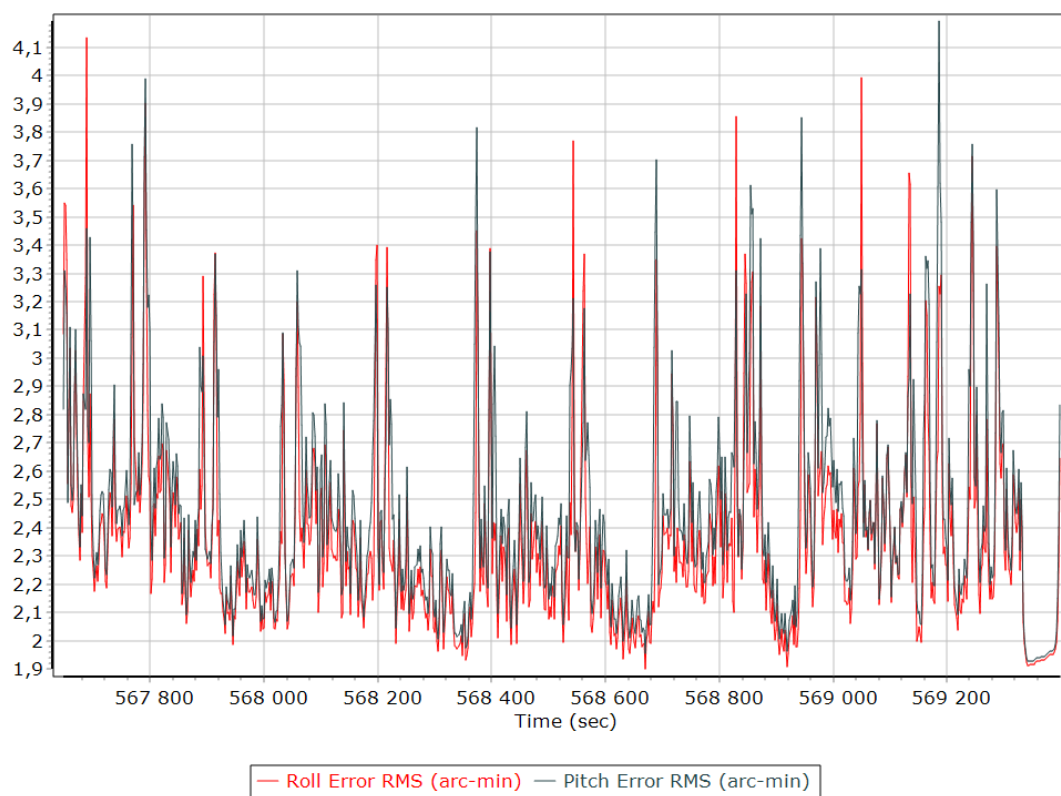
Position Error RMS (m)



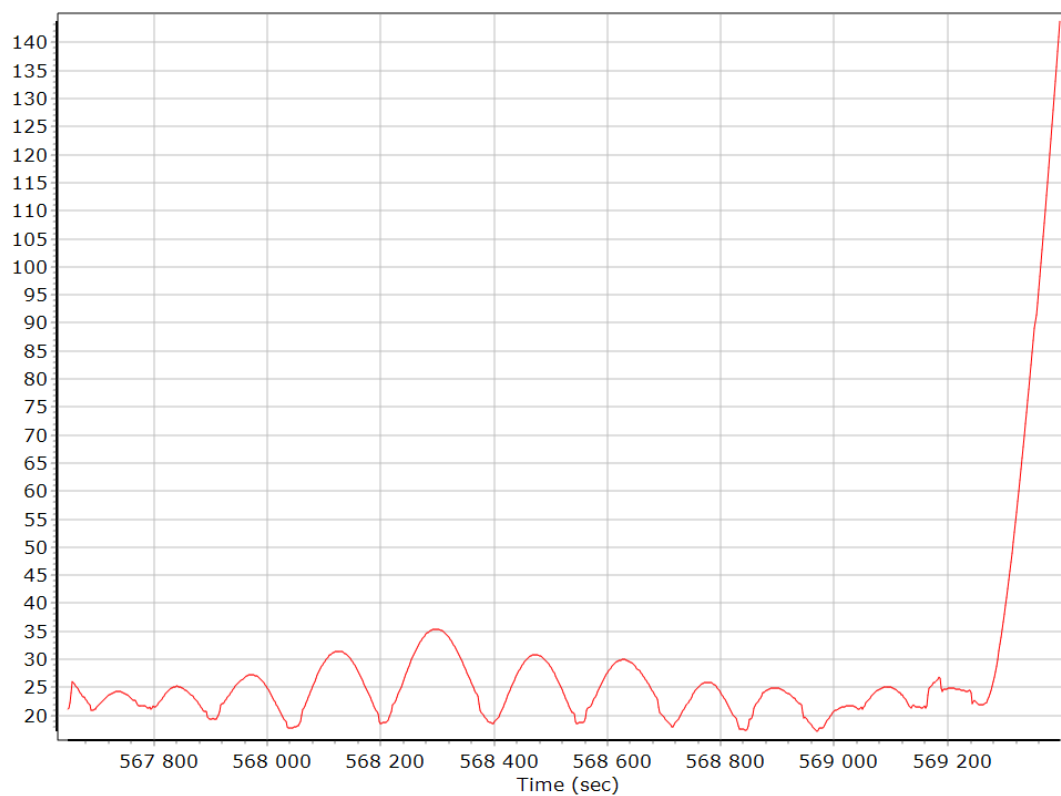
Velocity Error RMS (m/s)



Roll/Pitch Error RMS (arc-min)

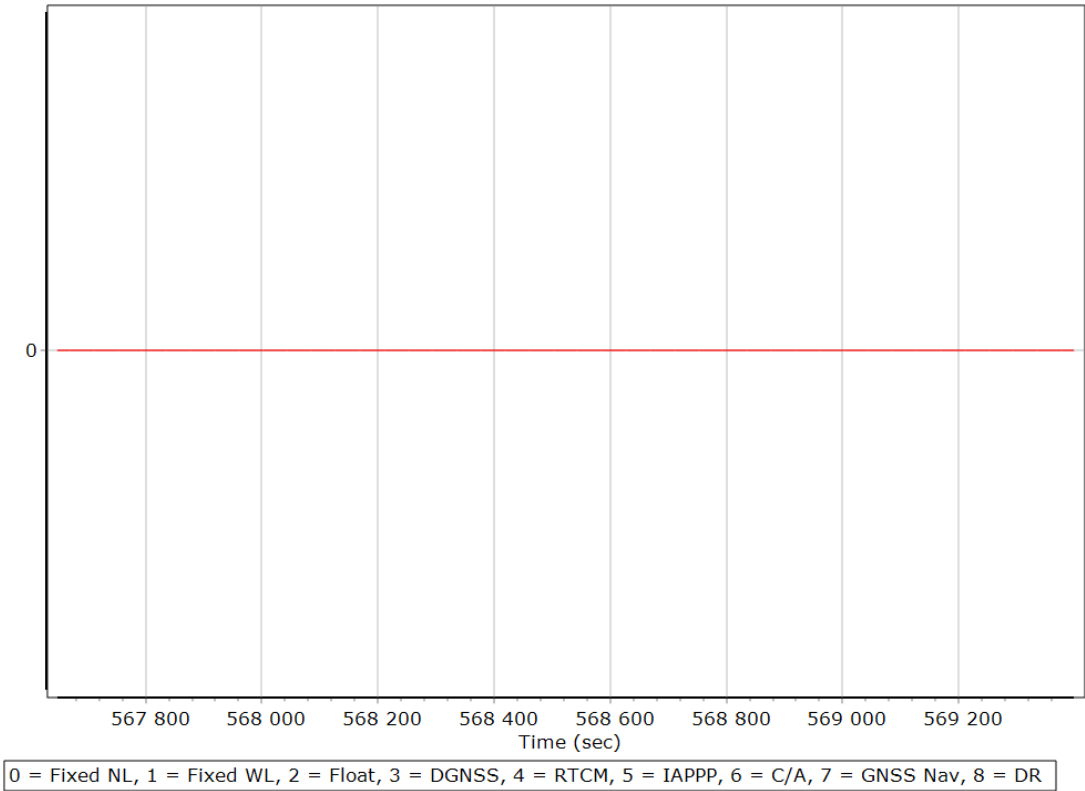


Heading Error RMS (arc-min)

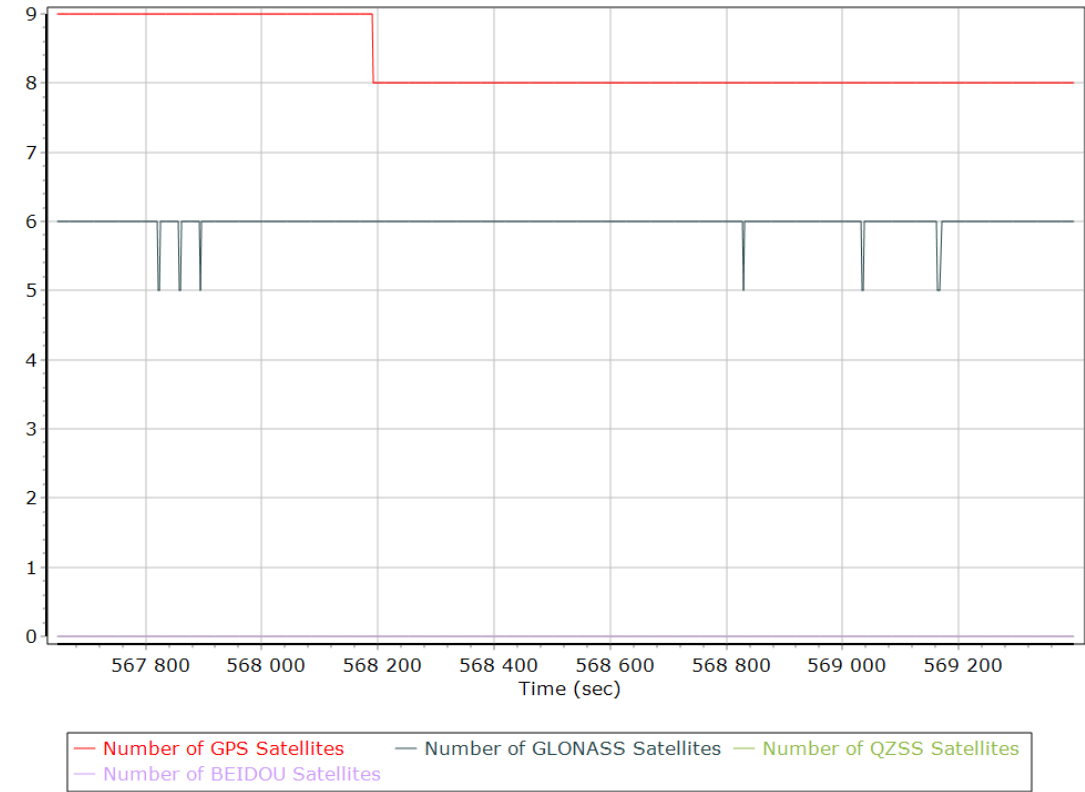


Smoothed Solution Status

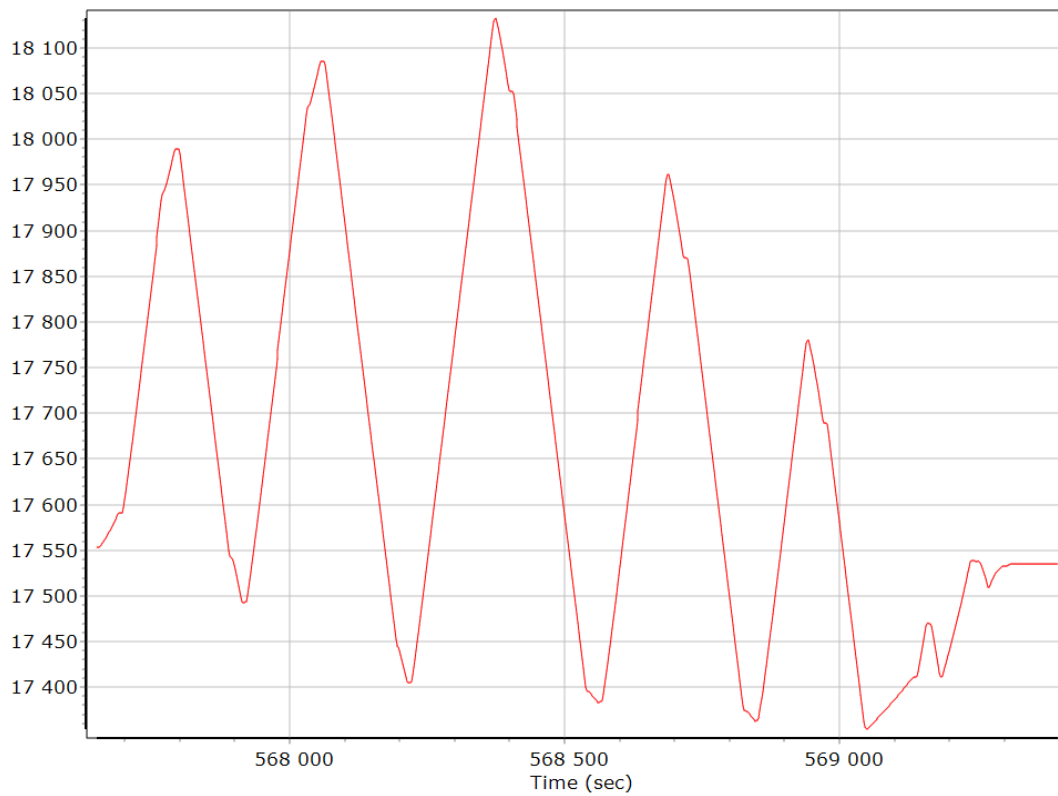
Processing Mode



Number of Satellites



Baseline Length



SBET IAKAR Separation

