



LiDAR Report:

IA_SouthCentral_2020_D20

LiDAR Collection, Processing, and QA/QC
140G0220F0076: IA_SouthCentral_2020_D20

QL2 LiDAR

US Geological Survey

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Solutions Task Order: 140220F0076:

IA_SouthCentral_2020_D20

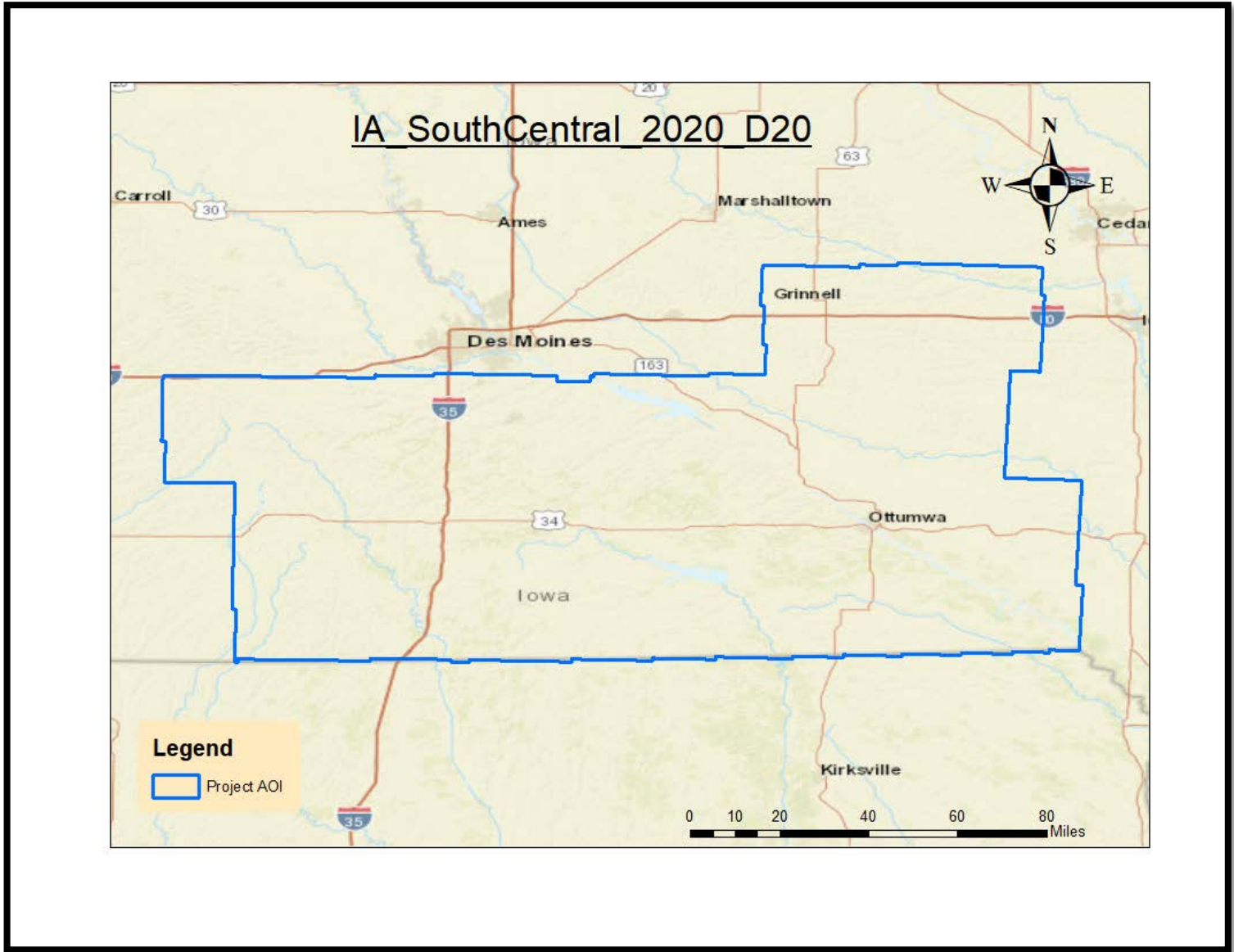


Image 1: IA_SouthCentral_2020_D20 AOI

Table of Contents

1 INTRODUCTION AND SPECIFICATIONS	4
2 SPATIAL REFERENCE SYSTEM	4
3 LIDAR ACQUISITION	5
3.1 SURVEY AREA	5
3.2 ACQUISITION PARAMETERS	6
3.3 ACQUISITION MISSION	7
3.4 AIRBORNE GPS/IMU	7
4 LIDAR PROCESSING	8
4.1 ACQUISITION POST PROCESSING	8
4.2 GEOMETRIC CALIBRATION	8
4.3 POINT CLOUD CLASSIFICATION	10
4.4 BREAKLINE COLLECTION	11
4.5 DEM GENERATION	11
5 QUALITY CONTROL.....	12
5.1 POINT CLOUDS	12
5.2 BREAKLINES	15
5.3 DIGITAL ELEVATION MODELS	15
APPENDIX A. FLIGHT LOGS	16
APPENDIX B. BASE STATION GPS SESSION FORMS	17
APPENDIX C. VERTICAL ACCURACY CALCULATIONS.....	ERROR! BOOKMARK NOT DEFINED.
APPENDIX D. INERTIAL EXPLORER	18

1 Introduction and Specifications

Digital Aerial Solutions, LLC (Das) was tasked to collect and process a Light Detection and Ranging (LiDAR) derived elevated dataset for the **140G0220F0076: IA_SouthCentral_2020_D20**. The area encompasses approximately 10,238 square miles. Aerial LiDAR data was collected utilizing a Leica Terrain Mapper. The Terrain Mapper is a discrete return topographic LiDAR mapping system manufactured by Leica Geosystems. LiDAR data collected for **140G0220F0076: IA_SouthCentral_2020_D20** LiDAR survey has an Aggregated Nominal Pulse (ANPS) spacing of 0.71 meters (QL2) and includes up to 2 discrete return per pulse, along with intensity values of each return.

LIDAR datasets were post process to generate elevation point cloud swaths for each flight lines. Deliverables include tiled point cloud classified by land cover type, breaklines to support hydro-flattening of digital elevations models (DEM), intensity tiles, and bare-earth DEM titles. The point cloud deliverables are store in the LAS Version 1.4, point data record format 6. The tiling scheme for the tiled deliverables is a **1,000 x 1,000 meters** grid. Tile naming convection is based on the easting and northing locations of the lower left corner for each tile (e.g. **w0002n0612**). All deliverables were generated in conformance with the U.S Geological Survey National Geospatial Program Guidelines and Base Specifications, Version 2.1.

2 Spatial Reference System

The spatial reference of the data is as follows:

Horizontal Spatial Reference

- Coordinates: UTM, Zone 15 North Meters (to 2 decimal places)
- Datum: North American Datum 1983 (2011), Meters (to 2 decimal places)

Vertical Spatial Reference

All datasets are available with orthometric elevation; point cloud datasets are also available with ellipsoid heights.

- Datum: North American Vertical Datum of 1988 (GEOID18)

3 LiDAR Acquisition

3.1 Survey Area

The **140G0220F0076: IA_SouthCentral_2020_D20** survey covers approximately 10,238 square miles located Adair, Appanoose, Clarke, Davis, Decatur, Iowa, Jefferson, Keokuk, Lucas, Madison, Mahaska, Marion, Monroe, Poweshiek, Ringgold, Union, Van Buren, Wapello, Warren and Wayne counties in Iowa. The project consisted of 296 flight lines totaling 13,416.14 nautical miles.

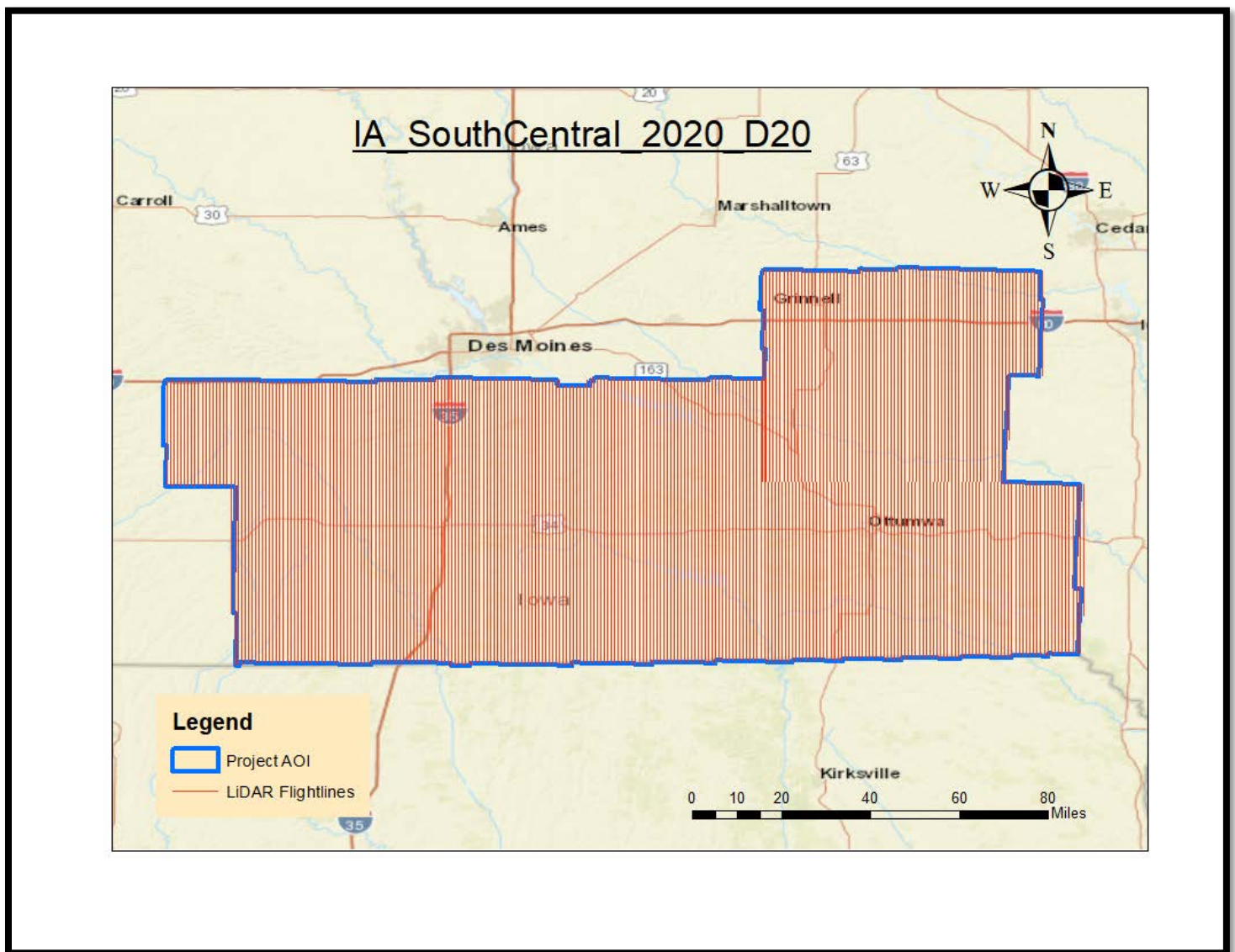


Image 2: IA_SouthCentral_2020_D20 Flightlines

3.2 Acquisition Parameters

Acquisition parameters include the sensor configuration and the flight plan characteristics, and are selected based on a number of project specific criteria. Criteria reviewed include the required accuracies for the final dataset, the land cover types within the project survey area, and the required nominal pulse spacing. Aggregate Nominal Pulse Density (ANPD) for QL2 AOI is no less than 2ppm. The project parameters are summarized below.

Parameter (QL2)	Terrain Mapper
Flying Height Above Ground Level:	6,562 feet
Nominal Sidelap:	30%
Nominal Speed Over Ground:	155 Knots
Field of View:	40°
Laser Rate:	550.00 kHz
Scan Rate:	150.00 Hz
Maximum Across Track Spacing:	0.82 meters
Maximum Along Track Spacing:	0.82 meters
Average point Spacing:	0.58 meters

Table 1: Flight Parameters

3.3 Acquisition Mission

The acquisition mission for **140G0220F0076: IA_SouthCentral_2020_D20** QL2 LiDAR survey was coordinated for optimal collection conditions and was completed in 26 lifts from March 30th 2020 –May 8th,2020. The GPS Session forms and NGS monument information can be found in **Appendix B**.

3.4 Airborne GPS/IMU

Airborne global positioning system (GPS) and inertial measurement unit (IMU) data was collected on the aircraft during the acquisition mission, providing sensor position and orientation information for geo- referencing the LiDAR data. Airborne GPS observations were collected at a frequency of 0.5Hz, and IMU observations are collected at a frequency of 200Hz.

Aircraft	Sensor	GPS Lever Arm (m)	IMU Lever Arm (m)
C441-N207SS	TM_9054	X: -0.061, Y: -0.174, Z: -1.092	X: 0.124, Y: -0.025, Z: 0.014

Table 2: Aircraft and Lever Arms

GPS data was collected with ground base stations during the acquisition missions, providing corrections to support differential post-processing of the airborne GPS. Base stations were setup at the following Airports Ottumwa Regional Airport (**KOTM**) and Creston Municipal Airport (**KCSQ**). Ground GPS observations were collected at a frequency of 0.5Hz

Name	Latitude	Longitude	Ellipsoid (m)
Ottumwa Regional Airport (KOTM)	41° 06' 22.55518"	-92° 26' 44.24485"	224.013
Creston Municipal Airport (KCSQ)	41° 01' 13.27965"	-94° 21' 44.09157"	363.348

Table 3: Base Stations Locations

4 LiDAR Processing

4.1 Acquisition Post Processing

Inertial Explorer 8.90 software was used to compute inertial solution file (*.sol) for each mission using ground GPS base station (KOTM, KCSQ) and Grafnet position coordinate in table above. The resulting solution was checked to ensure a minimum accuracy of +/- 0.10m, combined separation, for horizontal and vertical positions. Inertial Explorer methodology integrates Inertial Navigation Solution by processing the GPS data and Inertial Measurement Unit (IMU). The software applies the reference lever arms for the GPS and IMU during the process to determine the trajectory (position and orientation) of the LiDAR sensor during the acquisition mission. Inertial Explorer generated graphical results were reviewed to ensure that the IMU data was healthy.

Raw LiDAR sensor ranging data and the final solution sensor trajectory (*.sol), from Inertial Explorer, were processed in Leica's HxMap software to produce LiDAR point cloud swath for each flight line in LAS version 1.4 file format. Quality control of the swath point cloud was performed to validate proper functioning of the sensor system, full coverage of the project area and point density of the LiDAR data. Swath point clouds were assigned unique file source identification. The data was found to be complete and consistent with the sensor calibration parameters.

4.2 Geometric Calibration

LiDAR data calibration was done using Leica HxMap v2.6.0 software. HxMap is the common workflow platform for Leica airborne sensors. The processing workflow involves; Ingest, Block Creation, LiDAR Matching, Quality Assurance (QA) and Product Generation. LiDAR is processed in HxMap by generating point clouds from raw sensor data during the Ingest step. Noise filtering, sensor installation calibration and atmospheric condition parameters are also applied during the ingest process. Once all data is processed through ingest, they are assembled into a block for LiDAR Matching. The LiDAR Matching step resolves LiDAR registration errors which remain in the point clouds after sensor and installation calibration parameters are applied in the ingest step.

QA tool is run on the Block after LiDAR Matching to verify quality of results. QA results are reviewed to ensure that, 95% of patches < 5cm for Vertical Scan Direction and Vertical Line Separation. Ground control points are also included to assess absolute accuracy for the point cloud data. LiDAR products are finally generated in the Product Generation step as LAS swaths (LAS 1.4). Vertical (Z) shift (calculated from QA step) is also applied during the product generation. The exported LAS 1.4 swath data from HxMap is imported into GeoCue Group's product workflow management software, GeoCue v2017. The full point cloud is tiled into a manageable size for processing in TerraScan.

For **140G0220F0076: IA_SouthCentral_2020_D20** QL1 LiDAR project, the control lines listed below were used in data adjustment.

Point Id	Easting	Northing	Ortho Height
1_GS0012	556209.105	4505364.98	261.872
1_GS0034	577330.902	4518414.378	228.924
1_GS0055	578685	4540701.557	230.952
1_GS0063	595710.117	4551681.882	211.535
1_GS0095	539835.709	4562501.822	249.011
1_GS0102	549501.194	4549126.447	254.416
1_GS0131	528783.118	4583265.841	252.562
1_GS0161	582611.196	4625990.884	232.349
1_GS0173	553769.16	4598044.591	253.028
1_GS0181	545414.006	4610502.648	261.108
1_GS0197	478127.51	4578069.426	273.362
1_GS0214	515638.591	4572472.237	230.866
1_GS0223	543358.917	4511233.137	261.239
1_GS0229	540281.636	4497957.335	256.525
1_GS0263	510771.739	4548360.335	291.839
1_GS0274	531928.297	4540749.819	220.87
1_GS0283	491728.253	4538746.83	305.698
1_GS0290	477311.128	4549058.438	309.51
1_GS0297	473518.681	4528112.921	316.318
1_GS0307	496135.414	4522787.11	306.834
1_GS0315	474043.859	4511710.73	320.942
1_GS0341	434169.863	4546914.8	302.538
1_GS0350	453184.374	4542258.183	324.318
1_GS0351	453184.868	4542224.69	323.375
1_GS0358	458054.799	4566424.103	282.024
1_GS0366	453134.358	4584751.215	278.101
1_GS0367	453174.74	4584709.458	276.993
1_GS0373	432968.293	4571192.967	315.138
1_GS0375	432967.962	4571214.753	316.164
1_GS0381	415310.909	4586297.368	325.558
1_GS0389	412731.245	4562938.915	338.868
2_GS0413	387764.806	4507583.738	335.606
2_GS0416	396759.91	4515370.711	359.64
2_GS0423	410384.461	4520808.679	363.701
2_GS0431	409127.159	4542588.989	365.469
2_GS0435	384063.475	4528485.605	382.659
2_GS0445	394079.661	4552256.312	368.399
2_GS0456	389654.447	4574698.512	393.034
2_GS0461	378466.42	4581346.567	407.297
1_GS0004	549353.226	4529257.98	253.008
1_GS0020	577521.689	4499815.081	239.536
1_GS0028	595792.27	4508181.676	212.04

1_GS0045	589048.705	4525768.536	228.746
1_GS0070	576006.535	4561189.175	238.347
1_GS0079	569127.04	4584559.05	257.424
1_GS0086	554052.166	4576360.291	242.853
1_GS0112	578002.701	4596644.411	247.817
1_GS0118	577709.766	4612312.055	256.41
1_GS0135	528531.989	4602524.779	260.033
1_GS0146	534001.005	4621614.472	289.324
1_GS0153	563188.833	4621451.97	240.4
1_GS0189	490701.093	4583358.064	242.985
1_GS0205	498100.371	4565104.121	271.101
1_GS0238	511377.903	4509345.897	303.758
1_GS0246	503328.862	4495744.944	295.689
1_GS0255	514118.035	4526901.546	304.524
1_GS0324	457834.564	4498855.55	311.508
1_GS0330	457873.981	4519601.663	338.824
1_GS0335	457917.493	4523697.987	336.31
1_GS0342	434147.853	4546935.153	302.748
1_GS0357	458086.142	4566426.51	282.659
2_GS0440	384314.043	4544940.446	396.883
2_GS0451	378552.785	4573413.825	409.659

The final geometrically calibrated swath point clouds were compared to the bare-earth profile survey data. The data fit the profile surveys within the vertical accuracy tolerance specified for the project. Full documentation of the vertical accuracy checks may be found in section 5.1.

4.3 Point Cloud Classification

Georeferenced information was applied to the swath point cloud LAS files. Geometrically calibrated swath point clouds were cut into USNG index, **1,000-meter x 1,000-meter** LAS 1.4 format tiles for point cloud classification and derived in LAS 1.4 format for product creation.

Tiled point cloud data was processed in Terrasolid's TerraScan software to assign initial classification values. The TerraScan software provides a number of routines to algorithmically detect and assign points to their appropriate class. Points left unclassified by the algorithmic routine remain as Class 1- Processed, but unclassified. Automated classification routines assigned points to one of the following classes:

Class 1 – Processed, but unclassified

Class 2 – Bare-earth ground

Class 7 – Low Noise (low, manually identified, if necessary)

Class 9 — Water

Class 17 — Bridge Decks

Class 18 – High Noise (high, manually identified, if necessary)

Class 20 — Ignored Ground (Breakline Proximity)

Class 21 – Snow (if present and identifiable)

Class 22- Temporal exclusion (typically non-favored data in intertidal, use as necessary)

Automated classification results were reviewed for each tiled point cloud, and manual edits made where necessary to correct for misclassified points. Points remaining in Class 1 after the automated classification routines were run were left in Class 1. Points falling outside of a 100-meter buffer of the project AOI polygon were excluded from the tiled point clouds.

4.4 Breakline Collection

Hydro break lines were compiled in ArcMap using the LiDAR intensity data and surface terrain model of the entire project area. After the collection of hydro lines all features were conflated and validated for monotonicity and vertical variance, to ensure that no points were floating above ground. The hydro break lines were then embedded into the LiDAR surface and used to create a hydro enforced DEM.

The data collected for the **140G0220F0076: IA_SouthCentral_2020_D20** survey maintained significant point density in the water, marsh, and swamp, limiting the usefulness of point density as guiding factor in breakline placement. Points classified as **Class 2 – Bare-earth ground**, falling within a tenth of a meter buffer of the collected breaklines, were reassigned to **Class 20 – Ignored Ground**. These points are excluded from the surface model during DEM generation to preserve the hydro-flattening characteristics of the breaklines.

4.5 DEM Generation

The final classified point clouds and collected breaklines were reviewed for conformance to the task order (scope of work). Within the LP360 software, points in Class 2 – Bare- earth ground and breaklines were combined to generate TIN elevation models for each tile, from which the bare-earth DEM tiles were interpolated and exported as GeoTIFF 32-bit floating point raster format “.tiff” format.

5 Quality Control

5.1 Point Clouds

Accuracy and completeness of the LiDAR point clouds directly impacts the quality of all other derived LiDAR derived products. Ensuring a quality LiDAR dataset begins with proper mission planning and execution. Ground GPS base stations are located such that GPS baselines between the ground and airborne receivers do not exceed 30km. For the **140G0220F0076: IA_SouthCentral_2020_D20** project, two base stations were used to meet this requirement, one at the field operations airport and one within the project area. Static alignment is performed both before take-off and after landing to allow for GPS integer ambiguity resolution. Sensor operators carefully monitor the LiDAR unit and its various subsystems during the acquisition mission to ensure proper function. Airborne GPS positional dilution of precision (PDOP) estimates are monitored to ensure they remain less than 3. The optical system is monitored to ensure there are no ranging errors encountered during the flight lines.

During acquisition post-processing estimates of the trajectory data accuracy are reviewed to ensure they will support the required accuracies of the point cloud data. The trajectory accuracy is a function of the differentially corrected GPS data and the IMU data.

Geometric calibration quality control validates that the positional accuracy requirements of the project are met, and includes relative accuracy assessments for intra-swath (within) and inter-swath (between) accuracy, along with absolute accuracy assessments against project ground control.

Image 3 below, shows the swath-to-swath calibration assessment depicted by an intensity ortho created by using all returns, and colored by elevation difference between the swaths. The source deltas are an image type used for visualizing the elevation mismatch between overlapping swaths of LAS data. The granularity is controlled by the interval's selection. The interval size specifies the Z threshold at which the color bands apply. The interval used to create the difference elevation image is 0.040m. Colors shown as green indicates swath separation $<0.040\text{m}$, yellow indicates separation $>0.040\text{m}$ and $<0.080\text{m}$, red indicates separation $>0.080\text{m}$. All red areas depicted in the image have been reviewed and represent locations of high vegetation.

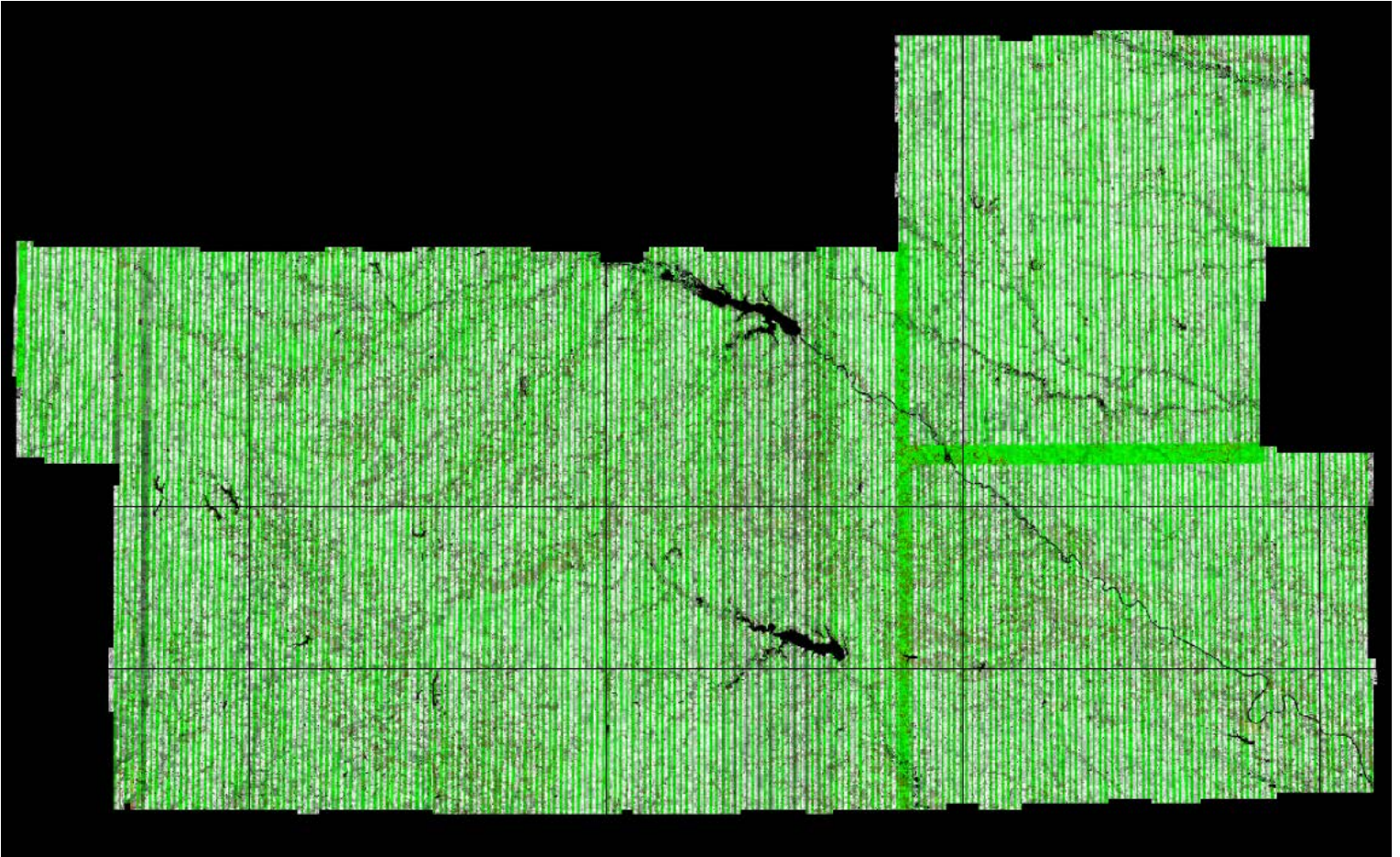


Image 3: Swath Separation Raster

Absolute vertical accuracy assessments for the point cloud data are made against ground check point data. For the **140G0220F00765: IA_SouthCentral_2020_D20** project, ground check point data consisted of the ground GPS base station and real-time kinematic (RTK) GPS techniques. Check point locations were collected at .5 second intervals during the RTK survey. Points collected during the static pre-initialization and post-initialization was removed from the assessment so as not to bias the assessment.

Check point locations were collected at .5 second intervals during the RTK survey. Points collected during the static pre-initialization and post-initialization was removed from the assessment so as not to bias the assessment.

Local TIN models of the elevation points are built around each ground check points. The tin model elevation is sampled at the horizontal position of the ground check point. The TIN model elevation and ground check point survey elevation values were used to calculate the Non-vegetated Vertical Accuracy (NVA) of the swath point clouds. Table 7 below shows the tested accuracy values for TIN and DEM data at 95% confidence level. The full calculations for all check points can be found in Appendix D.

Tested Accuracy	RMSE _Z	NVA	VVA
Classified LiDAR	0.078	210	145
Digital Elevation Model	0.078	210	145

Table 7: Tested RMSE_Z of NVA, NVA and VVA of LiDAR Point Cloud and Digital Elevation Model

Total #	# NVA	# VVA
355	210	145

Table 8: Number of Survey Points used to calculate accuracy of data.

The tiled point cloud products were reviewed for full coverage of the AOI and proper classification. As part of the QC process, TINs are built in the Terramodeler software for each tile using the ground class and the hydro-flattening breaklines. The TINs are reviewed for non-ground features, and edited where necessary to remove any remaining non-ground features. Points were also reviewed for absolute elevation, and points falling below the selected orthometric elevation for water were removed from the ground class.

5.2 Breaklines

The final breaklines in ESRI 3D shapefile format were reviewed for topological consistency and correct elevation. Breaklines features are continuous and do not have overlaps or dangles

5.3 Digital Elevation Models

Digital elevation models (DEMs) were reviewed for conformance with the SOW and the Base Mapping Specification version 2.1 guidelines. DEM files were loaded in the Global Mapper software and inspected visually for edge matching between tiles, void areas within the project AOI, and proper coding of the NODATA values. DEM file naming was verified for consistency with the USNG index

Appendix A. Flight Logs



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IA_SOUTH_CENTRAL			Lift	Temp °C Before	Temp °C After	Pressure (kPa)			Sensor Operator	
					5	14	15	101.56			Cynthia Williams	
Date/Julian:		4.1.20	Disk Drive			Sensor						Pilot
Hobbs End		7046.3	TM MM30 (105, 106)			TM_90524						Wes Ashmore
Hobbs ST		7042.1	TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		4.2	8,500	160	OTM 01		OTM 02		1.500	C441-N207SS	OTM (OTTUMWA, IA)	
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP	
	266	266	19:08	19:22	181°	7964	156	6698	25	1.2	0.6	
	265	265	19:29	19:39	360°	7920	156	6678	21	1.3	0.7	
	264	264	19:42	19:57	181°	7968	150	6669	23	1.2	0.7	
	263	263	20:00	20:14	1°	7981	145	6654	24	1.2	0.7	
	262	262	20:17	20:32	180°	7988	155	6641	23	1.1	0.7	
	261	261	20:34	20:45	1°	7974	160	6629	22	1.0	0.6	
	260	260	20:51	21:06	180°	7966	153	6615	21	1.2	0.7	
	259	259	21:08	21:23	359°	7982	158	6603	21	1.1	0.6	
	258	258	21:26	21:40	180°	7967	150	6589	22	1.0	0.6	
	257	257	21:43	21:57	359°	7984	155	6579	20	1.0	0.6	
	256	256	22:00	22:14	180°	7982	153	6568	19	1.1	0.6	
	255	255	22:17	22:31	1°	7992	157	6658	19	1.2	0.7	
	254	254	22:34	22:48	180°	7988	154	6546	20	1.1	0.7	
	253	253	22:51	23:04	360°	7997	158	6535	17	1.2	0.7	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IOWA_SouthCentral		Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator			
				6	13		7		29.95		Chuck Harris			
Date/Julian:		4/1/2020		Disk Drive			Sensor					Pilot		
Hobbs End		7052.1		TM MM30 (103, 104)			TM_90524					Anthony Kosinski		
Hobbs ST		7046.3		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:		
Flight Time		5.8		7,500		160		OTM01	OTM02		1.500		C441-N207SS	OTM (OTTUMWA, IA)
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:		
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP			
	252	252 S	24:33	24:47	180°	8032	155	6734	19	1.2	0.6			
	251	251 N	24:51	1:05	360°	8009	157	6724	18	1.3	0.7			
	250	250 S	1:09	1:23	180°	8008	156	6713	18	1.3	0.7			
	249	249 N	1:27	1:41	360°	8027	154	6701	19	1.2	0.7			
	248	248 S	1:45	1:59	180°	8020	157	6689	21	1.2	0.6			
	247	247 N	2:03	2:17	360°	8045	156	6677	20	1.3	0.7			
	230	230 S	2:22	2:36	180°	8024	150	6665	20	1.2	0.7	Planned Alt changed to below 8000		
	229	229 N	2:40	2:54	360°	7945	158	6652	19	1.2	0.7			
	228	228 S	2:59	3:13	180°	7993	160	6639	18	1.3	0.7	" " above 8060		
	227	227 N	3:17	3:31	360°	8034	160	6628	22	1.2	0.7			
	226	226 S	3:35	3:49	180°	8022	159	6617	21	1.2	0.7			
	217	217 N	3:53	3:49	360°	8028	153	6605	22	1.2	0.7			
	216	216 S	4:19	4:41	180°	8026	160	6589	23	1.2	0.7			
	215	215 N	4:45	5:07	360°	8047	152	6573	21	1.3	0.7			
	214	214 S	5:11	5:33	180°	8021	156	6556	21	1.2	0.7			
	213	213 N	5:37	5:59	360°	8033	156	6540	22	1.2	0.8			



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IA_SOUTH_CENTRAL			Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator	
					7	11		14		101.59		Cynthia Williams	
Date/Julian:		4.2.20	Disk Drive			Sensor						Pilot	
Hobbs End		7054.1	TM MM30 (105, 106)			TM_90524						Wes Ashmore	
Hobbs ST		7052.1	TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		2	8,500		160	OTM 01		OTM 02		1.500	C441-N207SS	OTM (OTTUMWA, IA)	
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:	
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP		
	69	69	14:21	14:28	360°	8106	155	6523	21	1.2	0.7		
	68	68	14:37	14:40	182°	8088	152	6516	21	1.1	0.7		
	67	67	14:42	14:51	1°	8099	159	6509	22	1.1	0.6		
	66	66	14:55	15:04	183°	8087	154	6505	22	1.1	0.6		
	65	65	15:07	15:16	0°	8094	156	6499	21	1.1	0.6		
	64	64	15:18	15:27	181°	8080	154	6495	22	1.1	0.6		
	63	63	15:30	15:39	2°	8070	157	6489	22	1.2	0.7		
	62	62	15:42	15:52	180°	8079	153	6485	21	1.2	0.7		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IOWA_SouthCentral			Lift	Temp °C Before	Temp °C After	Pressure (kPa)		Sensor Operator		
					8	9	6	30.12		Chuck Harris		
Date/Julian:		4/4/2020	Disk Drive			Sensor					Pilot	
Hobbs End		7059.6	TM MM30 (103, 104)			TM_90524					Anthony Kosinski	
Hobbs ST		7054.1	TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		5.5	7,500	160	OTM01		OTM02		1.500	C441-N207SS	OTM (OTTUMWA, IA)	
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP	
	206	206 S	22:01	22:23	180°	8000	152	6525	18	1.1	0.7	Clouds last 7nm
	197	197 N	22:27	22:49	360°	8000	151	6507	19	1.1	0.7	
	1	1 S	23:00	23:17	180°	8050	155	6491	18	1.3	0.8	
	2	2 N	23:21	23:38	360°	8082	157	6477	18	1.5	0.9	
	3	3 S	24:04	24:21	180°	8070	156	6466	22	1.0	0.6	
	4	4 N	24:25	24:42	360°	8093	160	6454	20	1.1	0.6	
	5	5 S	24:45	1:02	180°	8044	156	6443	19	1.1	0.6	
	6	6 N	1:06	1:23	360°	8053	160	6433	18	1.4	0.7	
	7	7 S	1:26	1:43	180°	8035	155	6422	18	1.2	0.6	
	8	8 N	1:47	2:03	360°	8025	159	6410	17	1.3	0.7	
	9	9 S	2:07	2:23	180°	8018	156	6399	18	1.1	0.6	
	10	10 N	2:27	2:43	360°	8034	155	6388	18	1.1	0.6	
	11	11 S	2:48	3:04	180°	8013	158	6376	18	1.1	0.6	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IA_SOUTH_CENTRAL			Lift	Temp °C Before	Temp °C After	Pressure (kPa)			Sensor Operator		
					5	6	14	102.13			Cynthia Williams		
Date/Julian:		4.5.20		Disk Drive			Sensor					Pilot	
Hobbs End		7065.3		TM MM30 (105, 106)			TM_90524					Wes Ashmore	
Hobbs ST		7059.6 <th>TARGET MSL</th> <th>Target AIRSPD</th> <th>Base Name</th> <th>PID</th> <th>Base Name</th> <th>PID</th> <th>Base Height</th> <th>Aircraft</th> <th>Airport Identification:</th>		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		5.7		8,500		160	OTM 01		OTM 02		1.500	C441-N207SS	OTM (OTTUMWA, IA)
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:	
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP		
	61	61	14:21	14:33	1°	8066	155	6475	21	1.1	0.6		
	60	60	14:38	14:53	181°	8060	155	6462	22	1.1	0.6		
	59	589	14:56	15:12	359°	8031	153	6450	22	1.1	0.6		
	58	58	15:15	15:32	181°	8026	155	6438	23	1.1	0.6		
	57	57	15:35	15:52	358°	8036	156	6424	22	1.3	0.7		
	56	56	15:55	16:11	181°	8037	158	6410	21	1.3	0.8		
	35	35	16:17	16:34	1°	8038	159	6397	21	1.7	1		
	205	205	16:46	17:08	181°	8041	155	6384	20	1.4	0.7		
	204	204	17:11	17:32	359°	8064	157	6366	19	1.5	0.7		
	203	203	17:35	17:58	180°	8040	151	6344	18	1.3	0.7		
	202	202	18:00	18:22	359°	8033	159	6324	20	1.2	0.6		
	201	201	18:25	18:47	181°	8013	159	6306	19	1.3	0.7		
	200	200	18:51	19:13	360°	8023	160	6284	19	1.2	0.6		
	199	199	19:15	19:36	180°	8008	156	6266	18	1.5	0.7		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IOWA_SouthCentral			Lift	Temp °C Before	Temp °C After	Pressure (kPa)			Sensor Operator		
					10	15	8	30.09			Chuck Harris		
Date/Julian:		4/5/2020		Disk Drive			Sensor					Pilot	
Hobbs End		7070.9		TM MM30 (103, 104)			TM_90524					Anthony Kosinski	
Hobbs ST		7065.3		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		5.6		7,500		160	OTM01		OTM02		1.500	C441-N207SS	OTM (OTTUMWA, IA)
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:	
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP		
	198	198 S	21:05	21:27	180°	8017	154	6364	21	1.0	0.6		
	196	196 N	21:31	21:53	360°	8023	145	6346	17	1.2	0.7		
	195	195 S	21:57	22:19	180°	8019	152	6329	18	1.4	0.8		
	194	194 N	22:23	22:45	360°	8042	158	6313	20	1.1	0.7		
	193	193 S	22:49	23:11	180°	8081	162	6295	20	1.2	0.7		
	192	192 N	23:15	23:38	360°	8102	159	6279	19	1.3	0.7		
	191	191 S	23:41	24:03	180°	8085	157	6260	20	1.2	0.7		
	190	190 N	24:07	24:29	360°	8108	159	6247	23	1.0	0.6		
	189	189 S	24:33	24:55	180°	8090	155	6226	22	1.3	0.6		
	188	188 N	24:58	1:20	360°	8092	158	6211	22	1.3	0.6		
	12	12 N	1:35	1:51	360°	7863	156	6200	22	1.2	0.6		
	13	13 S	1:56	2:12	180°	8016	153	6190	22	1.1	0.6		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IA_SOUTH_CENTRAL		Lift	Temp °C Before	Temp °C After	Pressure (kPa)	Sensor Operator				
				11	24	17	100.64	Akeem Kerr				
Date/Julian:		4/7/2020	Disk Drive			Sensor					Pilot	
Hobbs End		7076.2	TM MM30 (103, 104)			TM_90524					Mike Wasielewski	
Hobbs ST		7070.9	TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		5.3	8,500	160	OTM1		OTM2		1.500	C441-N207SS	OTM (OTTUMWA, IA	
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP	
	183	183S	:5	:26	178°	8083	160	6179	20	1.1	0.6	high speed
	182	182N	:30	:52	358°	8121	154	6153	18	1.2	0.6	
	181	181S	:57	1:18	180°	8070	158	6129	19	1.2	0.7	
	180	180N	1:22	1:44	360°	8115	157	6103	19	1.2	0.6	
	179	179S	1:48	2:10	179°	8073	158	6078	20	1.2	0.6	
	178	178N	2:14	2:35	357°	8118	158	6053	20	1.1	0.6	
	177	177S	2:39	3:01	180°	8076	154	6031	21	1.1	0.6	
	176	176N	3:04	3:26	359°	8138	160	6011	22	1.2	0.6	
	175	175S	3:30	3:52	176°	8091	156	5991	22	1.2	0.7	
	174	174N	3:55	4:17	358°	8112	157	5971	20	1.0	0.6	
	173	173S	4:21	4:42	180°	8061	155	5951	18	1.2	0.7	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IA_SOUTH_CENTRAL			Lift	Temp °C Before	Temp °C After	Pressure (kPa)			Sensor Operator	
					12	13	23	100.68			Cynthia Williams	
Date/Julian:		4.8.20	Disk Drive			Sensor					Pilot	
Hobbs End		7080.3	TM MM30 (105, 106)			TM_90524					Anthony Kosinski	
Hobbs ST		7076.2	TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		4.1	8,500		160	OTM 01		OTM 02		1.500	C441-N207SS	OTM (OTTUMWA, IA)
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP	
	55	55	13:05	13:22	0°	8040	160	6245	18	1.6	0.8	
	54	54	13:26	13:43	182°	8001	150	6231	20	1.3	0.7	
	53	53	13:47	14:03	360°	8042	158	6217	21	1.1	0.7	
	52	52	14:07	14:21	180°	7959	151	6204	20	1.1	0.7	
	51	51	14:27	1:44	358°	8018	149	6190	20	1.4	0.8	
	50	50	14:47	15:04	180°	7923	154	6175	19	1.4	0.8	
	49	49	15:08	15:25	0°	8011	158	6161	20	1.3	0.7	
	48	48	15:28	15:45	180°	7985	159	6146	20	1.1	0.7	
	47	47	15:49	16:05	360°	8031	157	6130	17	1.3	0.7	
	46	46	16:08	16:25	181°	7983	162	6115	11	1.2	0.6	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IOWA_SouthCentral			Lift	Temp °C Before	Temp °C After	Pressure (kPa)			Sensor Operator	
					21	7	14	29.84			Chuck Harris	
Date/Julian:		4/19/2020	Disk Drive			Sensor					Pilot	
Hobbs End		7117.6	TM MM30 (103, 104)			TM_90524					Wes Ashmore	
Hobbs ST		7112.1	TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		5.5	7,500	160	CSQ01		CSQ02		1.500	C441-N207SS	CSQ (CRESTON, IA)	
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP	
	112	112 N	13:03	13:25	359°	8309	150	5340	16	1.1	0.7	
	111	111 S	13:29	13:50	179°	8304	157	5324	20	1.1	0.7	
	110	110 N	13:54	14:16	359°	8403	159	5308	21	1.0	0.6	
	109	109 S	14:19	14:41	179°	8372	155	5290	22	1.2	0.7	
	108	108 N	14:45	15:07	359°	8398	150	5272	19	1.3	0.7	
	107	107 S	15:10	15:32	179°	8375	155	5254	19	1.4	0.7	
	106	106 N	15:35	15:58	359°	8411	161	5236	22	1.2	0.6	
	96	96 S	16:02	16:24	179°	8399	158	5217	22	1.1	0.6	
	95	95 N	16:27	16:49	359°	8398	159	5199	20	1.2	0.6	
	94	94 S	16:52	17:14	179°	8397	153	5181	20	1.2	0.6	haze 15 miles in
	93	93 N	17:17	17:39	359°	8406	162	5163	22	1.1	0.6	
	92	92 S	17:43	18:04	179°	8388	154	5143	20	1.2	0.7	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IA_SOUTH_CENTRAL		Lift	Temp °C Before	Temp °C After	Pressure (kPa)	Sensor Operator				
				22	15	13	101.19	Cynthia Williams				
Date/Julian:		4.19.20	Disk Drive			Sensor					Pilot	
Hobbs End		7123.6	TM MM30 (105, 106)			TM_90524					Mike Wasielewski	
Hobbs ST		7117.6	TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		6	8,500	160	OTM 01		OTM 02		1.500	C441-N207SS	CSQ (CRESTON, IA)	
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP	
	115	115	19:25	19:47	179°	8308	156	5627	15	1.5	0.8	
	116	116	19:51	20:13	357°	8347	157	5607	17	1.3	0.7	
	117	117	20:16	20:38	181°	8341	149	5587	22	1.0	36	
	118	118	20:44	21:04	356°	8285	15	5565	17	1.1	0.7	CLOUDS @ 25 MILES
	119	119	21:07	21:29	178°	8267	153	5547	18	1.0	0.7	
	120	120	21:33	21:55	358°	5263	148	5529	19	1.1	0.7	ROLL MOUNT
	121	121	21:59	22:21	181°	8199	149	5511	19	1.7	0.7	
	122	122	22:25	22:47	359°	8239	155	5491	18	1.4	0.7	
	123	123	22:51	23:13	180°	8287	159	5473	23	1.4	0.6	
	124	124	23:17	23:39	3058°	8223	157	5457	23	1.2	0.7	
	125	125	23:42	:4	178°	8271	163	5441	22	1.3	0.8	
	126	126	:8	:30	360°	8277	157	5425	21	1.2	0.7	
	127	127	:33	:55	182°	8254	159	5407	22	1.3	0.7	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IA_SOUTH_CENTRAL			Lift	Temp °C Before	Temp °C After	Pressure (kPa)			Sensor Operator	
					23	14	8	100.88			Cynthia Williams	
Date/Julian:		4.20.20		Disk Drive			Sensor			Pilot		
Hobbs End		7129.3		TM MM30 (105, 106)			TM_90524			Anthony Kosinski		
Hobbs ST		7123.6		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		5.7		8,500	160	CSQ 01		CSQ 02		1.500	C441-N207SS	CSQ (CRESTON, IA)
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP	
	128	128	1:49	2:10	359°	8233	159	5390	20	1.1	0.6	
	129	129	2:15	2:37	179°	5218	159	5369	20	1.1	0.6	
	130	130	2:41	3:03	360°	8258	161	5351	21	1.1	0.6	
	131	131	3:07	3:29	183°	8097	158	5333	21	1.0	0.6	
	132	132	3:33	3:57	359°	8146	145	5315	18	1.2	0.7	
	133	133	3:54	4:20	178°	8108	159	5297	12	1.2	0.7	
	134	134	4:27	4:48	359°	8196	156	5280	16	1.2	0.8	
	135	135	2:52	5:17	179°	8135	152	5202	18	1.0	0.6	
	136	136	5:19	5:42	1°	8204	160	5244	17	1.2	0.7	
	137	137	5:45	6:07	179°	8134	166	5228	18	1.1	0.7	GIMBAL PAV MISSING
	138	138	6:14	6:36	359°	8171	155	5210	19	1.1	0.6	
	139	139	6:38	7:00	180°	7954	157	5194	19	1.2	0.7	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IOWA_SouthCentral			Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
					24	5		15		30.03		Chuck Harris		
Date/Julian:		4/21/2020			Disk Drive			Sensor				Pilot		
Hobbs End		7135			TM MM30 (103, 104)			TM_90524				Wes Ashmore		
Hobbs ST		7129.3			TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		5.7			7,500		160	CSQ01		CSQ02		1.500	C441-N207SS	CSQ (CRESTON, IA)
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:		
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP			
	140	140 N	13:21	13:44	359°	8109	153	5120	20	1.1	0.7			
	141	141 S	13:47	14:09	179°	8153	157	5104	22	1.1	0.6			
	142	142 N	14:14	14:36	359°	8193	157	5088	21	1.3	0.7			
	143	143 S	14:39	15:01	179°	8159	155	5070	19	1.3	0.7			
	144	144 N	15:06	15:28	359°	8204	152	5053	17	2.1	1.1			
	145	145 S	15:33	15:54	179°	8182	156	5034	21	1.3	0.7			
	146	146 N	15:58	16:20	359°	8217	157	5015	20	1.5	0.7			
	147	147 S	16:24	16:46	179°	8209	159	4995	24	1.3	0.6			
	148	148 N	16:50	17:12	359°	8221	157	4975	25	1.1	0.6			
	149	149 S	17:16	17:38	179°	8172	152	4953	23	1.4	0.7			
	150	150 N	17:42	18:04	359°	8193	158	4933	24	1.2	0.6			
	151	151 S	18:08	18:30	179°	8192	155	4900	23	1.2	0.7			



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IA_SOUTH_CENTRAL			Lift	Temp °C Before	Temp °C After	Pressure (kPa)	Sensor Operator			
					7	16	17	101.66	Cynthia Williams			
Date/Julian:	4.21.20	Disk Drive				Sensor						Pilot
Hobbs End	7139.7	TM MM30 (105, 106)				TM_90524						Mike Wasielewski
Hobbs ST	7135	TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:		
Flight Time	4.7	8,500	160	CSQ 01		CSQ 02		1.500	C441-N207SS	CSQ (CRESTON, IA)		
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP	
	152	152	20:31	20:53	359°	8816	158	5174	16	1.3	0.8	
	153	153	20:58	21:19	179°	8079	164	1553	18	1.2	0.8	
	154	154	21:23	21:47	1°	8148	160	5133	19	1.1	0.8	
	155	155	21:48	22:10	181°	8140	157	5115	18	1.3	0.8	
	156	156	22:16	22:39	358°	8129	153	5097	17	1.3	0.7	
	157	157	22:42	23:04	180°	8132	159	5080	18	1.1	0.7	Gimbal pav error
	158	158	23:09	23:31	1°	8154	158	5063	19	1.2	0.7	
	159	159	23:35	23:57	180°	8171	164	5047	18	1.5	0.7	reflown last 6 miles
	157	157	00:00	:5	359°	8214	162	5029	20	1.2	0.6	
	118	18	:16	:38	359°	8215	161	5009	20	1.2	0.6	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		IOWA_SouthCentral	Lift	Temp °C Before	Temp °C After	Pressure (kPa)		Sensor Operator				
			26	7	8	30.19		Chuck Harris				
Date/Julian:	5/8/2020	Disk Drive			Sensor				Pilot			
Hobbs End	7148.9	TM MM30 (103, 104)			TM_90524				Anthony Kosinski			
Hobbs ST	7148.2	TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:		
Flight Time	0.7	7,500	160	CSQ01		CSQ02		1.500	C441-N207SS	KCSQ (Creston, IA)		
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available	S/Vs	Position Acc.		Comments and Conditions:
			Begin:	End:				MM Space		AVG PDOP	AVG HDOP	
	301	301 N	14:41	14:46	360°	8565	153	4887	21	1.3	0.6	
	301	301 S	14:51	14:56	179°	8607	157	4884	22	1.1	0.6	Extra overlap

Appendix B. Base Station GPS Session Forms

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.13.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ01			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 6684_0413_180833.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.13.20		Start Time (UTC) 2:10		Approx. Lat. <i>(if available)</i> N 41 01 13.34086	
End Date (UTC) 4.14.20		End Time (UTC) 6:40		Approx. Long. <i>(if available)</i> W 94 21 44.19009	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.15.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ01			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 6684_0415_160036.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.15.20		Start Time (UTC) 0:00		Approx. Lat. <i>(if available)</i> N 41 01 13.34086	
End Date (UTC) 4.16.20		End Time (UTC) 2:10		Approx. Long. <i>(if available)</i> W 94 21 44.19009	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.18.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ01			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 6684_0418_115739.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.18.20		Start Time (UTC) 19:58		Approx. Lat. <i>(if available)</i> N 41 01 13.34086	
End Date (UTC) 4.19.20		End Time (UTC) 8:10		Approx. Long. <i>(if available)</i> W 94 21 44.19009	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.19.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ01			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 6684_0419_051607.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.19.20		Start Time (UTC) 13:16		Approx. Lat. <i>(if available)</i> N 41 01 13.34086	
End Date (UTC) 4.20.20		End Time (UTC) 2:20		Approx. Long. <i>(if available)</i> W 94 21 44.19009	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.20.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ01			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 6684_0420_180953.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.20.20		Start Time (UTC) 2:10		Approx. Lat. <i>(if available)</i> N 41 01 13.34086	
End Date (UTC) 4.21.20		End Time (UTC) 8:29		Approx. Long. <i>(if available)</i> W 94 21 44.19009	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.21.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ01			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 6684_0421_054308.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.21.20		Start Time (UTC) 1:43		Approx. Lat. <i>(if available)</i> N 41 01 13.34086	
End Date (UTC) 4.22.20		End Time (UTC) 2:05		Approx. Long. <i>(if available)</i> W 94 21 44.19009	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 05.08.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation CSQ01			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 6684_0508_070348.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 05.08.20		Start Time (UTC) 14:04		Approx. Lat. <i>(if available)</i> N 41 01 13.34086	
End Date (UTC) 05.08.20		End Time (UTC) 15:19		Approx. Long. <i>(if available)</i> W 94 21 44.19009	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.13.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ02			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 1514_0413_211336.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.13.20		Start Time (UTC) 2:19		Approx. Lat. <i>(if available)</i> N 41 01 13.76955	
End Date (UTC) 4.14.20		End Time (UTC) 7:45		Approx. Long. <i>(if available)</i> W 94 21 43.78481	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.15.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ02			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 1514_0415_190501.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.15.20		Start Time (UTC) 12:10		Approx. Lat. <i>(if available)</i> N 41 01 13.76955	
End Date (UTC) 4.16.20		End Time (UTC) 2:16		Approx. Long. <i>(if available)</i> W 94 21 43.78481	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.18.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ02			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 1514_0418_145114.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.18.20		Start Time (UTC) 19:51		Approx. Lat. <i>(if available)</i> N 41 01 13.76955	
End Date (UTC) 4.19.20		End Time (UTC) 8:16		Approx. Long. <i>(if available)</i> W 94 21 43.78481	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.19.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ02			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 1514_0418_145114.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.19.20		Start Time (UTC) 13:22		Approx. Lat. (if available) N 41 01 13.76955	
End Date (UTC) 4.20.20		End Time (UTC) 2:22		Approx. Long. (if available) W 94 21 43.78481	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.20.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ02			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 1514_0420_211305.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.20.20		Start Time (UTC) 2:13		Approx. Lat. <i>(if available)</i> N 41 01 13.76955	
End Date (UTC) 4.21.20		End Time (UTC) 8:30		Approx. Long. <i>(if available)</i> W 94 21 43.78481	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.21.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation CSQ02			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 1514_0420_211305.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.21.20		Start Time (UTC) 13:39		Approx. Lat. <i>(if available)</i> N 41 01 13.76955	
End Date (UTC) 4.22.20		End Time (UTC) 2:06		Approx. Long. <i>(if available)</i> W 94 21 43.78481	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 05.08.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation CSQ02			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 1514_0508_100743.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 05.08.20		Start Time (UTC) 14:08		Approx. Lat. <i>(if available)</i> N 41 01 13.76955	
End Date (UTC) 05.08.20		End Time (UTC) 15:21		Approx. Long. <i>(if available)</i> W 94 21 43.78481	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 3.30.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM01			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 1514_0329_153942.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 3.30.20		Start Time (UTC) 13:37		Approx. Lat. (if available) N 41 06 22.60365	
End Date (UTC) 3.31.20		End Time (UTC) 4:04		Approx. Long. (if available) W 92 26 44.27605	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 3.31.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM01			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i> 1514_0329_153942.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 3.31.20		Start Time (UTC) 13:33		Approx. Lat. <i>(if available)</i> N 41 06 22.60365	
End Date (UTC) 4.01.20		End Time (UTC) 3:05		Approx. Long. <i>(if available)</i> W 92 26 44.27605	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.2.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM01			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.2.20		Start Time (UTC) 13:39		Approx. Lat. (if available) N 41 06 22.60365	
End Date (UTC) 4.3.20		End Time (UTC) 17:40		Approx. Long. (if available) W 92 26 44.27605	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.2.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM01			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.2.20		Start Time (UTC) 13:39		Approx. Lat. (if available) N 41 06 22.60365	
End Date (UTC) 4.3.20		End Time (UTC) 17:40		Approx. Long. (if available) W 92 26 44.27605	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.4.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM01			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.4.20		Start Time (UTC) 22:12		Approx. Lat. (if available) N 41 06 22.60365	
End Date (UTC) 4.5.20		End Time (UTC) 4:27		Approx. Long. (if available) W 92 26 44.27605	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.5.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM01			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.5.20		Start Time (UTC) 14:46		Approx. Lat. (if available) N 41 06 22.60365	
End Date (UTC) 4.6.20		End Time (UTC) 3:34		Approx. Long. (if available) W 92 26 44.27605	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.7.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM01			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.7.20		Start Time (UTC) 14:20		Approx. Lat. (if available) N 41 06 22.60365	
End Date (UTC) 4.8.20		End Time (UTC) 6:16		Approx. Long. (if available) W 92 26 44.27605	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.8.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM01			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i>	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.8.20		Start Time (UTC) 13:20		Approx. Lat. <i>(if available)</i> N 41 06 22.60365	
End Date (UTC) 4.9.20		End Time (UTC) 18:16		Approx. Long. <i>(if available)</i> W 92 26 44.27605	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.9.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM01			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.9.20		Start Time (UTC) 13:16		Approx. Lat. (if available) N 41 06 22.60365	
End Date (UTC) 4.10.20		End Time (UTC) 7:47		Approx. Long. (if available) W 92 26 44.27605	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA SOUTH CENTRAL 2020 D20		Date 4.10.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM01			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1506684	
Antenna Part No. 4255298		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.10.20		Start Time (UTC) 13:14		Approx. Lat. (if available) N 41 06 22.60365	
End Date (UTC) 4.11.20		End Time (UTC) 3:40		Approx. Long. (if available) W 92 26 44.27605	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 3.30.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM02			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 3.30.20		Start Time (UTC) 14:42		Approx. Lat. (if available) N 41 06 23.35647	
End Date (UTC) 3.31.20		End Time (UTC) 4:09		Approx. Long. (if available) W 92 26 44.33874	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 3.31.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM02			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i>	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 3.31.20		Start Time (UTC) 14:29		Approx. Lat. <i>(if available)</i> N 41 06 23.35647	
End Date (UTC) 04.01.20		End Time (UTC) 3:07		Approx. Long. <i>(if available)</i> W 92 26 44.33874	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 04.01.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM02			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i>	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 04.01.20		Start Time (UTC) 15:40		Approx. Lat. <i>(if available)</i> N 41 06 23.35647	
End Date (UTC) 04.02.20		End Time (UTC) 7:31		Approx. Long. <i>(if available)</i> W 92 26 44.33874	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 04.02.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM02			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.2.20		Start Time (UTC) 13:34		Approx. Lat. (if available) N 41 06 23.35647	
End Date (UTC) 4.4.20		End Time (UTC) 5:36		Approx. Long. (if available) W 92 26 44.33874	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 04.04.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM02			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.4.20		Start Time (UTC) 22:21		Approx. Lat. (if available) N 41 06 23.35647	
End Date (UTC) 4.5.20		End Time (UTC) 4:29		Approx. Long. (if available) W 92 26 44.33874	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.5.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM02			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501414	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.5.20		Start Time (UTC) 14:42		Approx. Lat. (if available) N 41 06 23.35647	
End Date (UTC) 4.6.20		End Time (UTC) 3:36		Approx. Long. (if available) W 92 26 44.33874	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.7.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM02			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i>	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.7.20		Start Time (UTC) 14:20		Approx. Lat. <i>(if available)</i> N 41 06 23.35647	
End Date (UTC) 4.8.20		End Time (UTC) 6:16		Approx. Long. <i>(if available)</i> W 92 26 44.33874	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.8.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM02			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.8.20		Start Time (UTC) 13:16		Approx. Lat. (if available) N 41 06 23.35647	
End Date (UTC) 4.9.20		End Time (UTC) 18:20		Approx. Long. (if available) W 92 26 44.33874	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.10.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM02			Exact Stamping <i>(include photo in survey report)</i>		
Monument No./PID		Collection Type <i>(circle one)</i> <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name <i>(receiver generated)</i>	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement <i>(circle one)</i> TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point <i>(include and reference a dimensional diagram in Survey Report)</i> <i>(e.g., bottom edge of notch in ground plane, Page 5, Figure 2)</i>					
Start Date (UTC) 4.10.20		Start Time (UTC) 13:19		Approx. Lat. <i>(if available)</i> N 41 06 23.35647	
End Date (UTC) 4.11.20		End Time (UTC) 3:46		Approx. Long. <i>(if available)</i> W 92 26 44.33874	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

GPS SESSION FORM



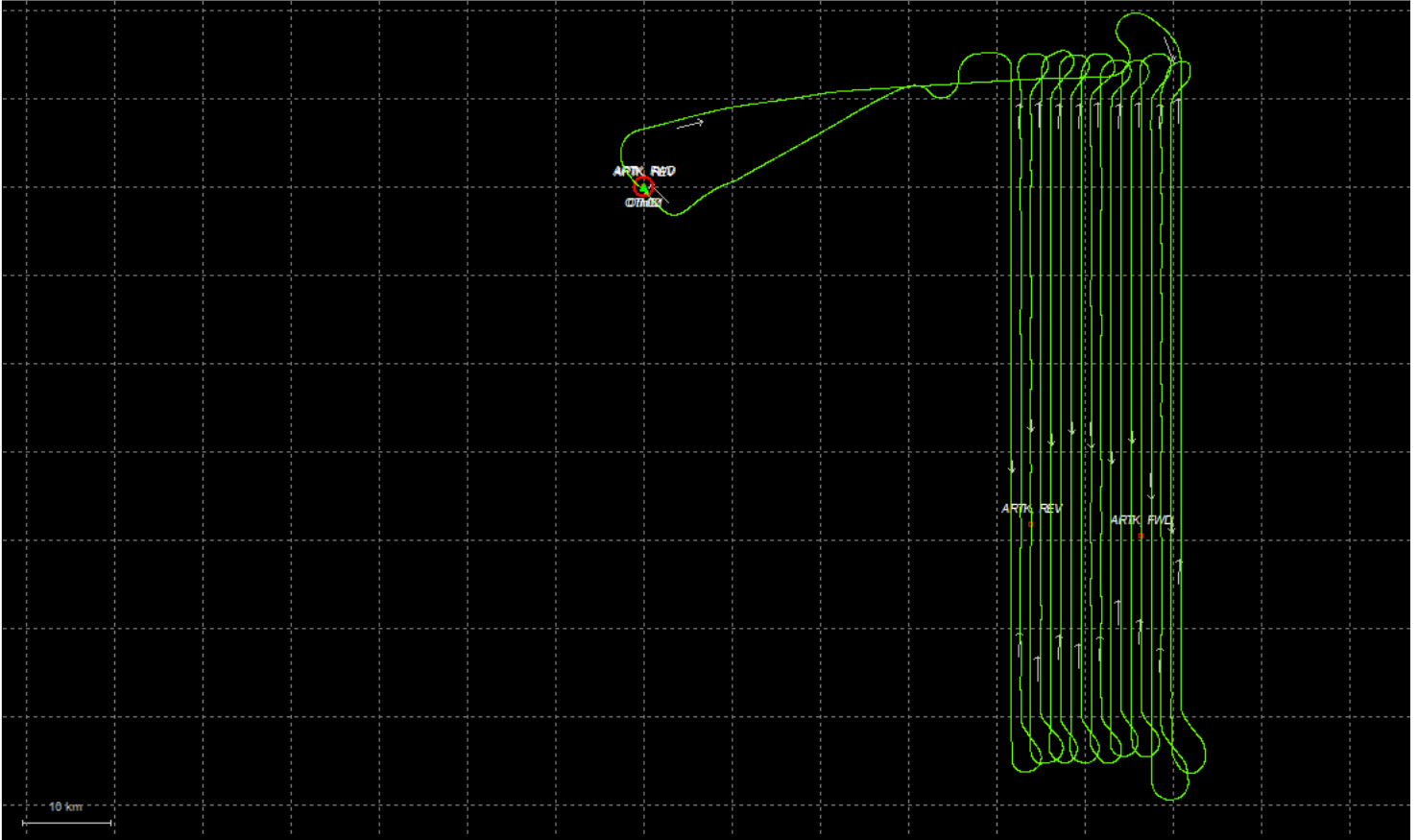
Contract # / TO # G16PC00044		Client / Project Name U. S. GEOLOGICAL SURVEY Rolla, MO IA_SOUTH_CENTRAL_2020_D20		Date 4.10.20	
DAS Project No. 20001		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation OTM02			Exact Stamping (include photo in survey report)		
Monument No./PID		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated)	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model N/A		Data Collector Serial No. 1501514	
Antenna Part No. 3725413		Antenna Model N/A		Antenna Serial No. N/A	
Starting Antenna Height in Feet 1 2 3 AVG		Starting Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Ending Antenna Height in Feet 1 2 3 AVG		Ending Antenna Height in Meters 1 2 3 AVG 1.5		Type of Measurement (circle one) TRUE VERTICAL <input checked="" type="radio"/> ARP	
Antenna Reference Point (include and reference a dimensional diagram in Survey Report) (e.g., bottom edge of notch in ground plane, Page 5, Figure 2)					
Start Date (UTC) 4.10.20		Start Time (UTC) 13:19		Approx. Lat. (if available) N 41 06 23.35647	
End Date (UTC) 4.11.20		End Time (UTC) 3:46		Approx. Long. (if available) W 92 26 44.33874	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

Appendix C. Inertial Explorer

Output Results for 20200330143256_1

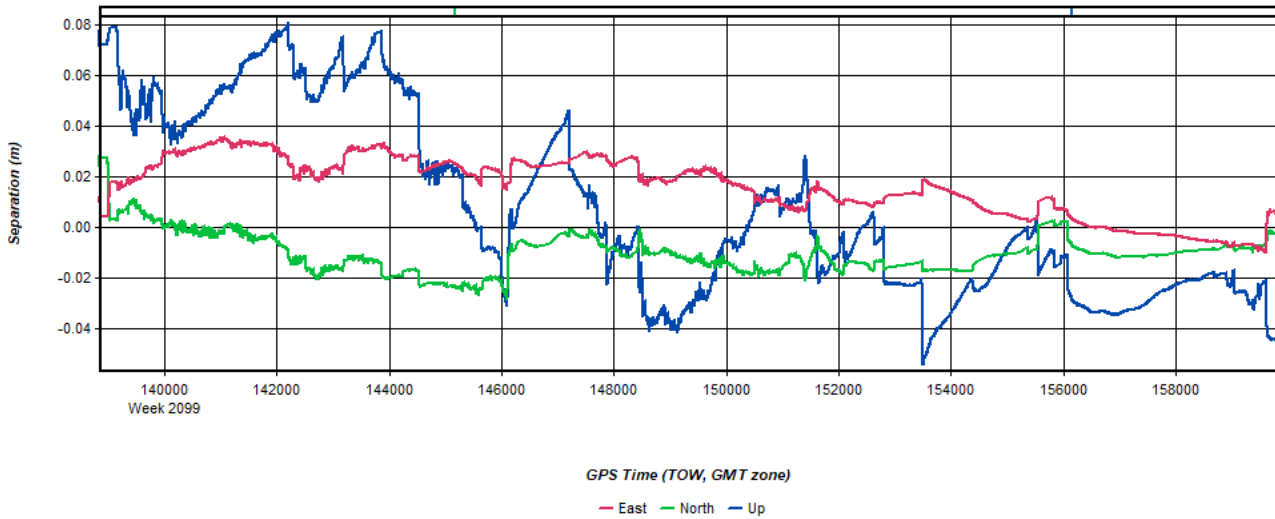
Inertial Explorer Version 8.90.2124
06/03/2020

Figure 1: Smoothed TC Combined - Map



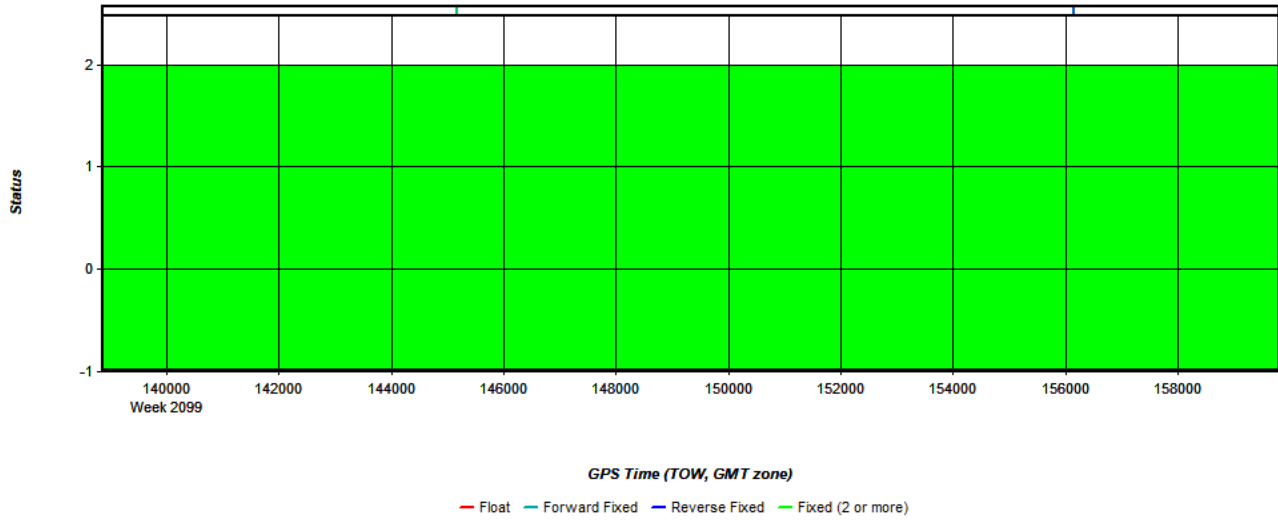
Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Figure 2: 20200330143256_1 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



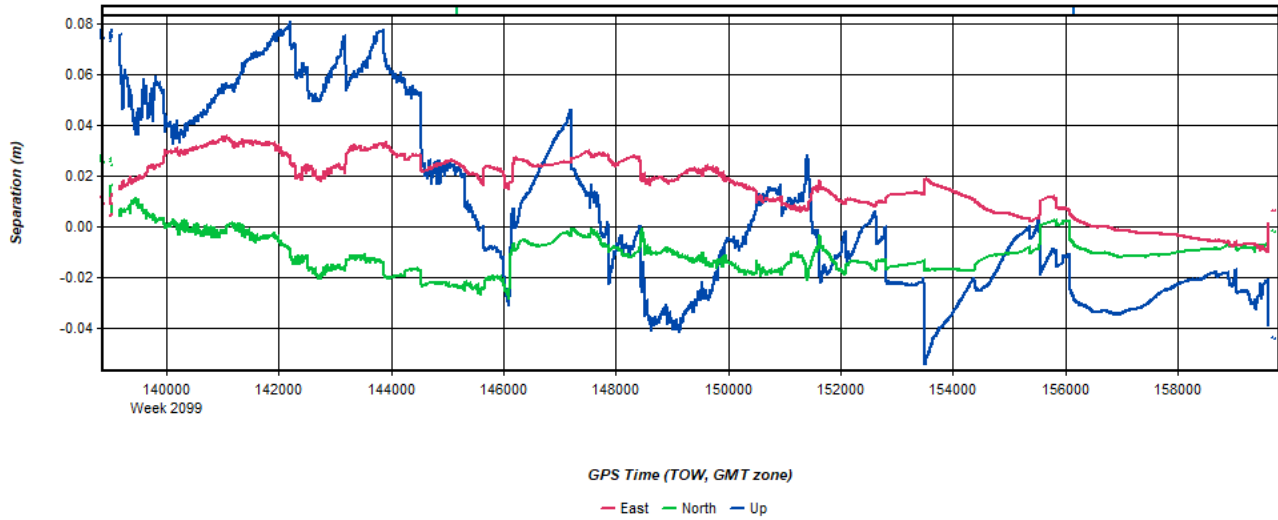
Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Figure 3: 20200330143256_1 [Smoothed TC Combined] - Float or Fixed Ambiguity



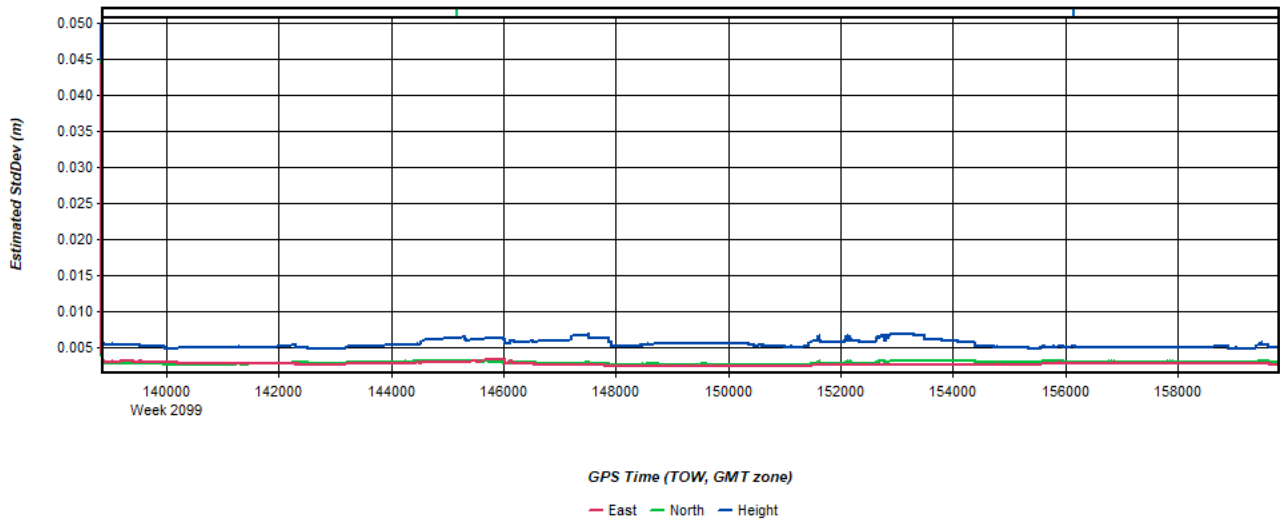
Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Figure 4: 20200330143256_1 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



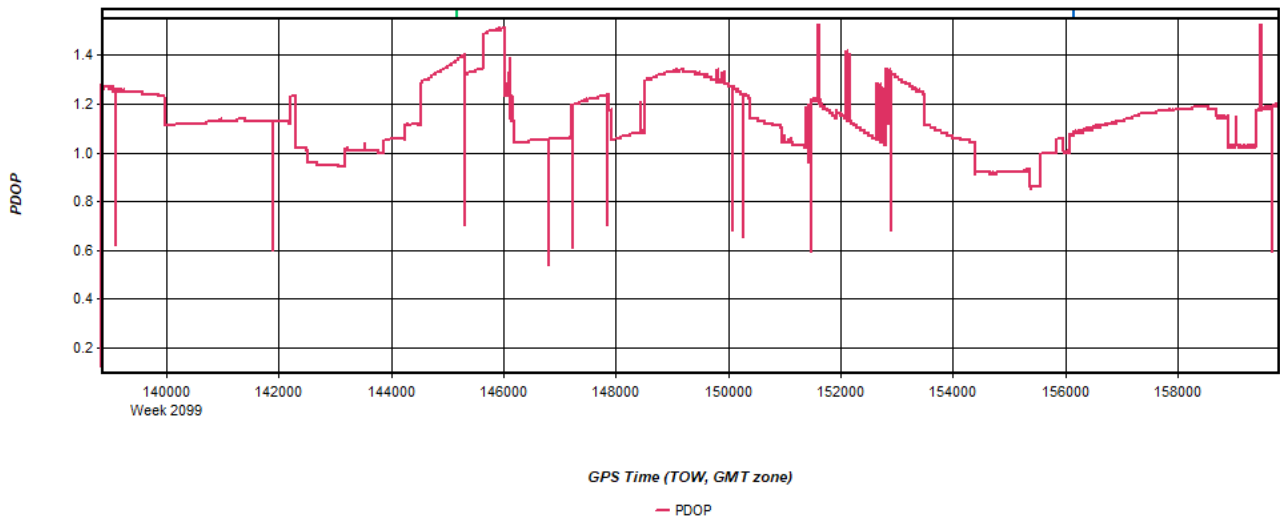
Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Figure 5: 20200330143256_1 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Figure 6: 20200330143256_1 [Smoothed TC Combined] - PDOP Plot



Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Figure 7: 20200330143256_1 [Smoothed TC Combined] - Number of Satellites Line Plot

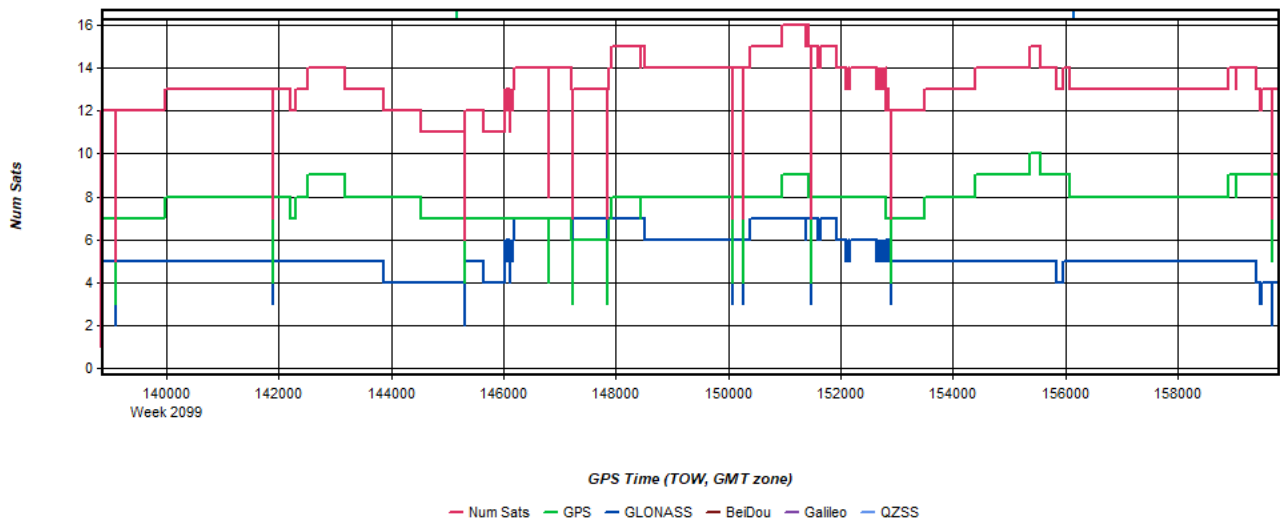


Figure 8: 20200330143256_1 [Smoothed TC Combined] - Status flag for IMU processing

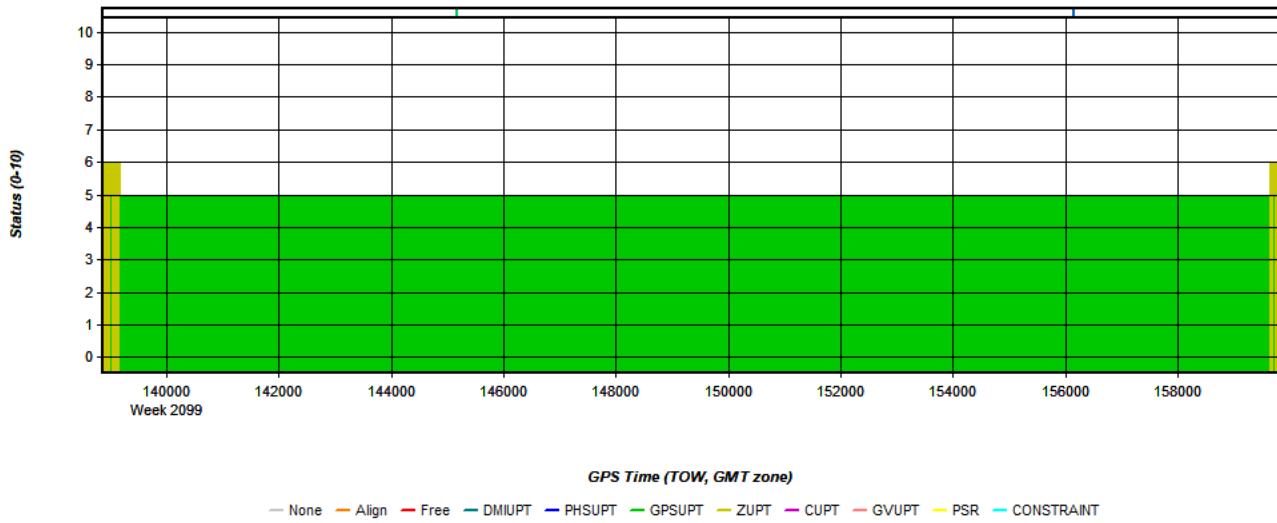


Figure 9: 20200330143256_1 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

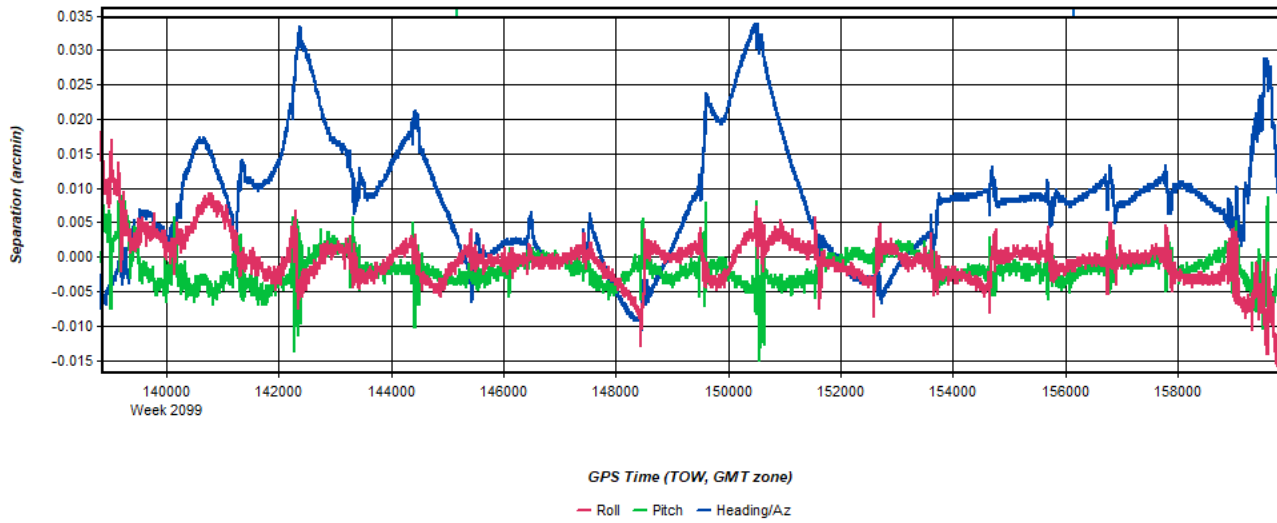
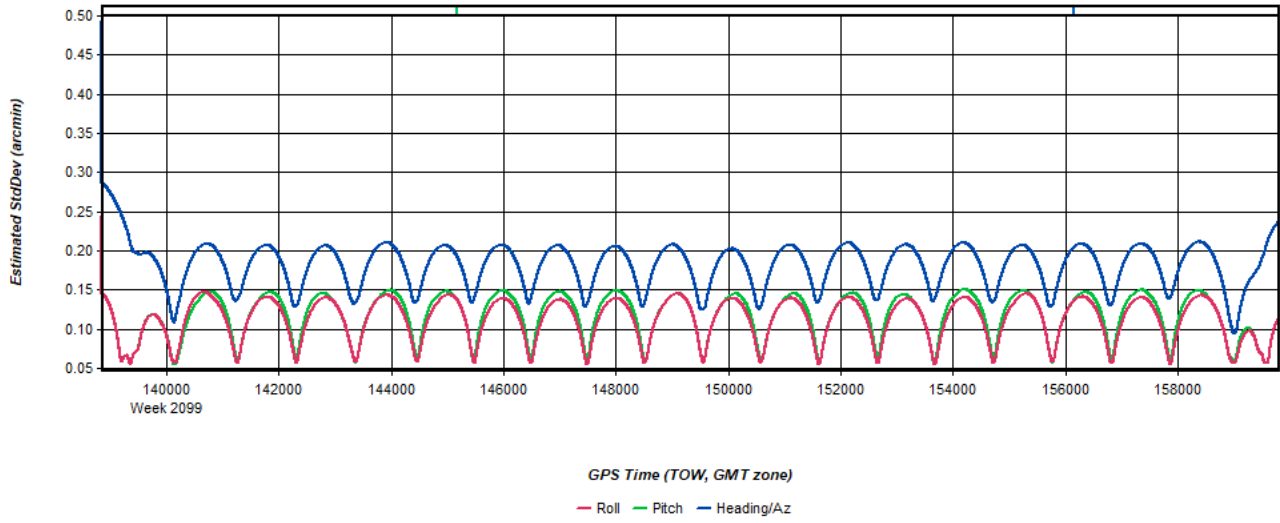
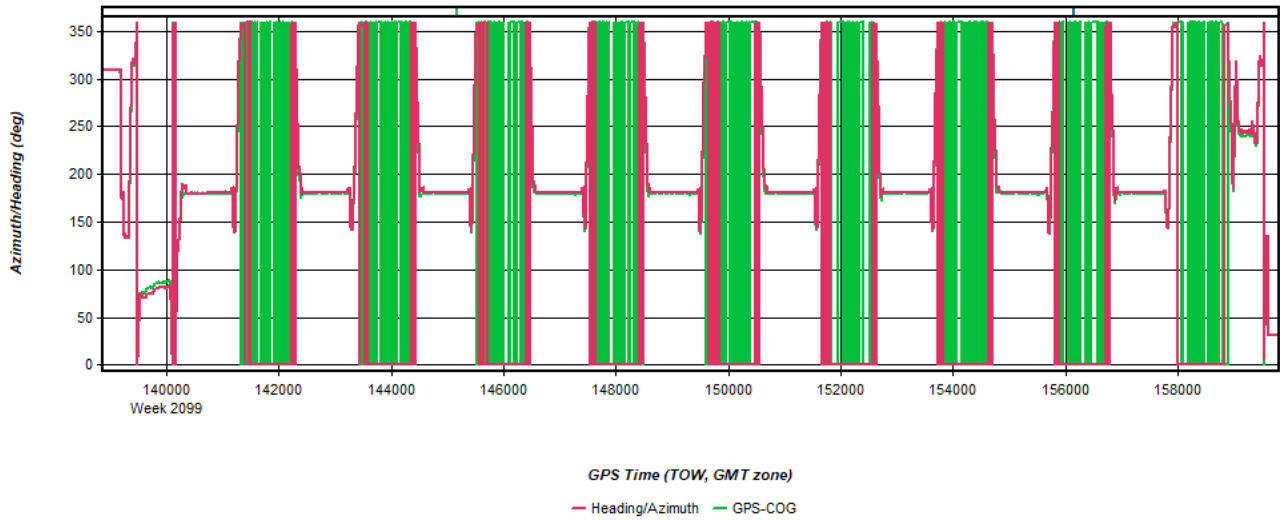


Figure 10: 20200330143256_1 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Figure 11: 20200330143256_1 [Smoothed TC Combined] - Azimuth Plot



Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Figure 12: 20200330143256_1 [Smoothed TC Combined] - Roll & Pitch Plot

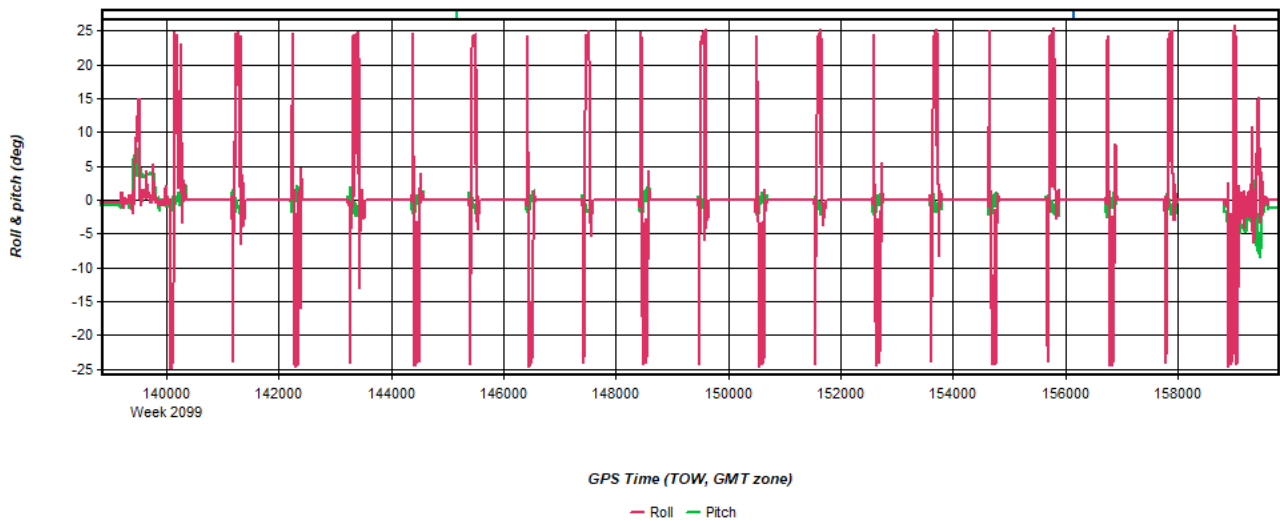


Figure 13: 20200330143256_1 [Smoothed TC Combined] - Velocity Profile Plot

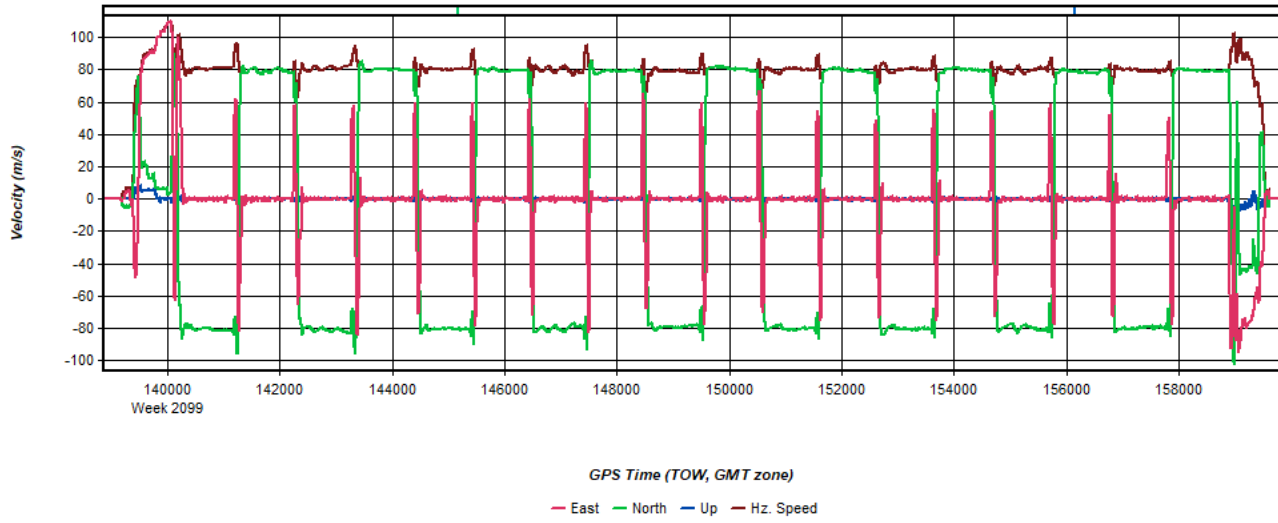


Figure 14: 20200330143256_1 [Smoothed TC Combined] - Body Frame Velocity Plot

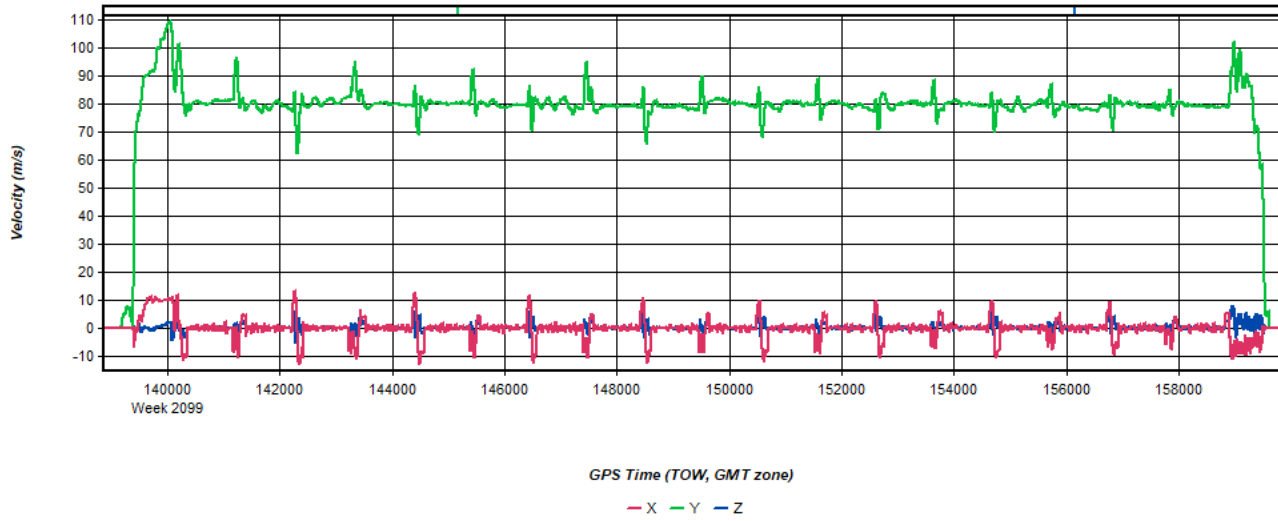
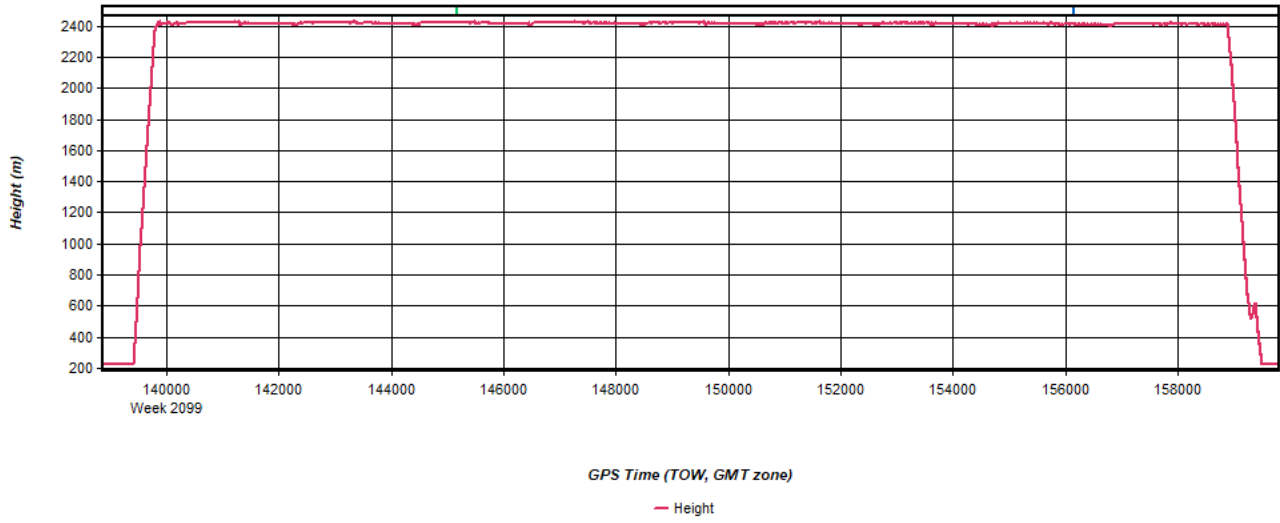
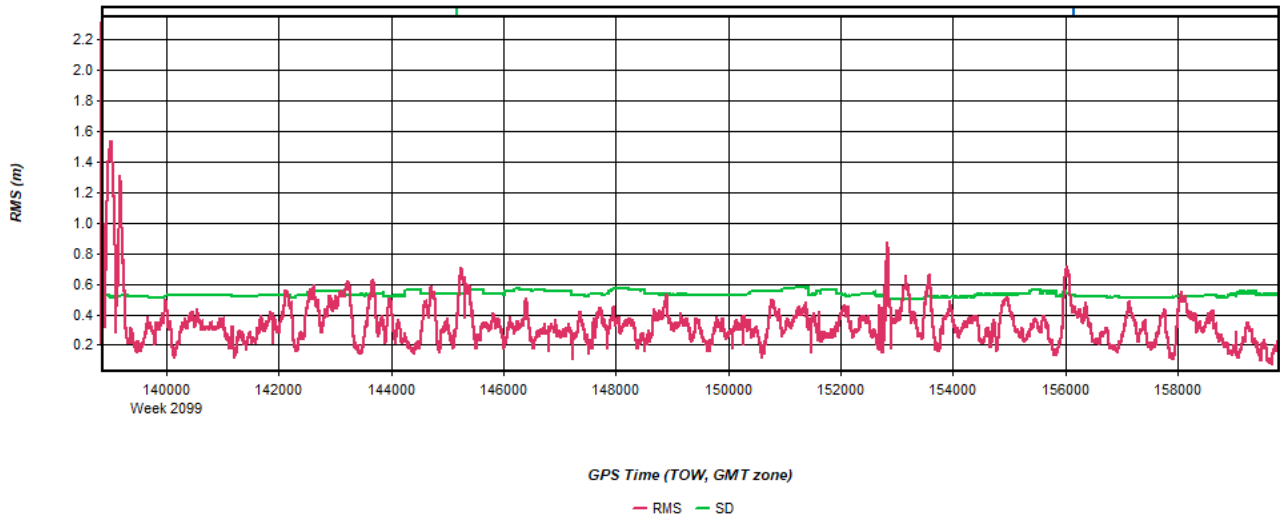


Figure 15: 20200330143256_1 [Smoothed TC Combined] - Height Profile Plot



Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Figure 16: 20200330143256_1 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Figure 17: 20200330143256_1 [Smoothed TC Combined] - Carrier Residual RMS Plot

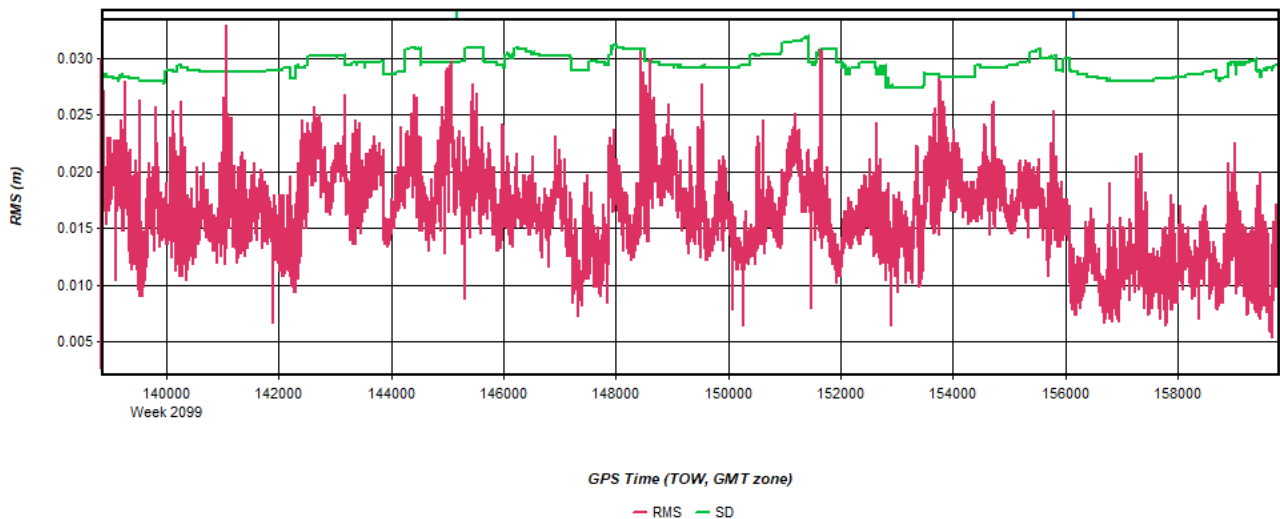


Figure 18: 20200330143256_1 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

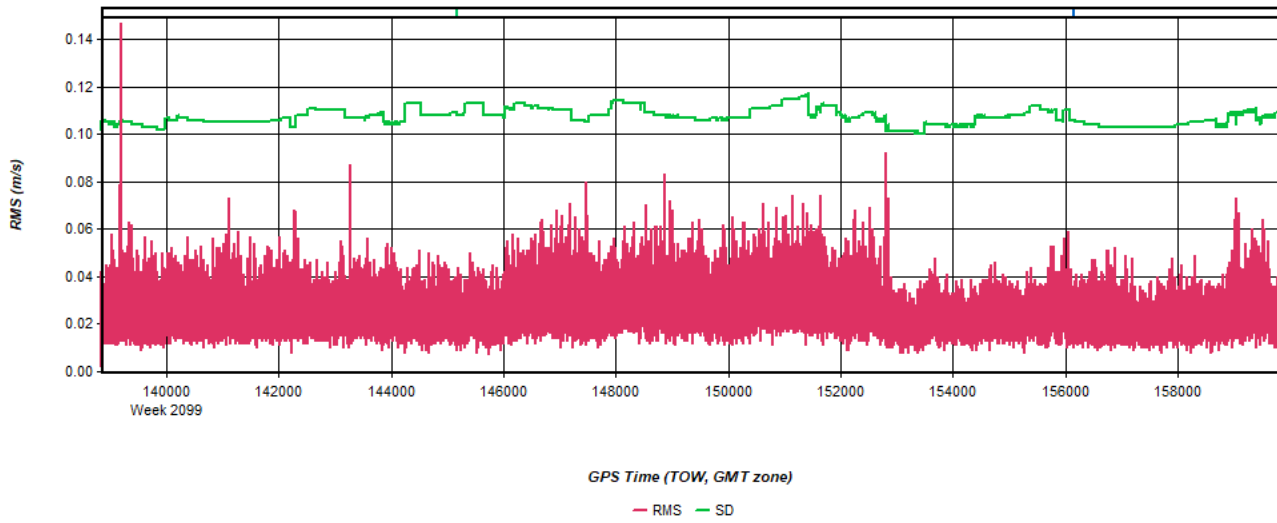


Figure 19: 20200330143256_1 [Smoothed TC Combined] - Accelerometer Bias Plot

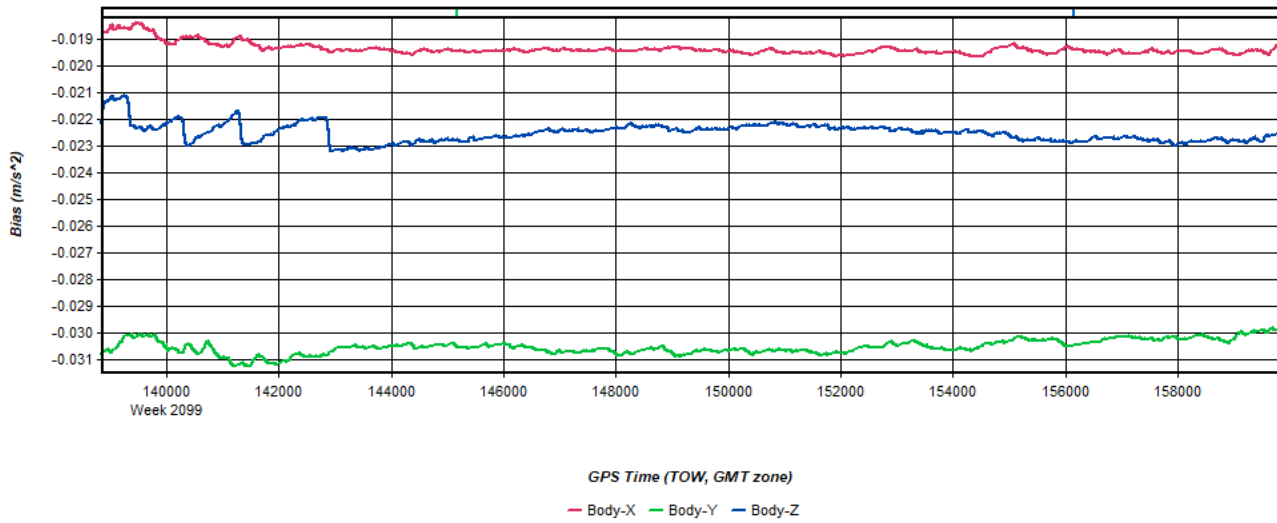
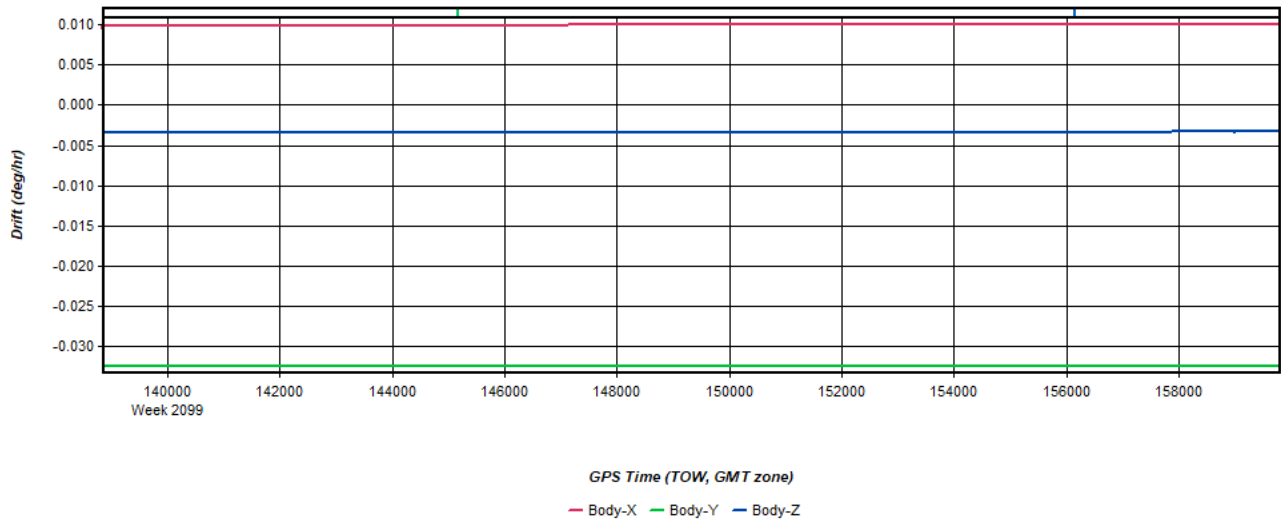


Figure 20: 20200330143256_1 [Smoothed TC Combined] - Gyro Drift Plot

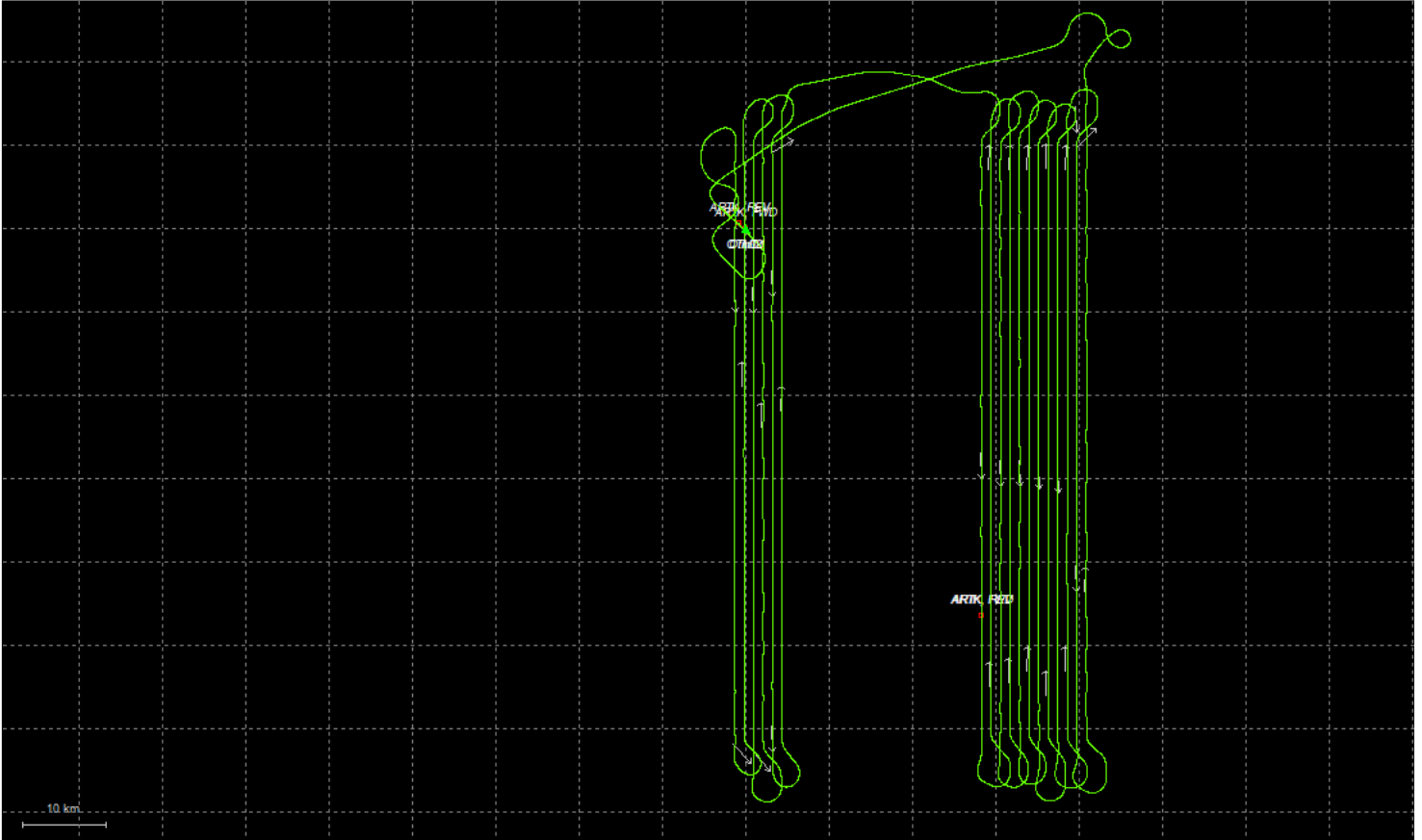


Process	20200330143256_1	by Unknown	on 6/3/2020	at 16:25:18
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Output Results for 20200330210307_2

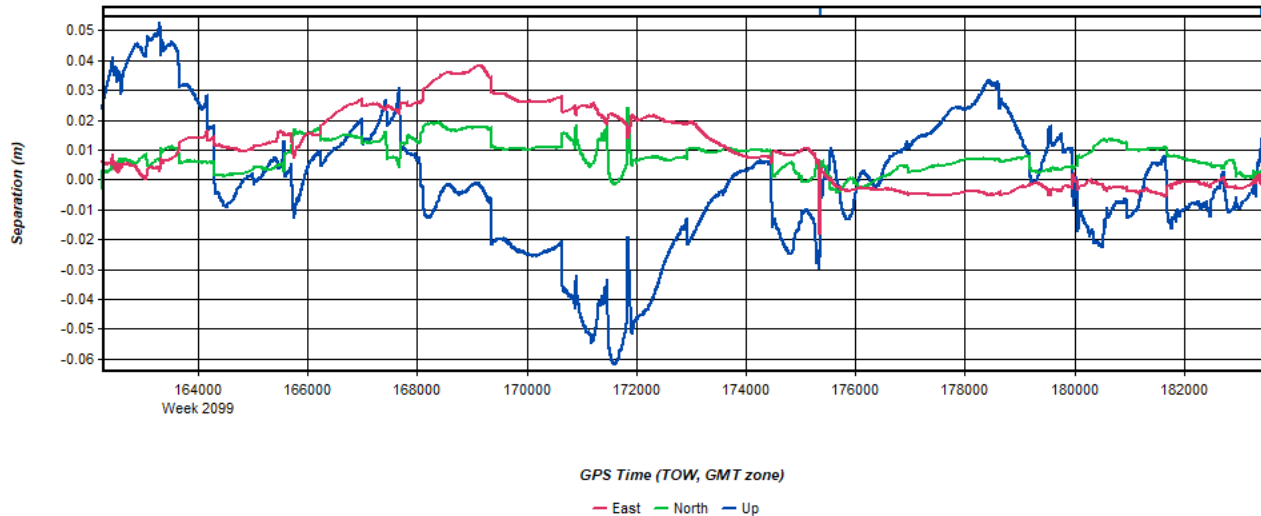
Inertial Explorer Version 8.90.2124
06/03/2020

Figure 1: Smoothed TC Combined - Map



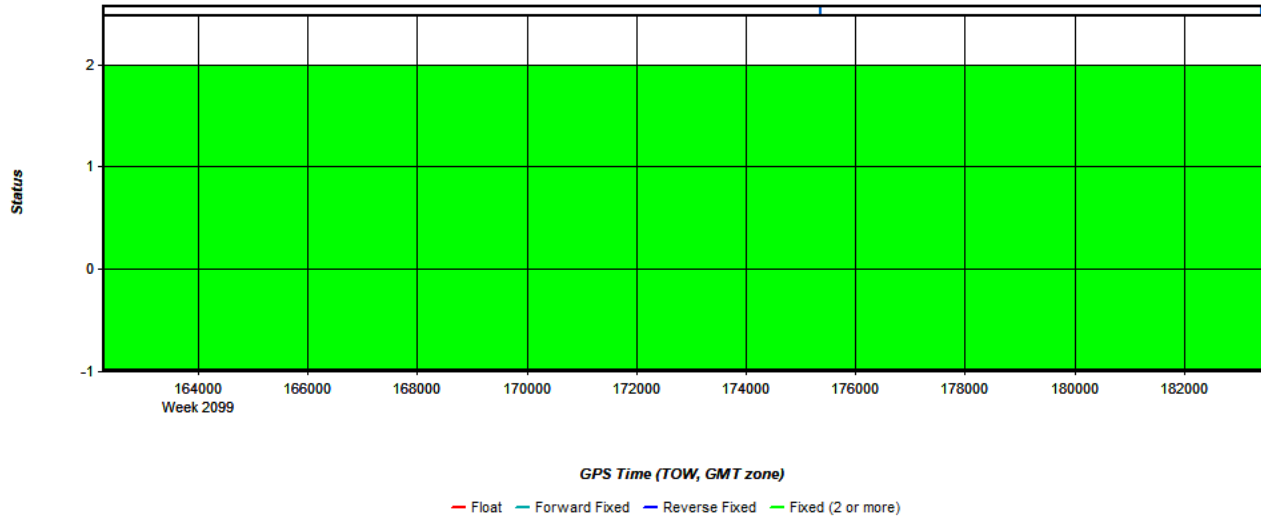
Process	20200330210307_2	by Unknown	on 6/3/2020	at 18:12:32
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Figure 2: 20200330210307_2 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



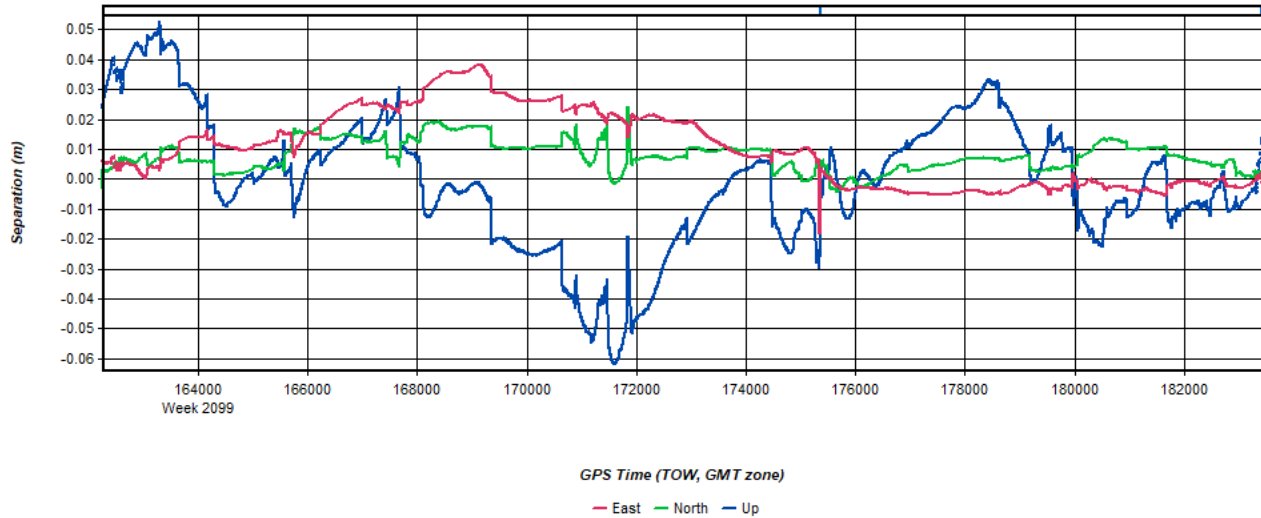
Process	20200330210307_2	by Unknown	on 6/3/2020	at 18:12:32
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Figure 3: 20200330210307_2 [Smoothed TC Combined] - Float or Fixed Ambiguity



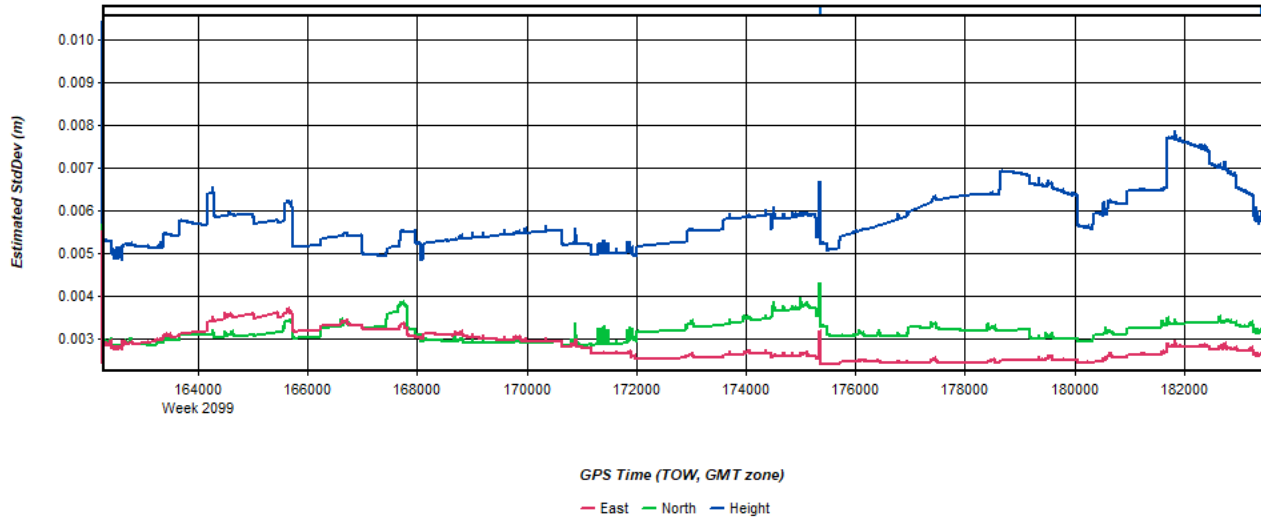
Process	20200330210307_2	by Unknown	on 6/3/2020	at 18:12:32
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Figure 4: 20200330210307_2 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



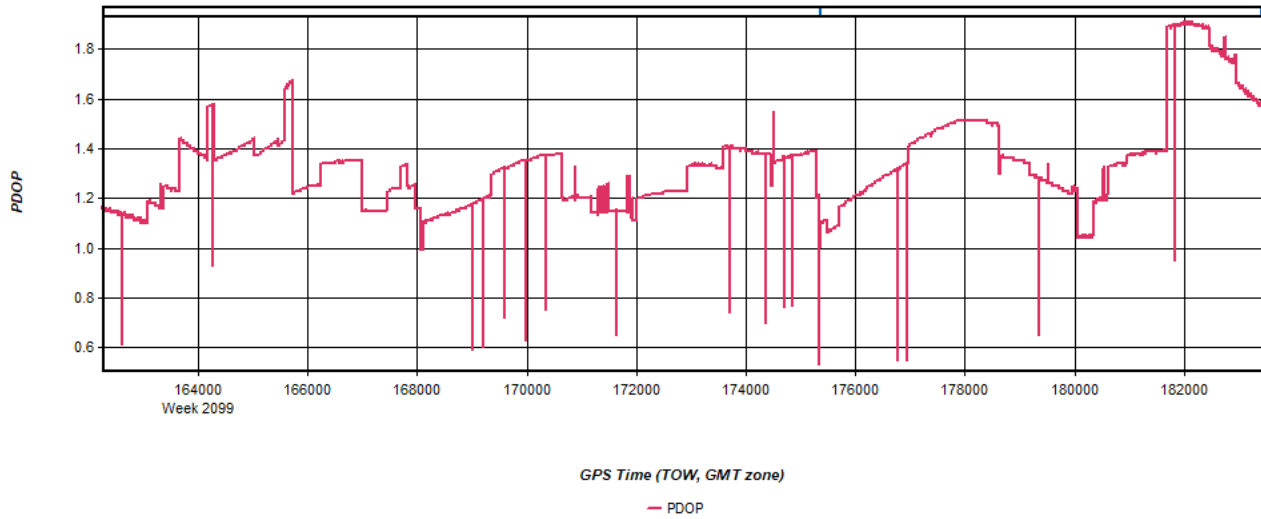
Process	20200330210307_2	by Unknown	on 6/3/2020	at 18:12:32
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Figure 5: 20200330210307_2 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20200330210307_2	by Unknown	on 6/3/2020	at 18:12:32
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Figure 6: 20200330210307_2 [Smoothed TC Combined] - PDOP Plot



Process	20200330210307_2	by Unknown	on 6/3/2020	at 18:12:32
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Figure 7: 20200330210307_2 [Smoothed TC Combined] - Number of Satellites Line Plot

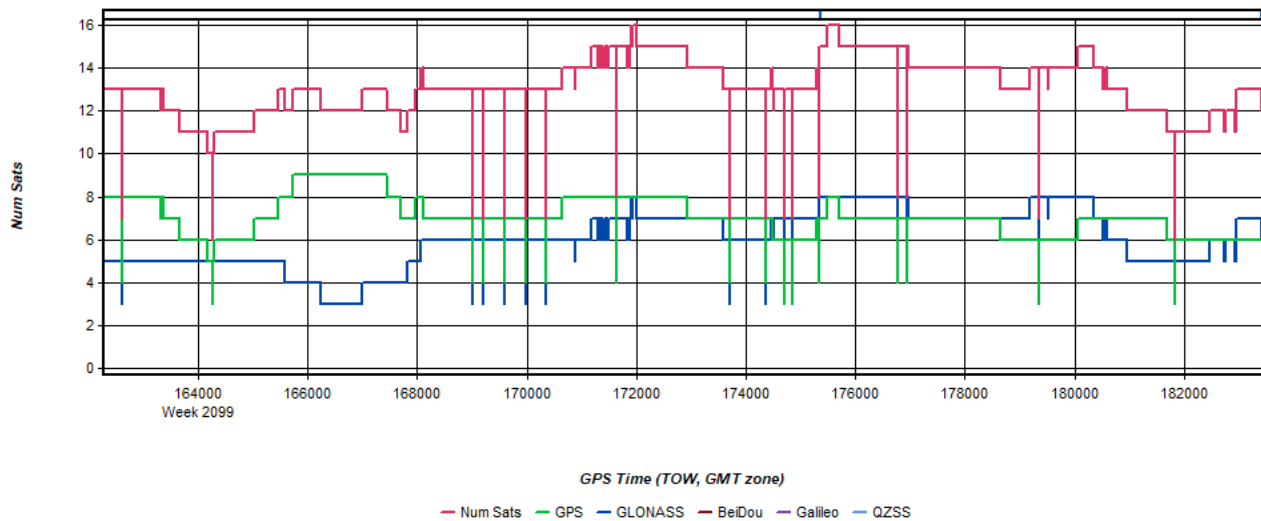


Figure 8: 20200330210307_2 [Smoothed TC Combined] - Status flag for IMU processing

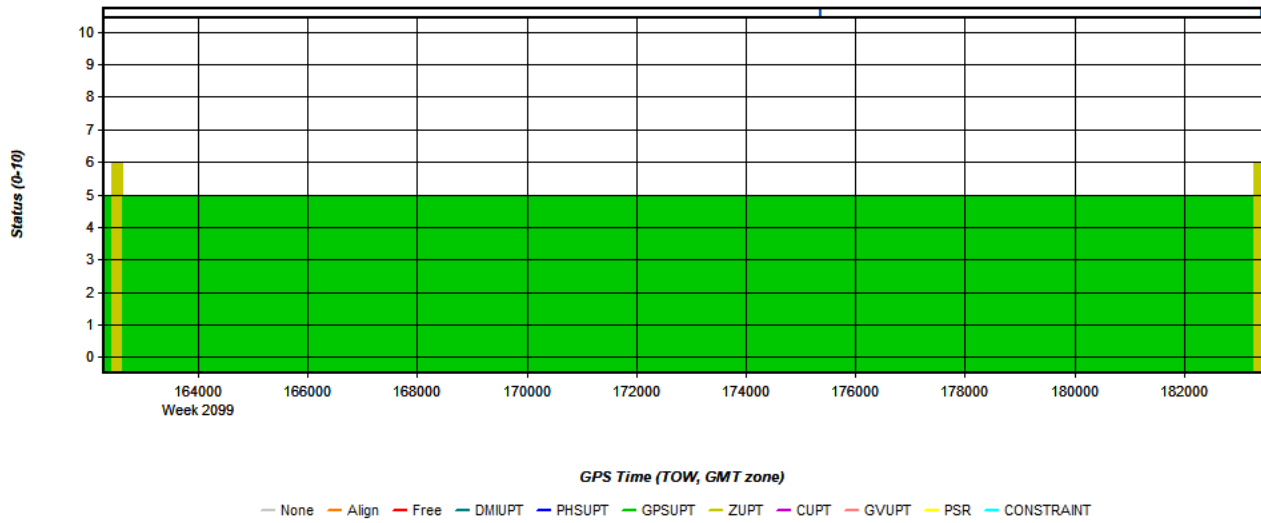


Figure 9: 20200330210307_2 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

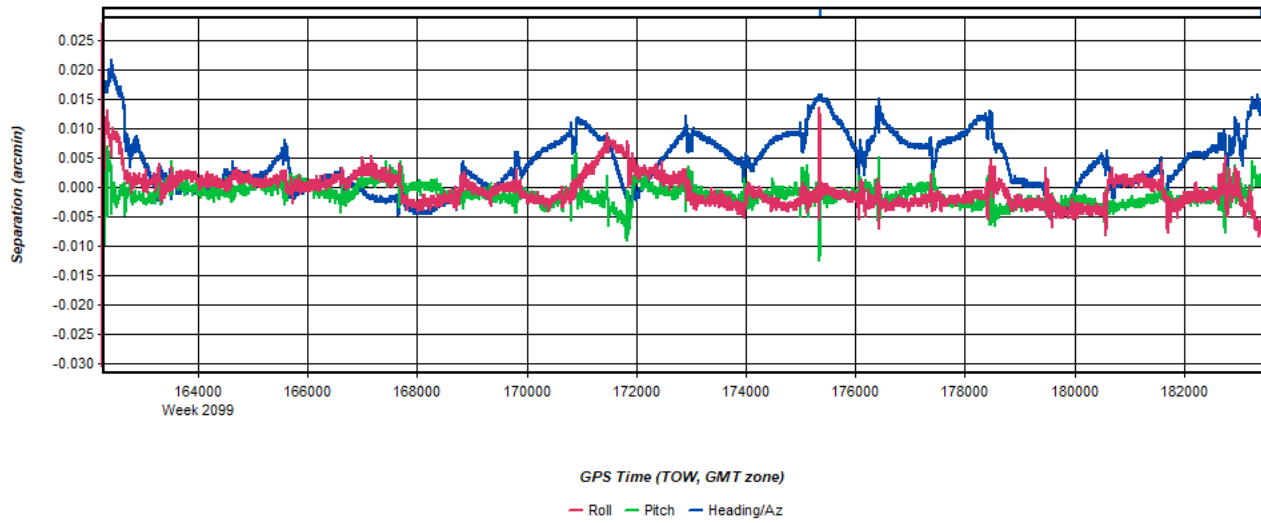
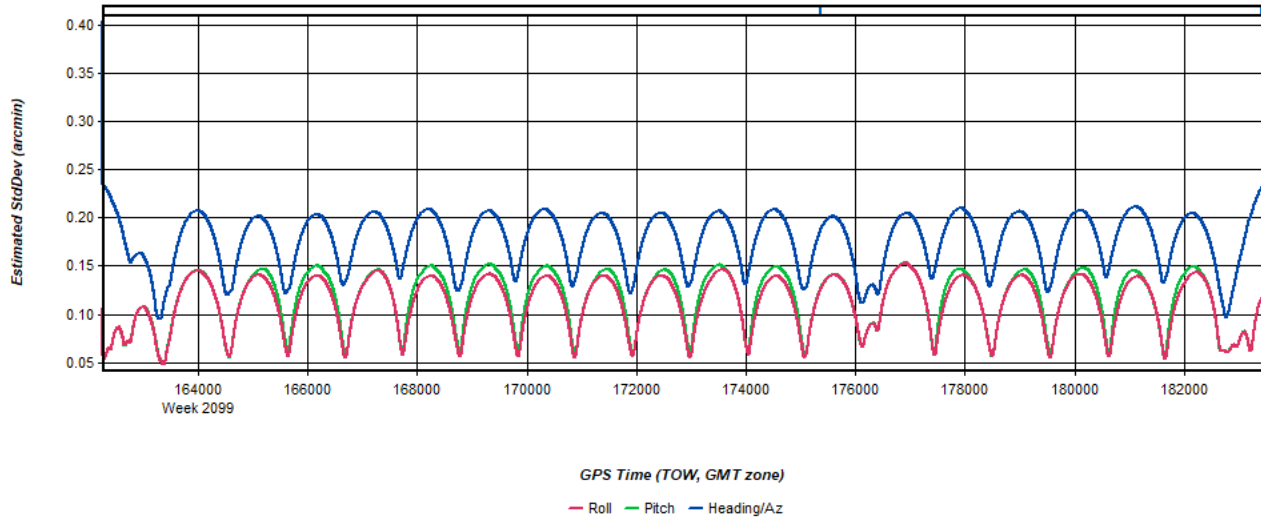
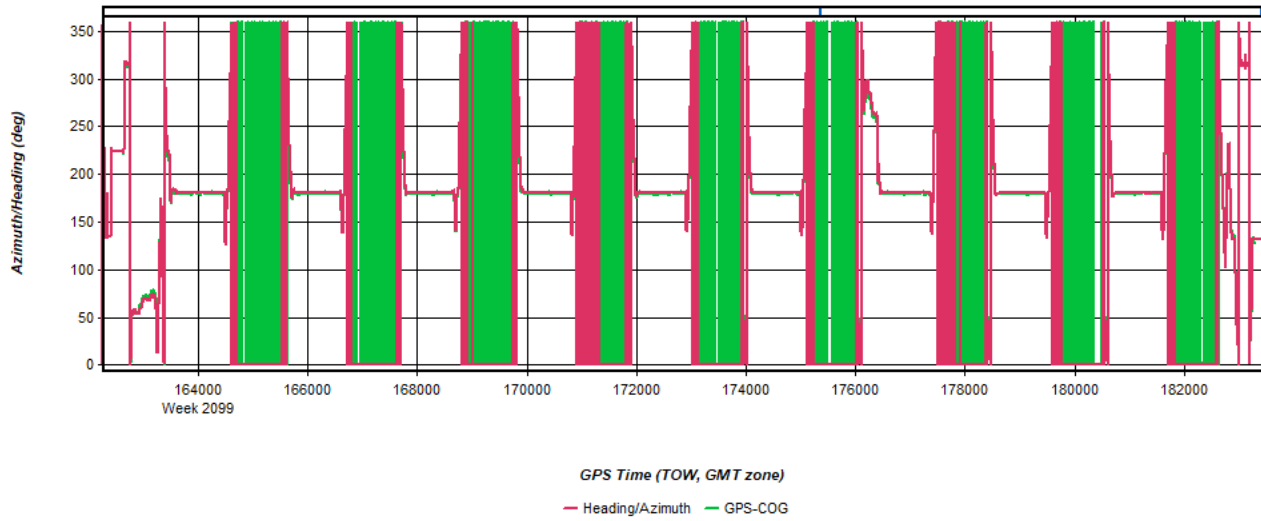


Figure 10: 20200330210307_2 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20200330210307_2	by Unknown	on 6/3/2020	at 18:12:32
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Figure 11: 20200330210307_2 [Smoothed TC Combined] - Azimuth Plot



Process	20200330210307_2	by Unknown	on 6/3/2020	at 18:12:32
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Figure 12: 20200330210307_2 [Smoothed TC Combined] - Roll & Pitch Plot

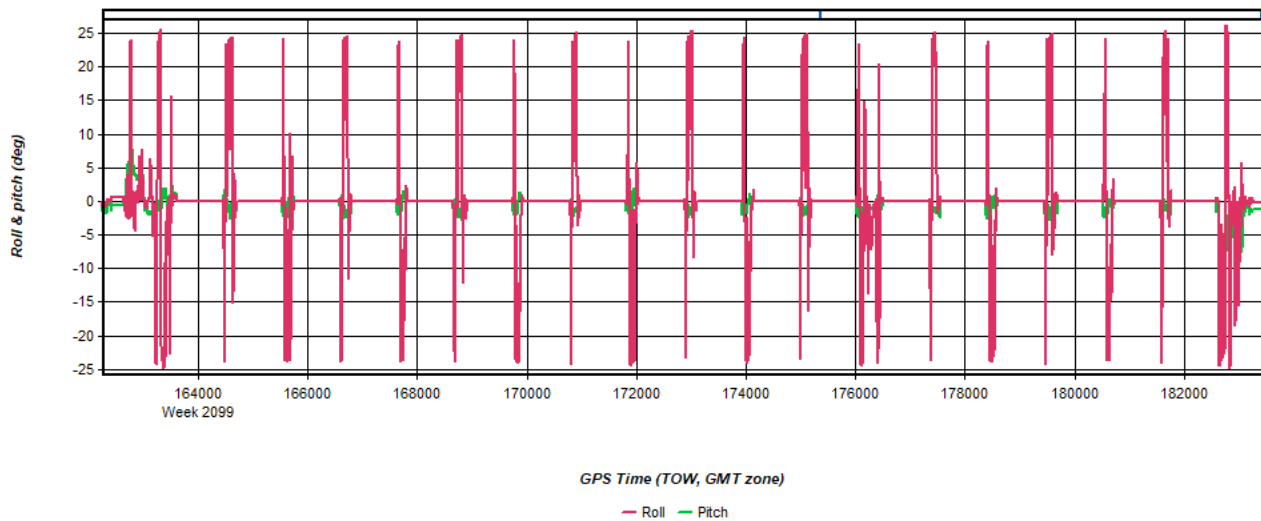


Figure 13: 20200330210307_2 [Smoothed TC Combined] - Velocity Profile Plot

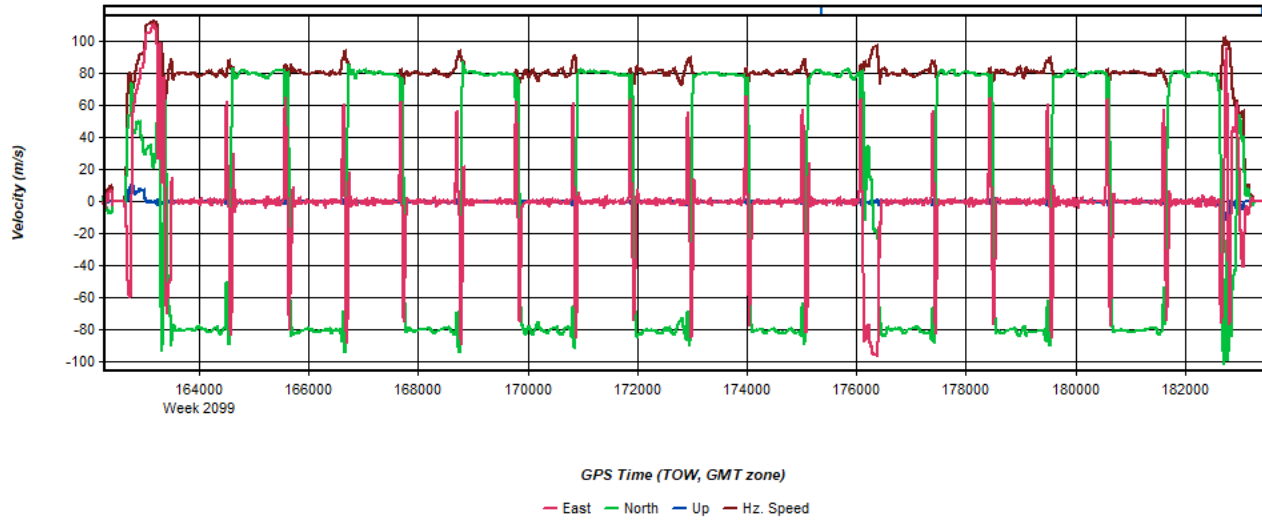


Figure 14: 20200330210307_2 [Smoothed TC Combined] - Body Frame Velocity Plot

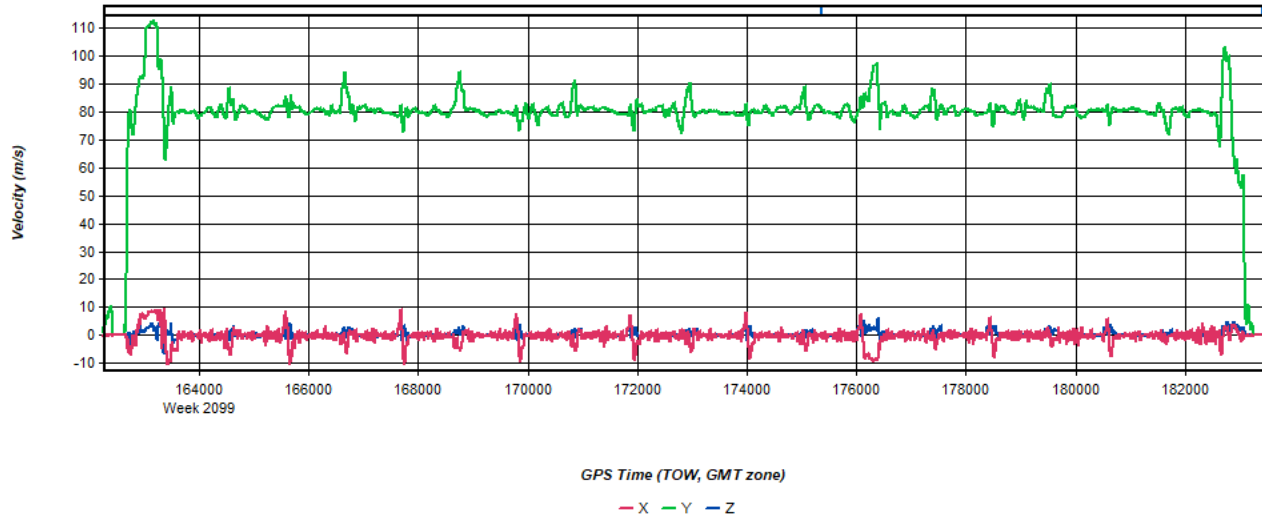


Figure 15: 20200330210307_2 [Smoothed TC Combined] - Height Profile Plot

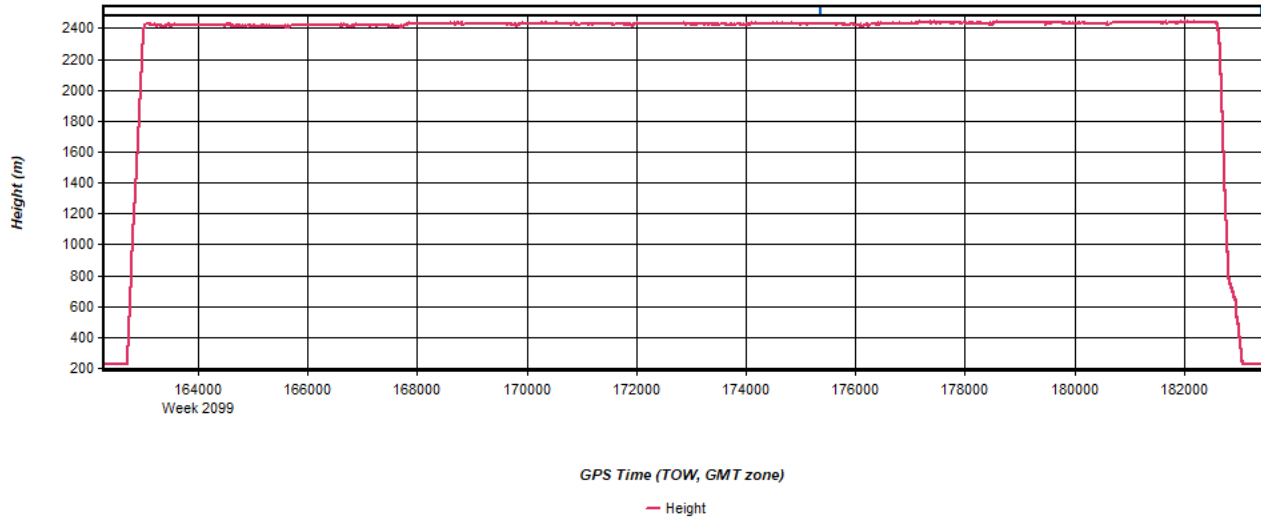


Figure 16: 20200330210307_2 [Smoothed TC Combined] - C/A Code Residual RMS Plot

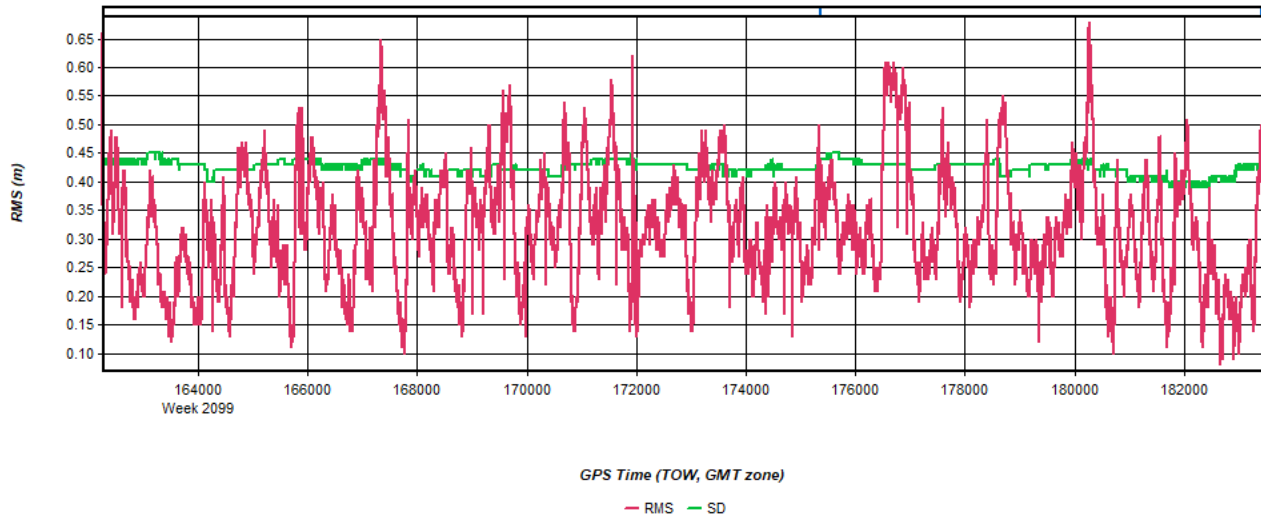


Figure 17: 20200330210307_2 [Smoothed TC Combined] - Carrier Residual RMS Plot

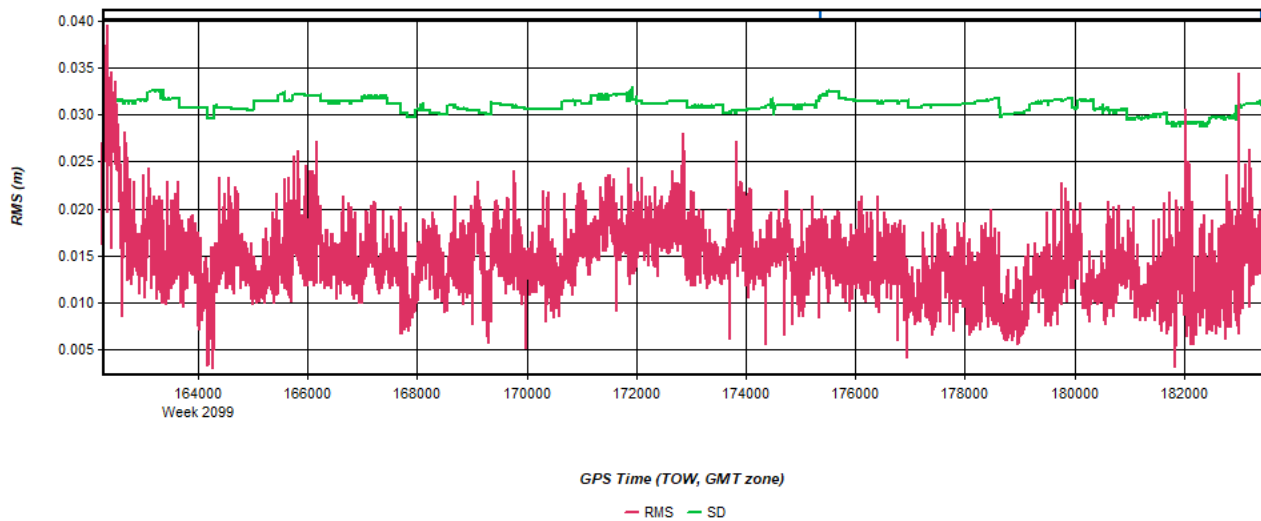


Figure 18: 20200330210307_2 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

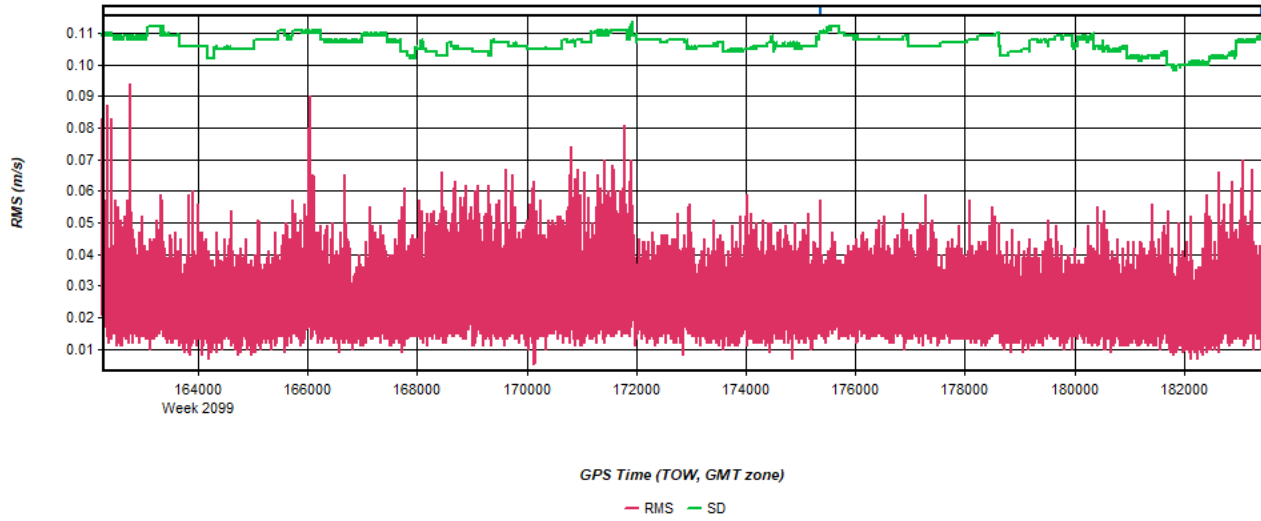


Figure 19: 20200330210307_2 [Smoothed TC Combined] - Accelerometer Bias Plot

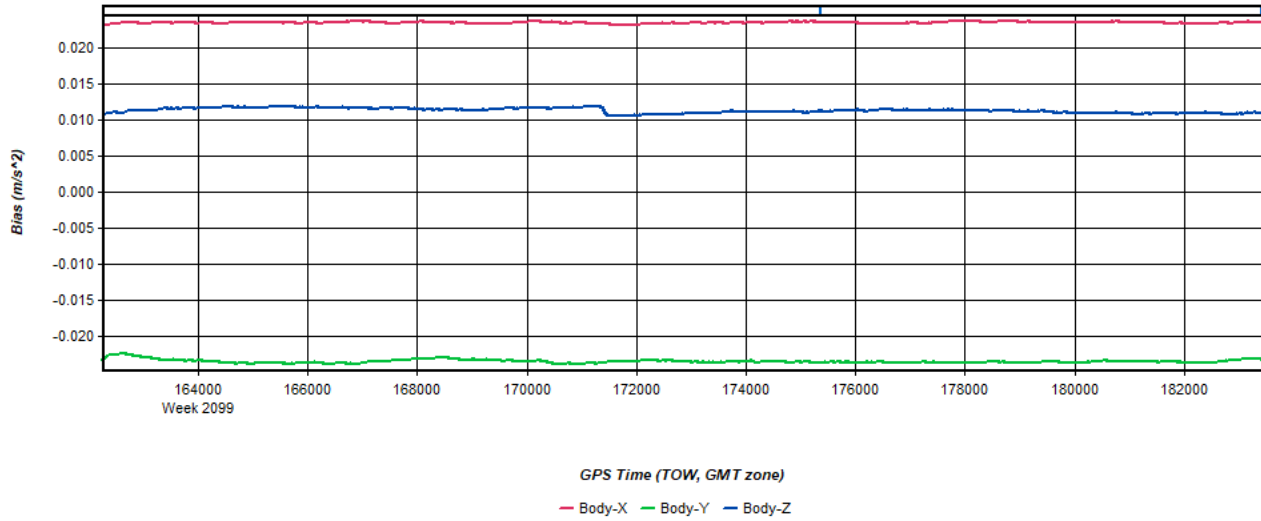
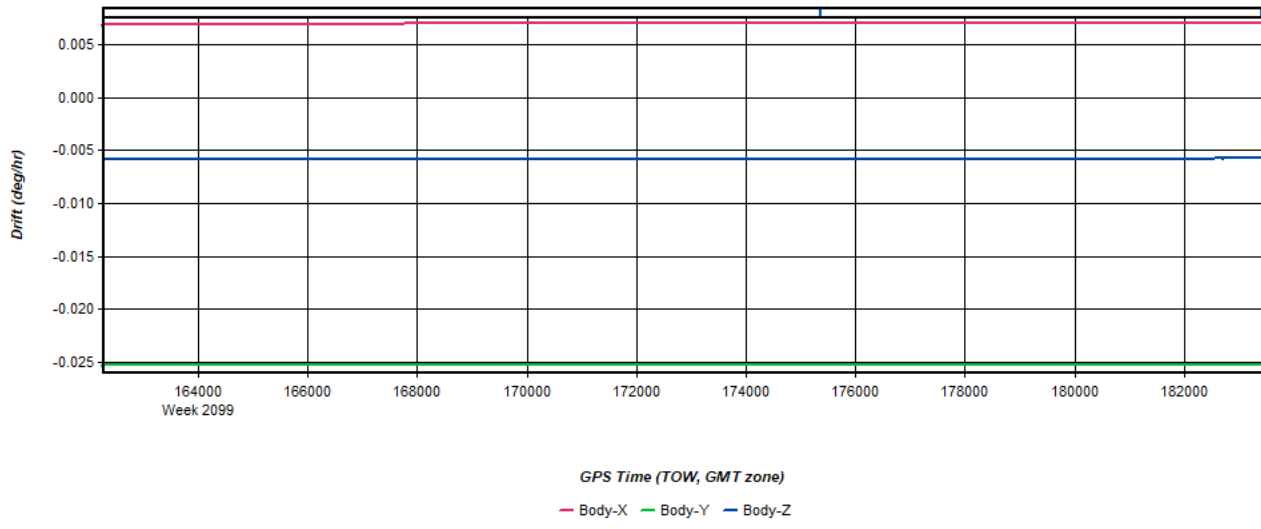


Figure 20: 20200330210307_2 [Smoothed TC Combined] - Gyro Drift Plot

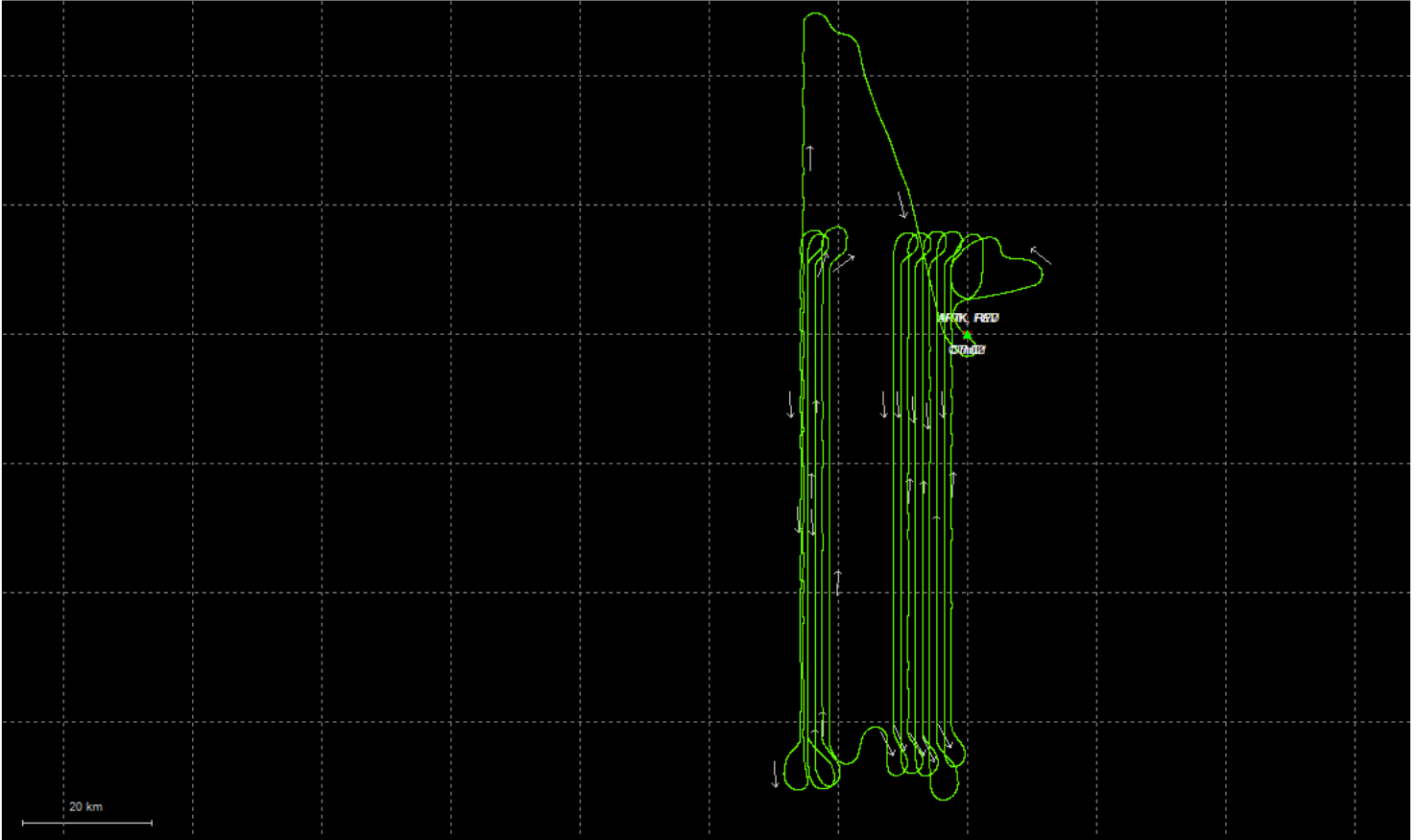


Process	20200330210307_2	by Unknown	on 6/3/2020	at 18:12:32
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Output Results for 20200331134547_3

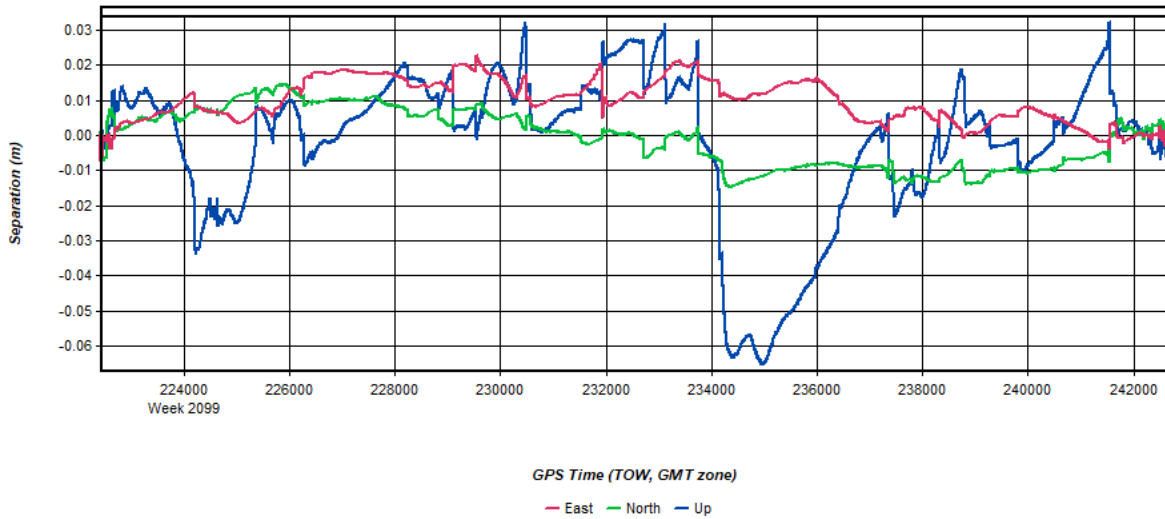
Inertial Explorer Version 8.90.2124
06/04/2020

Figure 1: Smoothed TC Combined - Map



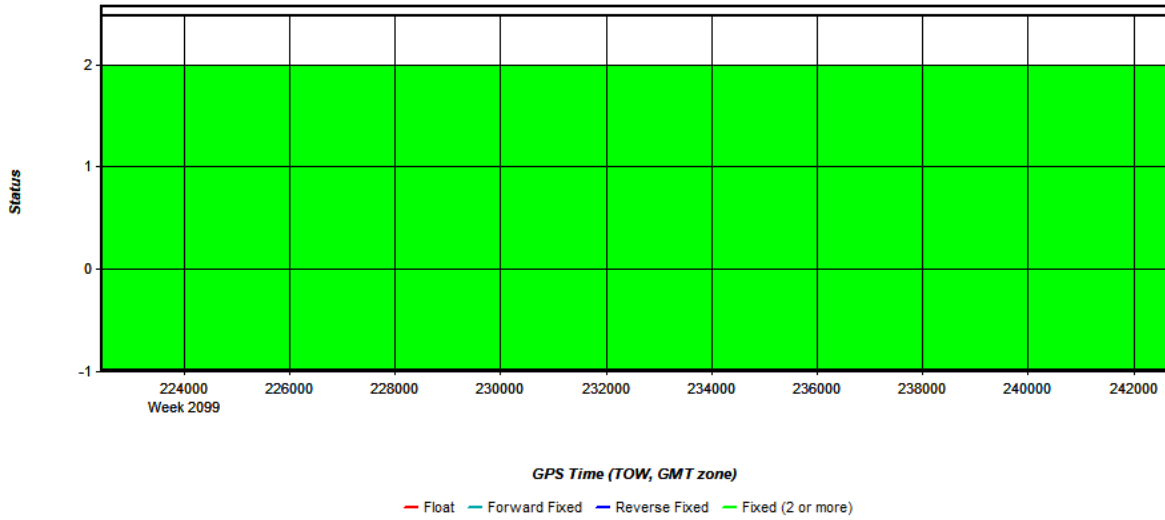
Process	20200331134547_3	by Unknown	on 6/4/2020	at 11:28:37
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Figure 2: 20200331134547_3 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



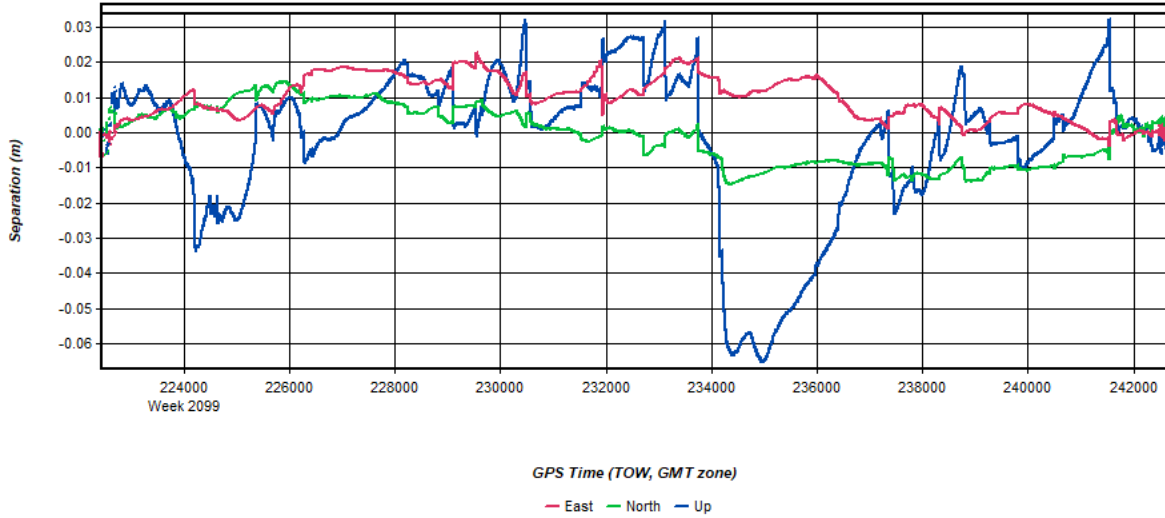
Process	20200331134547_3	by Unknown	on 6/4/2020	at 11:28:37
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Figure 3: 20200331134547_3 [Smoothed TC Combined] - Float or Fixed Ambiguity



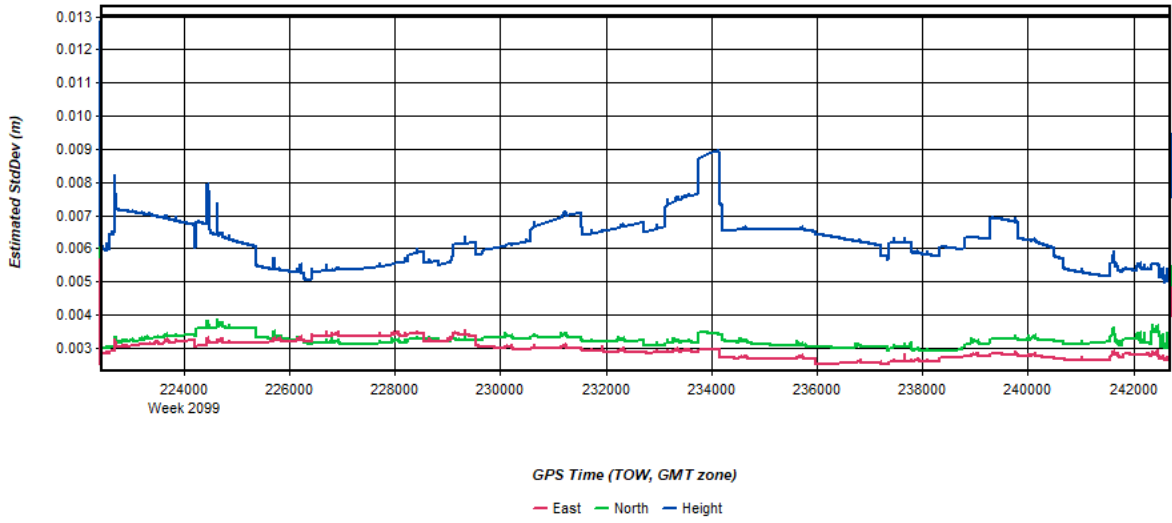
Process	20200331134547_3	by Unknown	on 6/4/2020	at 11:28:37
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Figure 4: 20200331134547_3 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



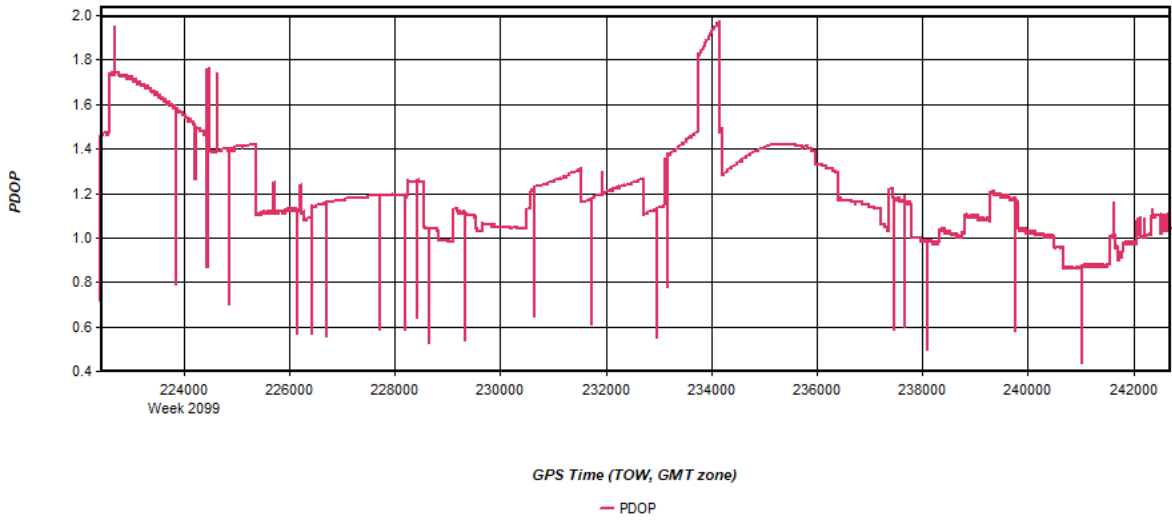
Process	20200331134547_3	by Unknown	on 6/4/2020	at 11:28:37
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Figure 5: 20200331134547_3 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20200331134547_3	by Unknown	on 6/4/2020	at 11:28:37
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Figure 6: 20200331134547_3 [Smoothed TC Combined] - PDOP Plot



Process	20200331134547_3	by Unknown	on 6/4/2020	at 11:28:37
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Figure 7: 20200331134547_3 [Smoothed TC Combined] - Number of Satellites Line Plot

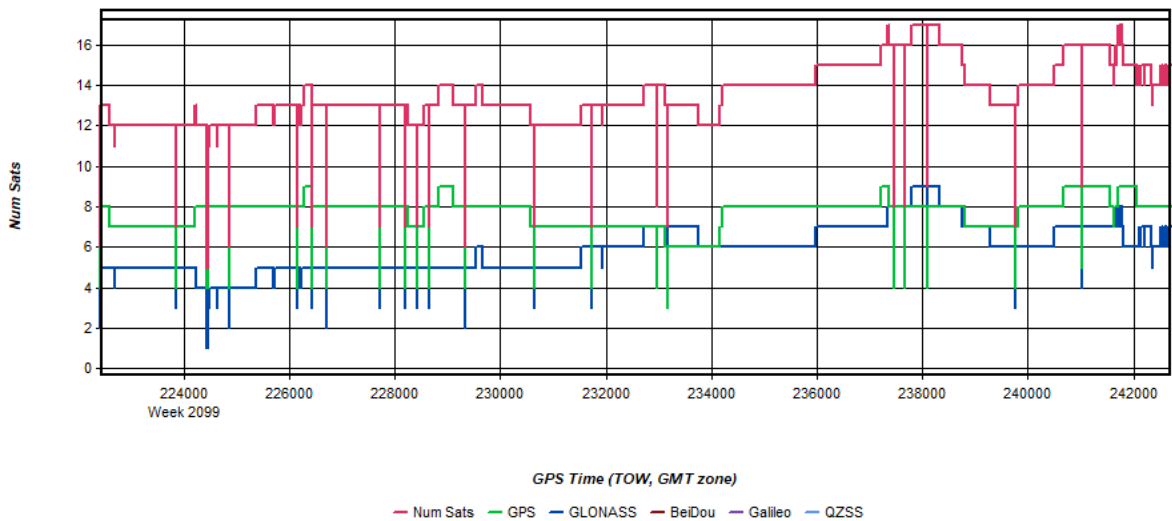


Figure 8: 20200331134547_3 [Smoothed TC Combined] - Status flag for IMU processing

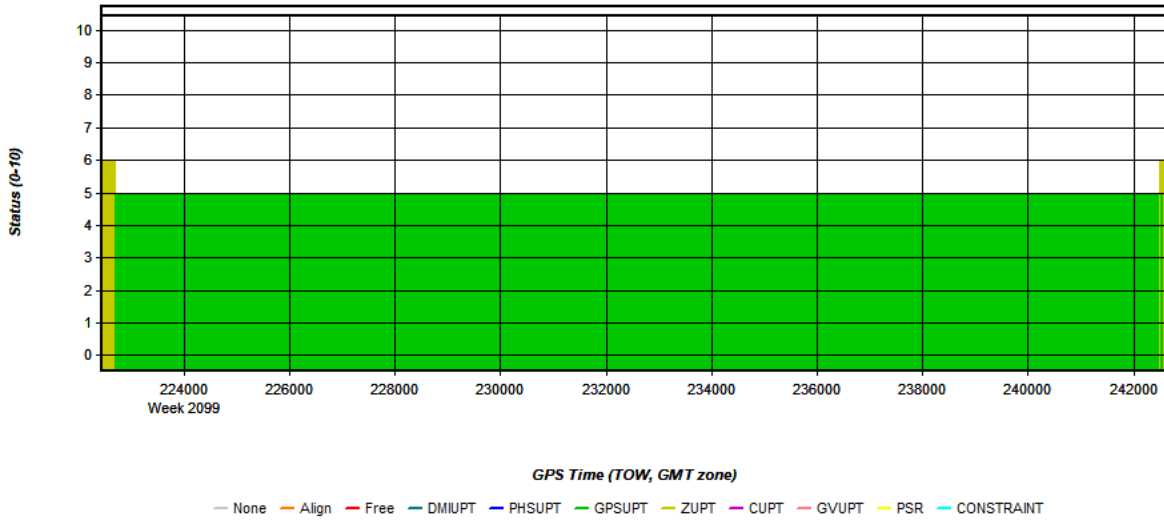


Figure 9: 20200331134547_3 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

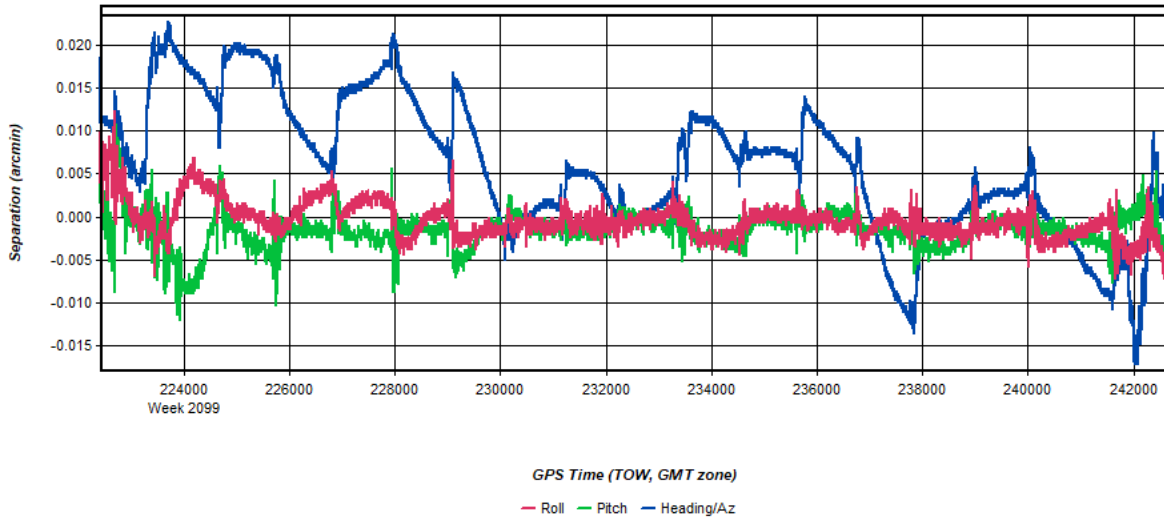
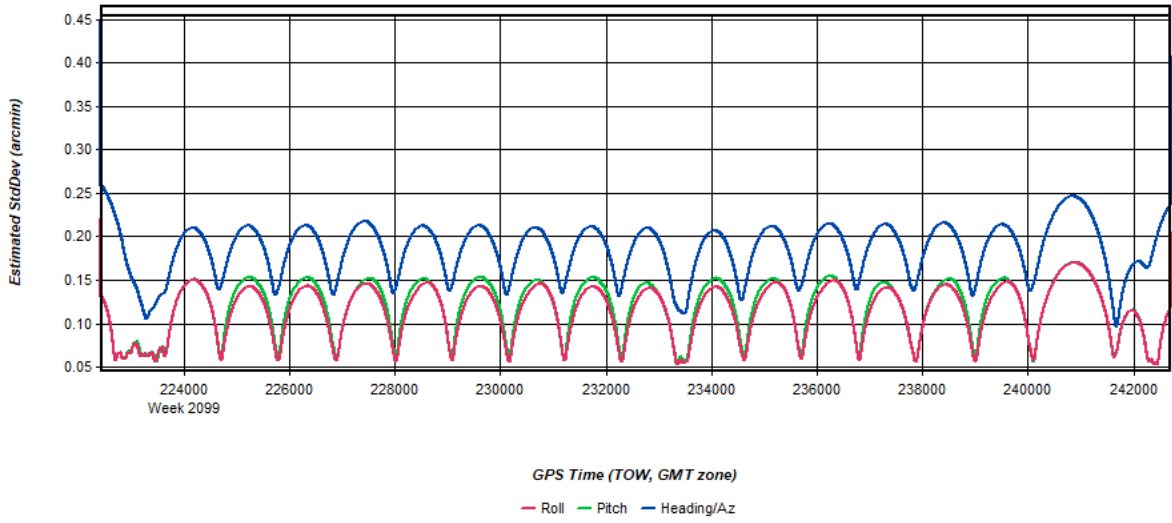
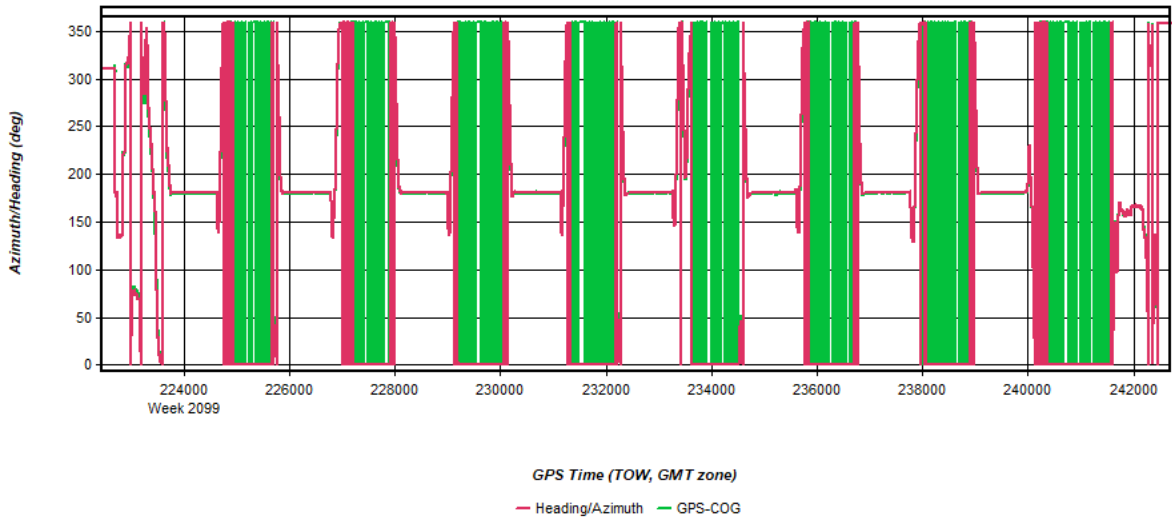


Figure 10: 20200331134547_3 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20200331134547_3	by Unknown	on 6/4/2020	at 11:28:37
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Figure 11: 20200331134547_3 [Smoothed TC Combined] - Azimuth Plot



Process	20200331134547_3	by Unknown	on 6/4/2020	at 11:28:37
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Figure 12: 20200331134547_3 [Smoothed TC Combined] - Roll & Pitch Plot

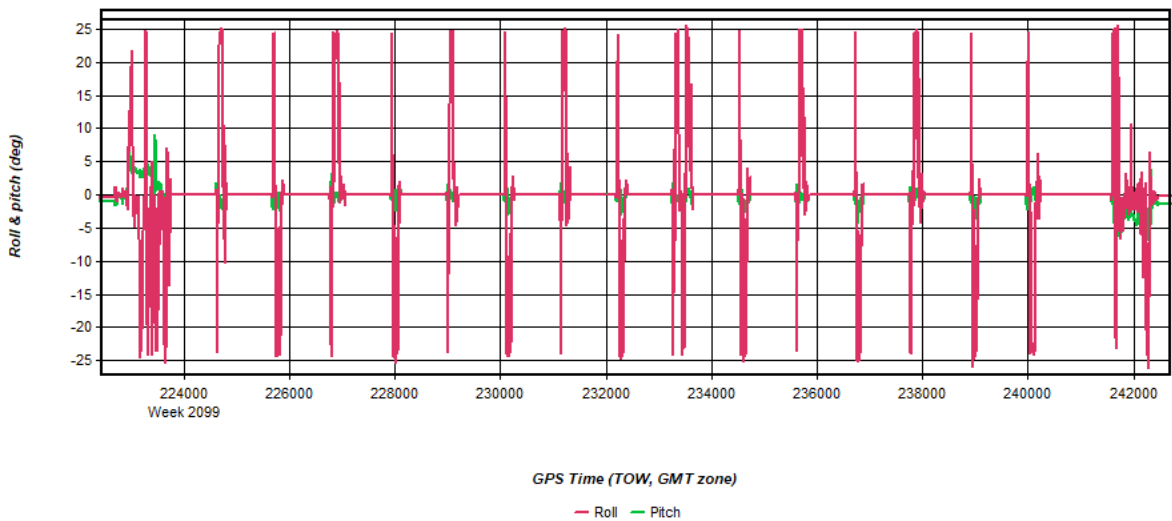


Figure 13: 20200331134547_3 [Smoothed TC Combined] - Velocity Profile Plot

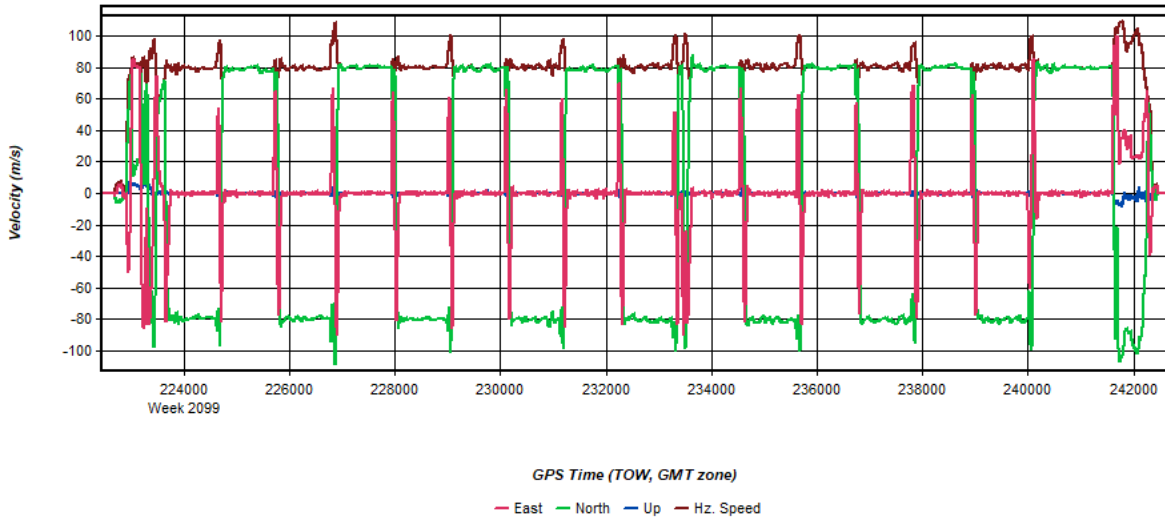


Figure 14: 20200331134547_3 [Smoothed TC Combined] - Body Frame Velocity Plot

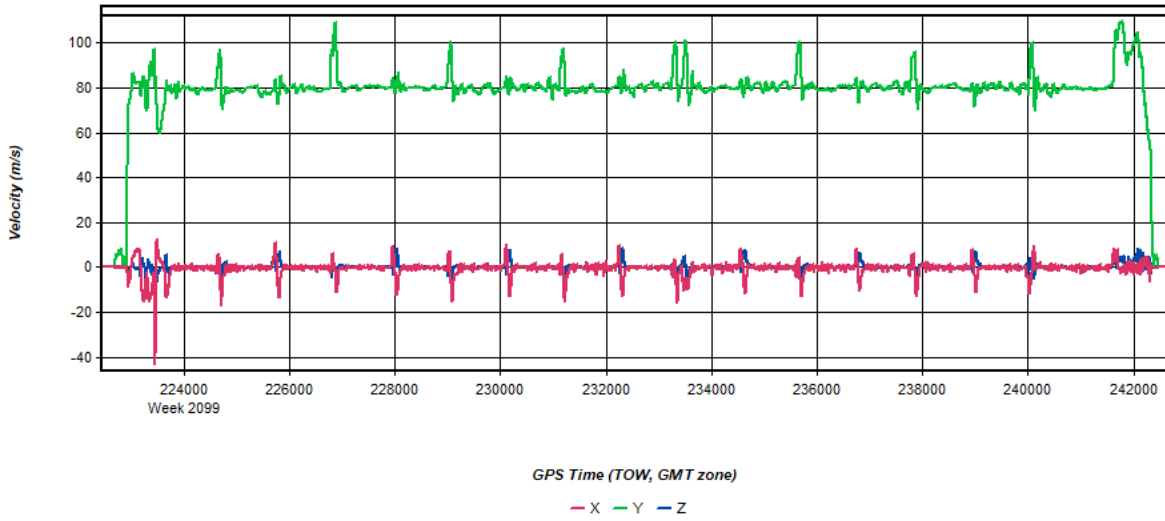


Figure 15: 20200331134547_3 [Smoothed TC Combined] - Height Profile Plot

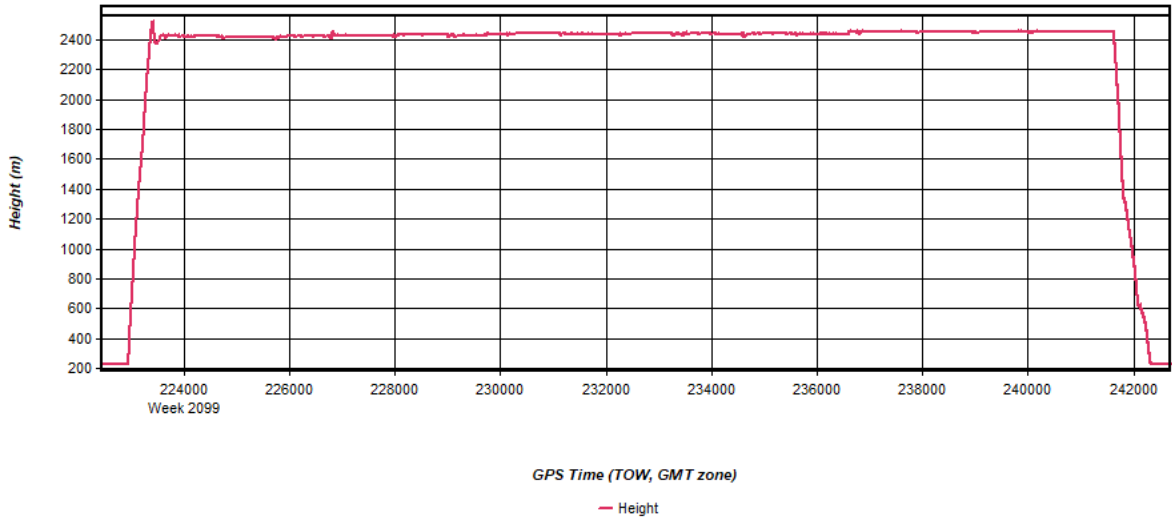


Figure 16: 20200331134547_3 [Smoothed TC Combined] - C/A Code Residual RMS Plot

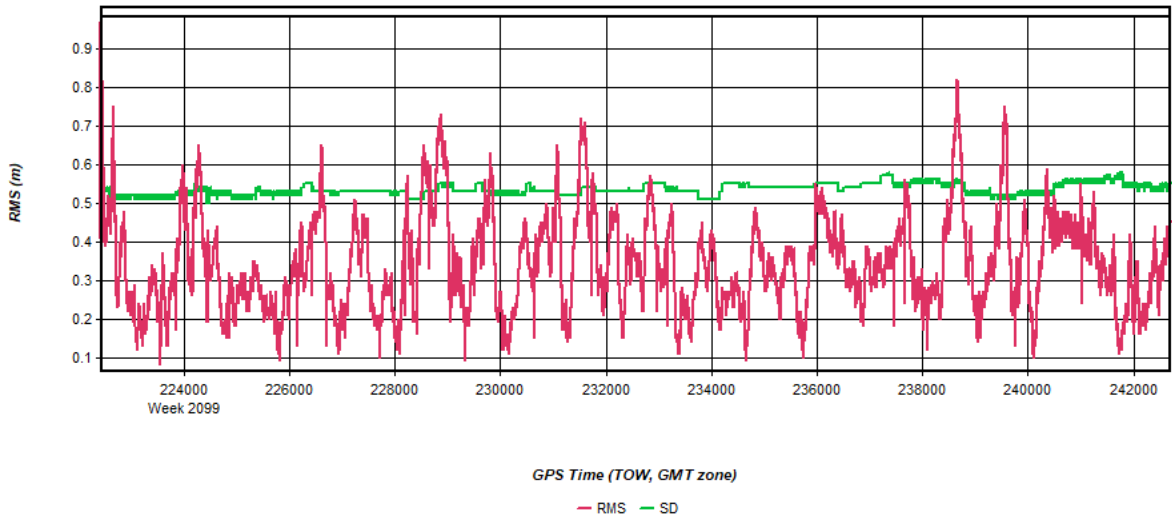


Figure 17: 20200331134547_3 [Smoothed TC Combined] - Carrier Residual RMS Plot

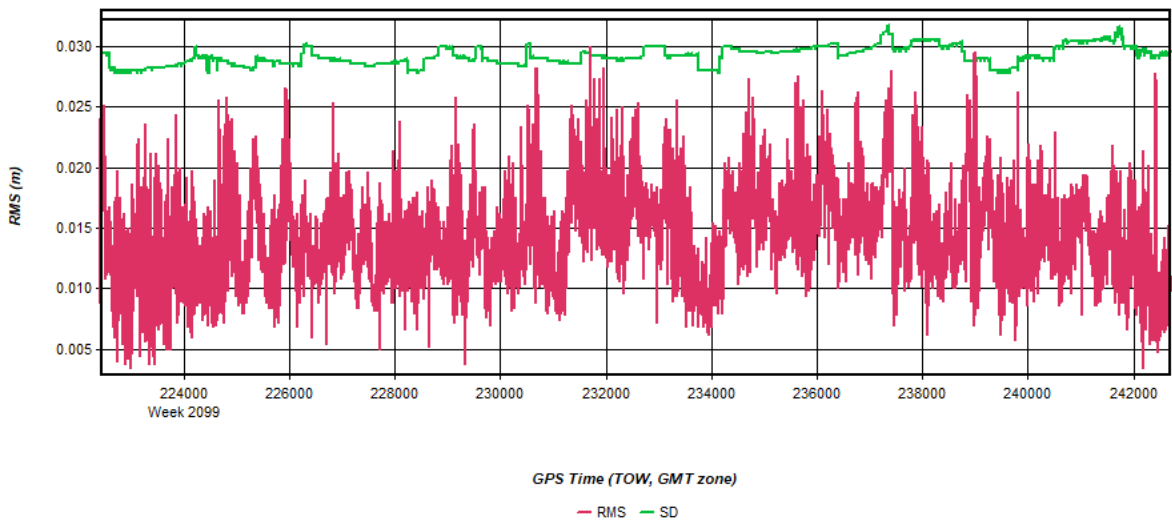


Figure 18: 20200331134547_3 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

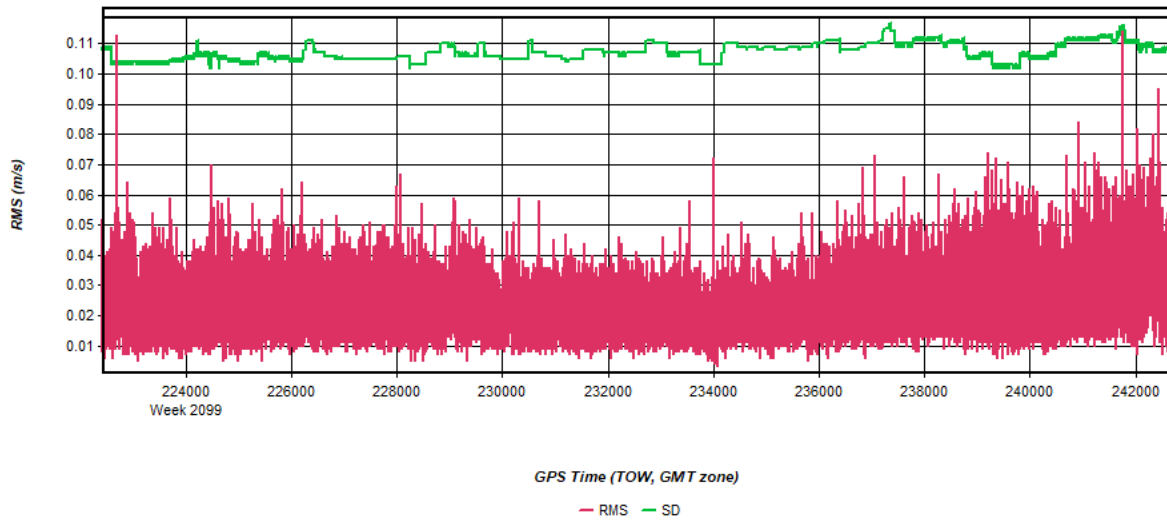


Figure 19: 20200331134547_3 [Smoothed TC Combined] - Accelerometer Bias Plot

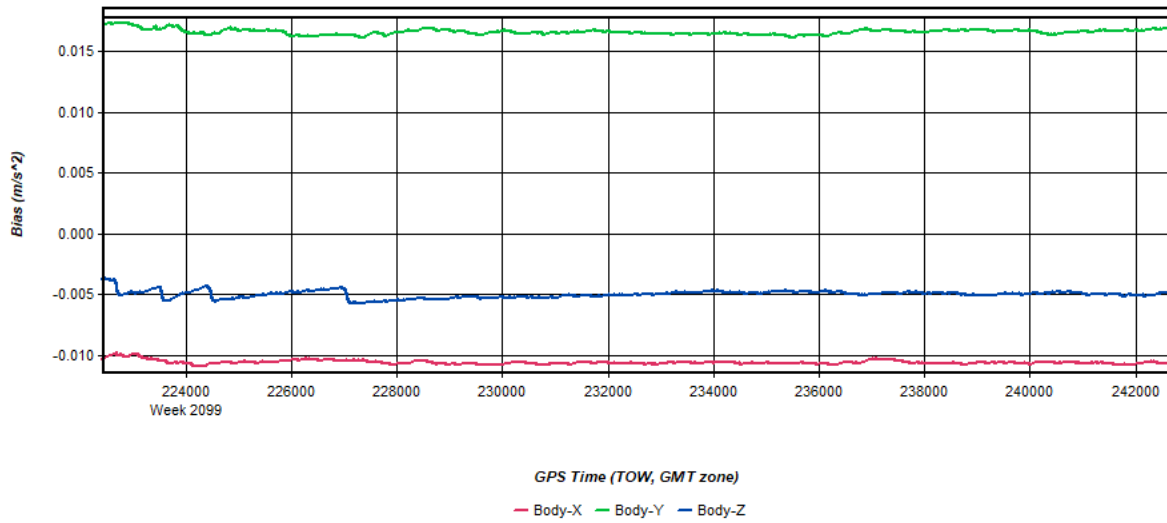
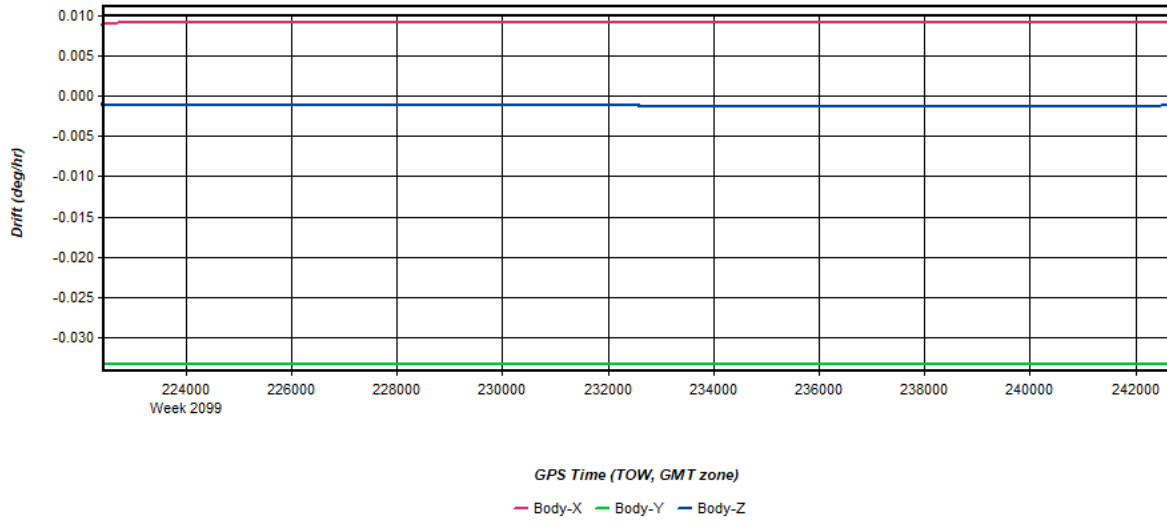


Figure 20: 20200331134547_3 [Smoothed TC Combined] - Gyro Drift Plot

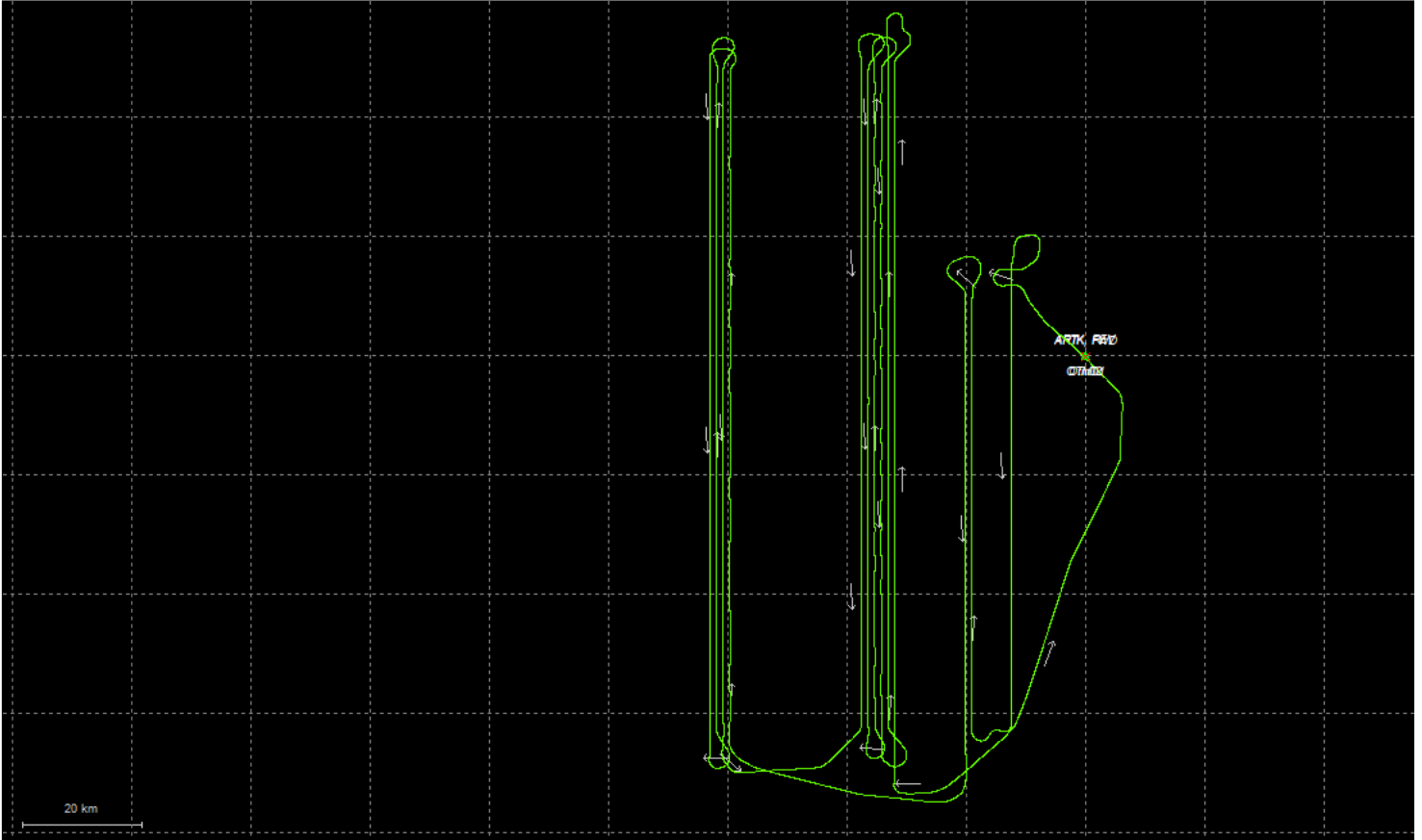


Process	20200331134547_3	by Unknown	on 6/4/2020	at 11:28:37
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Output Results for 20200331195521_4

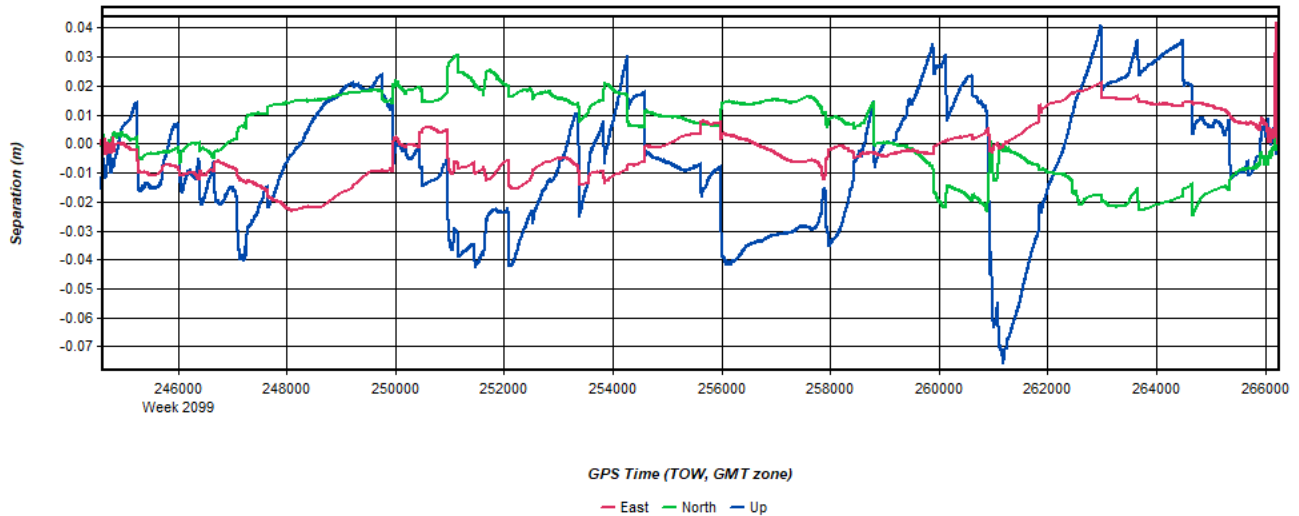
Inertial Explorer Version 8.90.2124
06/08/2020

Figure 1: Smoothed TC Combined - Map



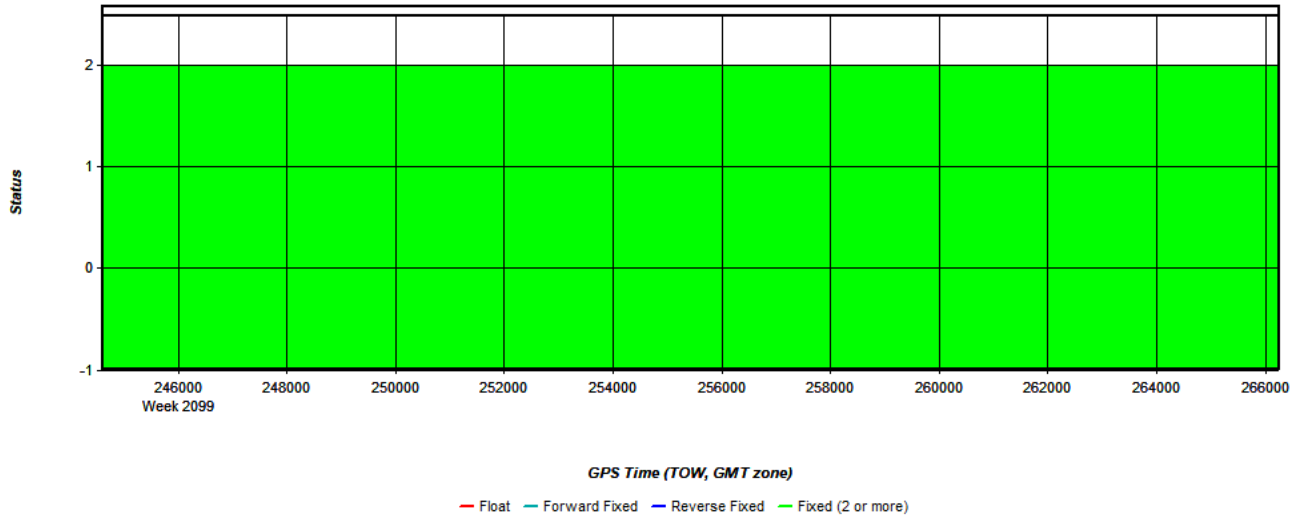
Process	20200331195521_4	by Unknown	on 6/8/2020	at 14:59:47
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Figure 2: 20200331195521_4 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



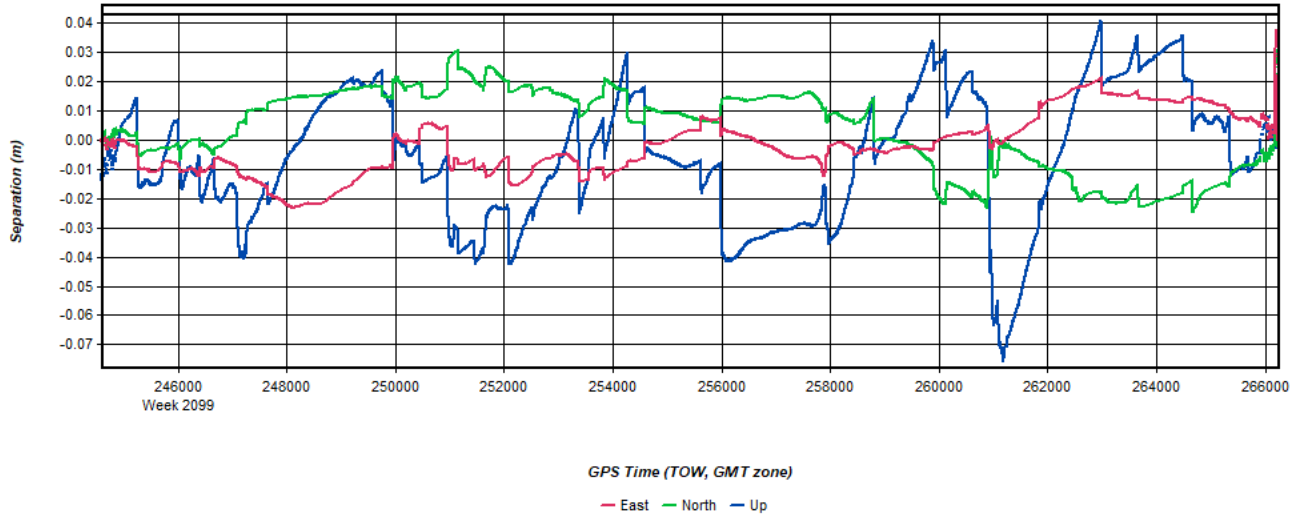
Process	20200331195521_4	by Unknown	on 6/8/2020	at 14:59:47
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Figure 3: 20200331195521_4 [Smoothed TC Combined] - Float or Fixed Ambiguity



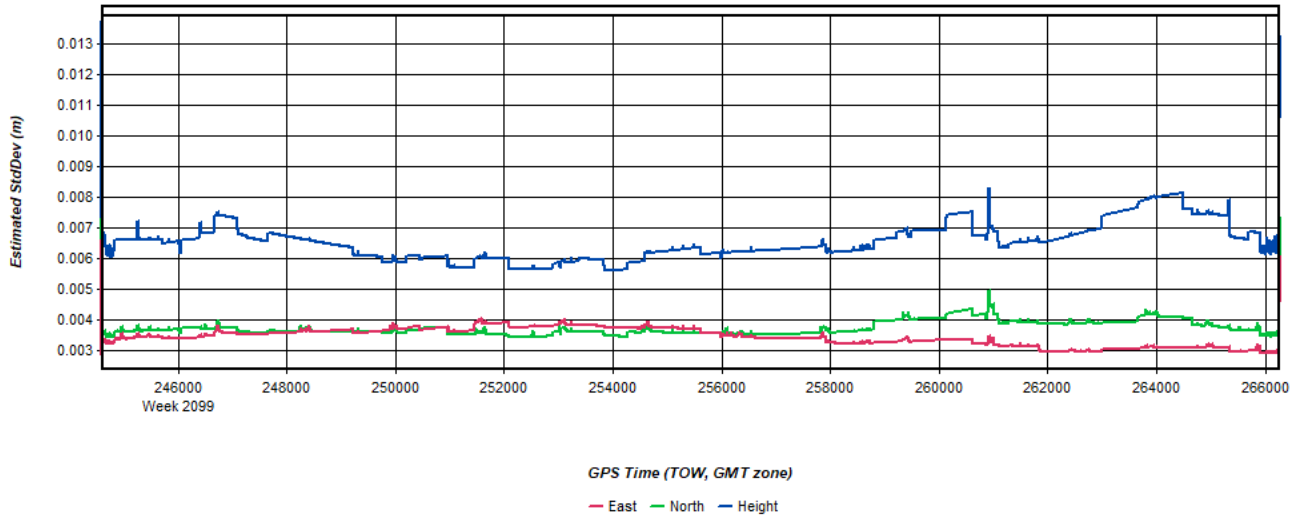
Process	20200331195521_4	by Unknown	on 6/8/2020	at 14:59:47
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Figure 4: 20200331195521_4 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



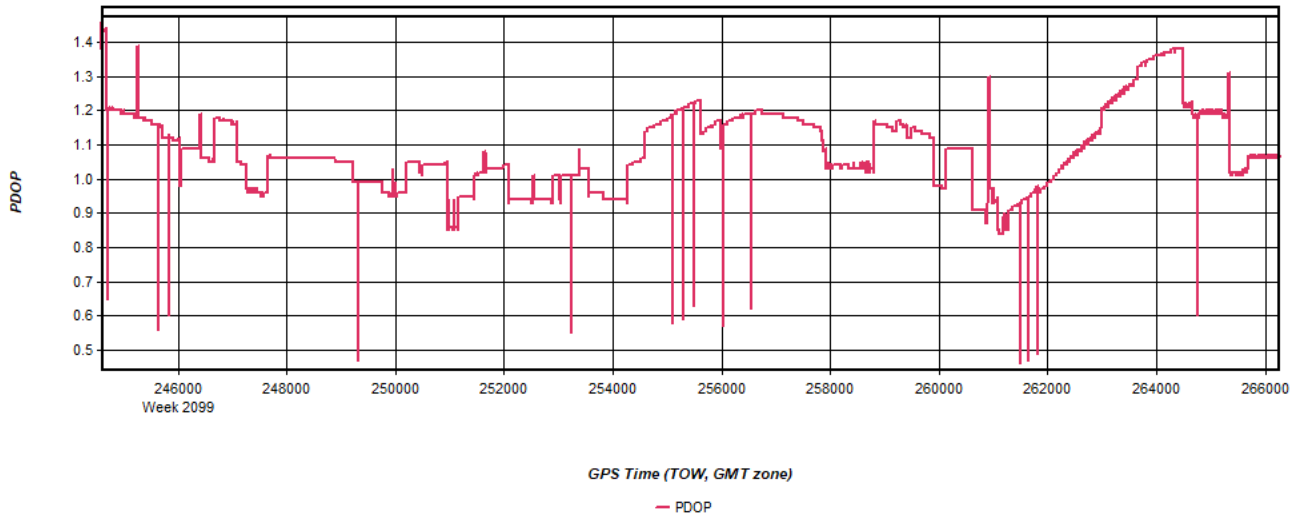
Process	20200331195521_4	by Unknown	on 6/8/2020	at 14:59:47
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Figure 5: 20200331195521_4 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20200331195521_4	by Unknown	on 6/8/2020	at 14:59:47
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Figure 6: 20200331195521_4 [Smoothed TC Combined] - PDOP Plot



Process	20200331195521_4	by Unknown	on 6/8/2020	at 14:59:47
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Figure 7: 20200331195521_4 [Smoothed TC Combined] - Number of Satellites Line Plot

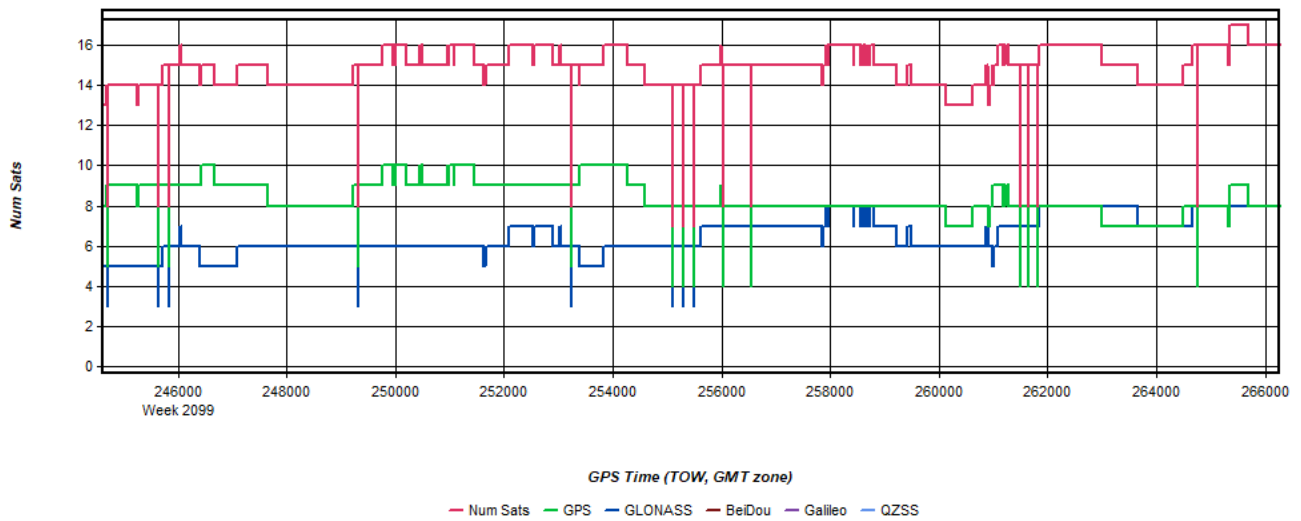


Figure 8: 20200331195521_4 [Smoothed TC Combined] - Status flag for IMU processing

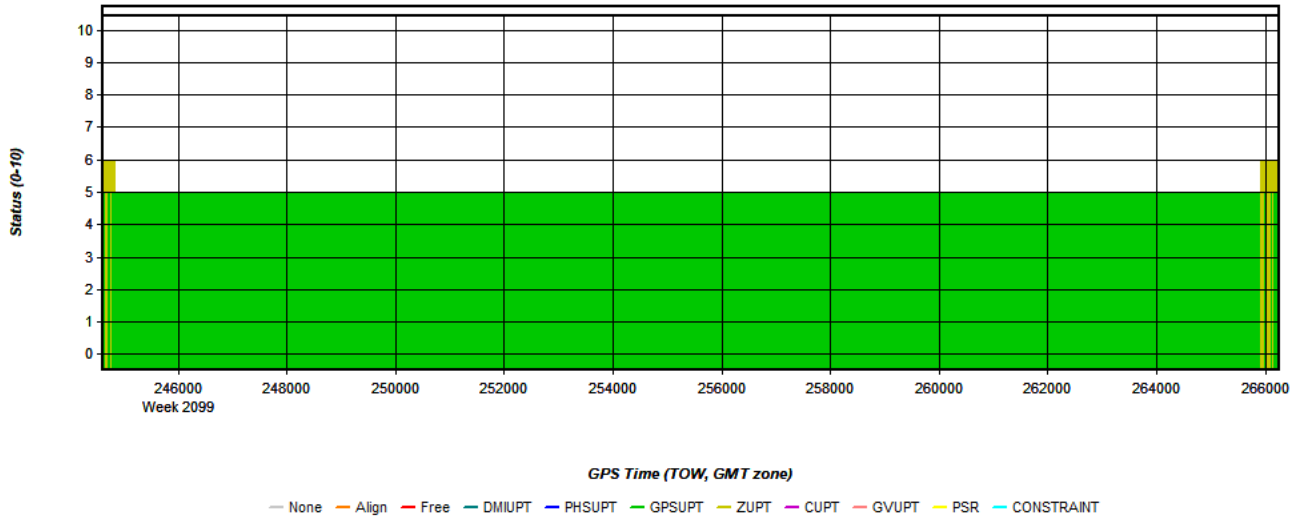


Figure 9: 20200331195521_4 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

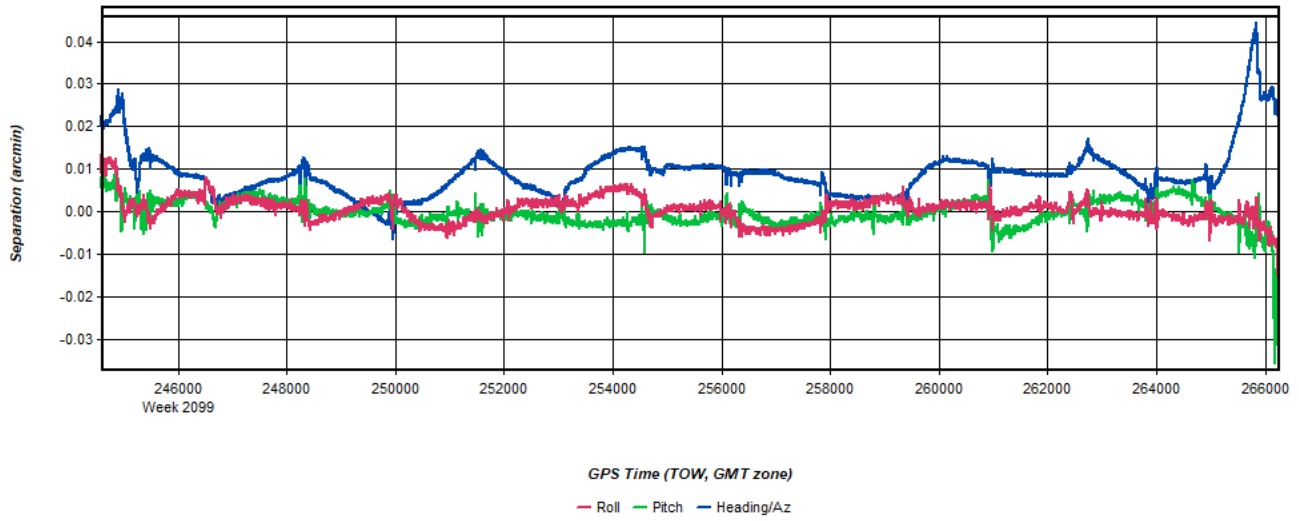
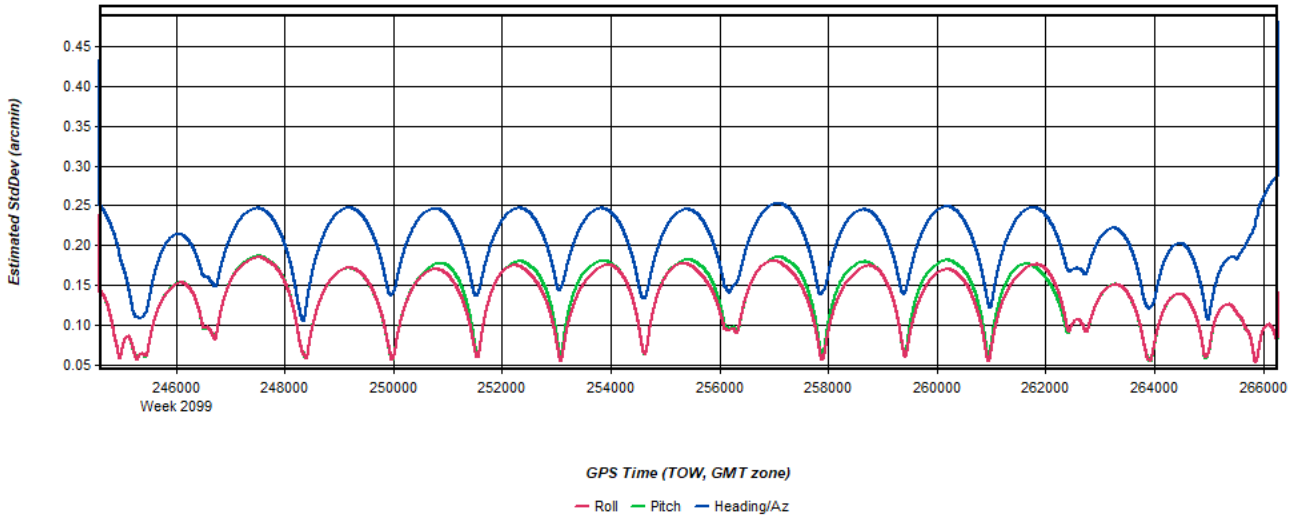
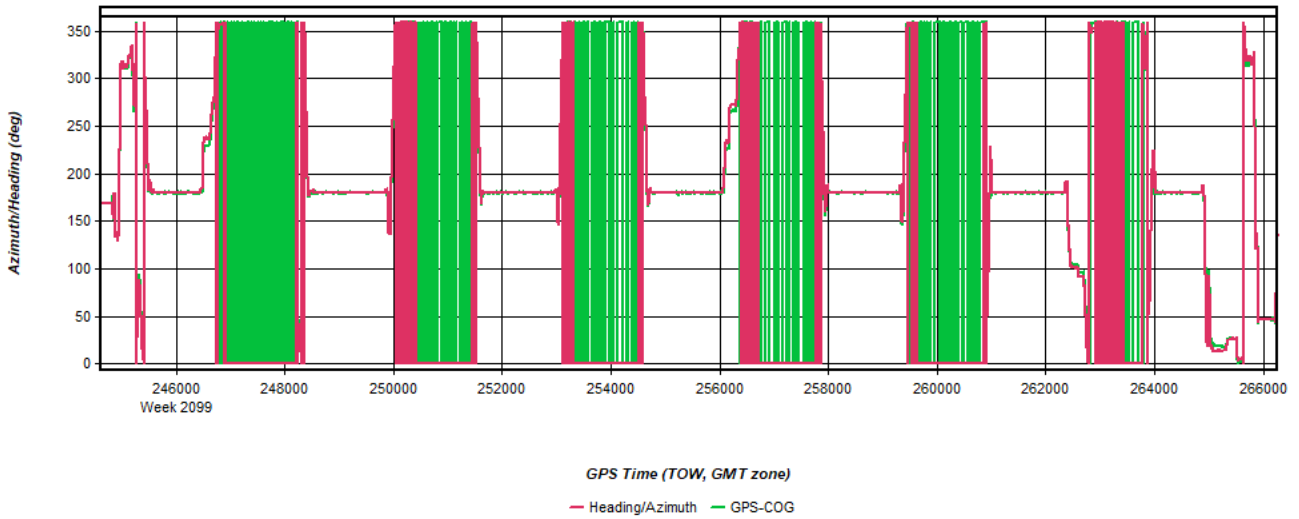


Figure 10: 20200331195521_4 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20200331195521_4	by Unknown	on 6/8/2020	at 14:59:47
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Figure 11: 20200331195521_4 [Smoothed TC Combined] - Azimuth Plot



Process	20200331195521_4	by Unknown	on 6/8/2020	at 14:59:47
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Figure 12: 20200331195521_4 [Smoothed TC Combined] - Roll & Pitch Plot

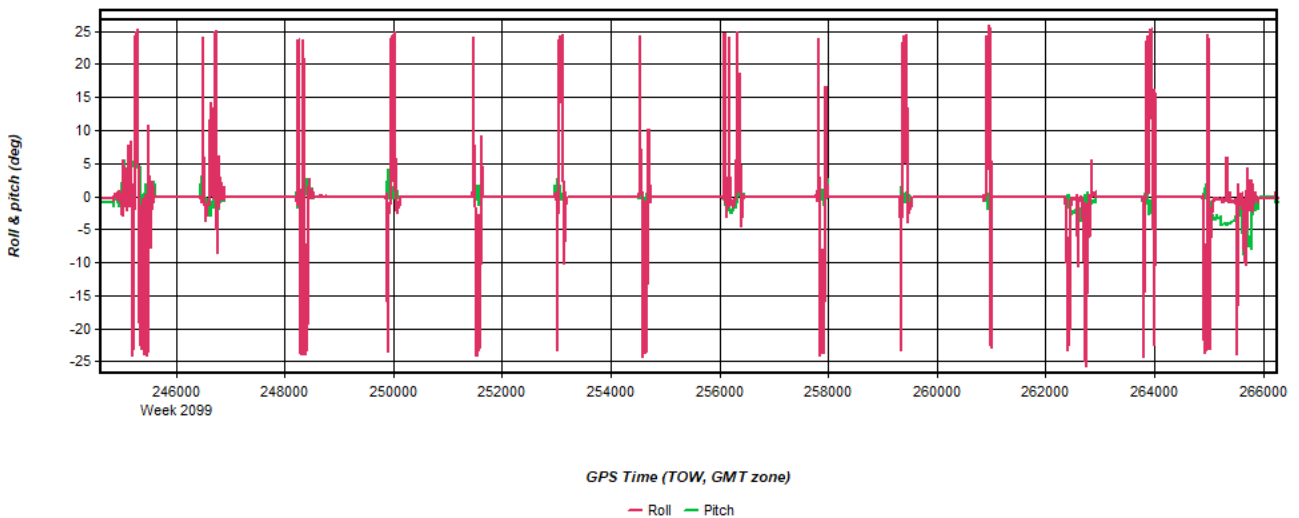


Figure 13: 20200331195521_4 [Smoothed TC Combined] - Velocity Profile Plot

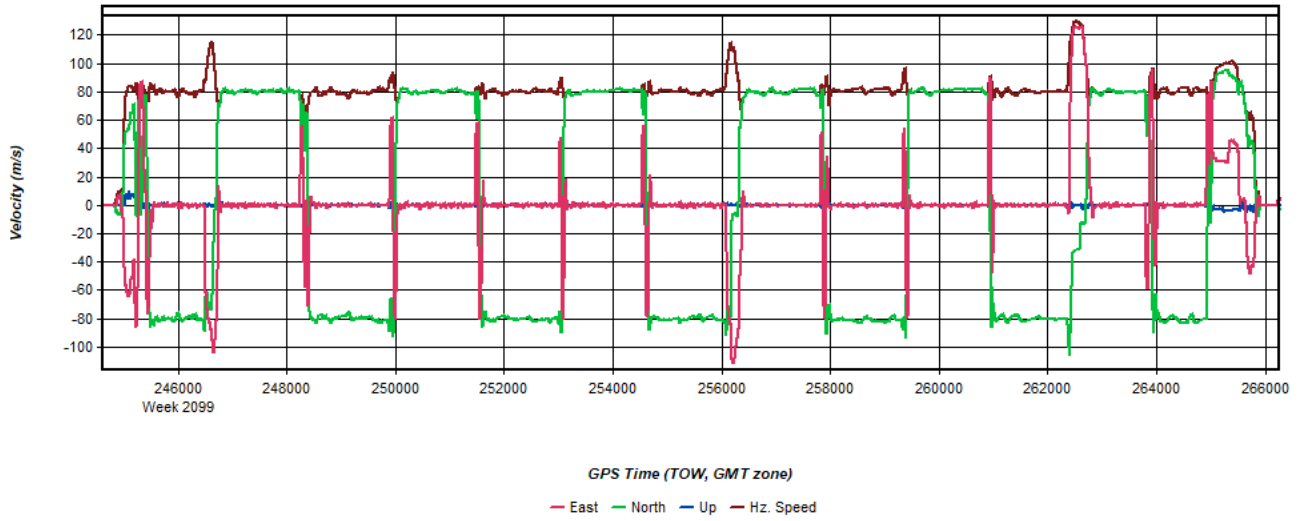


Figure 14: 20200331195521_4 [Smoothed TC Combined] - Body Frame Velocity Plot

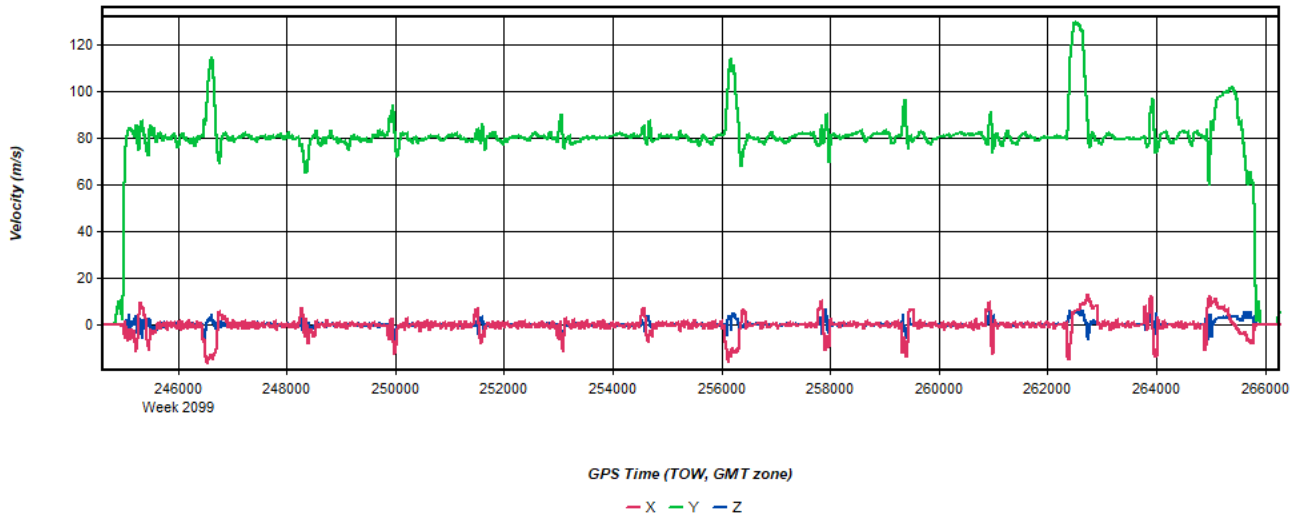


Figure 15: 20200331195521_4 [Smoothed TC Combined] - Height Profile Plot

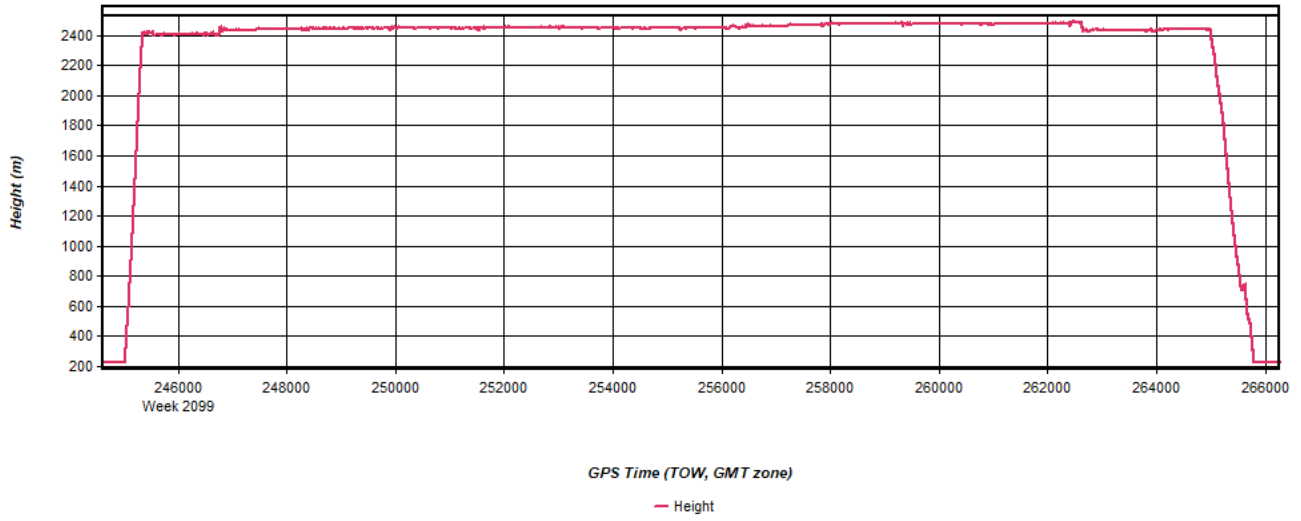


Figure 16: 20200331195521_4 [Smoothed TC Combined] - C/A Code Residual RMS Plot

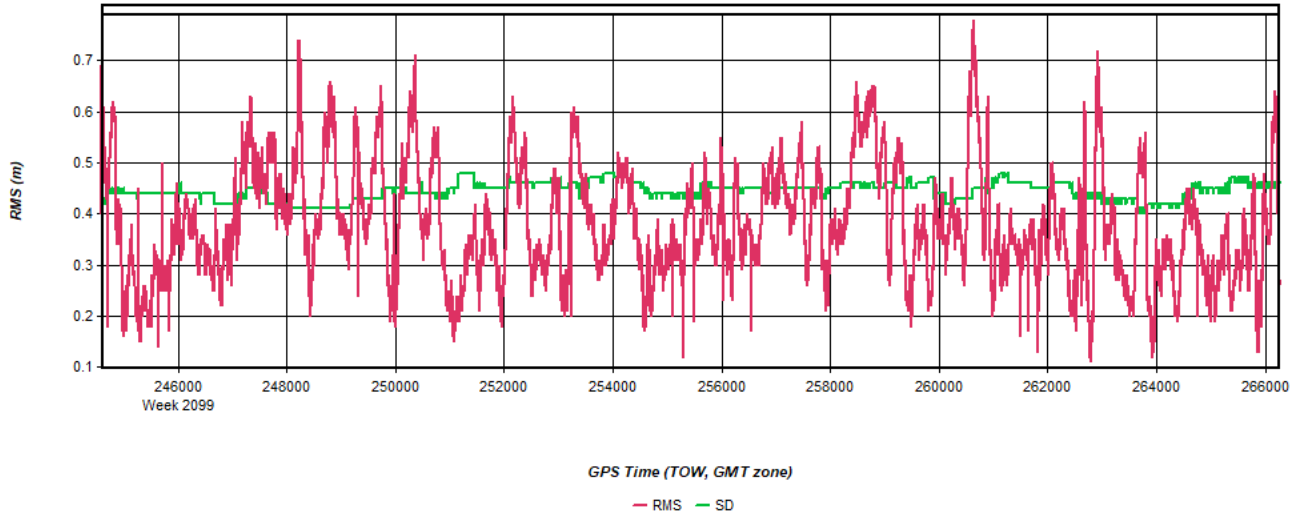


Figure 17: 20200331195521_4 [Smoothed TC Combined] - Carrier Residual RMS Plot

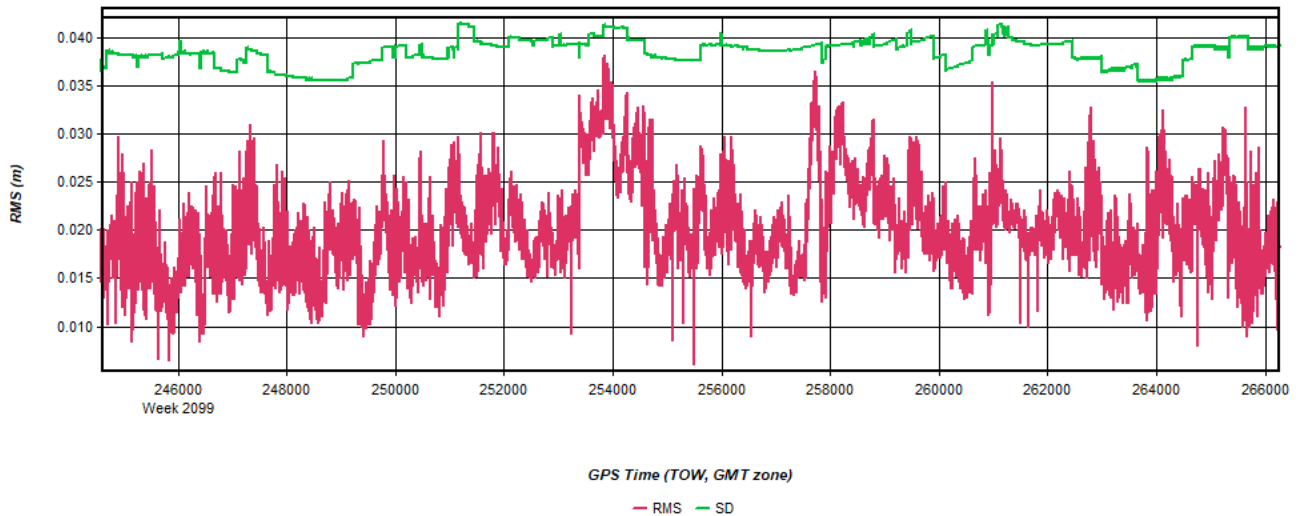


Figure 18: 20200331195521_4 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

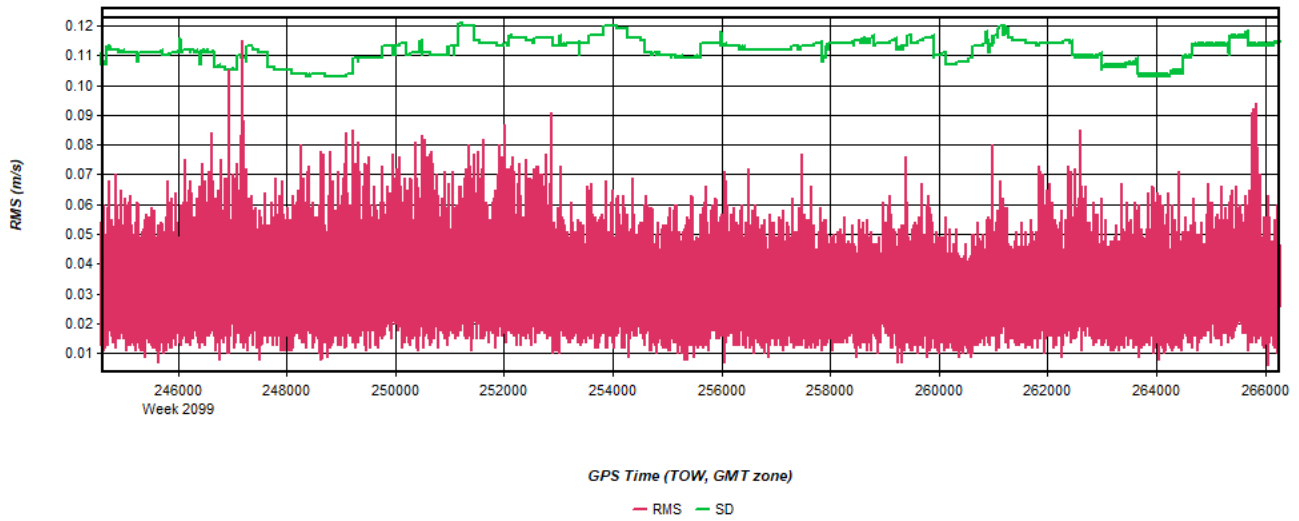


Figure 19: 20200331195521_4 [Smoothed TC Combined] - Accelerometer Bias Plot

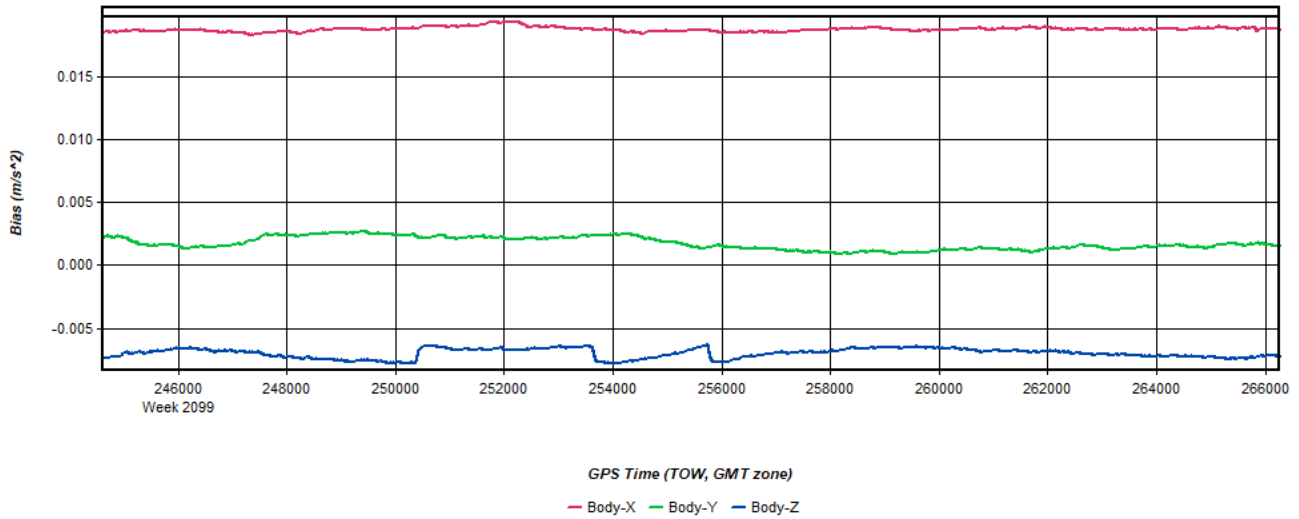
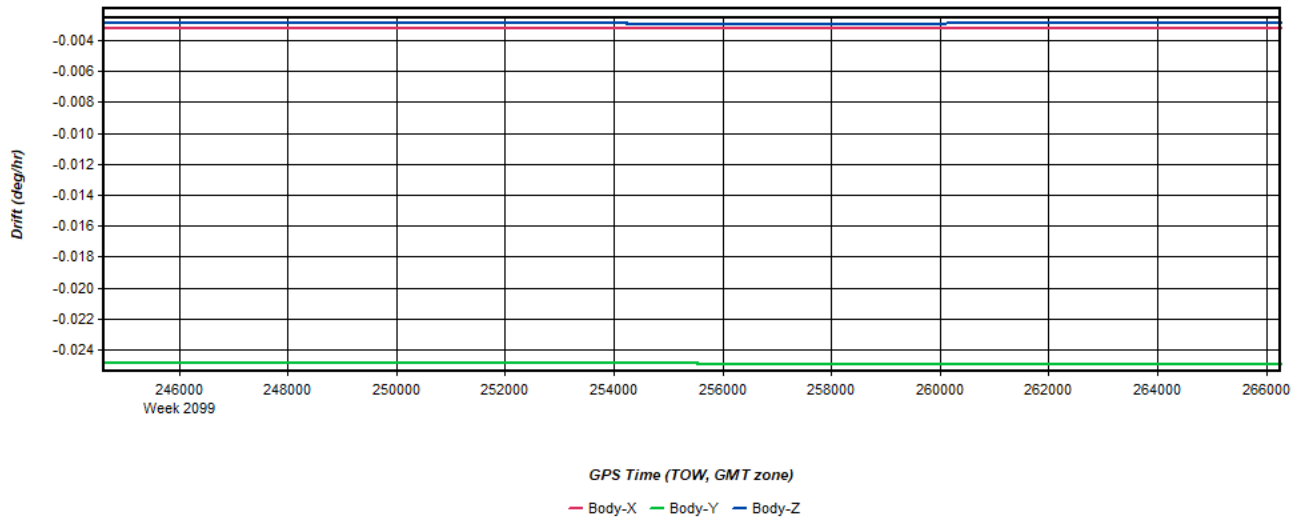


Figure 20: 20200331195521_4 [Smoothed TC Combined] - Gyro Drift Plot

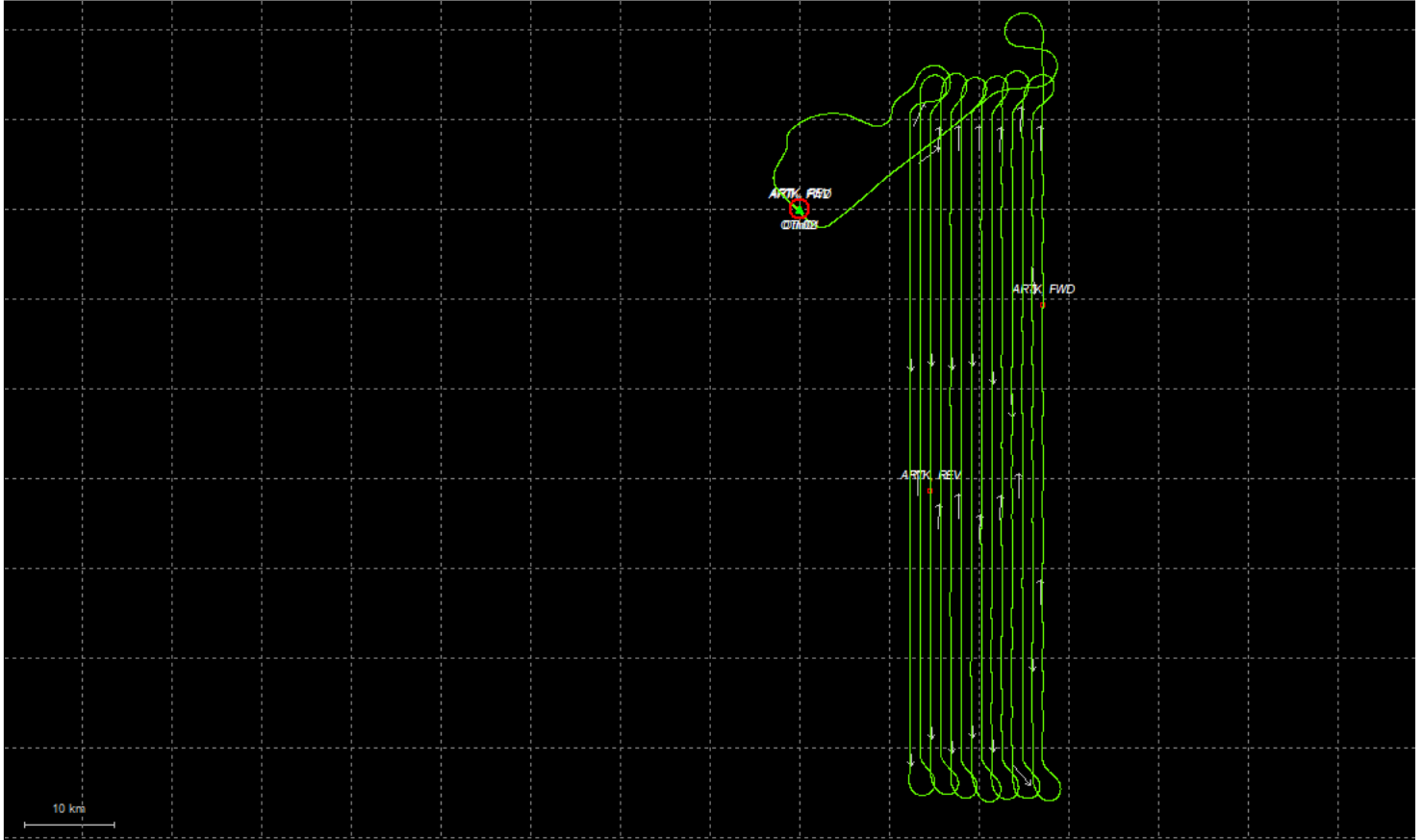


Process	20200331195521_4	by Unknown	on 6/8/2020	at 14:59:47
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Output Results for 20200401184852_5

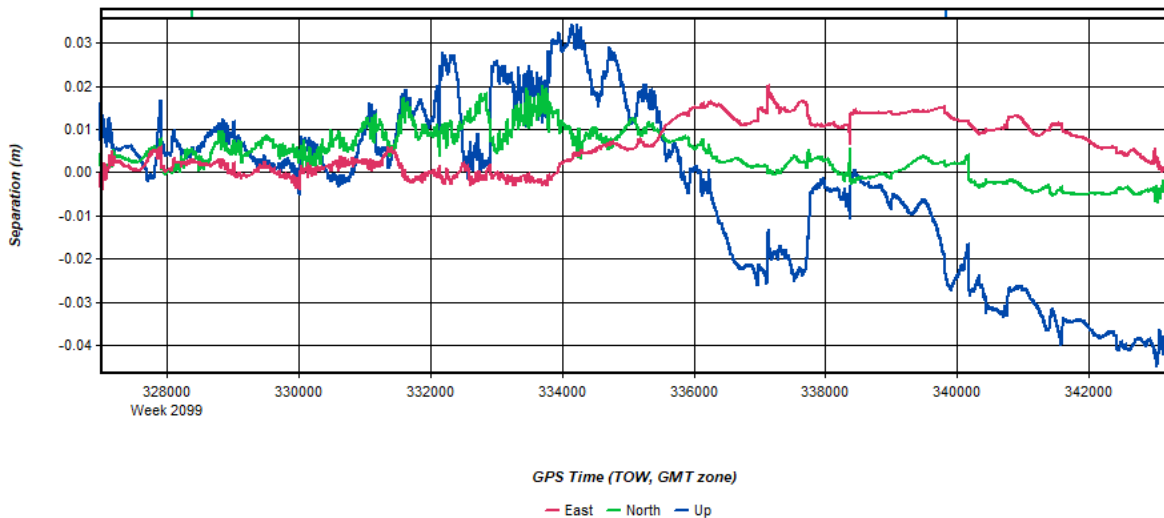
Inertial Explorer Version 8.90.2124
06/04/2020

Figure 1: Smoothed TC Combined - Map



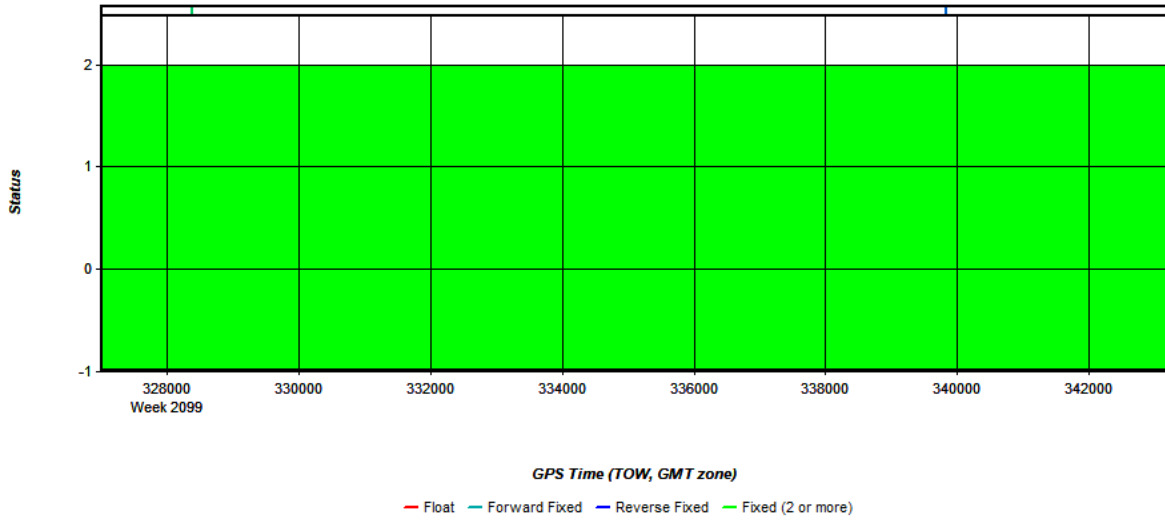
Process	20200401184852_5	by Unknown	on 6/4/2020	at 13:05:25
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Figure 2: 20200401184852_5 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



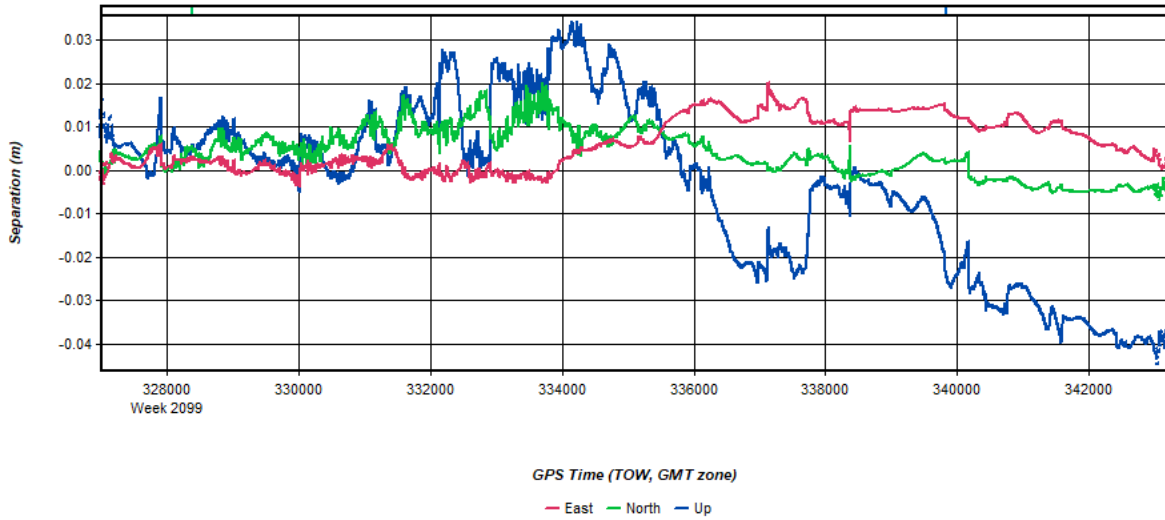
Process	20200401184852_5	by Unknown	on 6/4/2020	at 13:05:25
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Figure 3: 20200401184852_5 [Smoothed TC Combined] - Float or Fixed Ambiguity



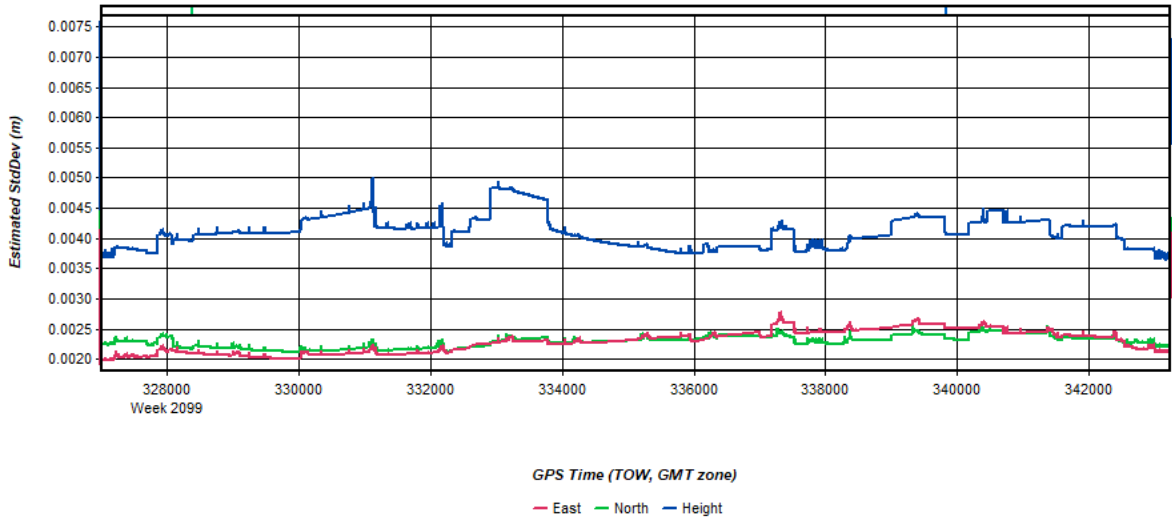
Process	20200401184852_5	by Unknown	on 6/4/2020	at 13:05:25
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Figure 4: 20200401184852_5 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



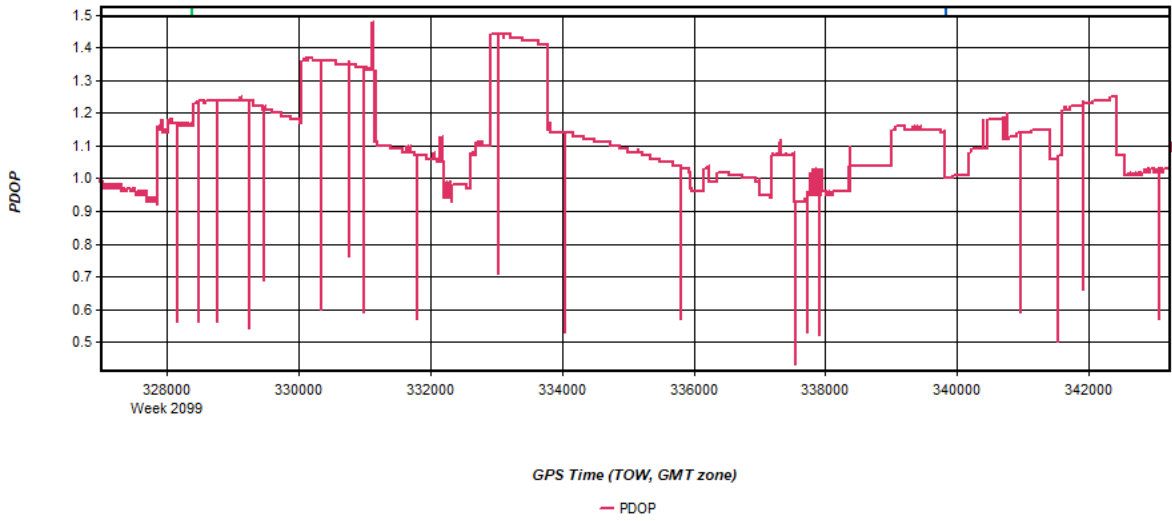
Process	20200401184852_5	by Unknown	on 6/4/2020	at 13:05:25
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Figure 5: 20200401184852_5 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20200401184852_5	by Unknown	on 6/4/2020	at 13:05:25
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Figure 6: 20200401184852_5 [Smoothed TC Combined] - PDOP Plot



Process	20200401184852_5	by Unknown	on 6/4/2020	at 13:05:25
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Figure 7: 20200401184852_5 [Smoothed TC Combined] - Number of Satellites Line Plot

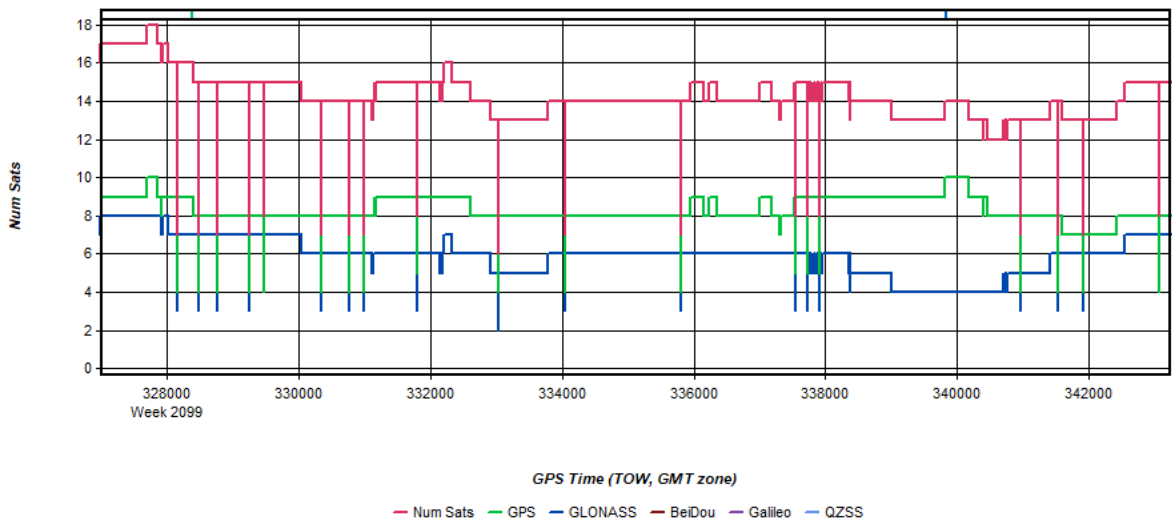


Figure 8: 20200401184852_5 [Smoothed TC Combined] - Status flag for IMU processing

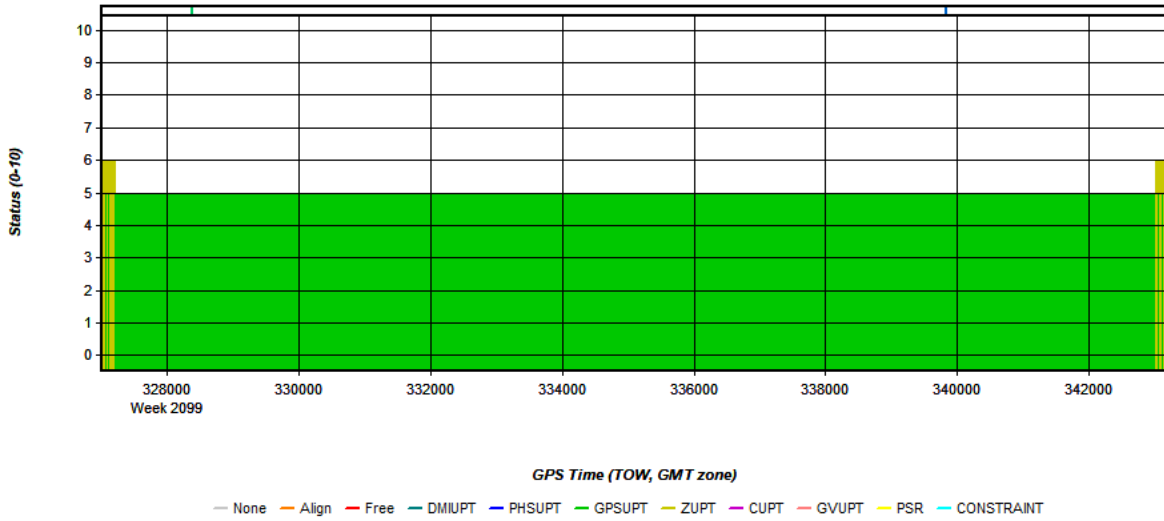


Figure 9: 20200401184852_5 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

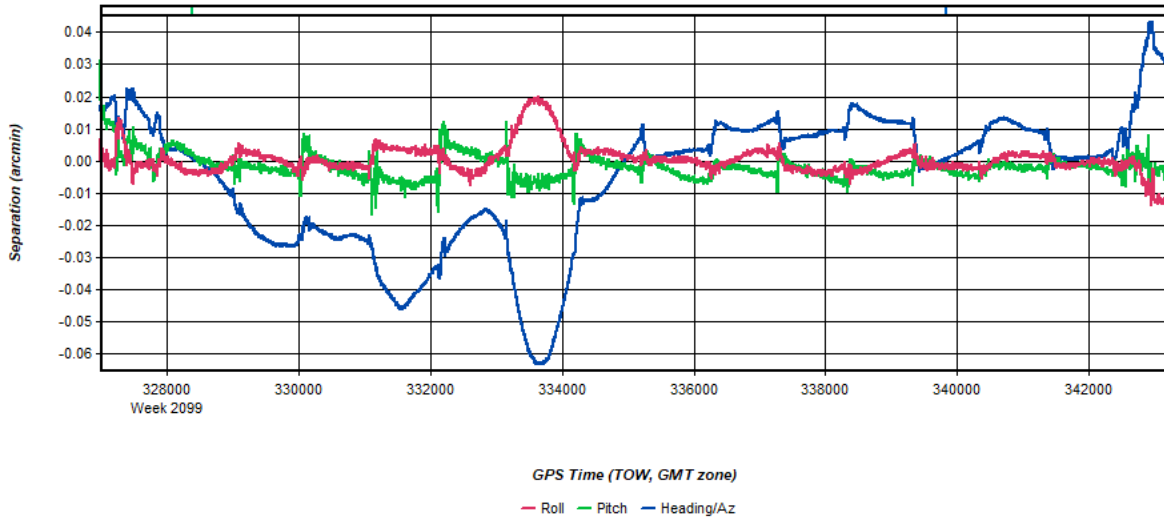
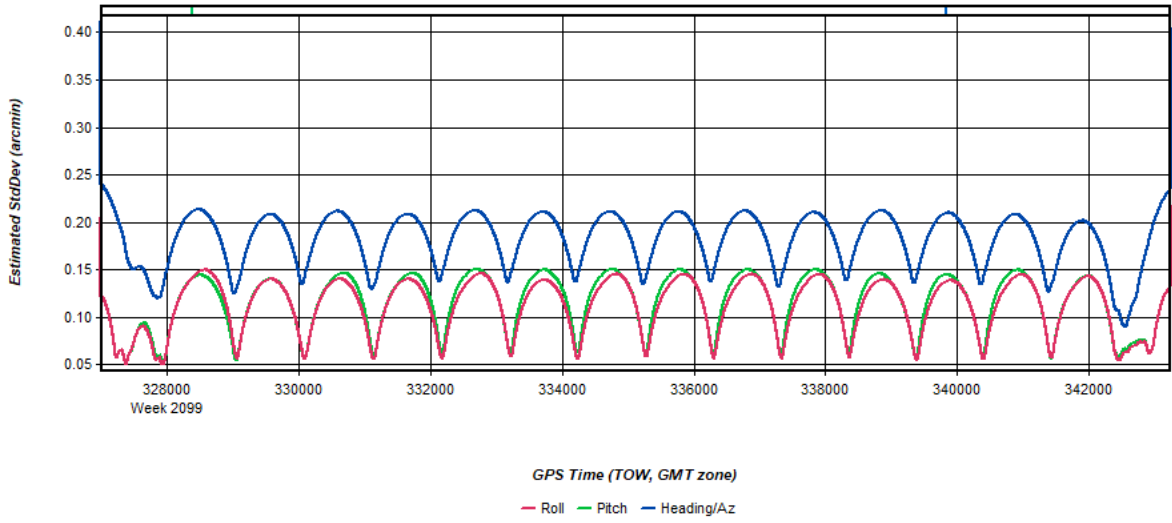
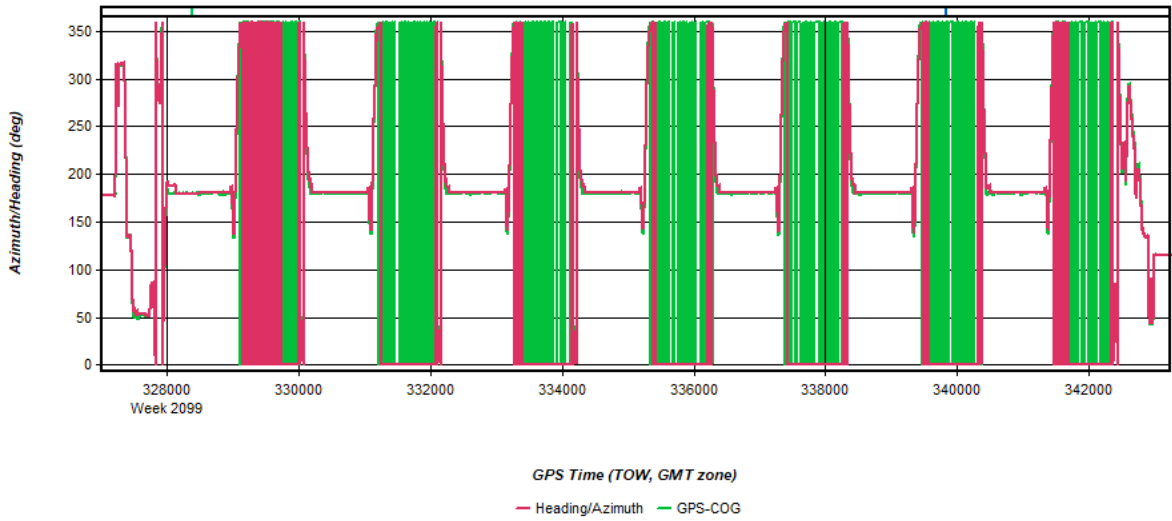


Figure 10: 20200401184852_5 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20200401184852_5	by Unknown	on 6/4/2020	at 13:05:25
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Figure 11: 20200401184852_5 [Smoothed TC Combined] - Azimuth Plot



Process	20200401184852_5	by Unknown	on 6/4/2020	at 13:05:25
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Figure 12: 20200401184852_5 [Smoothed TC Combined] - Roll & Pitch Plot

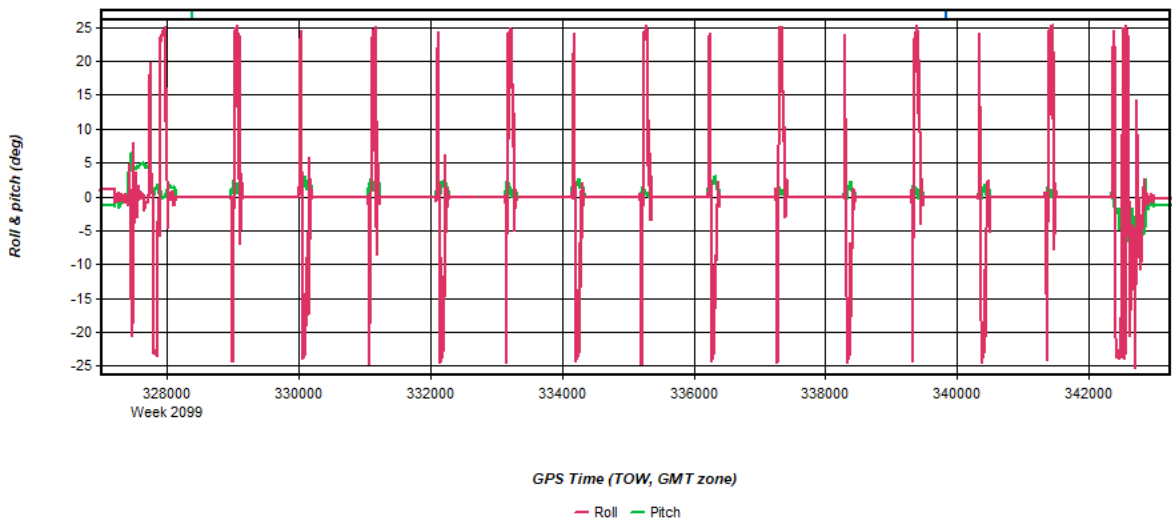


Figure 13: 20200401184852_5 [Smoothed TC Combined] - Velocity Profile Plot

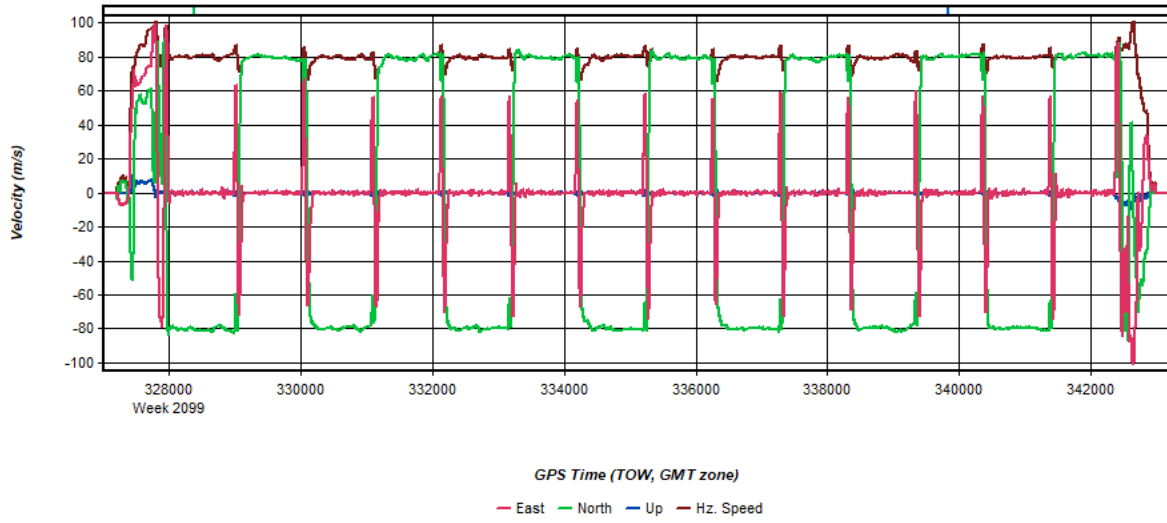


Figure 14: 20200401184852_5 [Smoothed TC Combined] - Body Frame Velocity Plot

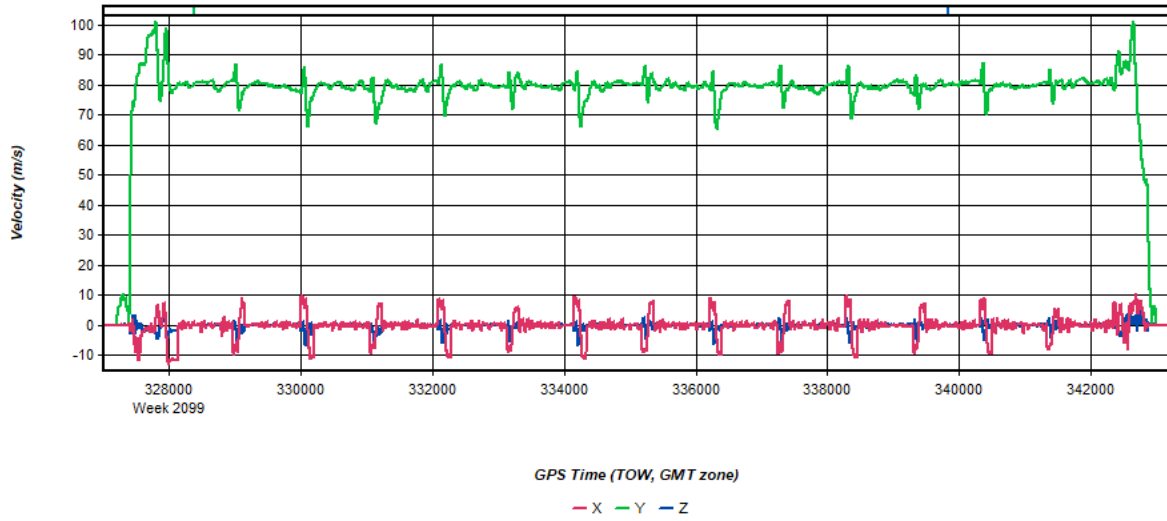


Figure 15: 20200401184852_5 [Smoothed TC Combined] - Height Profile Plot

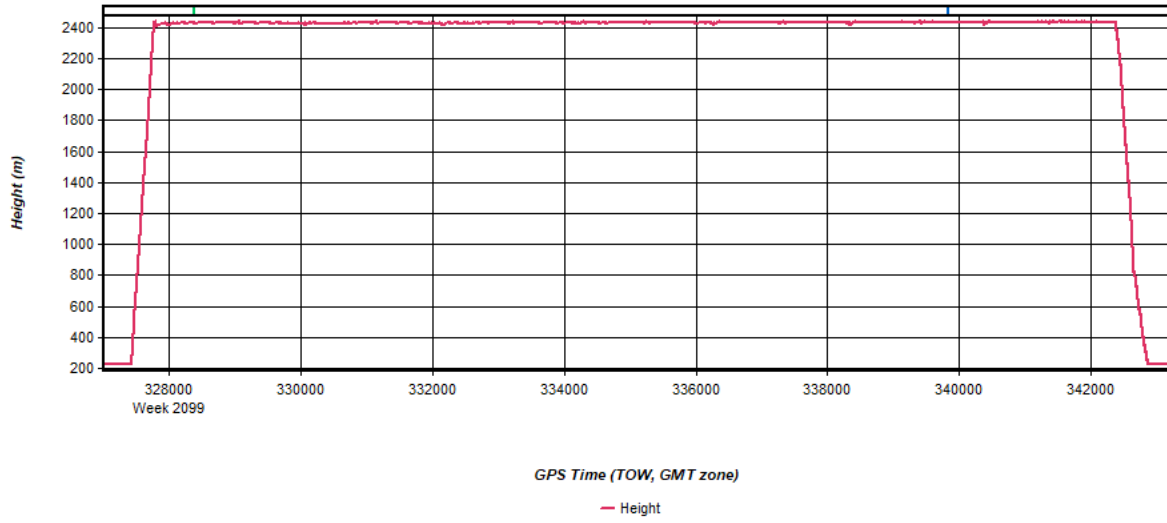


Figure 16: 20200401184852_5 [Smoothed TC Combined] - C/A Code Residual RMS Plot

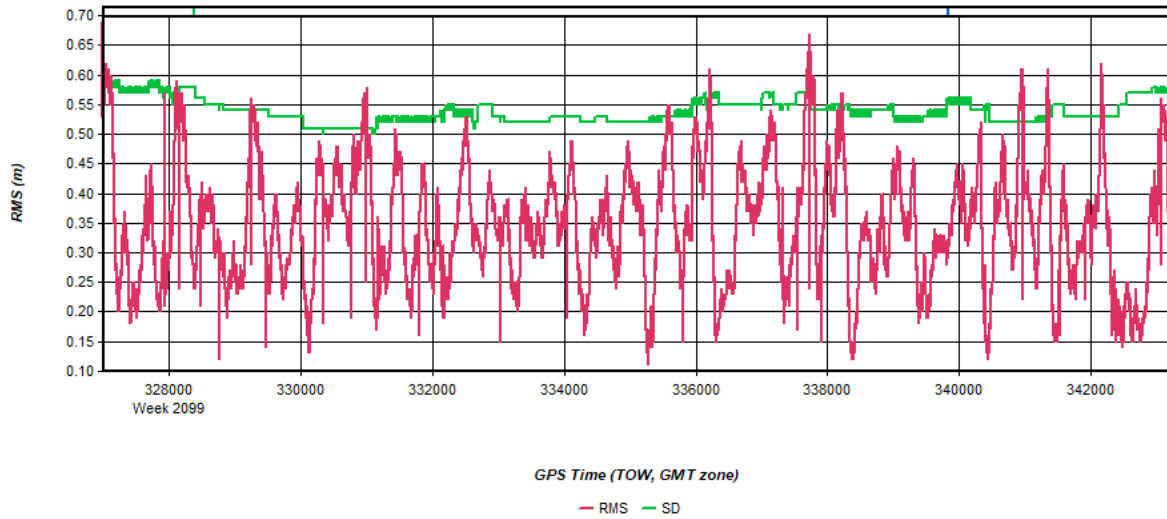


Figure 17: 20200401184852_5 [Smoothed TC Combined] - Carrier Residual RMS Plot

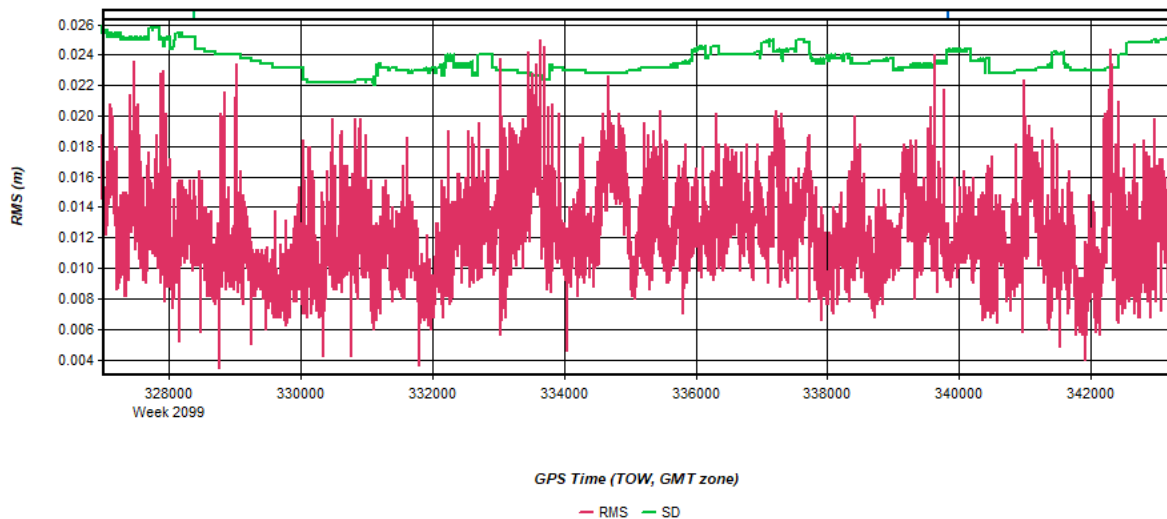


Figure 18: 20200401184852_5 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

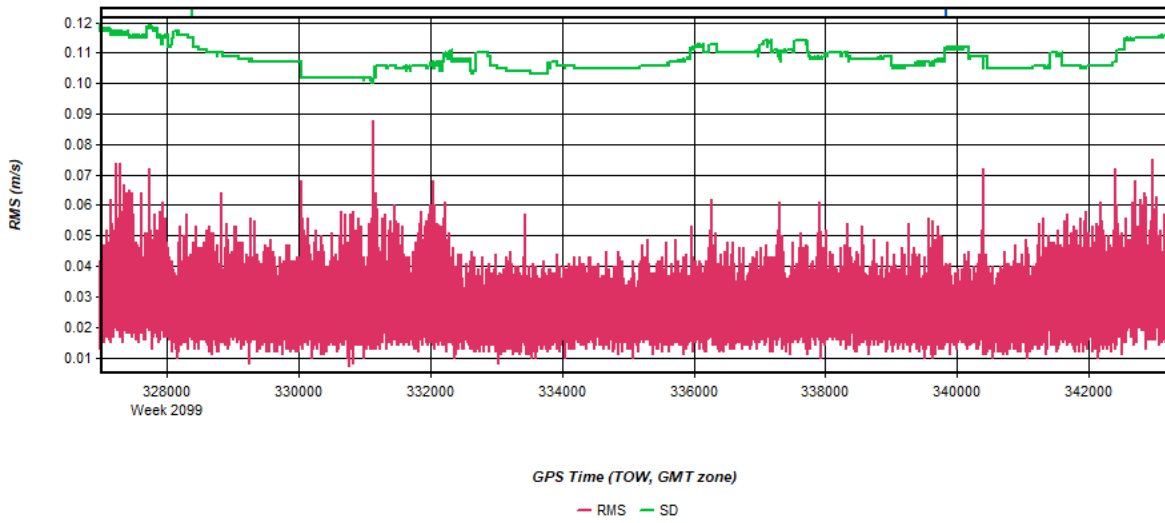


Figure 19: 20200401184852_5 [Smoothed TC Combined] - Accelerometer Bias Plot

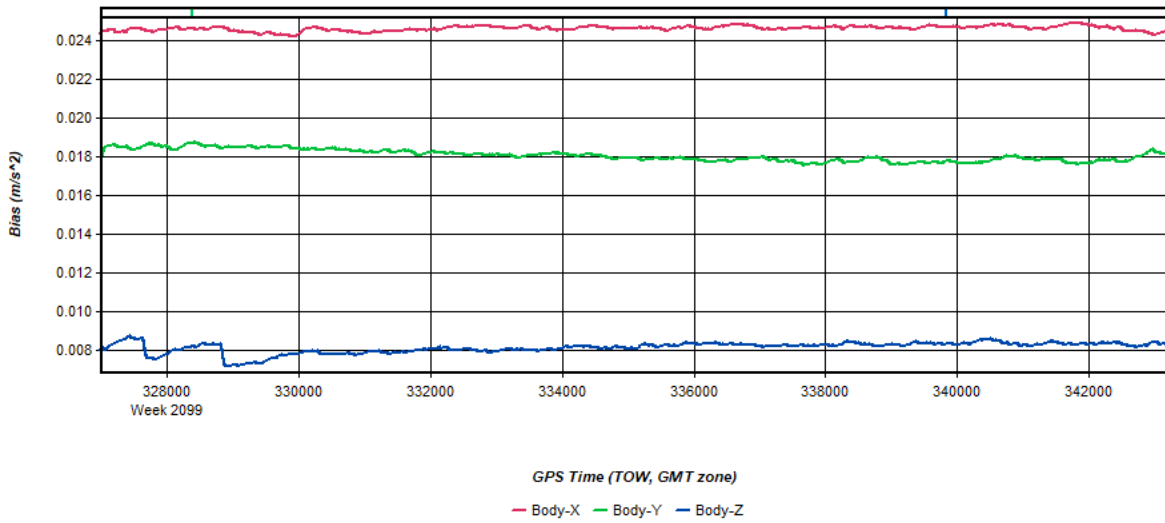
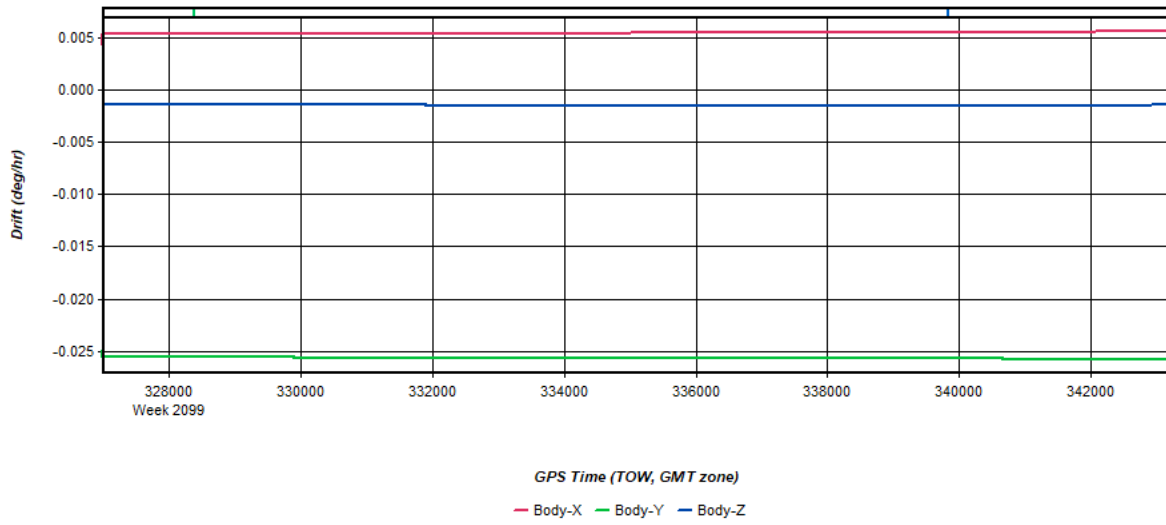


Figure 20: 20200401184852_5 [Smoothed TC Combined] - Gyro Drift Plot

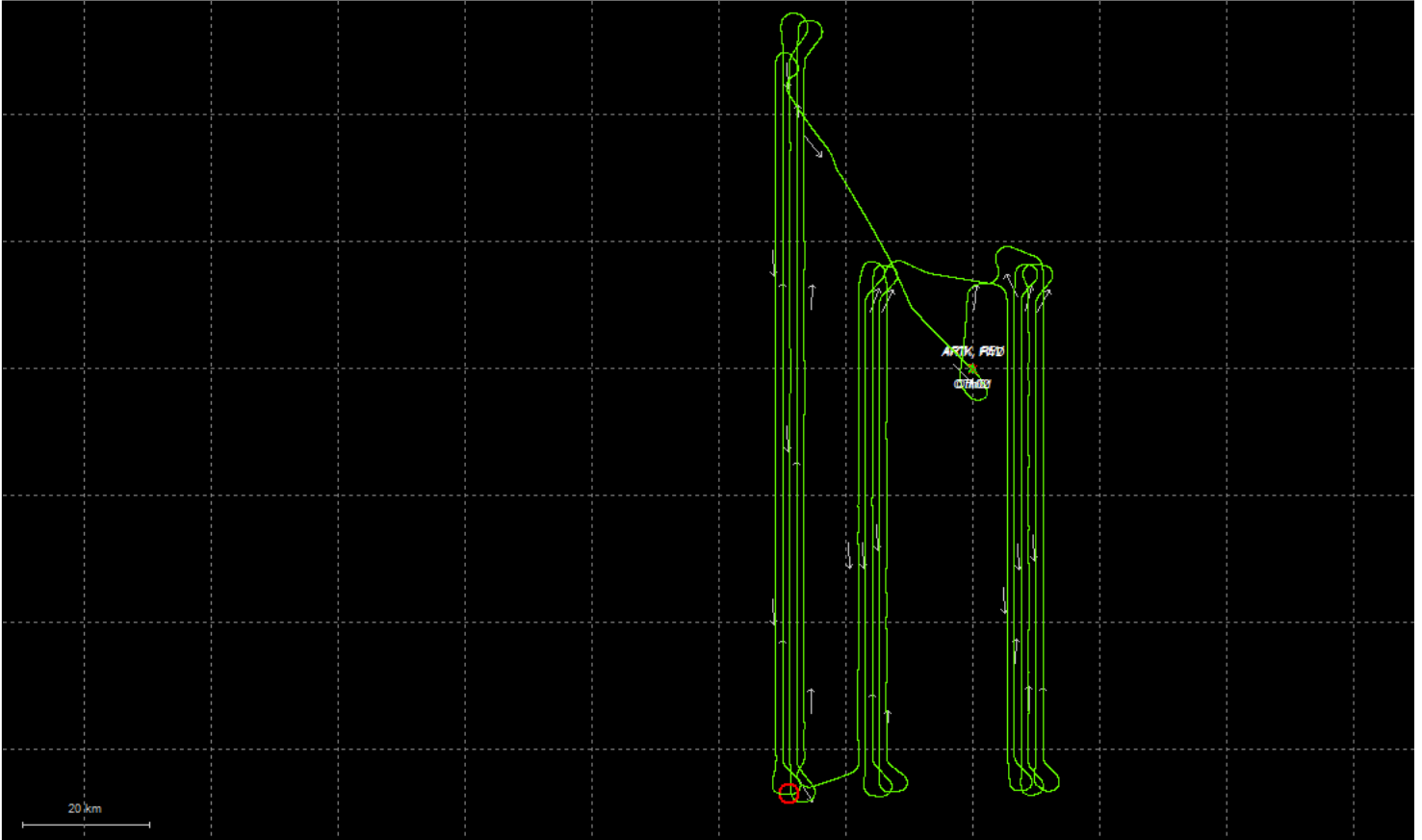


Process	20200401184852_5	by Unknown	on 6/4/2020	at 13:05:25
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Output Results for 20200402001409_6

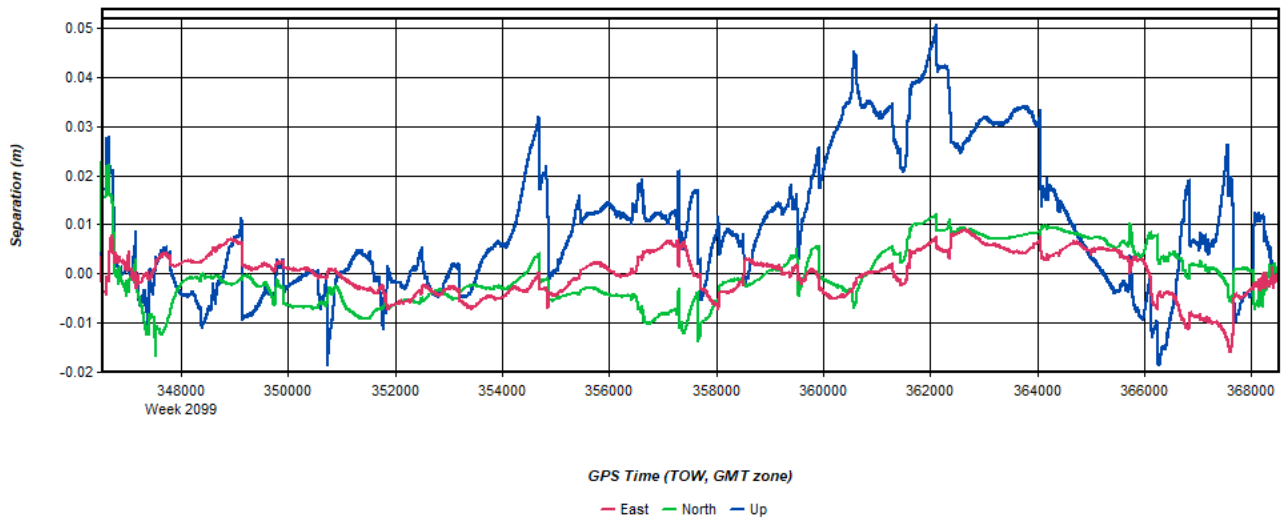
Inertial Explorer Version 8.90.2124
06/04/2020

Figure 1: Smoothed TC Combined - Map



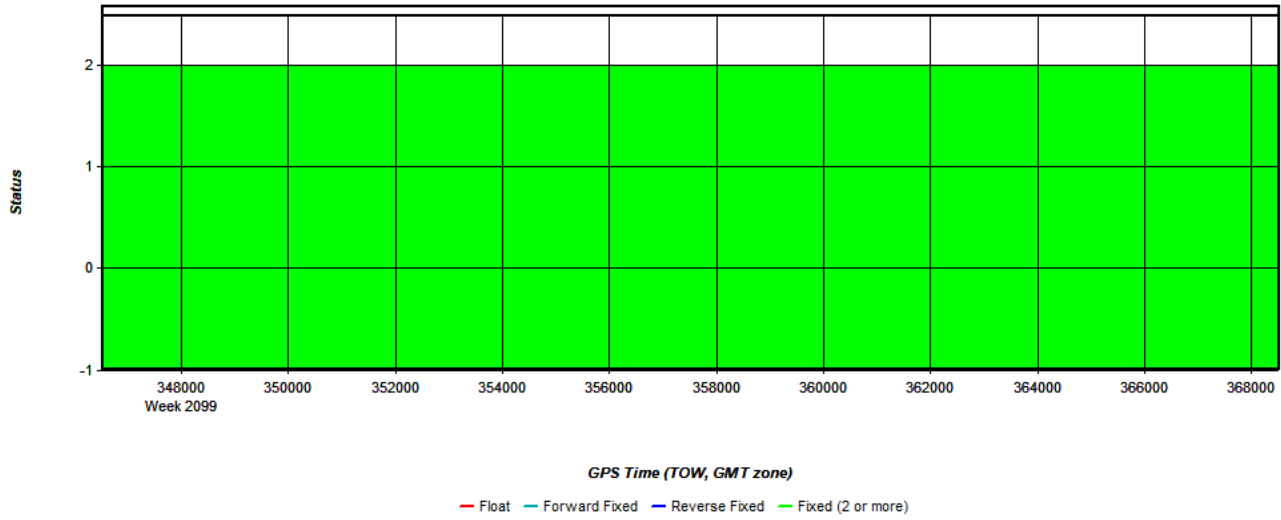
Process	20200402001409_6	by Unknown	on 6/4/2020	at 17:11:49
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Figure 2: 20200402001409_6 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



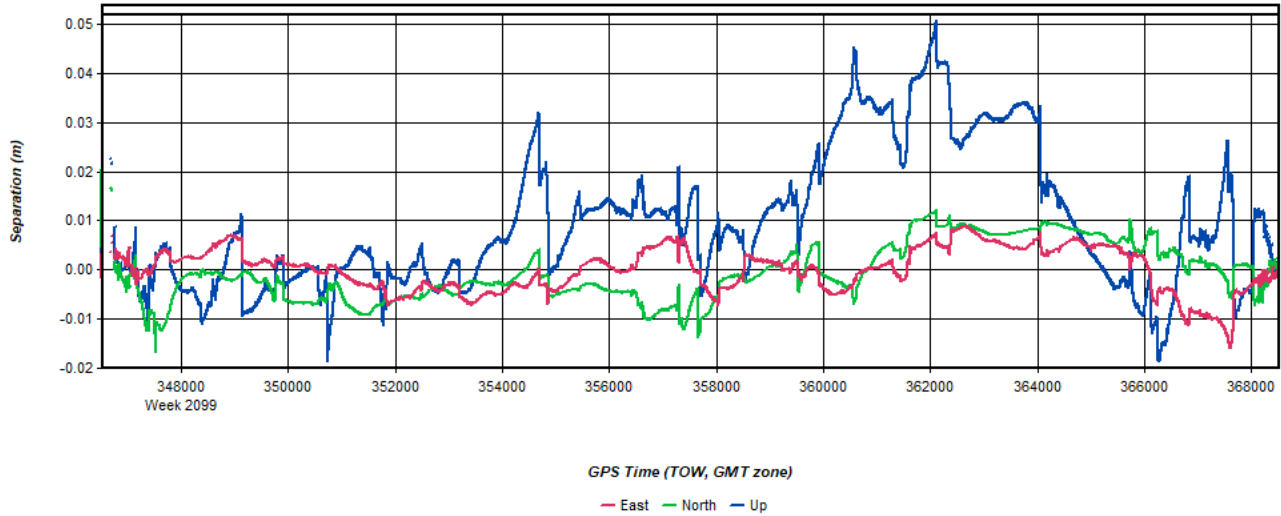
Process	20200402001409_6	by Unknown	on 6/4/2020	at 17:11:49
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Figure 3: 20200402001409_6 [Smoothed TC Combined] - Float or Fixed Ambiguity



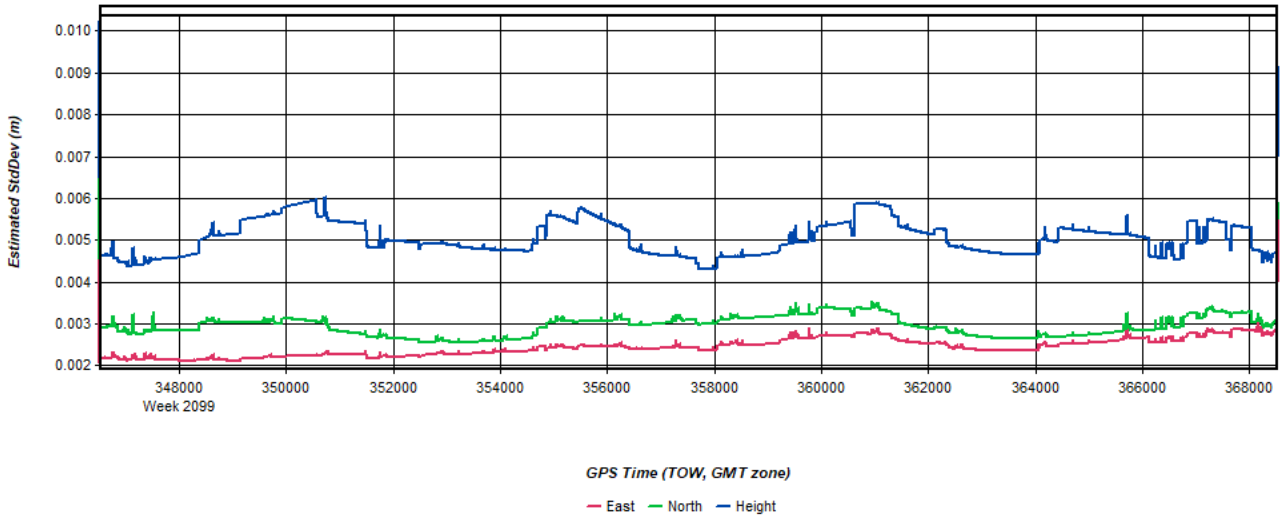
Process	20200402001409_6	by Unknown	on 6/4/2020	at 17:11:49
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Figure 4: 20200402001409_6 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



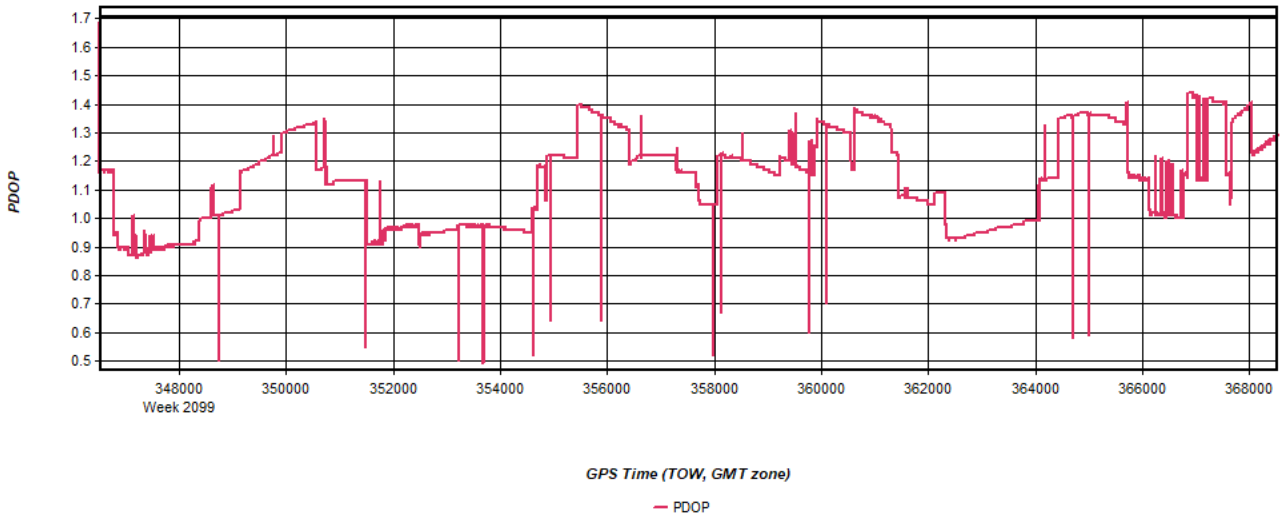
Process	20200402001409_6	by Unknown	on 6/4/2020	at 17:11:49
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Figure 5: 20200402001409_6 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20200402001409_6	by Unknown	on 6/4/2020	at 17:11:49
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Figure 6: 20200402001409_6 [Smoothed TC Combined] - PDOP Plot



Process	20200402001409_6	by Unknown	on 6/4/2020	at 17:11:49
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Figure 7: 20200402001409_6 [Smoothed TC Combined] - Number of Satellites Line Plot

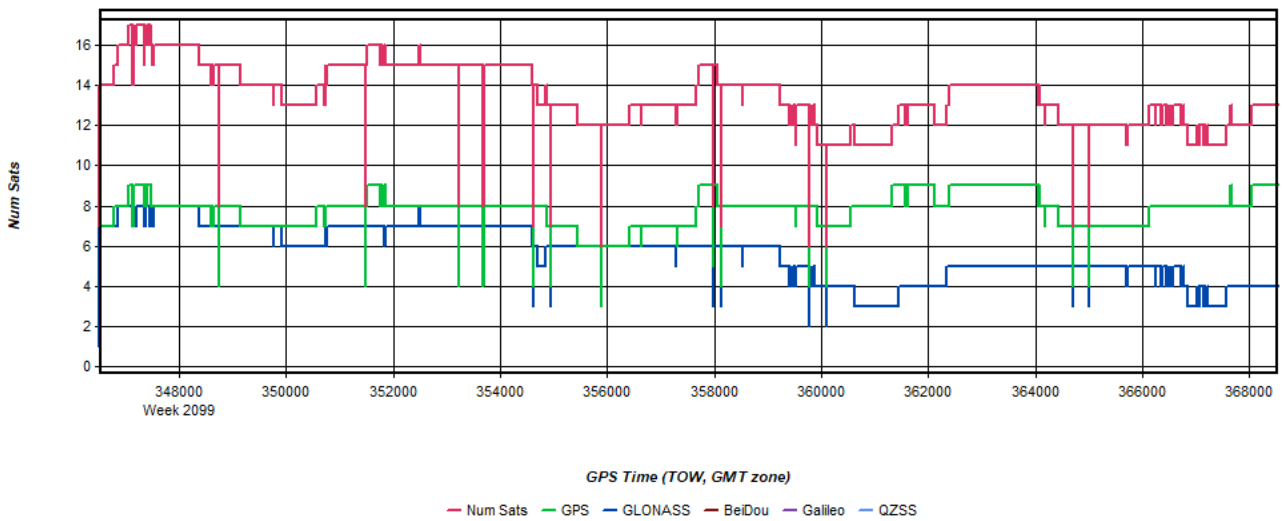


Figure 8: 20200402001409_6 [Smoothed TC Combined] - Status flag for IMU processing

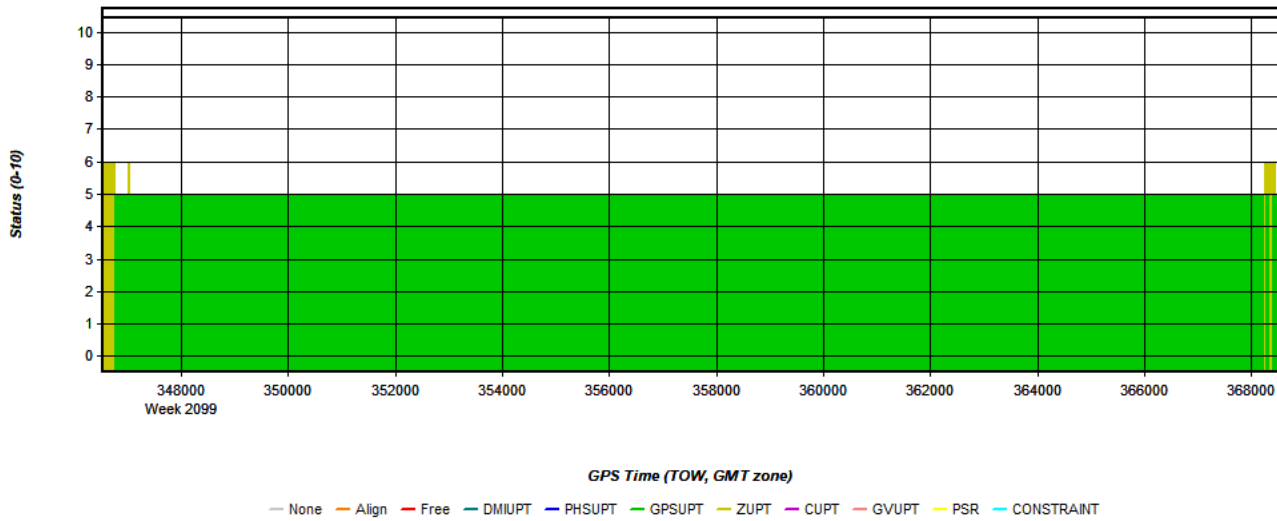


Figure 9: 20200402001409_6 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

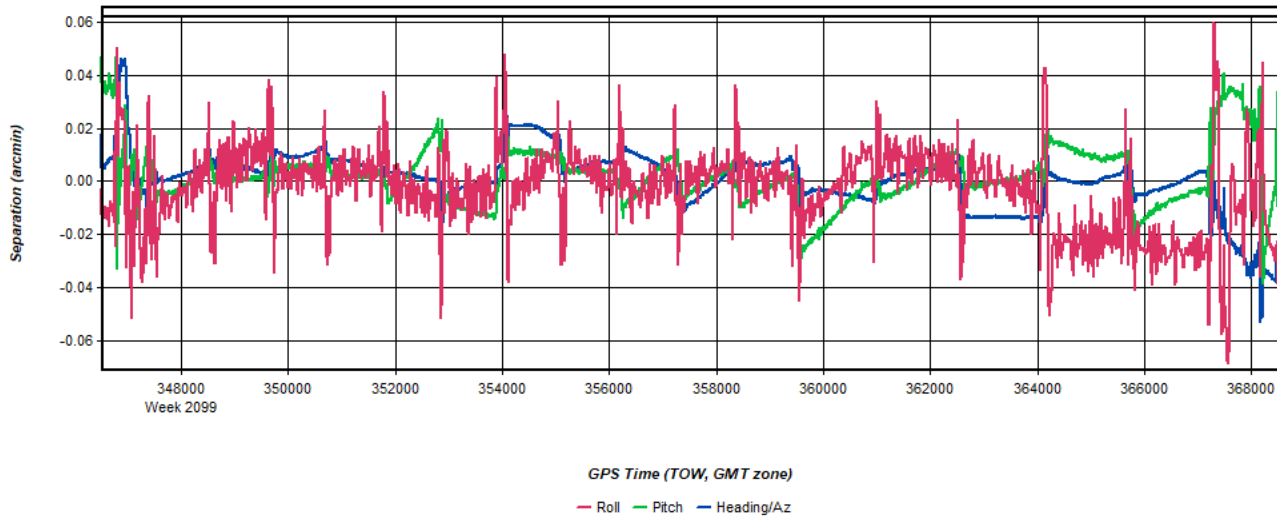
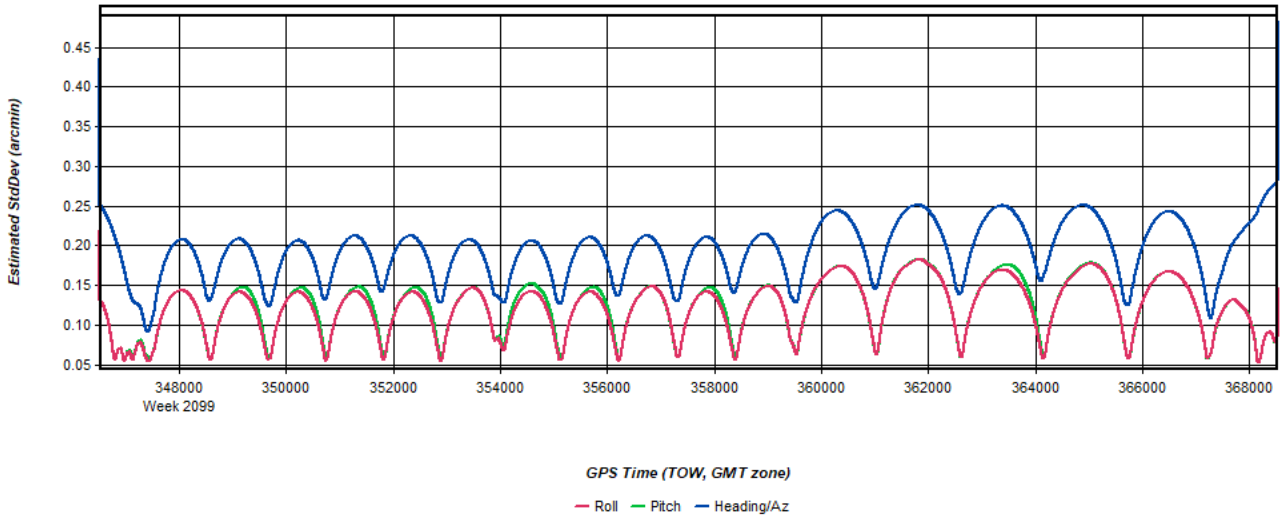
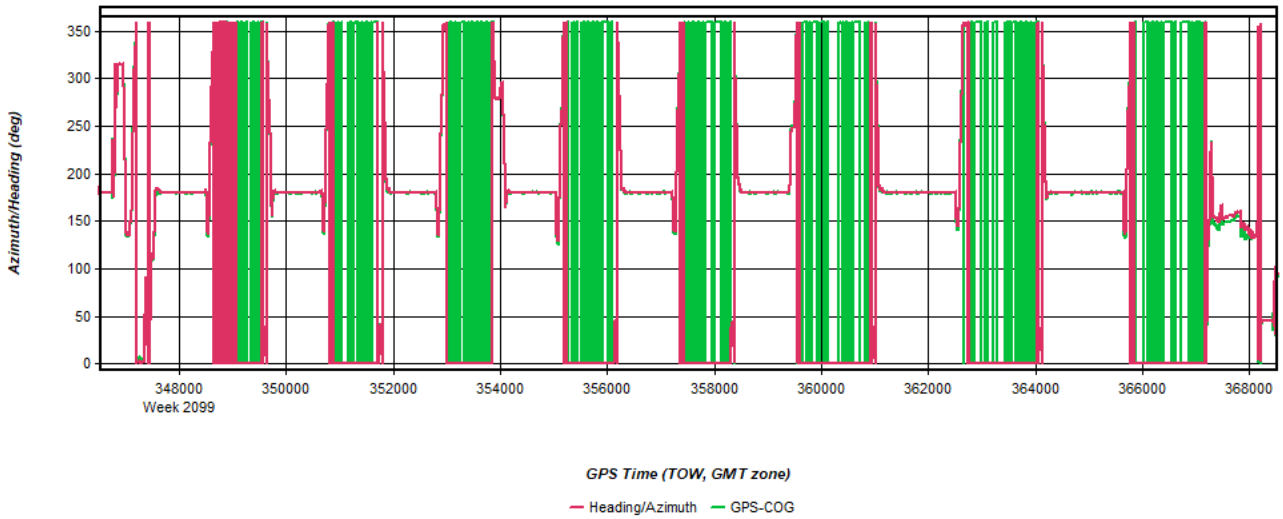


Figure 10: 20200402001409_6 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20200402001409_6	by Unknown	on 6/4/2020	at 17:11:49
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Figure 11: 20200402001409_6 [Smoothed TC Combined] - Azimuth Plot



Process	20200402001409_6	by Unknown	on 6/4/2020	at 17:11:49
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Figure 12: 20200402001409_6 [Smoothed TC Combined] - Roll & Pitch Plot

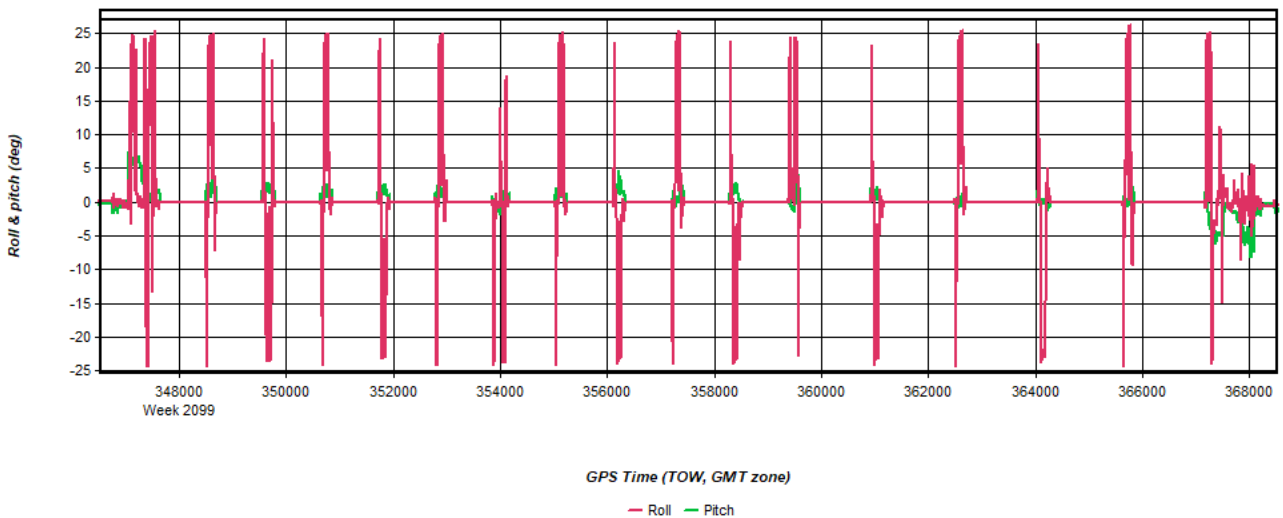


Figure 13: 20200402001409_6 [Smoothed TC Combined] - Velocity Profile Plot

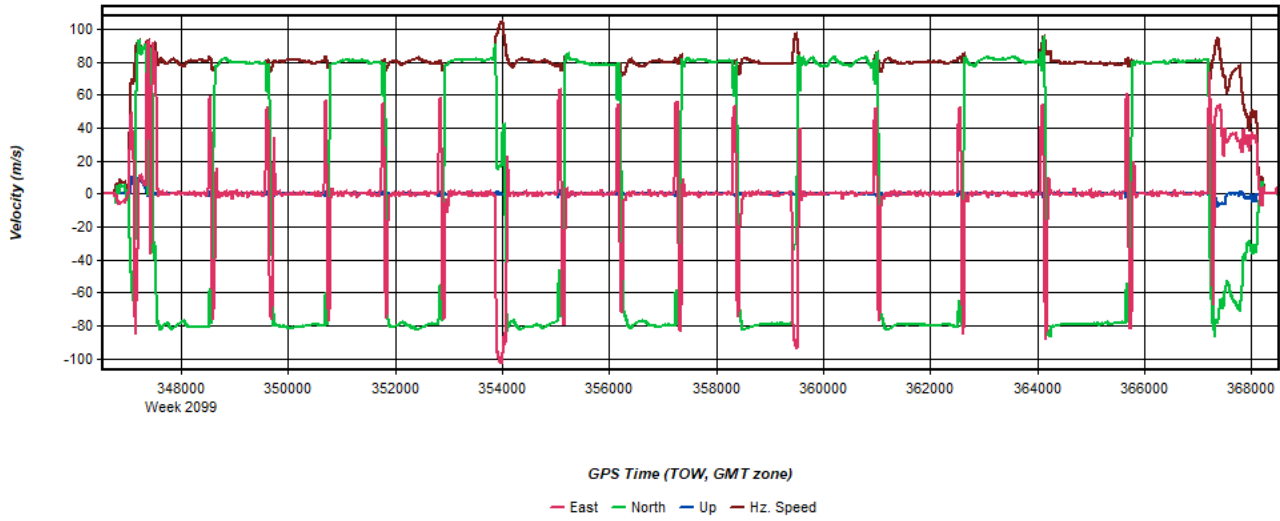


Figure 14: 20200402001409_6 [Smoothed TC Combined] - Body Frame Velocity Plot

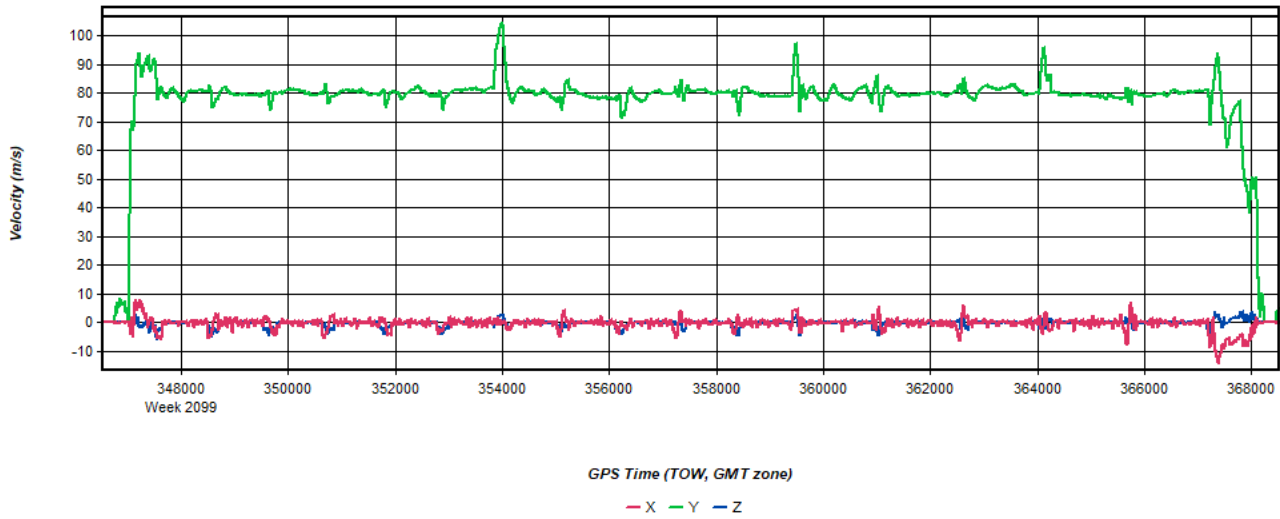


Figure 15: 20200402001409_6 [Smoothed TC Combined] - Height Profile Plot

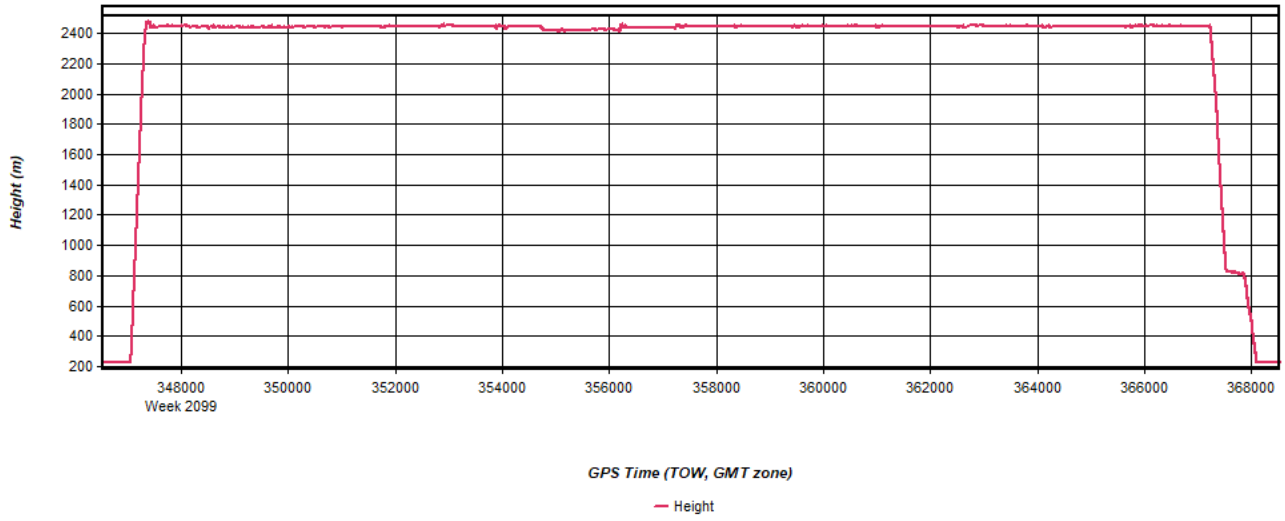


Figure 16: 20200402001409_6 [Smoothed TC Combined] - C/A Code Residual RMS Plot

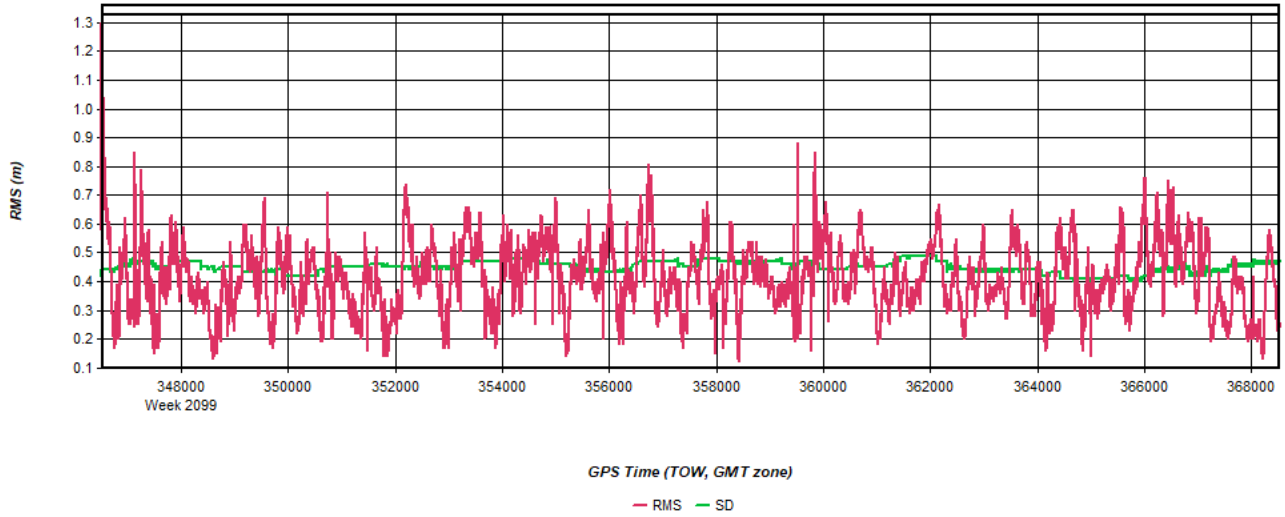


Figure 17: 20200402001409_6 [Smoothed TC Combined] - Carrier Residual RMS Plot

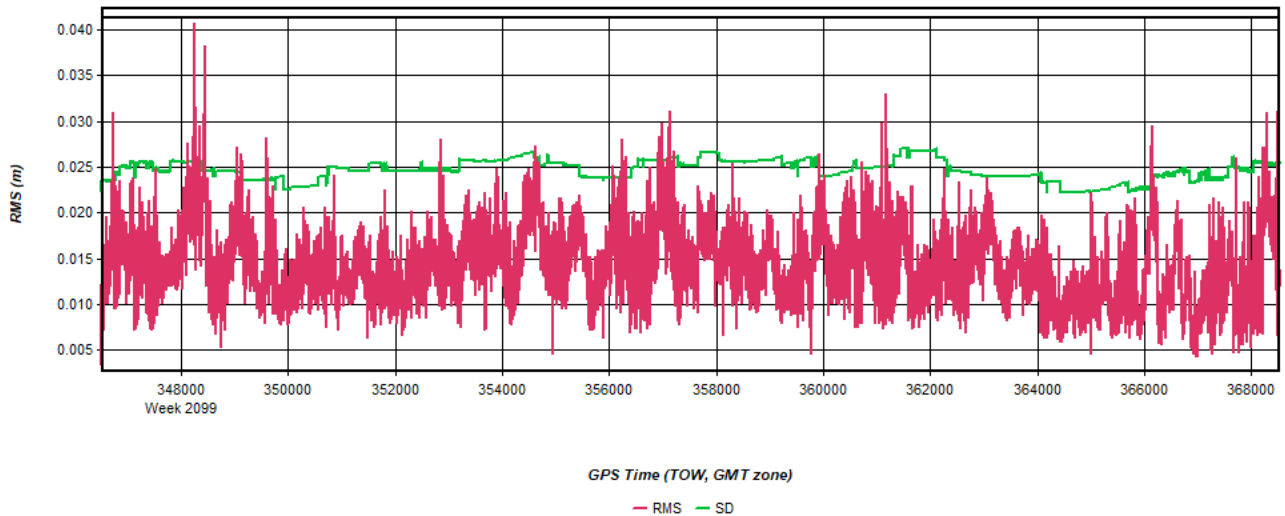


Figure 18: 20200402001409_6 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

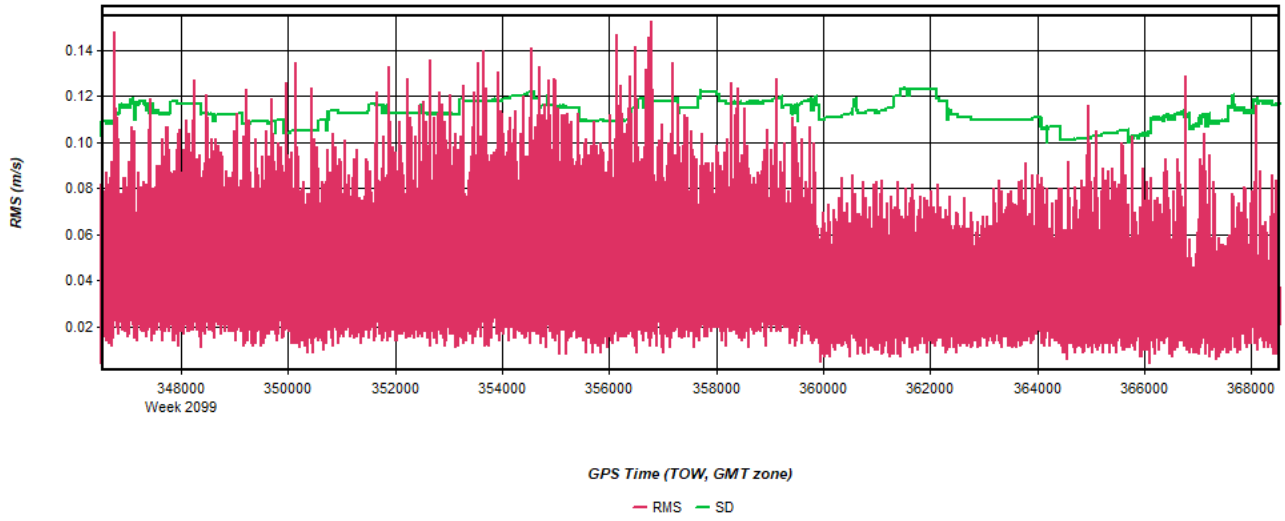


Figure 19: 20200402001409_6 [Smoothed TC Combined] - Accelerometer Bias Plot

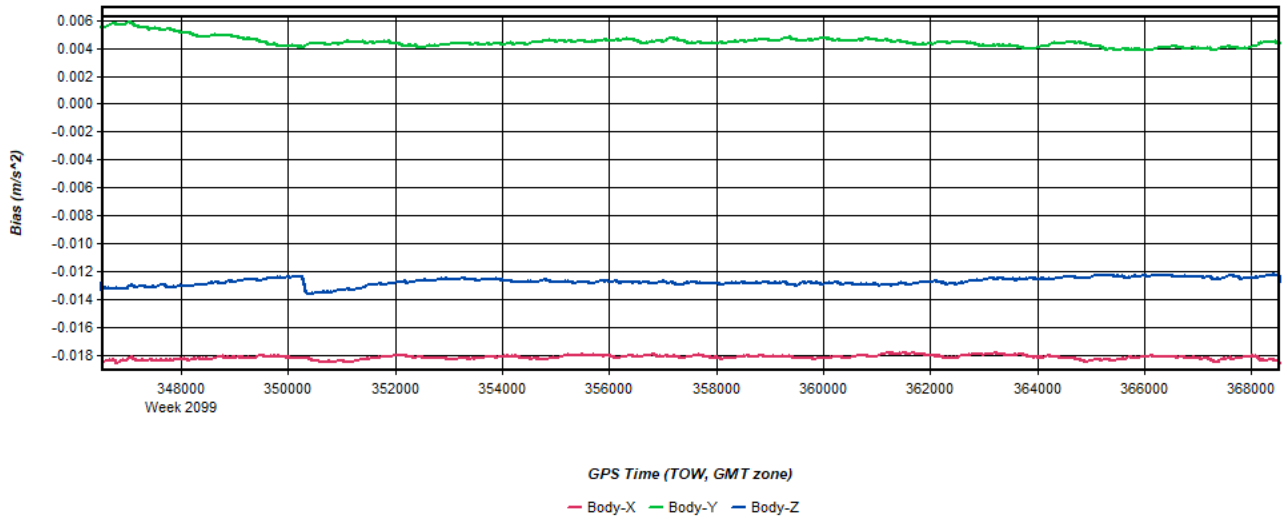
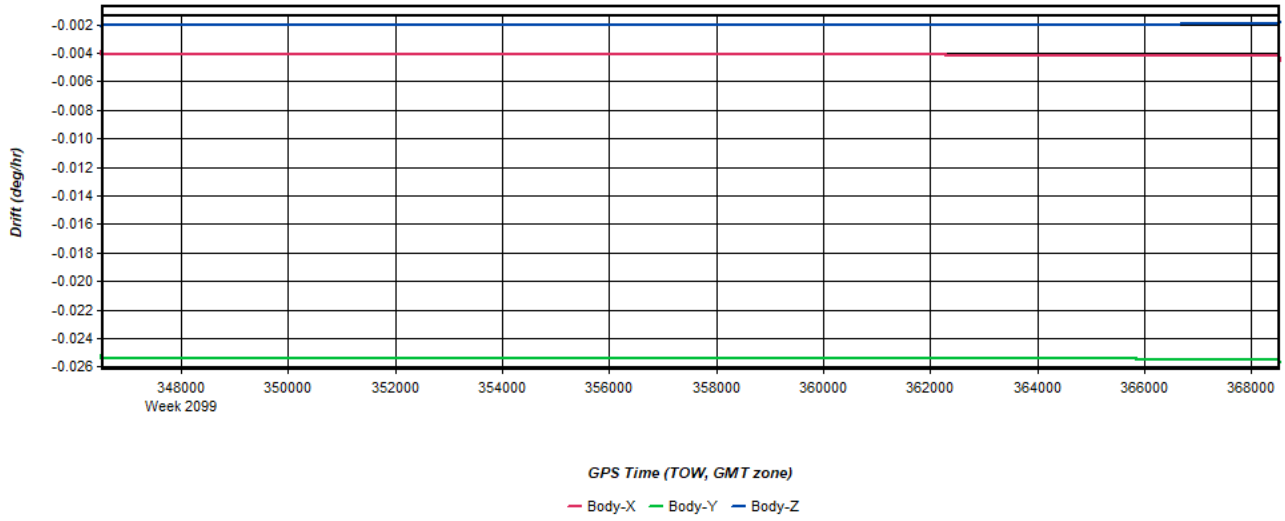


Figure 20: 20200402001409_6 [Smoothed TC Combined] - Gyro Drift Plot

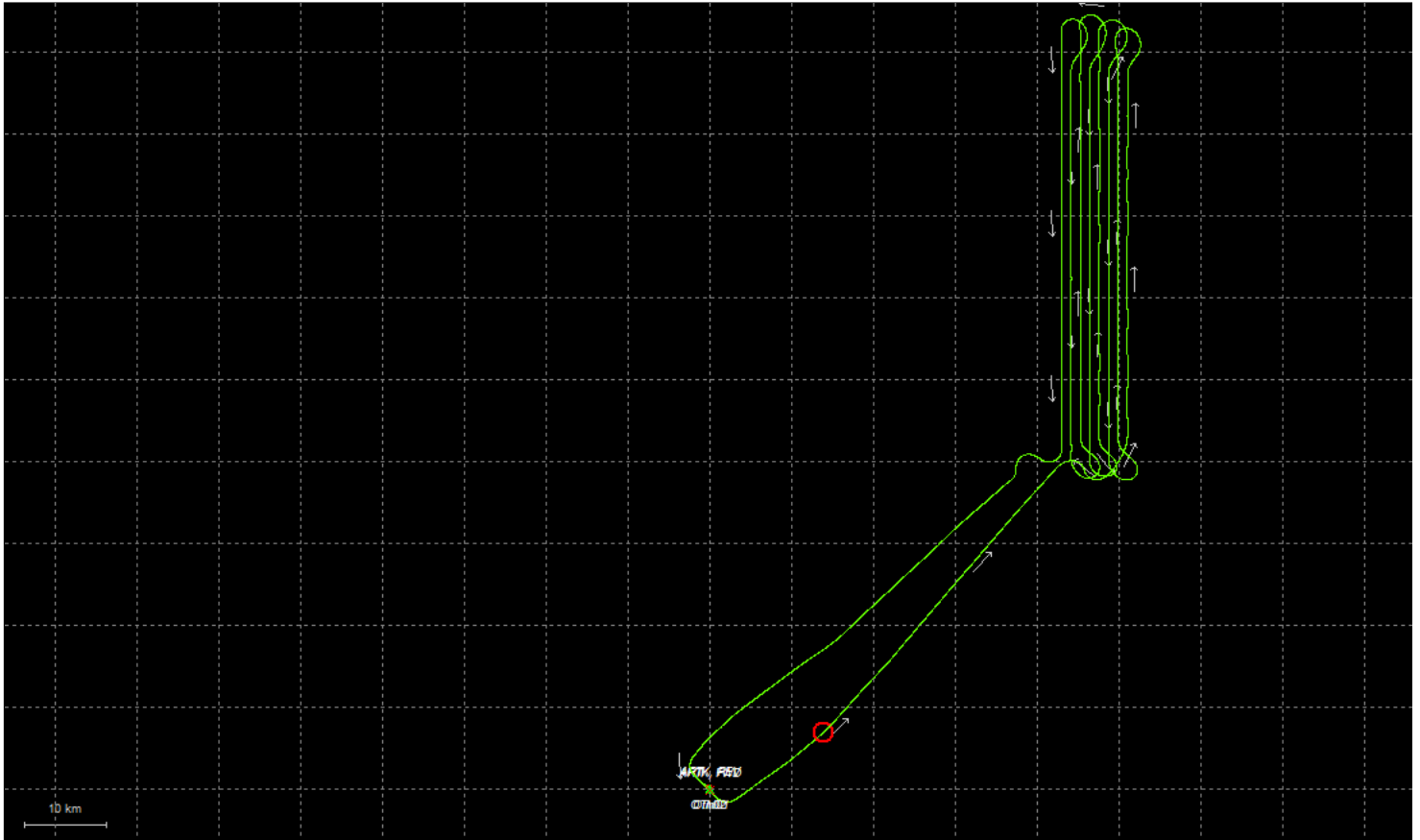


Process	20200402001409_6	by Unknown	on 6/4/2020	at 17:11:49
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Output Results for 20200402135843_7

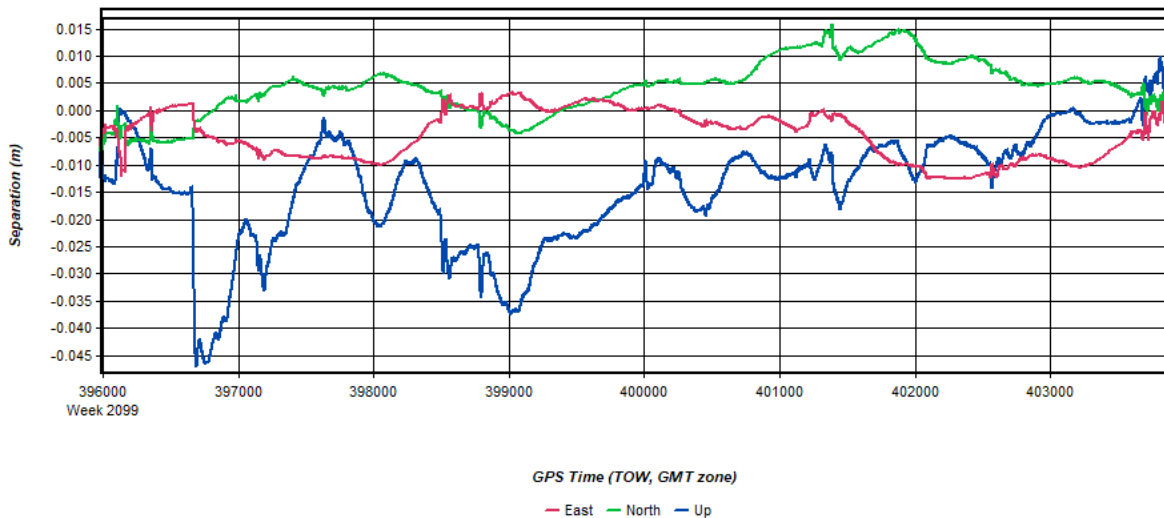
Inertial Explorer Version 8.90.2124
06/04/2020

Figure 1: Smoothed TC Combined - Map



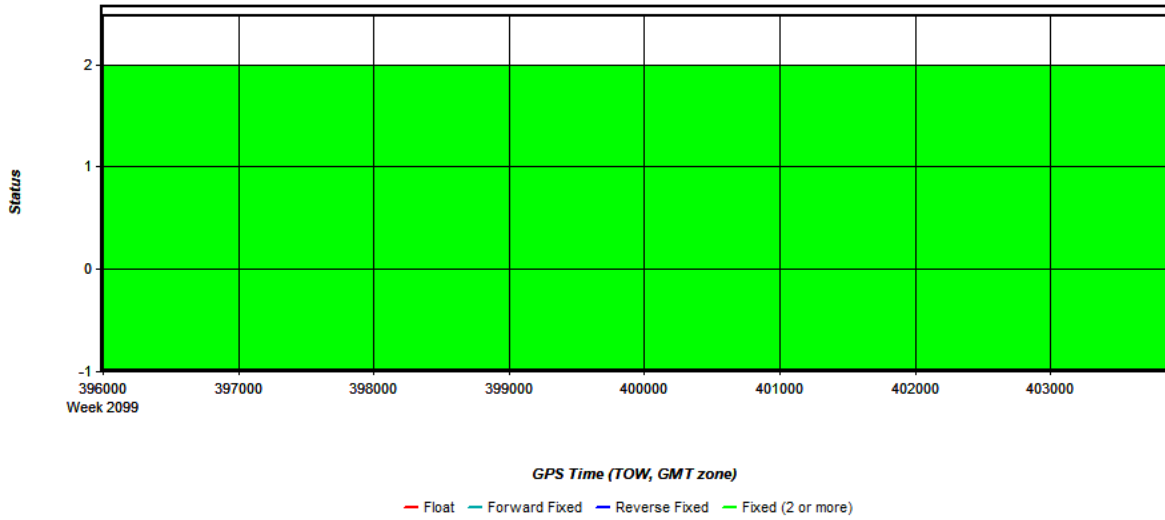
Process	20200402135843_7	by Unknown	on 6/4/2020	at 14:19:57
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Figure 2: 20200402135843_7 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



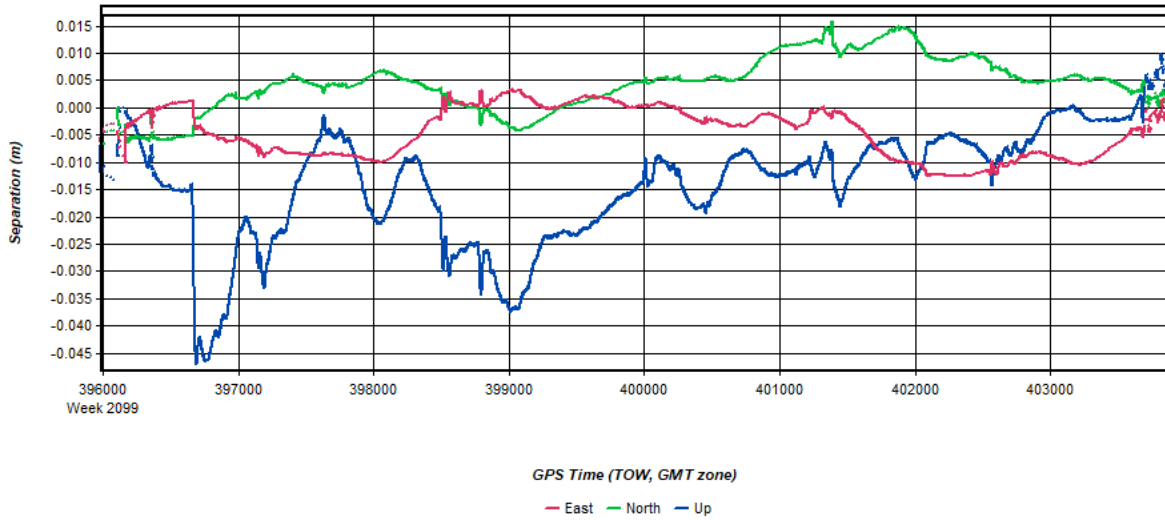
Process	20200402135843_7	by Unknown	on 6/4/2020	at 14:19:57
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Figure 3: 20200402135843_7 [Smoothed TC Combined] - Float or Fixed Ambiguity



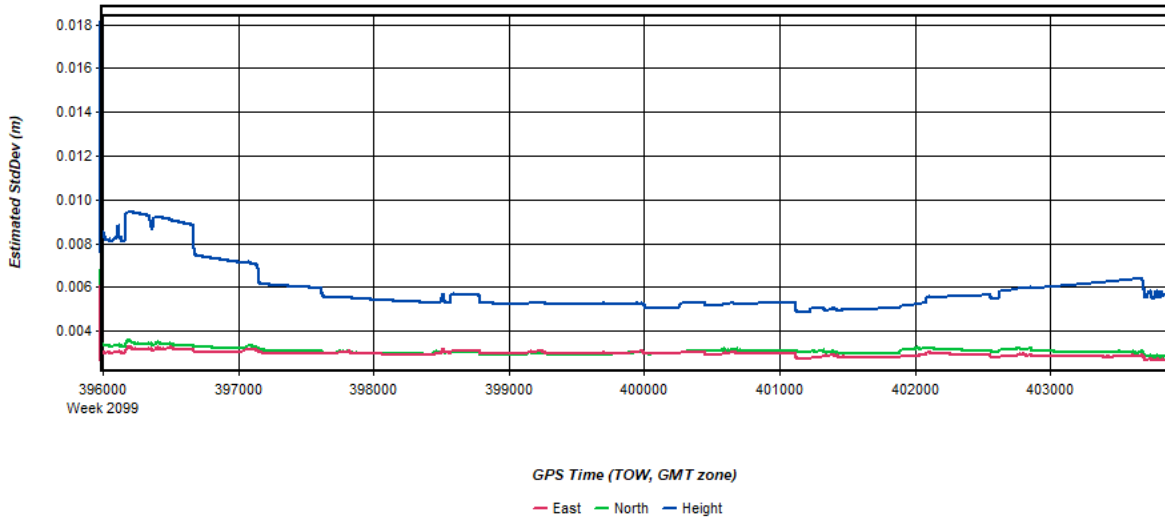
Process	20200402135843_7	by Unknown	on 6/4/2020	at 14:19:57
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Figure 4: 20200402135843_7 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



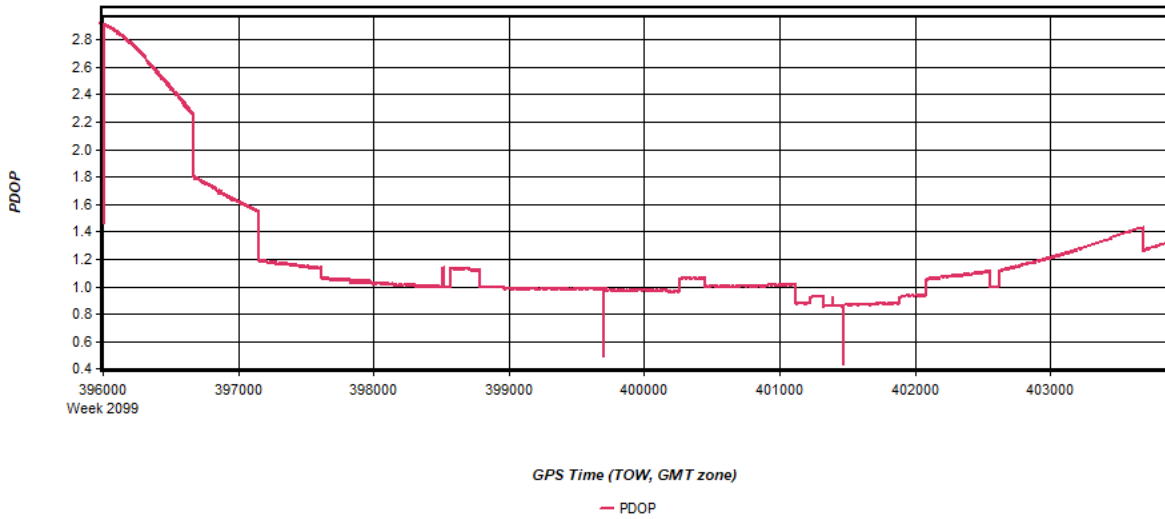
Process	20200402135843_7	by Unknown	on 6/4/2020	at 14:19:57
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Figure 5: 20200402135843_7 [Smoothed TC Combined] - Estimated Position Accuracy Plot



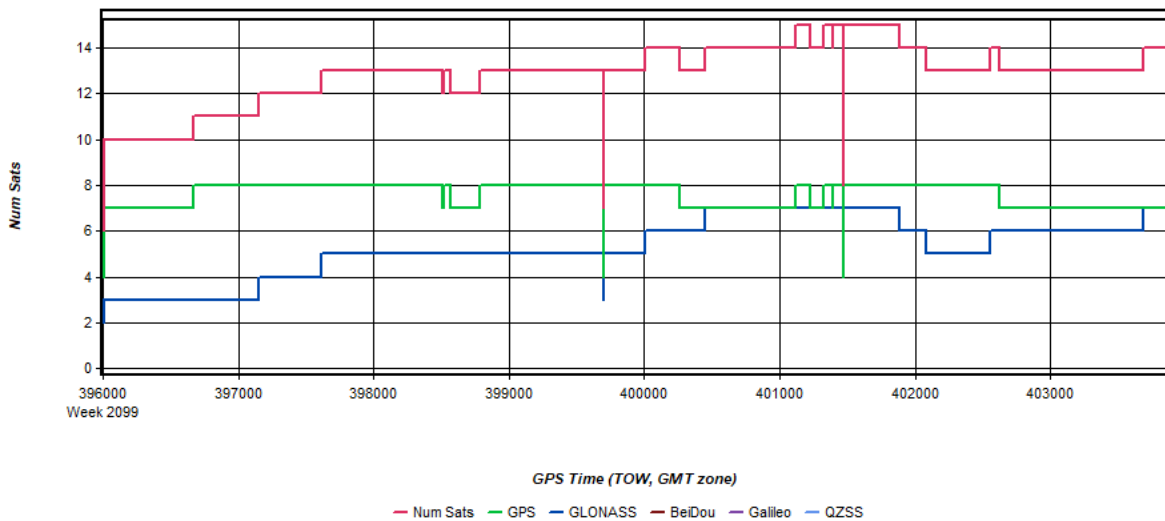
Process	20200402135843_7	by Unknown	on 6/4/2020	at 14:19:57
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Figure 6: 20200402135843_7 [Smoothed TC Combined] - PDOP Plot



Process	20200402135843_7	by Unknown	on 6/4/2020	at 14:19:57
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Figure 7: 20200402135843_7 [Smoothed TC Combined] - Number of Satellites Line Plot



Process	20200402135843_7	by Unknown	on 6/4/2020	at 14:19:57
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Figure 8: 20200402135843_7 [Smoothed TC Combined] - Status flag for IMU processing

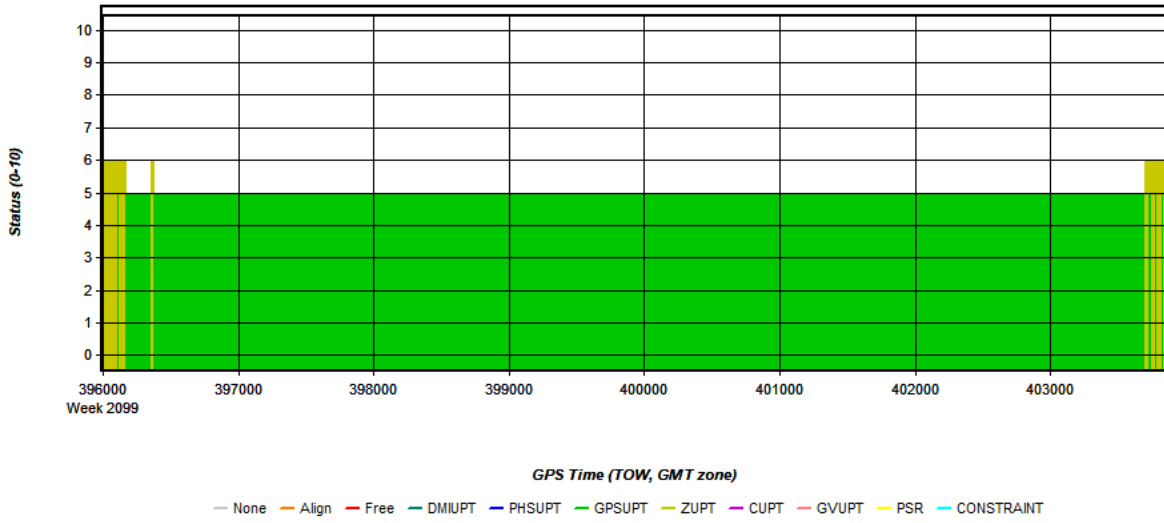


Figure 9: 20200402135843_7 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

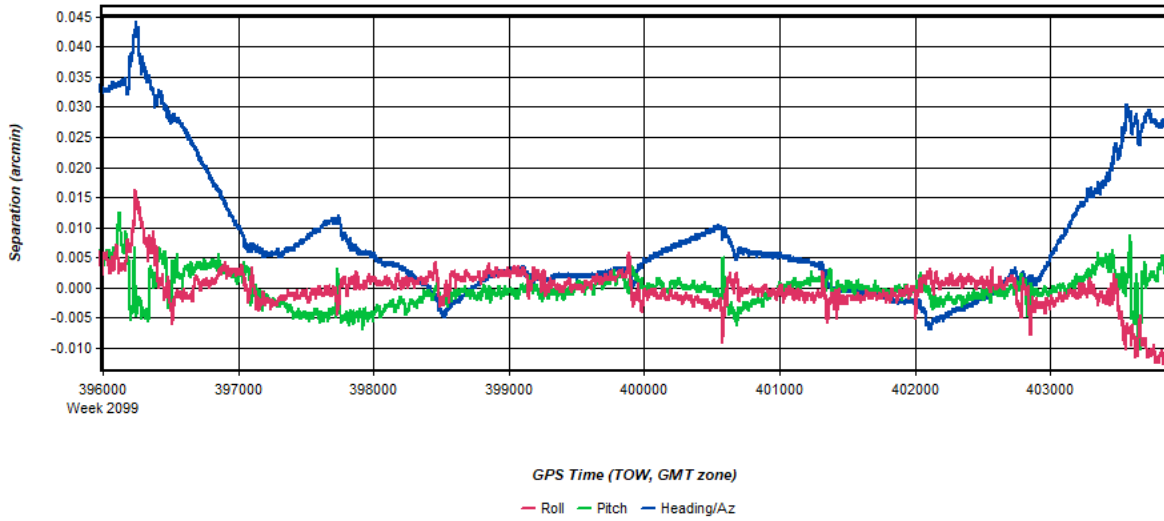
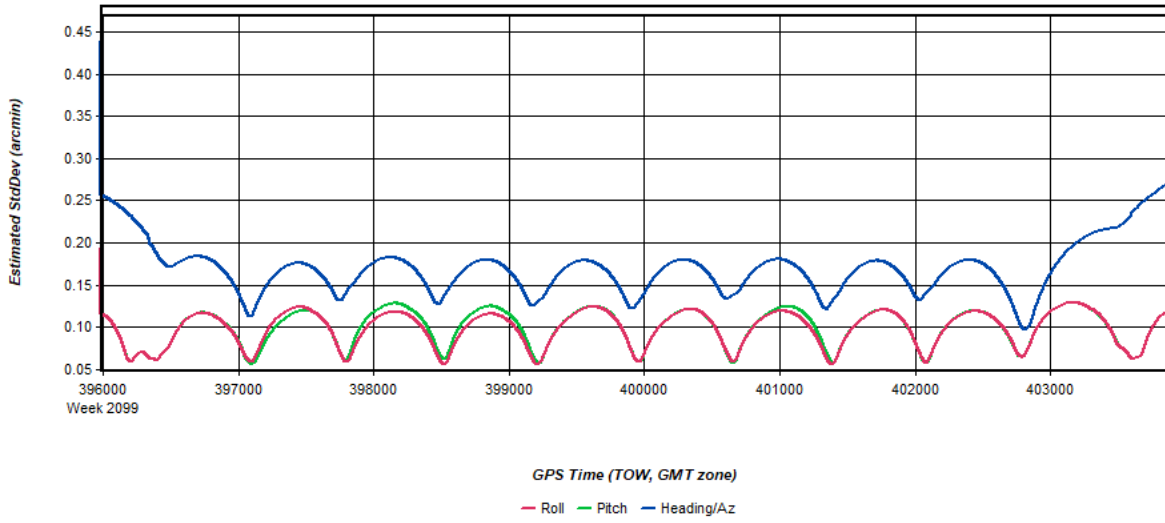
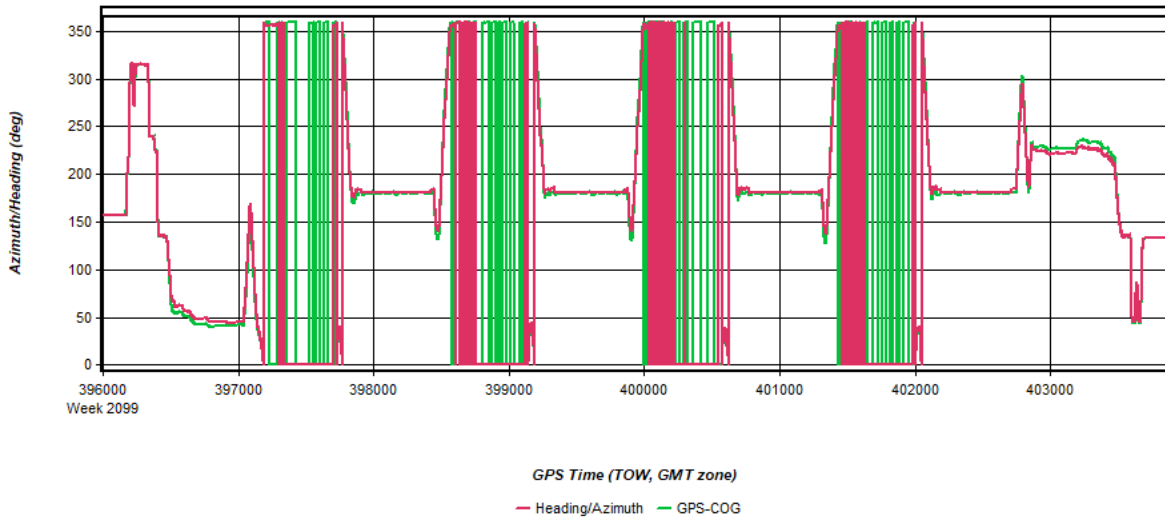


Figure 10: 20200402135843_7 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20200402135843_7	by Unknown	on 6/4/2020	at 14:19:57
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Figure 11: 20200402135843_7 [Smoothed TC Combined] - Azimuth Plot



Process	20200402135843_7	by Unknown	on 6/4/2020	at 14:19:57
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Figure 12: 20200402135843_7 [Smoothed TC Combined] - Roll & Pitch Plot

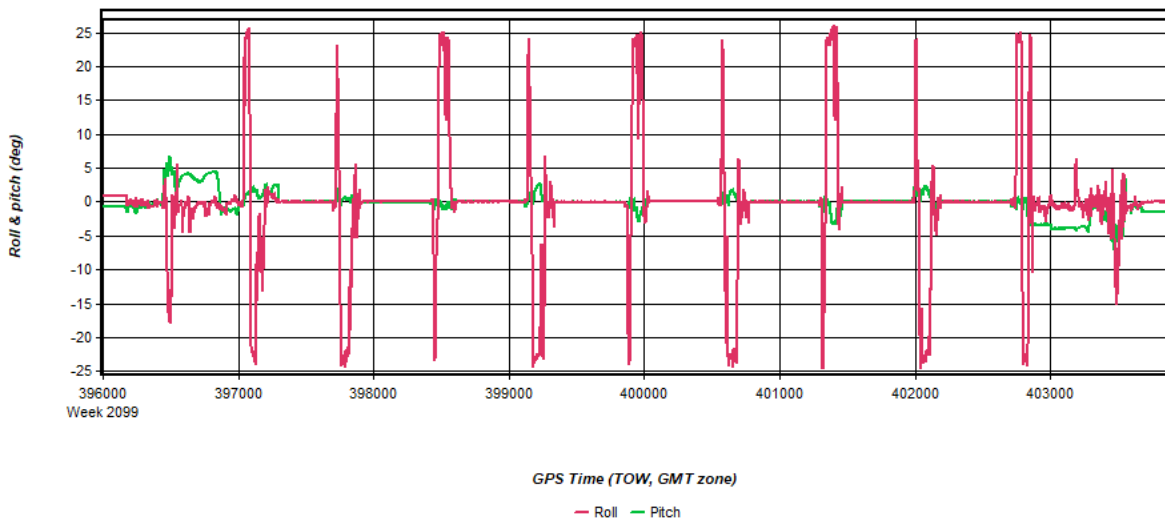


Figure 13: 20200402135843_7 [Smoothed TC Combined] - Velocity Profile Plot

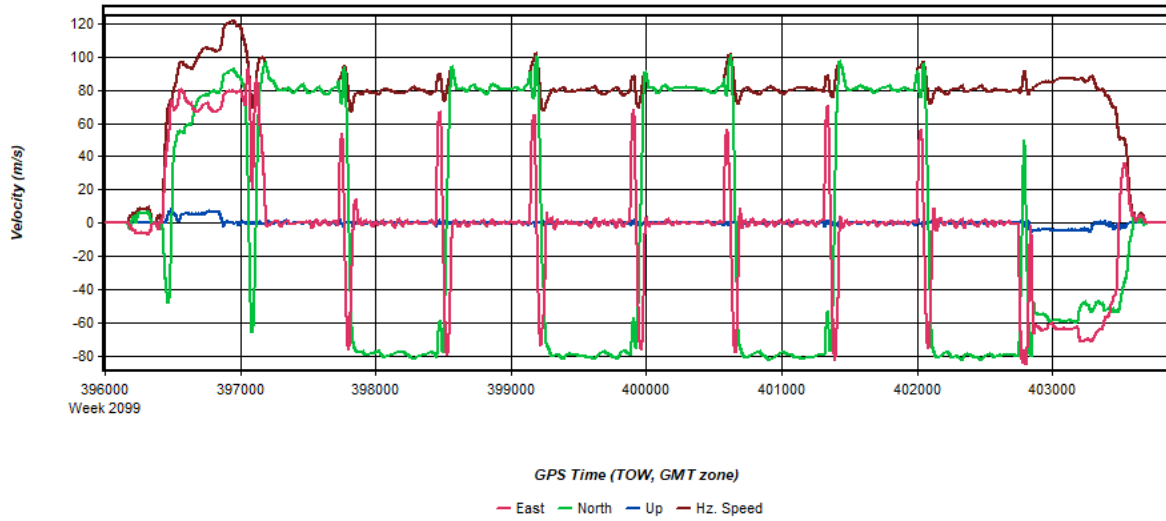


Figure 14: 20200402135843_7 [Smoothed TC Combined] - Body Frame Velocity Plot

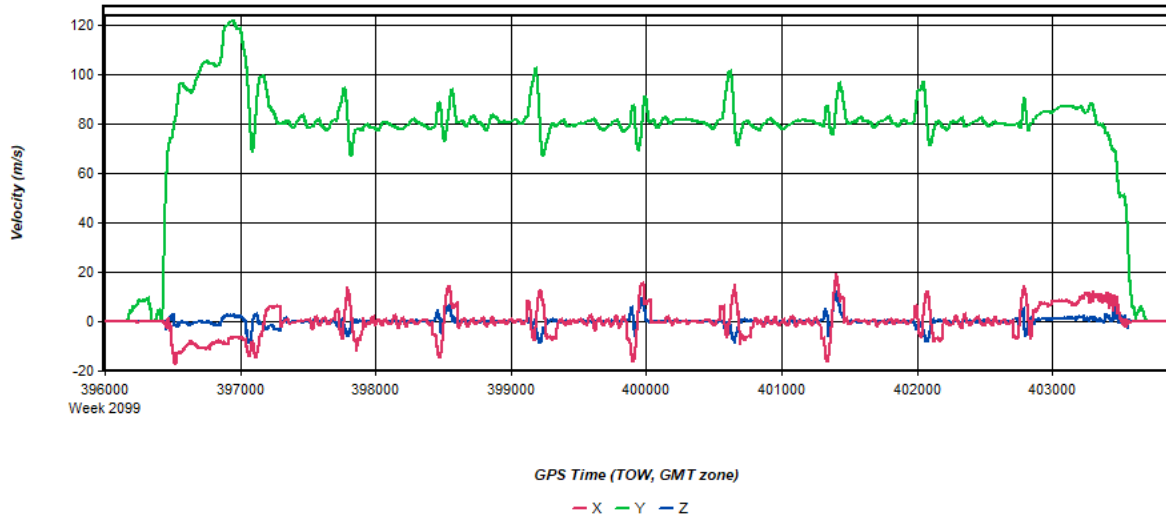


Figure 15: 20200402135843_7 [Smoothed TC Combined] - Height Profile Plot

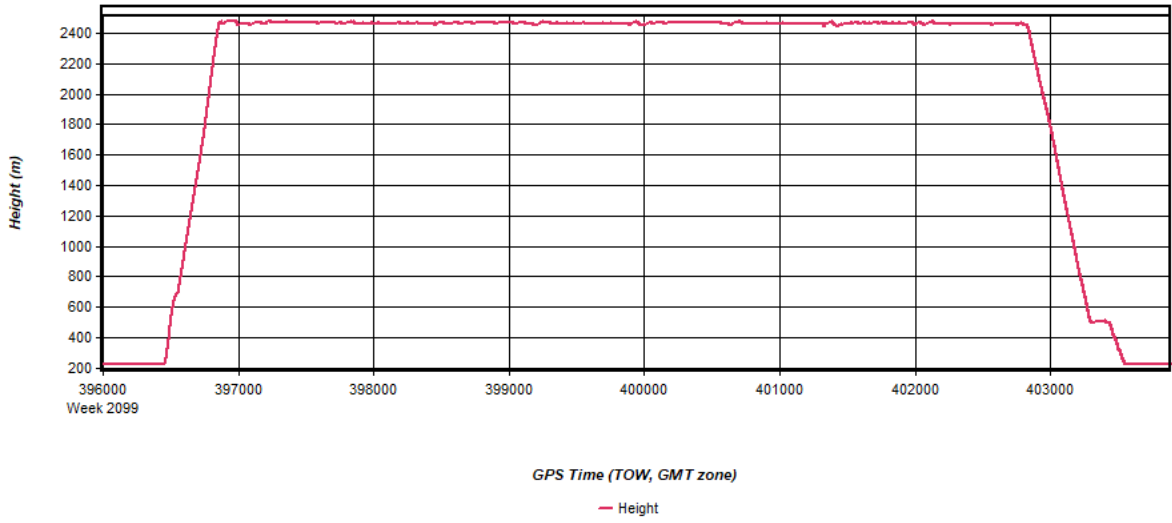


Figure 16: 20200402135843_7 [Smoothed TC Combined] - C/A Code Residual RMS Plot

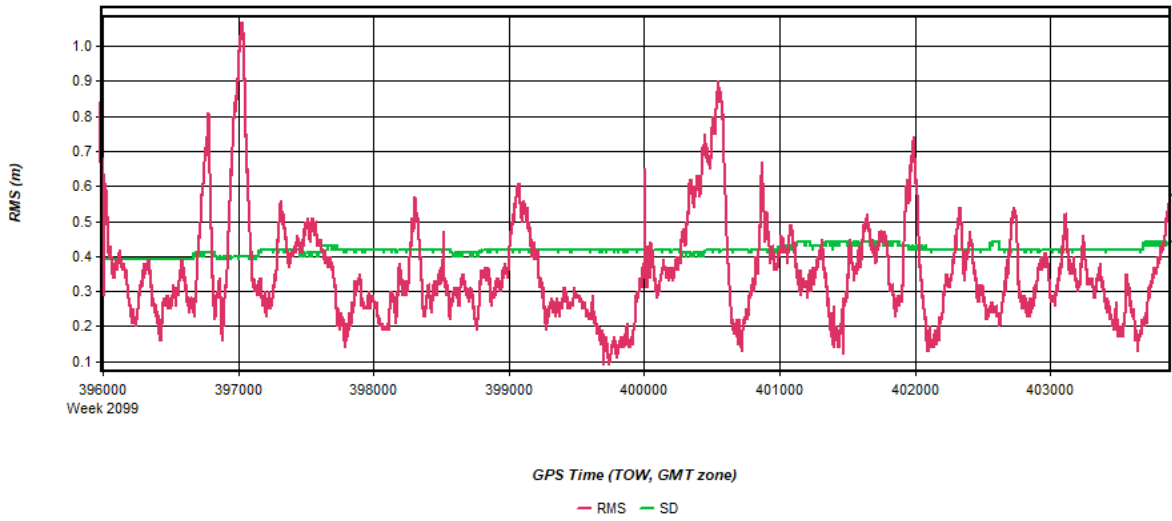


Figure 17: 20200402135843_7 [Smoothed TC Combined] - Carrier Residual RMS Plot

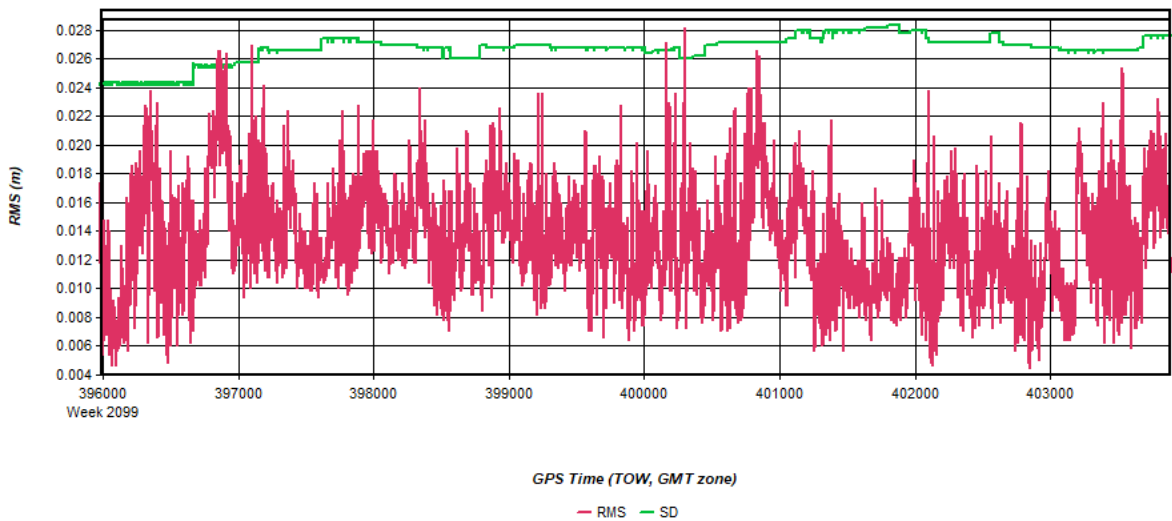


Figure 18: 20200402135843_7 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

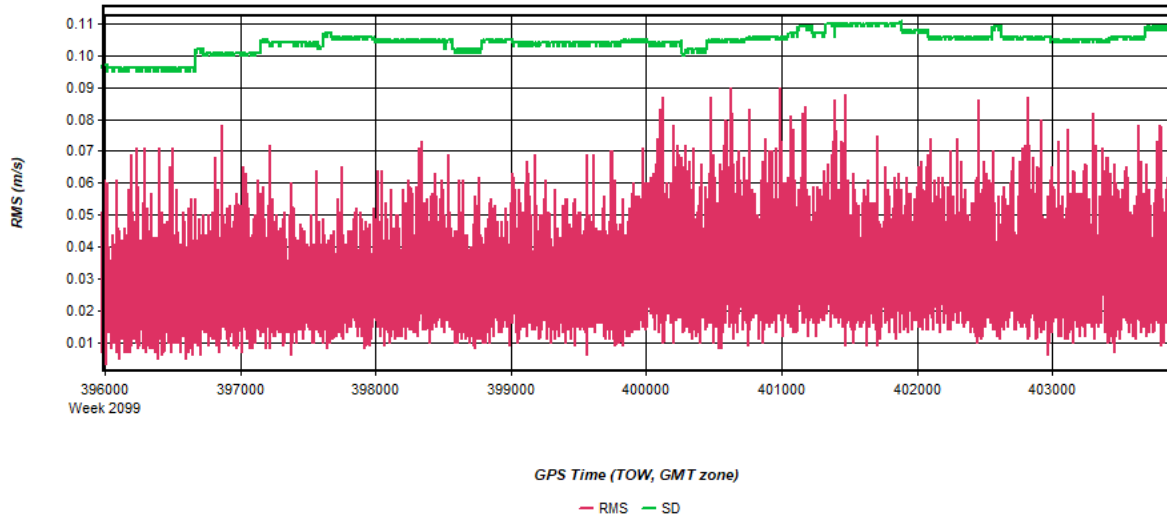


Figure 19: 20200402135843_7 [Smoothed TC Combined] - Accelerometer Bias Plot

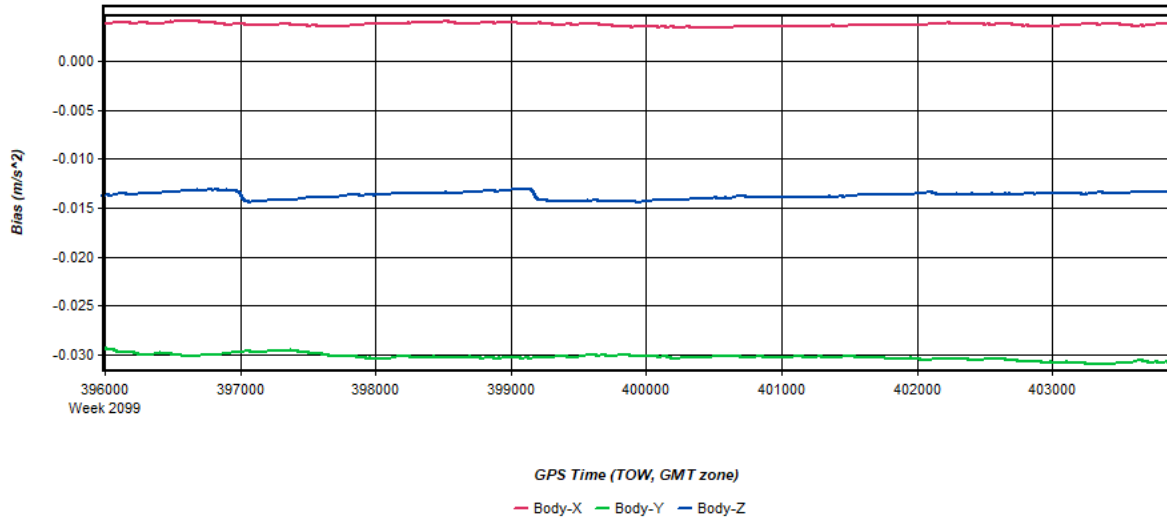
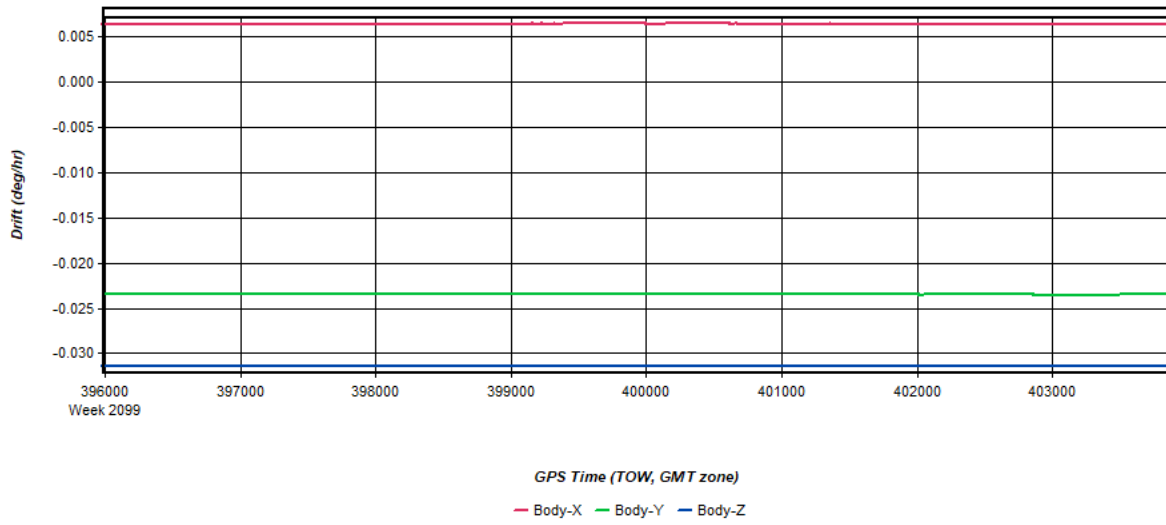


Figure 20: 20200402135843_7 [Smoothed TC Combined] - Gyro Drift Plot

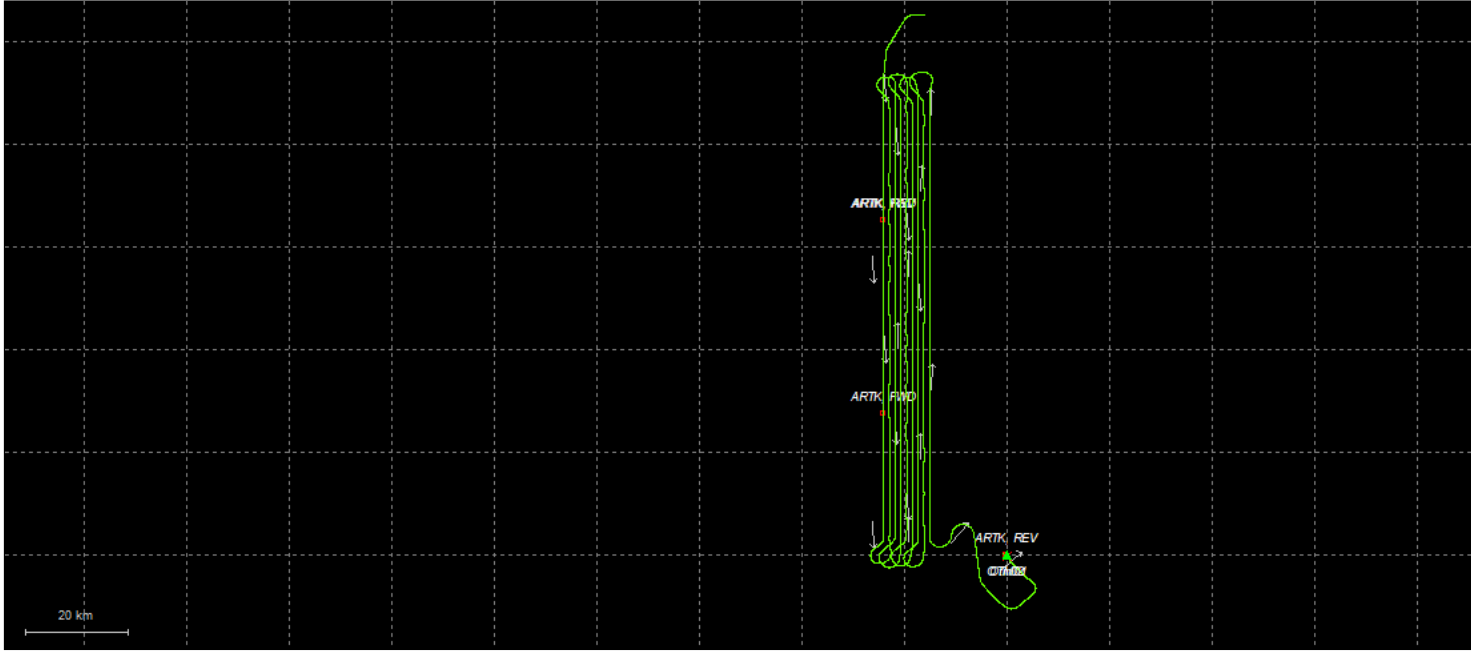


Process	20200402135843_7	by Unknown	on 6/4/2020	at 14:19:57
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Output Results for 20200404213438_8

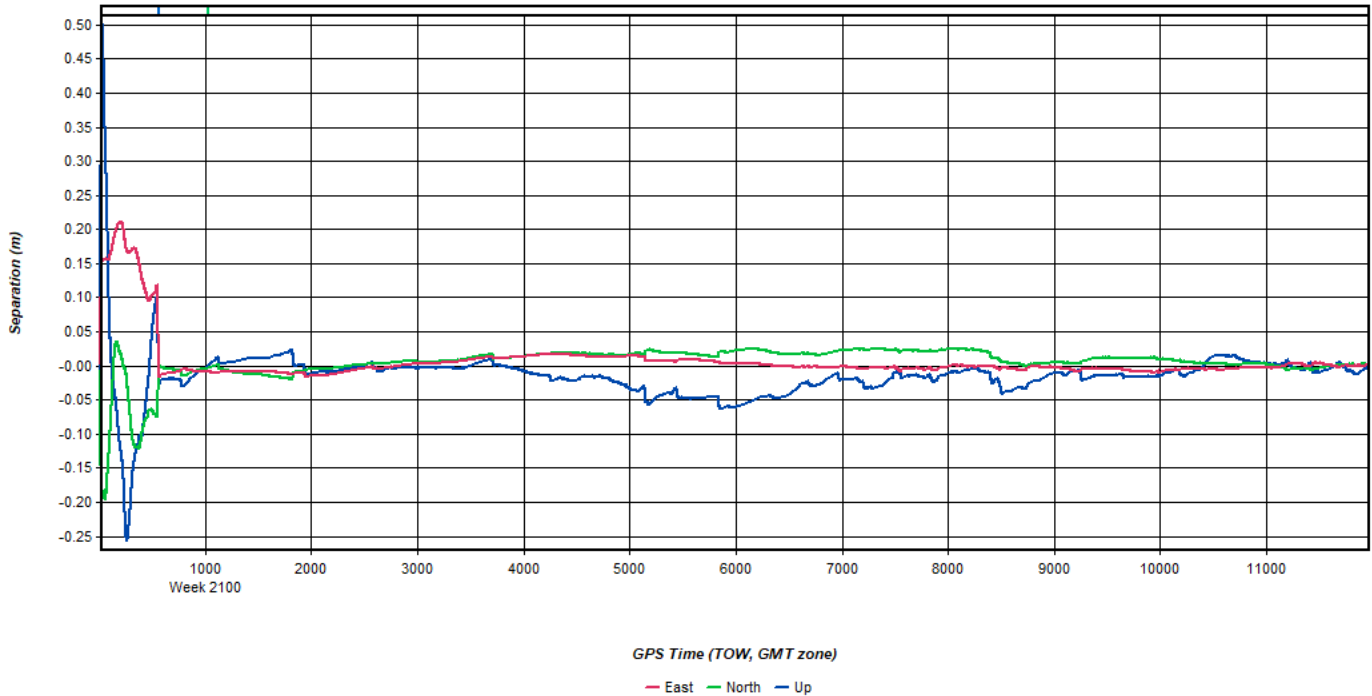
Inertial Explorer Version 8.90.2124
09/23/2020

Figure 1: Smoothed TC Combined - Map



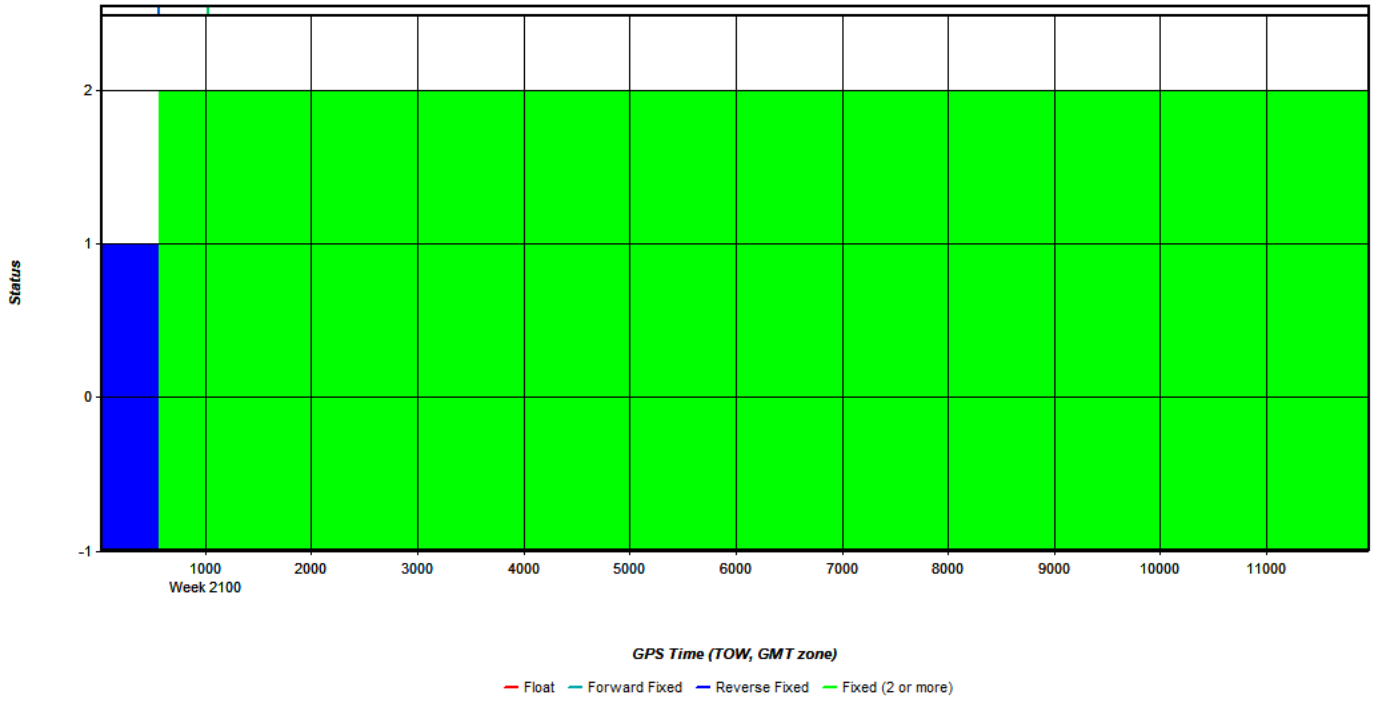
Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 2: 20200404213438_8 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 3: 20200404213438_8 [Smoothed TC Combined] - Float or Fixed Ambiguity



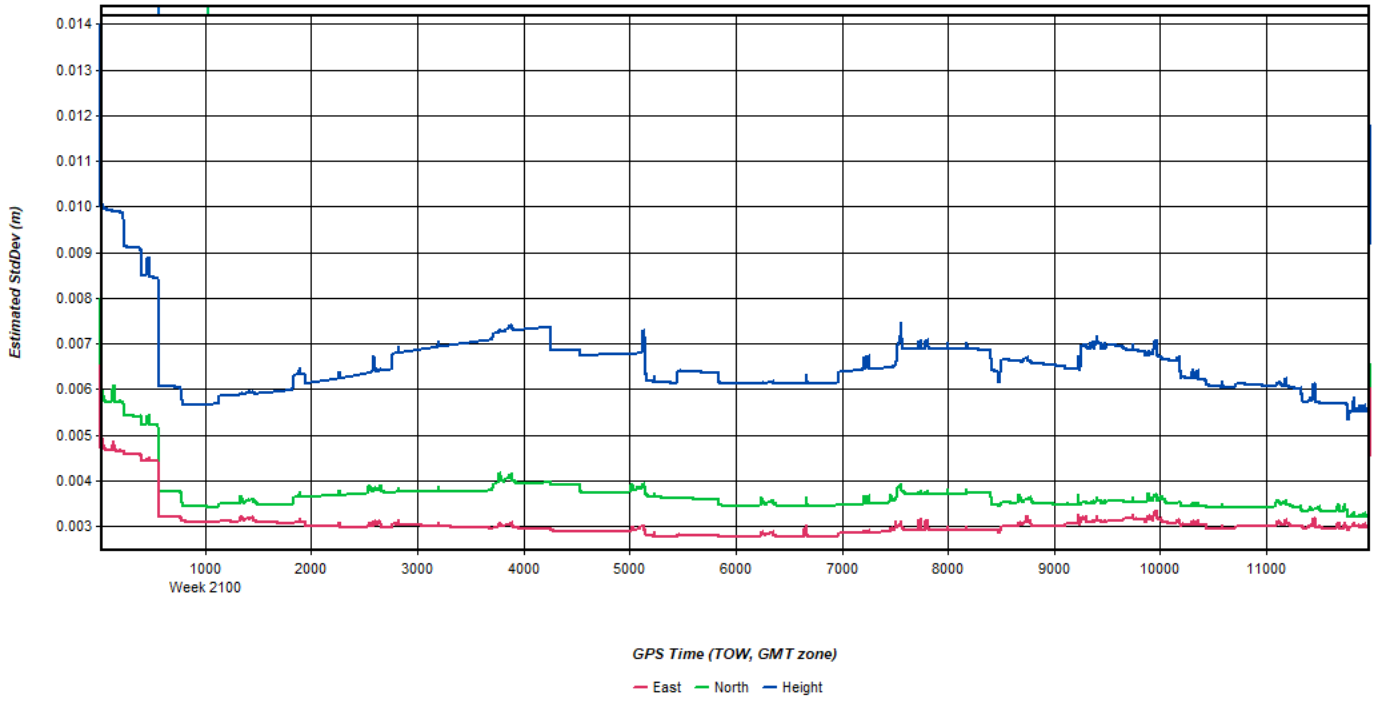
Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 4: 20200404213438_8 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



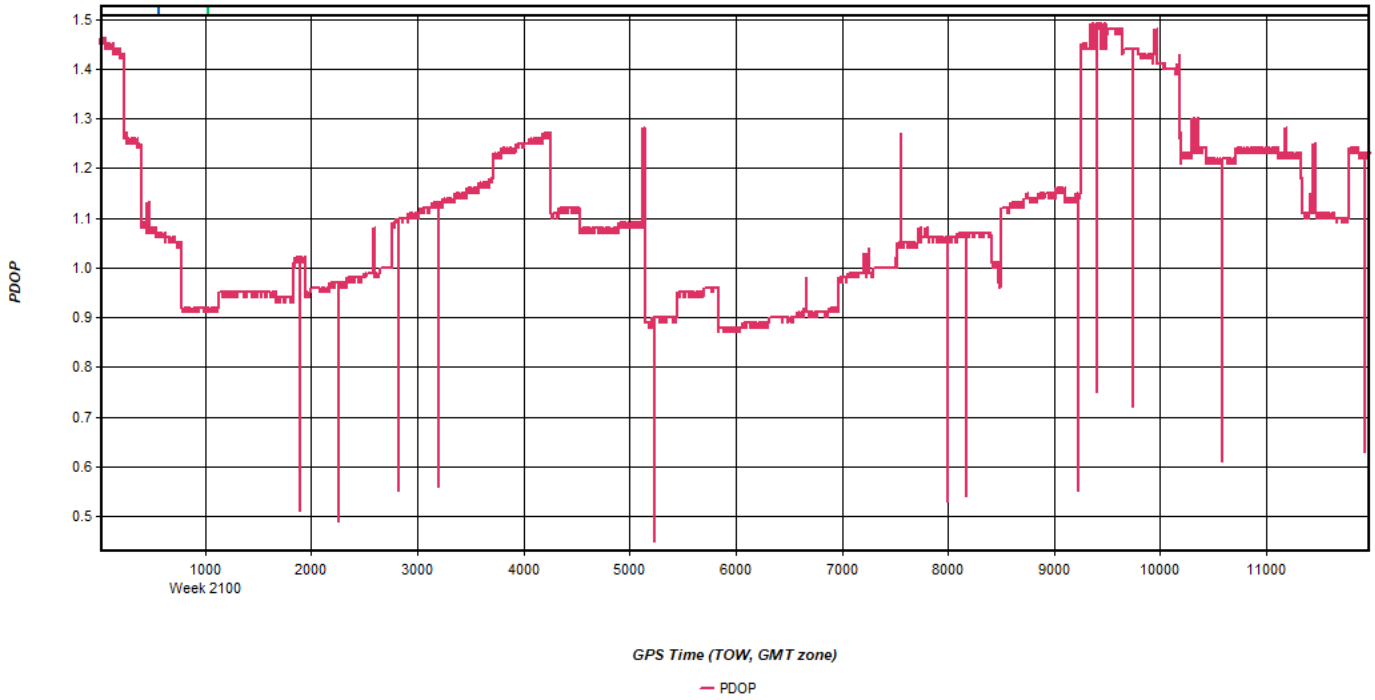
Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 5: 20200404213438_8 [Smoothed TC Combined] - Estimated Position Accuracy Plot



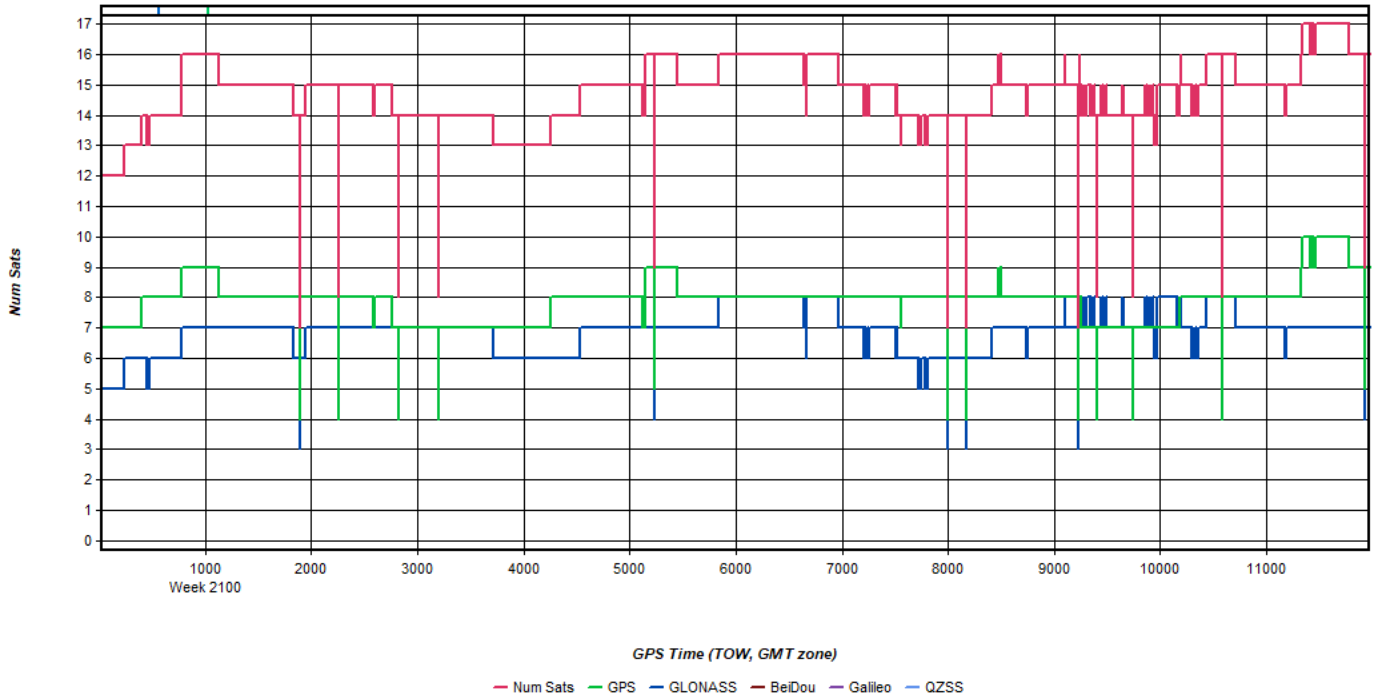
Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 6: 20200404213438_8 [Smoothed TC Combined] - PDOP Plot



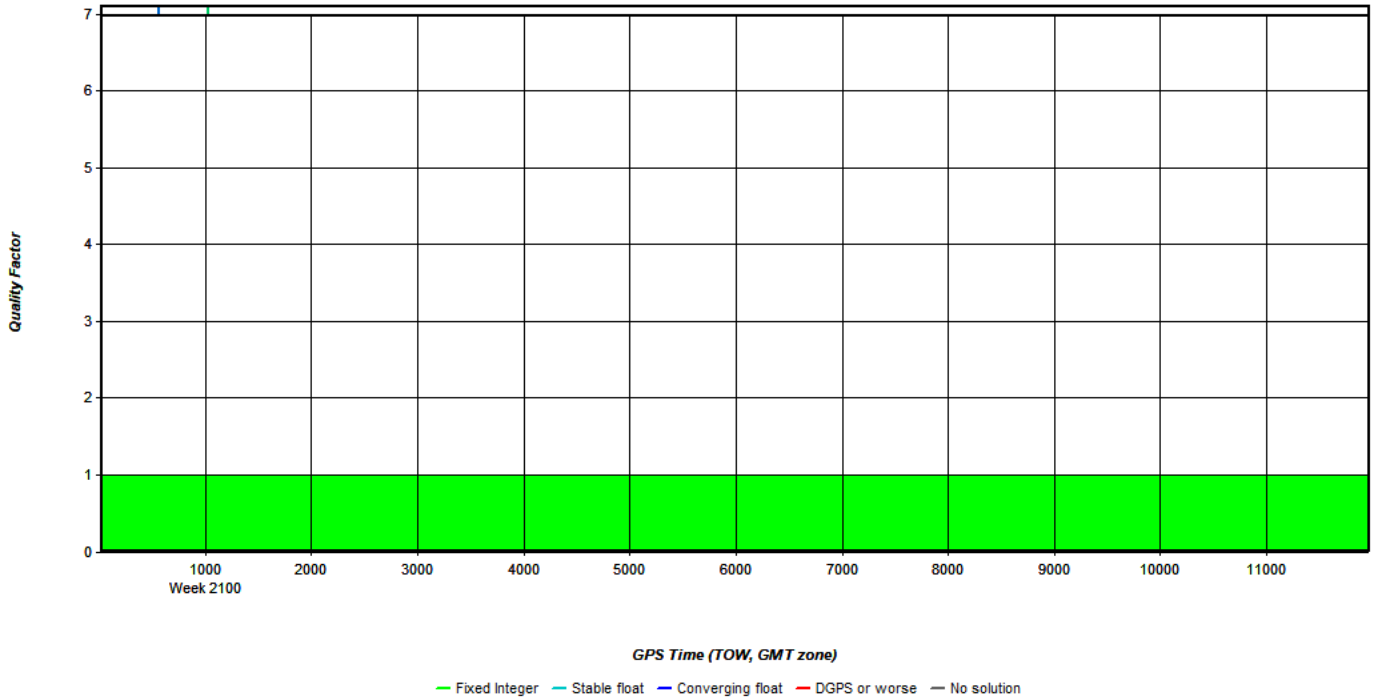
Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 7: 20200404213438_8 [Smoothed TC Combined] - Number of Satellites Line Plot



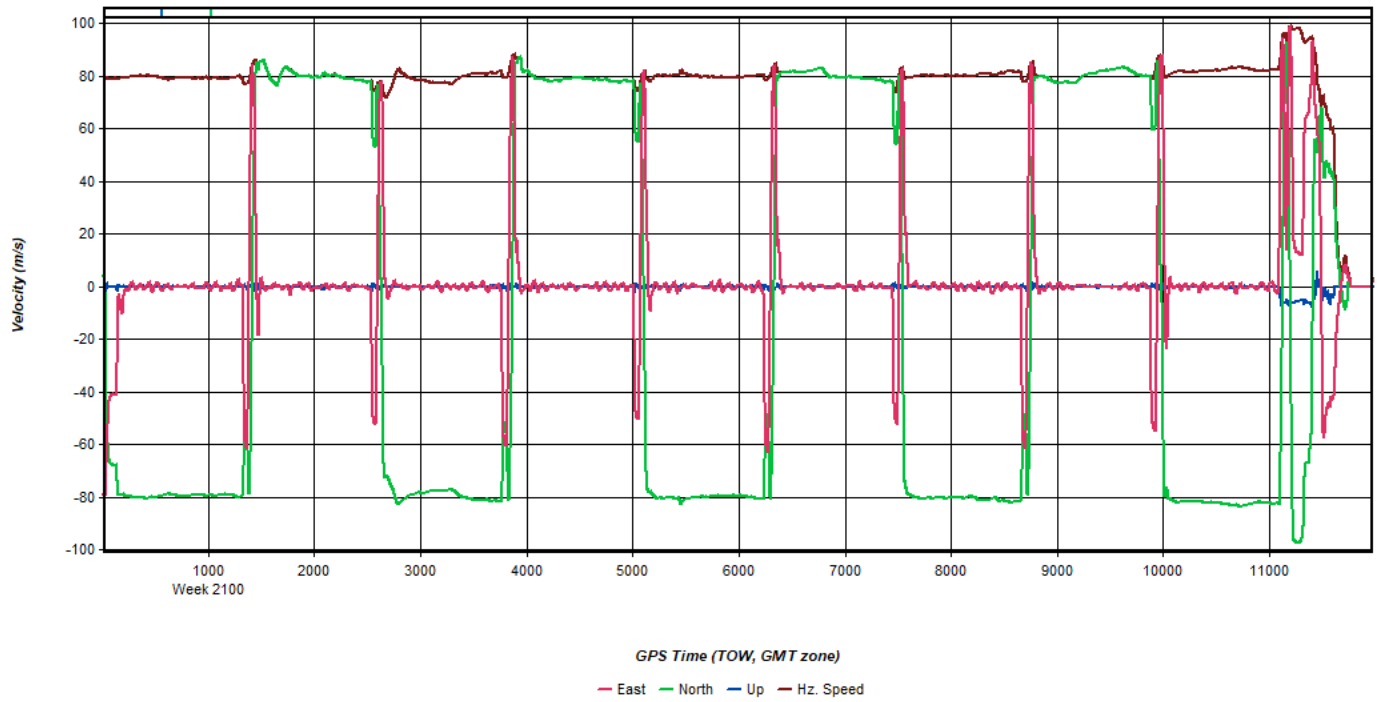
Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 8: 20200404213438_8 [Smoothed TC Combined] - Quality Factor Plot



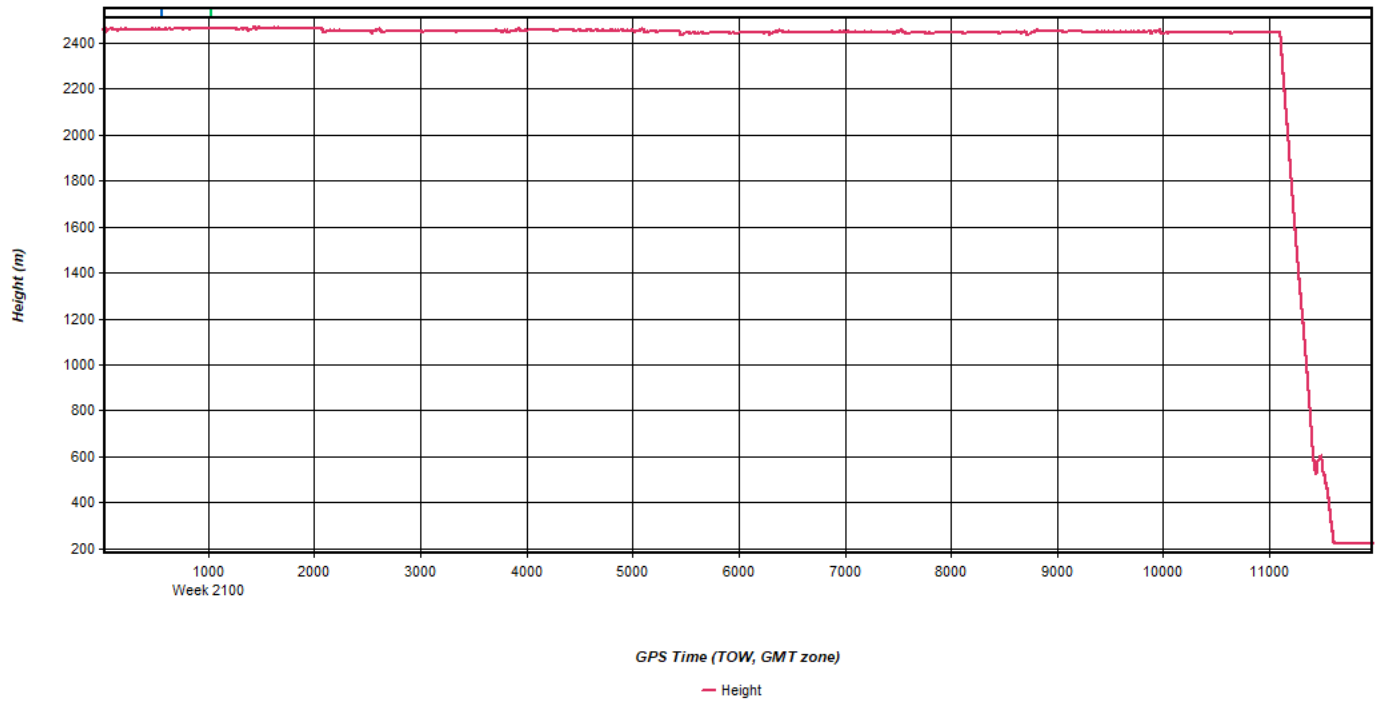
Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 9: 20200404213438_8 [Smoothed TC Combined] - Velocity Profile Plot



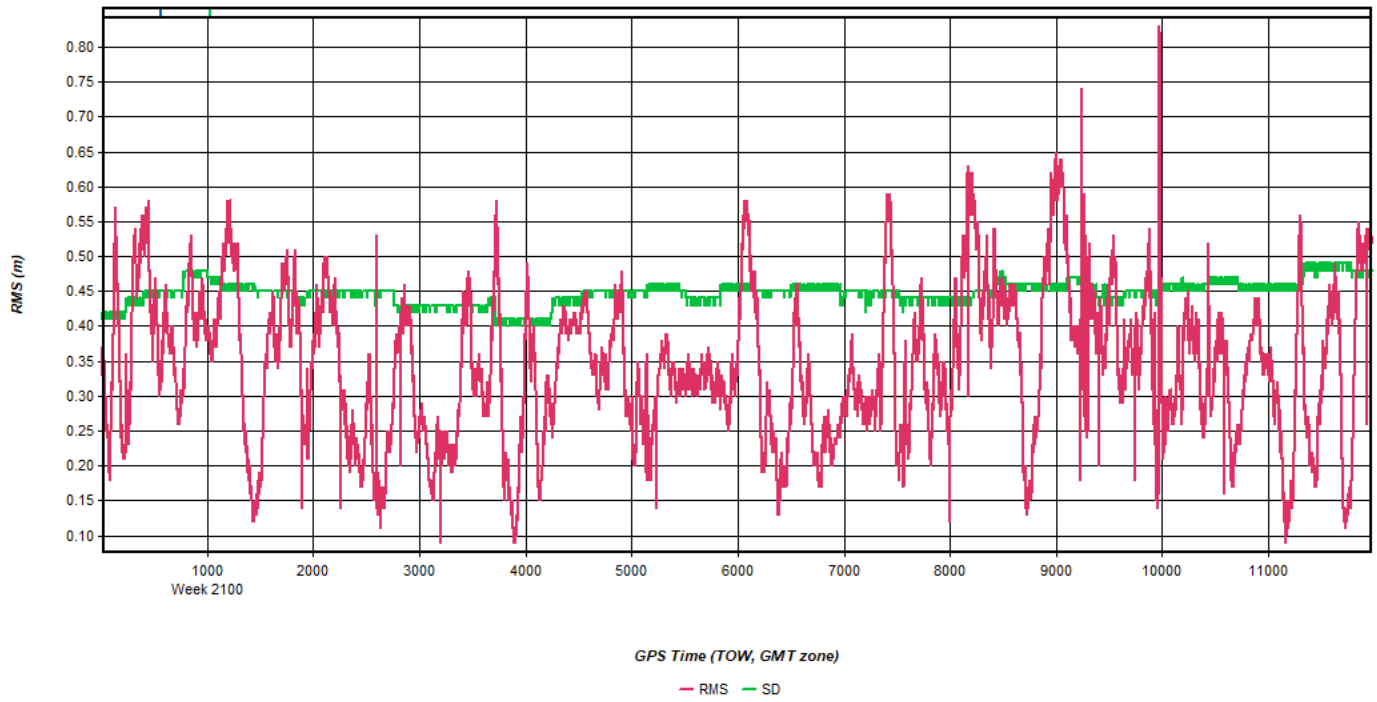
Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 10: 20200404213438_8 [Smoothed TC Combined] - Height Profile Plot



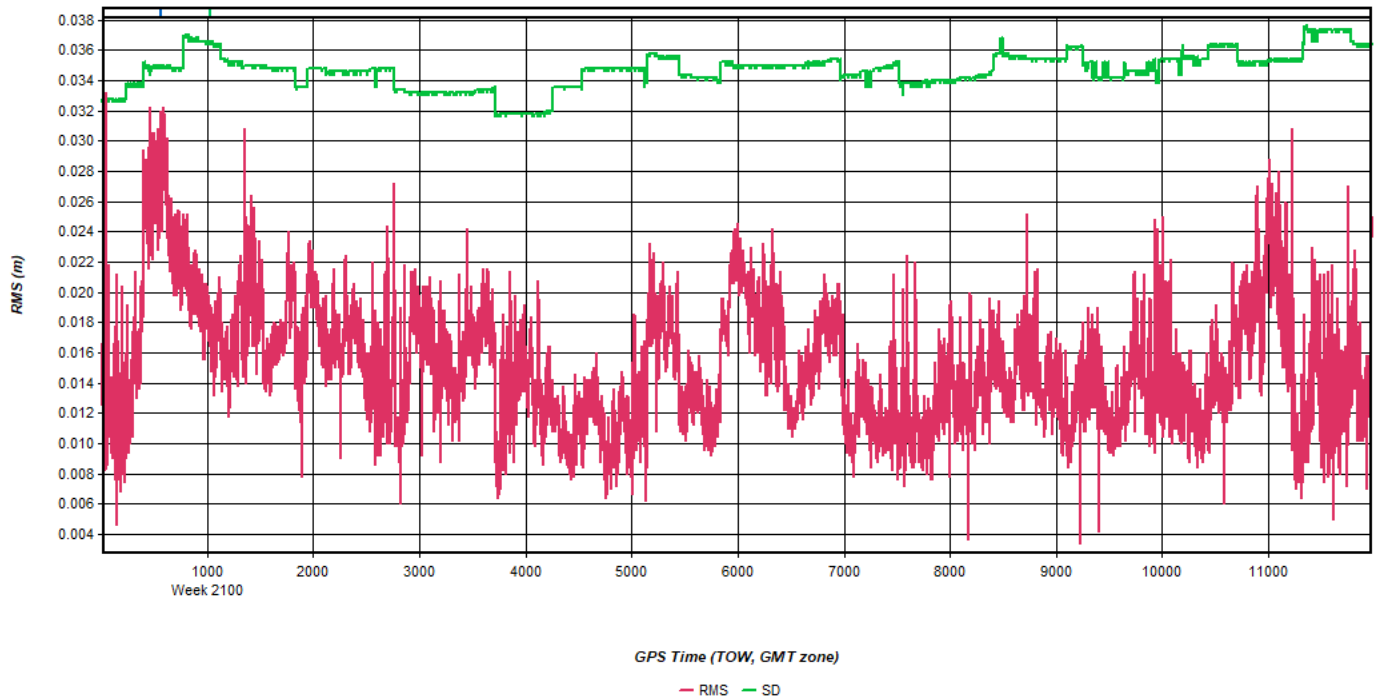
Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 11: 20200404213438_8 [Smoothed TC Combined] - C/A Code Residual RMS Plot



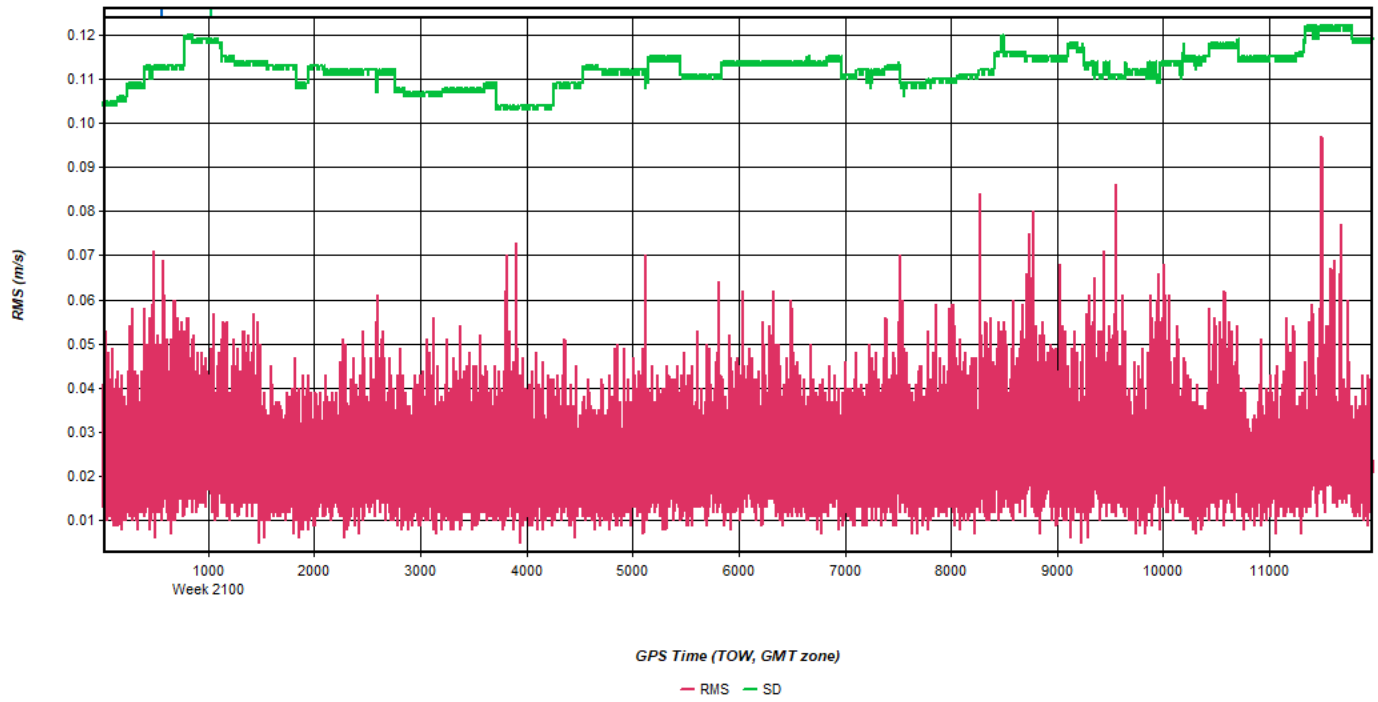
Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 12: 20200404213438_8 [Smoothed TC Combined] - Carrier Residual RMS Plot



Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Figure 13: 20200404213438_8 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

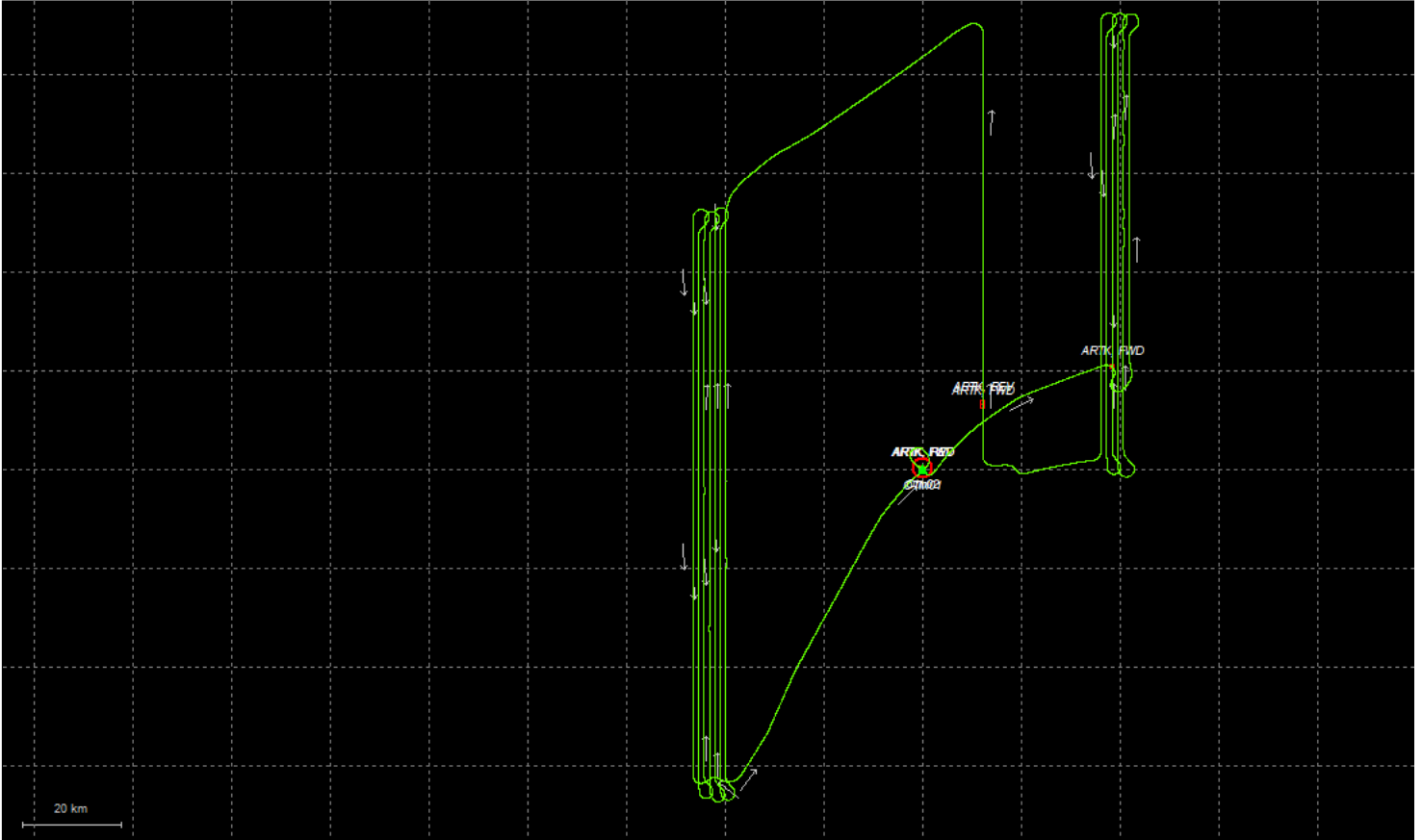


Process	20200404213438_8	by Unknown	on 9/23/2020	at 14:12:04
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Output Results for 20200405135910_9

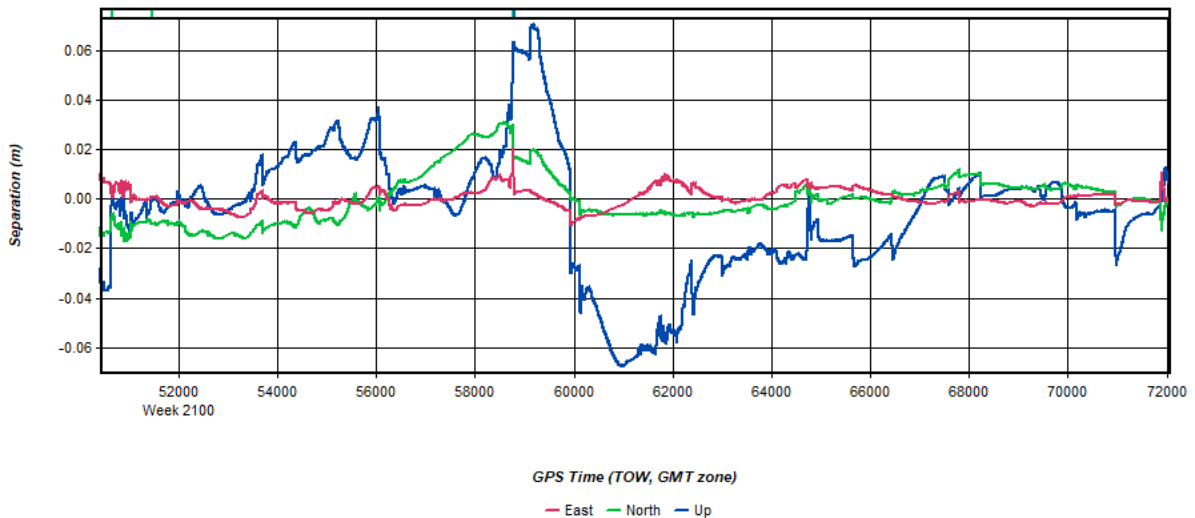
Inertial Explorer Version 8.90.2124
06/04/2020

Figure 1: Smoothed TC Combined - Map



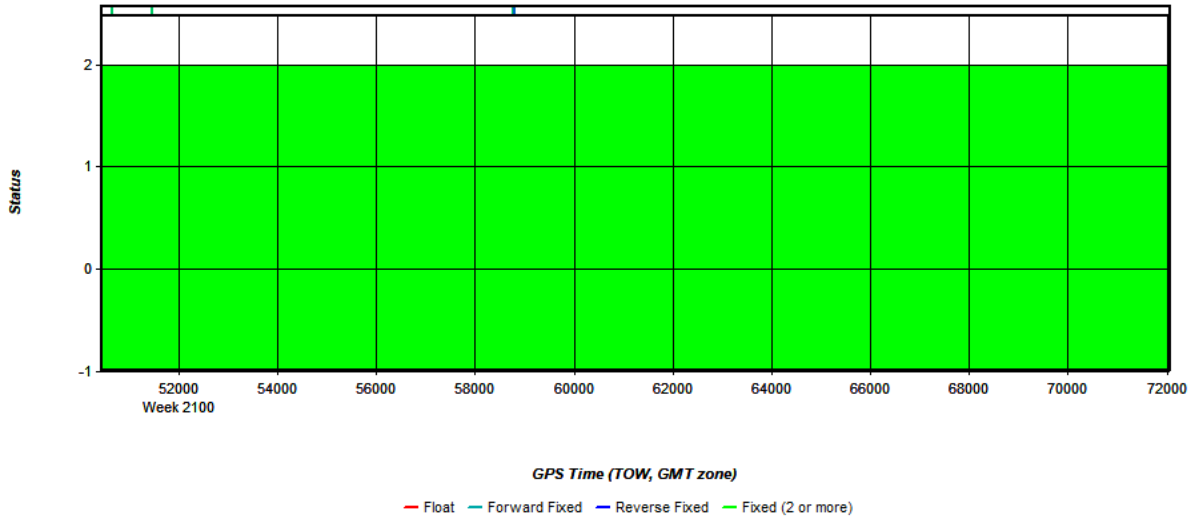
Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 2: 20200405135910_9 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



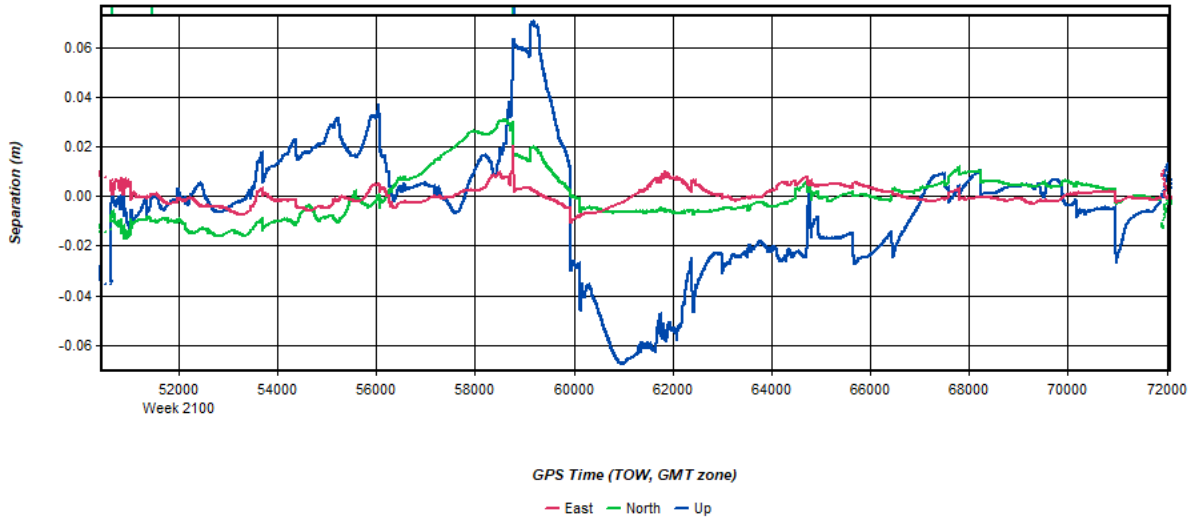
Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 3: 20200405135910_9 [Smoothed TC Combined] - Float or Fixed Ambiguity



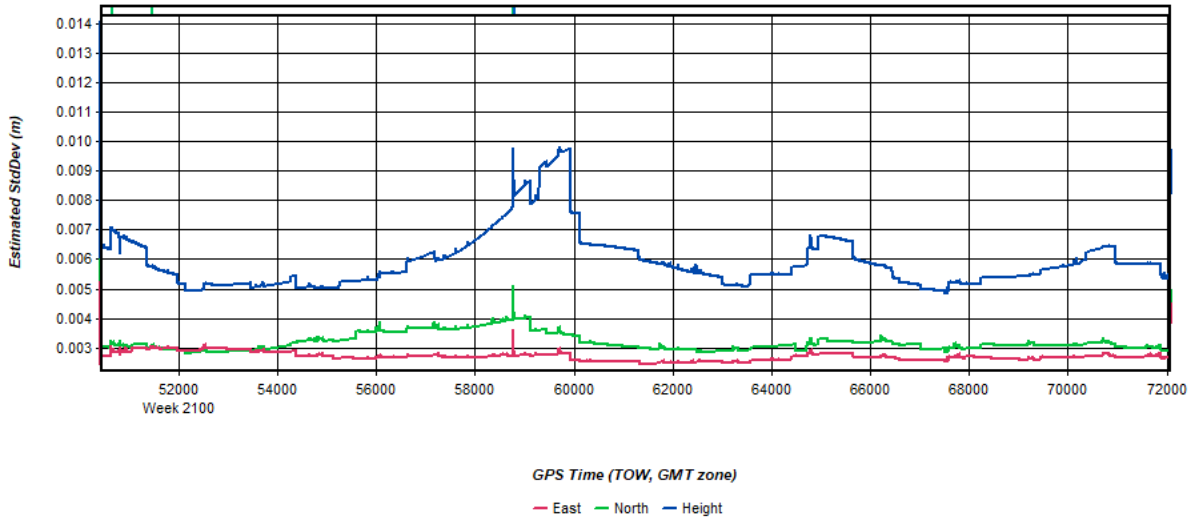
Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 4: 20200405135910_9 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



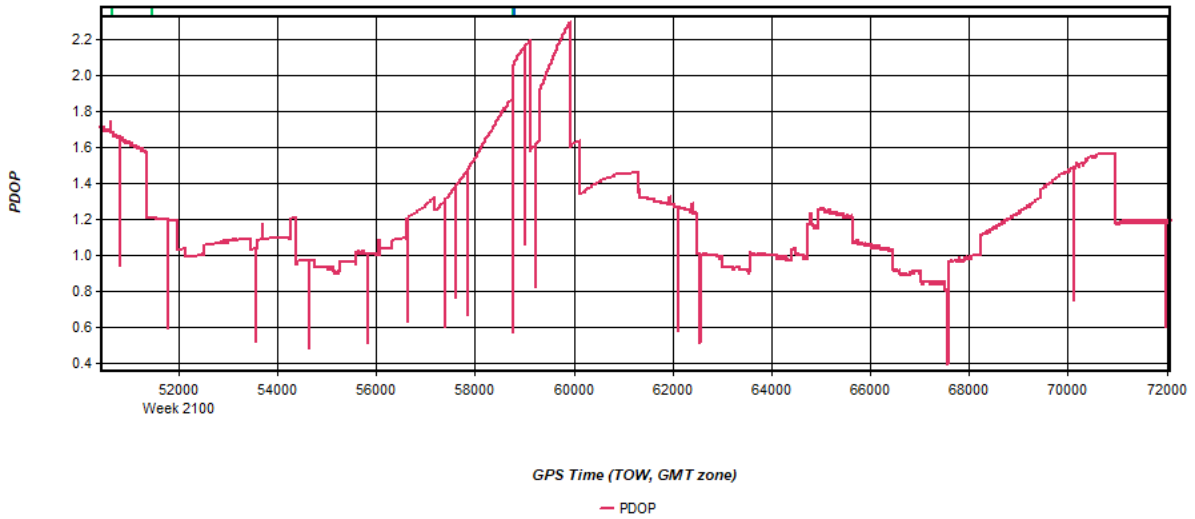
Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 5: 20200405135910_9 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 6: 20200405135910_9 [Smoothed TC Combined] - PDOP Plot



Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 7: 20200405135910_9 [Smoothed TC Combined] - Number of Satellites Line Plot

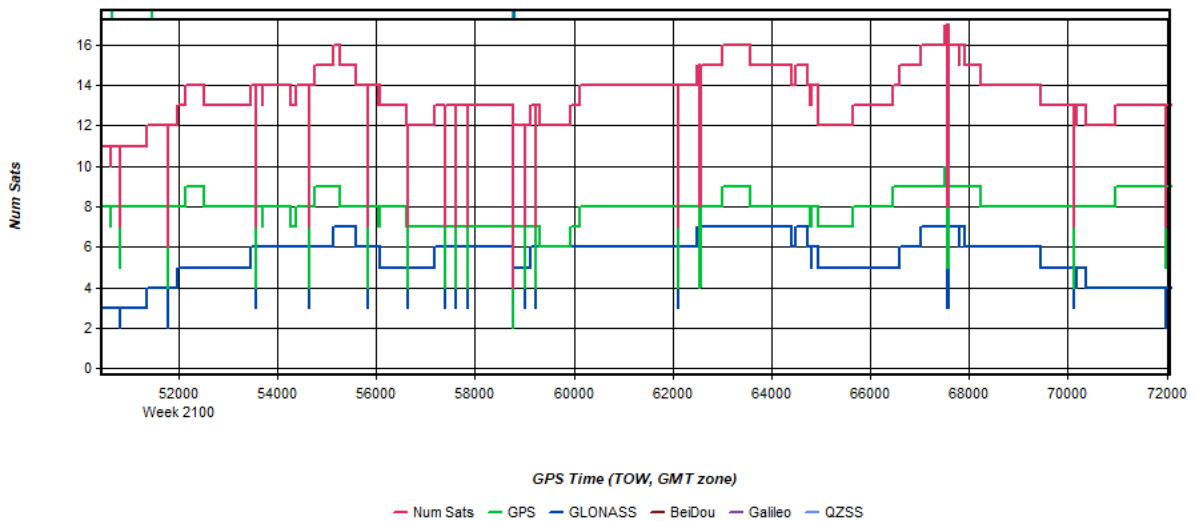


Figure 8: 20200405135910_9 [Smoothed TC Combined] - Status flag for IMU processing

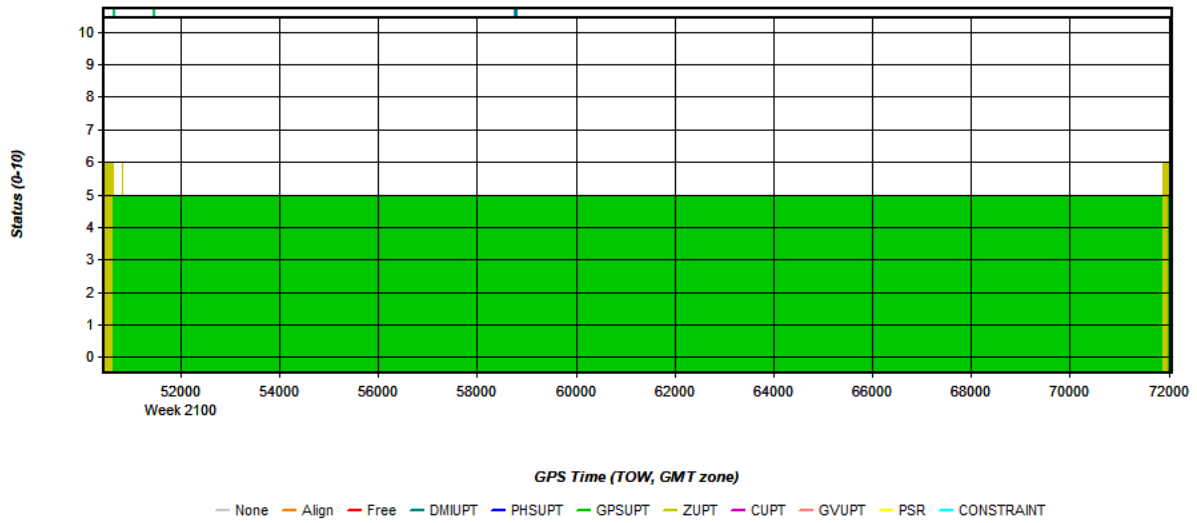


Figure 9: 20200405135910_9 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

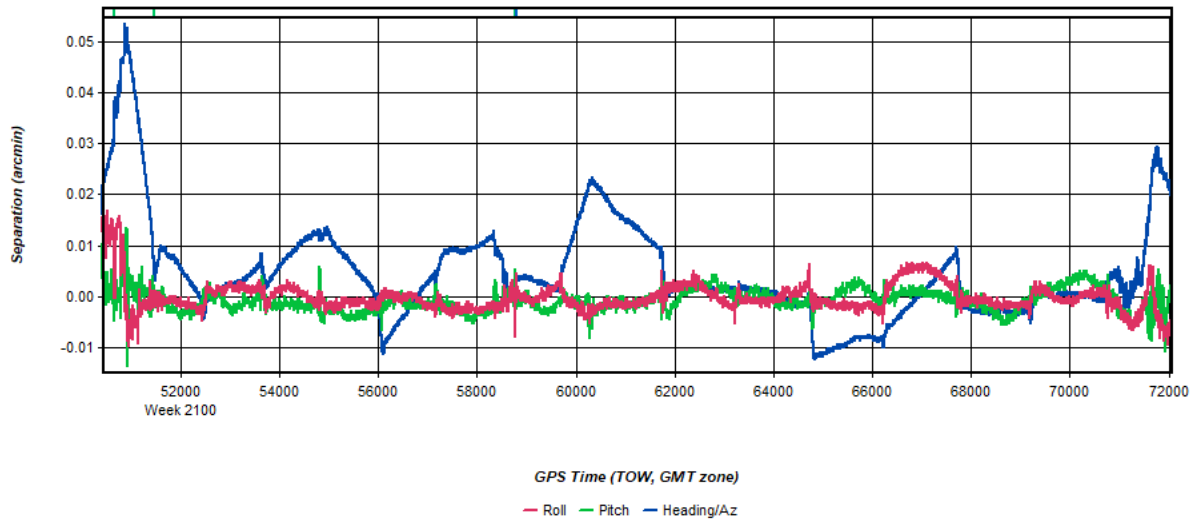
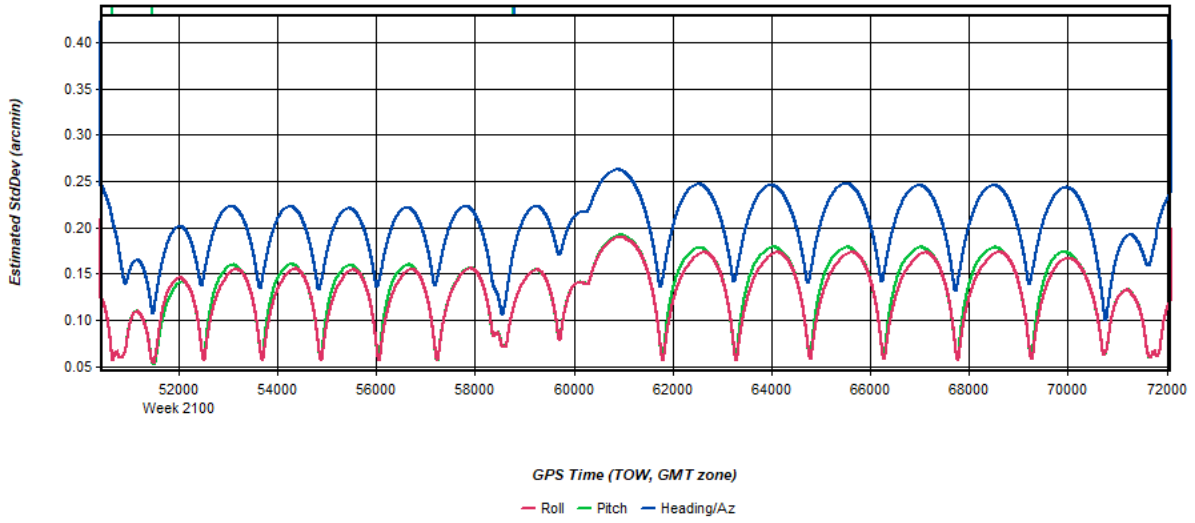
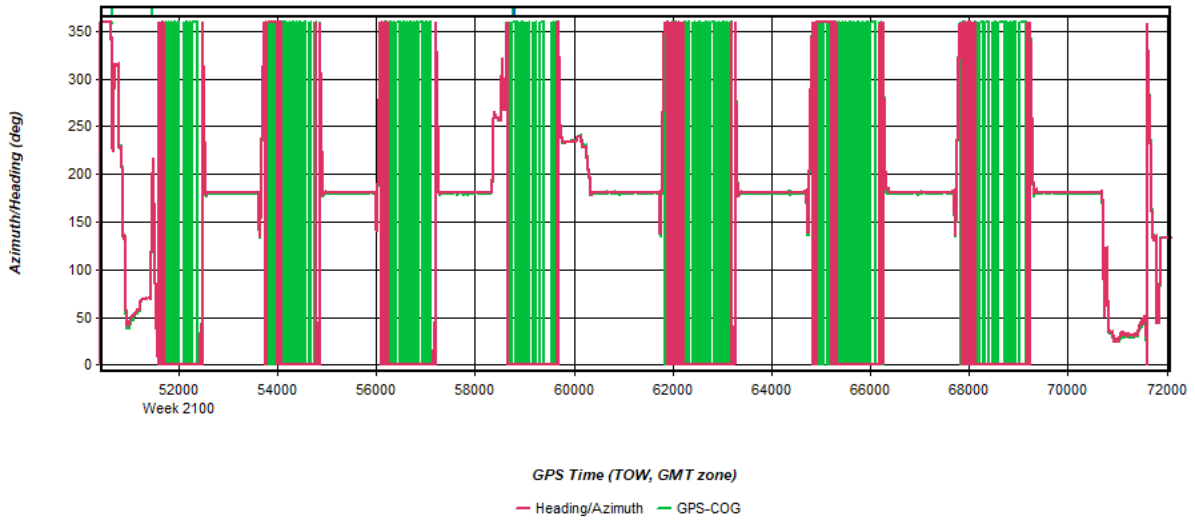


Figure 10: 20200405135910_9 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 11: 20200405135910_9 [Smoothed TC Combined] - Azimuth Plot



Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 12: 20200405135910_9 [Smoothed TC Combined] - Roll & Pitch Plot

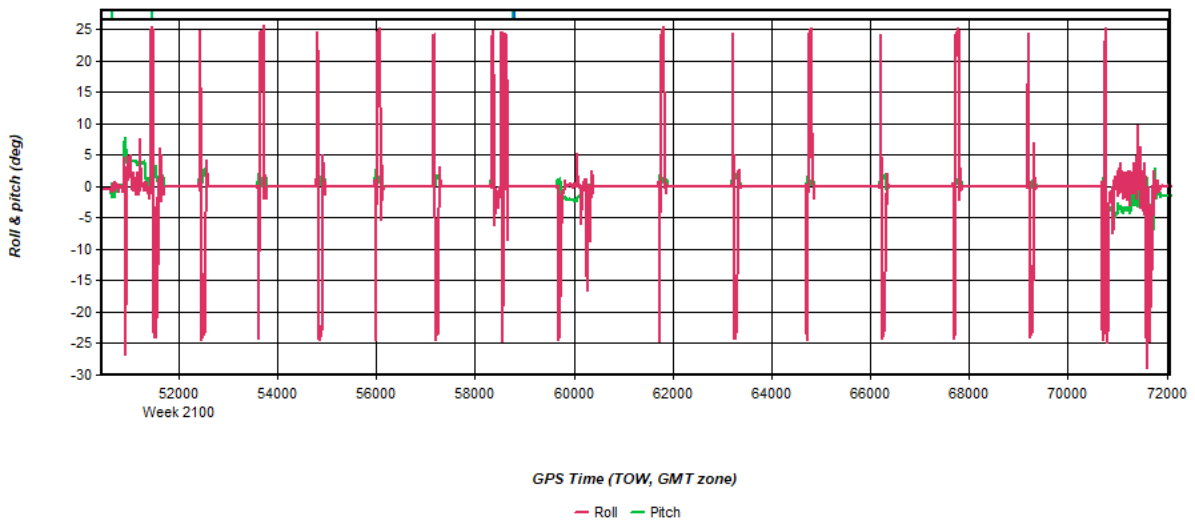


Figure 13: 20200405135910_9 [Smoothed TC Combined] - Velocity Profile Plot

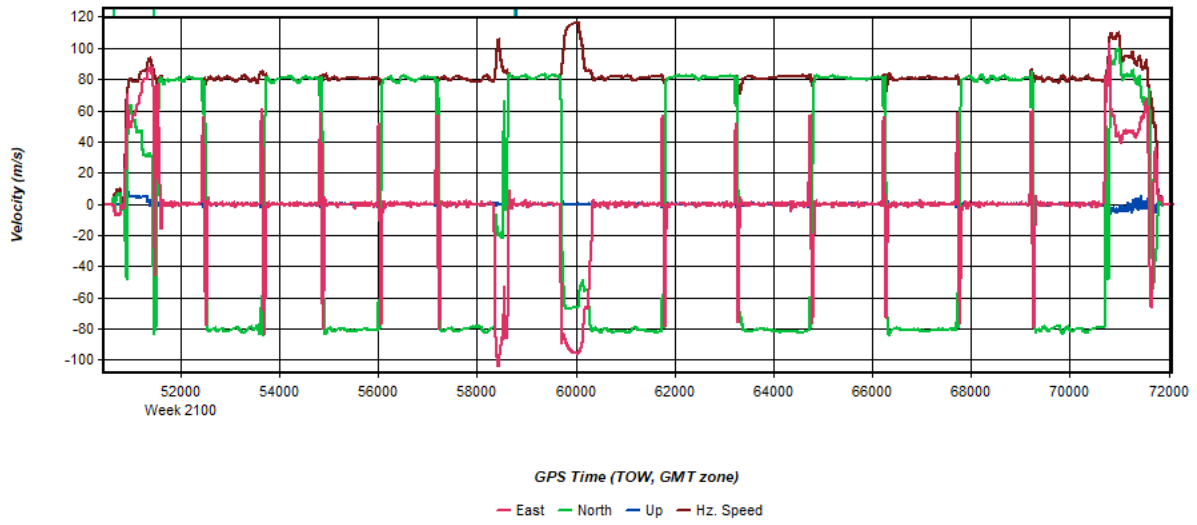


Figure 14: 20200405135910_9 [Smoothed TC Combined] - Body Frame Velocity Plot

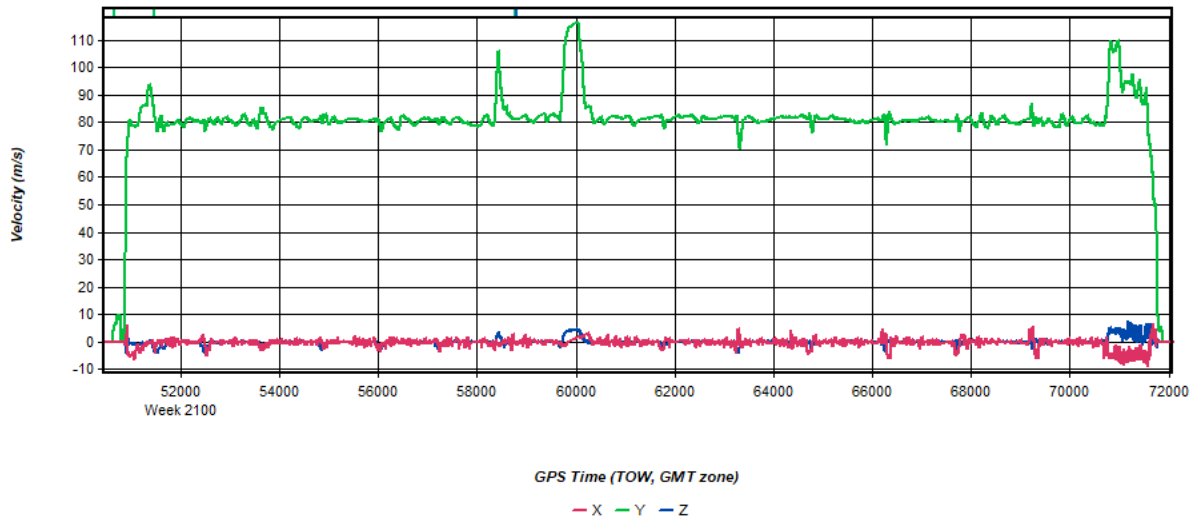
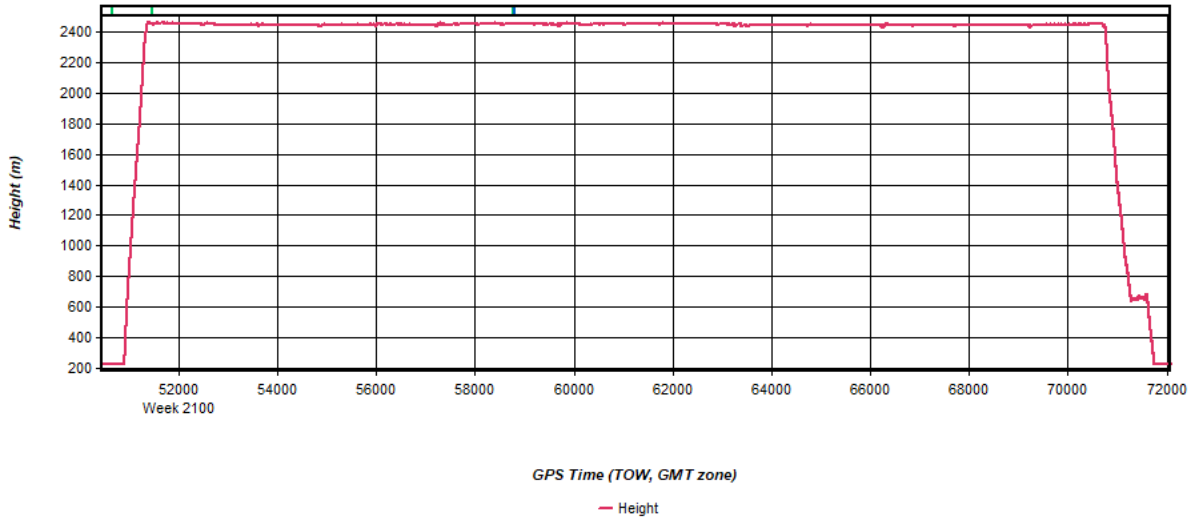
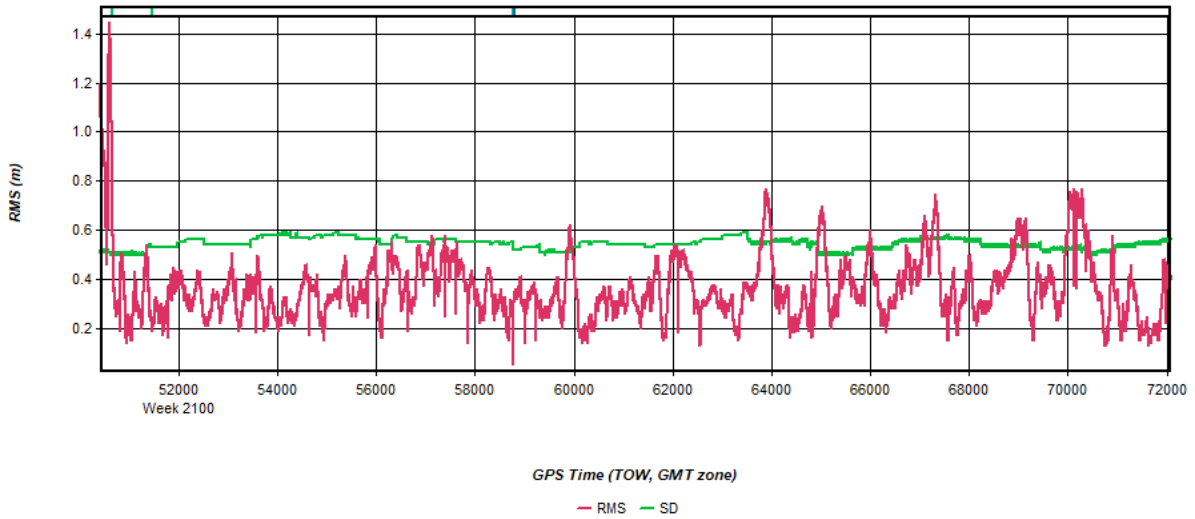


Figure 15: 20200405135910_9 [Smoothed TC Combined] - Height Profile Plot



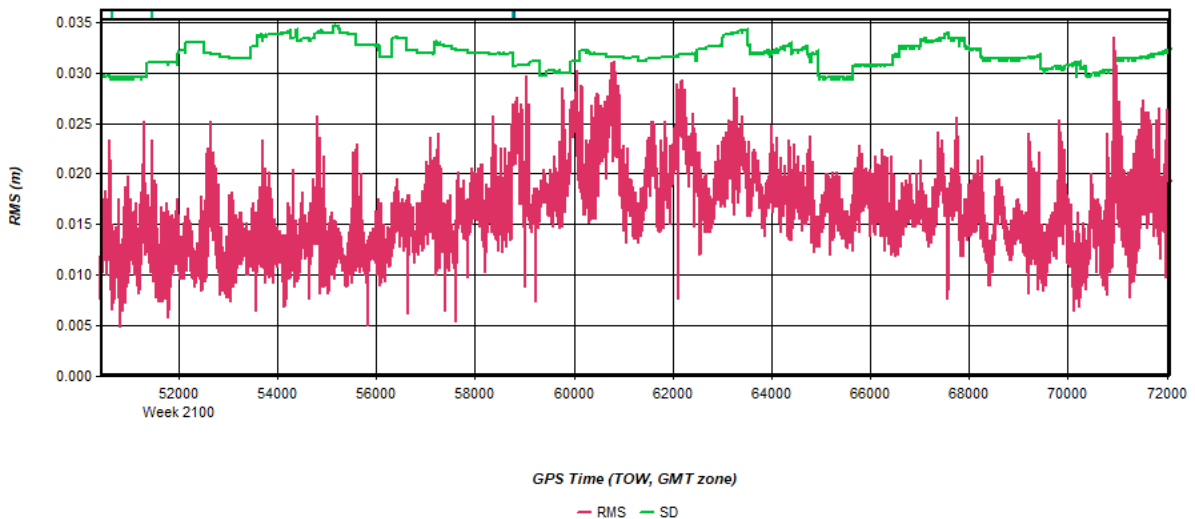
Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 16: 20200405135910_9 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 17: 20200405135910_9 [Smoothed TC Combined] - Carrier Residual RMS Plot



Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Figure 18: 20200405135910_9 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

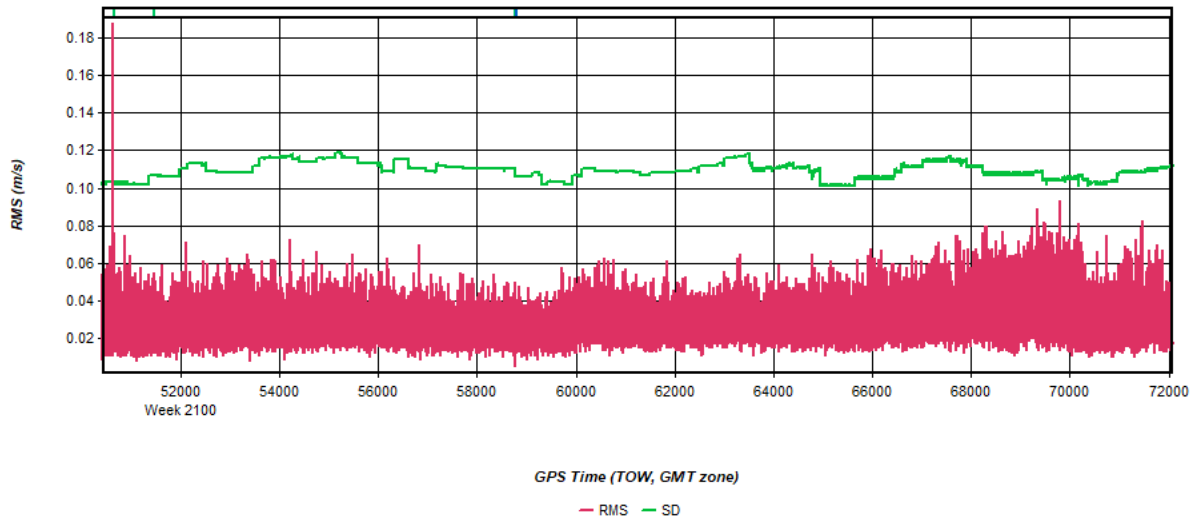


Figure 19: 20200405135910_9 [Smoothed TC Combined] - Accelerometer Bias Plot

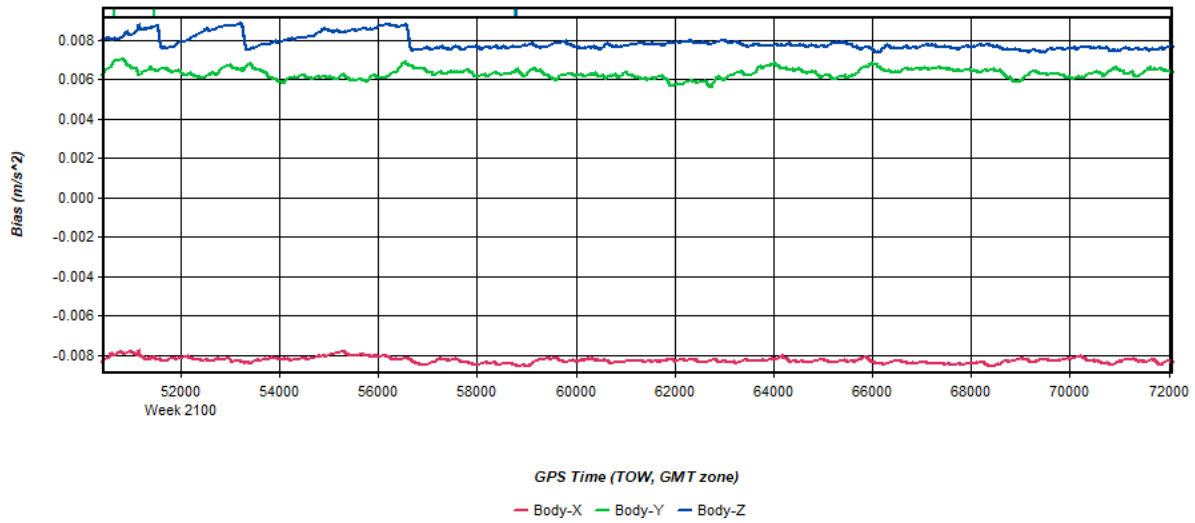
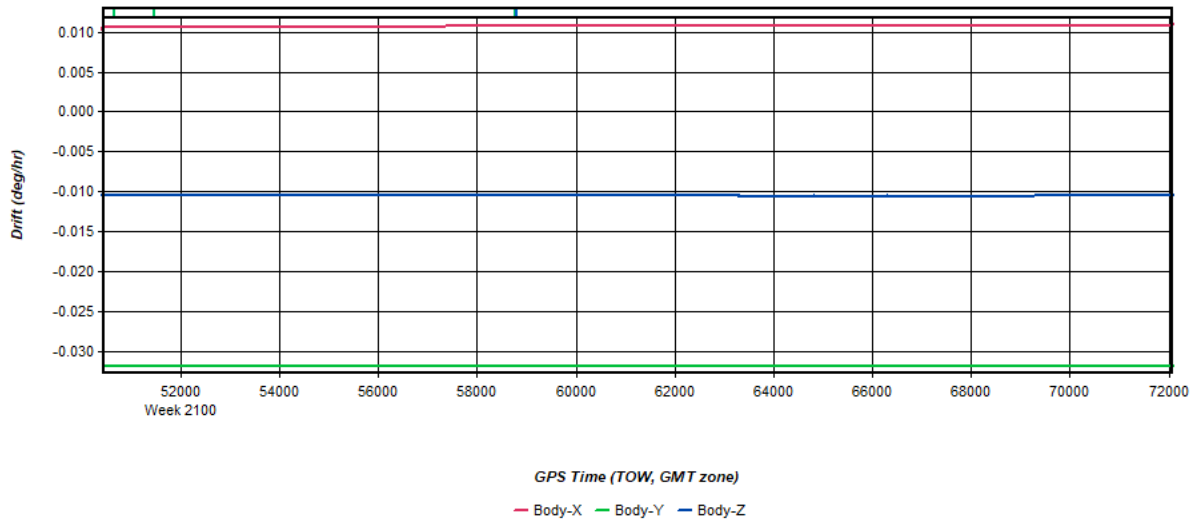


Figure 20: 20200405135910_9 [Smoothed TC Combined] - Gyro Drift Plot

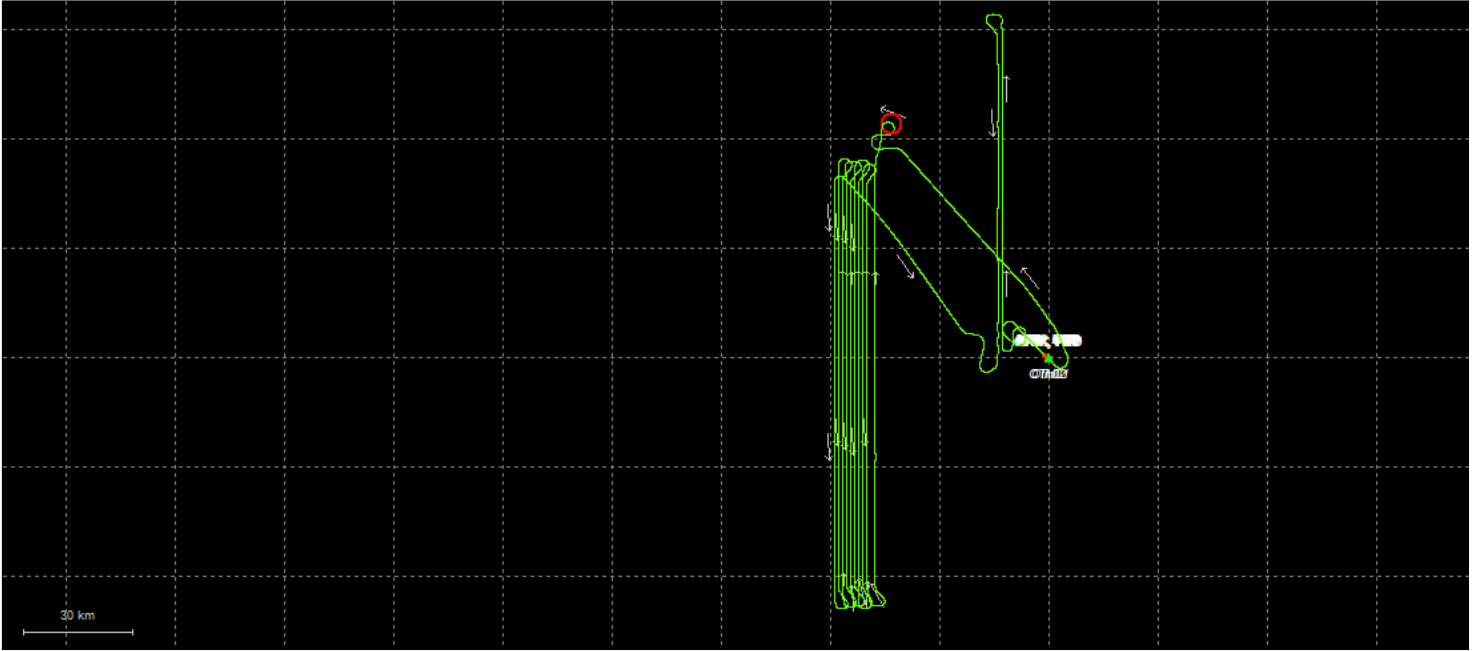


Process	20200405135910_9	by Unknown	on 6/4/2020	at 18:51:46
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Output Results for 20200405203430_10

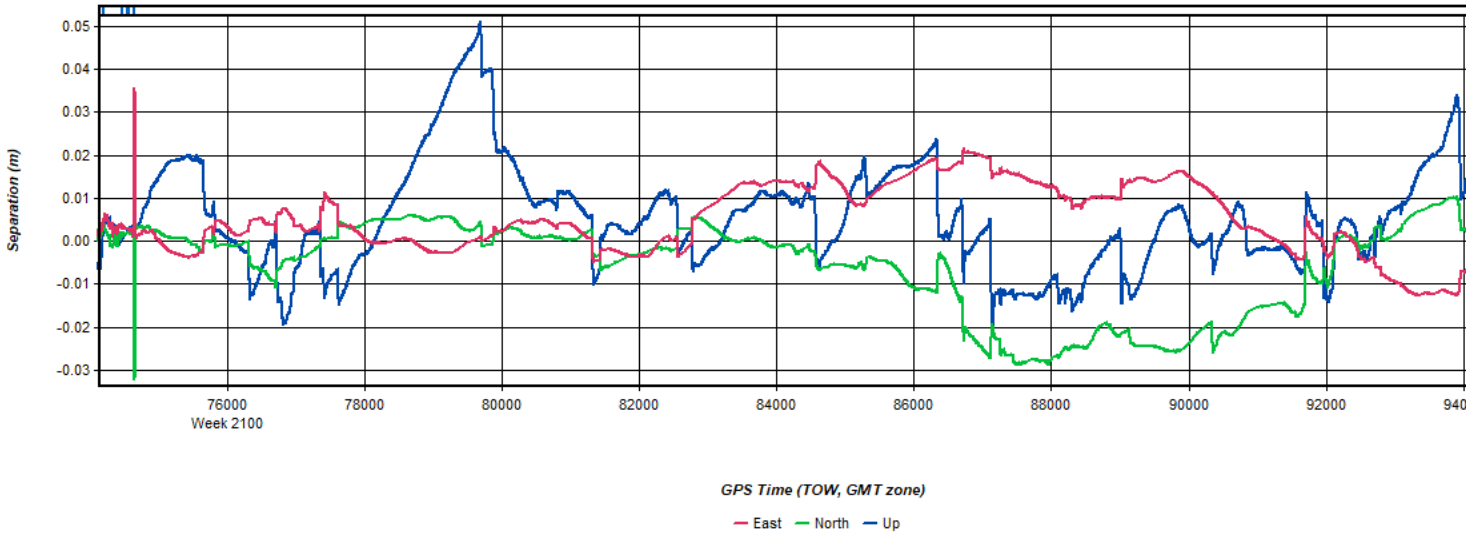
Inertial Explorer Version 8.90.2124
06/18/2020

Figure 1: Smoothed TC Combined - Map



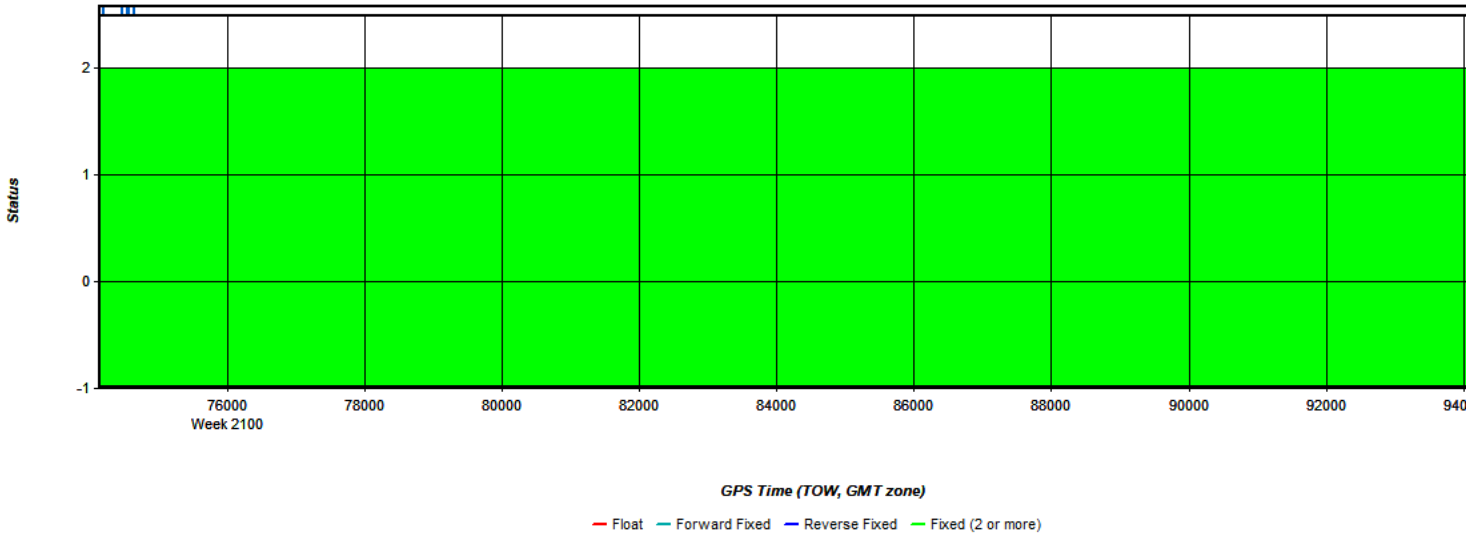
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 2: 20200405203430_10 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



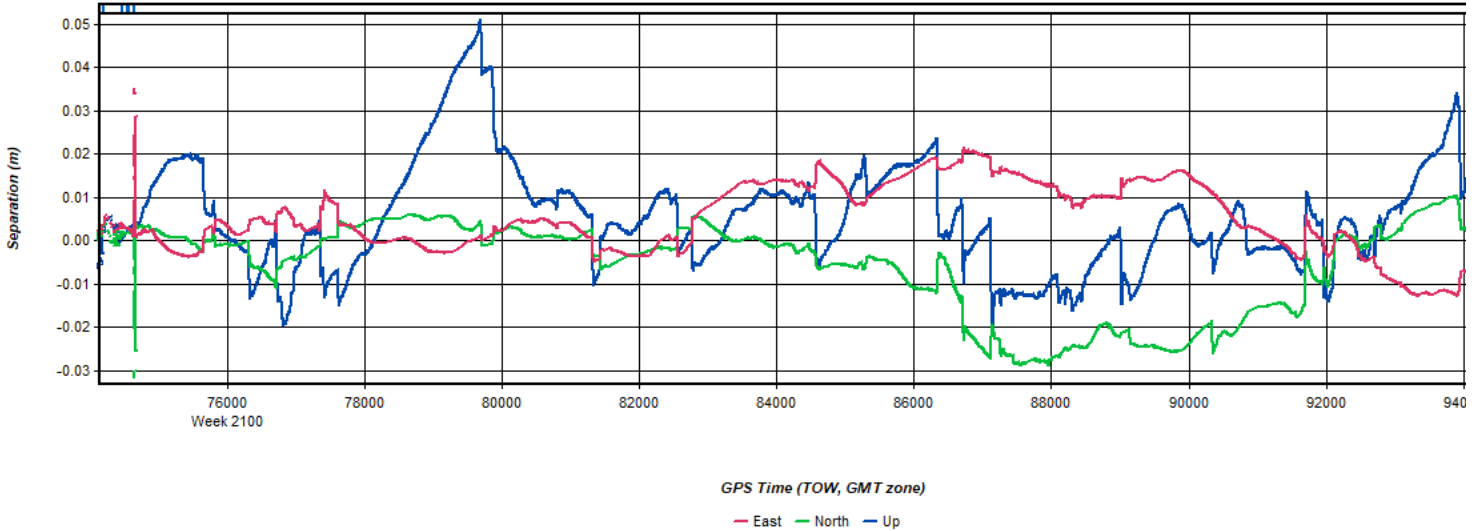
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 3: 20200405203430_10 [Smoothed TC Combined] - Float or Fixed Ambiguity



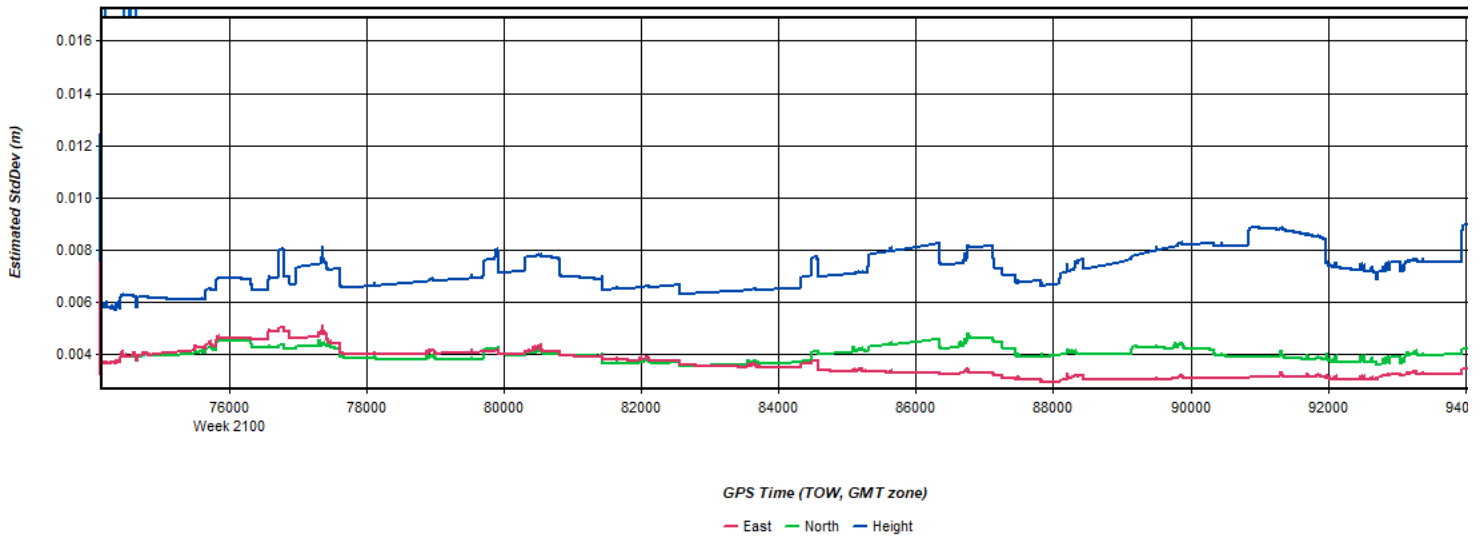
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 4: 20200405203430_10 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



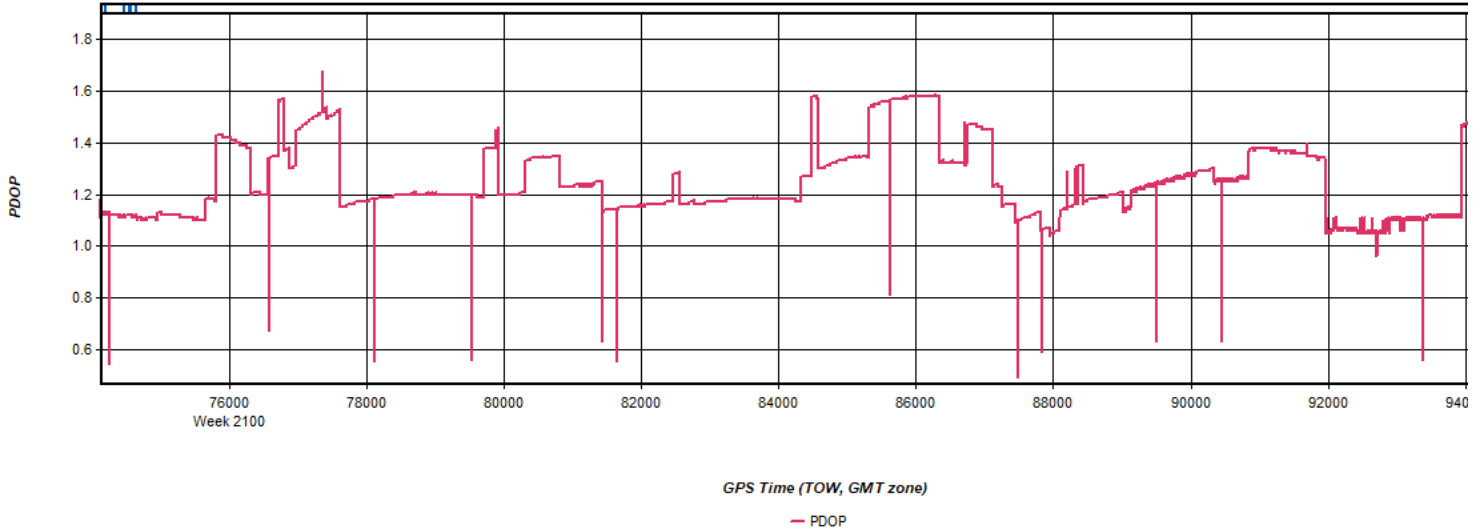
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 5: 20200405203430_10 [Smoothed TC Combined] - Estimated Position Accuracy Plot



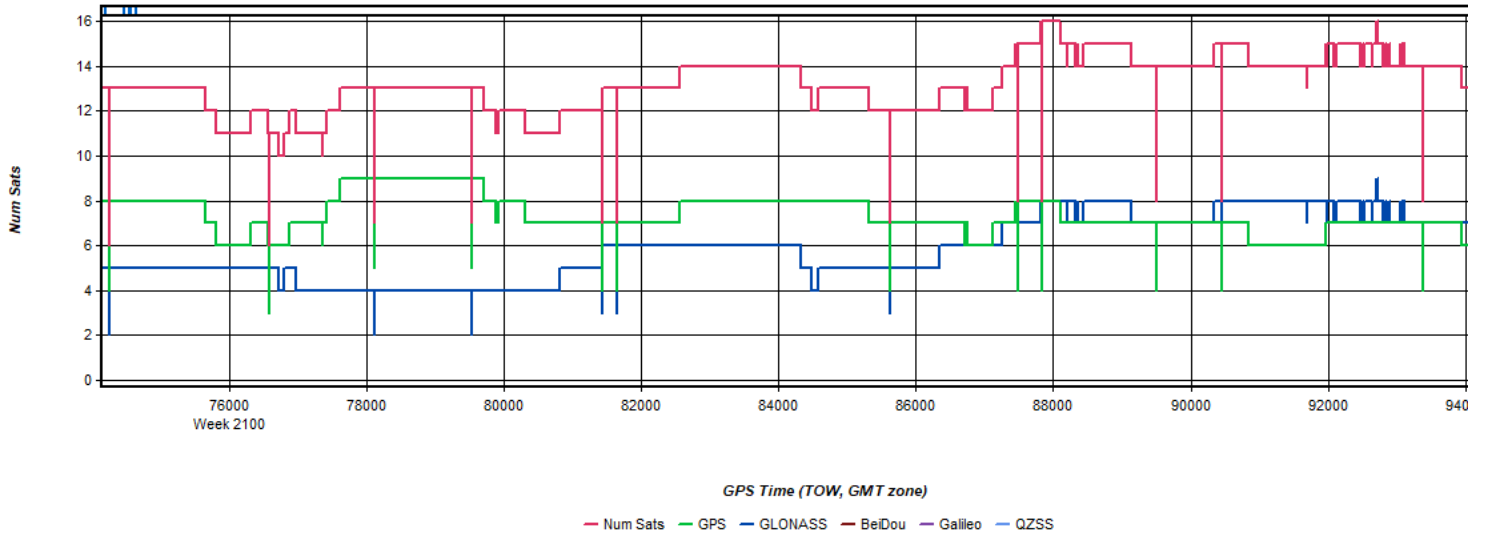
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 6: 20200405203430_10 [Smoothed TC Combined] - PDOP Plot



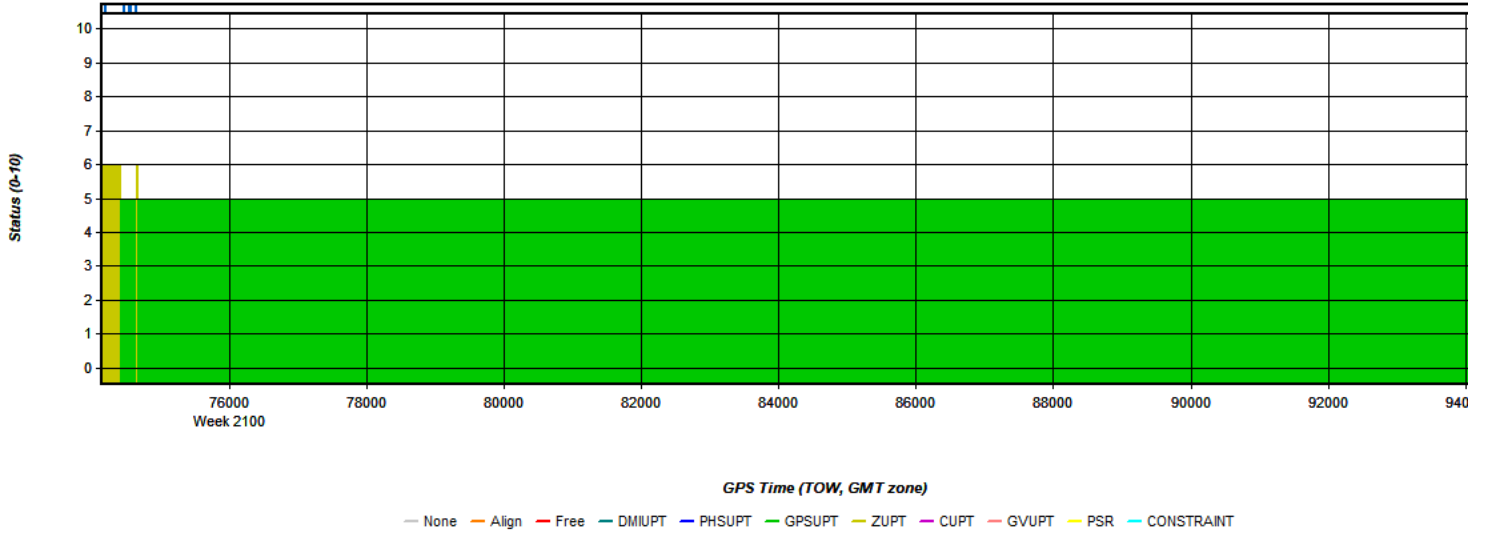
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 7: 20200405203430_10 [Smoothed TC Combined] - Number of Satellites Line Plot



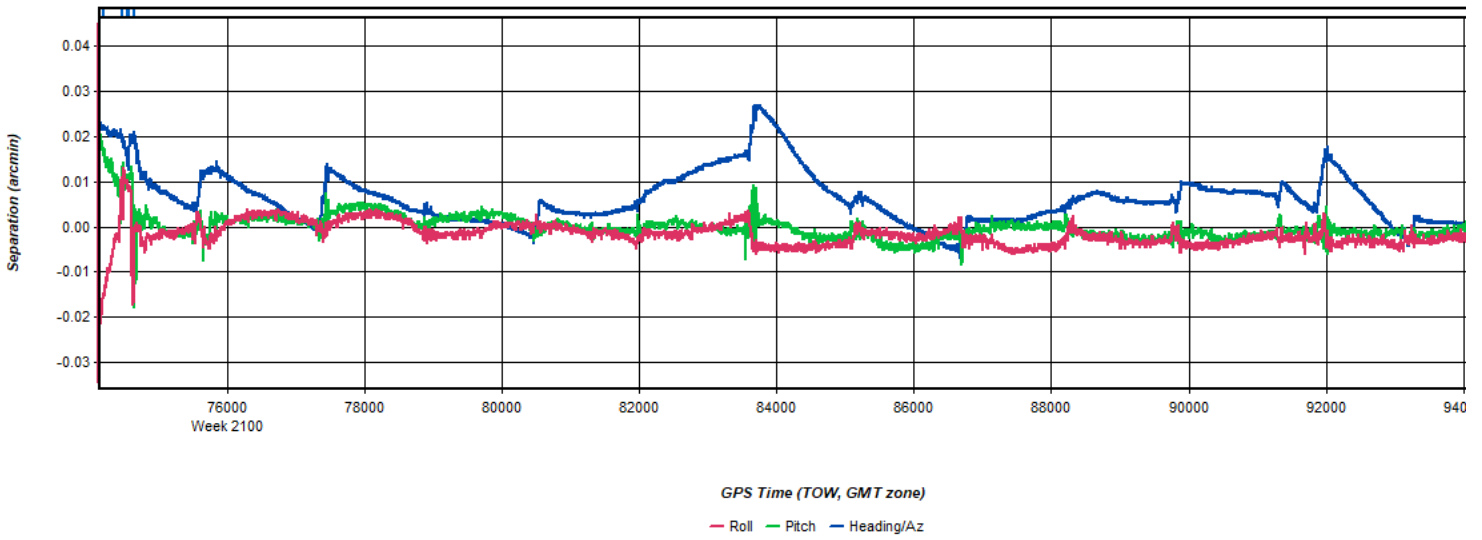
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 8: 20200405203430_10 [Smoothed TC Combined] - Status flag for IMU processing



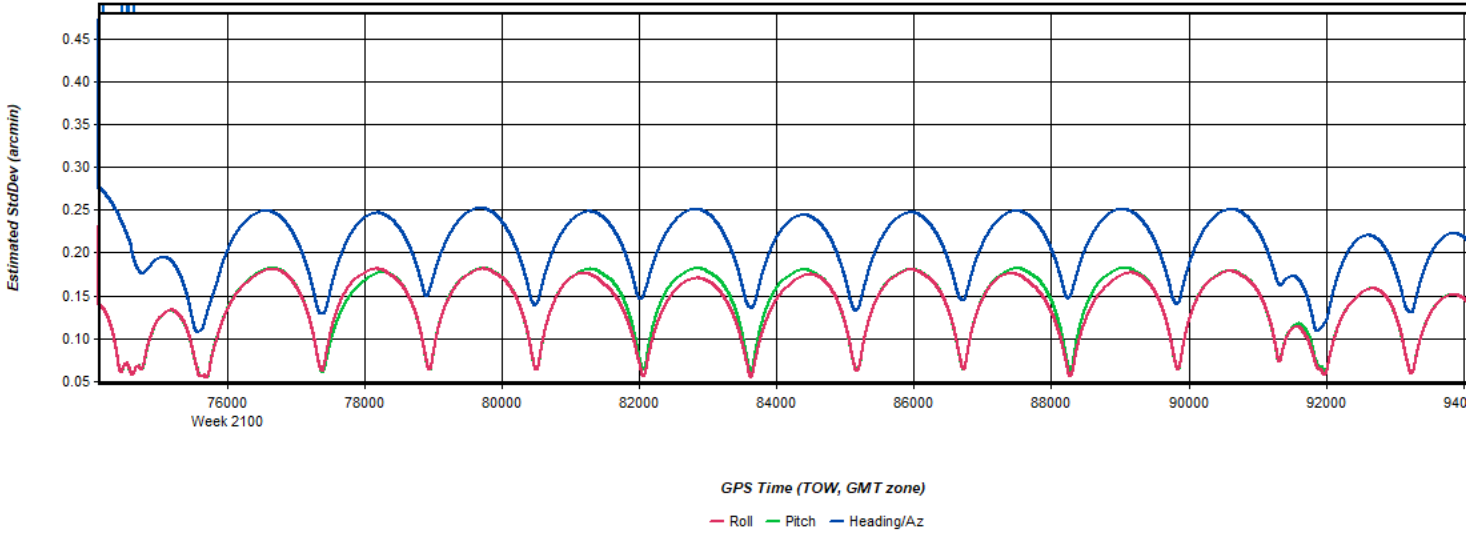
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 9: 20200405203430_10 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



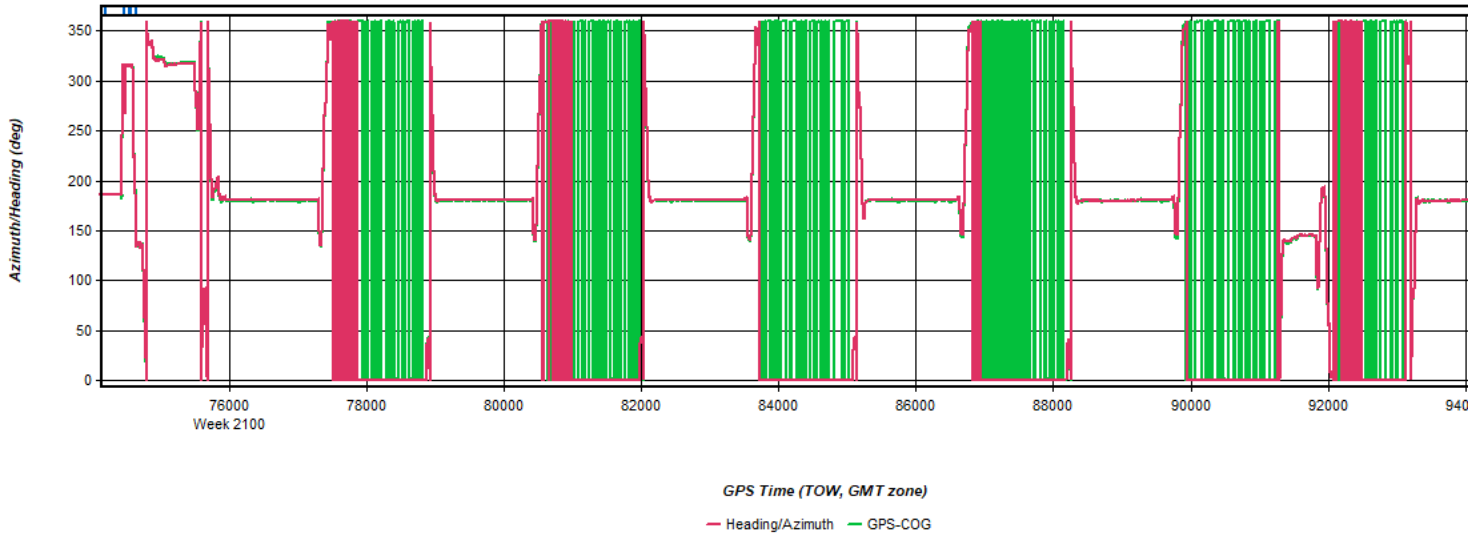
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 10: 20200405203430_10 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



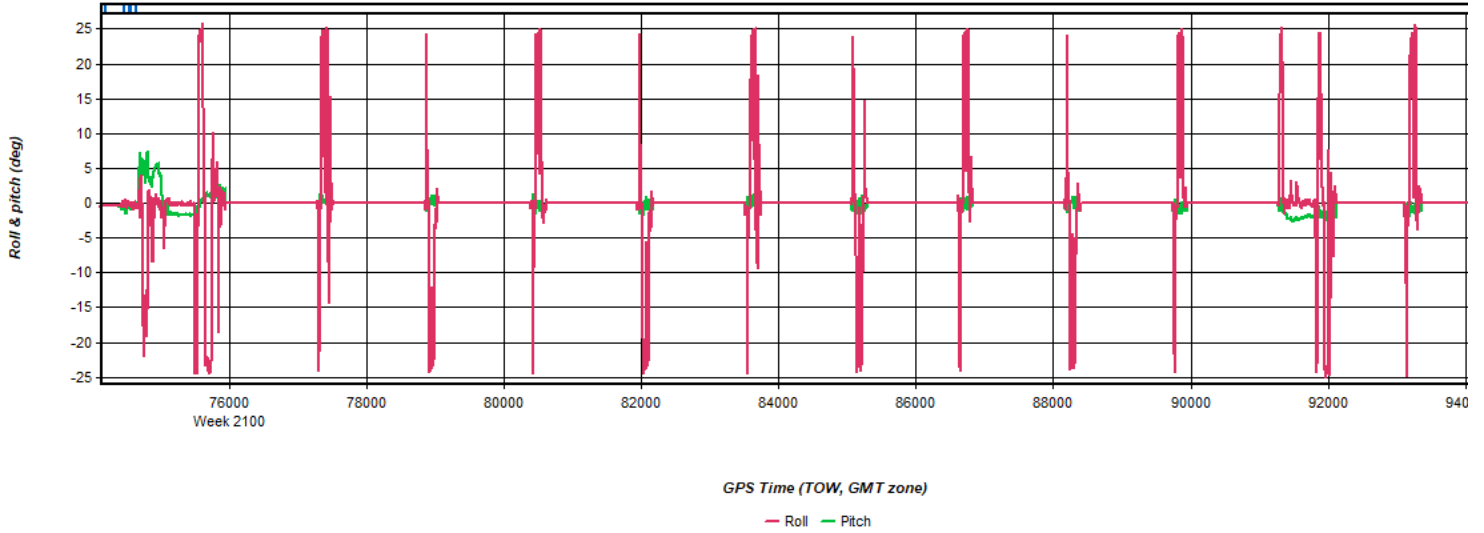
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 11: 20200405203430_10 [Smoothed TC Combined] - Azimuth Plot



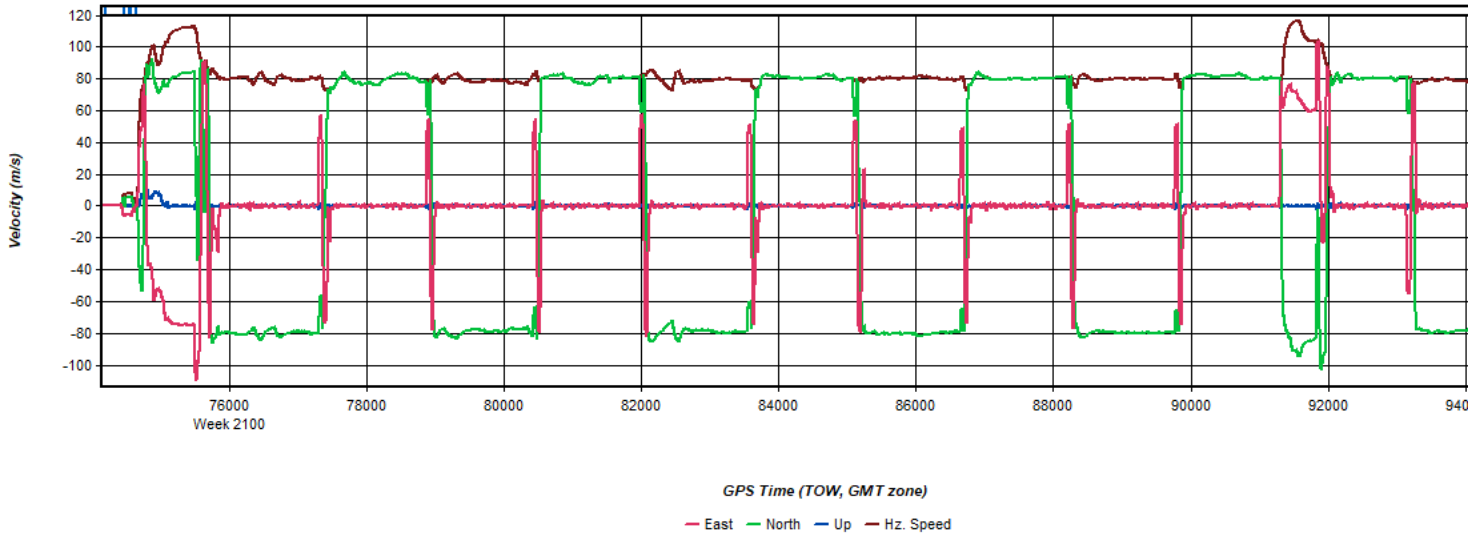
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 12: 20200405203430_10 [Smoothed TC Combined] - Roll & Pitch Plot



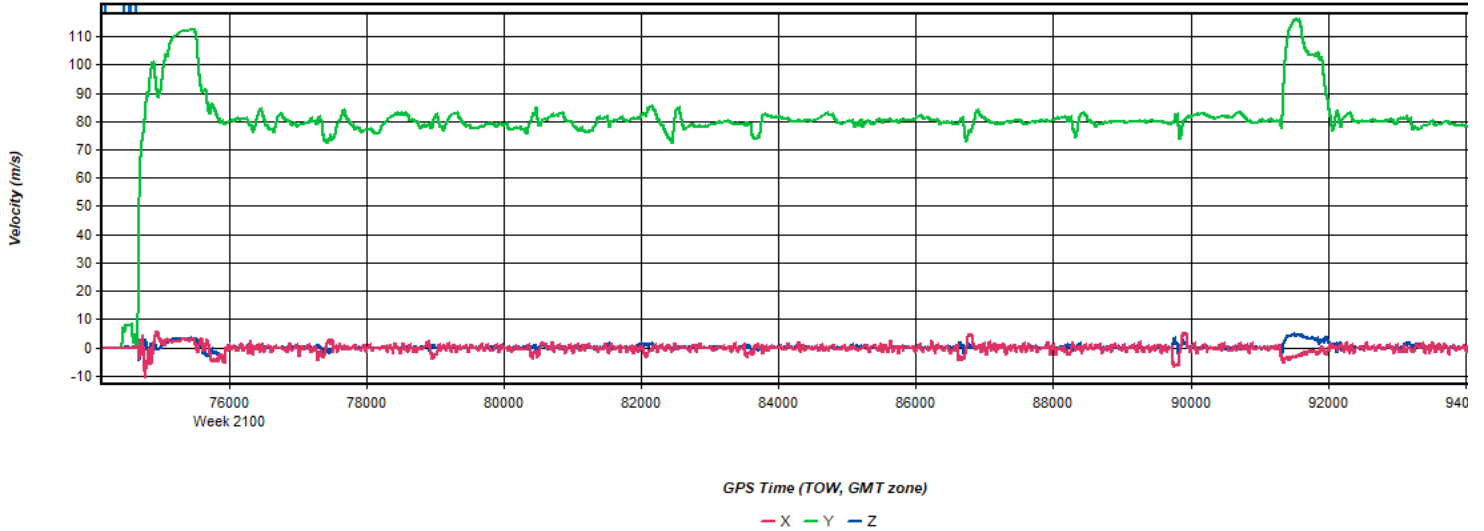
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 13: 20200405203430_10 [Smoothed TC Combined] - Velocity Profile Plot



Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 14: 20200405203430_10 [Smoothed TC Combined] - Body Frame Velocity Plot



Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 15: 20200405203430_10 [Smoothed TC Combined] - Height Profile Plot

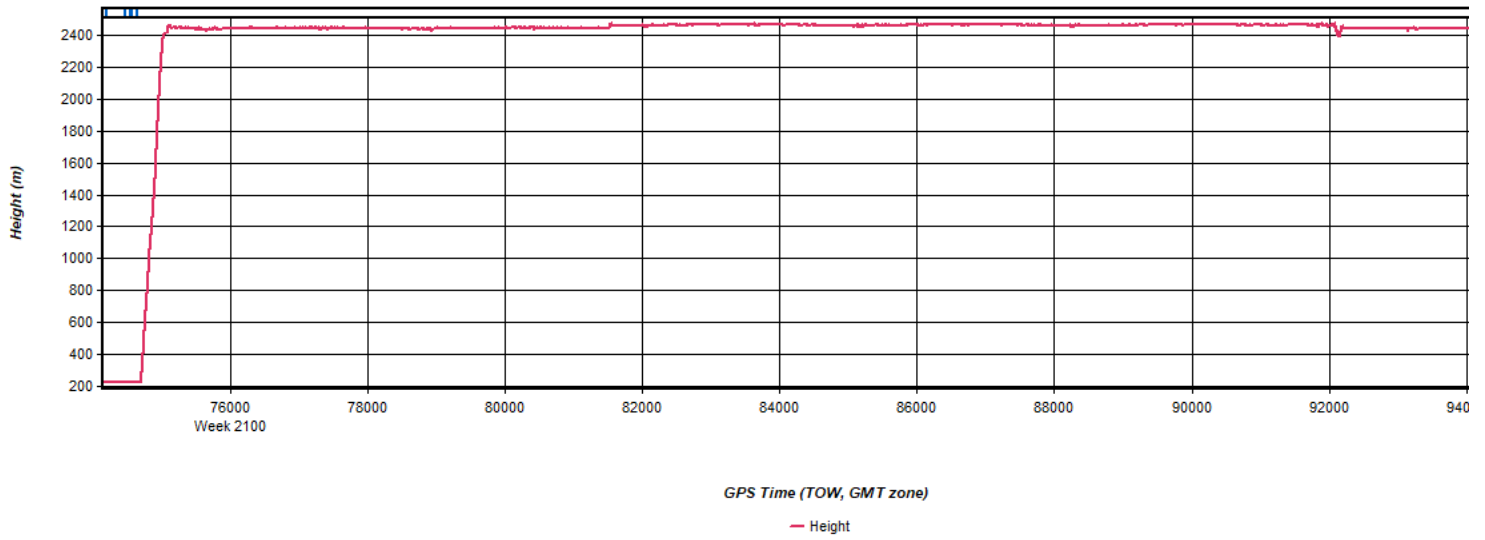


Figure 16: 20200405203430_10 [Smoothed TC Combined] - C/A Code Residual RMS Plot

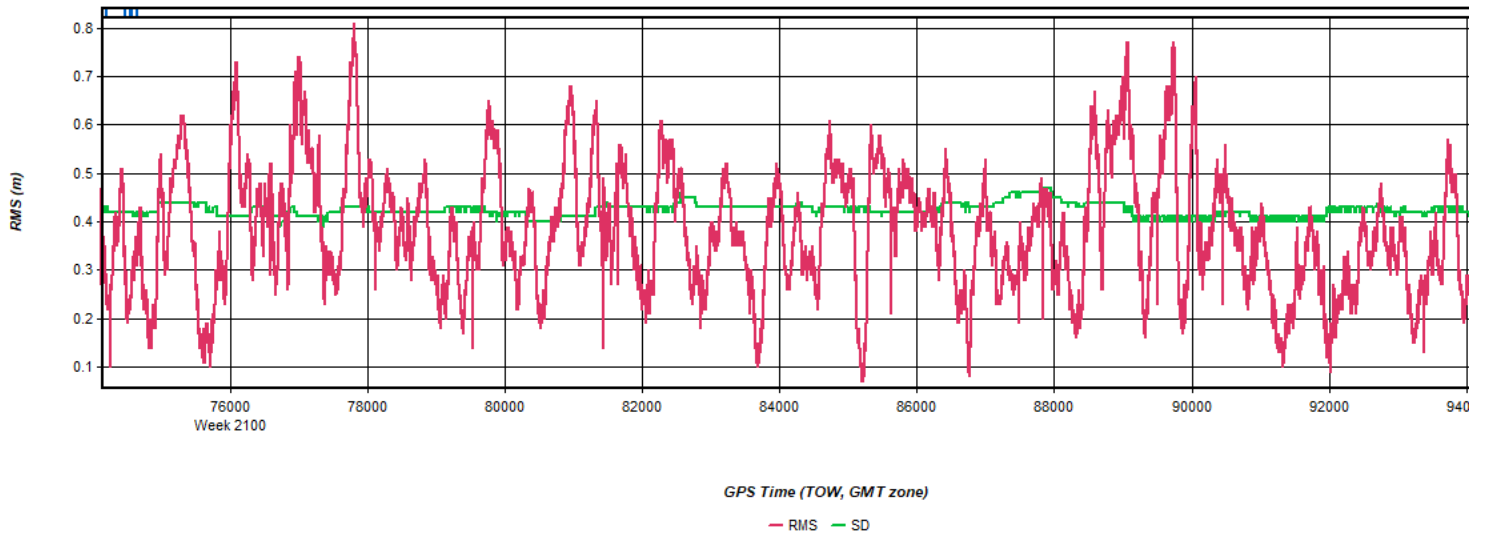
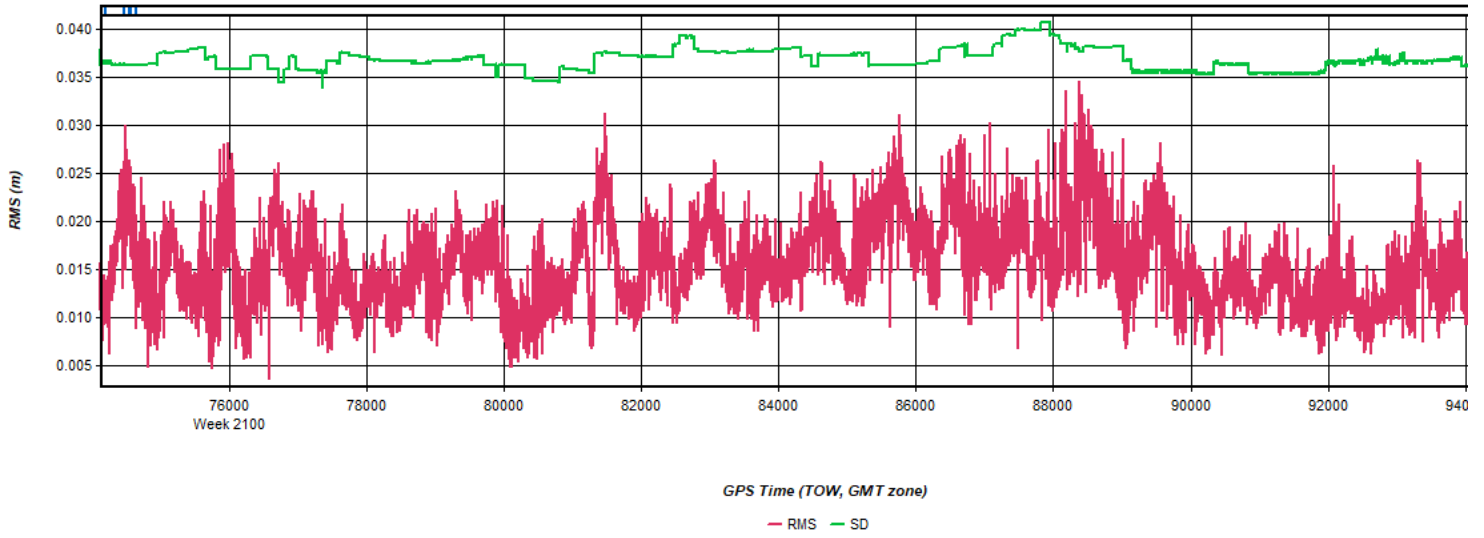
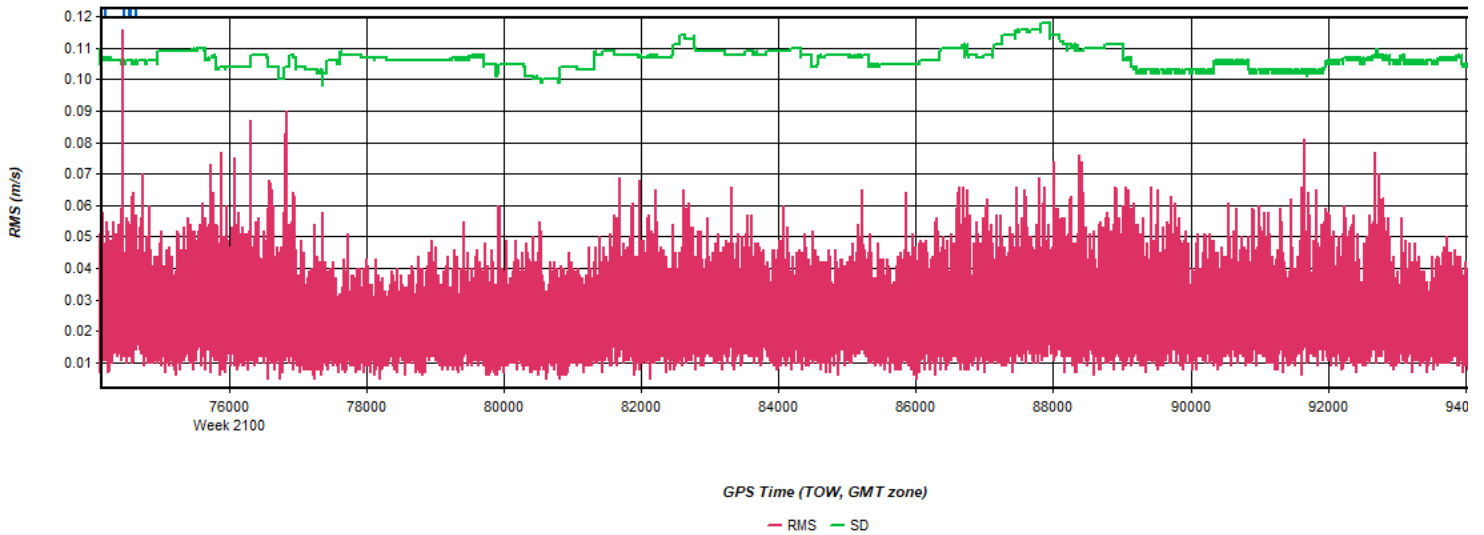


Figure 17: 20200405203430_10 [Smoothed TC Combined] - Carrier Residual RMS Plot



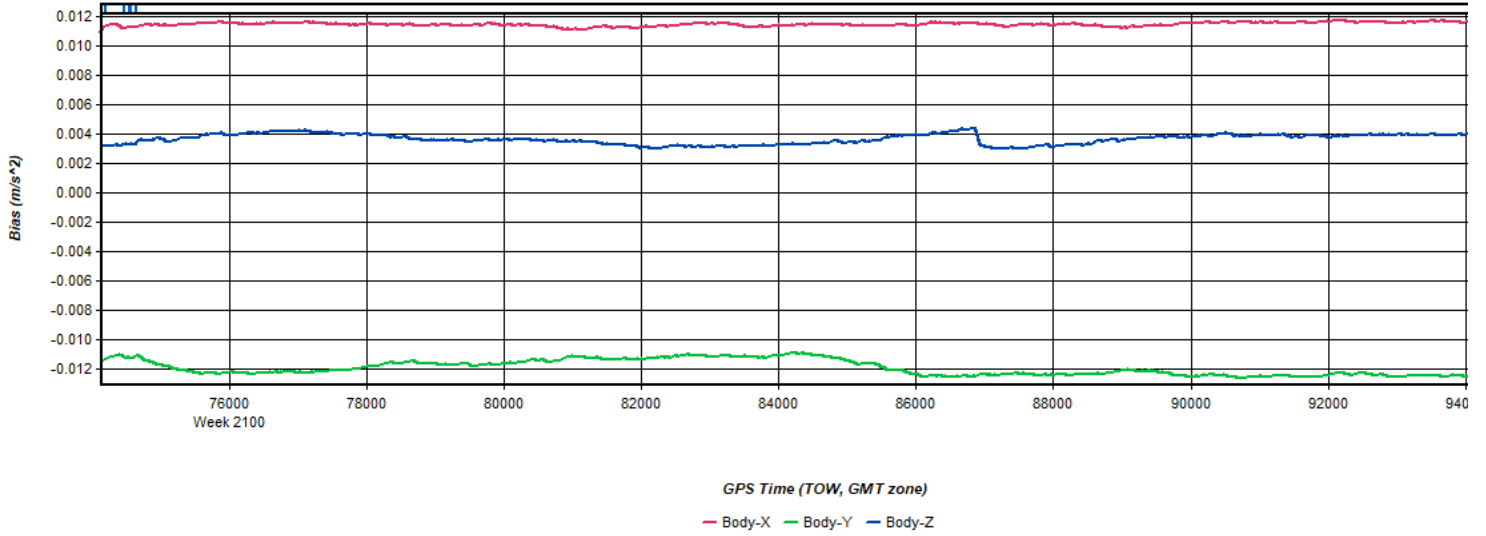
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 18: 20200405203430_10 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



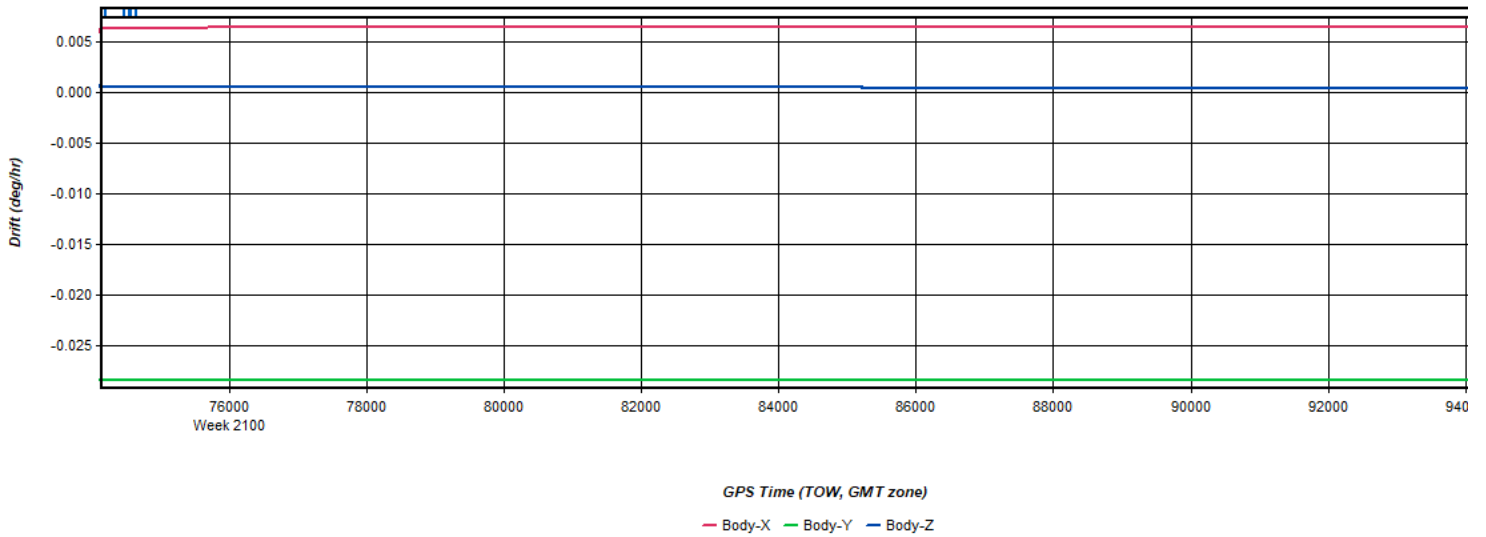
Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 19: 20200405203430_10 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Figure 20: 20200405203430_10 [Smoothed TC Combined] - Gyro Drift Plot

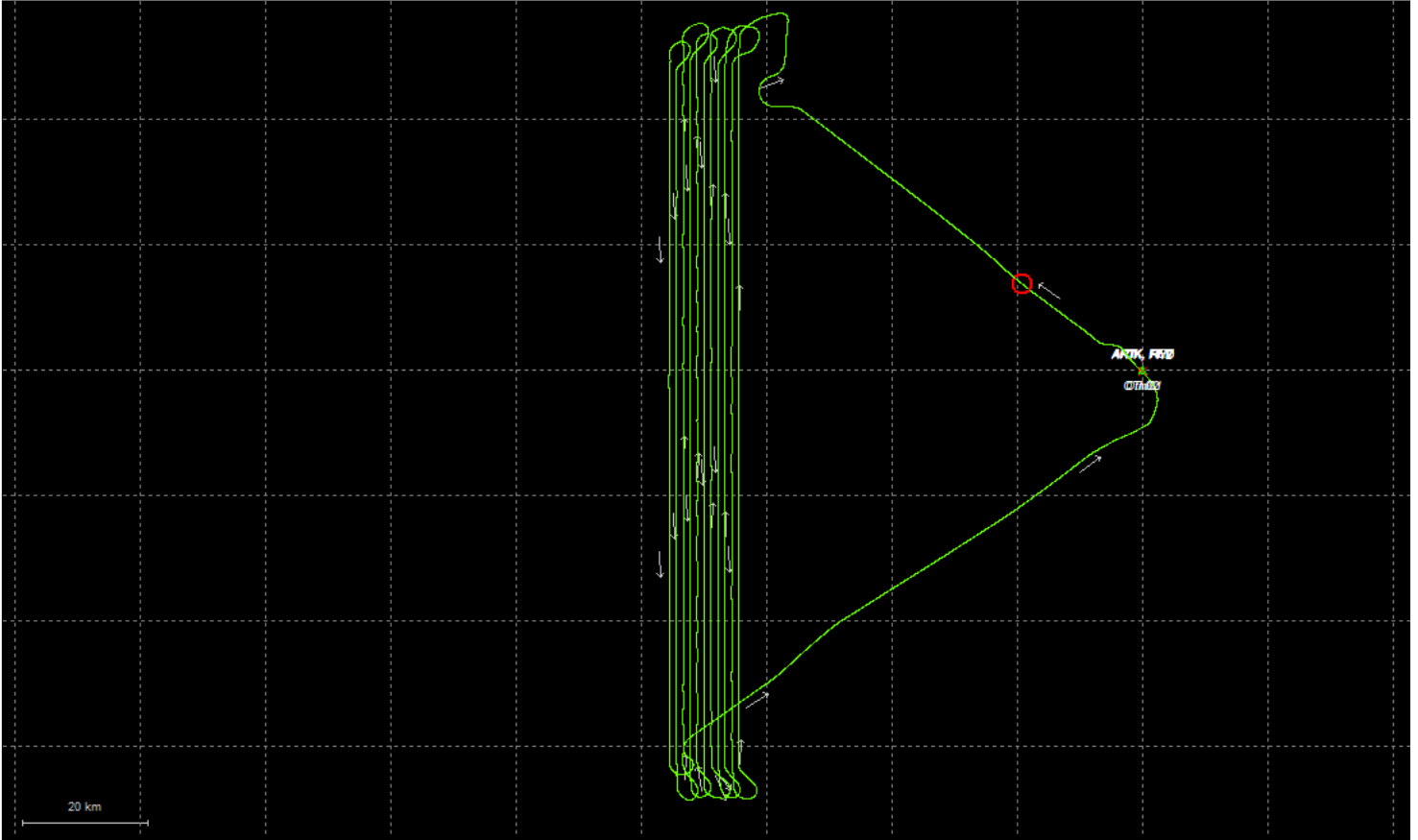


Process	20200405203430_10	by Unknown	on 6/18/2020	at 16:58:23
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Output Results for 20200407233739_11

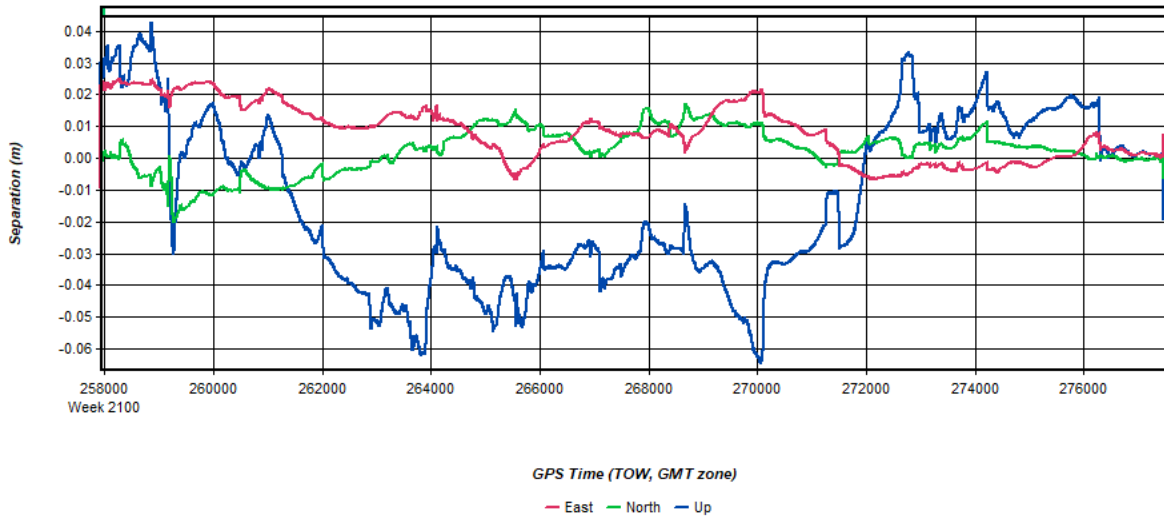
Inertial Explorer Version 8.90.2124
06/05/2020

Figure 1: Smoothed TC Combined - Map



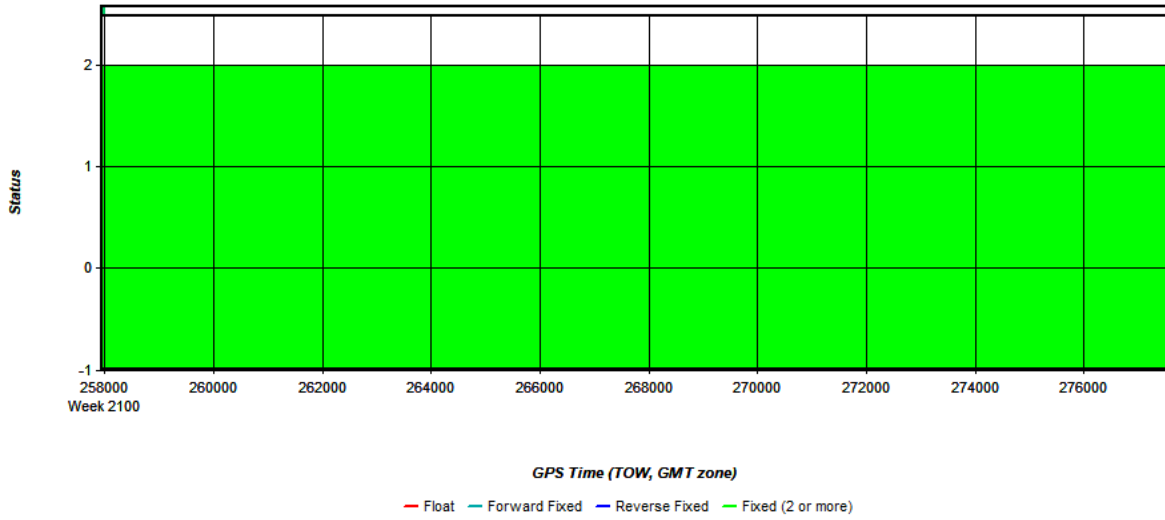
Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Figure 2: 20200407233739_11 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



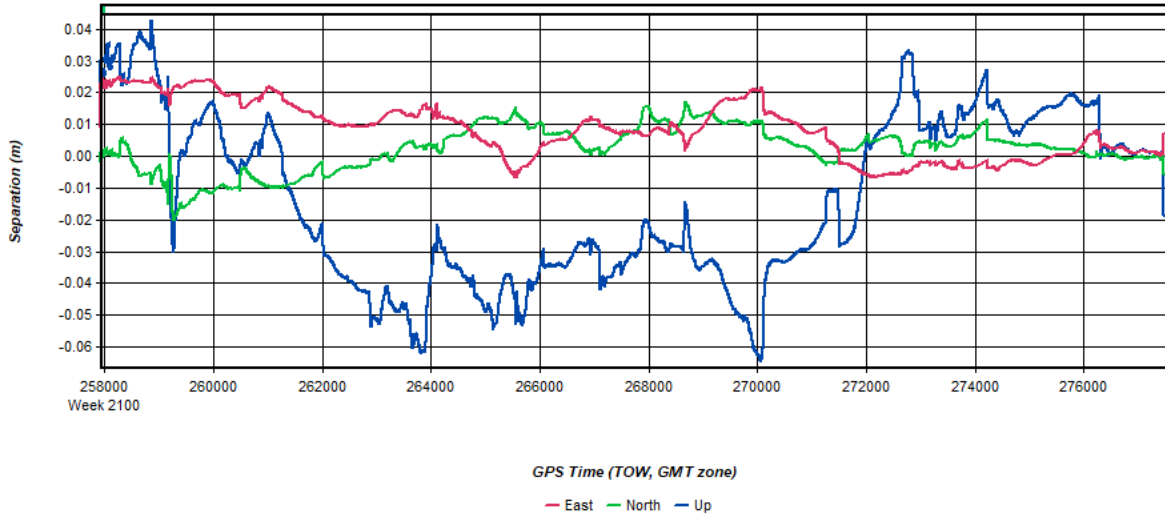
Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Figure 3: 20200407233739_11 [Smoothed TC Combined] - Float or Fixed Ambiguity



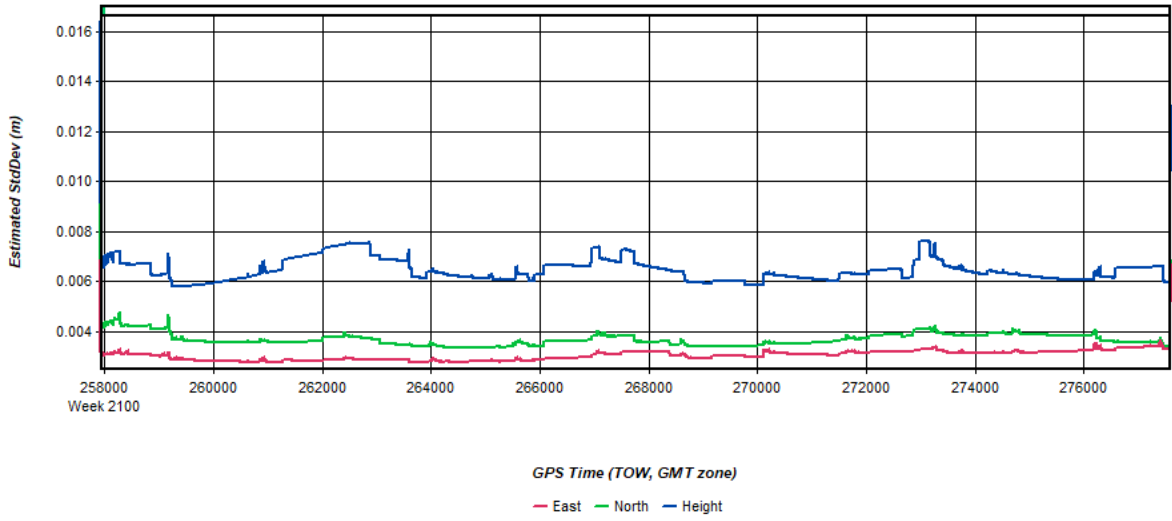
Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Figure 4: 20200407233739_11 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



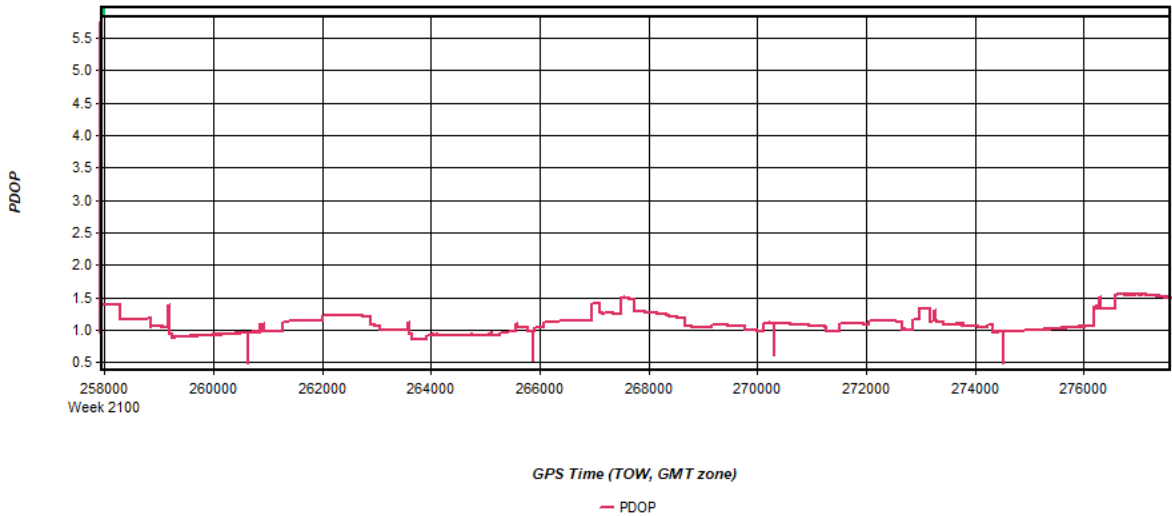
Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Figure 5: 20200407233739_11 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Figure 6: 20200407233739_11 [Smoothed TC Combined] - PDOP Plot



Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Figure 7: 20200407233739_11 [Smoothed TC Combined] - Number of Satellites Line Plot

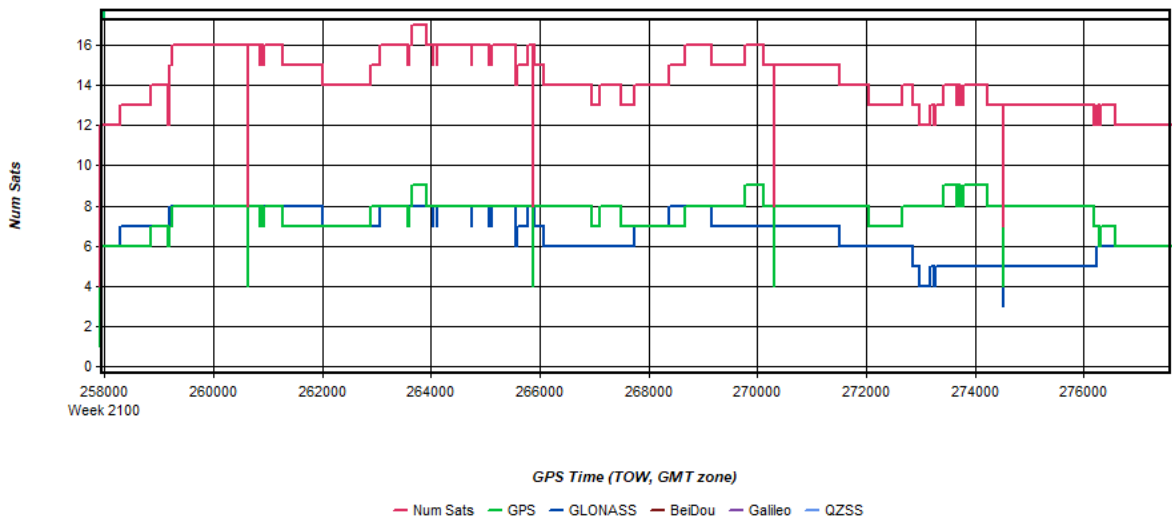


Figure 8: 20200407233739_11 [Smoothed TC Combined] - Status flag for IMU processing

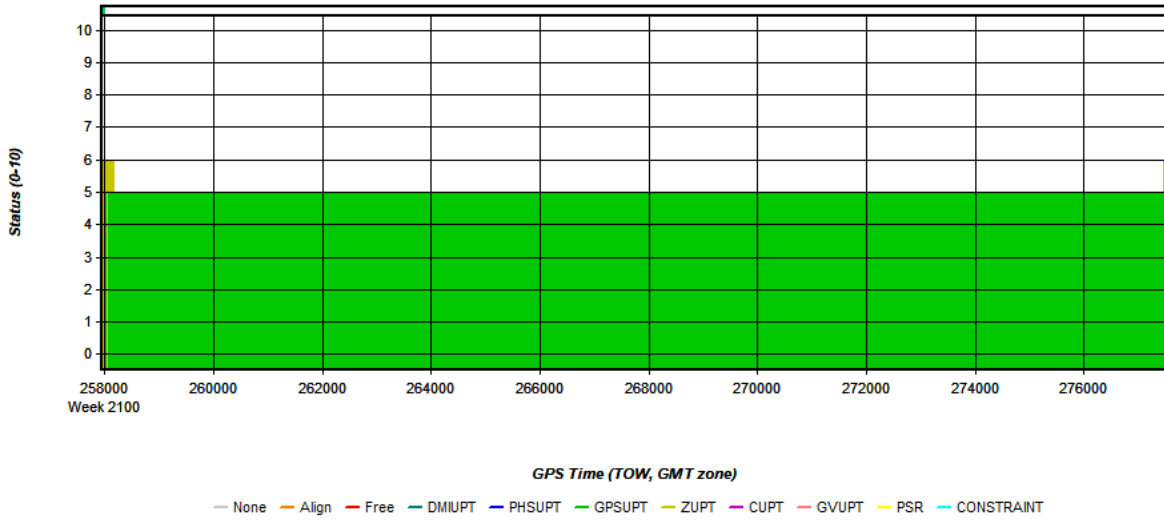


Figure 9: 20200407233739_11 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

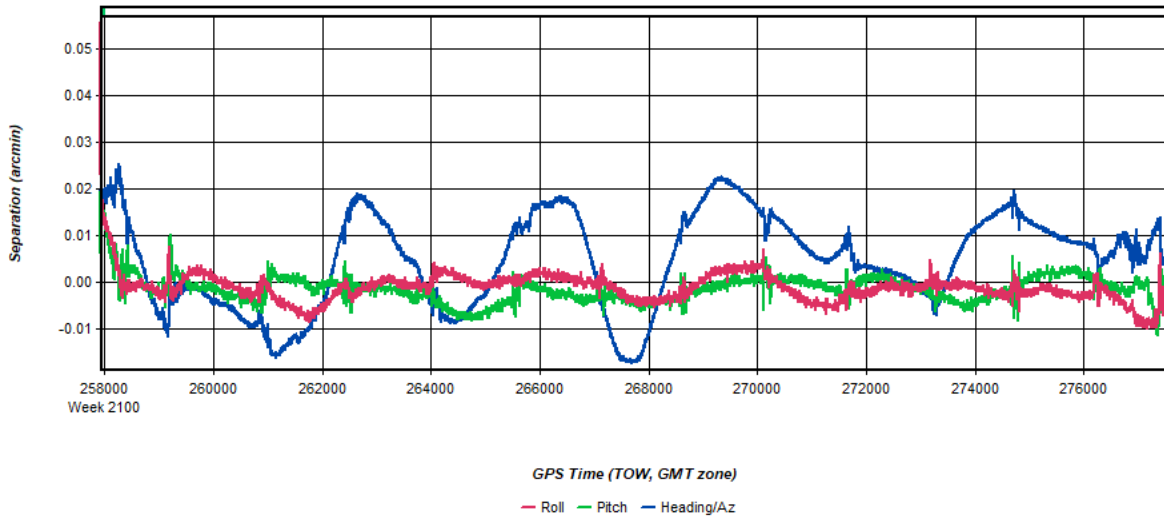
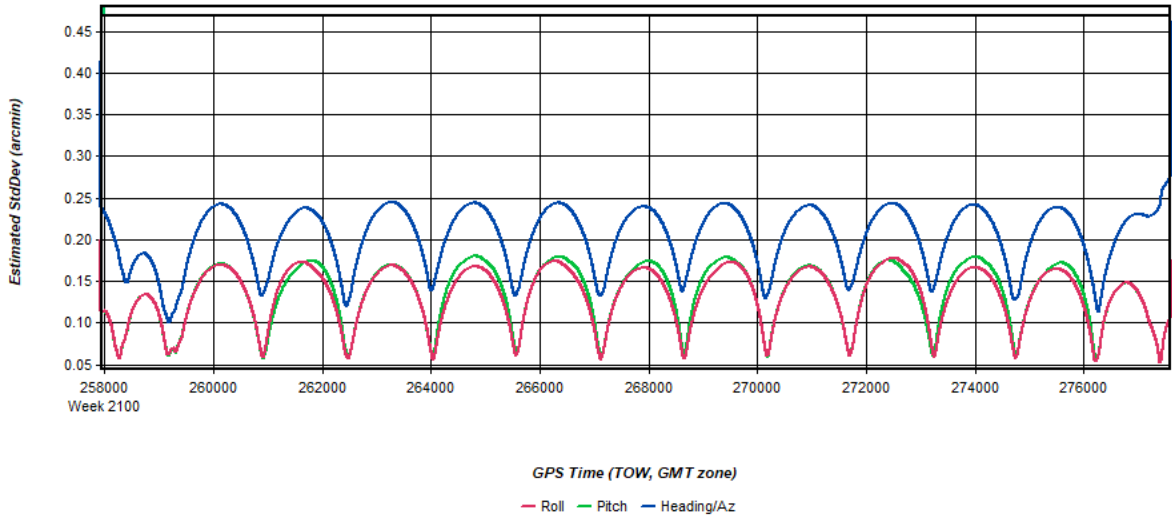
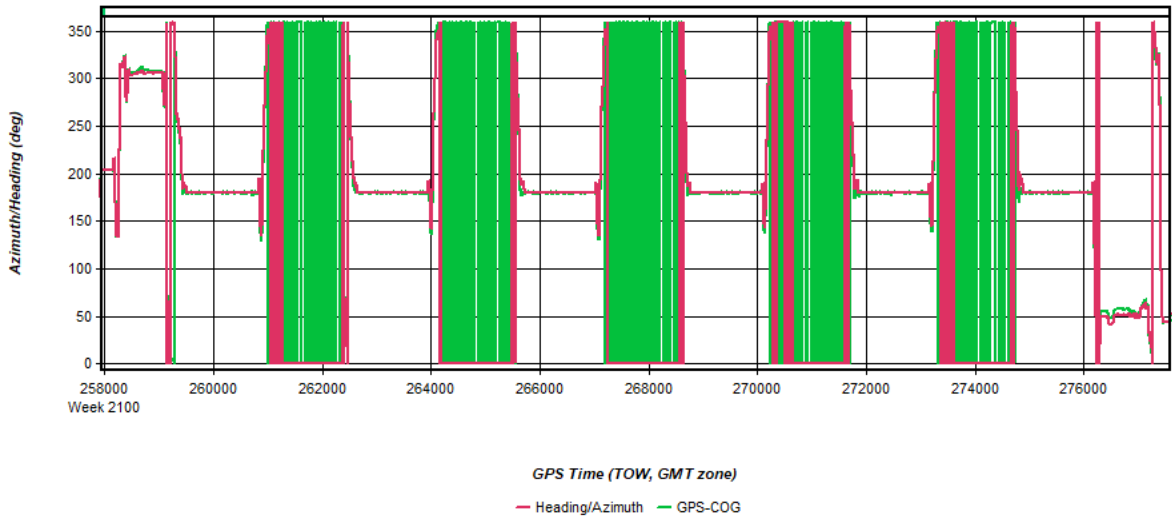


Figure 10: 20200407233739_11 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Figure 11: 20200407233739_11 [Smoothed TC Combined] - Azimuth Plot



Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Figure 12: 20200407233739_11 [Smoothed TC Combined] - Roll & Pitch Plot

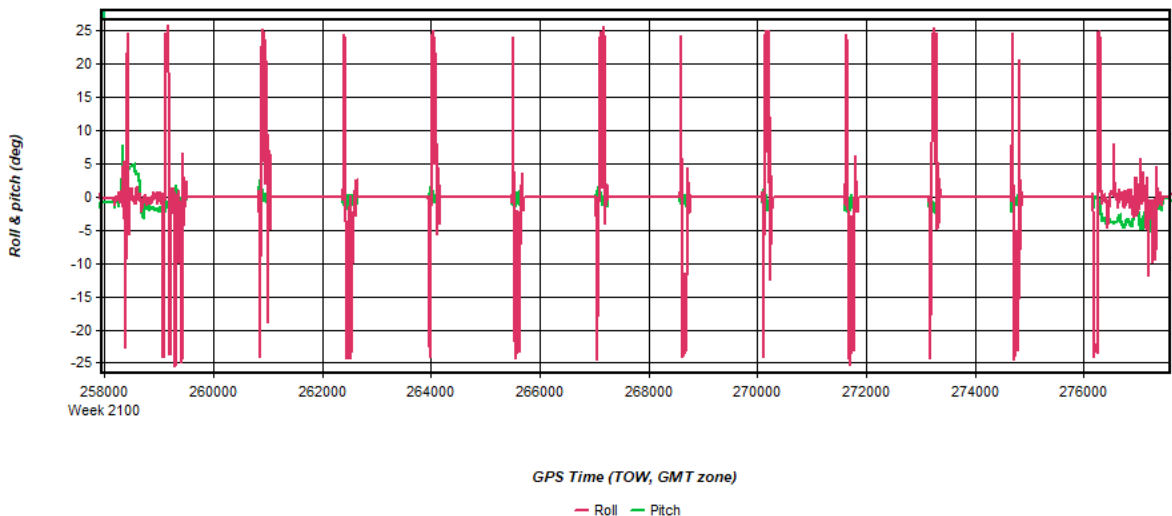


Figure 13: 20200407233739_11 [Smoothed TC Combined] - Velocity Profile Plot

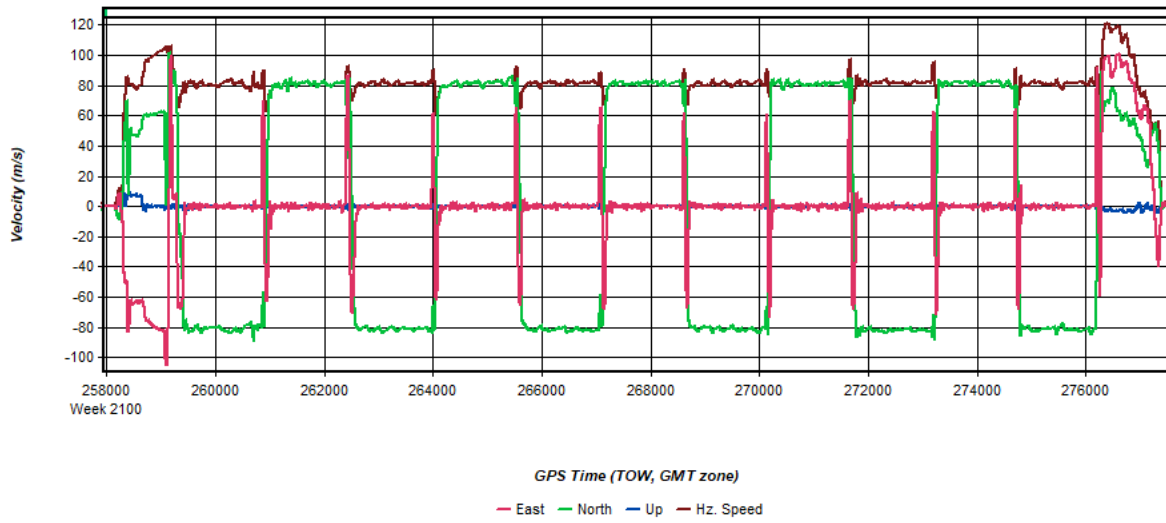


Figure 14: 20200407233739_11 [Smoothed TC Combined] - Body Frame Velocity Plot

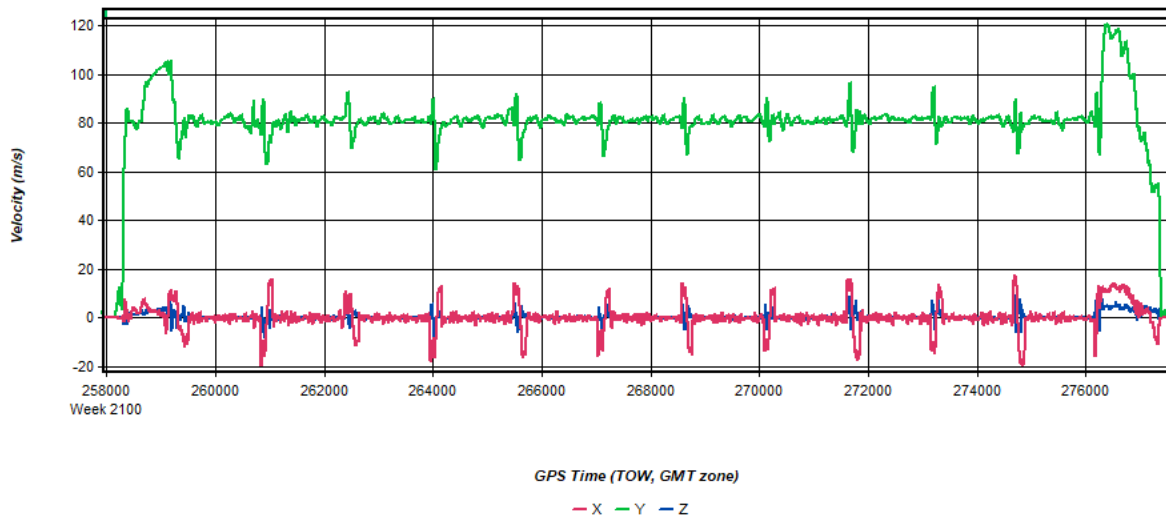
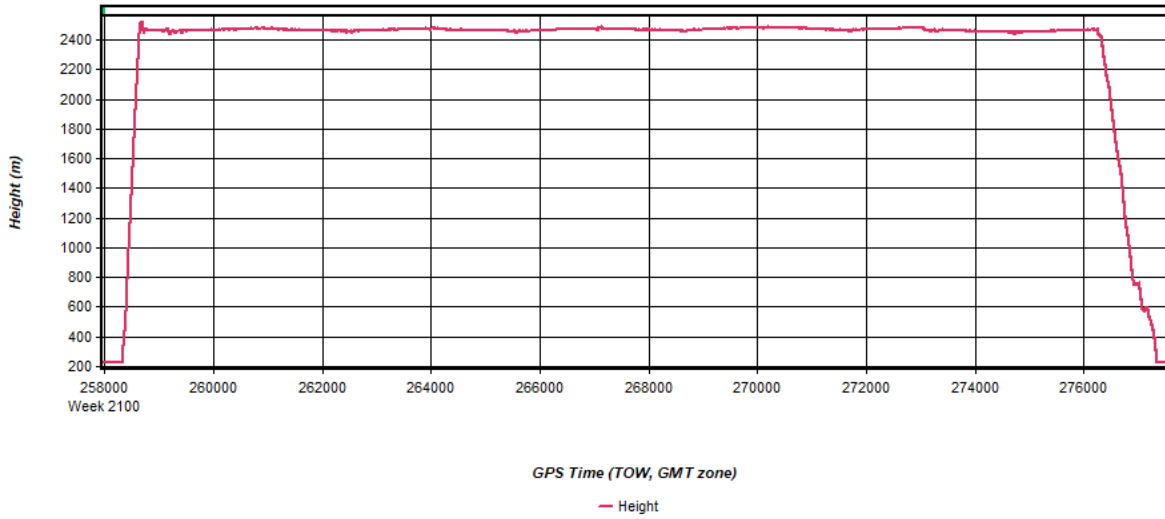
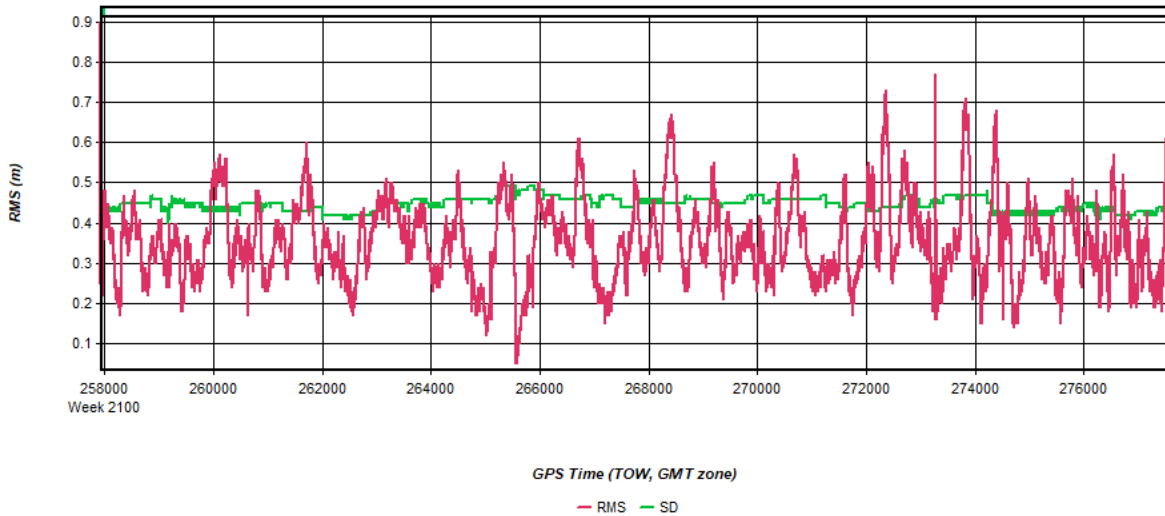


Figure 15: 20200407233739_11 [Smoothed TC Combined] - Height Profile Plot



Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Figure 16: 20200407233739_11 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Figure 17: 20200407233739_11 [Smoothed TC Combined] - Carrier Residual RMS Plot

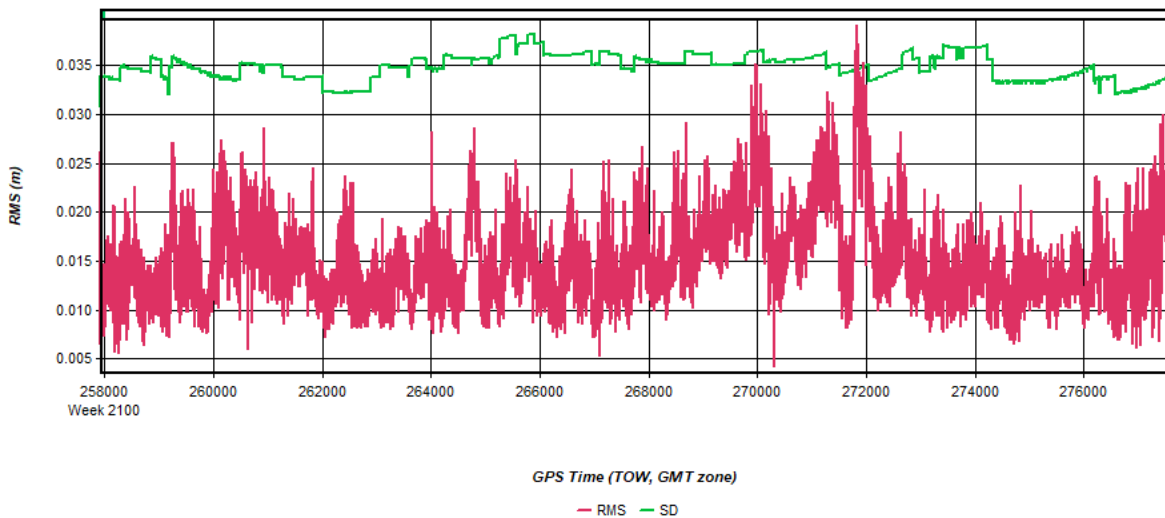


Figure 18: 20200407233739_11 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

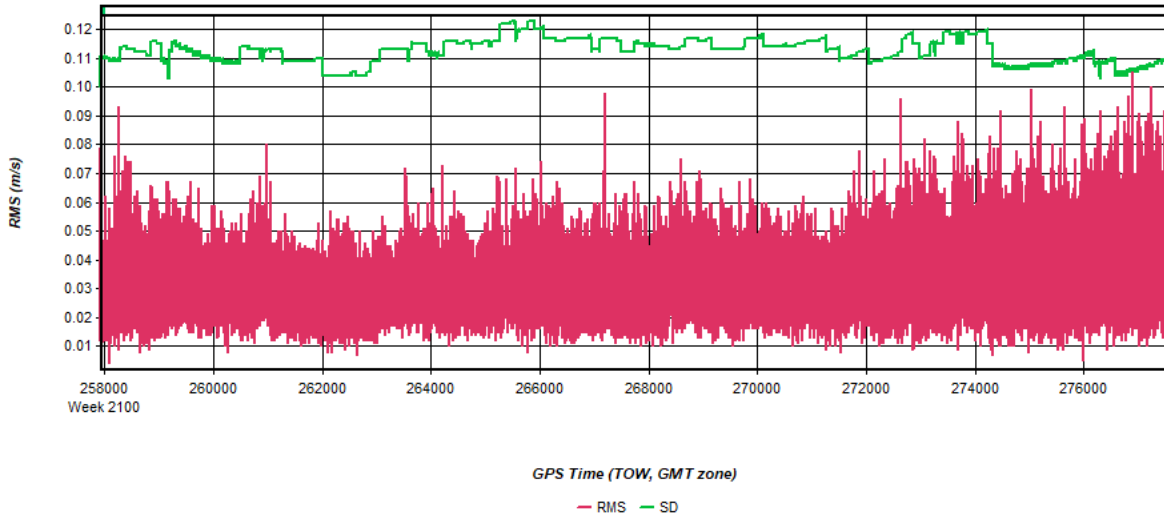


Figure 19: 20200407233739_11 [Smoothed TC Combined] - Accelerometer Bias Plot

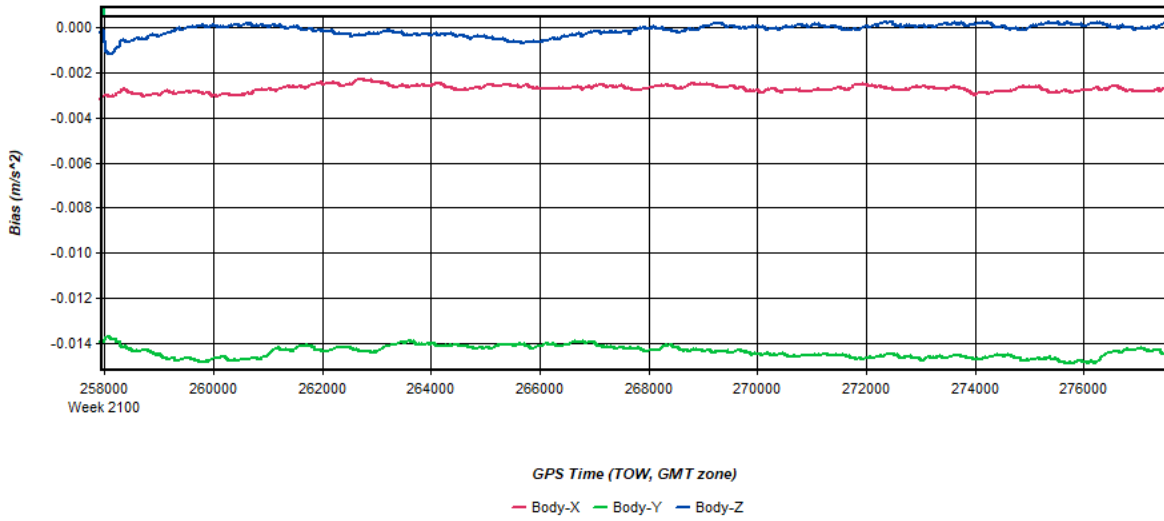
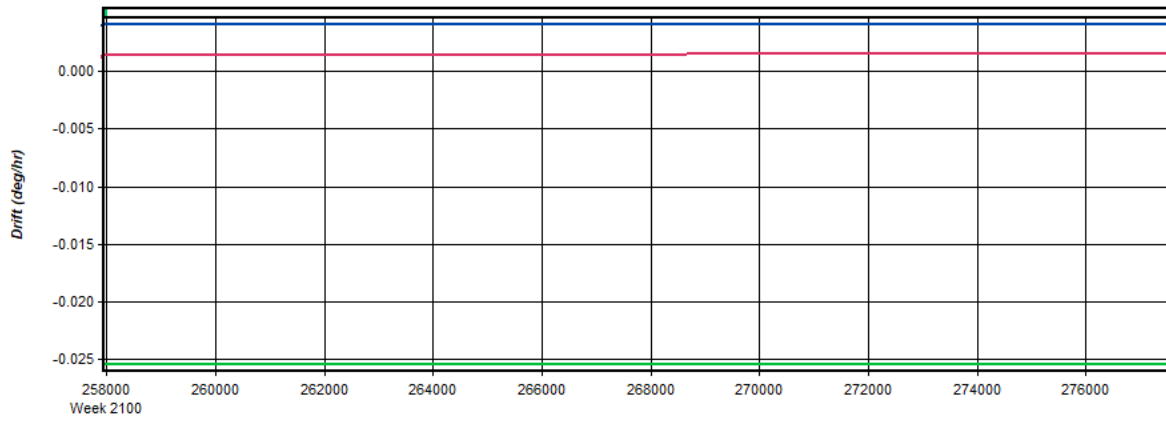


Figure 20: 20200407233739_11 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

— Body-X — Body-Y — Body-Z

Process	20200407233739_11	by Unknown	on 6/5/2020	at 11:46:44
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Output Results for 20200408124128_12

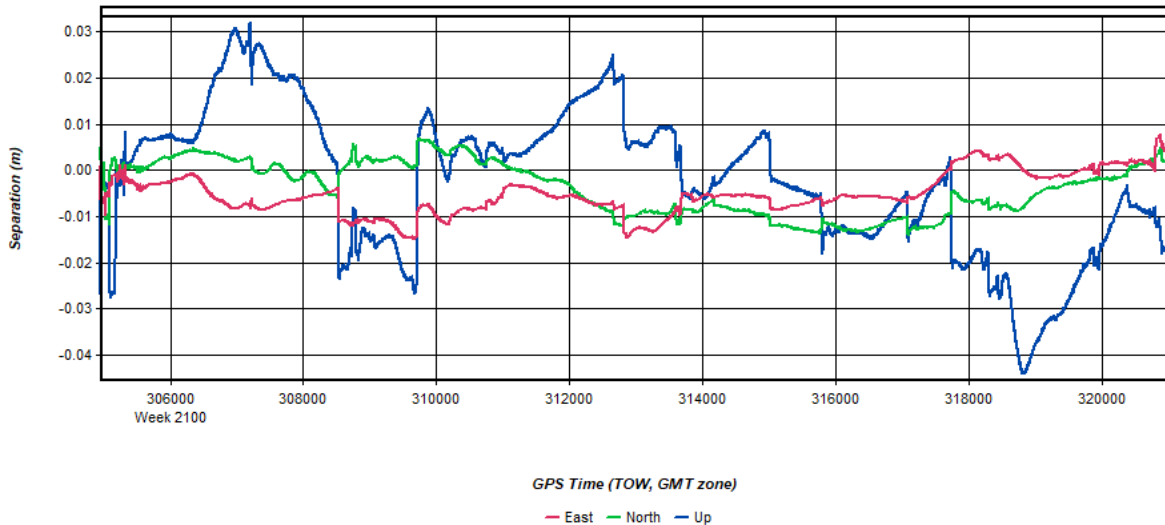
Inertial Explorer Version 8.90.2124
06/10/2020

Figure 1: Smoothed TC Combined - Map



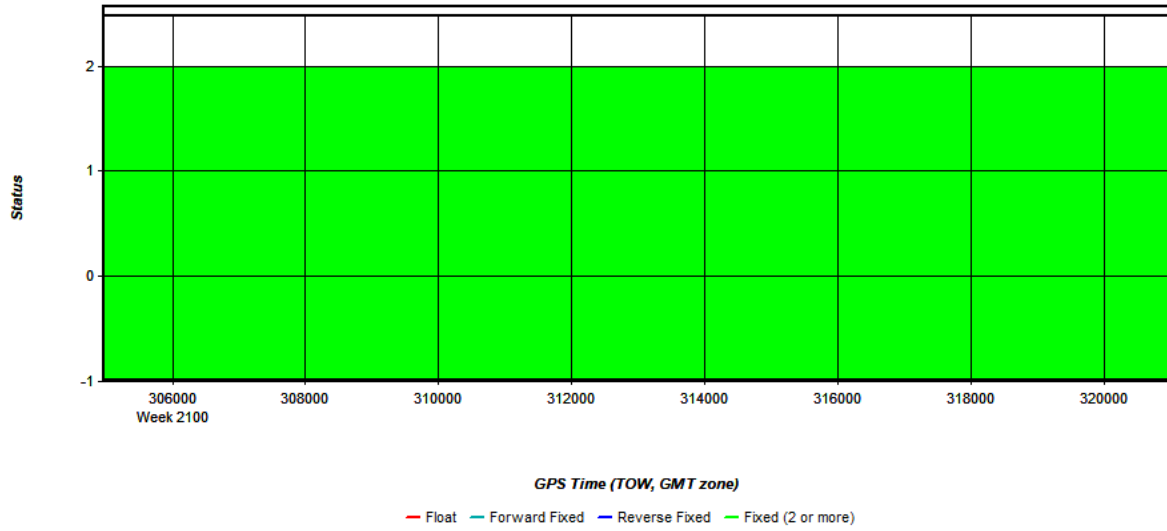
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 2: 20200408124128_12 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



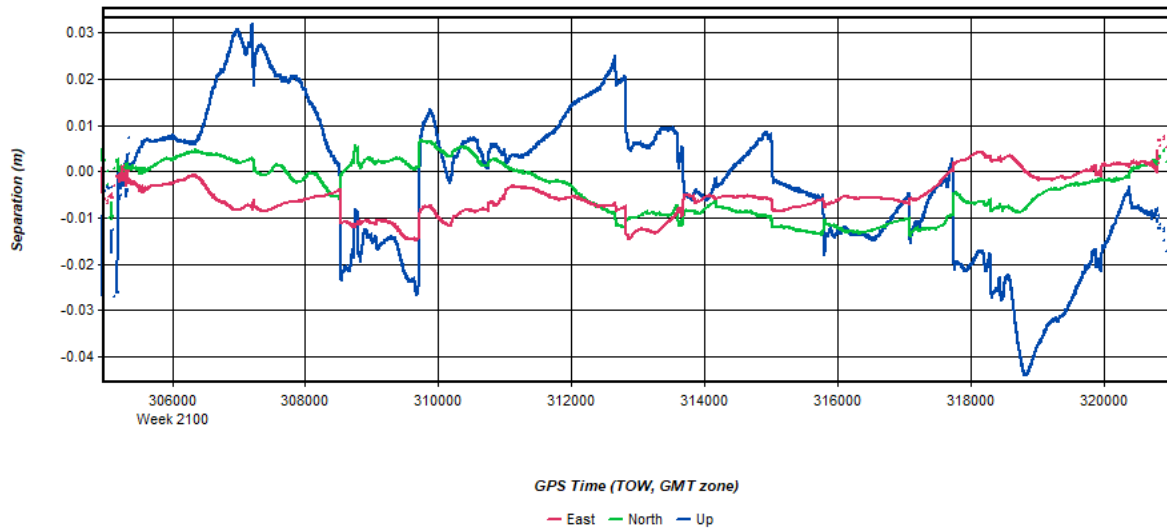
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 3: 20200408124128_12 [Smoothed TC Combined] - Float or Fixed Ambiguity



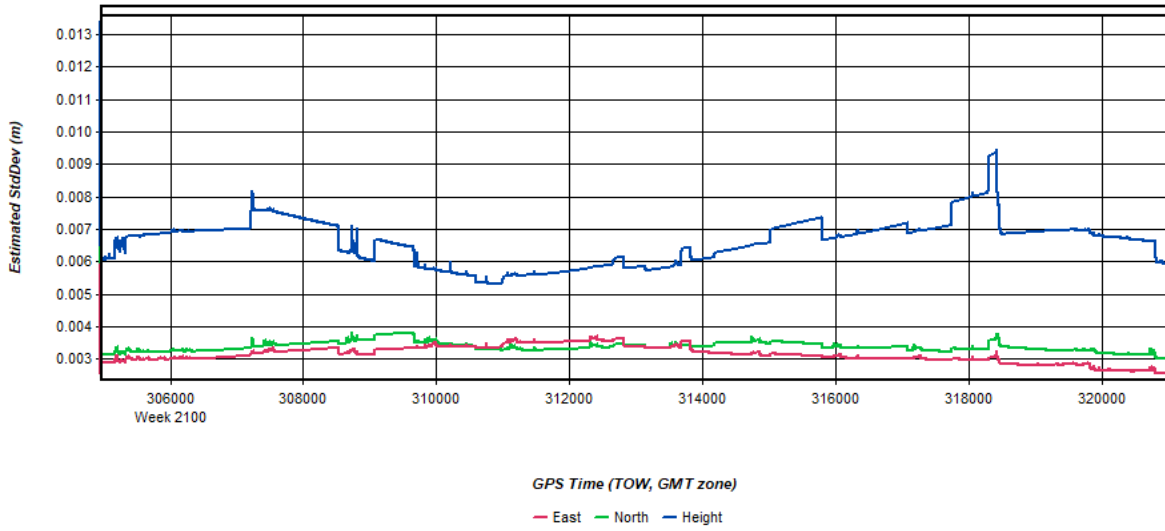
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 4: 20200408124128_12 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



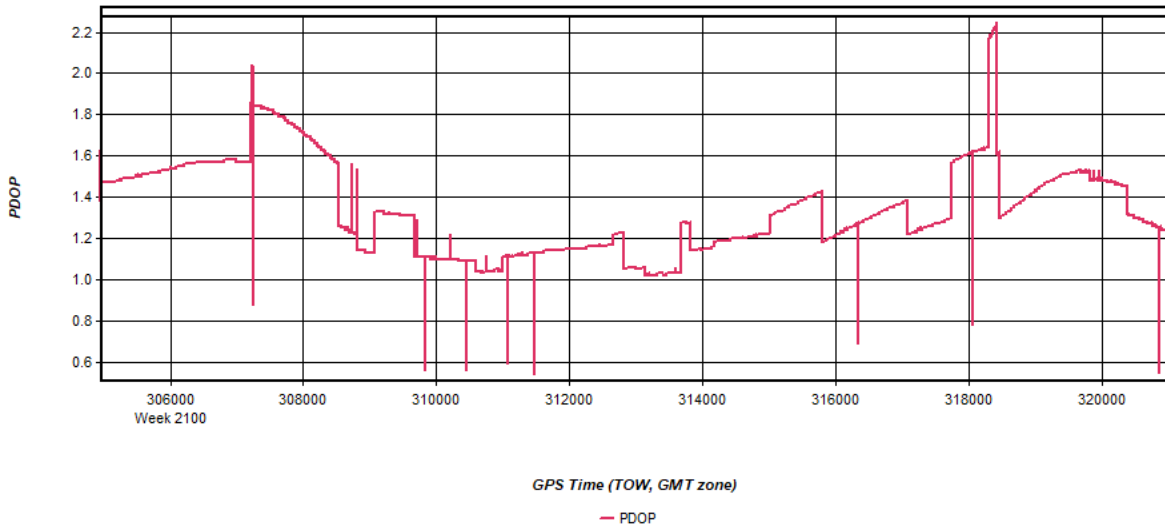
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 5: 20200408124128_12 [Smoothed TC Combined] - Estimated Position Accuracy Plot



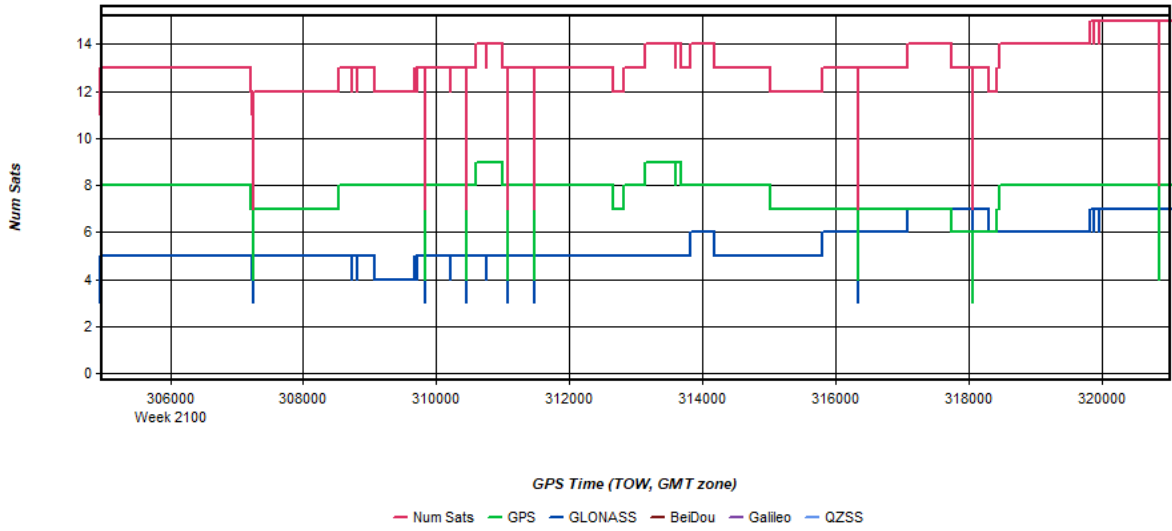
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 6: 20200408124128_12 [Smoothed TC Combined] - PDOP Plot



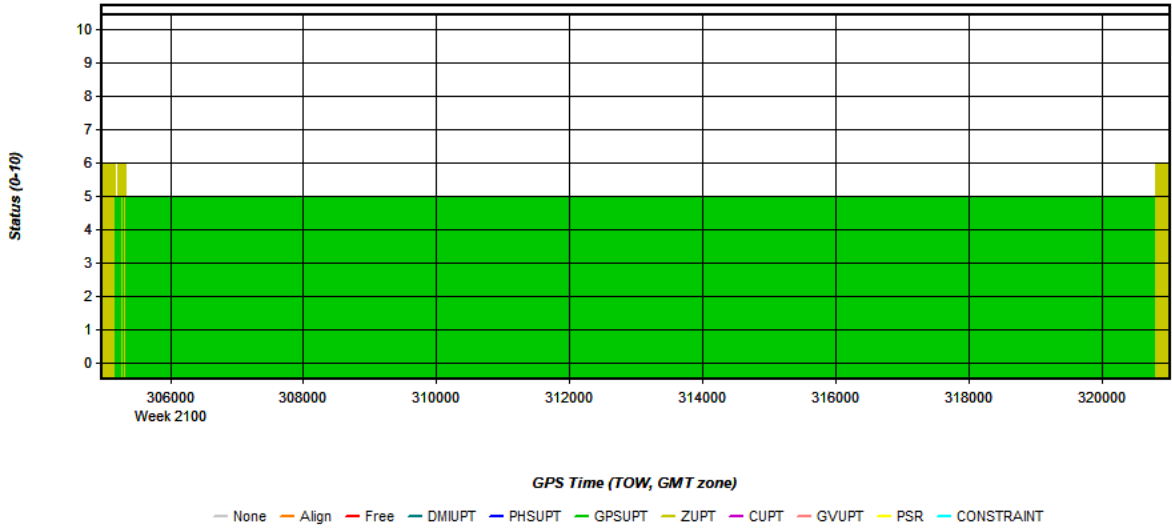
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 7: 20200408124128_12 [Smoothed TC Combined] - Number of Satellites Line Plot



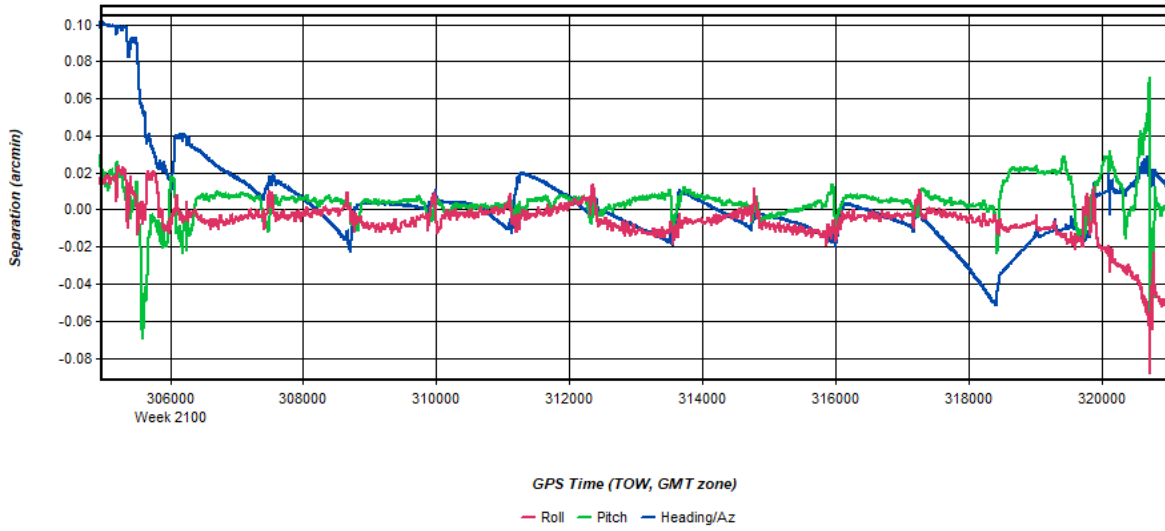
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 8: 20200408124128_12 [Smoothed TC Combined] - Status flag for IMU processing



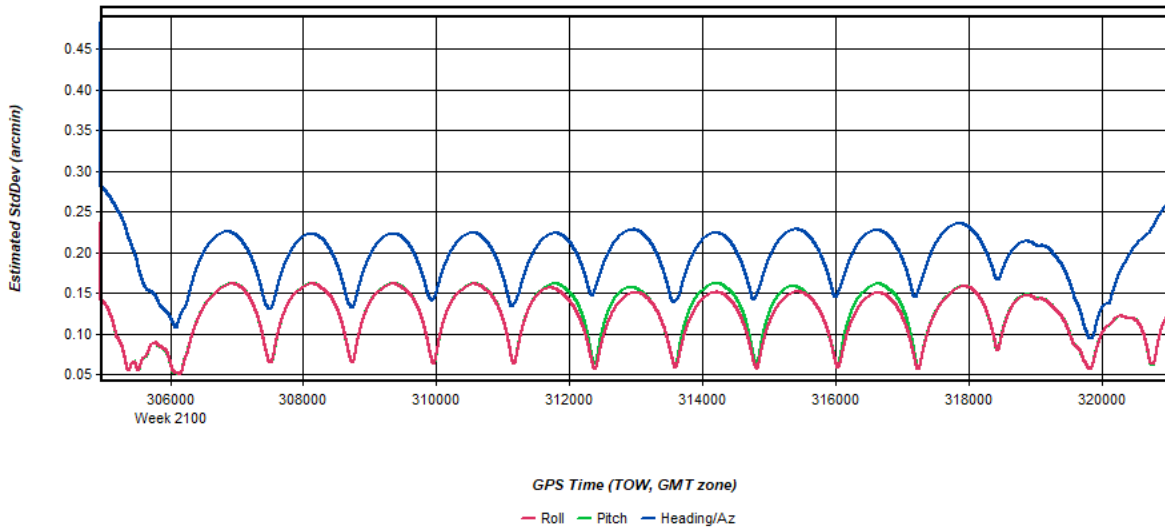
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 9: 20200408124128_12 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



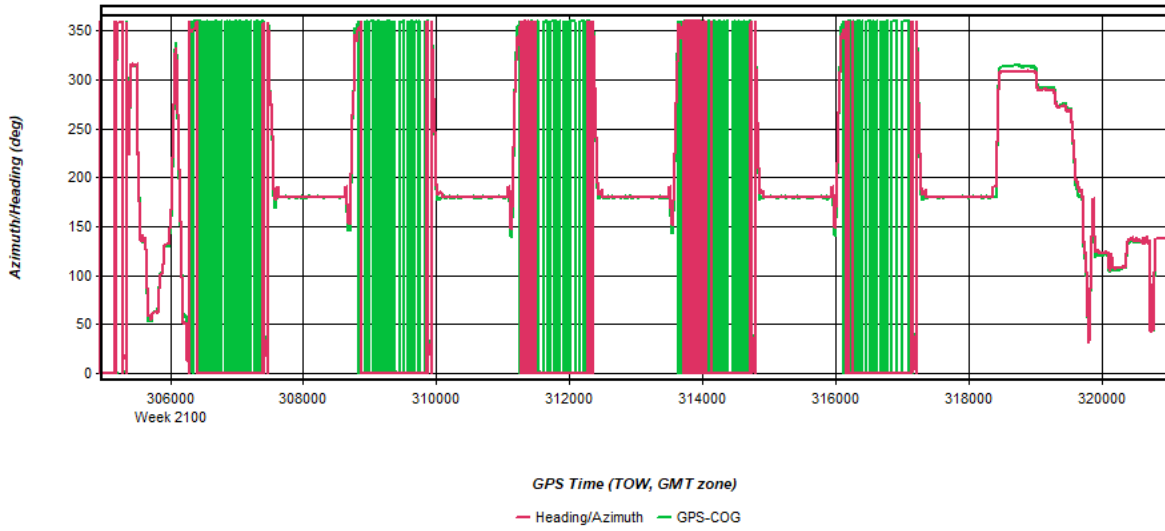
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 10: 20200408124128_12 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



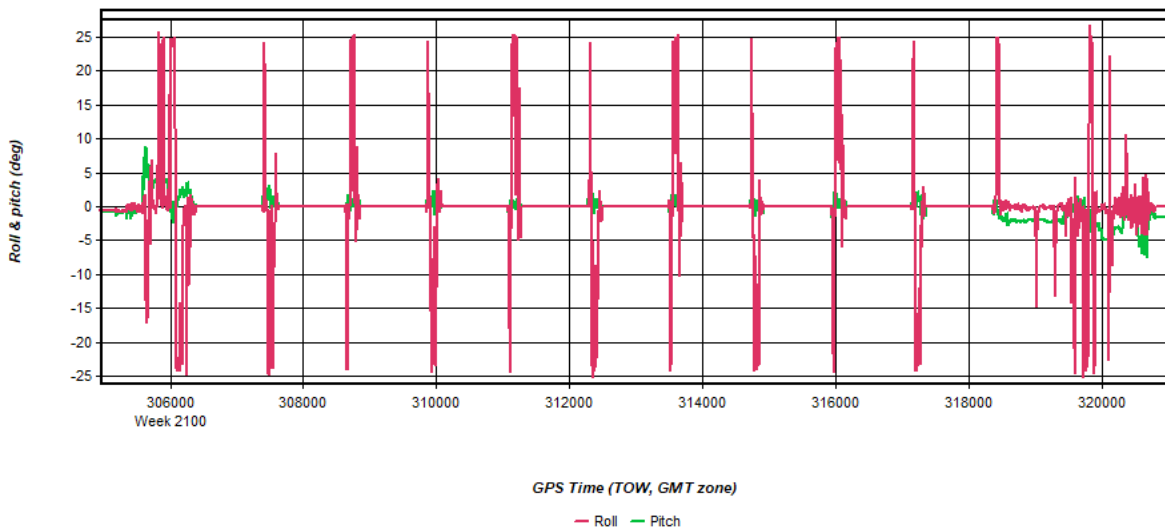
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 11: 20200408124128_12 [Smoothed TC Combined] - Azimuth Plot



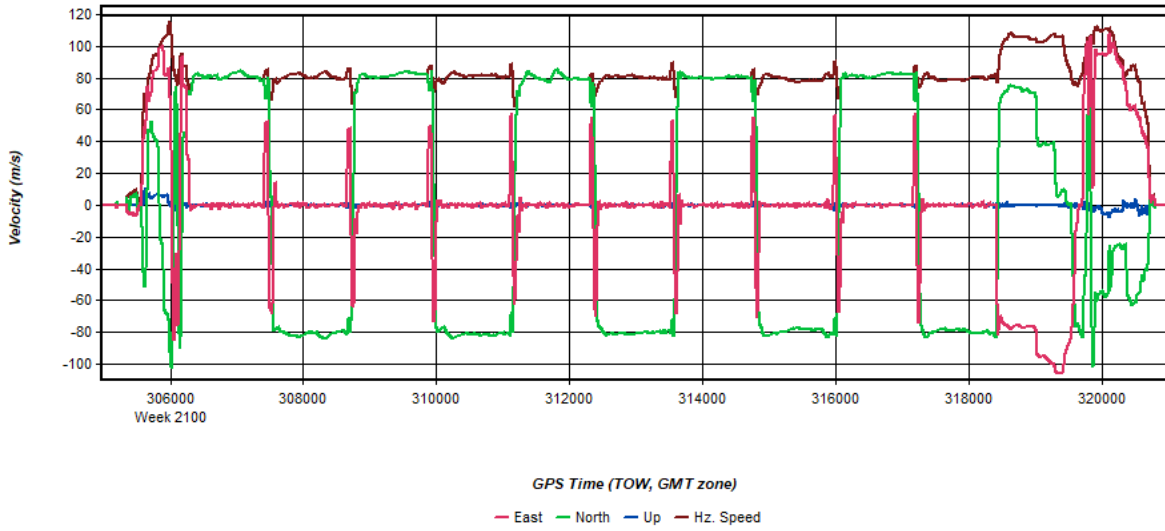
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 12: 20200408124128_12 [Smoothed TC Combined] - Roll & Pitch Plot



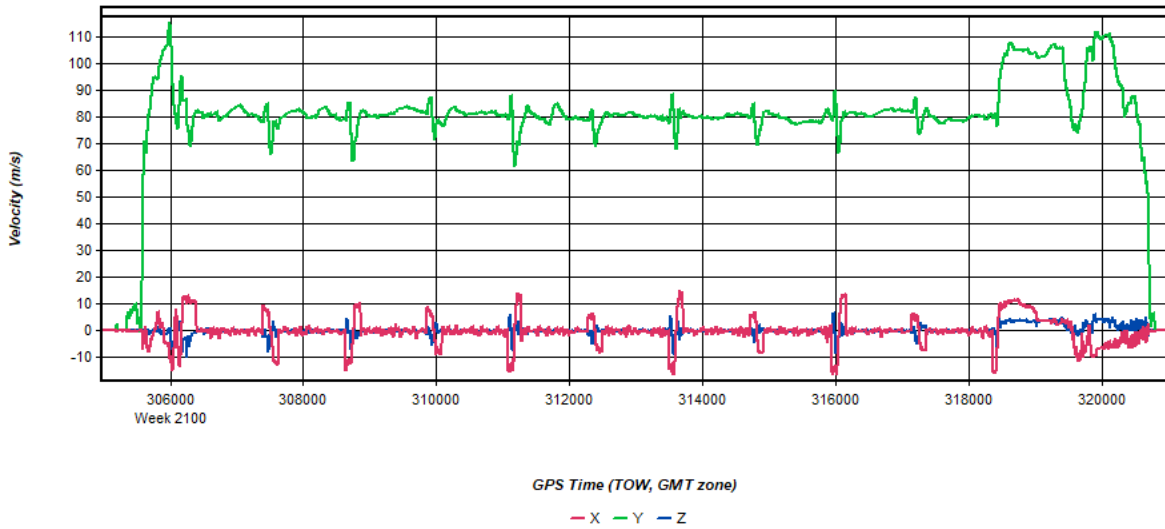
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 13: 20200408124128_12 [Smoothed TC Combined] - Velocity Profile Plot



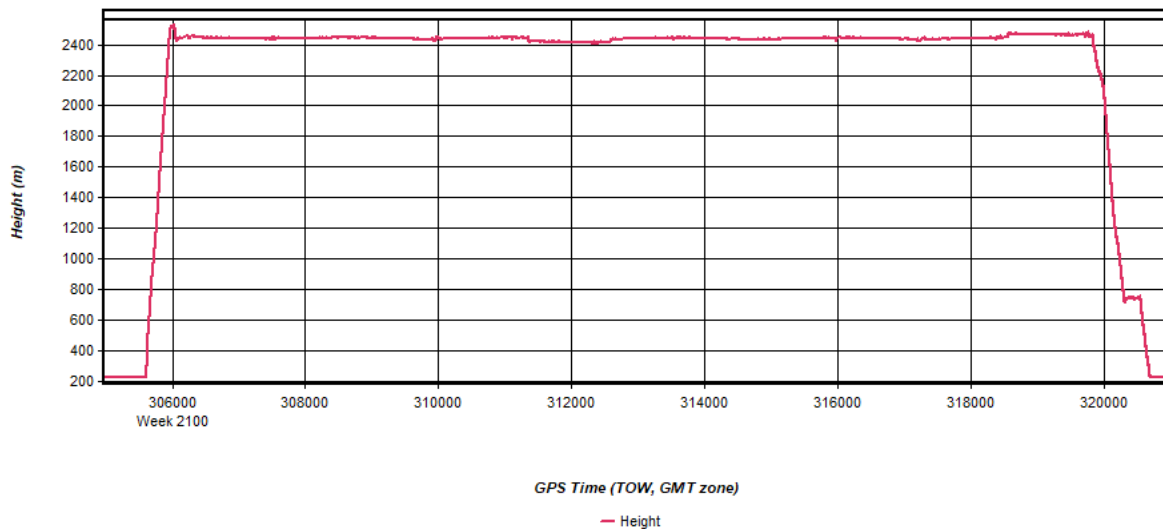
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 14: 20200408124128_12 [Smoothed TC Combined] - Body Frame Velocity Plot



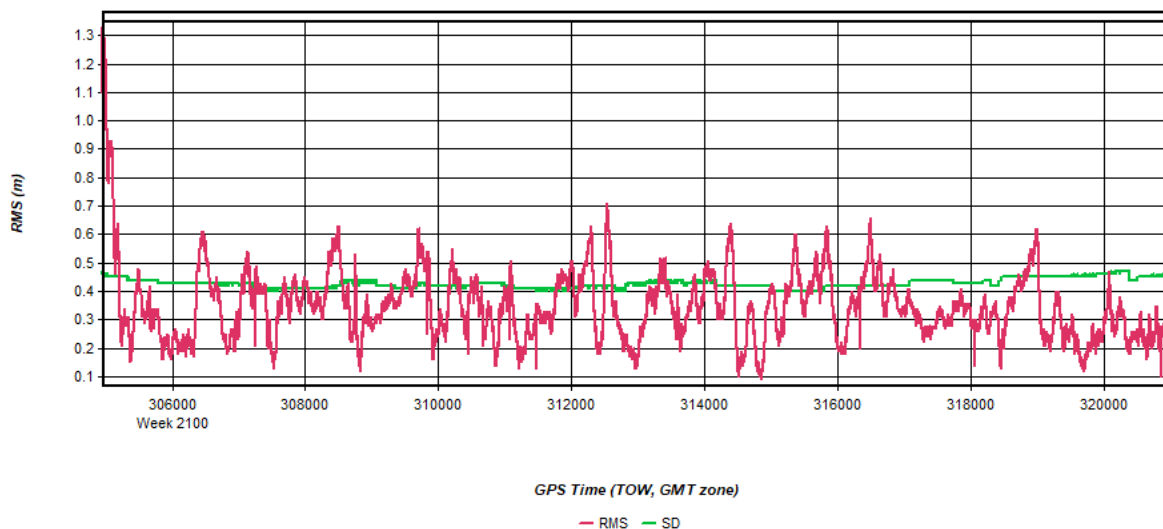
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 15: 20200408124128_12 [Smoothed TC Combined] - Height Profile Plot



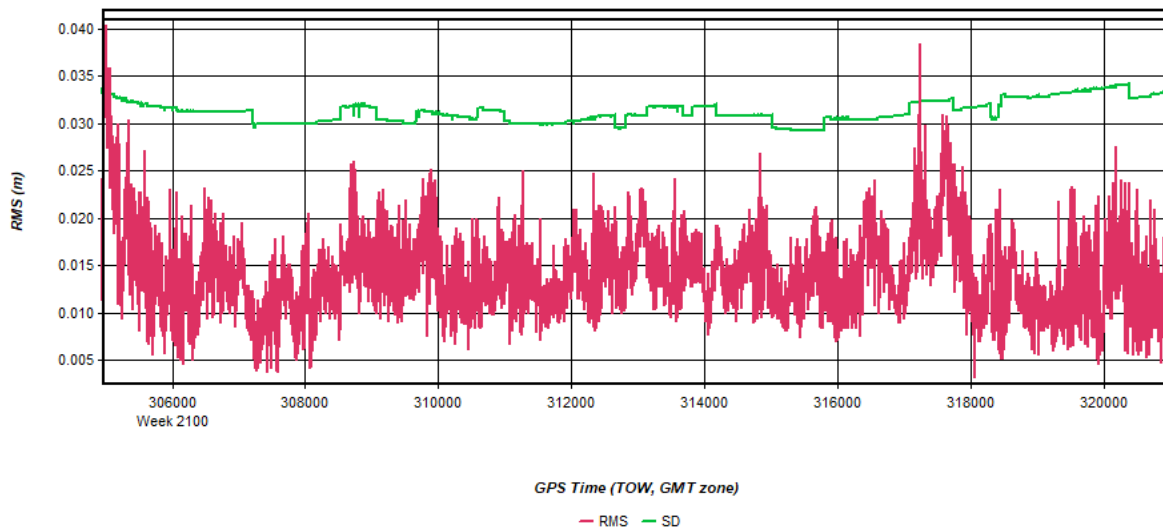
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 16: 20200408124128_12 [Smoothed TC Combined] - C/A Code Residual RMS Plot



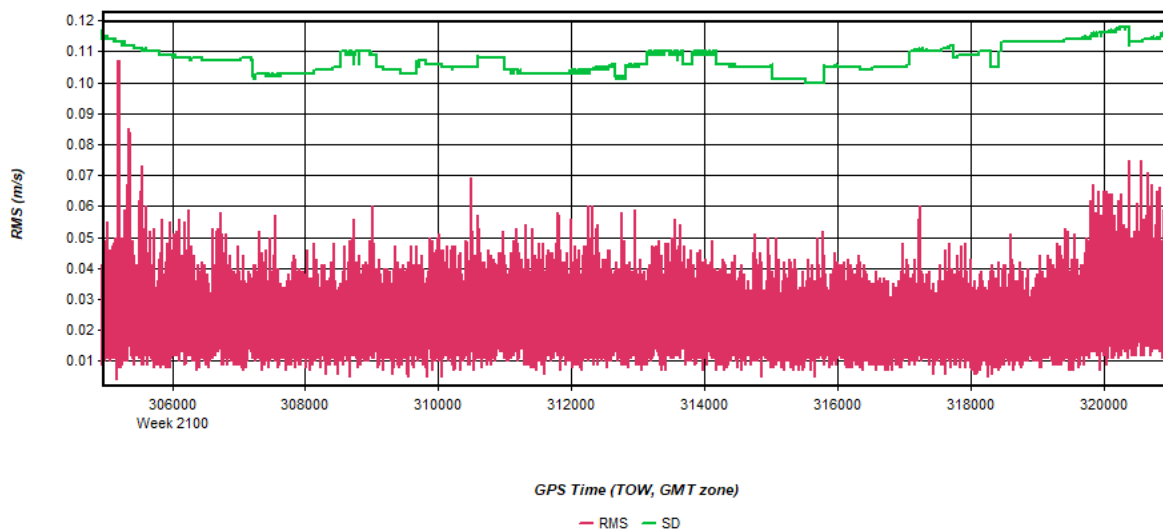
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 17: 20200408124128_12 [Smoothed TC Combined] - Carrier Residual RMS Plot



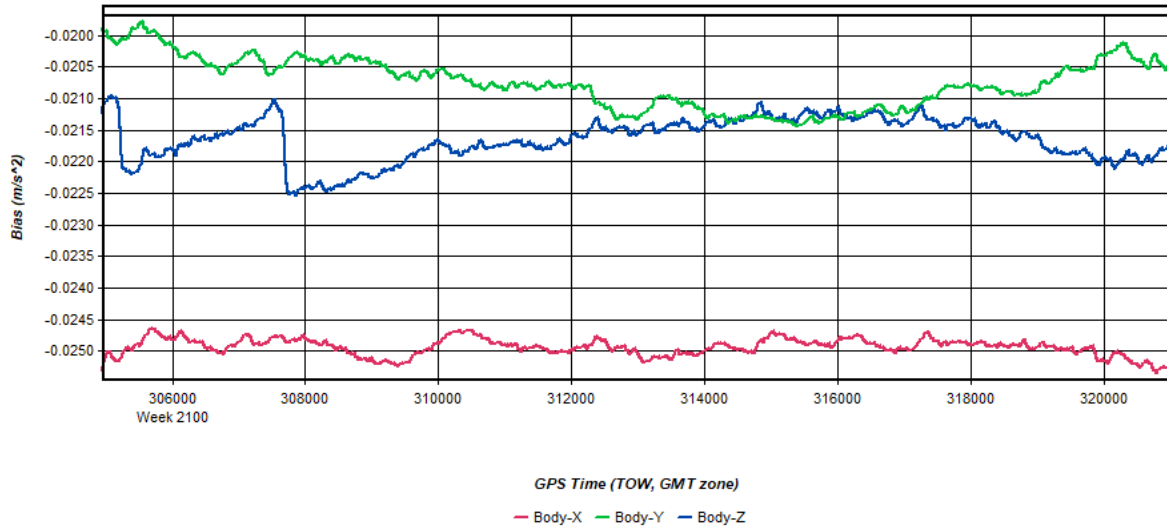
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 18: 20200408124128_12 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



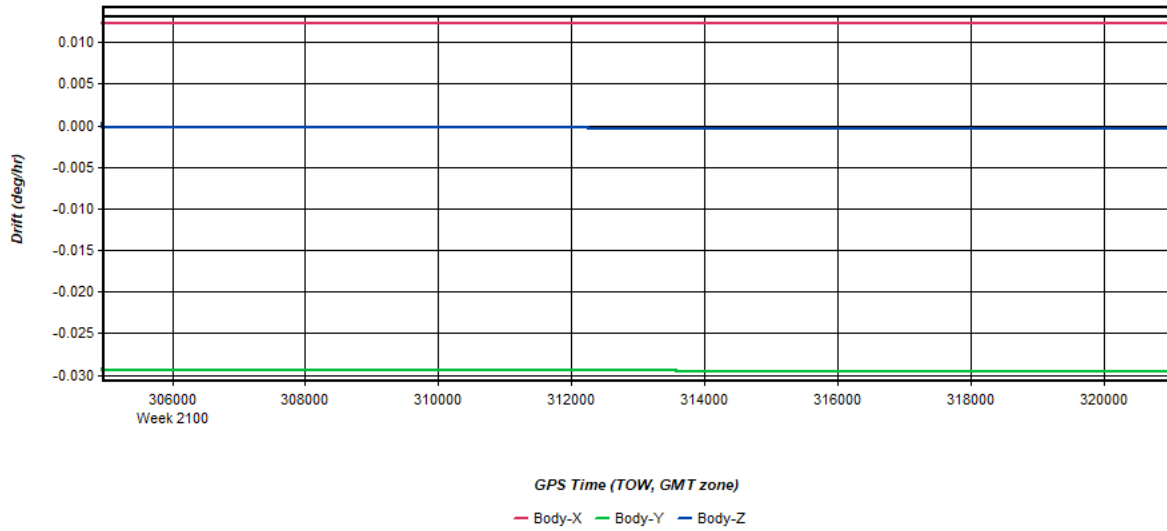
Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 19: 20200408124128_12 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Figure 20: 20200408124128_12 [Smoothed TC Combined] - Gyro Drift Plot

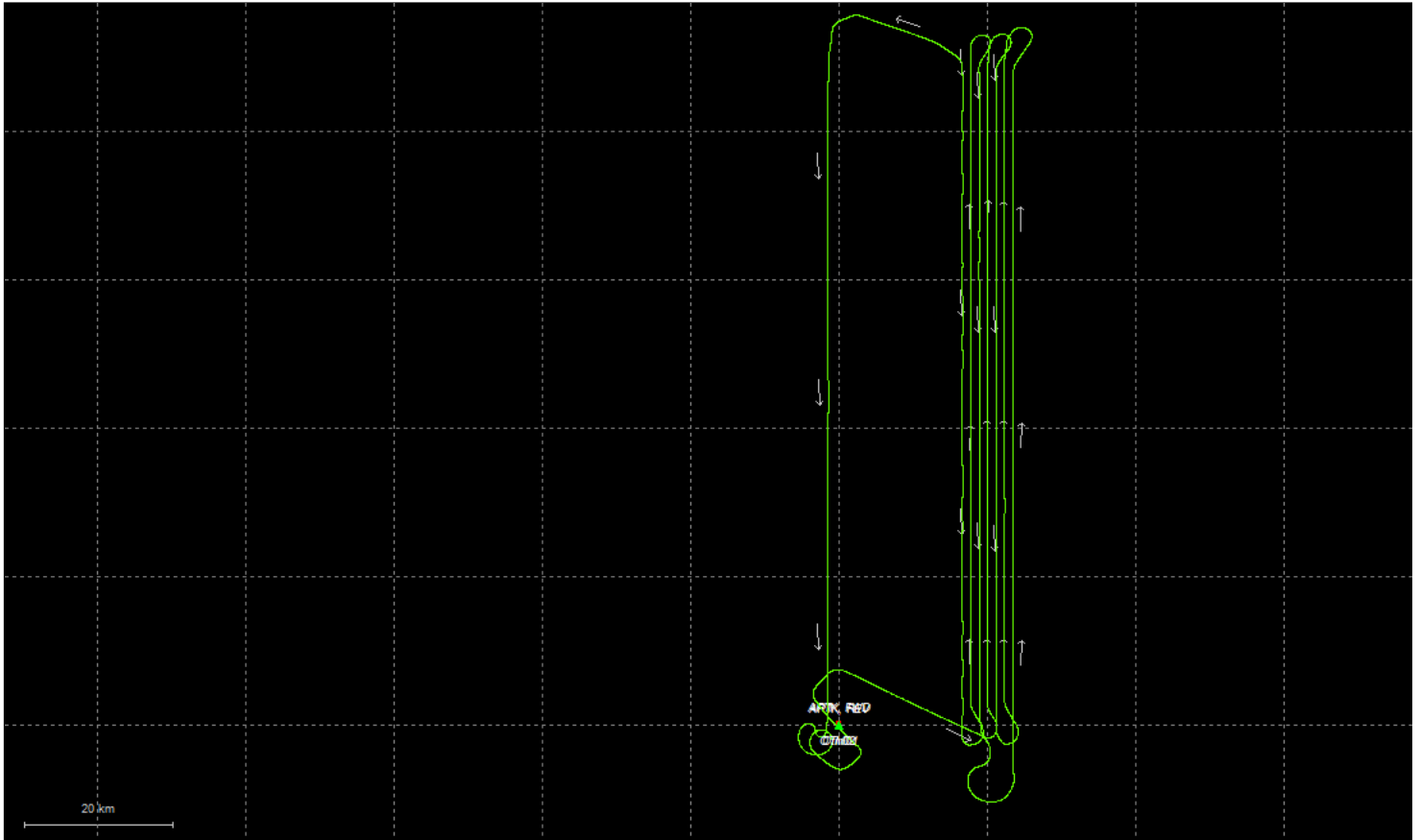


Process	20200408124128_12	by Unknown	on 6/10/2020	at 10:48:56
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Output Results for 20200409124226_13

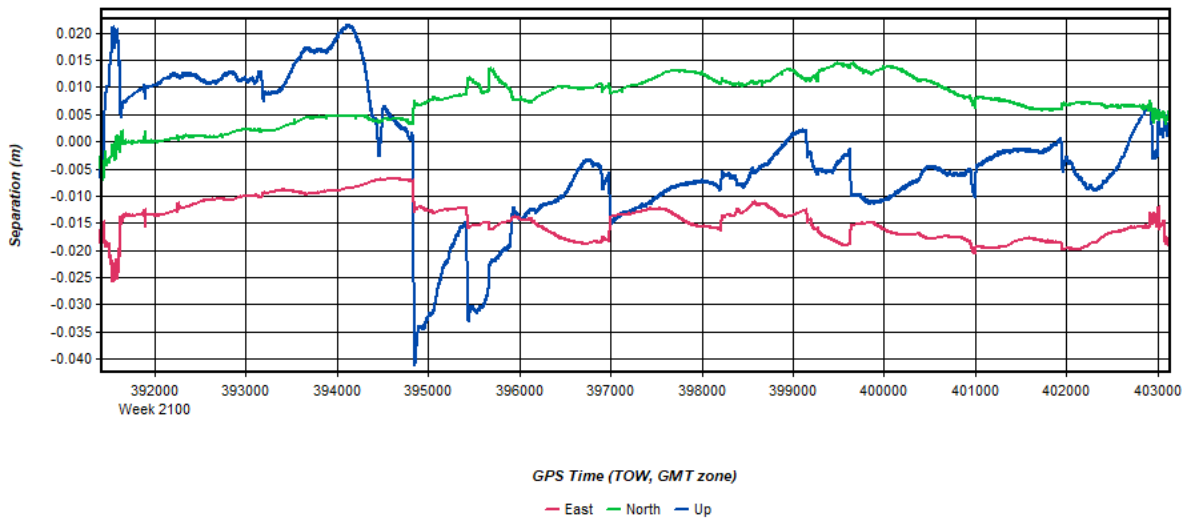
Inertial Explorer Version 8.90.2124
06/05/2020

Figure 1: Smoothed TC Combined - Map



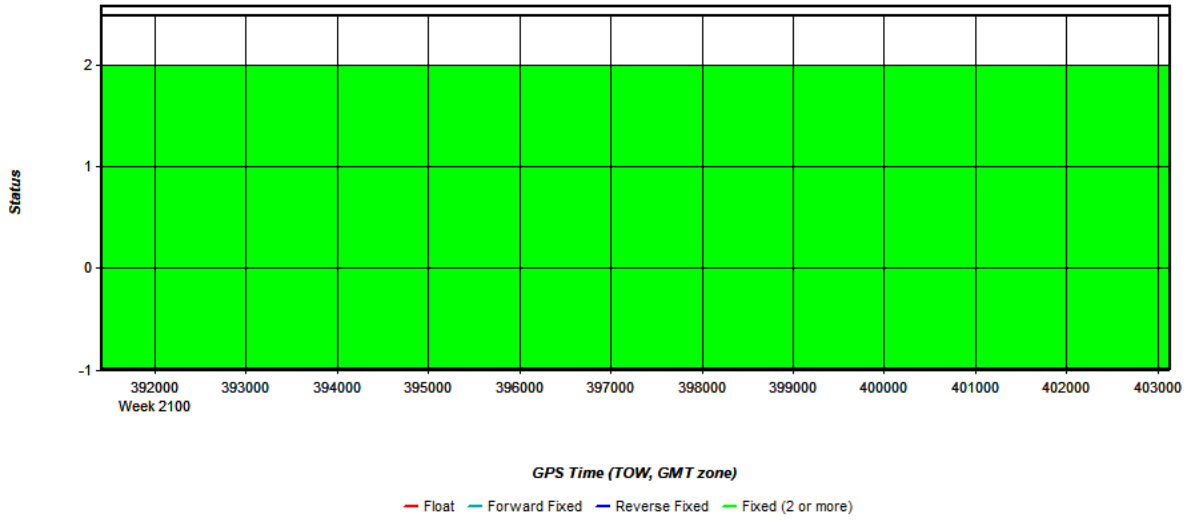
Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 2: 20200409124226_13 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



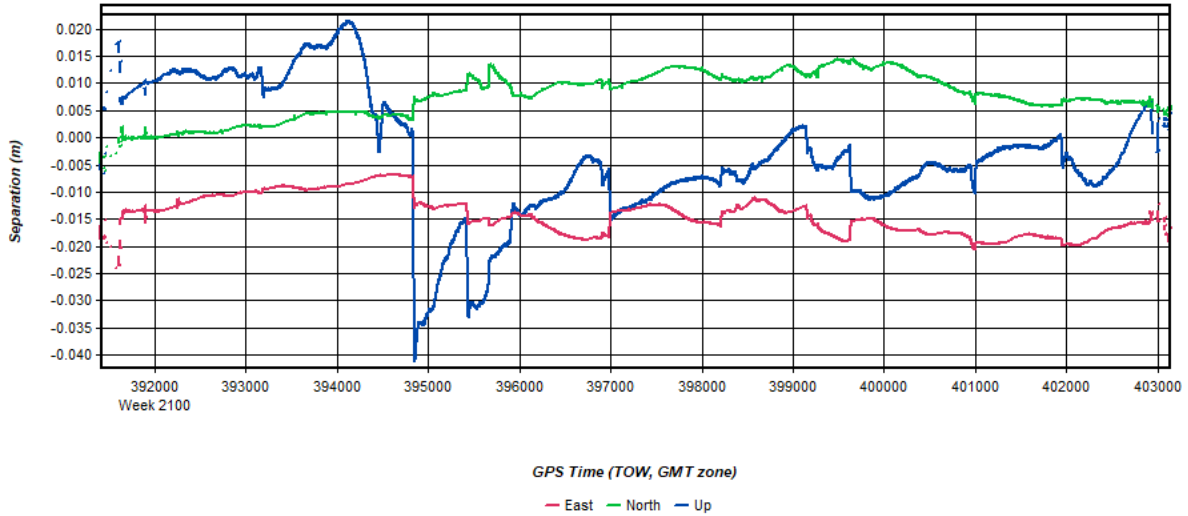
Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 3: 20200409124226_13 [Smoothed TC Combined] - Float or Fixed Ambiguity



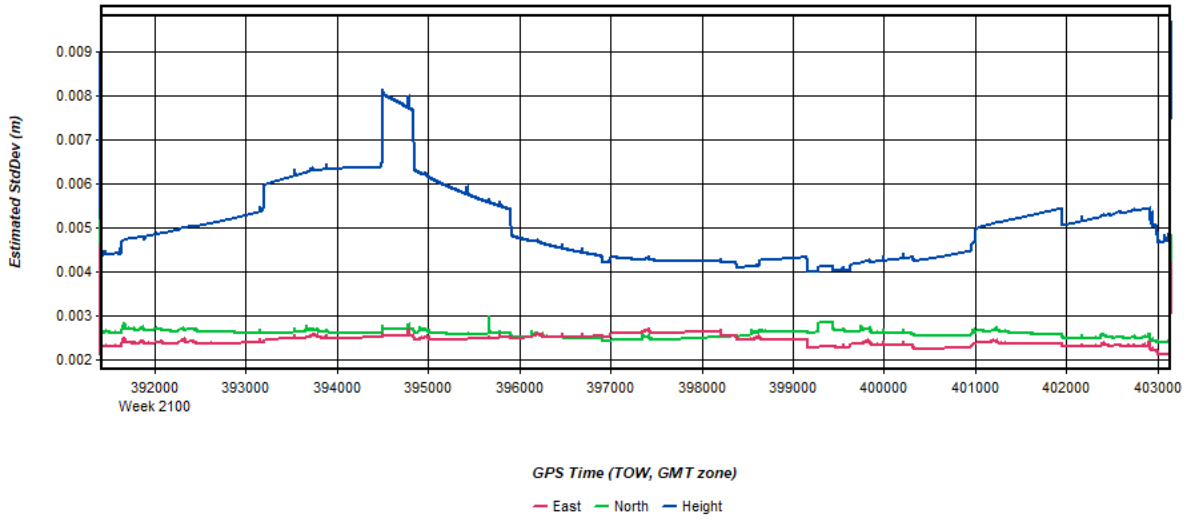
Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 4: 20200409124226_13 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



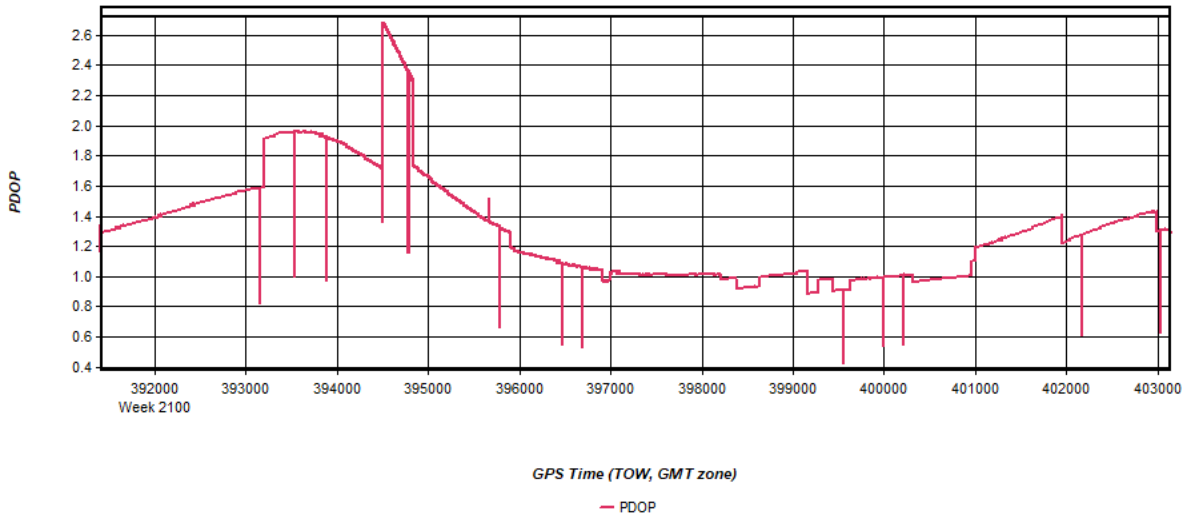
Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 5: 20200409124226_13 [Smoothed TC Combined] - Estimated Position Accuracy Plot



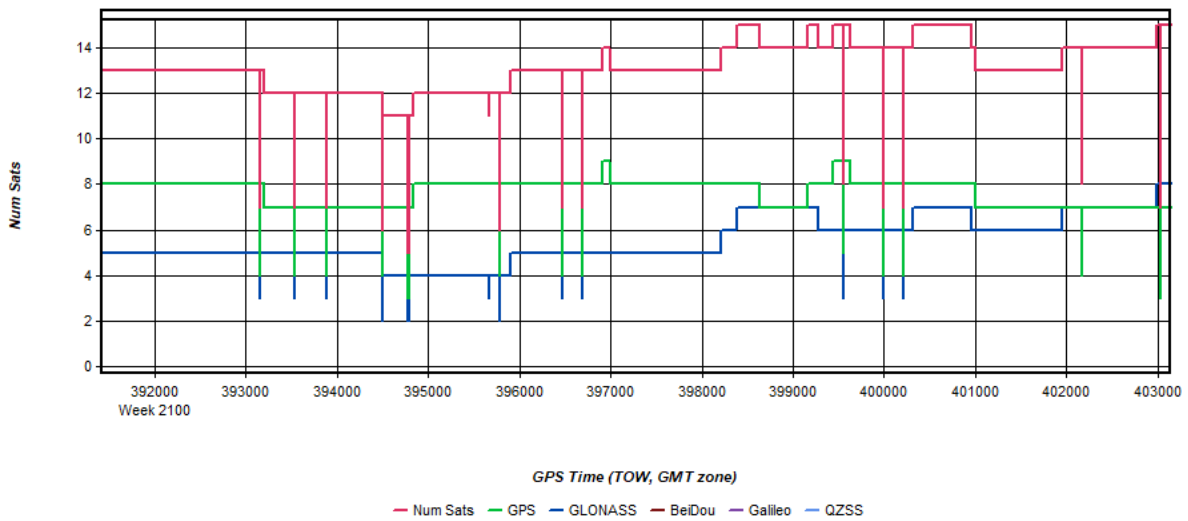
Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 6: 20200409124226_13 [Smoothed TC Combined] - PDOP Plot



Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 7: 20200409124226_13 [Smoothed TC Combined] - Number of Satellites Line Plot



Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 8: 20200409124226_13 [Smoothed TC Combined] - Status flag for IMU processing

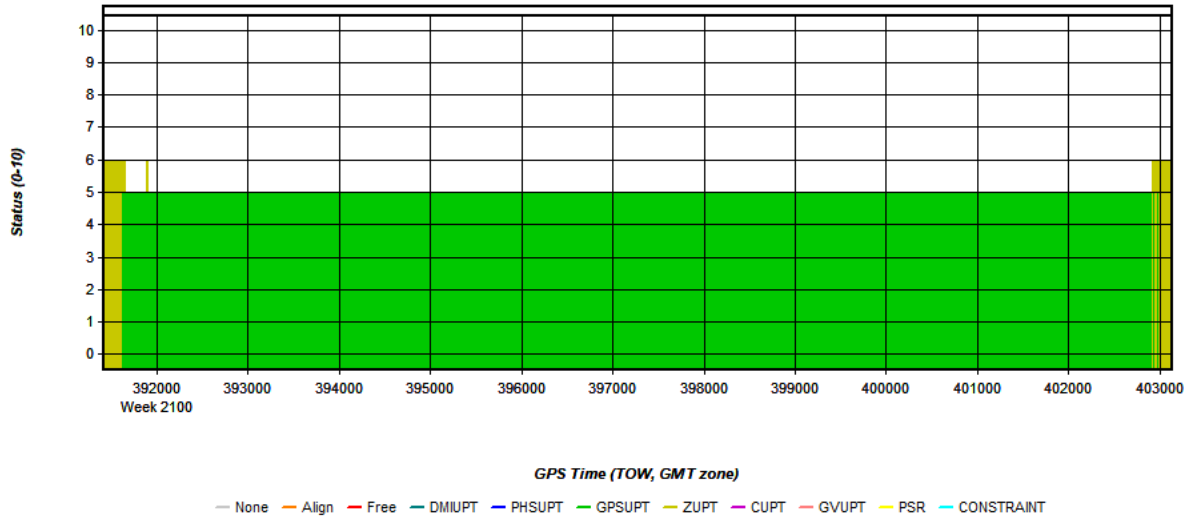


Figure 9: 20200409124226_13 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

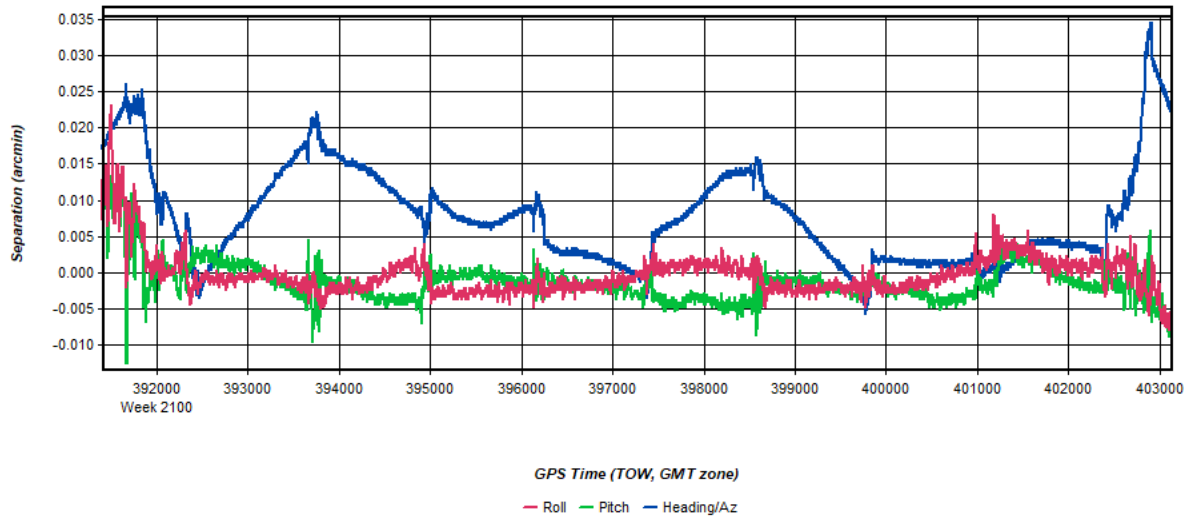
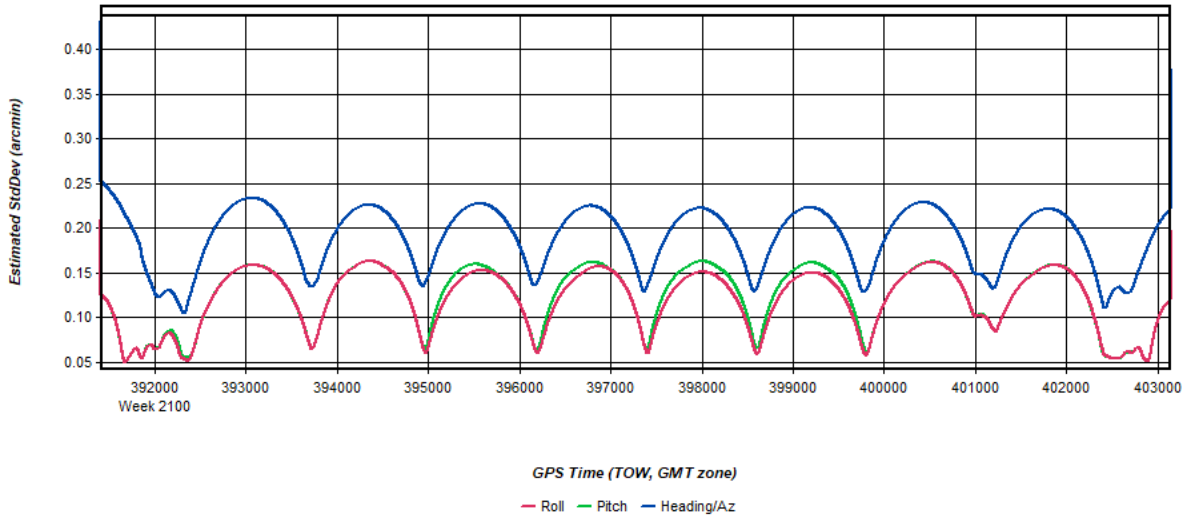
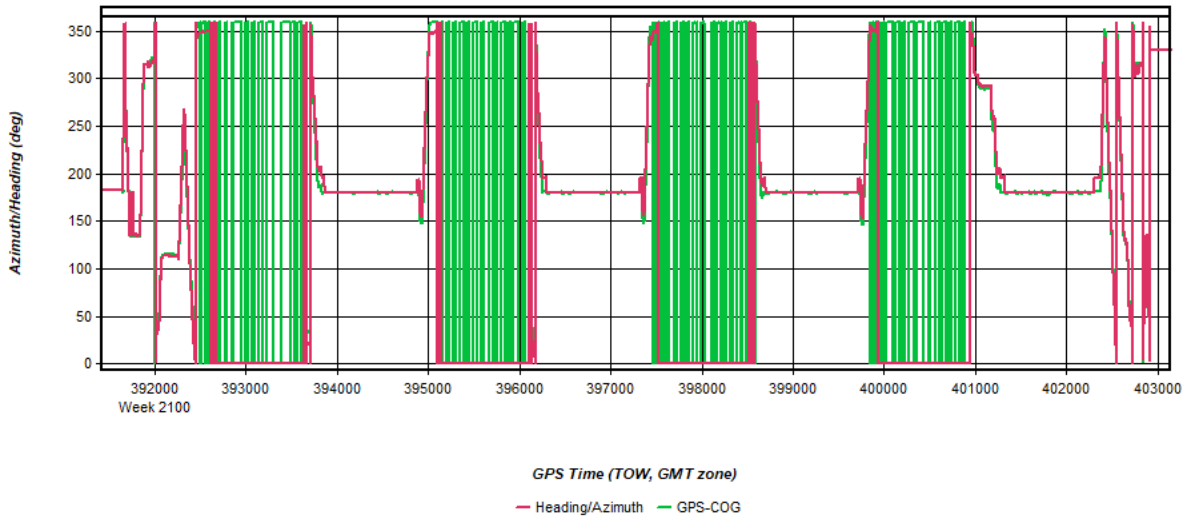


Figure 10: 20200409124226_13 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 11: 20200409124226_13 [Smoothed TC Combined] - Azimuth Plot



Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 12: 20200409124226_13 [Smoothed TC Combined] - Roll & Pitch Plot

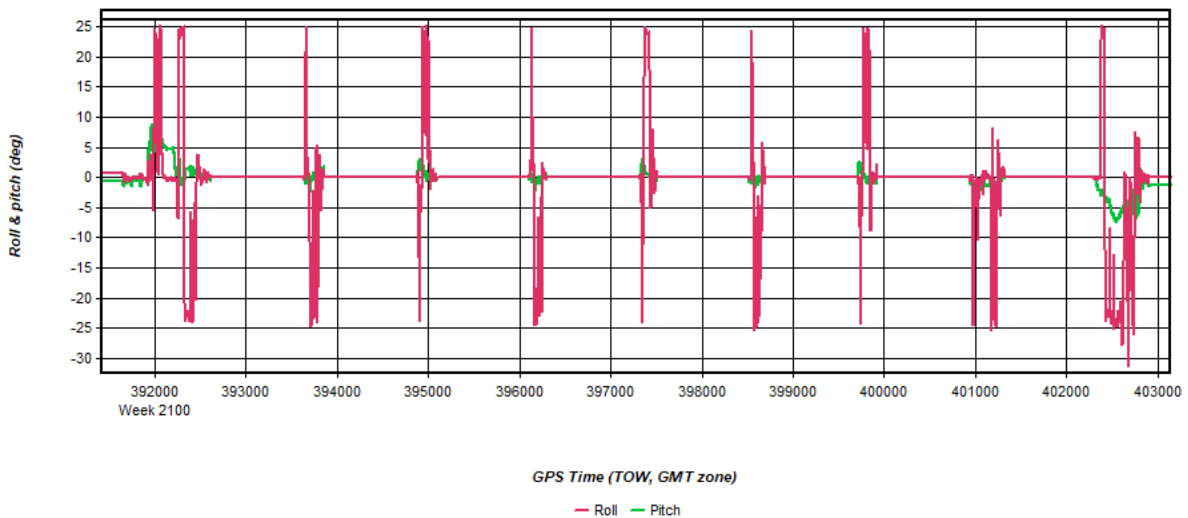


Figure 13: 20200409124226_13 [Smoothed TC Combined] - Velocity Profile Plot

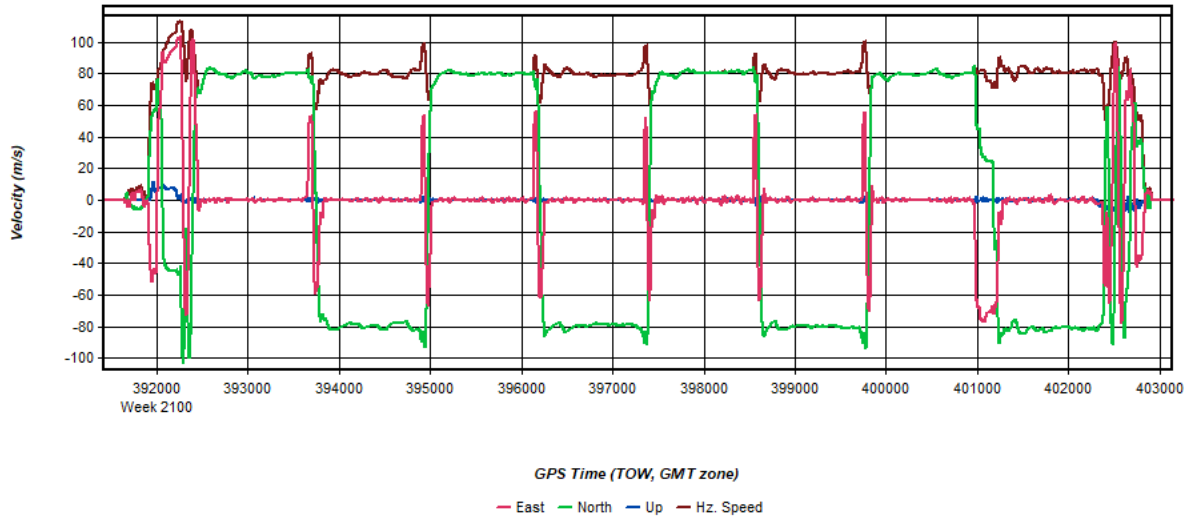


Figure 14: 20200409124226_13 [Smoothed TC Combined] - Body Frame Velocity Plot

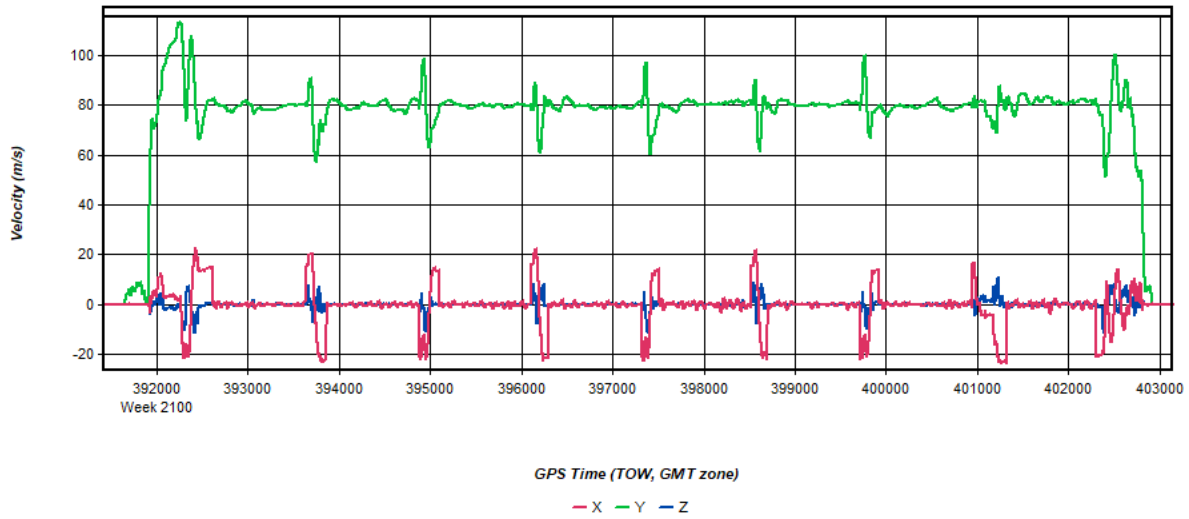
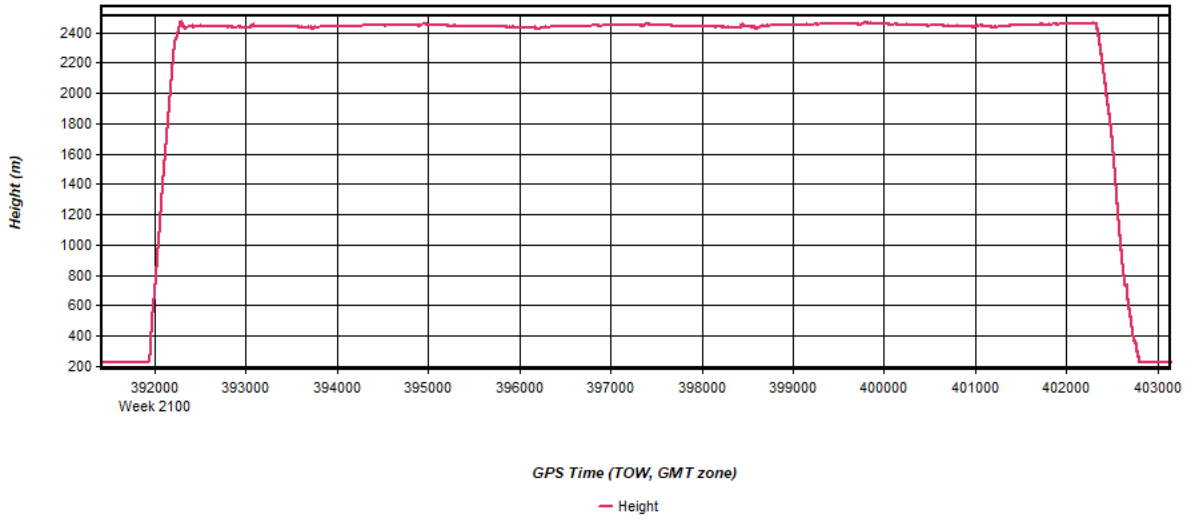
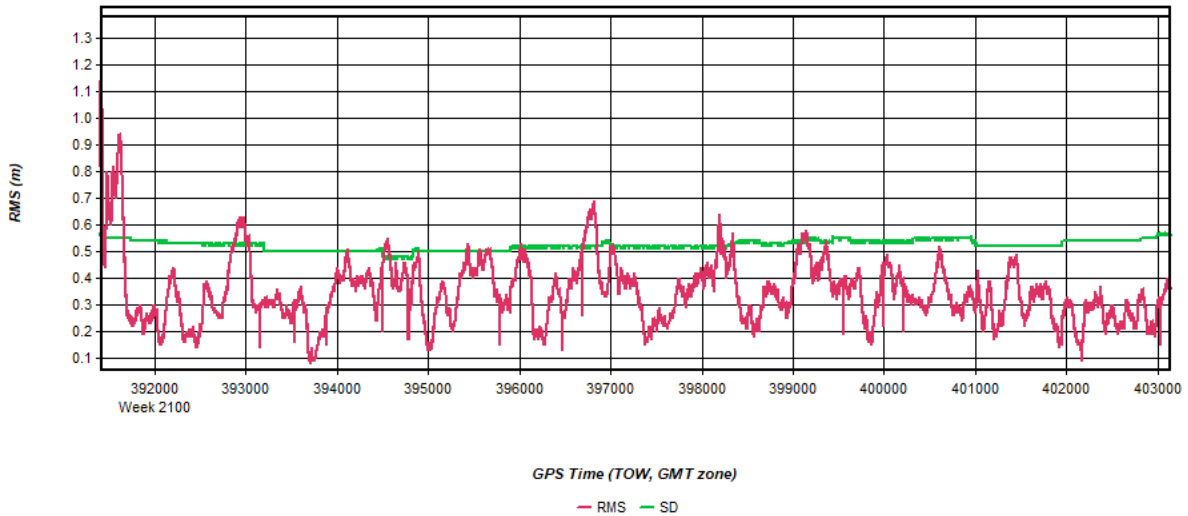


Figure 15: 20200409124226_13 [Smoothed TC Combined] - Height Profile Plot



Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 16: 20200409124226_13 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Figure 17: 20200409124226_13 [Smoothed TC Combined] - Carrier Residual RMS Plot

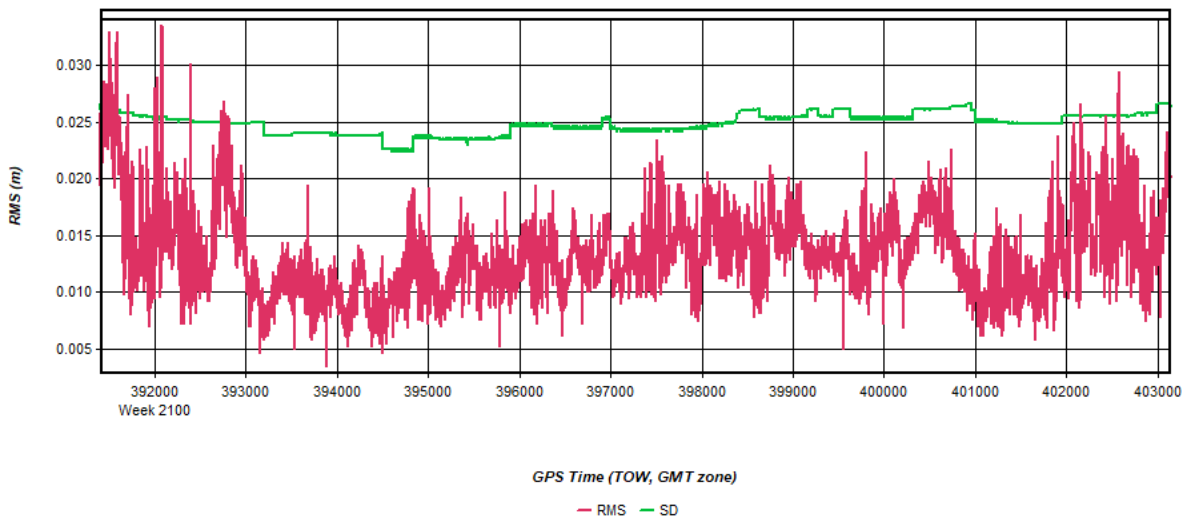


Figure 18: 20200409124226_13 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

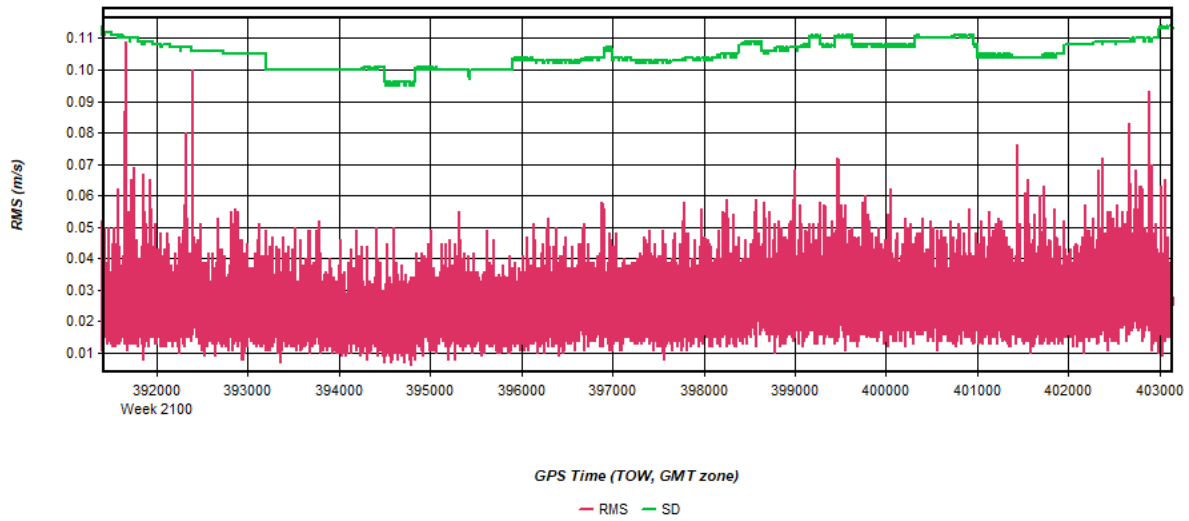


Figure 19: 20200409124226_13 [Smoothed TC Combined] - Accelerometer Bias Plot

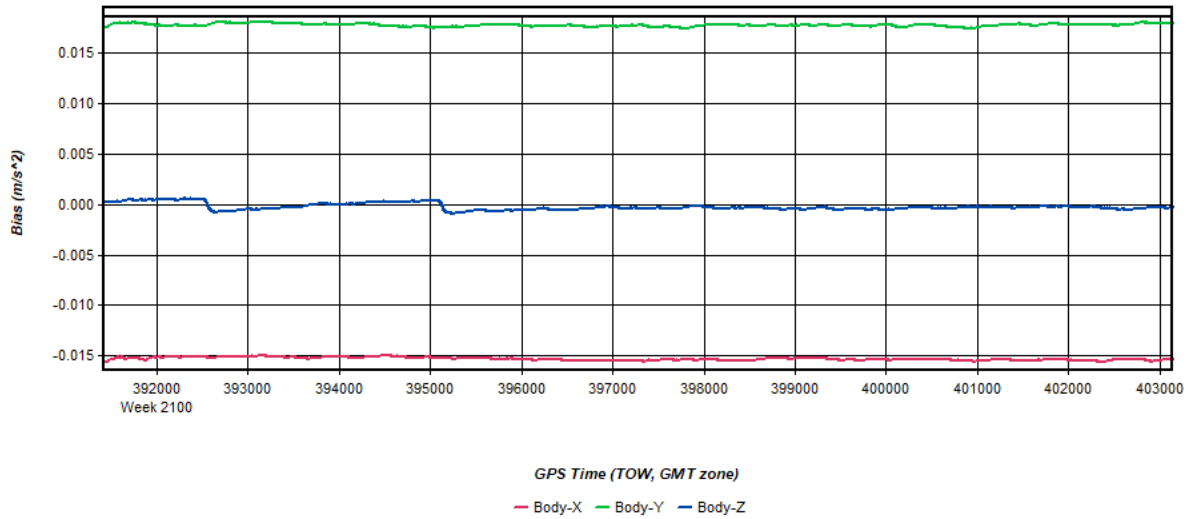
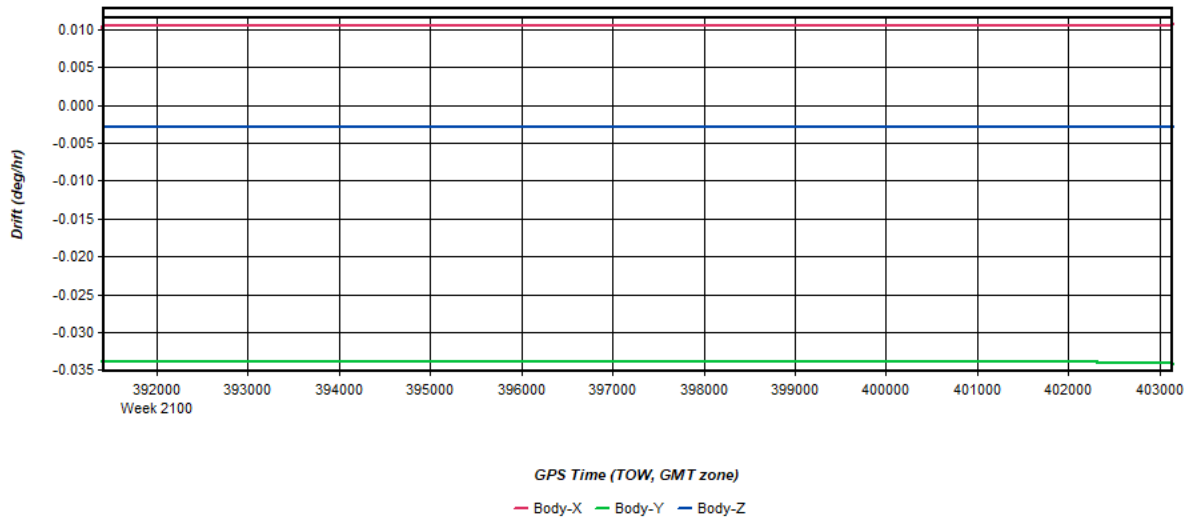


Figure 20: 20200409124226_13 [Smoothed TC Combined] - Gyro Drift Plot



Process	20200409124226_13	by Unknown	on 6/5/2020	at 12:56:10
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Output Results for 20200410011914_14

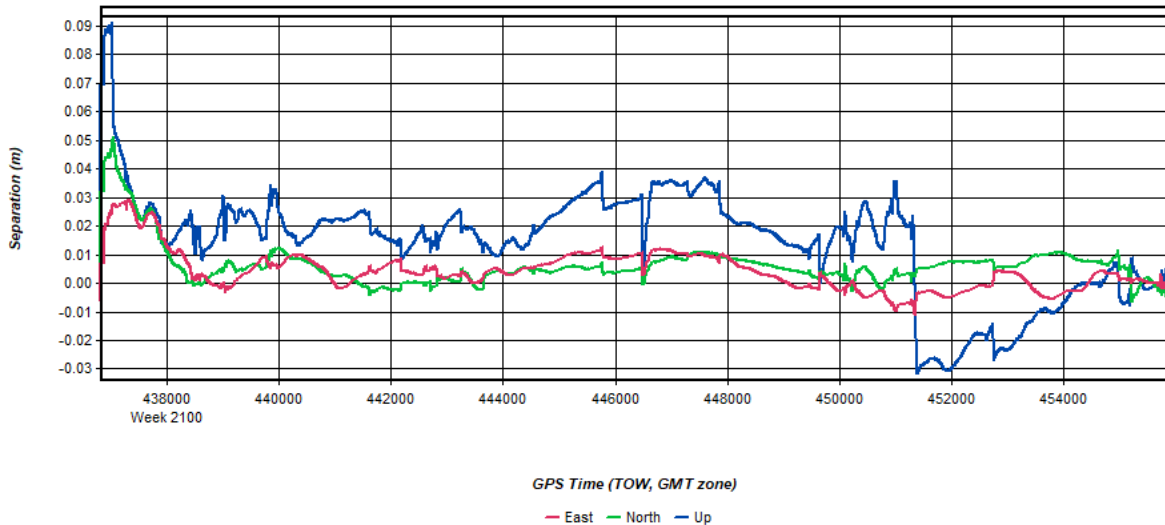
Inertial Explorer Version 8.90.2124
06/10/2020

Figure 1: Smoothed TC Combined - Map



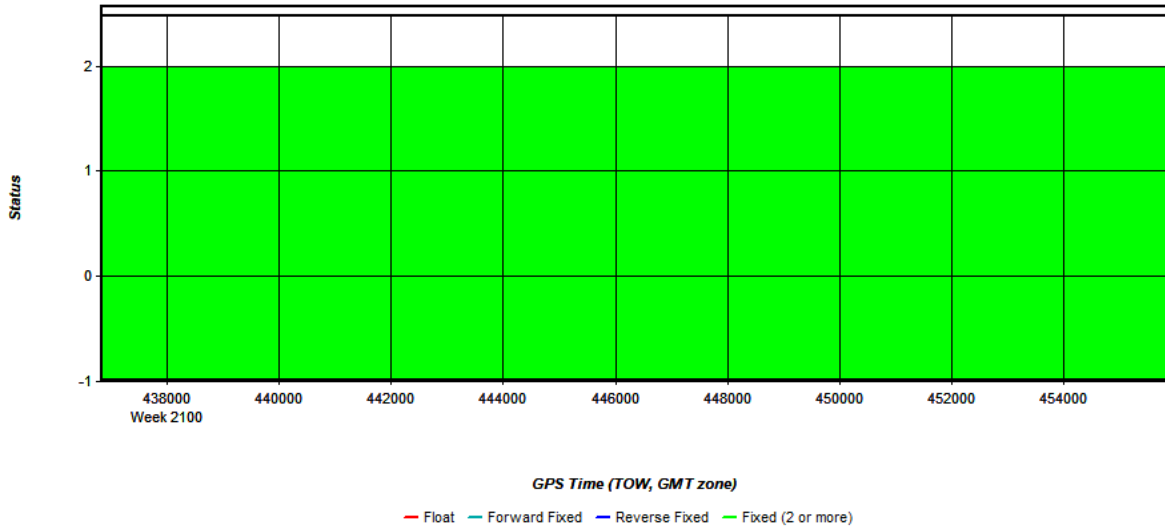
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 2: 20200410011914_14 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



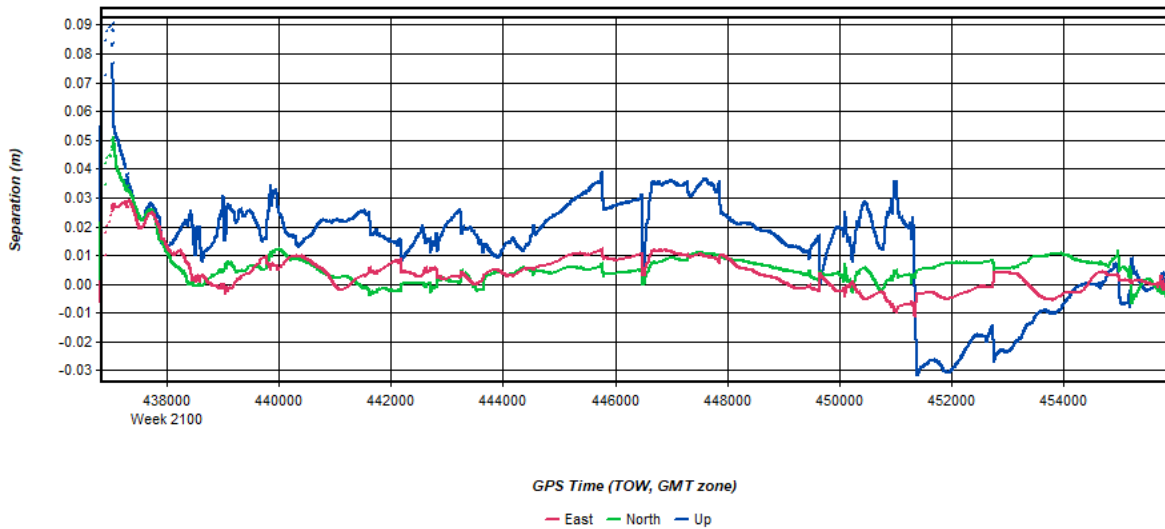
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 3: 20200410011914_14 [Smoothed TC Combined] - Float or Fixed Ambiguity



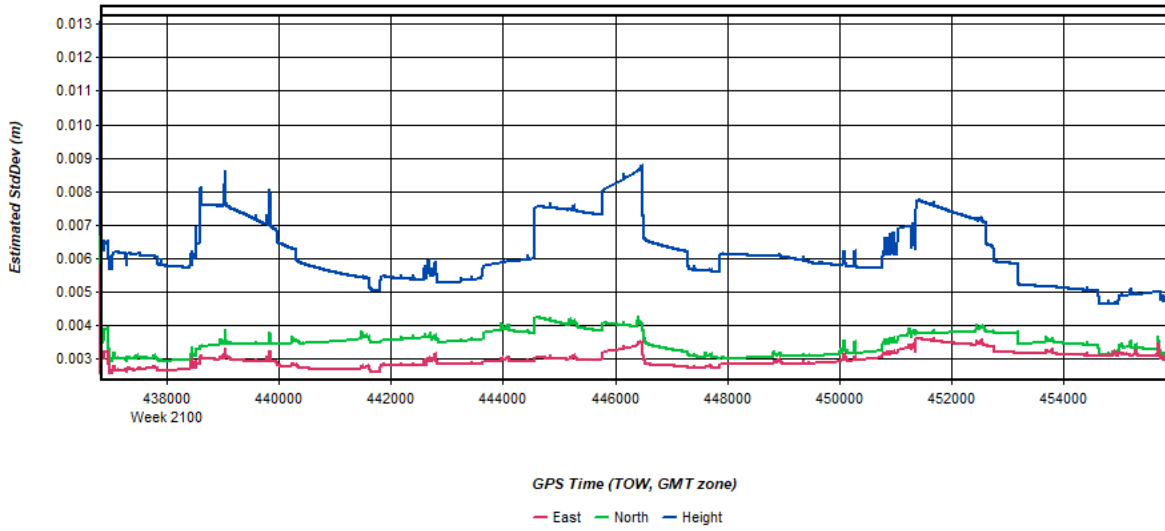
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 4: 20200410011914_14 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



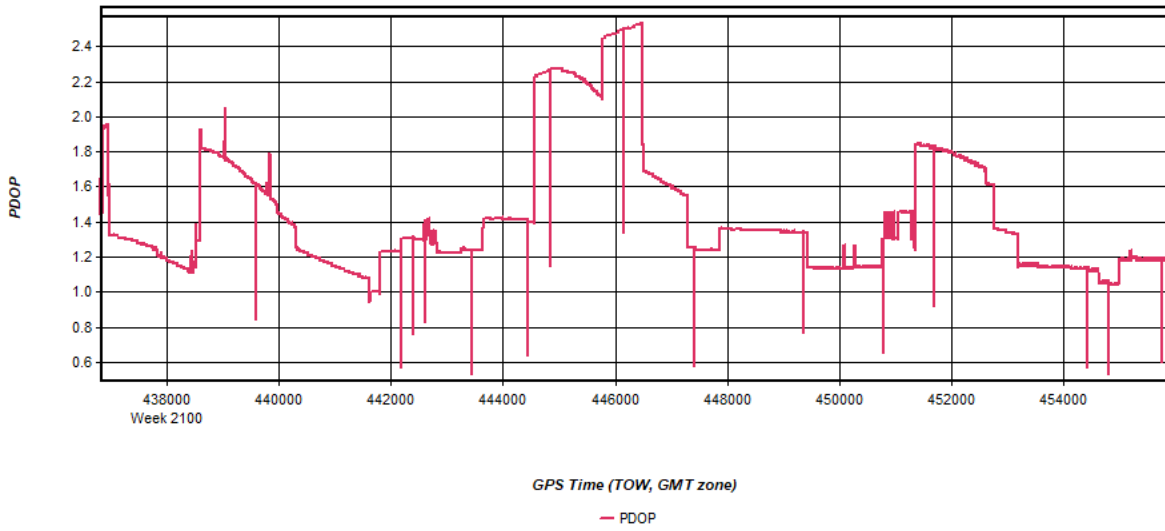
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 5: 20200410011914_14 [Smoothed TC Combined] - Estimated Position Accuracy Plot



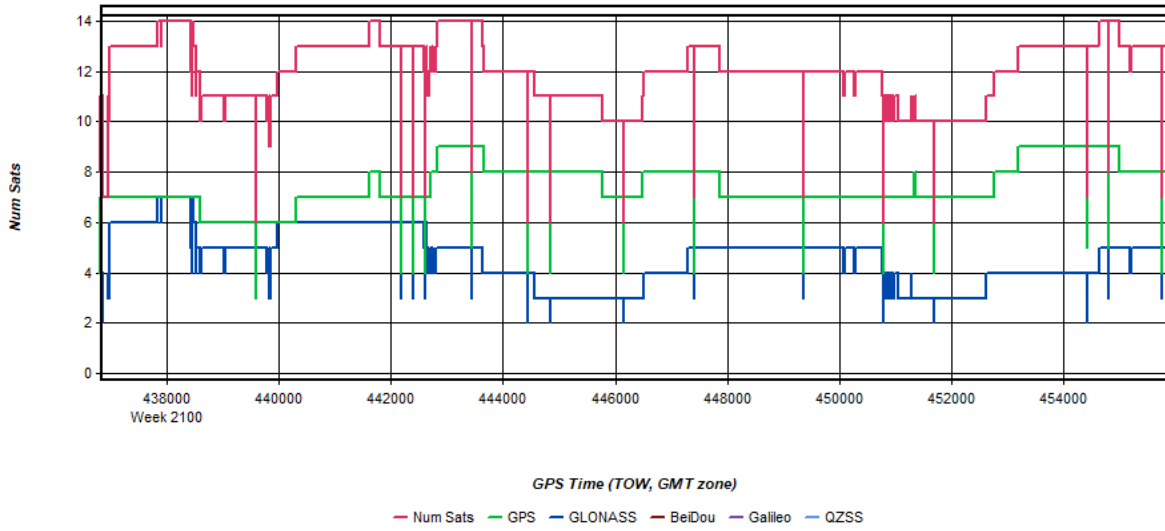
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 6: 20200410011914_14 [Smoothed TC Combined] - PDOP Plot



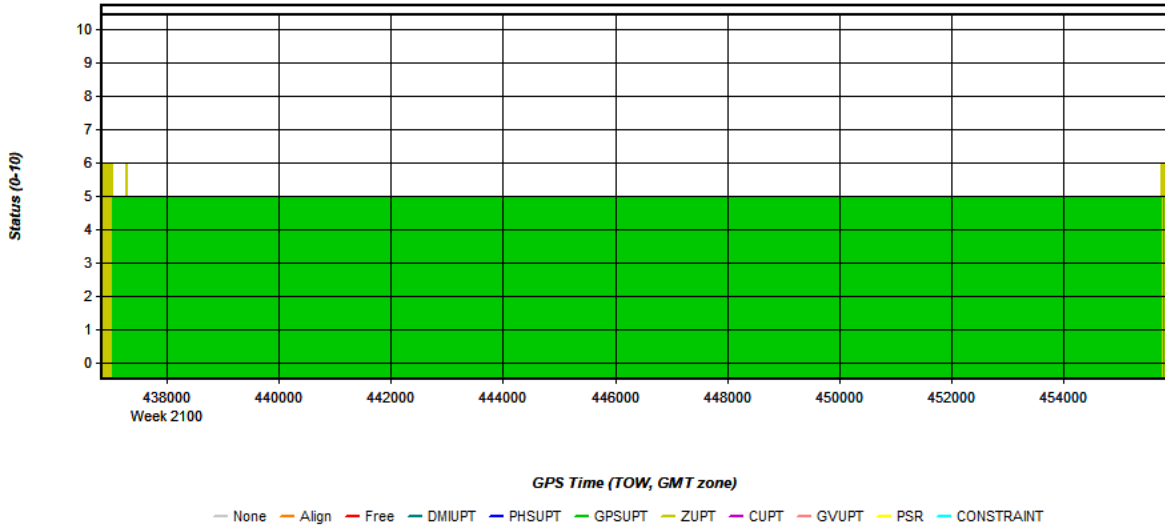
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 7: 20200410011914_14 [Smoothed TC Combined] - Number of Satellites Line Plot



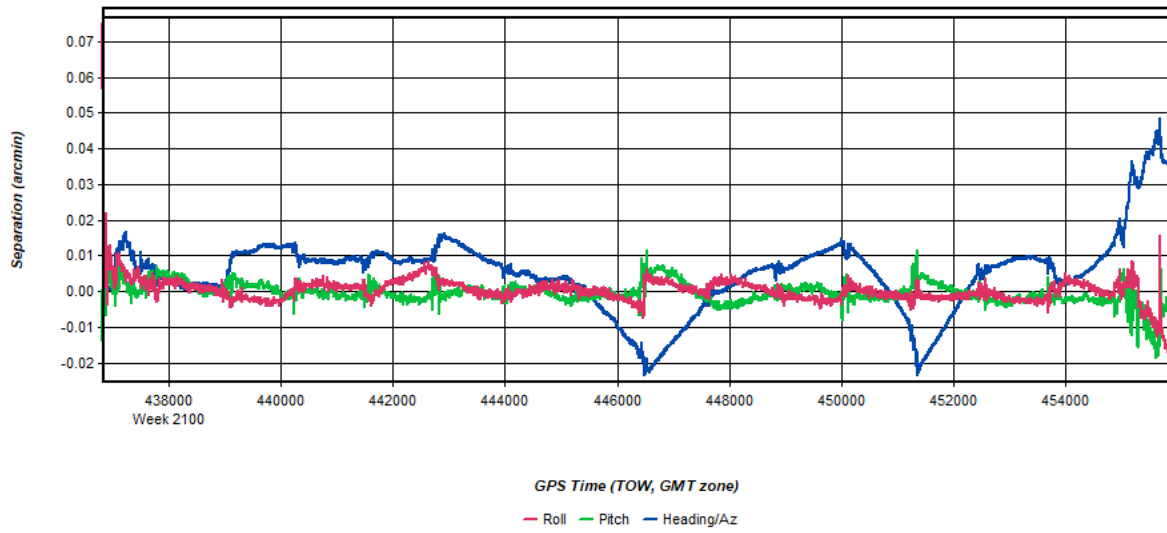
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 8: 20200410011914_14 [Smoothed TC Combined] - Status flag for IMU processing



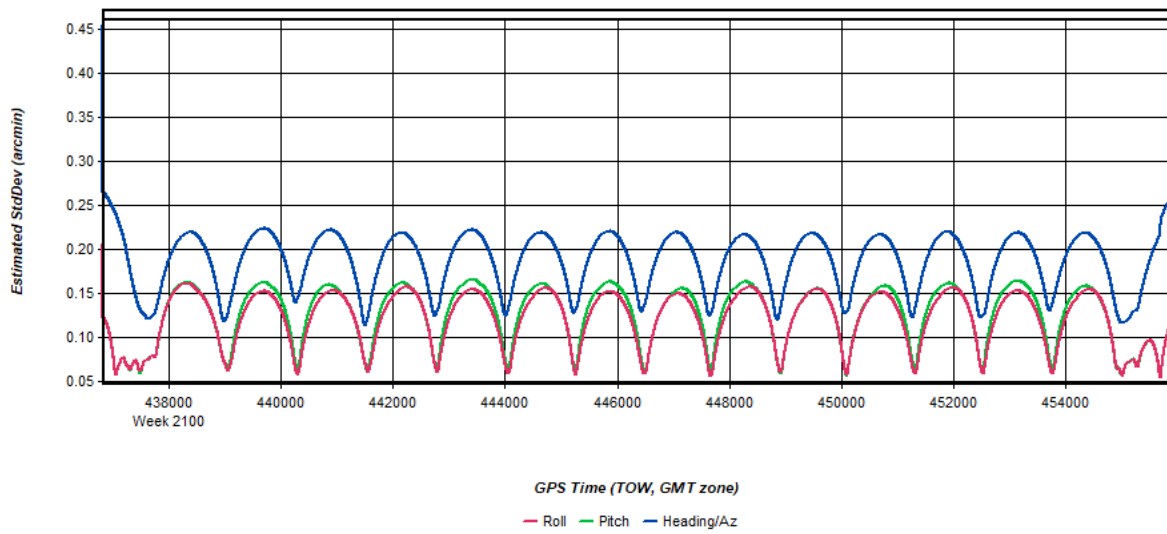
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 9: 20200410011914_14 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



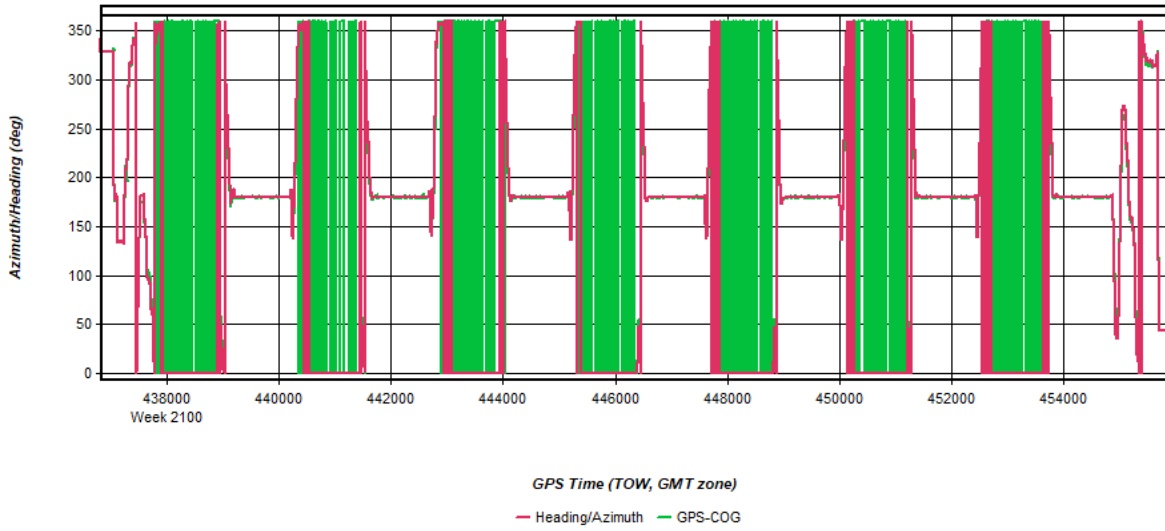
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 10: 20200410011914_14 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



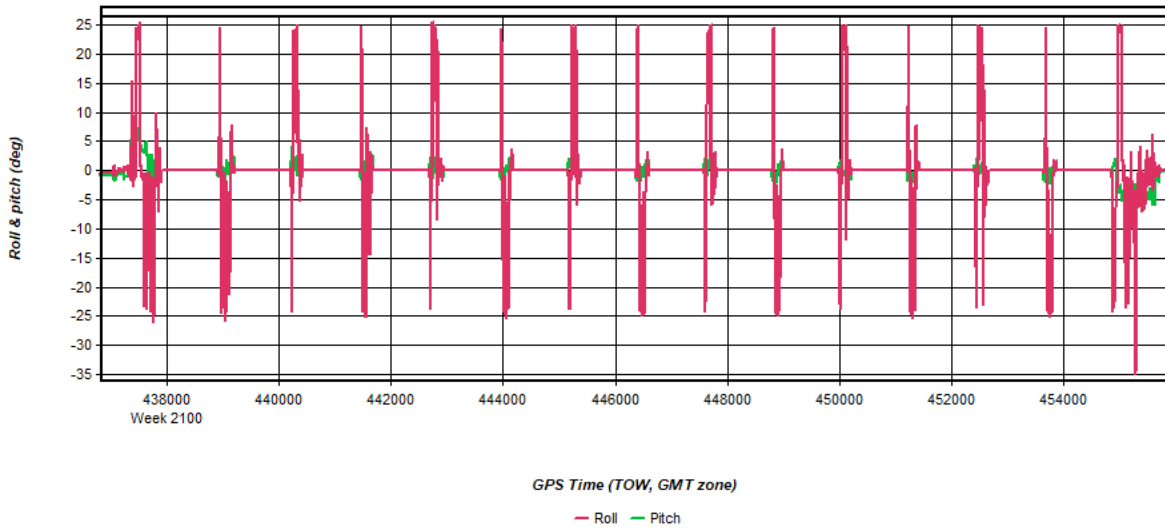
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 11: 20200410011914_14 [Smoothed TC Combined] - Azimuth Plot



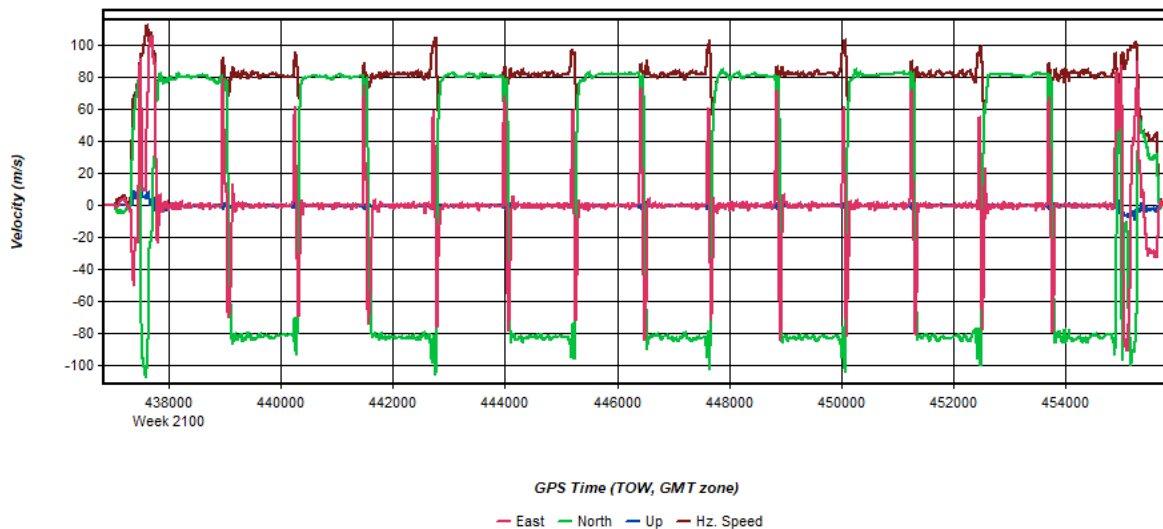
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 12: 20200410011914_14 [Smoothed TC Combined] - Roll & Pitch Plot



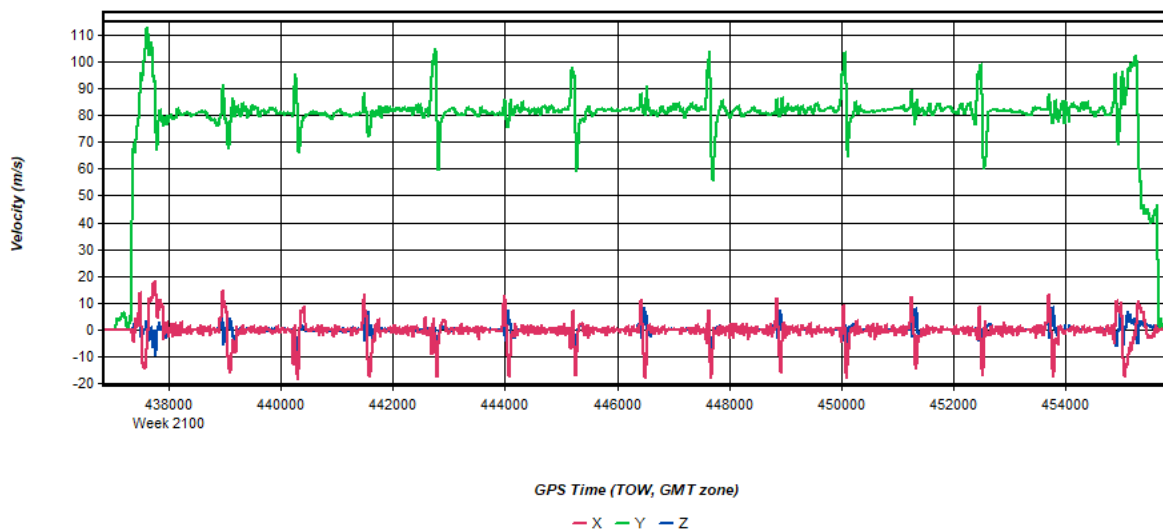
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 13: 20200410011914_14 [Smoothed TC Combined] - Velocity Profile Plot



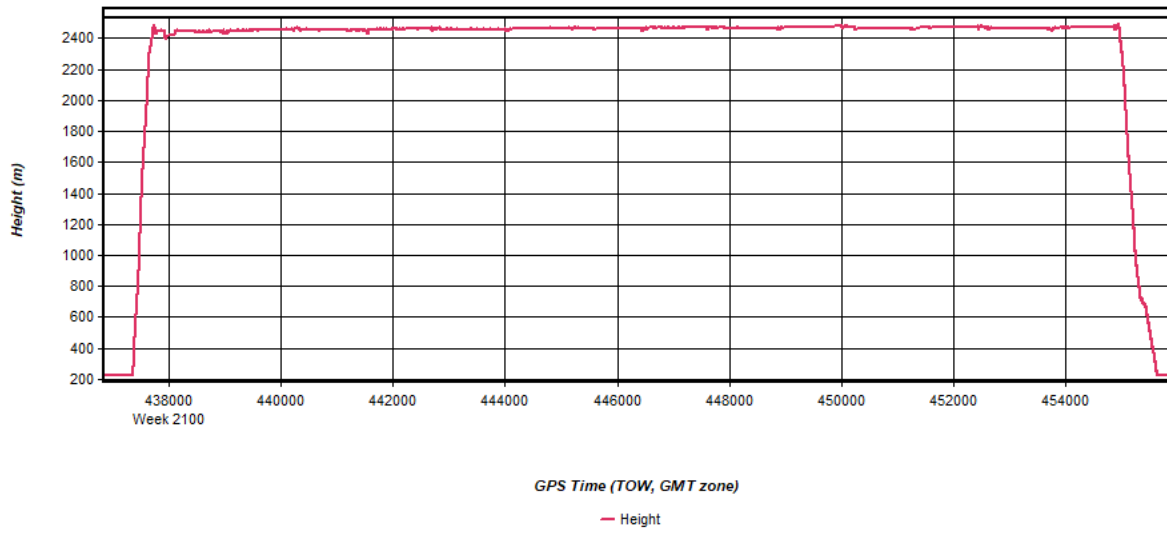
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 14: 20200410011914_14 [Smoothed TC Combined] - Body Frame Velocity Plot



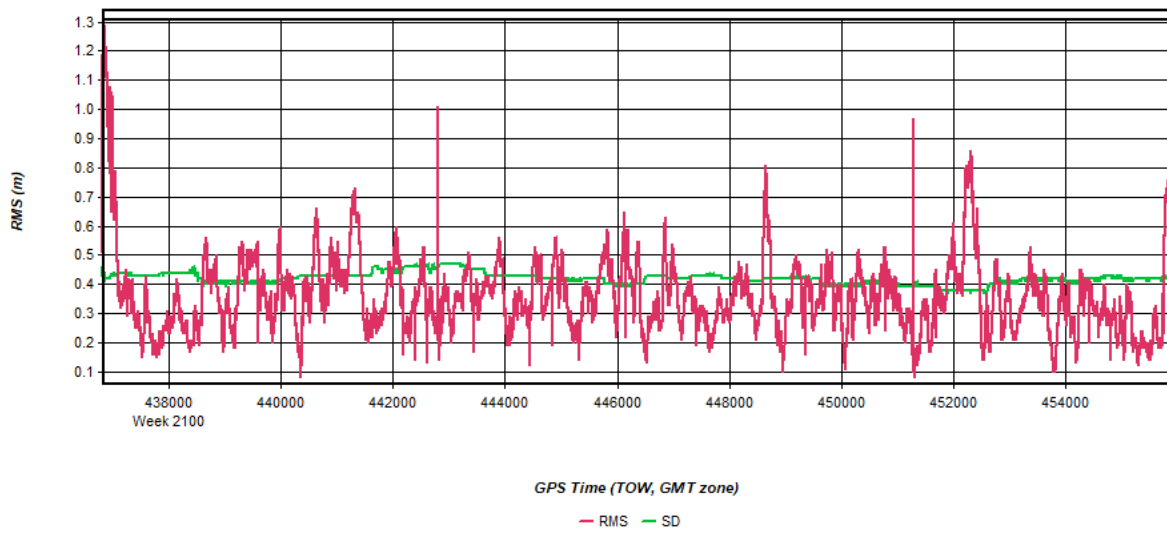
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 15: 20200410011914_14 [Smoothed TC Combined] - Height Profile Plot



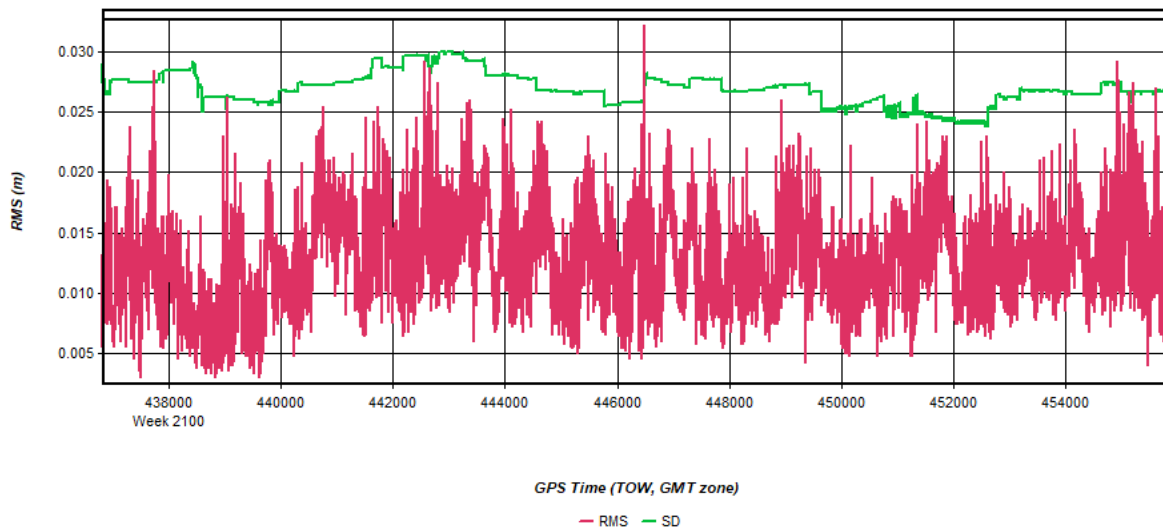
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 16: 20200410011914_14 [Smoothed TC Combined] - C/A Code Residual RMS Plot



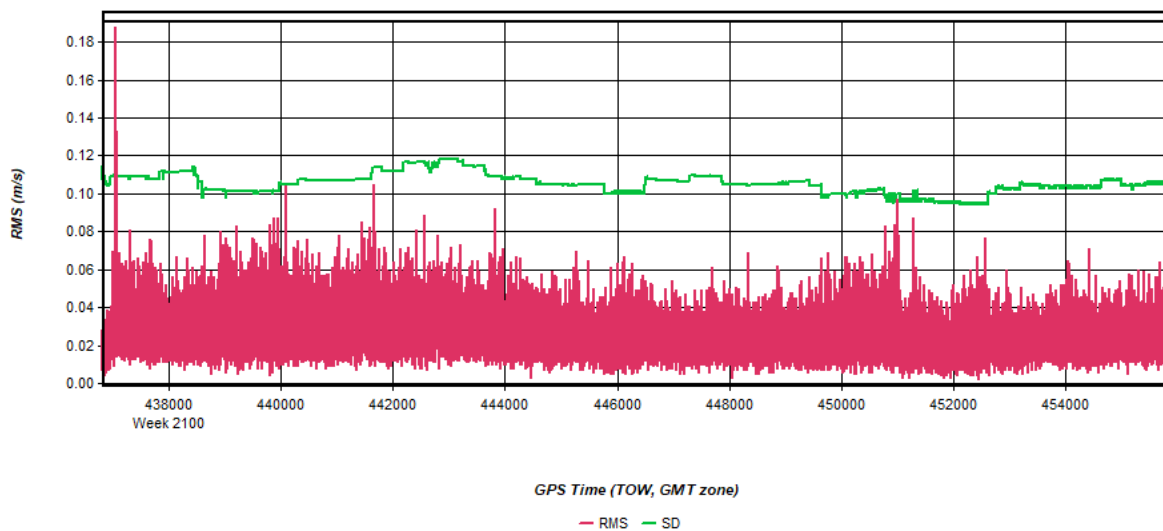
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 17: 20200410011914_14 [Smoothed TC Combined] - Carrier Residual RMS Plot



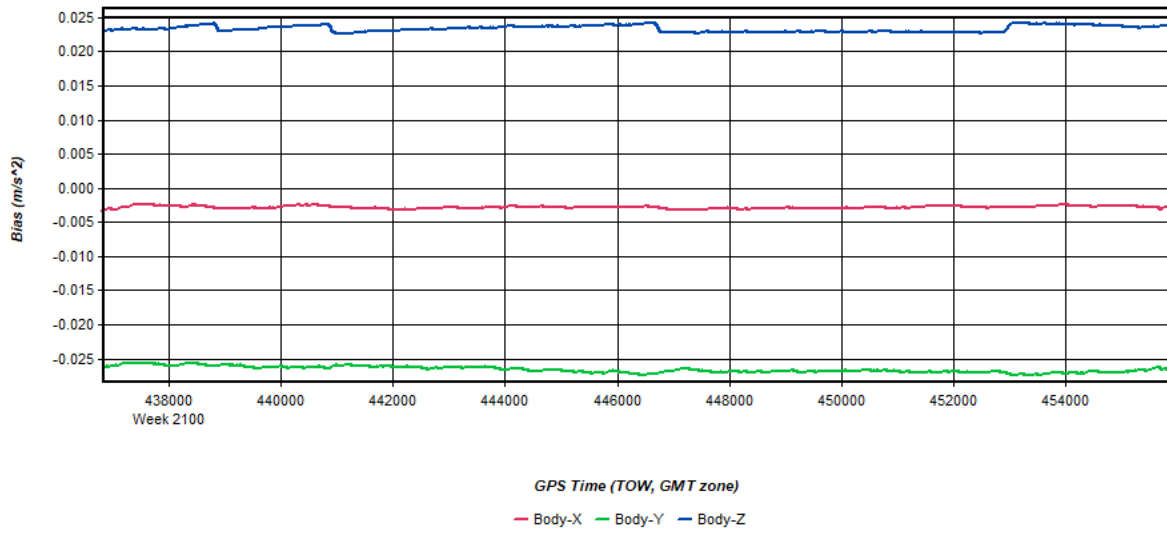
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 18: 20200410011914_14 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



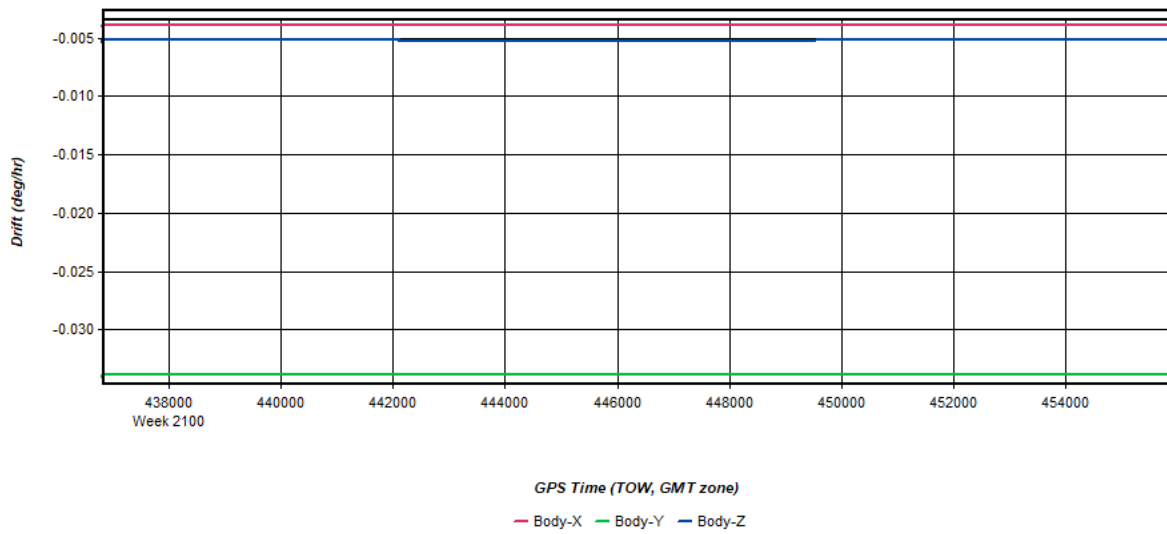
Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 19: 20200410011914_14 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Figure 20: 20200410011914_14 [Smoothed TC Combined] - Gyro Drift Plot

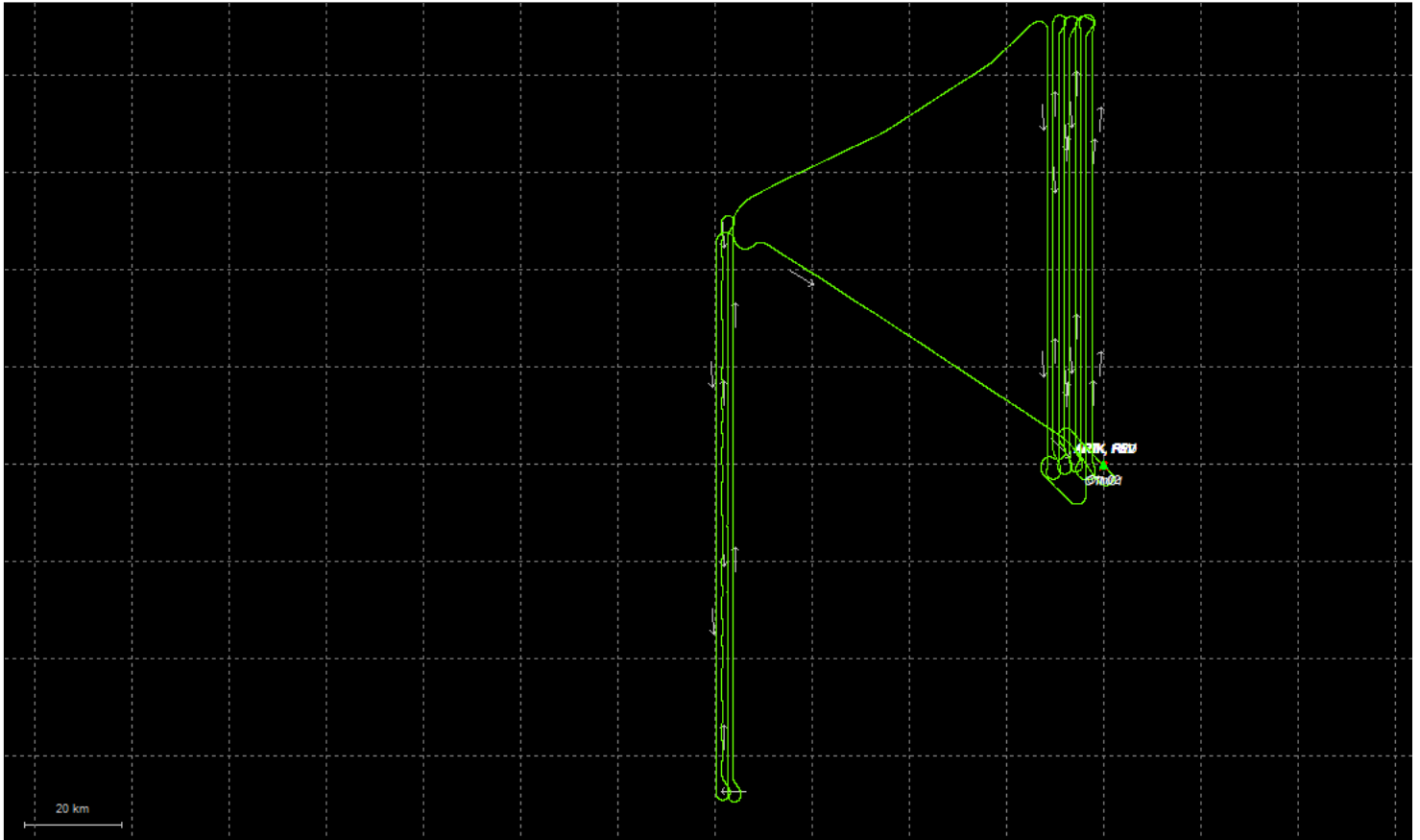


Process	20200410011914_14	by Unknown	on 6/10/2020	at 12:37:36
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Output Results for 20200410123525_15

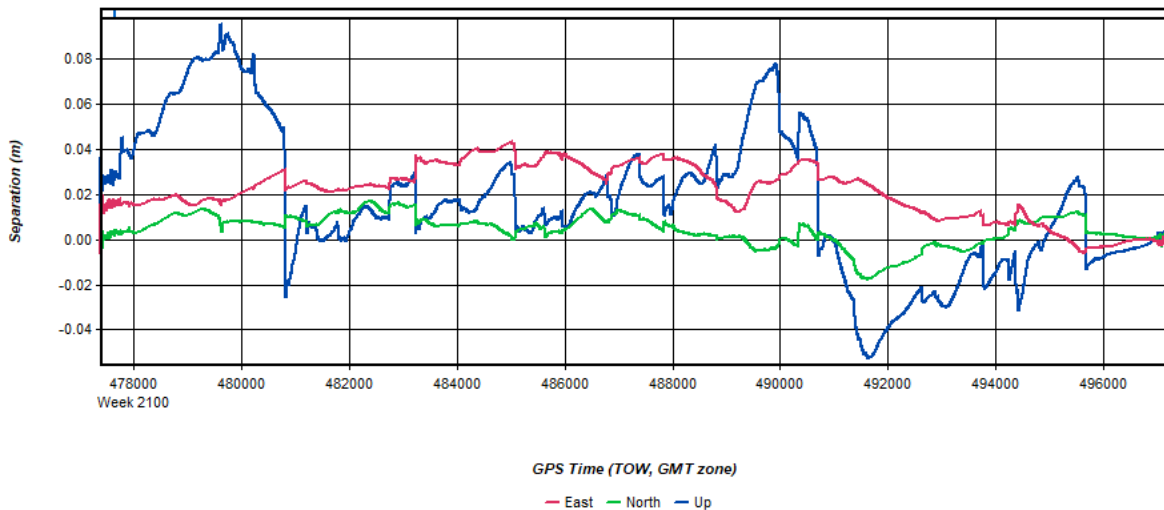
Inertial Explorer Version 8.90.2124
06/08/2020

Figure 1: Smoothed TC Combined - Map



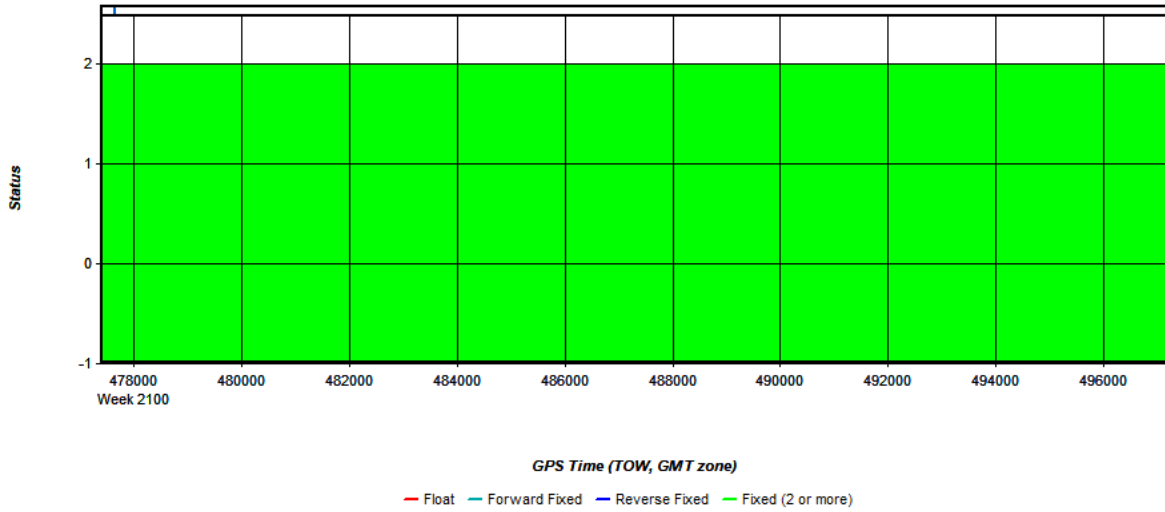
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 2: 20200410123525_15 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



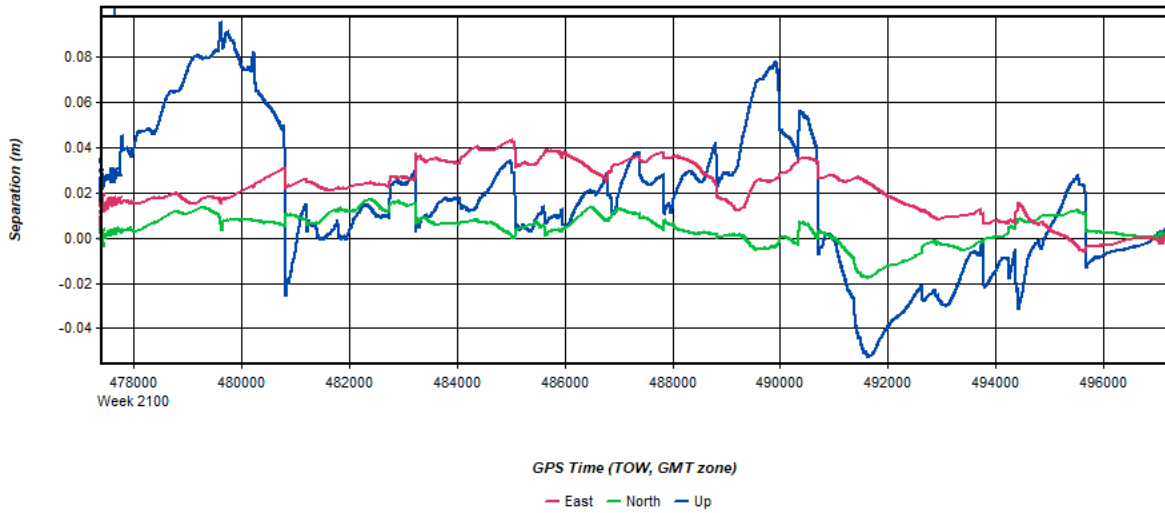
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 3: 20200410123525_15 [Smoothed TC Combined] - Float or Fixed Ambiguity



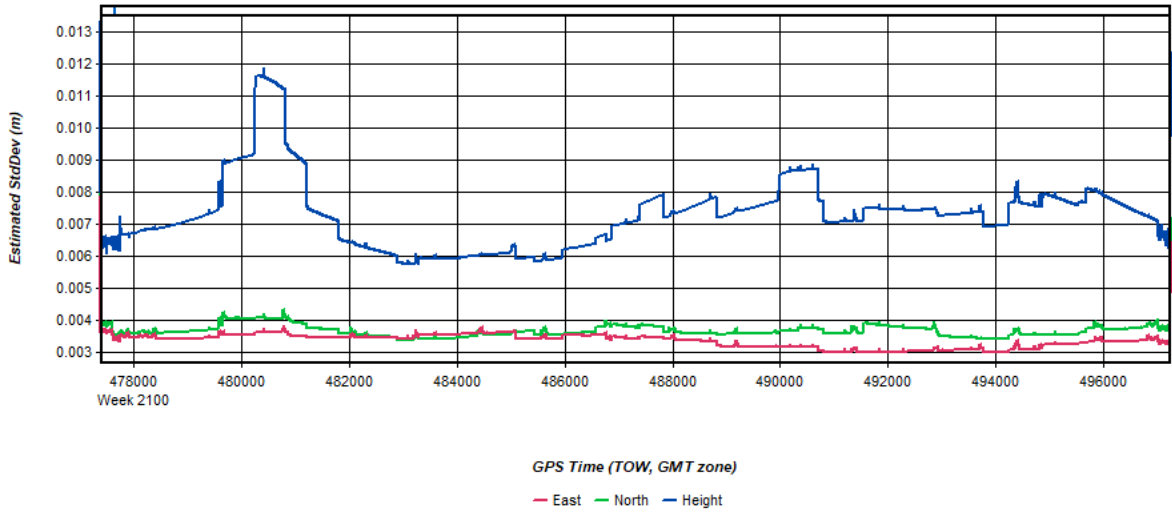
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 4: 20200410123525_15 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



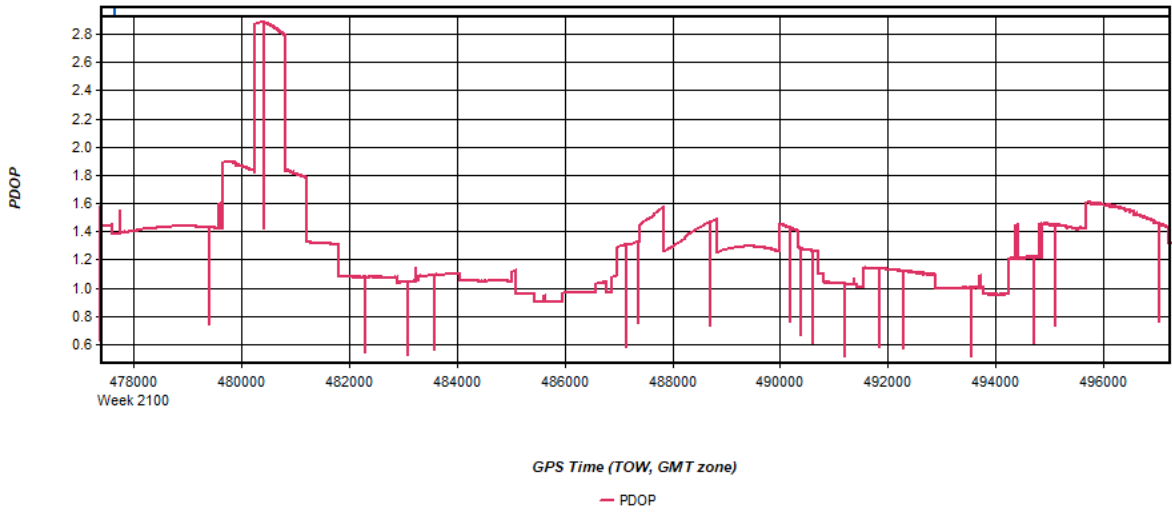
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 5: 20200410123525_15 [Smoothed TC Combined] - Estimated Position Accuracy Plot



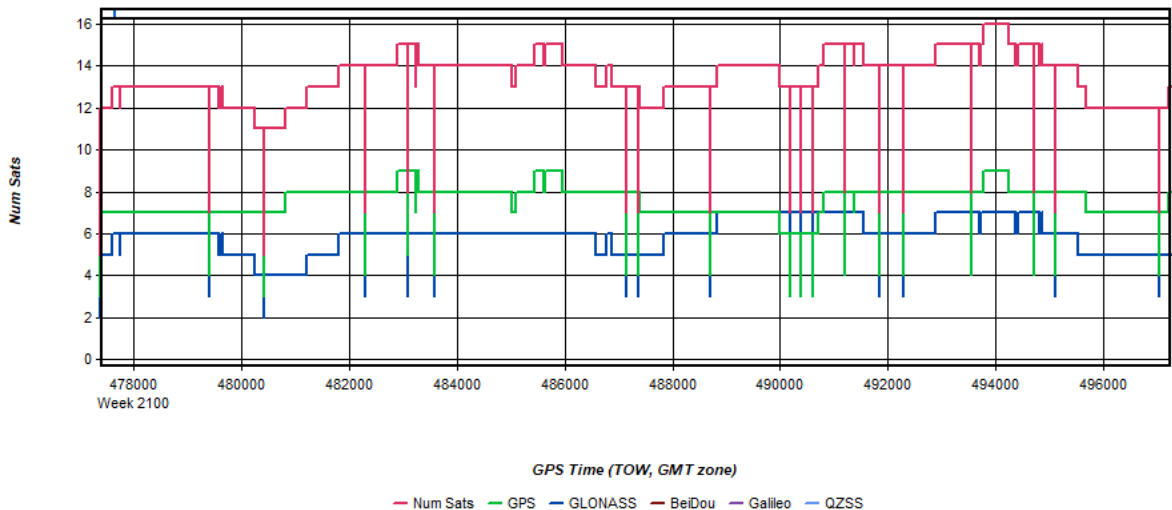
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 6: 20200410123525_15 [Smoothed TC Combined] - PDOP Plot



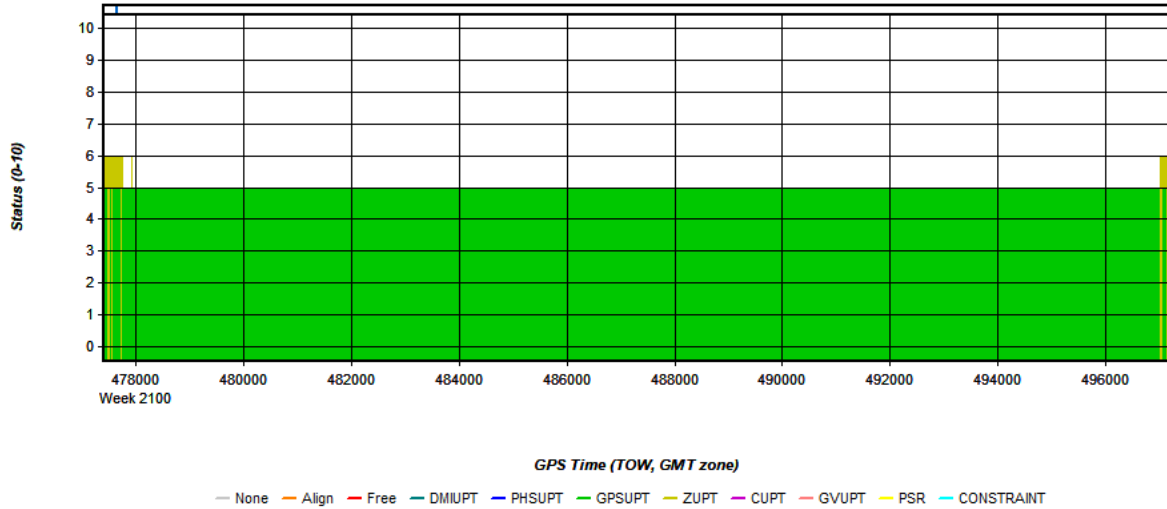
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 7: 20200410123525_15 [Smoothed TC Combined] - Number of Satellites Line Plot



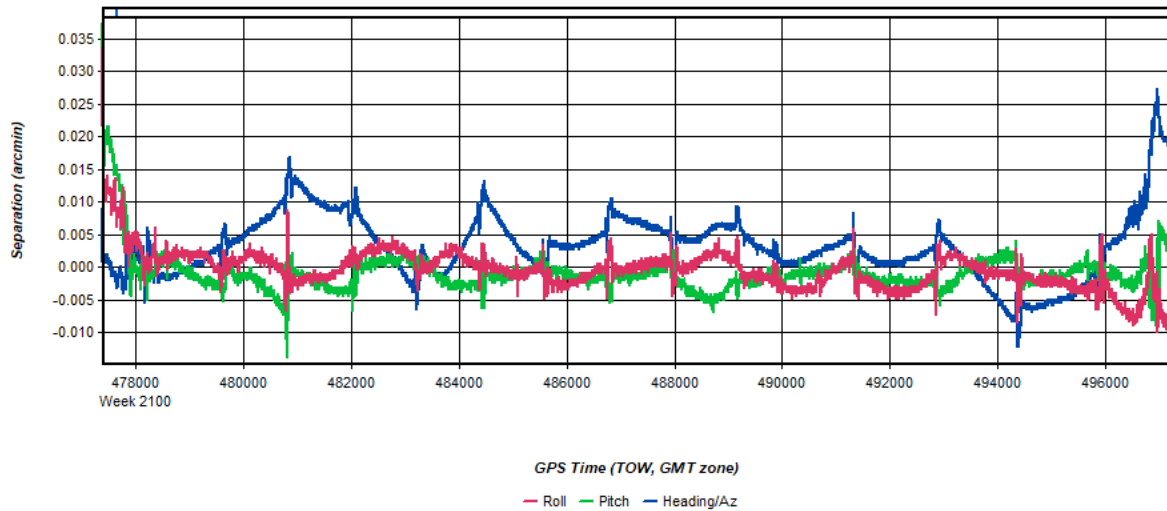
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 8: 20200410123525_15 [Smoothed TC Combined] - Status flag for IMU processing



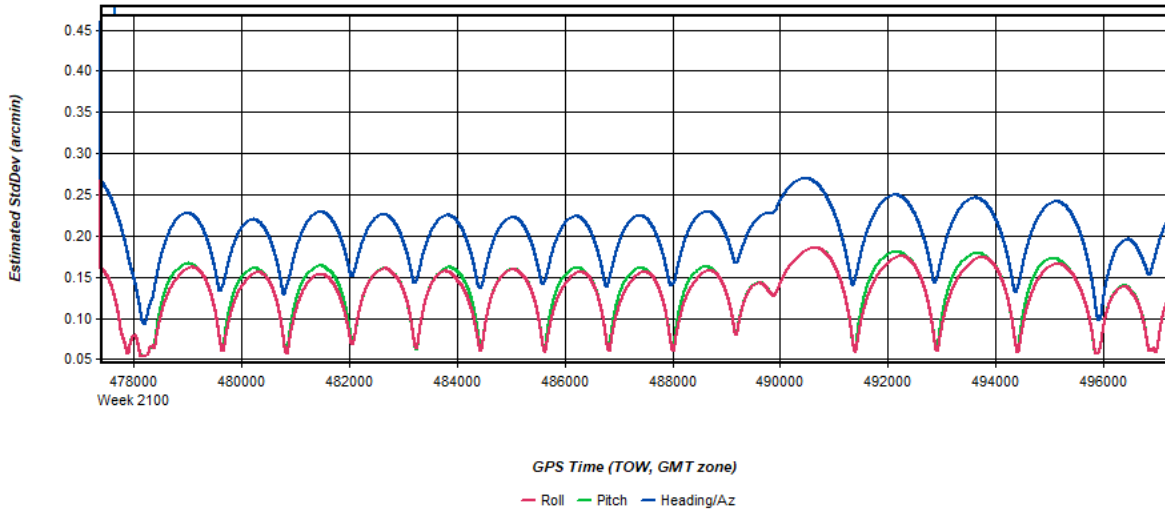
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 9: 20200410123525_15 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



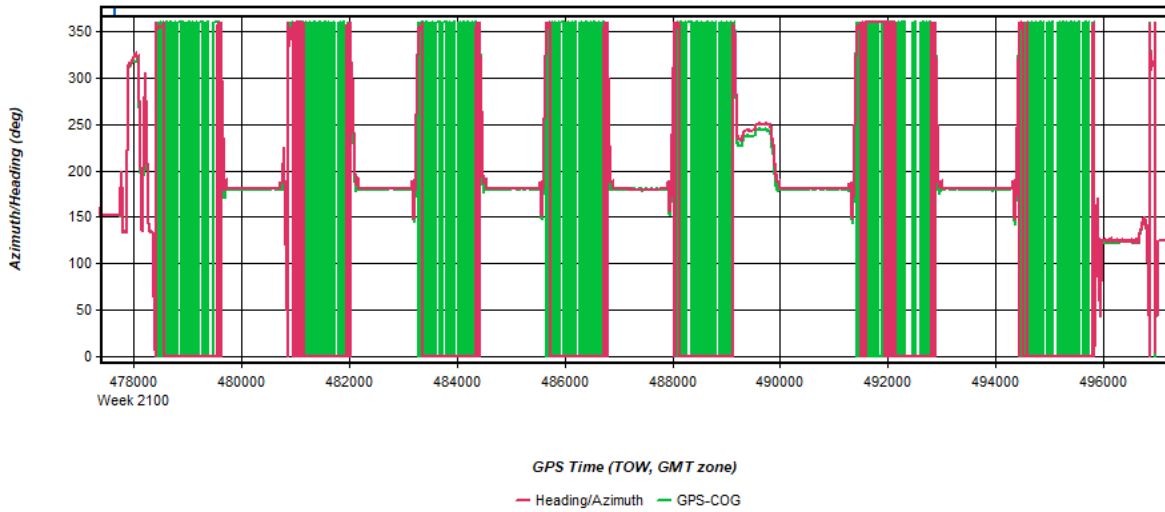
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 10: 20200410123525_15 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



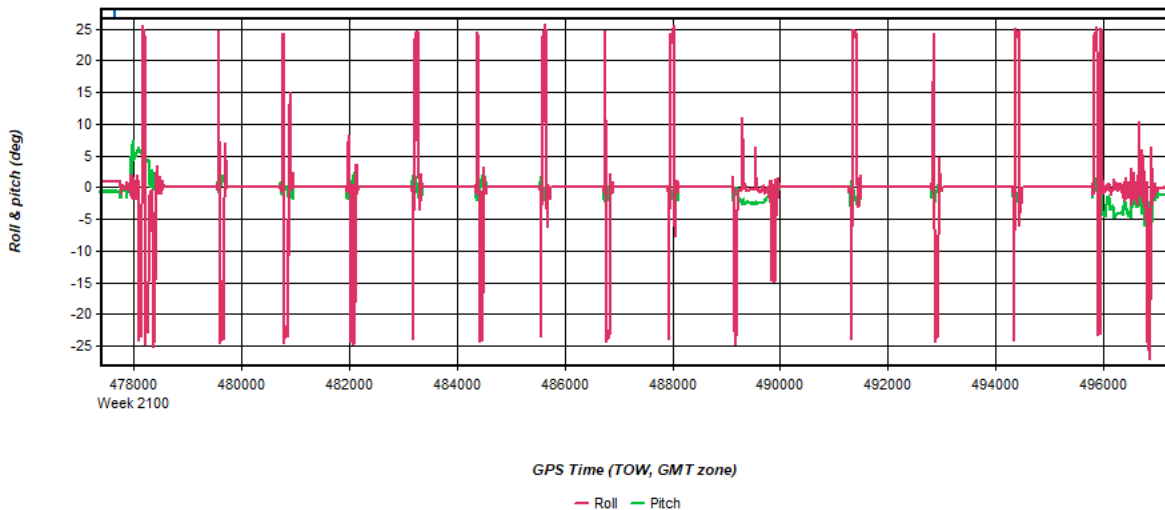
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 11: 20200410123525_15 [Smoothed TC Combined] - Azimuth Plot



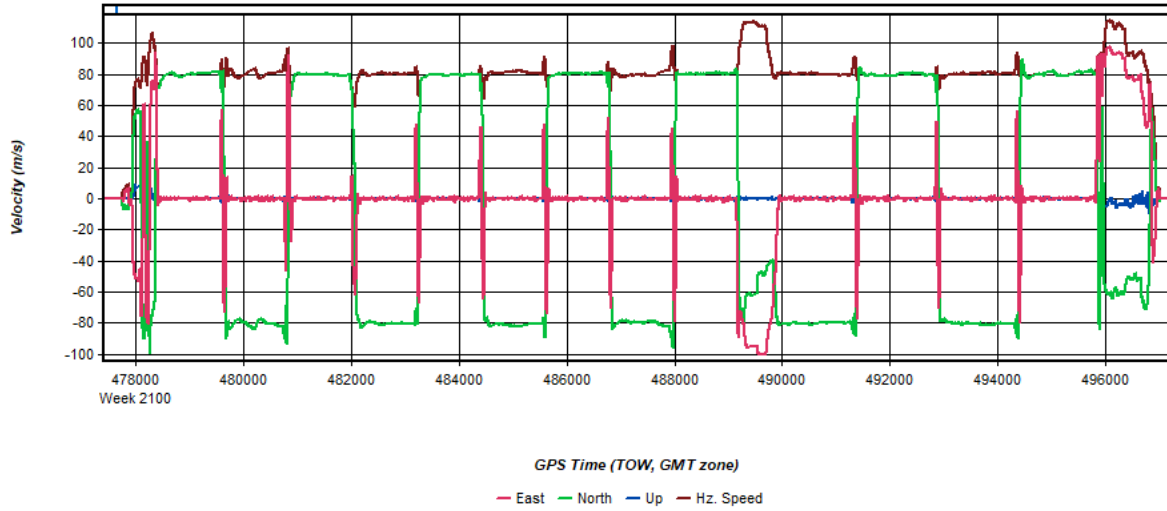
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 12: 20200410123525_15 [Smoothed TC Combined] - Roll & Pitch Plot



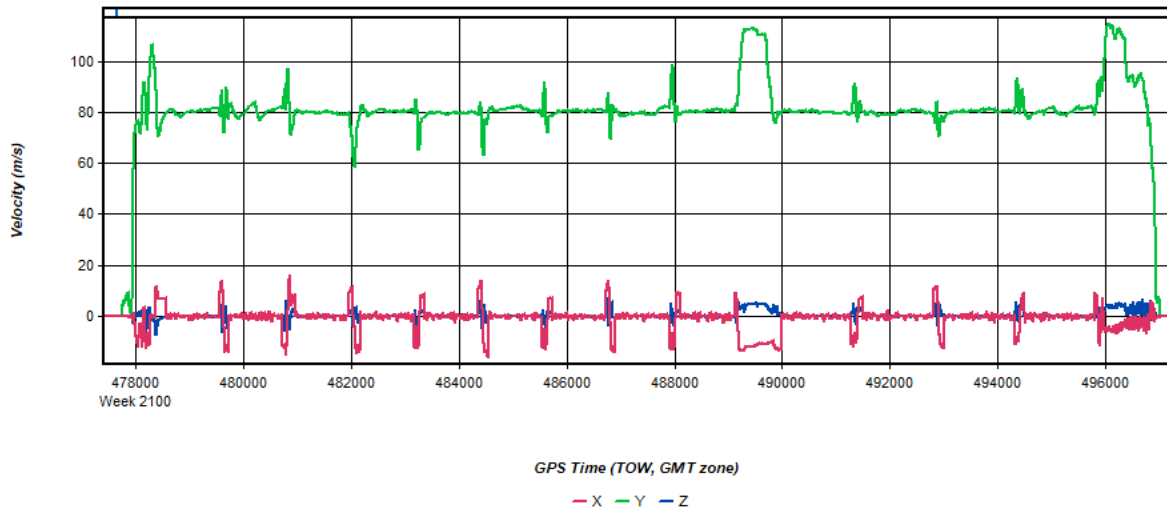
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 13: 20200410123525_15 [Smoothed TC Combined] - Velocity Profile Plot



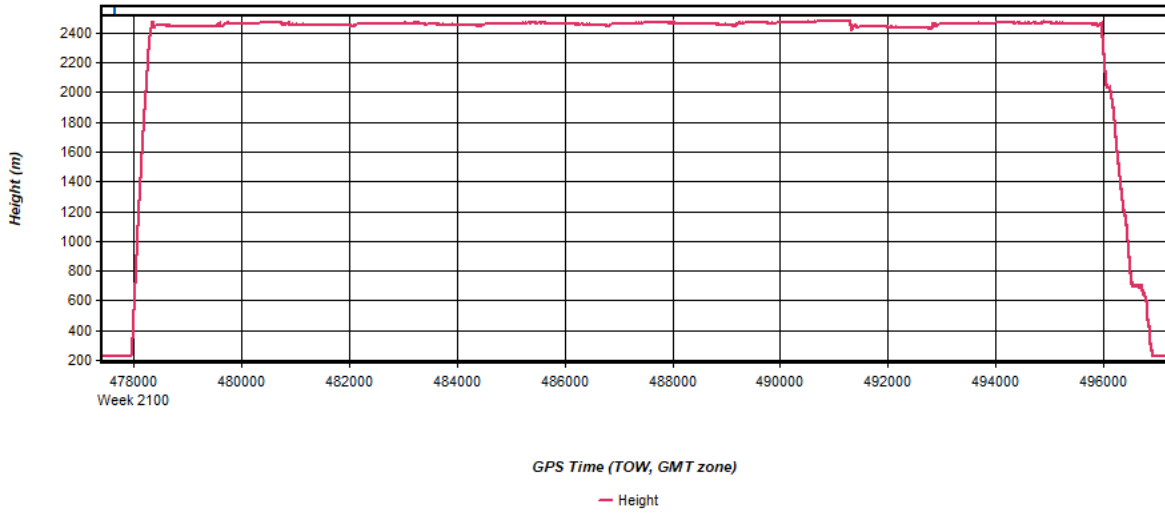
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 14: 20200410123525_15 [Smoothed TC Combined] - Body Frame Velocity Plot



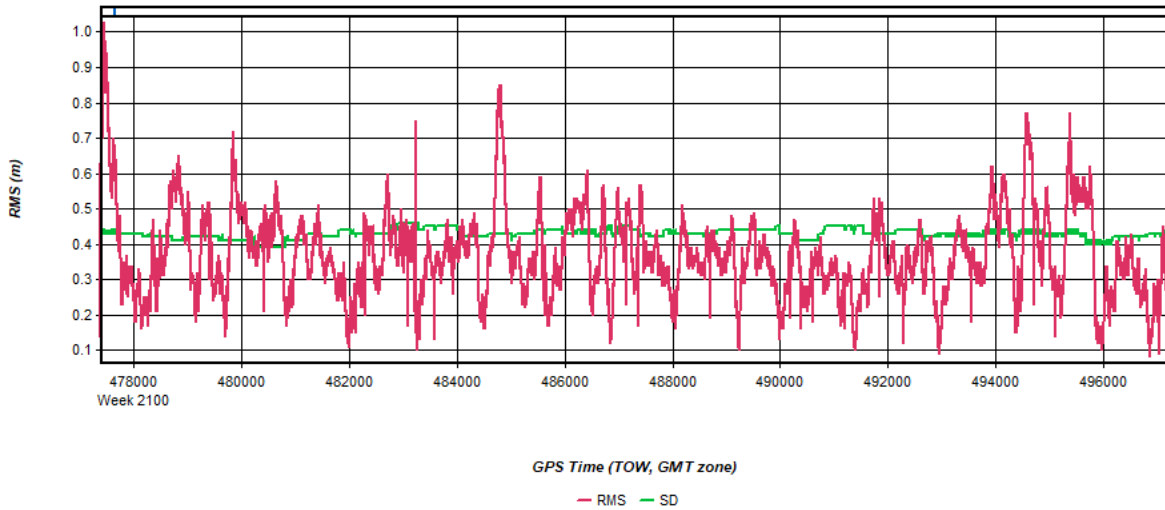
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 15: 20200410123525_15 [Smoothed TC Combined] - Height Profile Plot



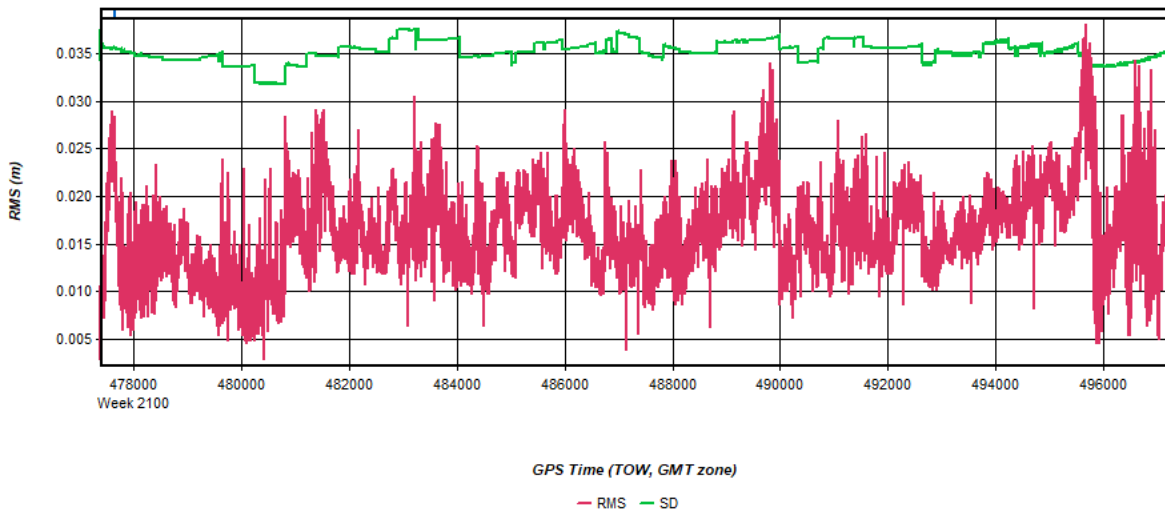
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 16: 20200410123525_15 [Smoothed TC Combined] - C/A Code Residual RMS Plot



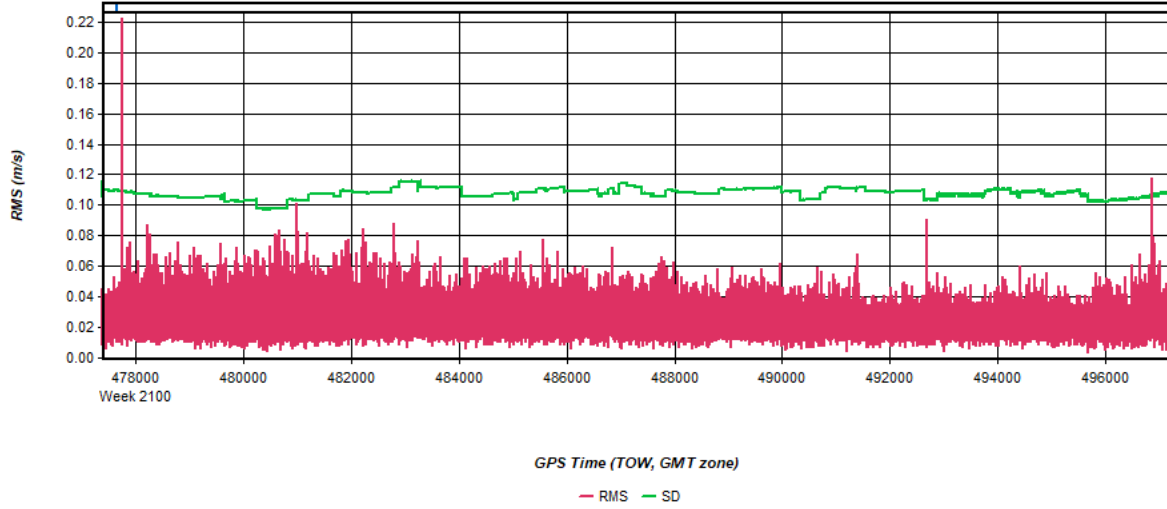
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 17: 20200410123525_15 [Smoothed TC Combined] - Carrier Residual RMS Plot



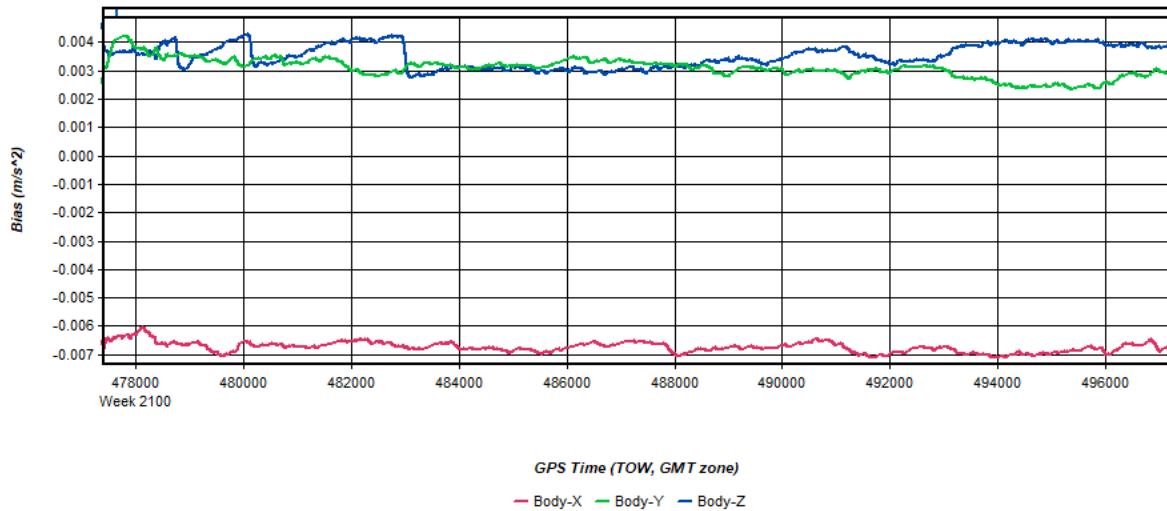
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 18: 20200410123525_15 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



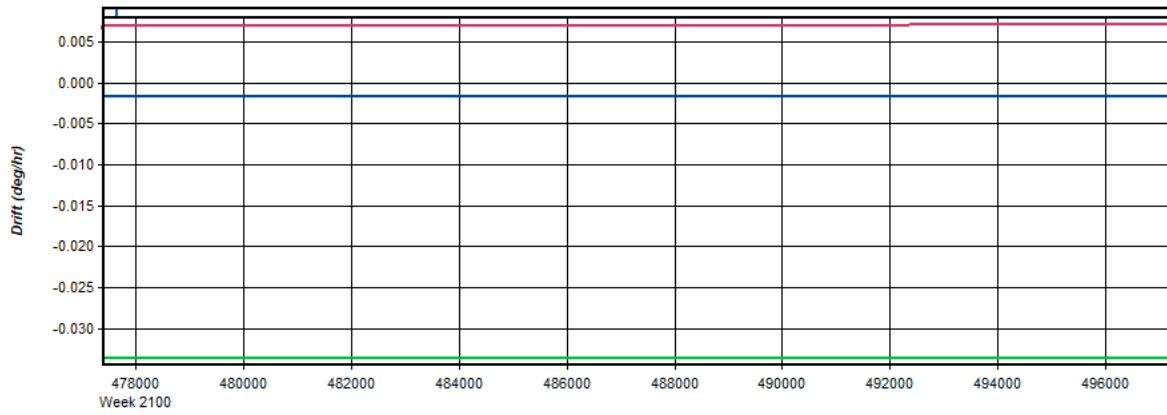
Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 19: 20200410123525_15 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Figure 20: 20200410123525_15 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

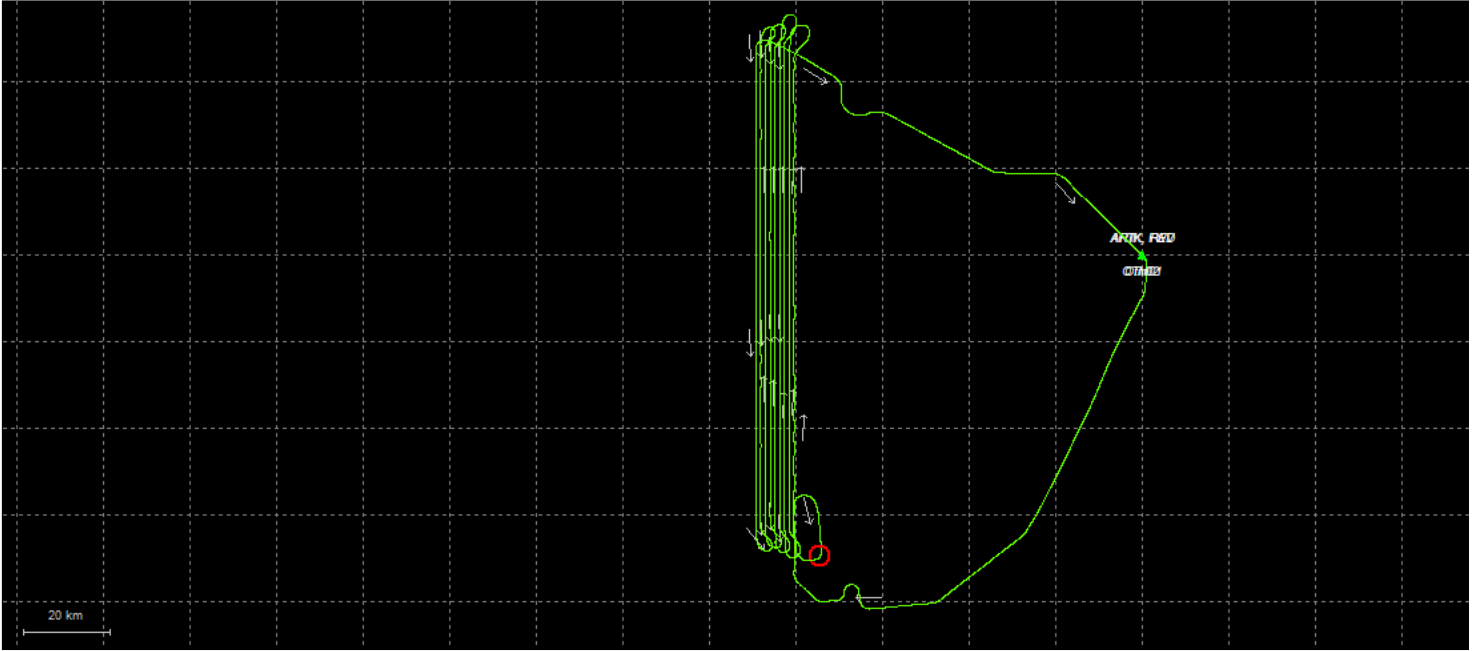
Body-X Body-Y Body-Z

Process	20200410123525_15	by Unknown	on 6/8/2020	at 11:36:43
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Output Results for 20200410194332_16

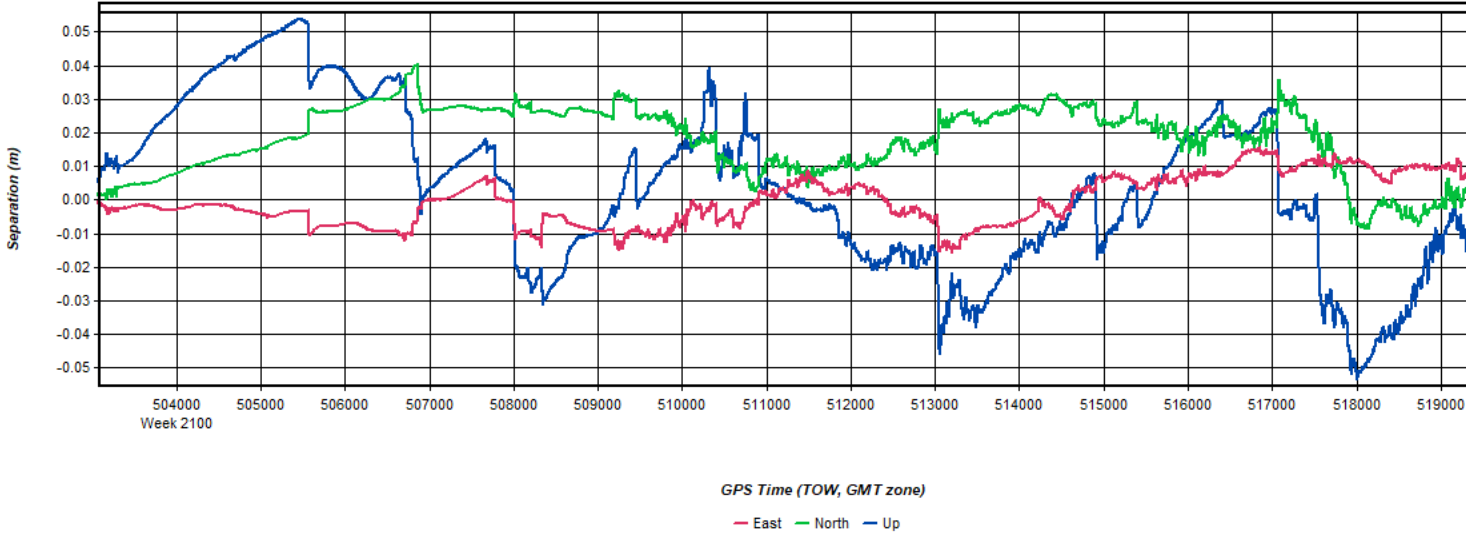
Inertial Explorer Version 8.90.2124
07/07/2020

Figure 1: Smoothed TC Combined - Map



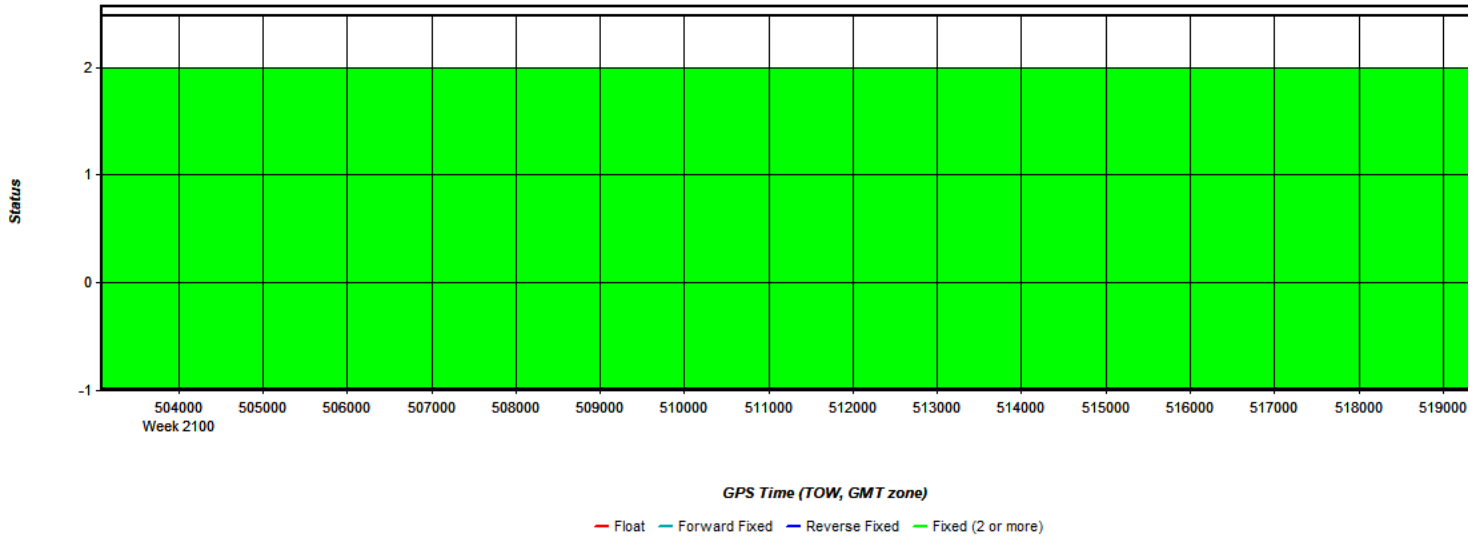
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 2: 20200410194332_16 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



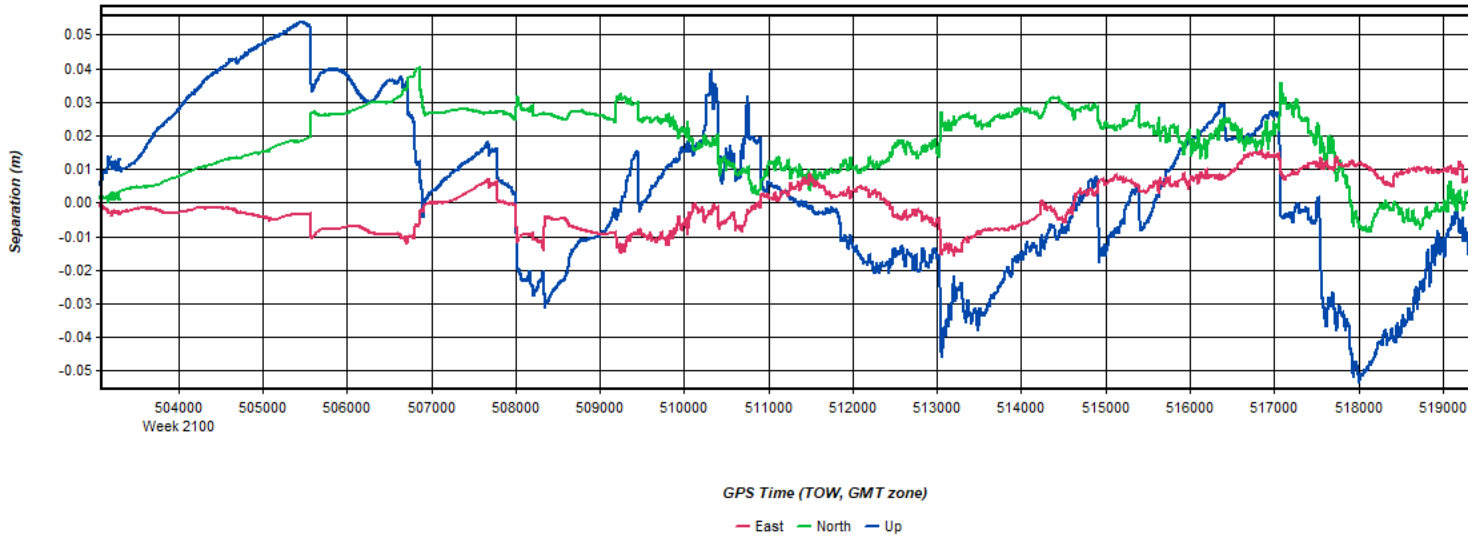
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 3: 20200410194332_16 [Smoothed TC Combined] - Float or Fixed Ambiguity



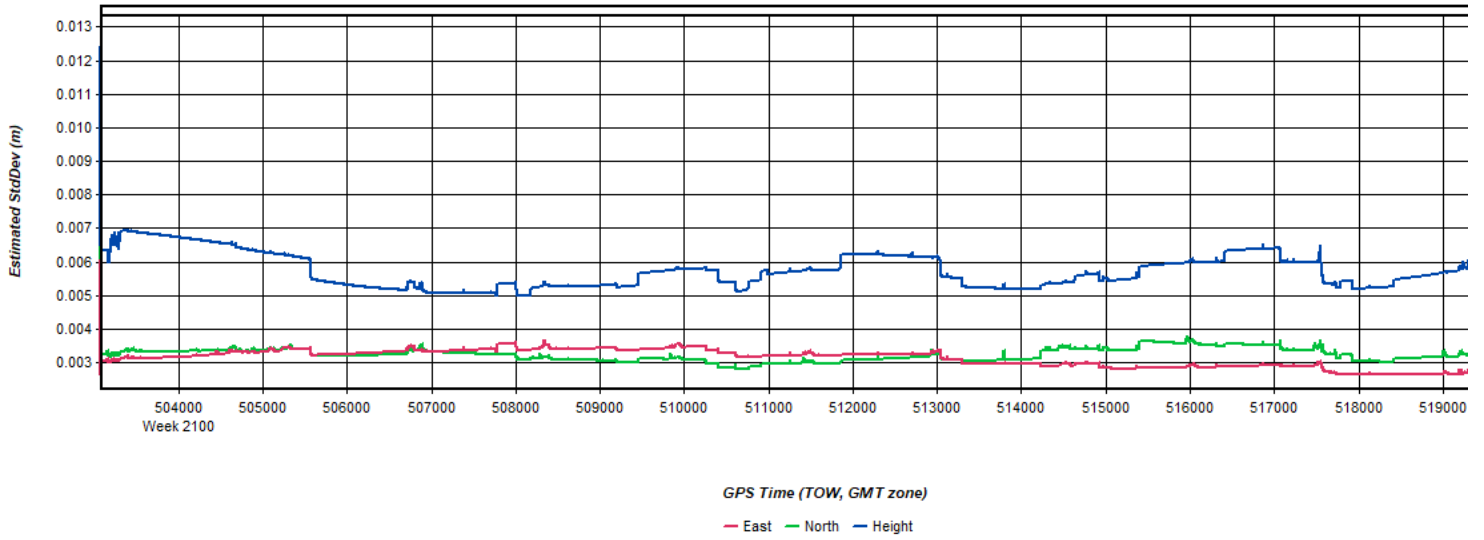
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 4: 20200410194332_16 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



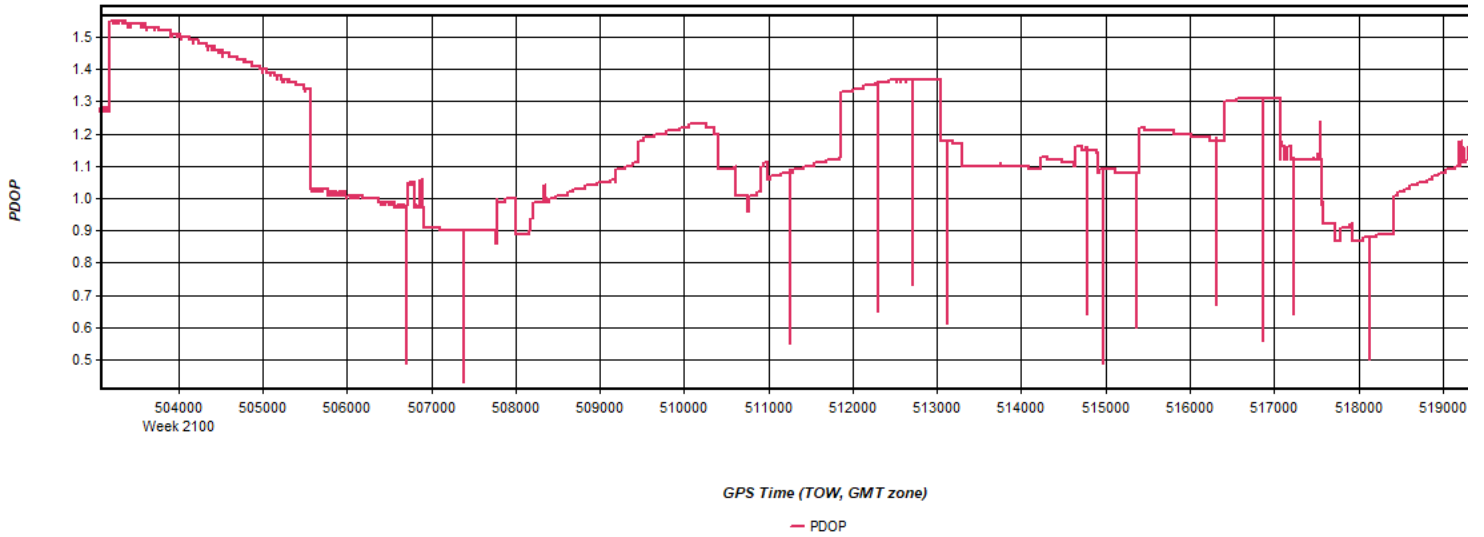
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 5: 20200410194332_16 [Smoothed TC Combined] - Estimated Position Accuracy Plot



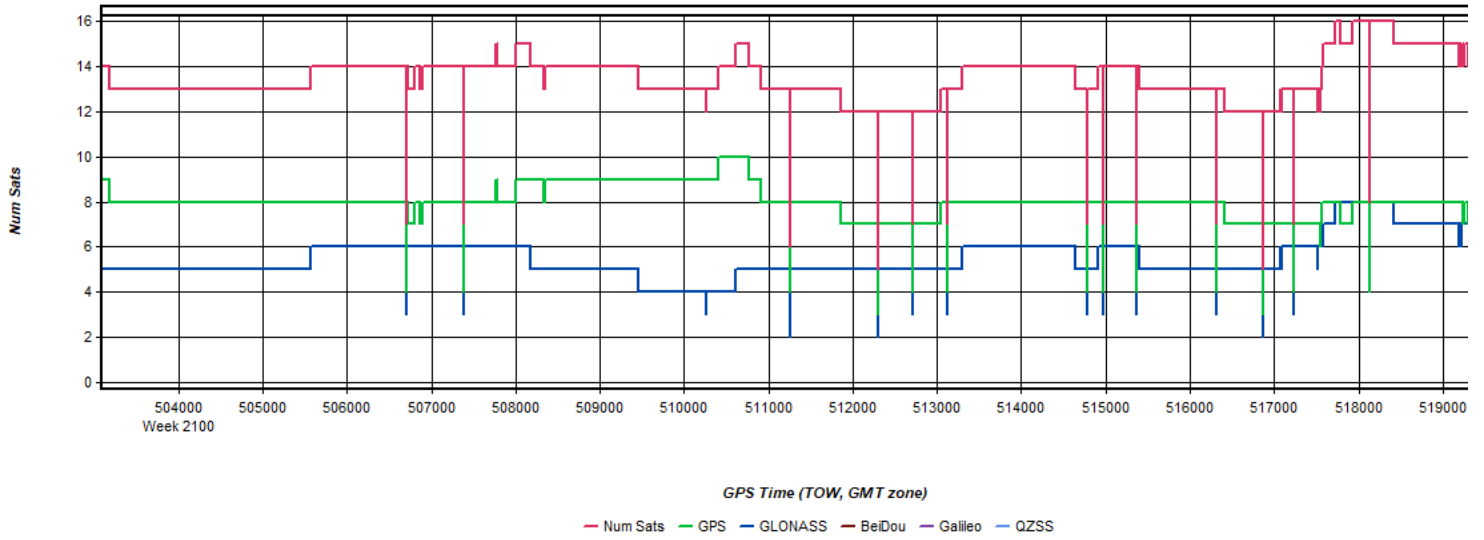
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 6: 20200410194332_16 [Smoothed TC Combined] - PDOP Plot



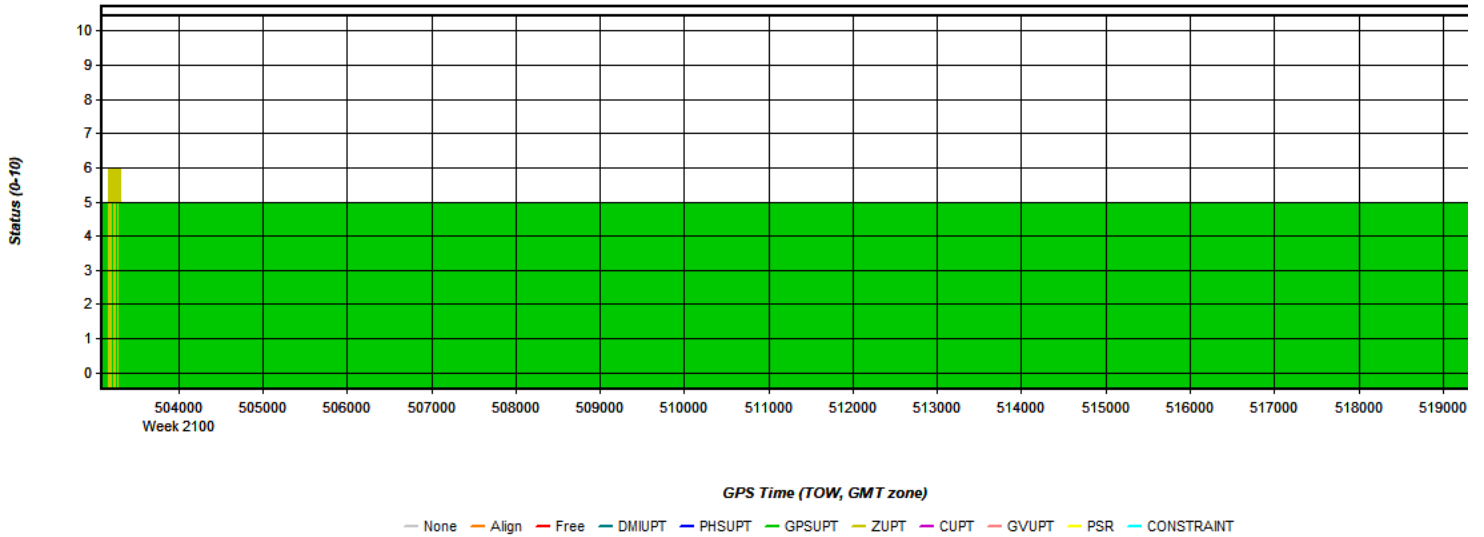
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 7: 20200410194332_16 [Smoothed TC Combined] - Number of Satellites Line Plot



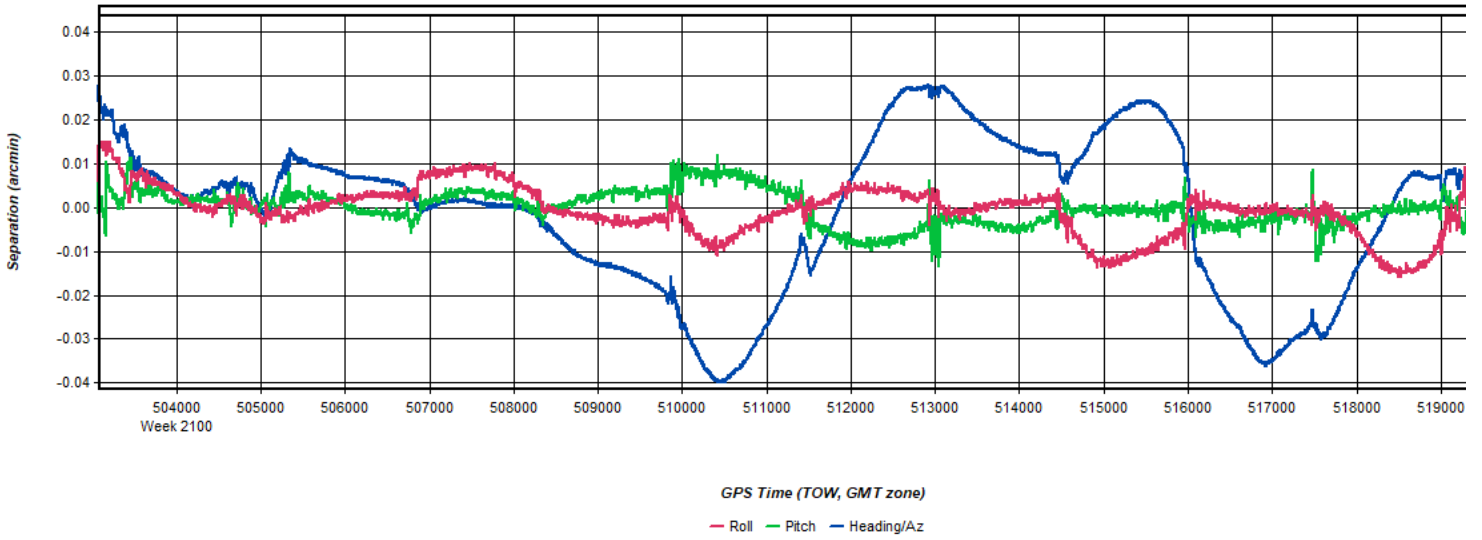
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 8: 20200410194332_16 [Smoothed TC Combined] - Status flag for IMU processing



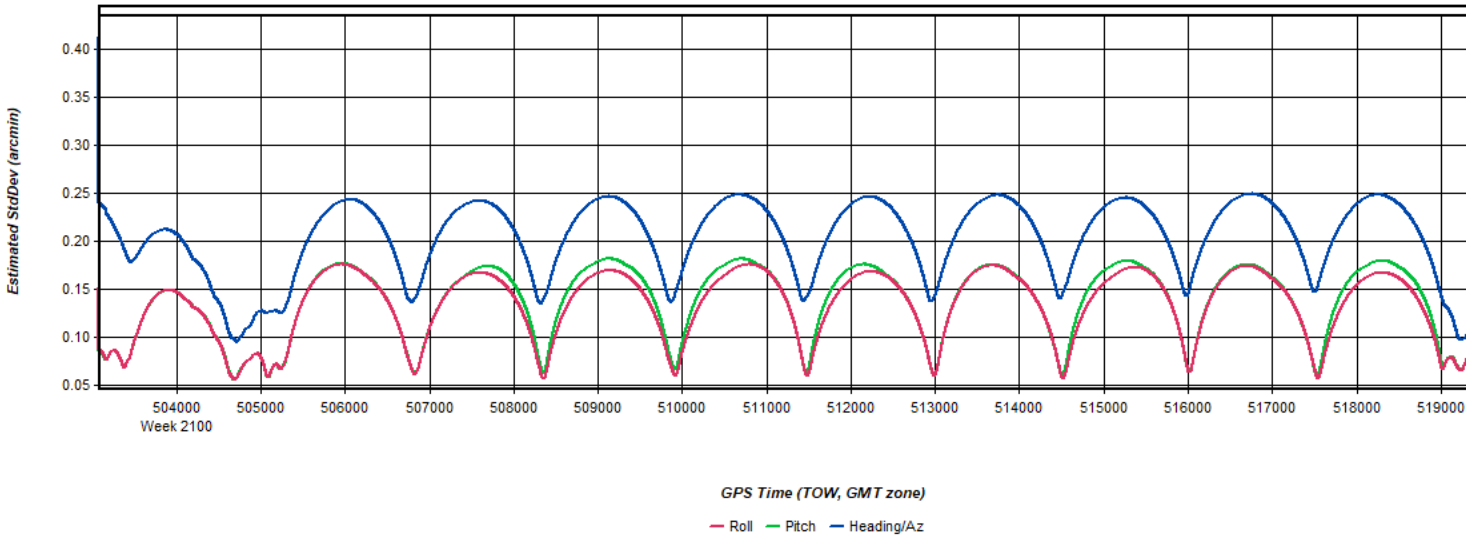
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 9: 20200410194332_16 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



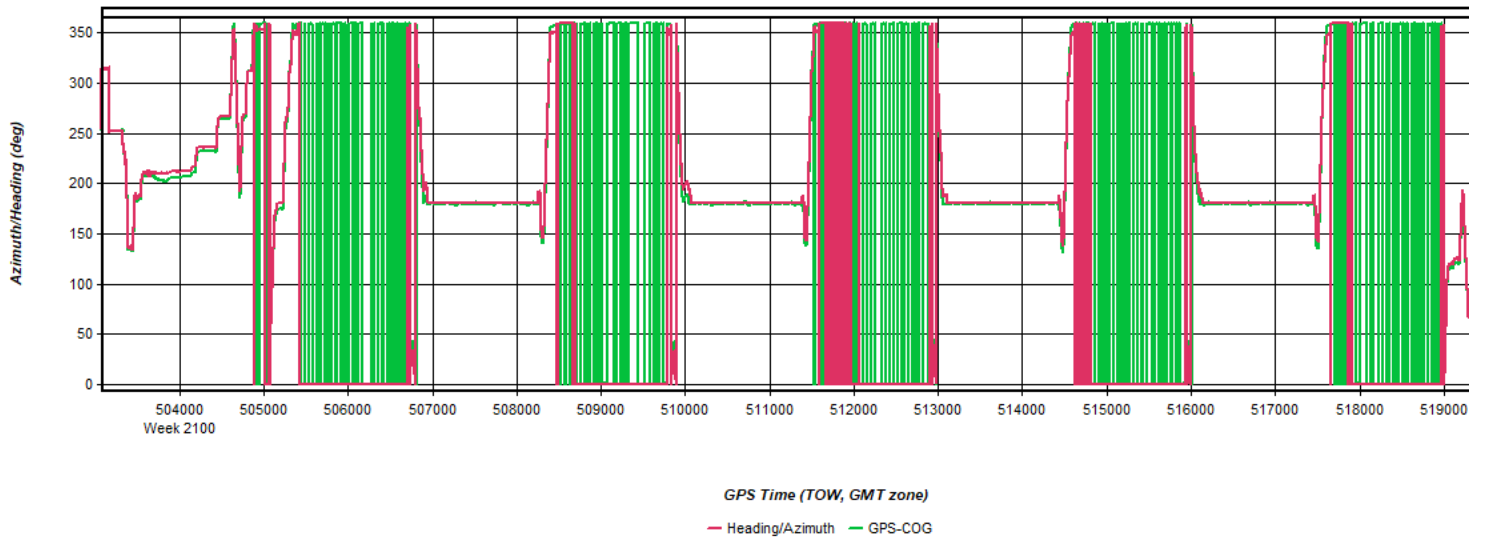
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 10: 20200410194332_16 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



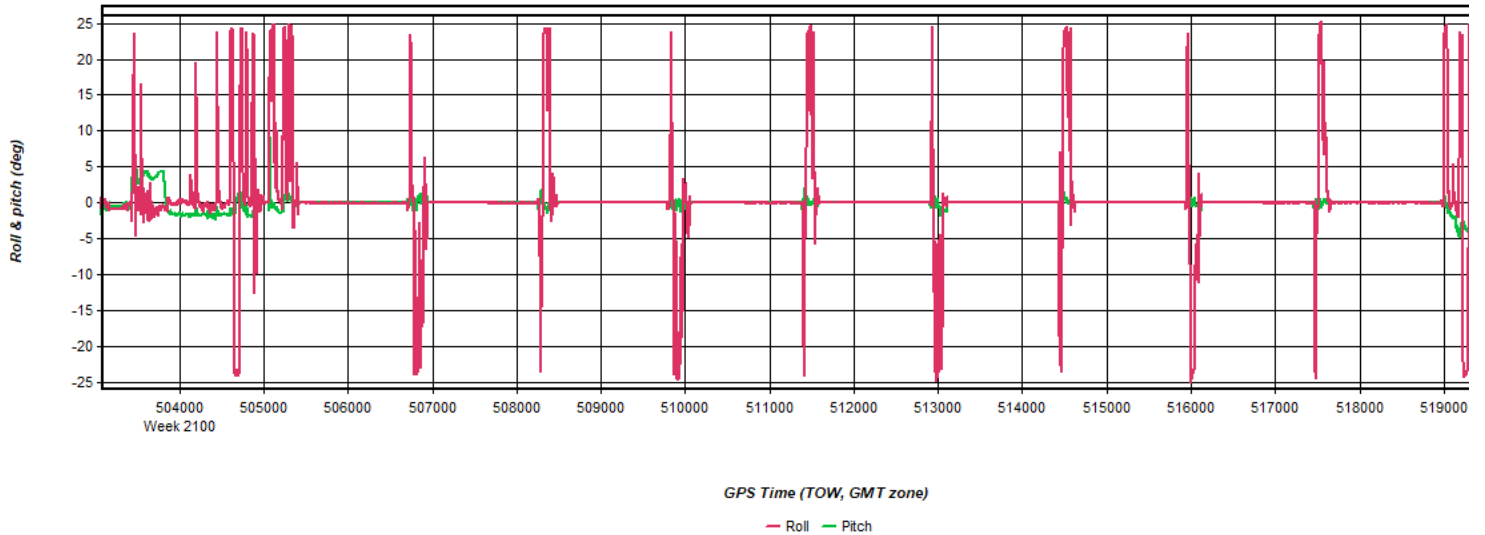
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 11: 20200410194332_16 [Smoothed TC Combined] - Azimuth Plot



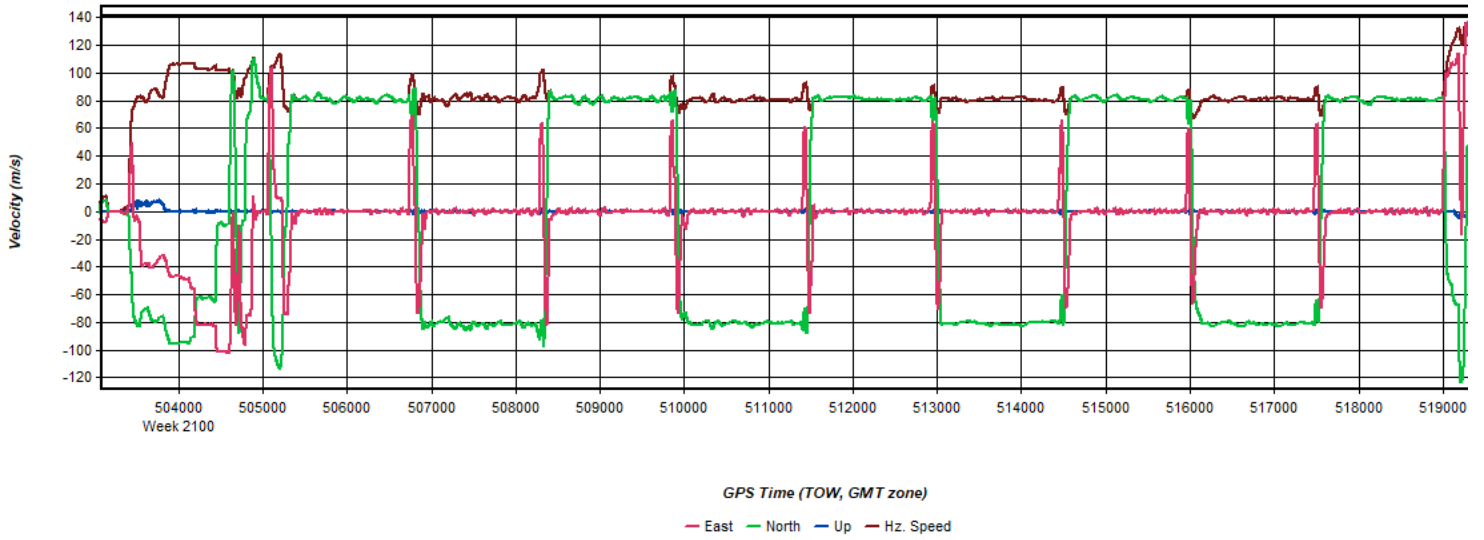
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 12: 20200410194332_16 [Smoothed TC Combined] - Roll & Pitch Plot



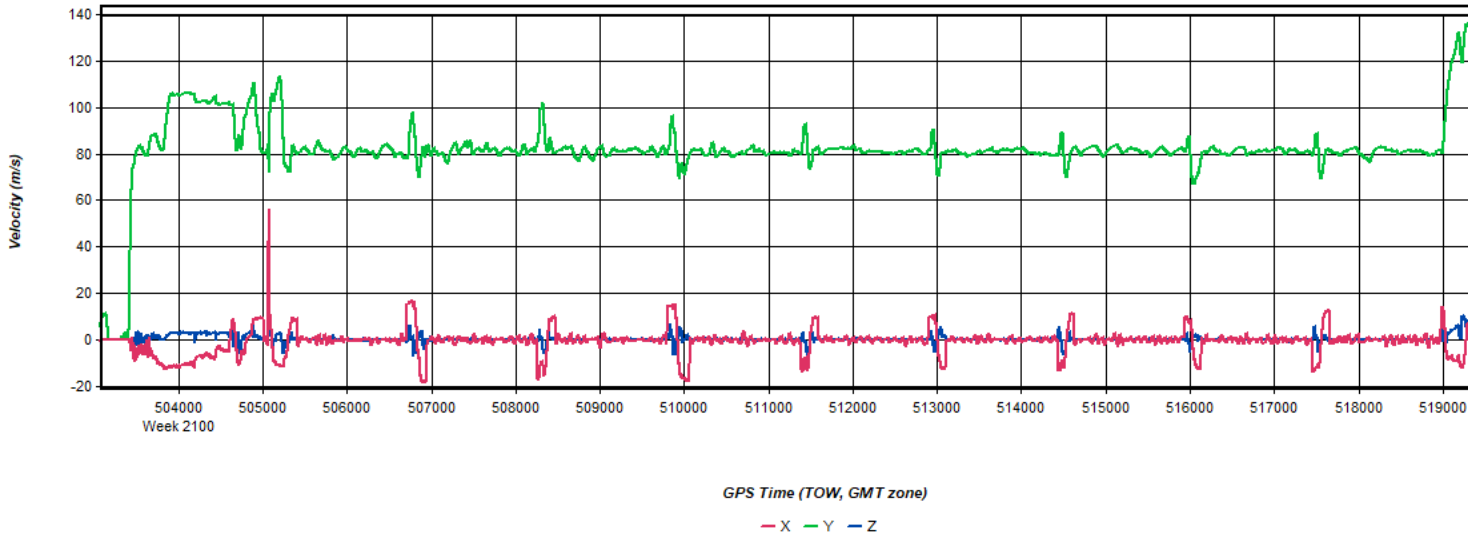
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 13: 20200410194332_16 [Smoothed TC Combined] - Velocity Profile Plot



Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 14: 20200410194332_16 [Smoothed TC Combined] - Body Frame Velocity Plot



Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 15: 20200410194332_16 [Smoothed TC Combined] - Height Profile Plot

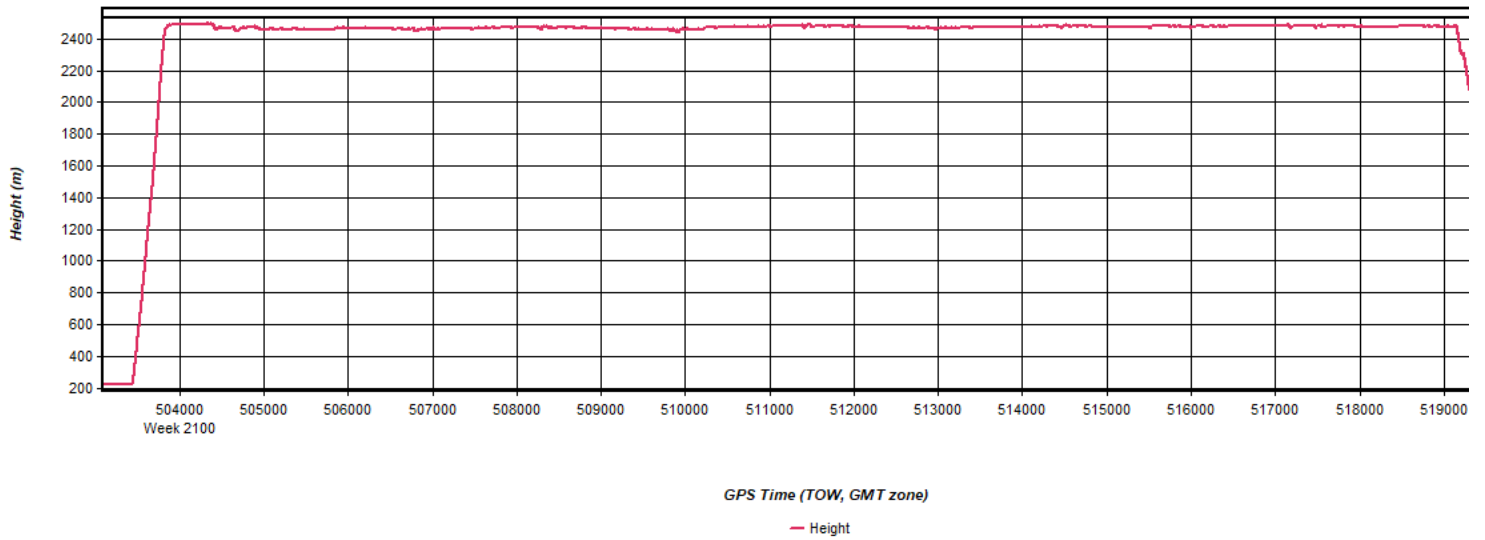


Figure 16: 20200410194332_16 [Smoothed TC Combined] - C/A Code Residual RMS Plot

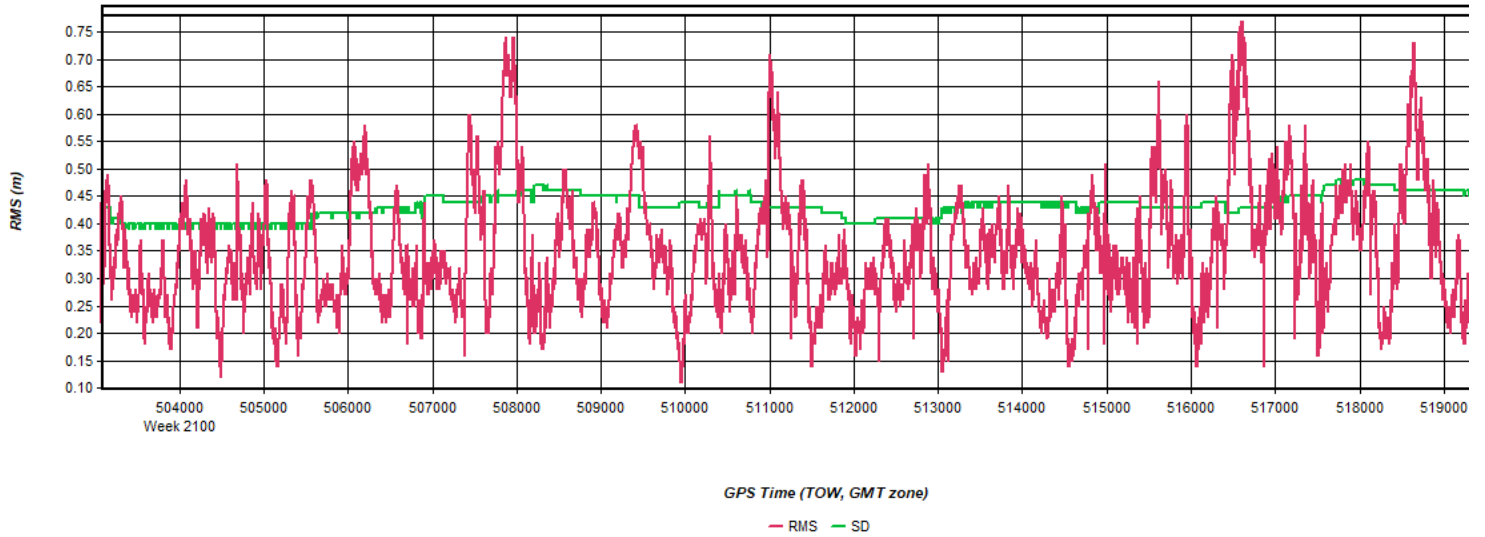
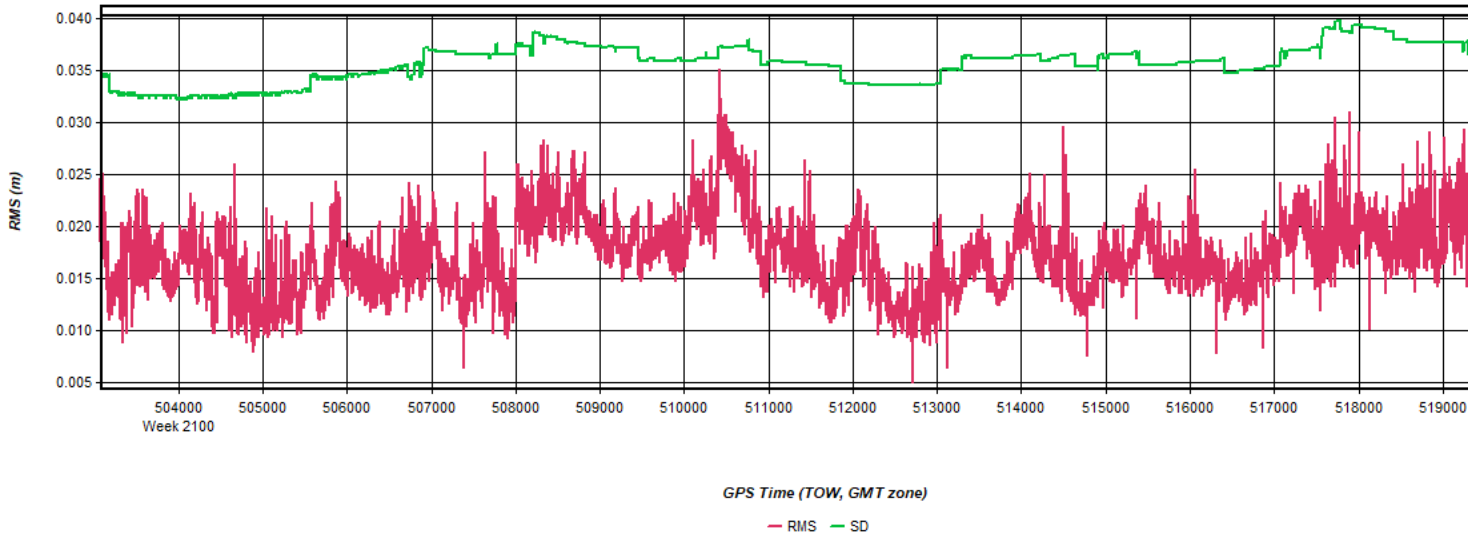
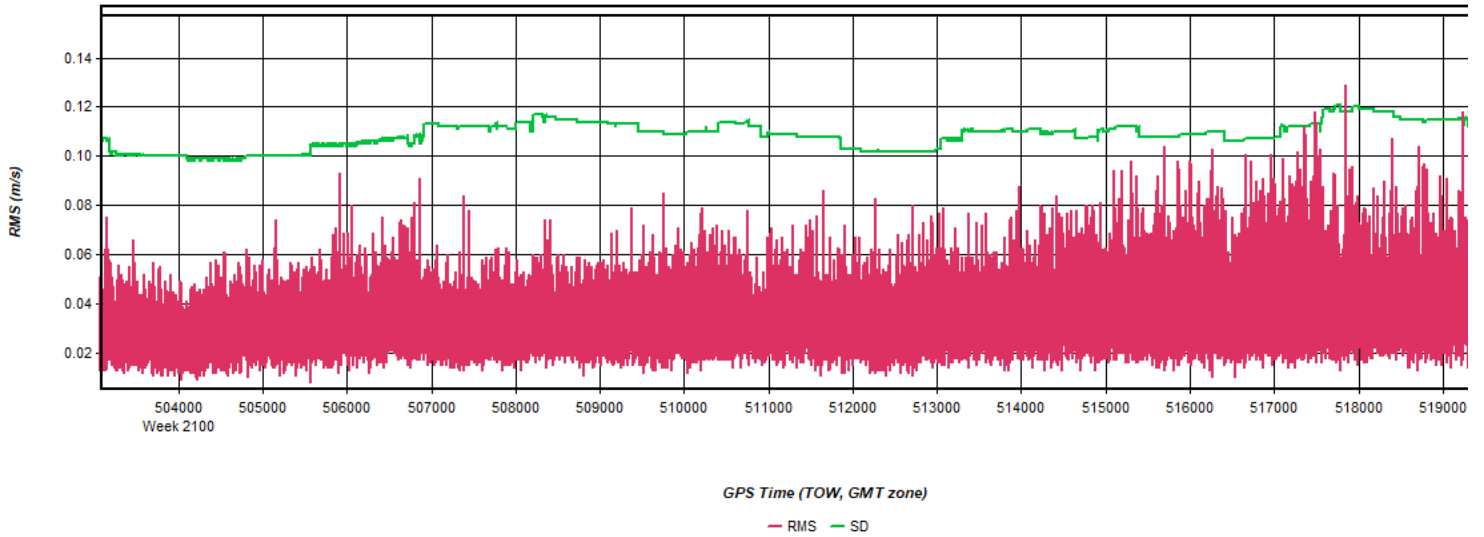


Figure 17: 20200410194332_16 [Smoothed TC Combined] - Carrier Residual RMS Plot



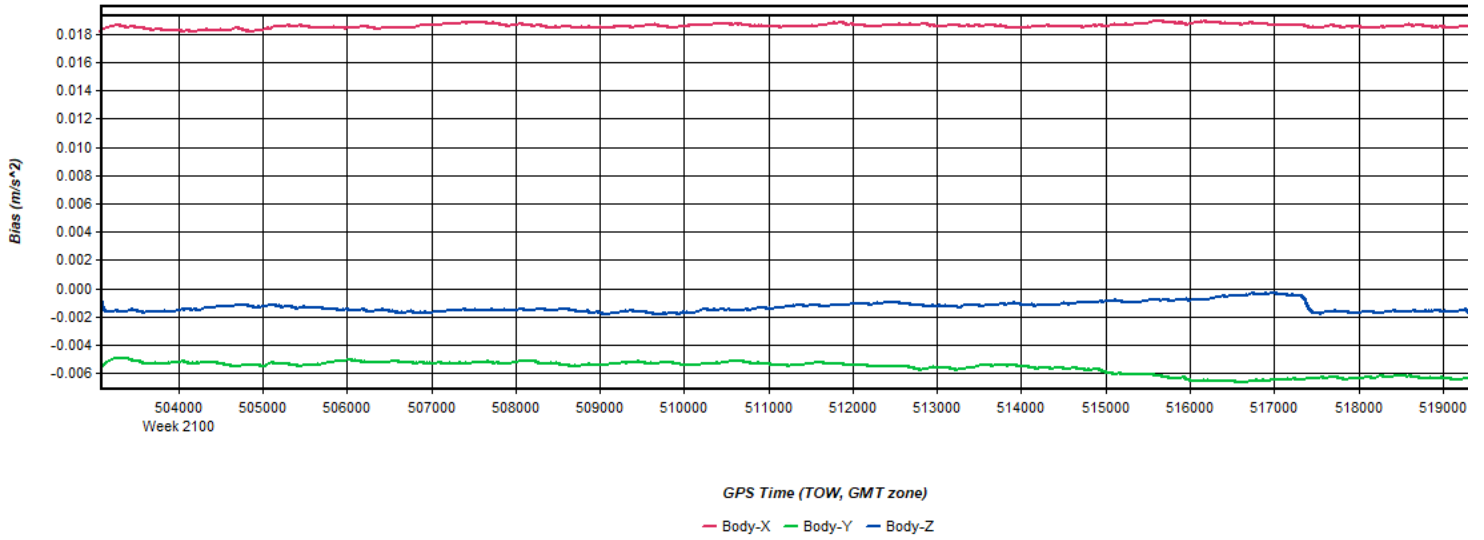
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 18: 20200410194332_16 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



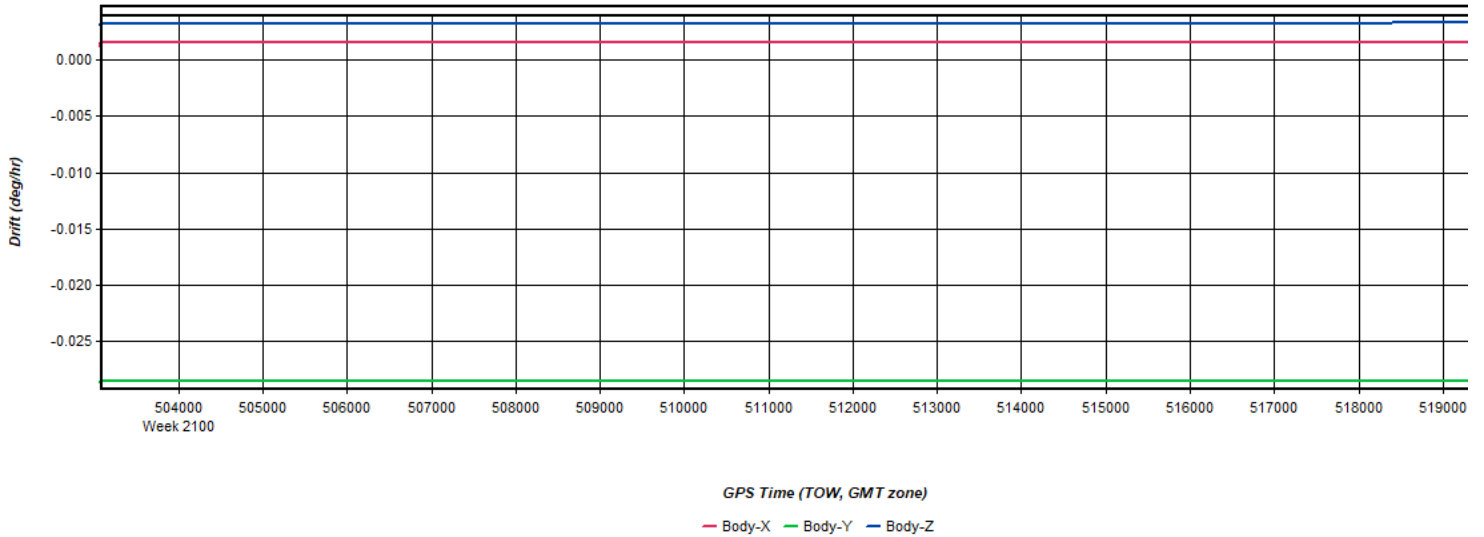
Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 19: 20200410194332_16 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Figure 20: 20200410194332_16 [Smoothed TC Combined] - Gyro Drift Plot

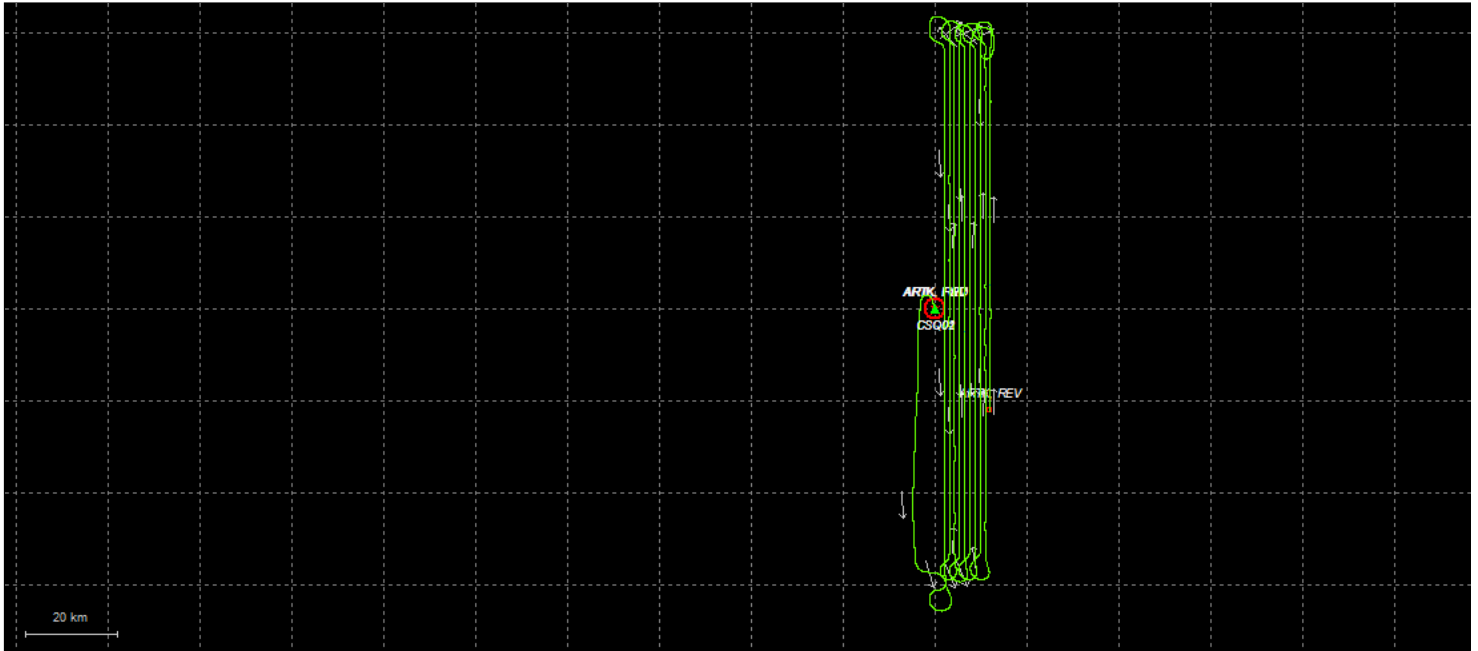


Process	20200410194332_16	by Unknown	on 7/7/2020	at 15:56:29
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Output Results for 20200414014741_17

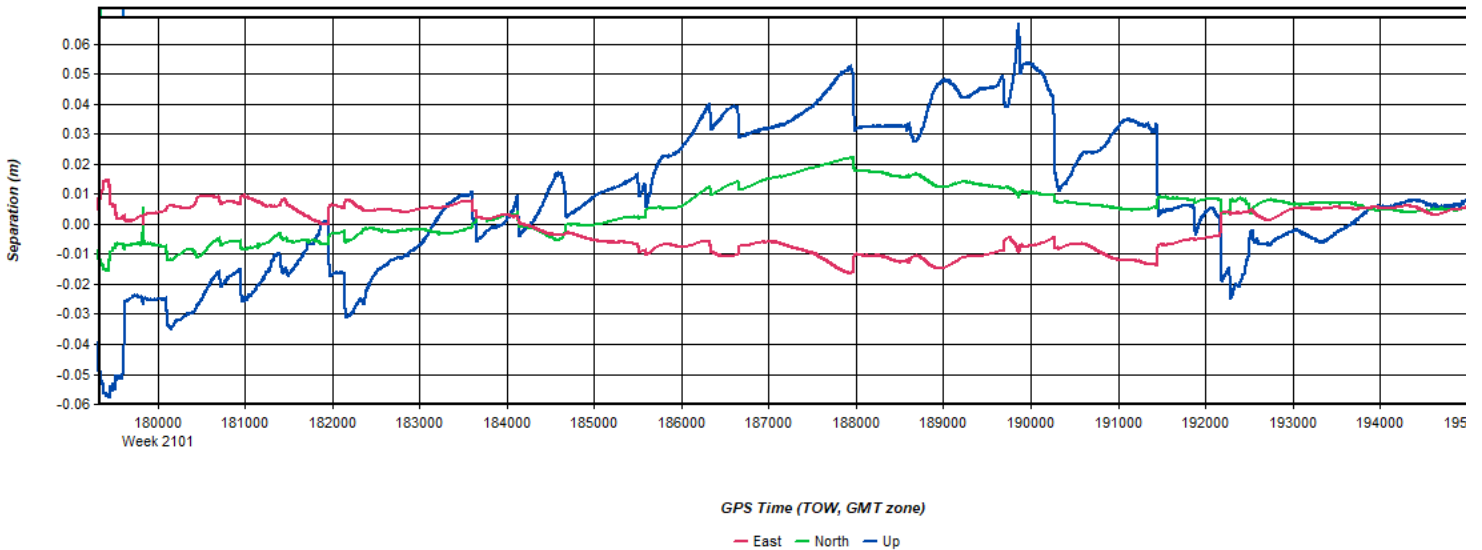
Inertial Explorer Version 8.90.2124
07/09/2020

Figure 1: Smoothed TC Combined - Map



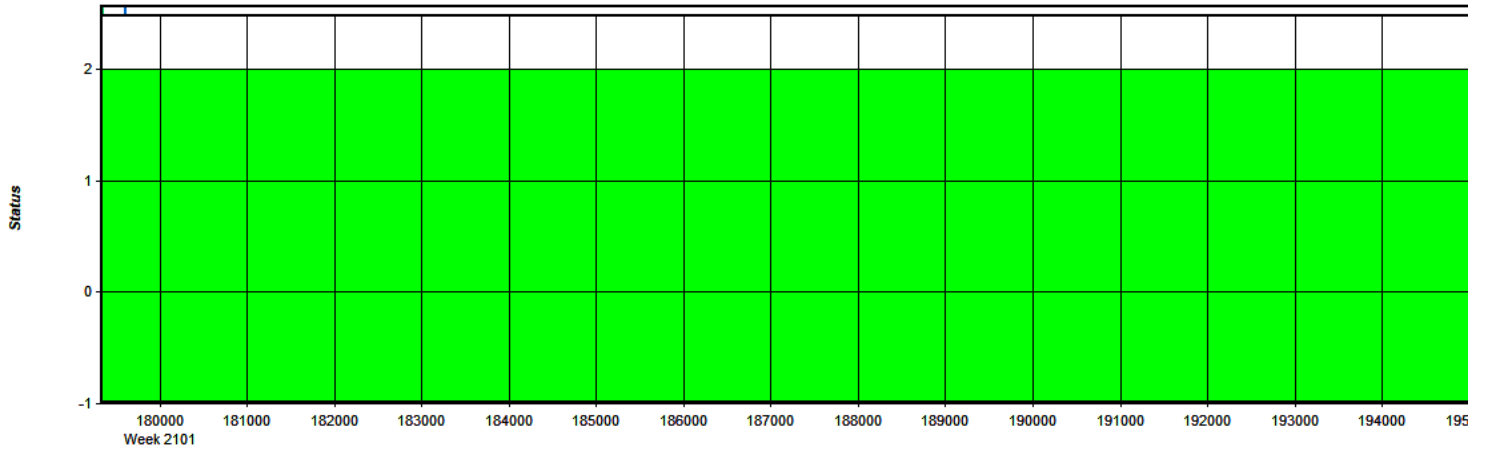
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 2: 20200414014741_17 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 3: 20200414014741_17 [Smoothed TC Combined] - Float or Fixed Ambiguity

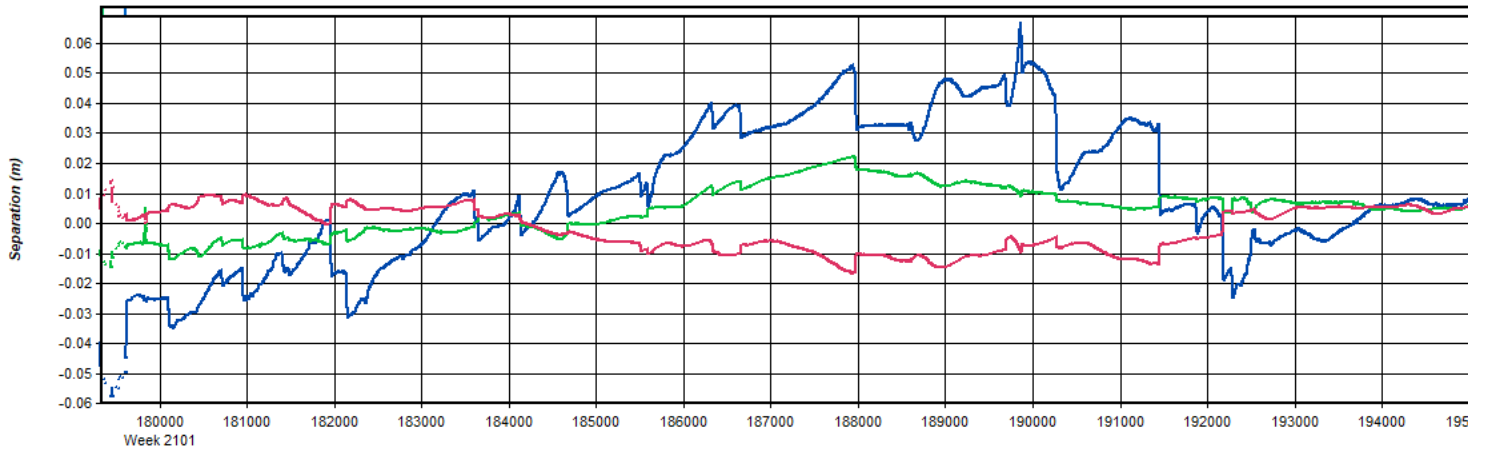


GPS Time (TOW, GMT zone)

— Float — Forward Fixed — Reverse Fixed — Fixed (2 or more)

Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 4: 20200414014741_17 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

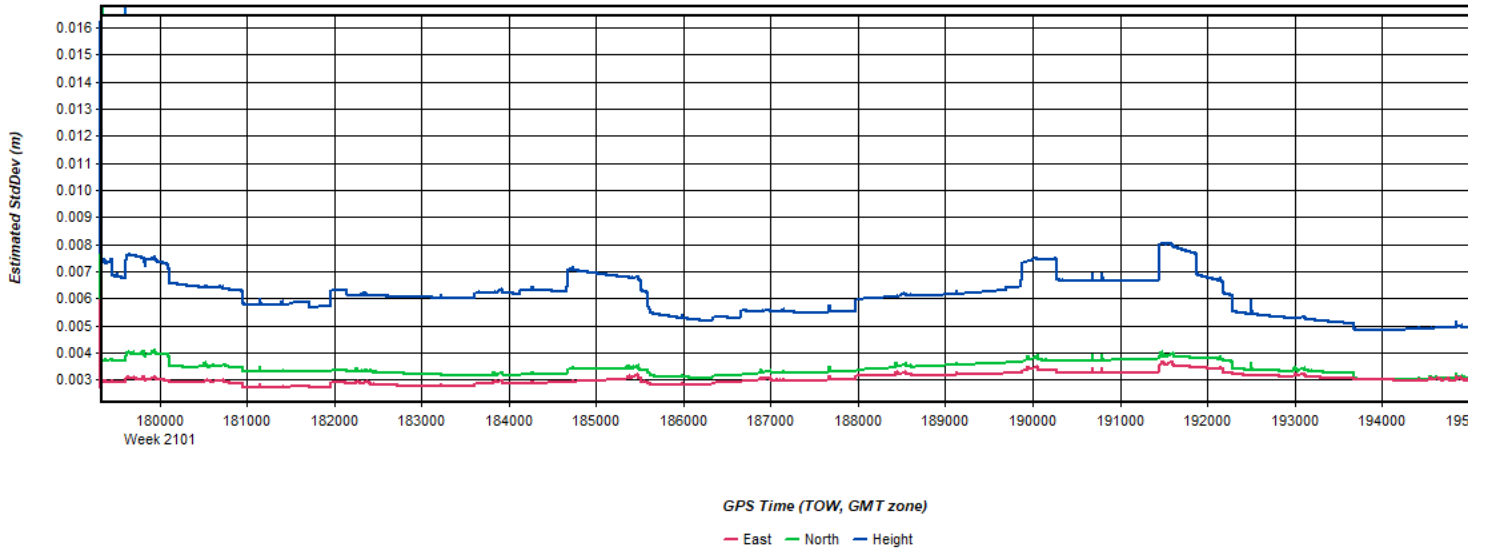


GPS Time (TOW, GMT zone)

— East — North — Up

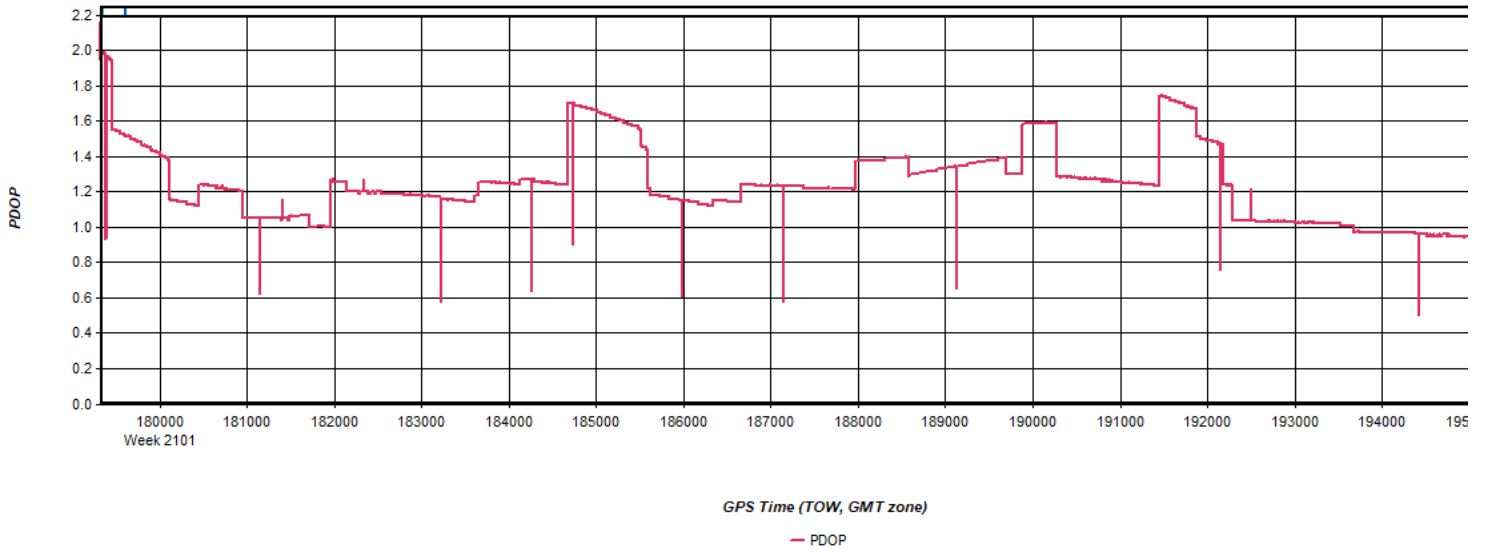
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 5: 20200414014741_17 [Smoothed TC Combined] - Estimated Position Accuracy Plot



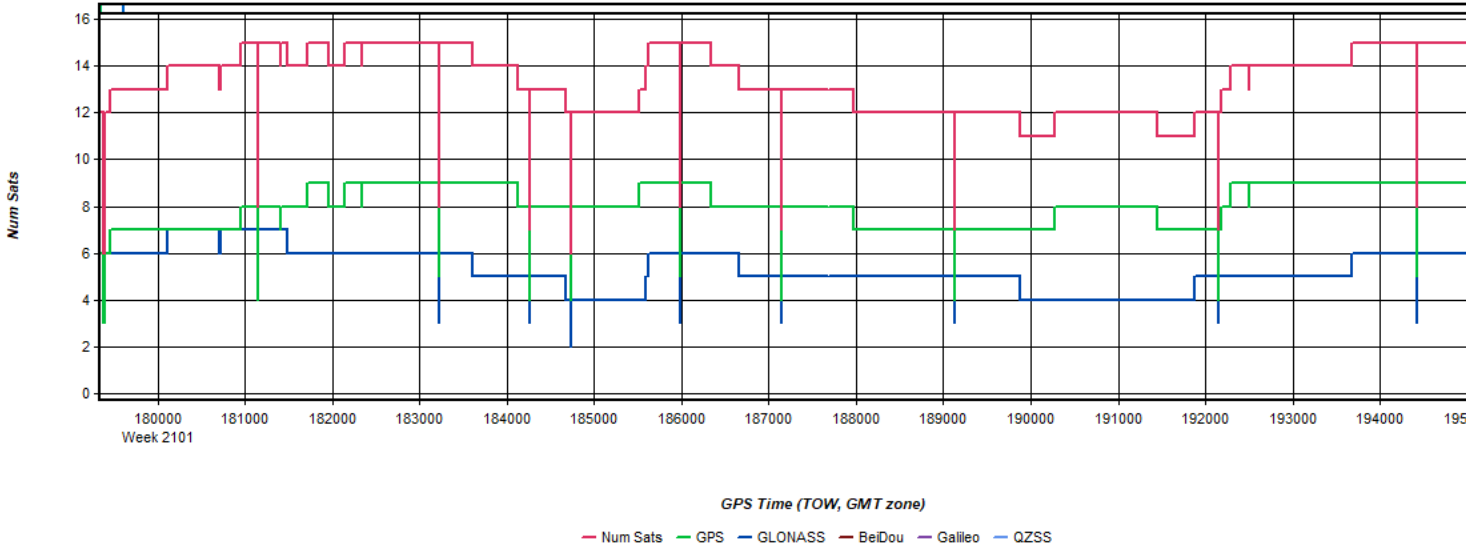
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 6: 20200414014741_17 [Smoothed TC Combined] - PDOP Plot



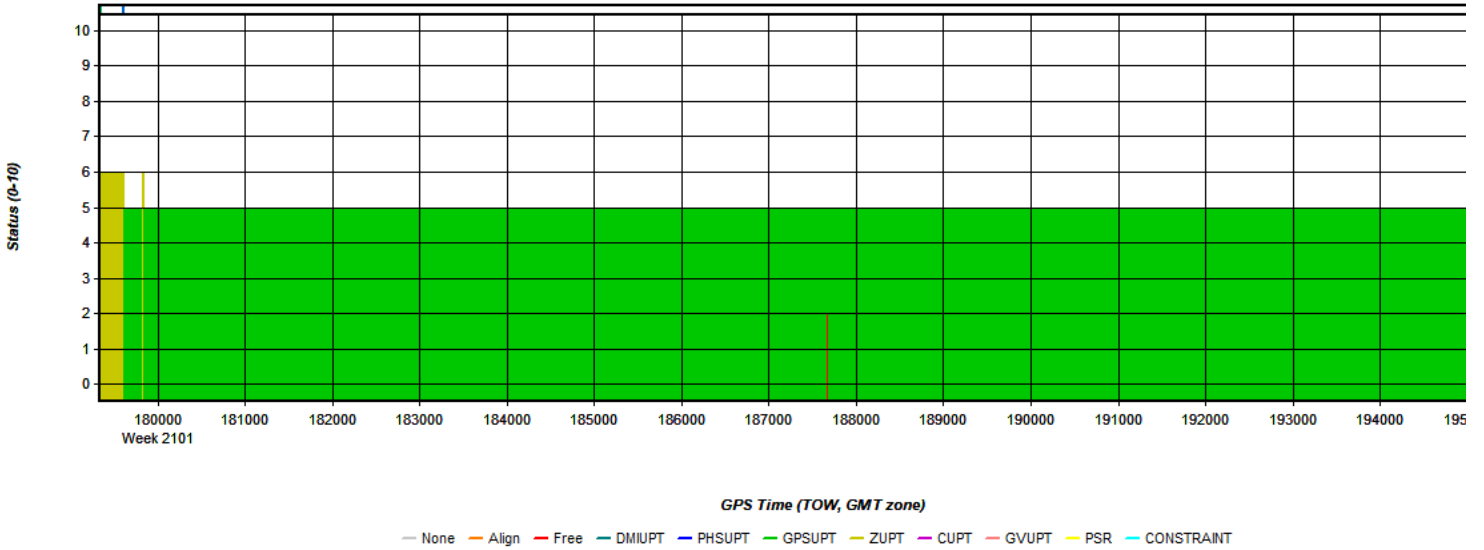
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 7: 20200414014741_17 [Smoothed TC Combined] - Number of Satellites Line Plot



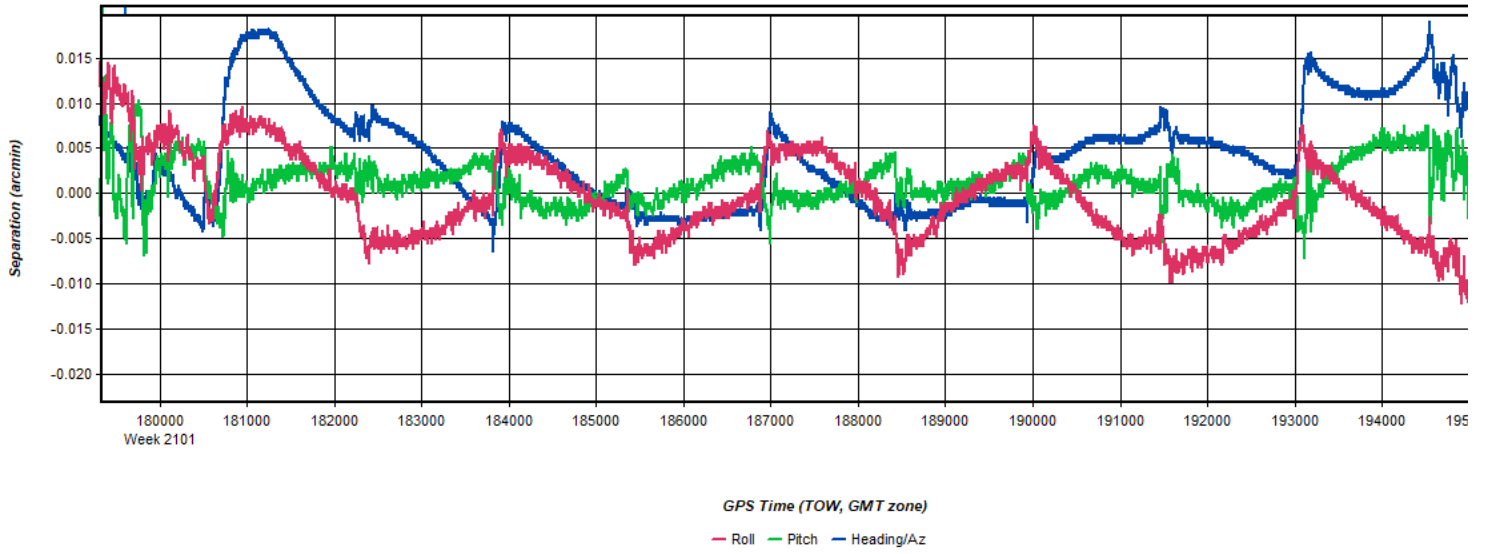
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 8: 20200414014741_17 [Smoothed TC Combined] - Status flag for IMU processing



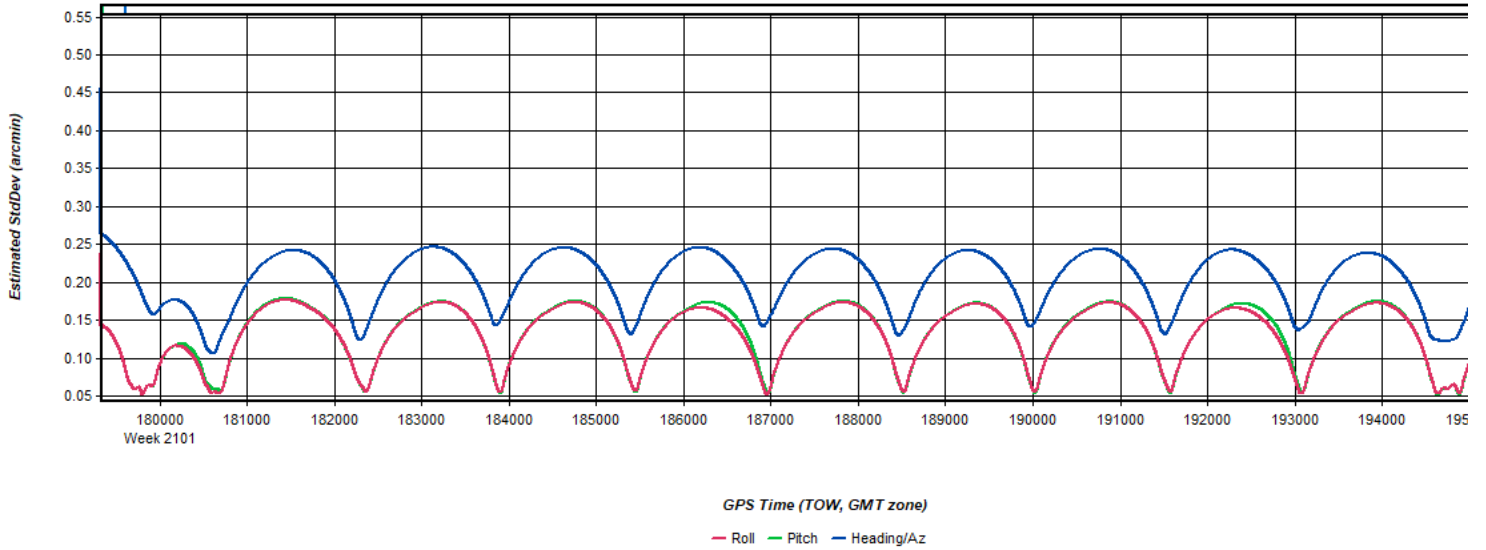
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 9: 20200414014741_17 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



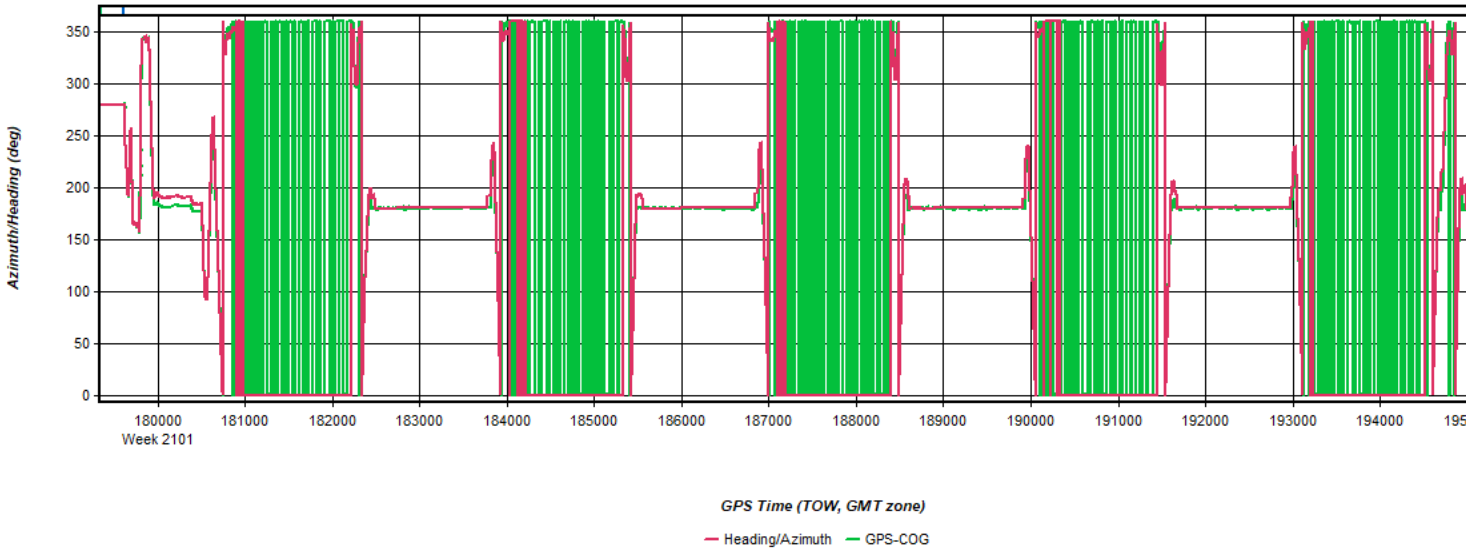
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 10: 20200414014741_17 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



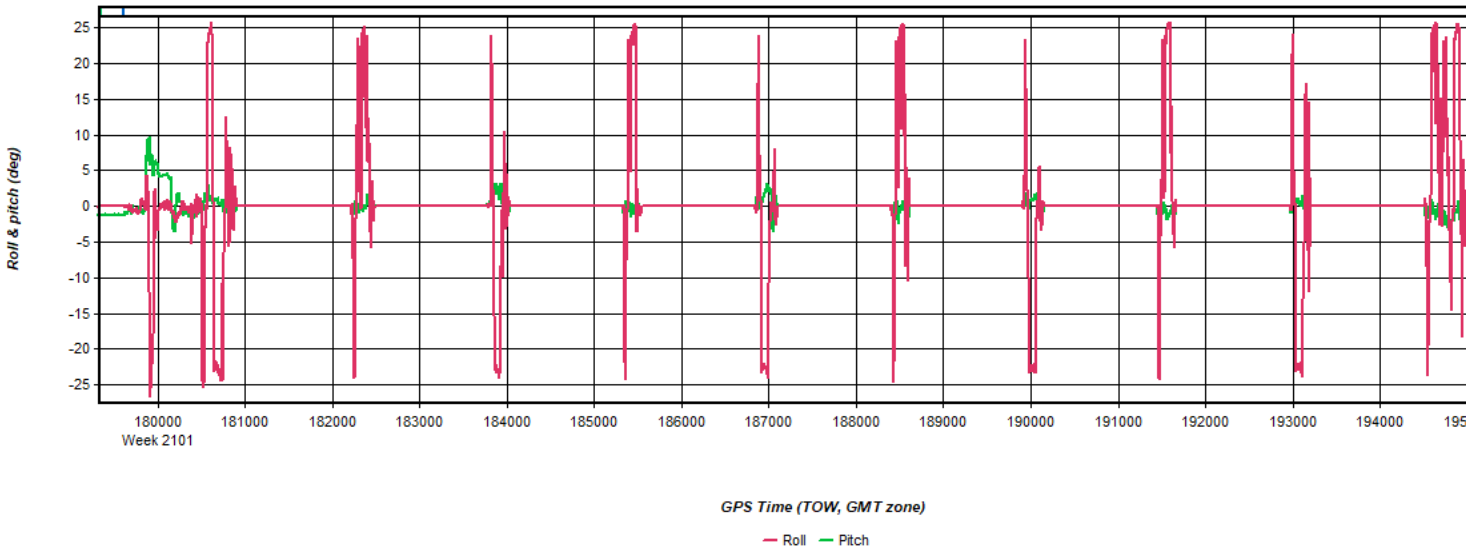
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 11: 20200414014741_17 [Smoothed TC Combined] - Azimuth Plot



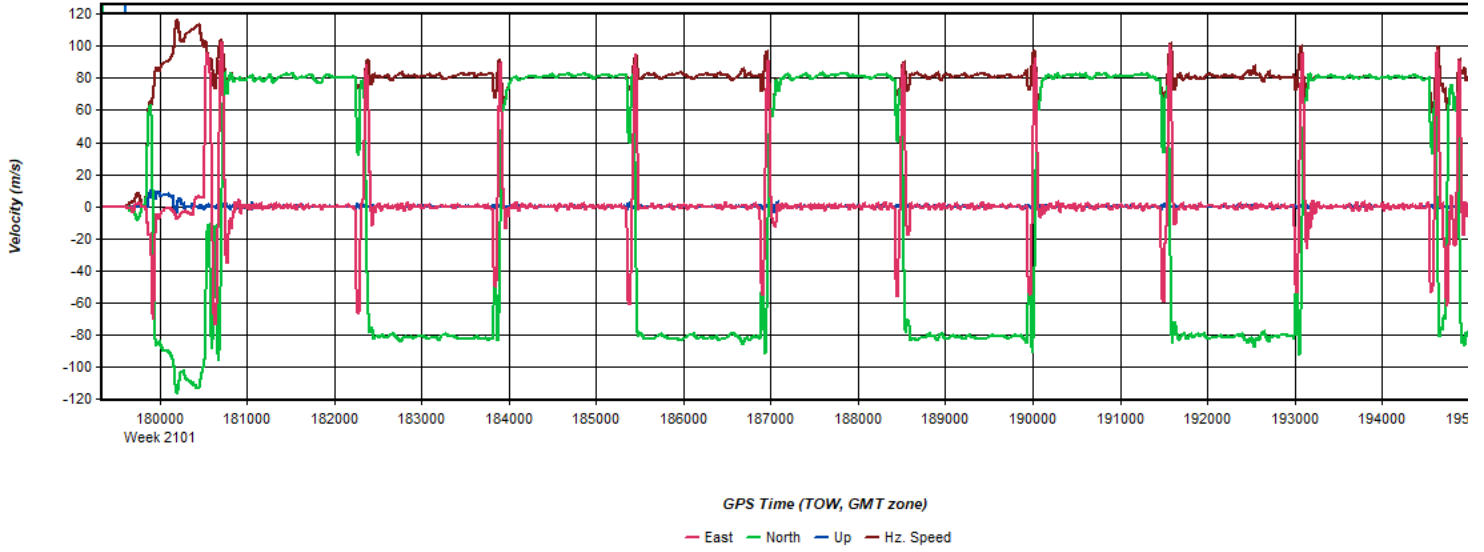
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 12: 20200414014741_17 [Smoothed TC Combined] - Roll & Pitch Plot



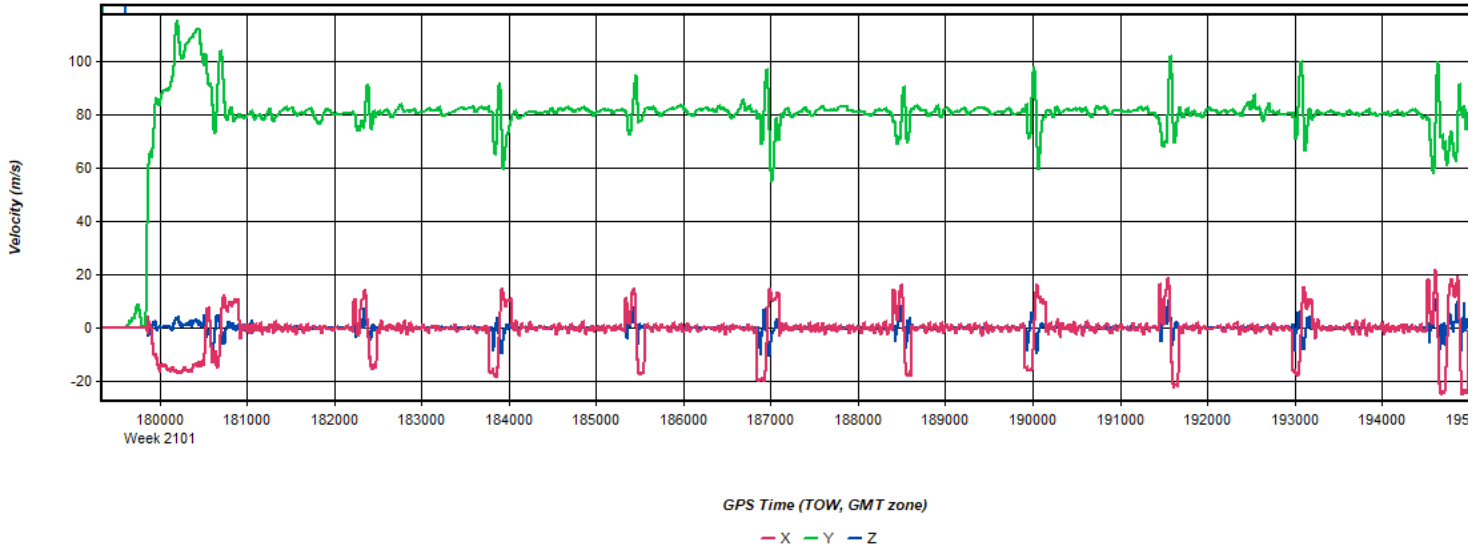
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 13: 20200414014741_17 [Smoothed TC Combined] - Velocity Profile Plot



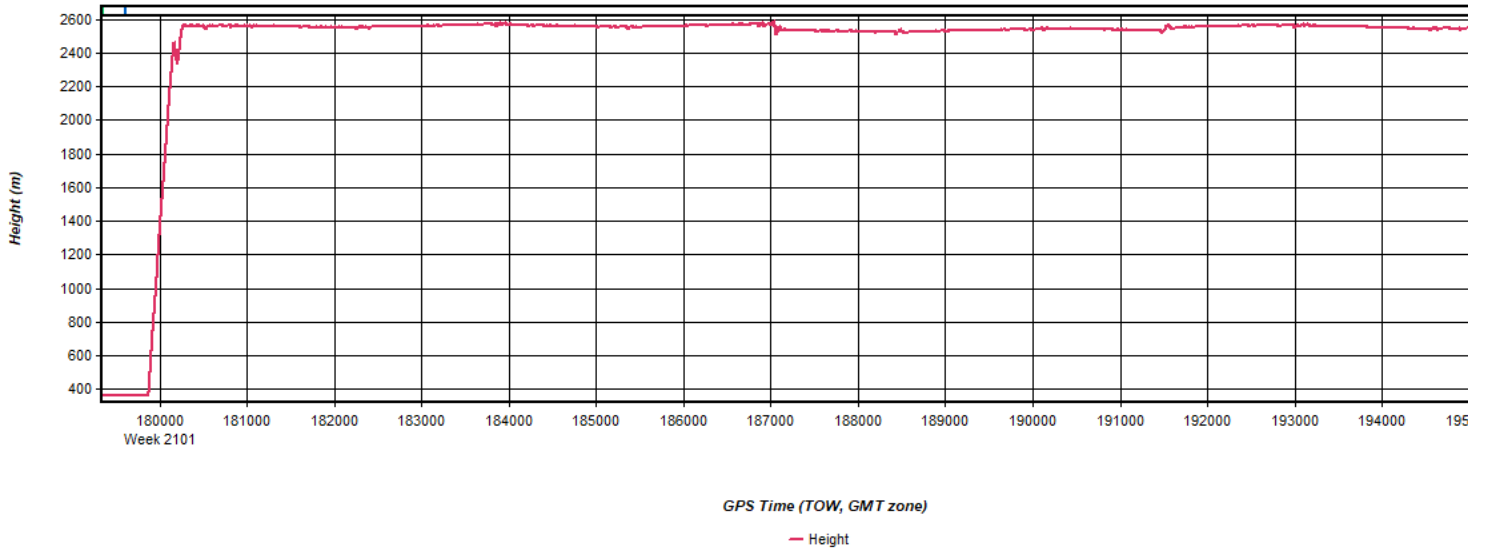
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 14: 20200414014741_17 [Smoothed TC Combined] - Body Frame Velocity Plot



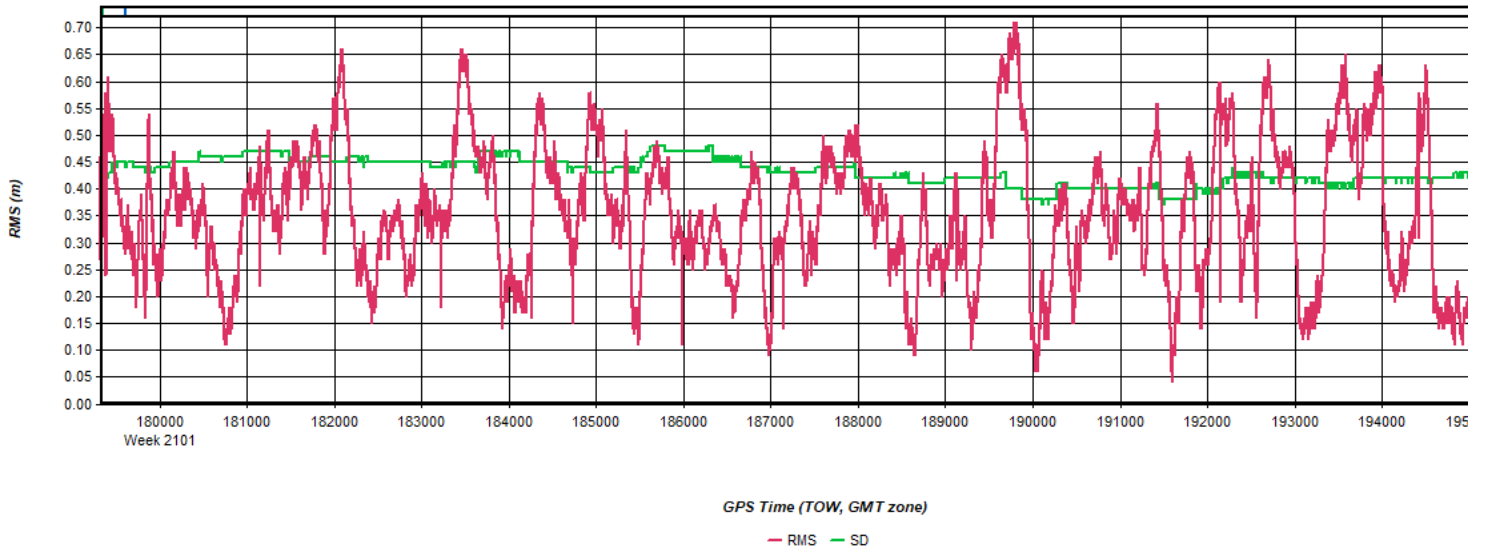
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 15: 20200414014741_17 [Smoothed TC Combined] - Height Profile Plot



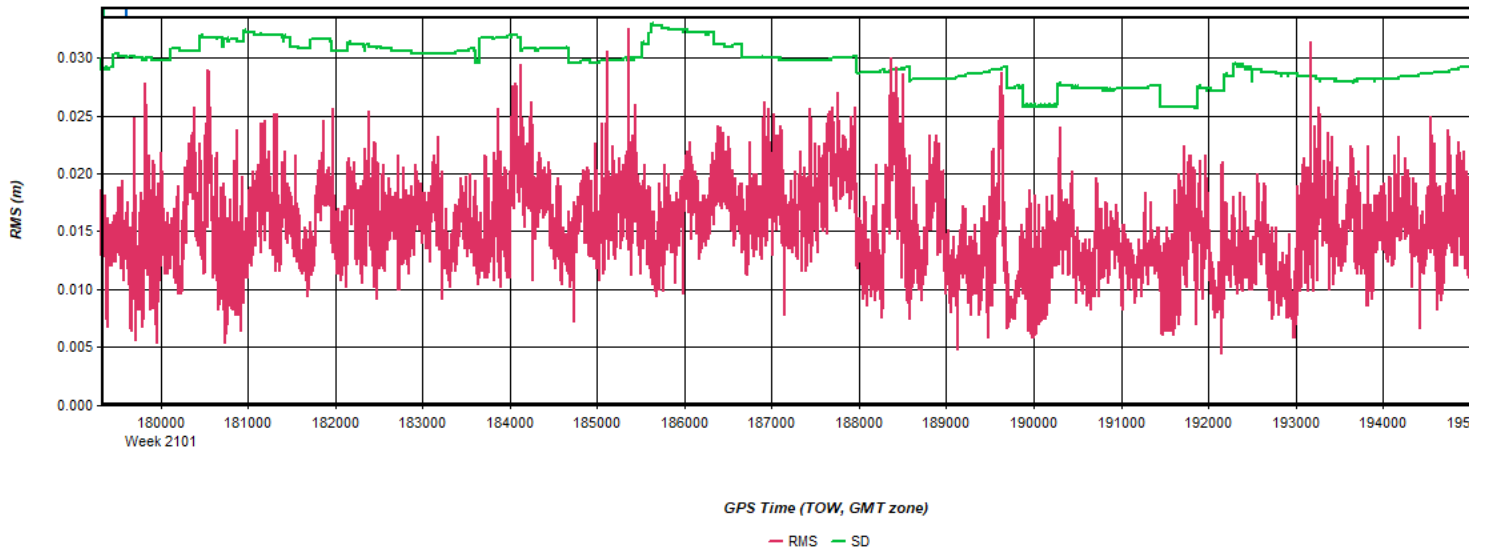
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 16: 20200414014741_17 [Smoothed TC Combined] - C/A Code Residual RMS Plot



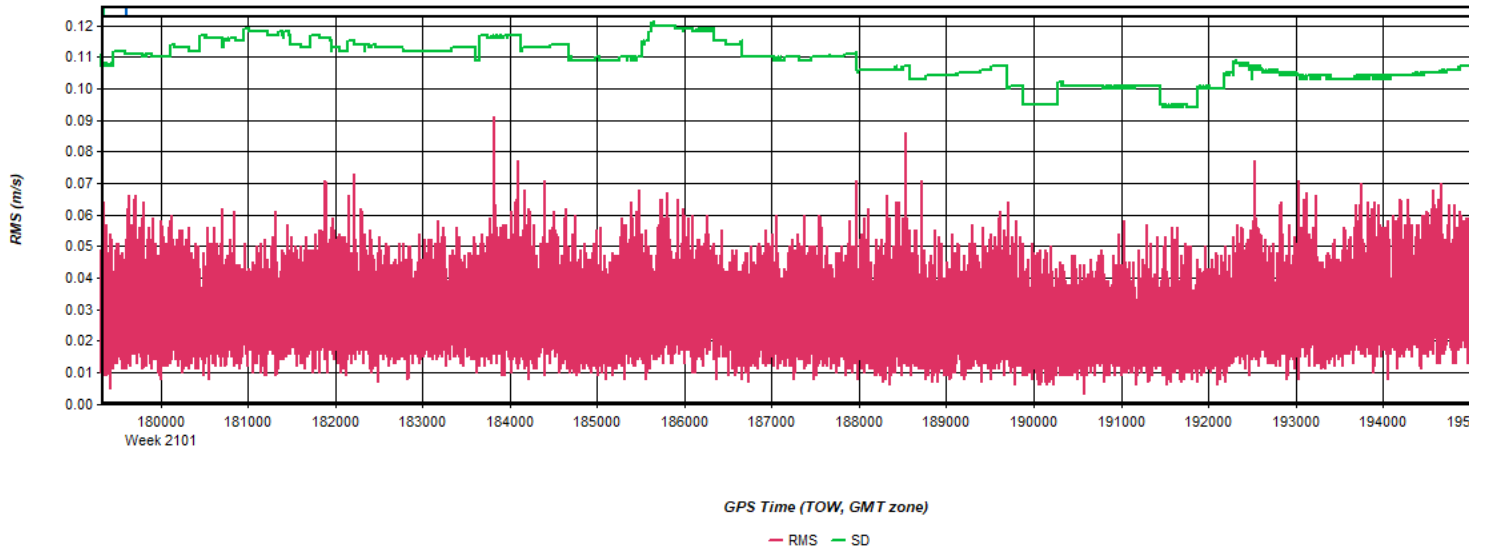
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 17: 20200414014741_17 [Smoothed TC Combined] - Carrier Residual RMS Plot



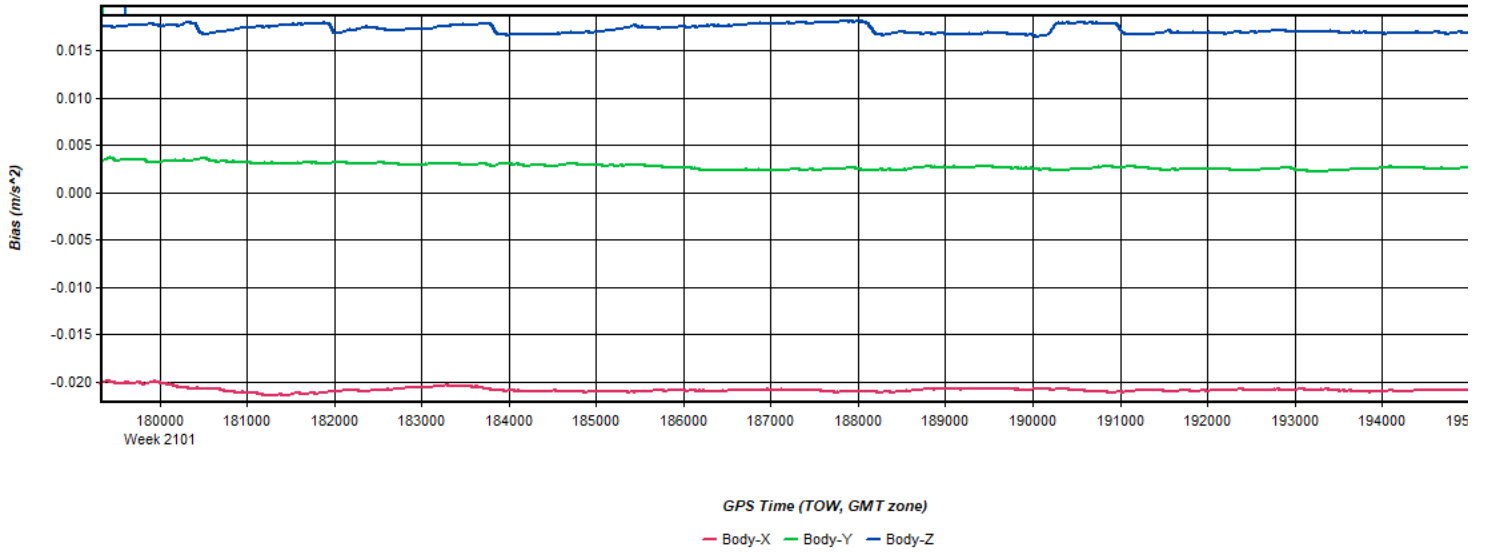
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 18: 20200414014741_17 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



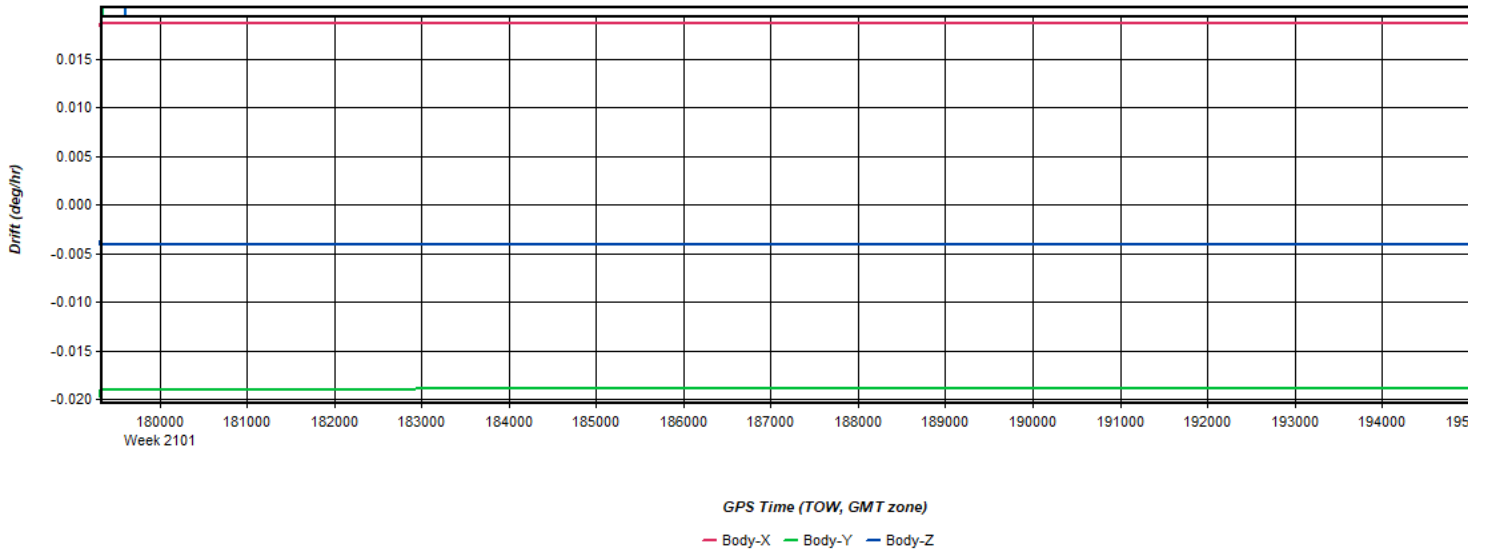
Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 19: 20200414014741_17 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Figure 20: 20200414014741_17 [Smoothed TC Combined] - Gyro Drift Plot

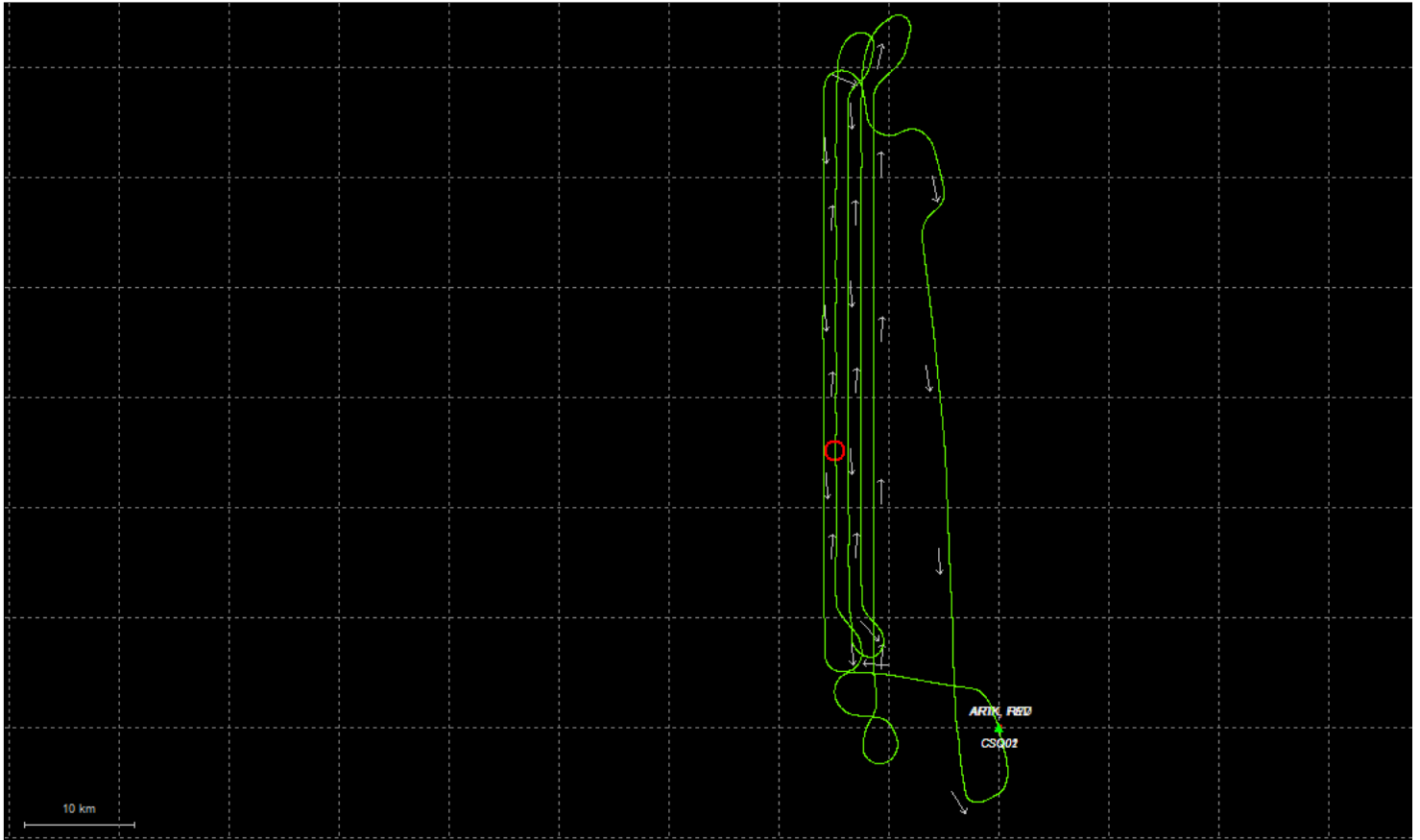


Process	20200414014741_17	by Unknown	on 7/9/2020	at 12:59:03
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Output Results for 20200416002658_18

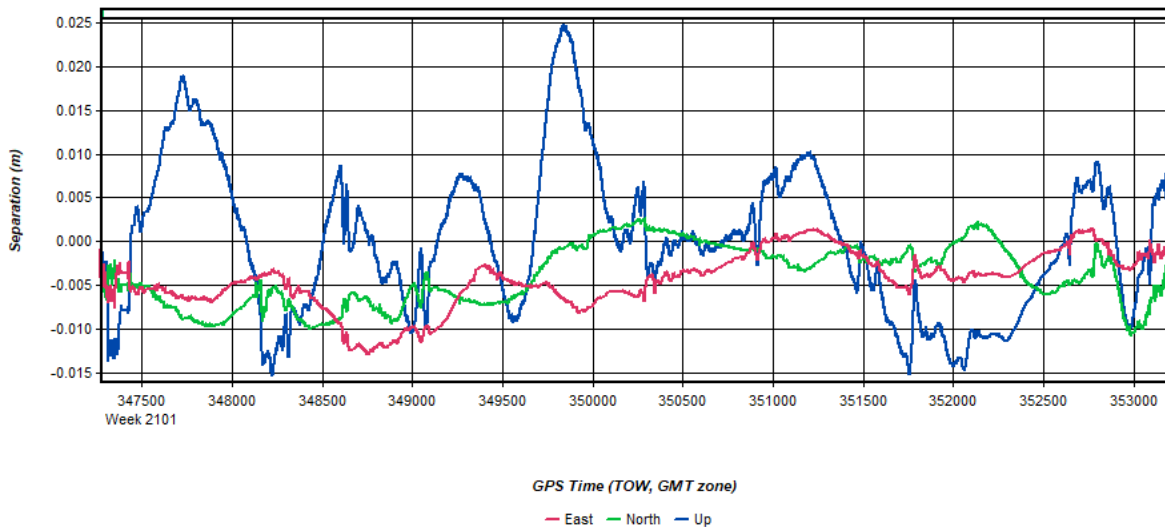
Inertial Explorer Version 8.90.2124
06/10/2020

Figure 1: Smoothed TC Combined - Map



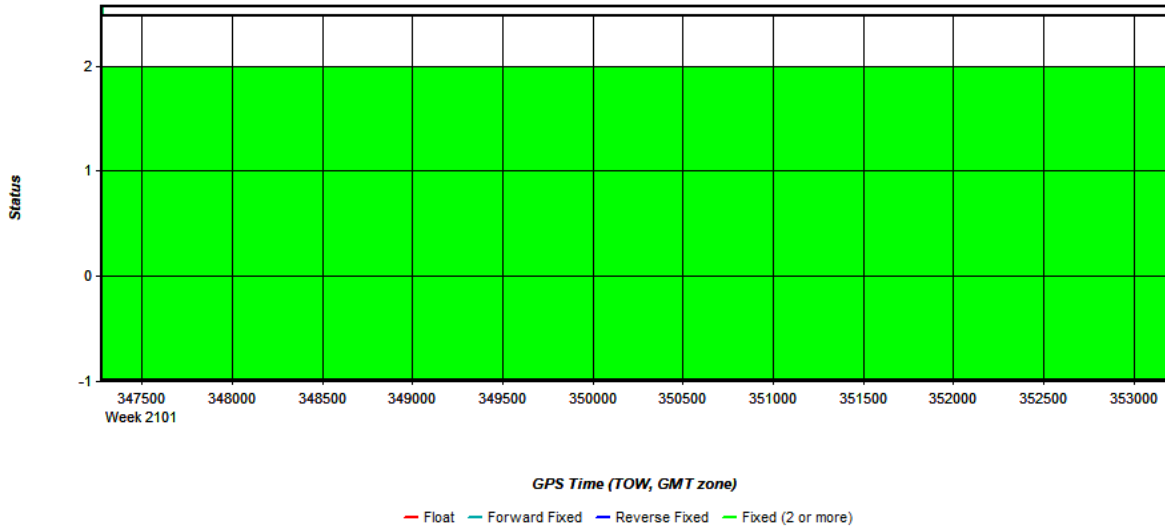
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 2: 20200416002658_18 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



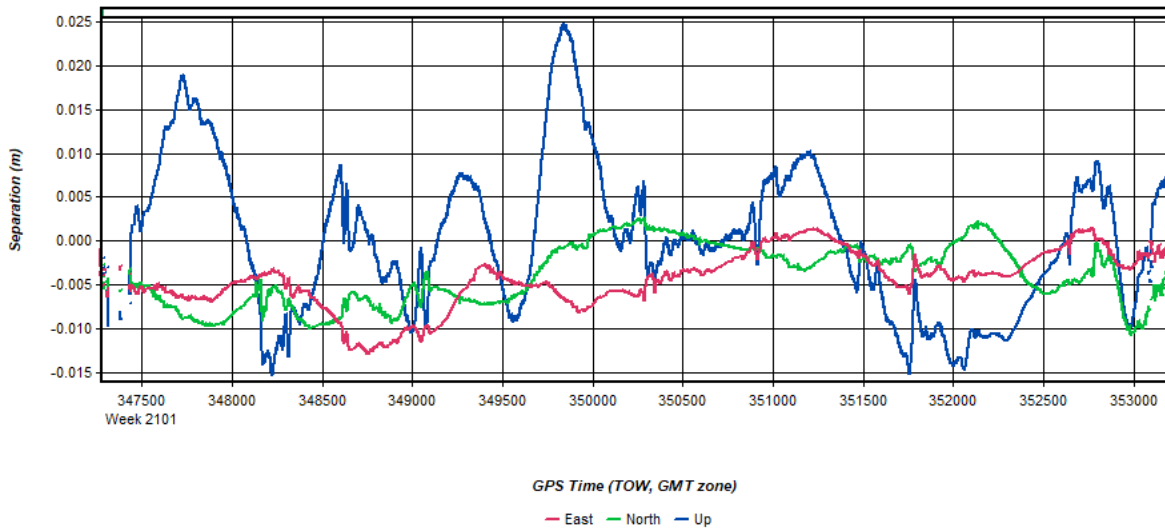
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 3: 20200416002658_18 [Smoothed TC Combined] - Float or Fixed Ambiguity



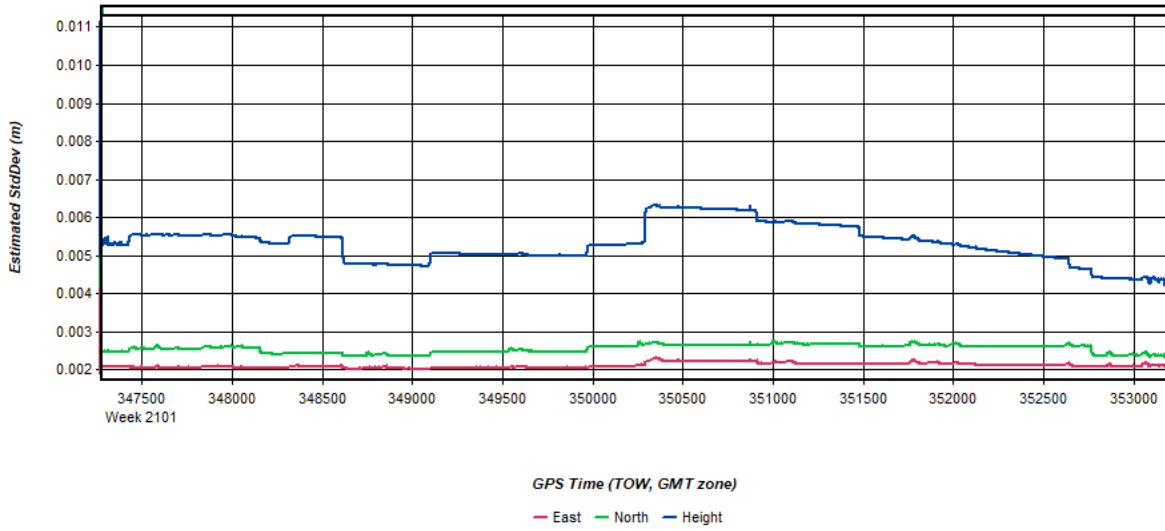
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 4: 20200416002658_18 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



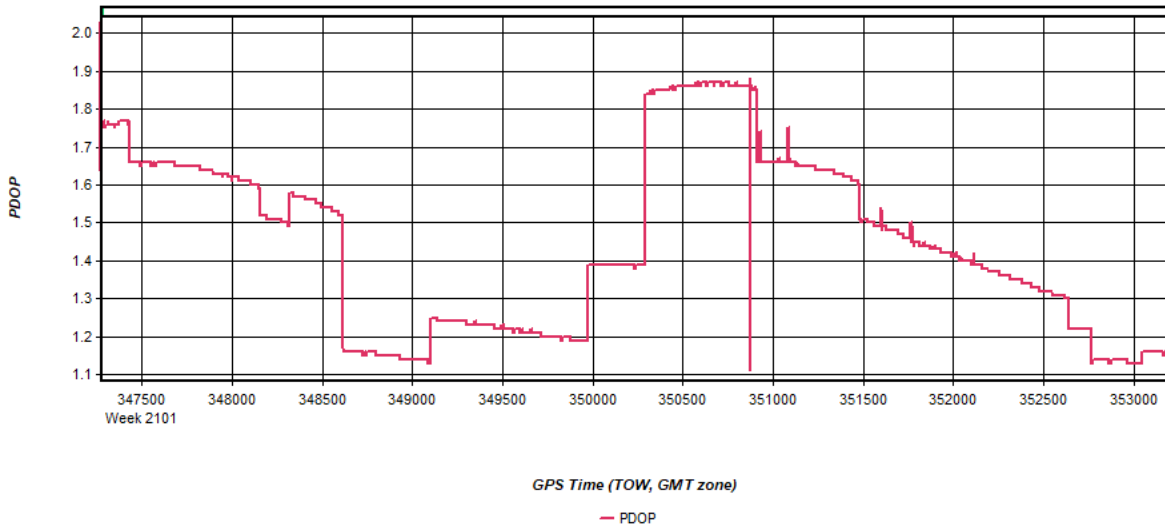
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 5: 20200416002658_18 [Smoothed TC Combined] - Estimated Position Accuracy Plot



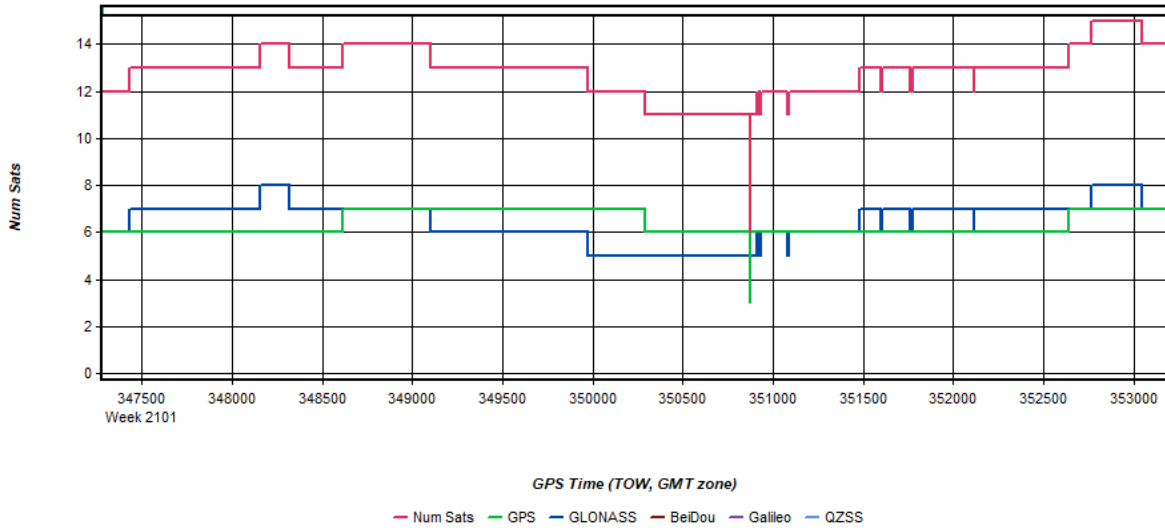
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 6: 20200416002658_18 [Smoothed TC Combined] - PDOP Plot



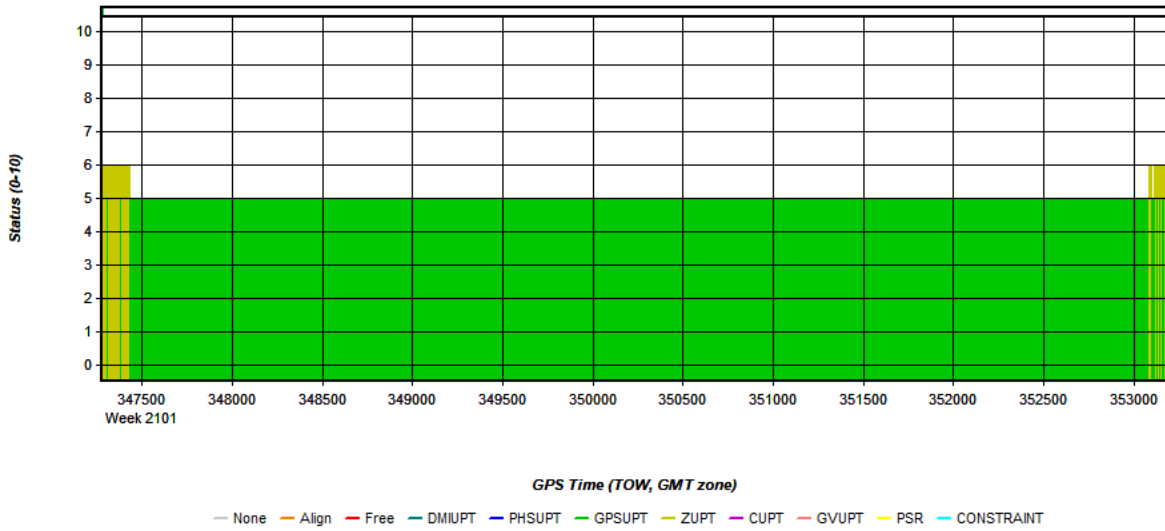
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 7: 20200416002658_18 [Smoothed TC Combined] - Number of Satellites Line Plot



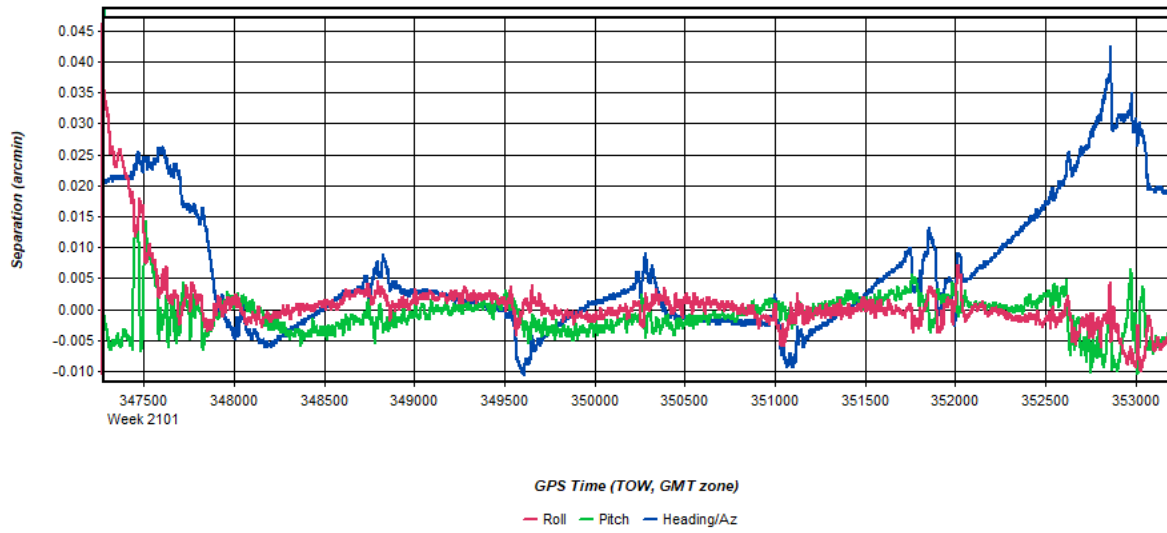
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 8: 20200416002658_18 [Smoothed TC Combined] - Status flag for IMU processing



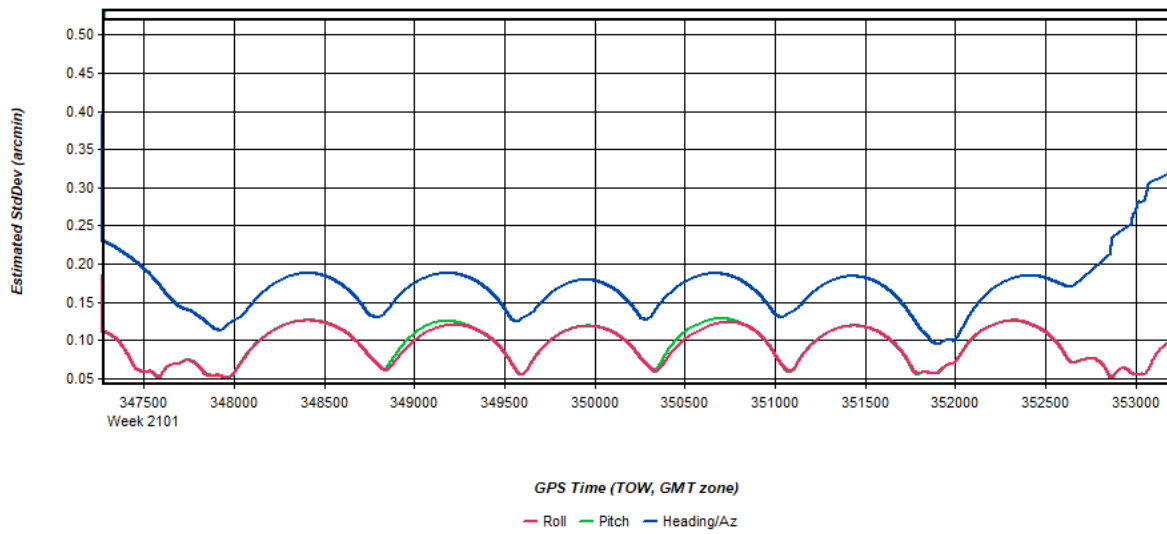
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 9: 20200416002658_18 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



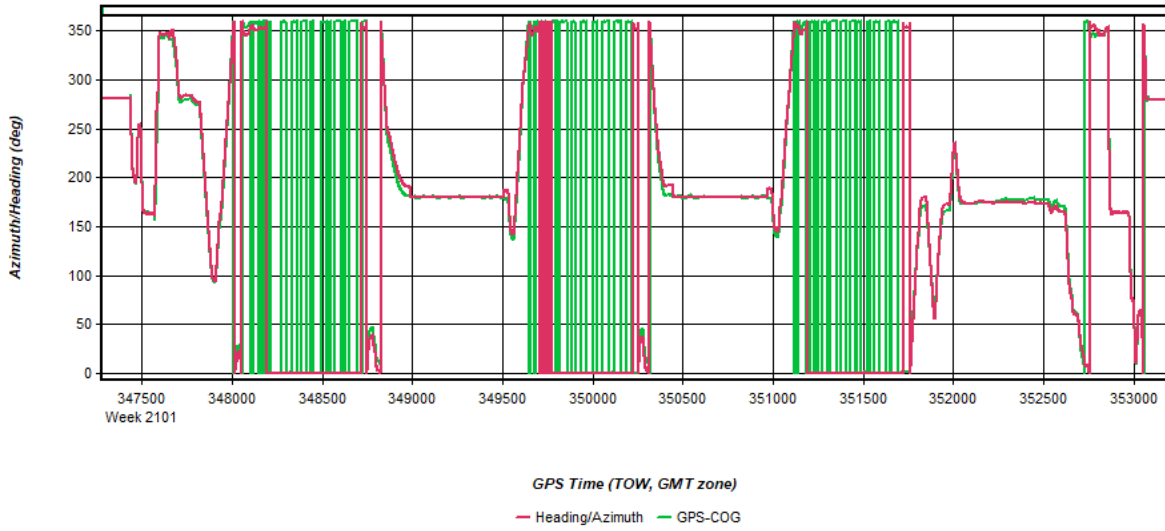
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 10: 20200416002658_18 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



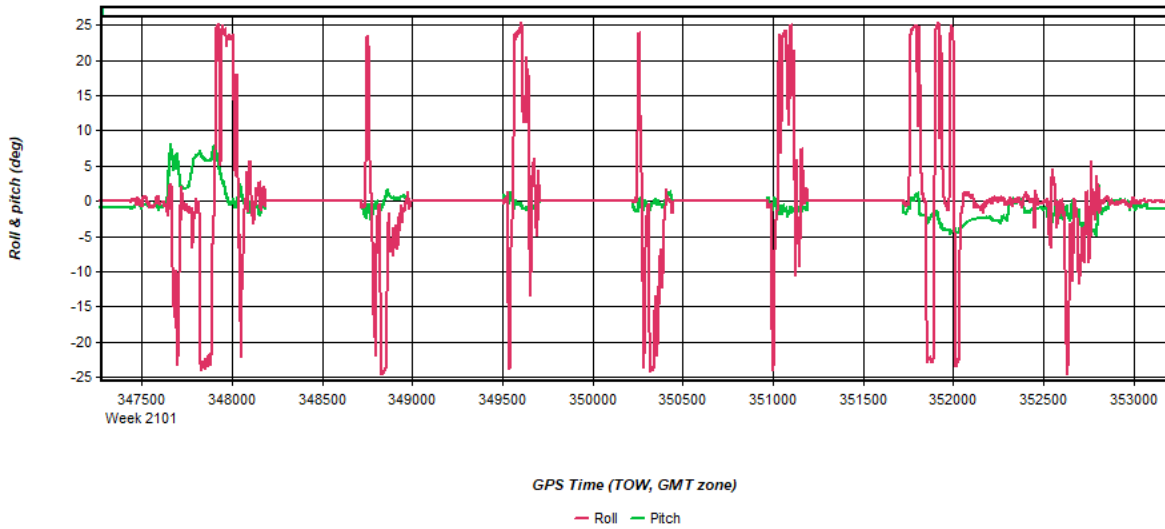
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 11: 20200416002658_18 [Smoothed TC Combined] - Azimuth Plot



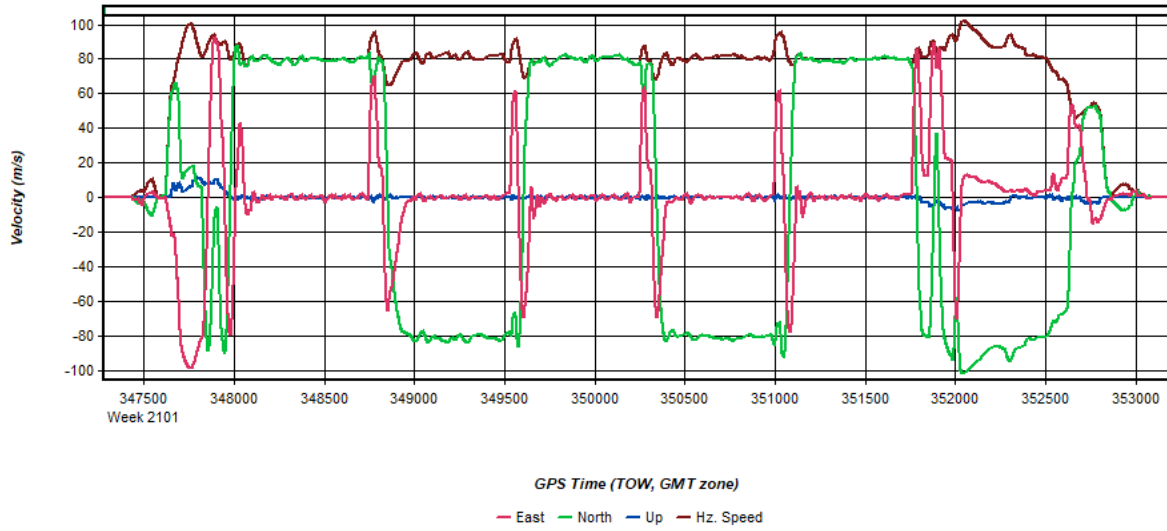
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 12: 20200416002658_18 [Smoothed TC Combined] - Roll & Pitch Plot



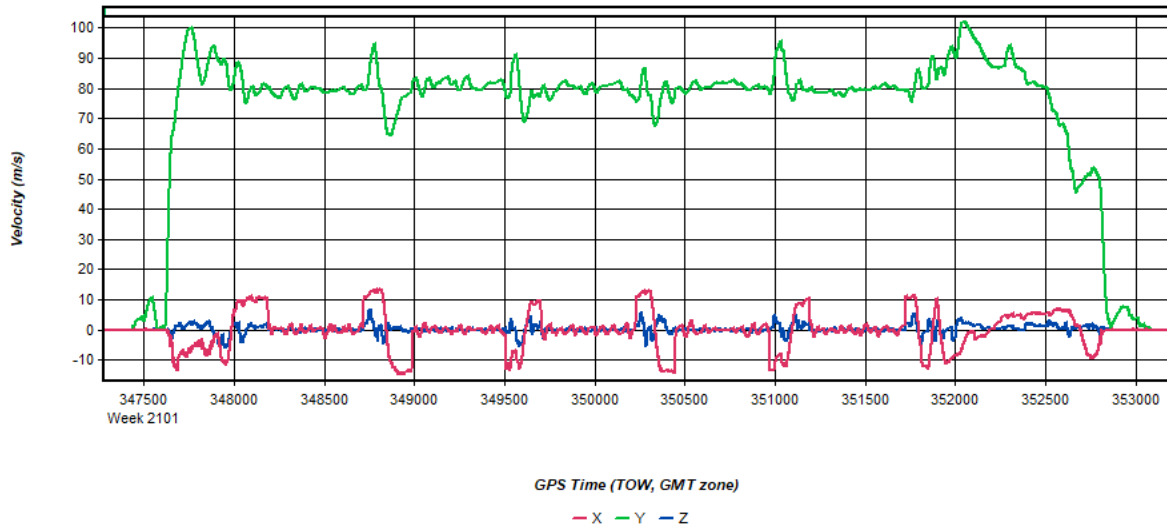
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 13: 20200416002658_18 [Smoothed TC Combined] - Velocity Profile Plot



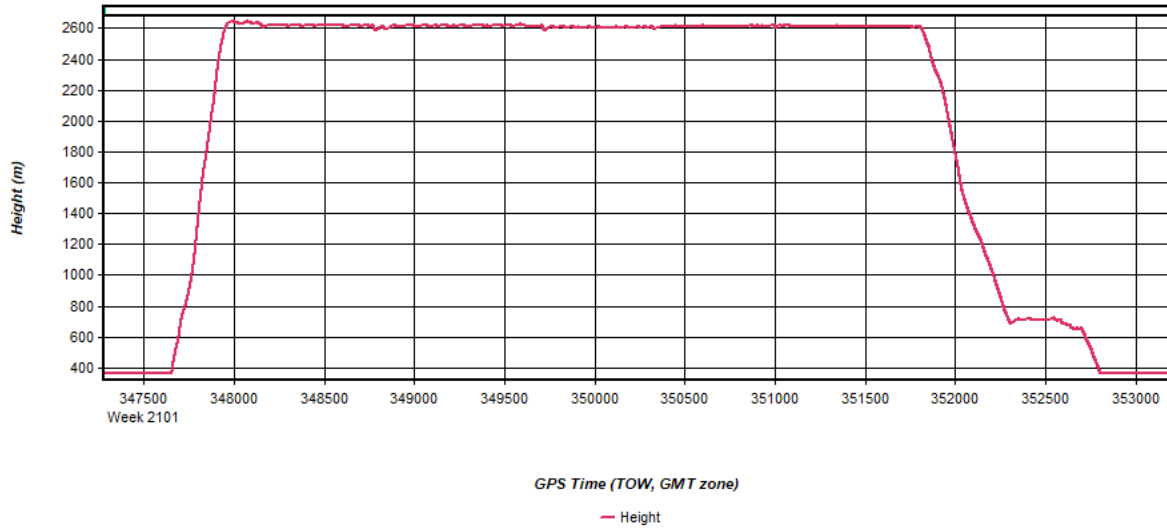
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 14: 20200416002658_18 [Smoothed TC Combined] - Body Frame Velocity Plot



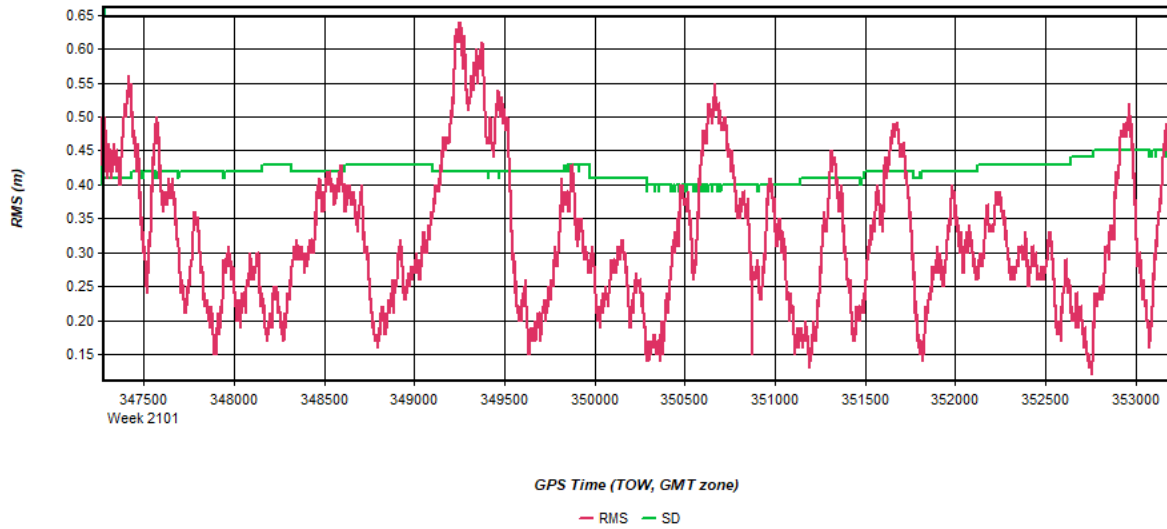
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 15: 20200416002658_18 [Smoothed TC Combined] - Height Profile Plot



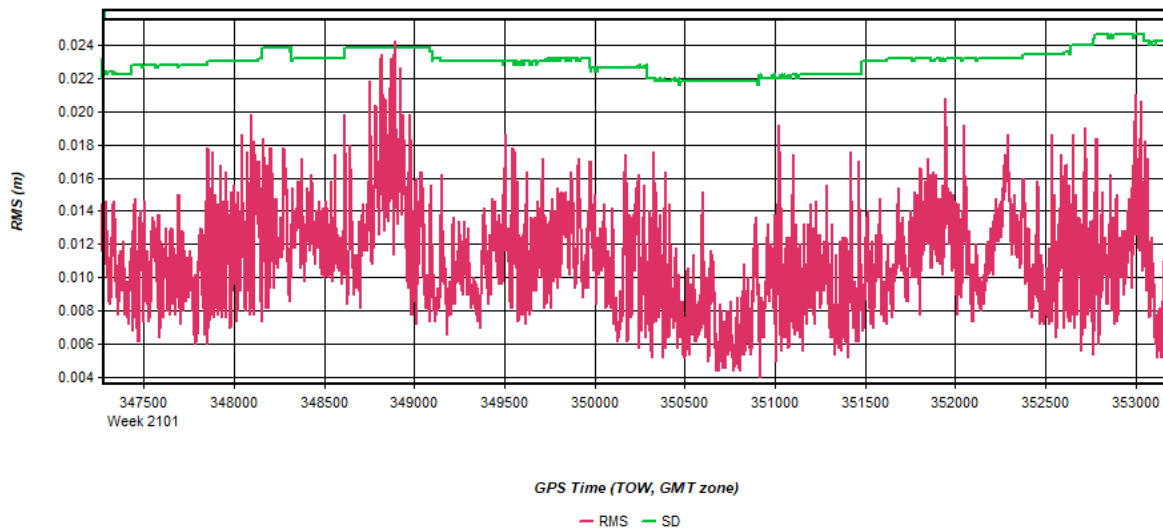
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 16: 20200416002658_18 [Smoothed TC Combined] - C/A Code Residual RMS Plot



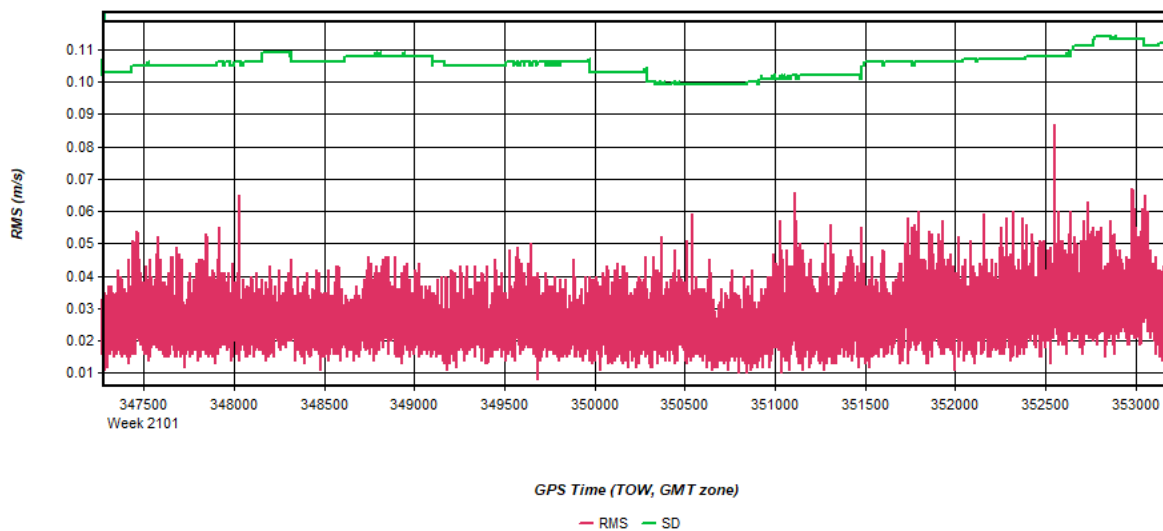
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 17: 20200416002658_18 [Smoothed TC Combined] - Carrier Residual RMS Plot



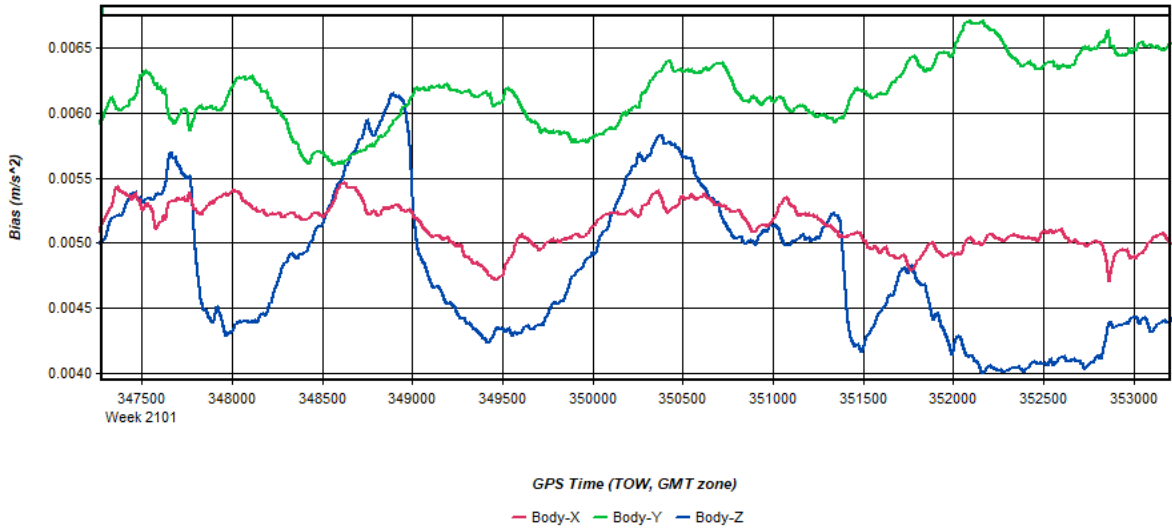
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 18: 20200416002658_18 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



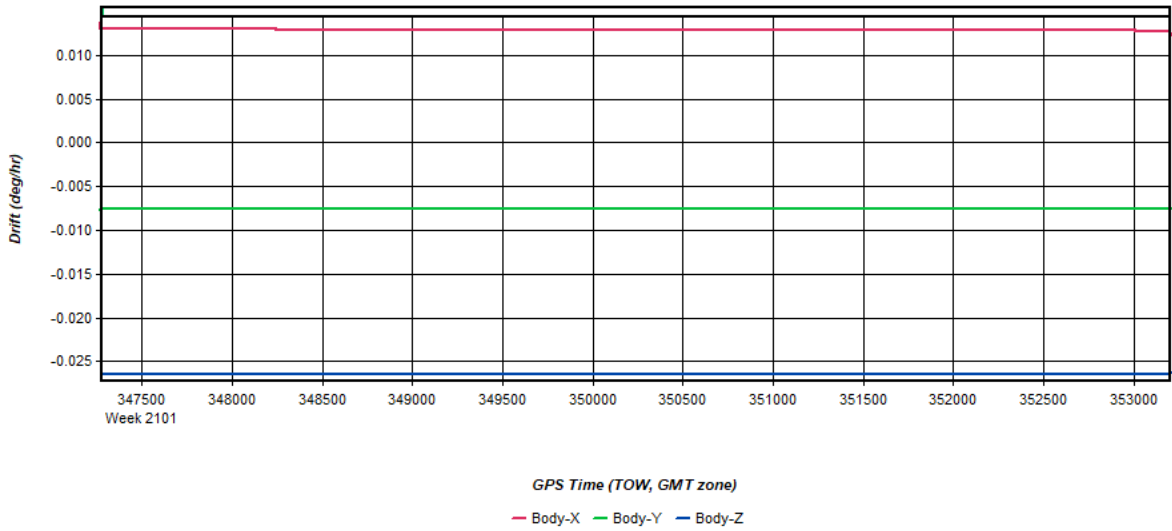
Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 19: 20200416002658_18 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Figure 20: 20200416002658_18 [Smoothed TC Combined] - Gyro Drift Plot



Process	20200416002658_18	by Unknown	on 6/10/2020	at 15:37:20
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Output Results for 20200418190913_19

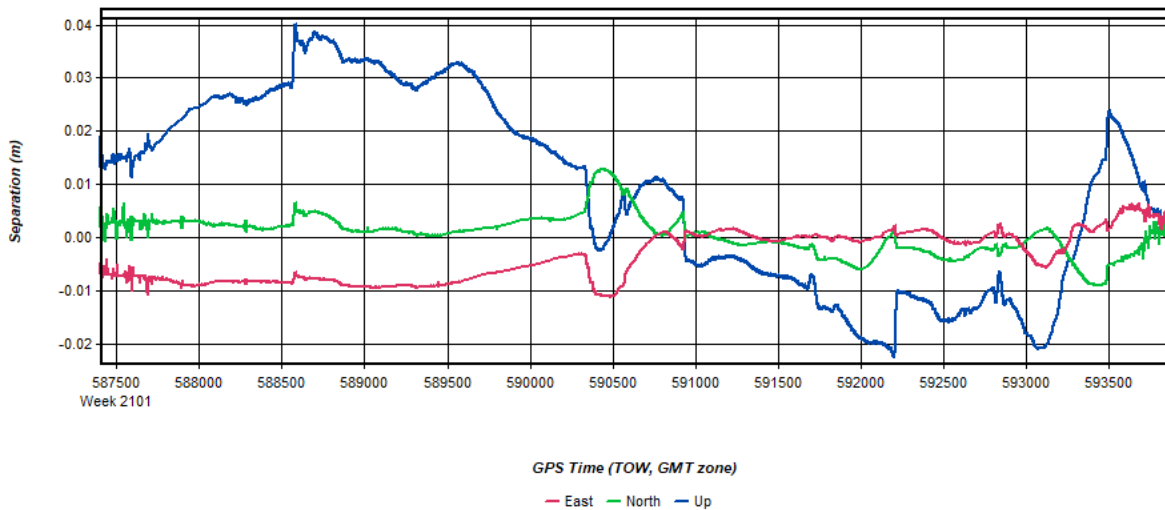
Inertial Explorer Version 8.90.2124
06/08/2020

Figure 1: Smoothed TC Combined - Map



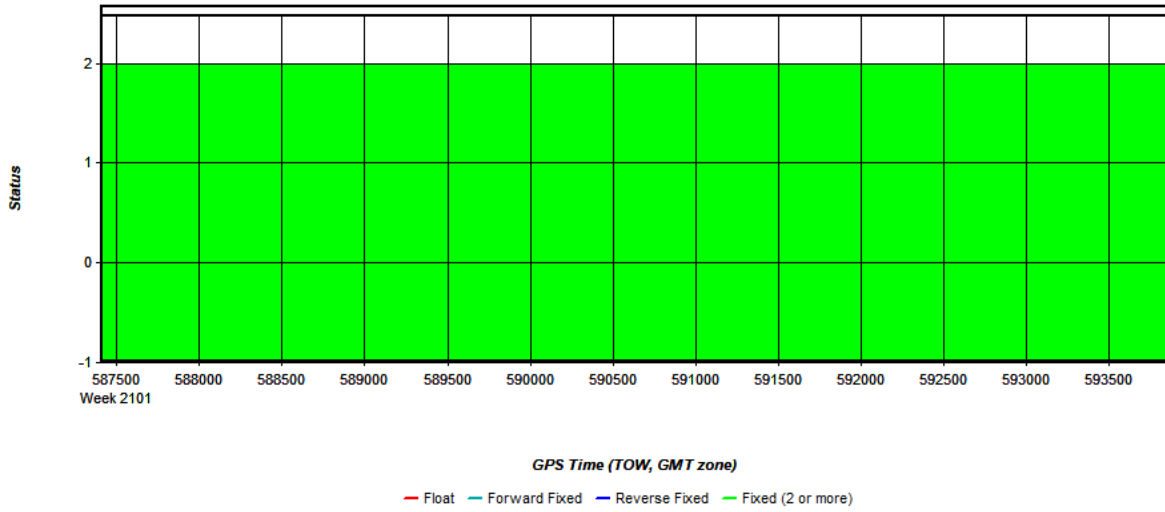
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 2: 20200418190913_19 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



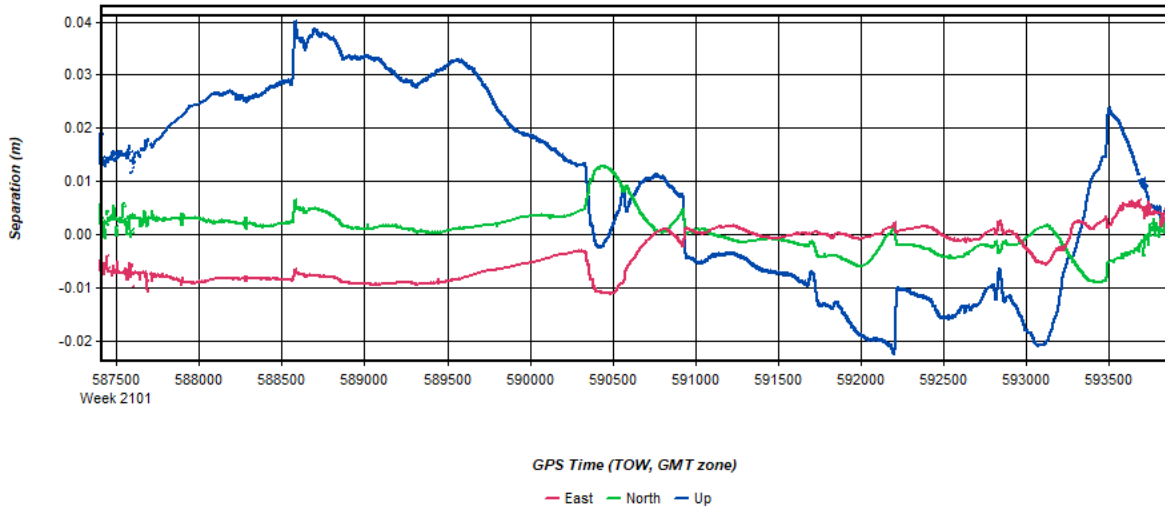
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 3: 20200418190913_19 [Smoothed TC Combined] - Float or Fixed Ambiguity



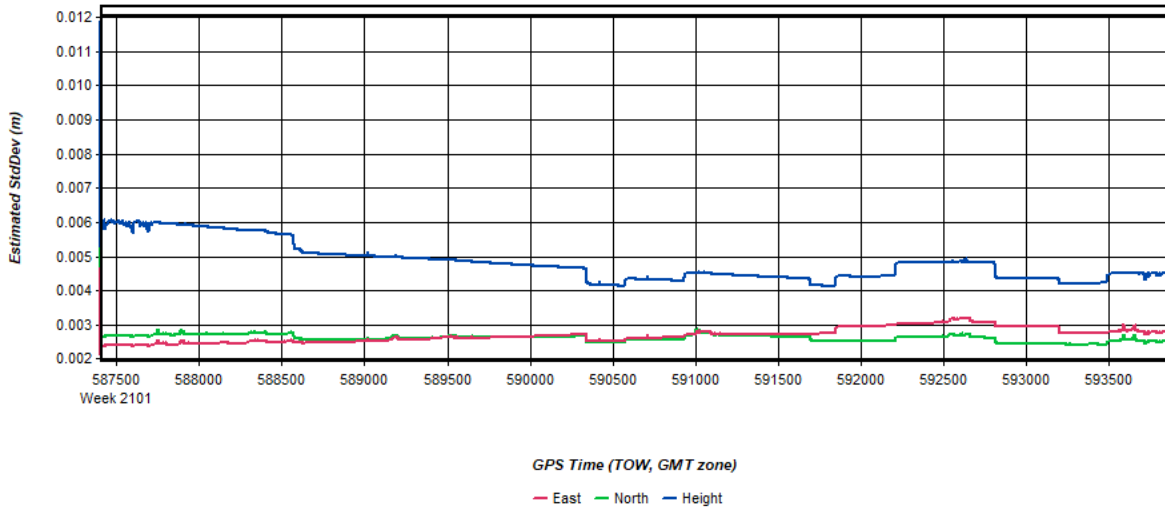
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 4: 20200418190913_19 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



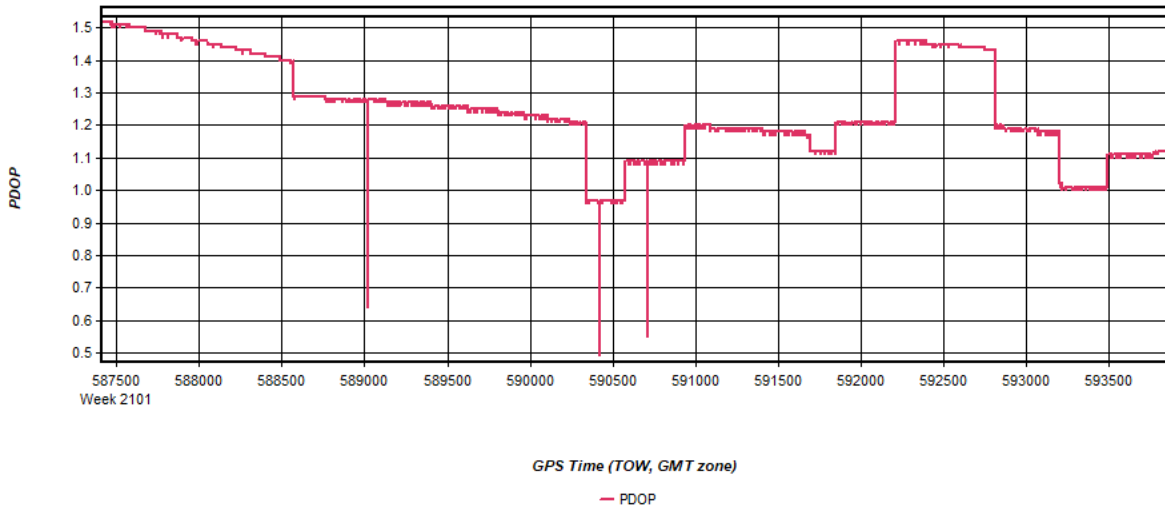
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 5: 20200418190913_19 [Smoothed TC Combined] - Estimated Position Accuracy Plot



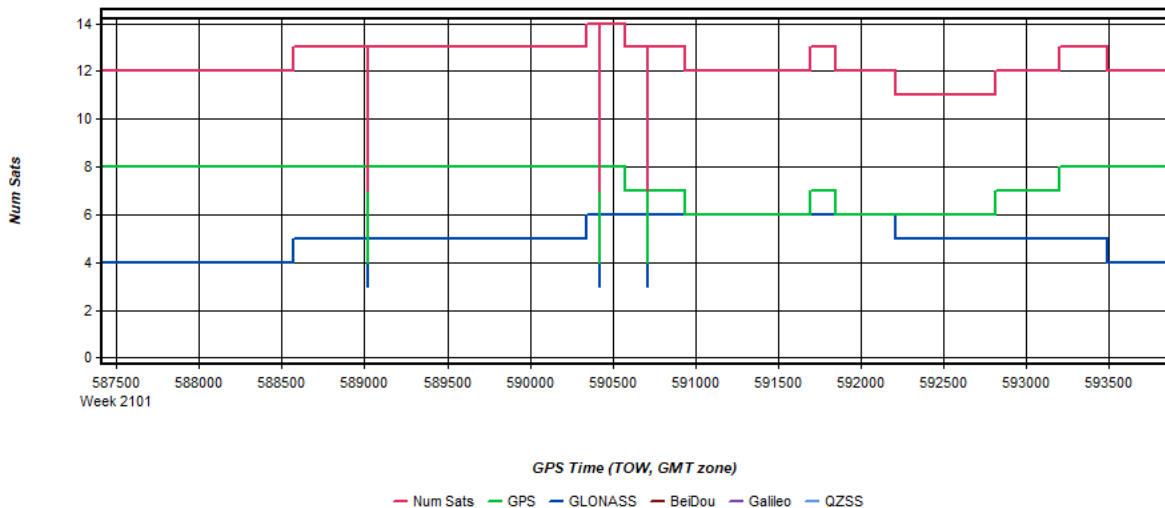
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 6: 20200418190913_19 [Smoothed TC Combined] - PDOP Plot



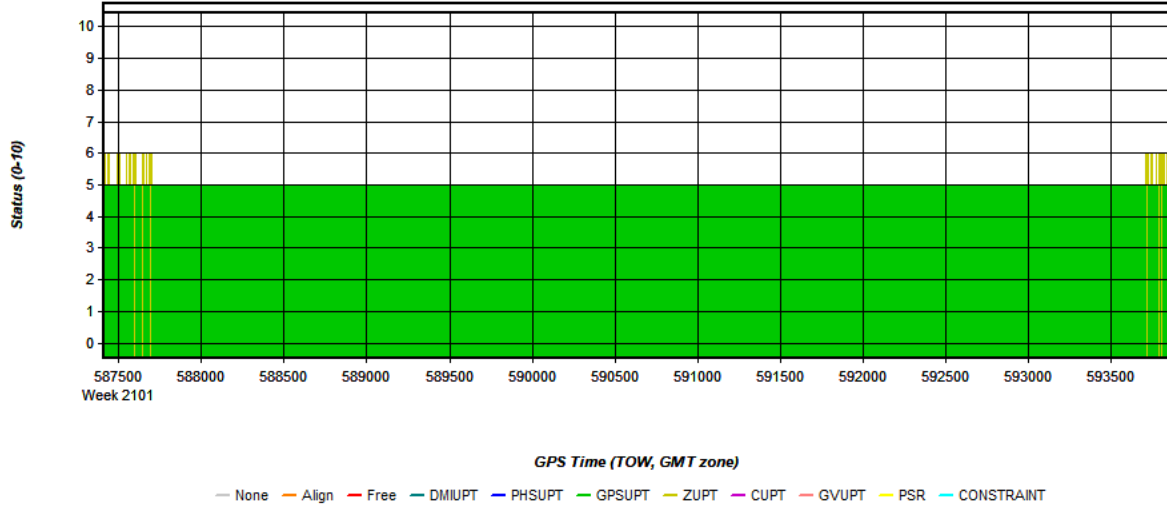
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 7: 20200418190913_19 [Smoothed TC Combined] - Number of Satellites Line Plot



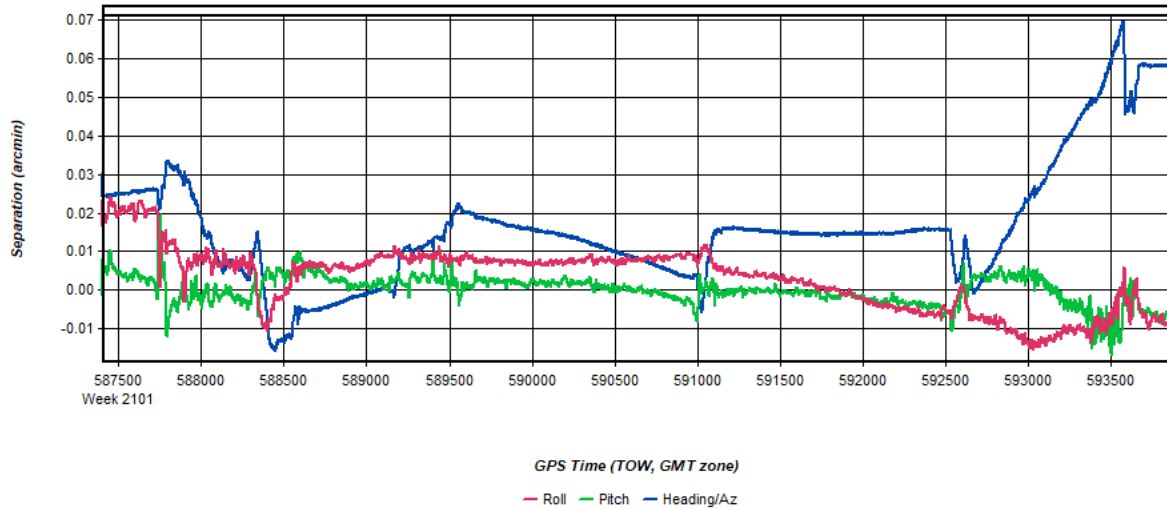
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 8: 20200418190913_19 [Smoothed TC Combined] - Status flag for IMU processing



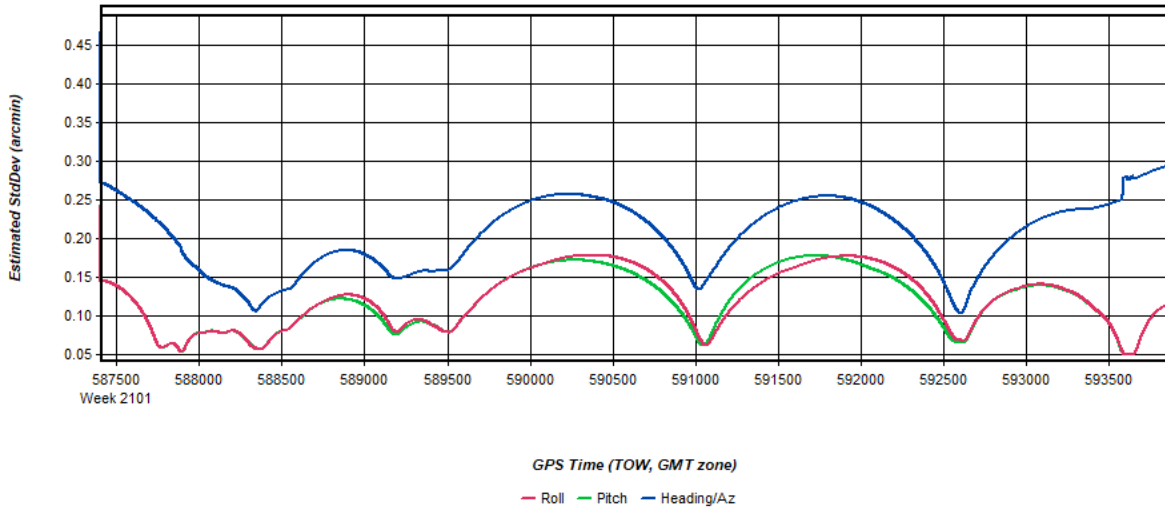
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 9: 20200418190913_19 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



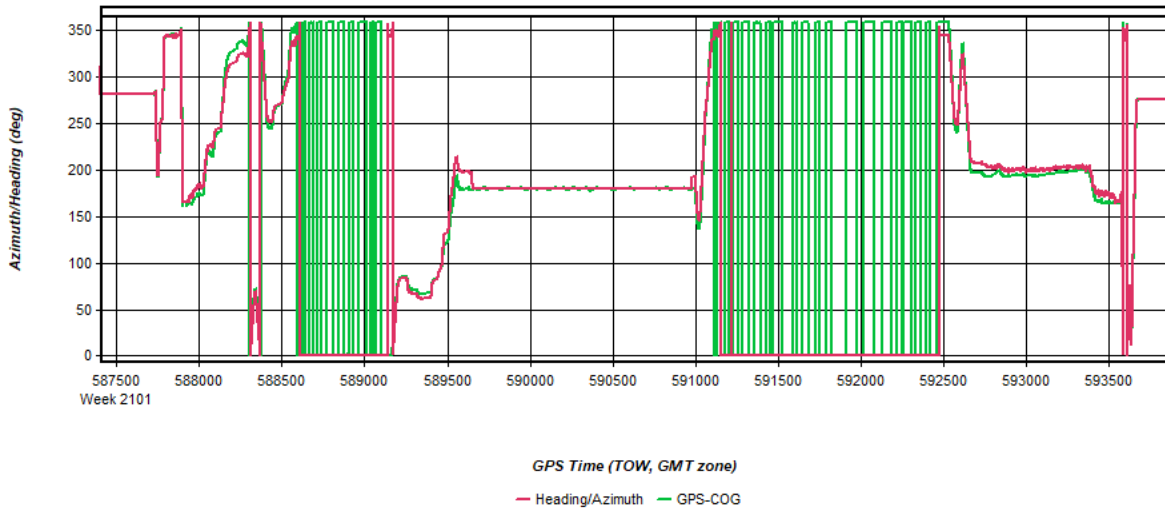
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 10: 20200418190913_19 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



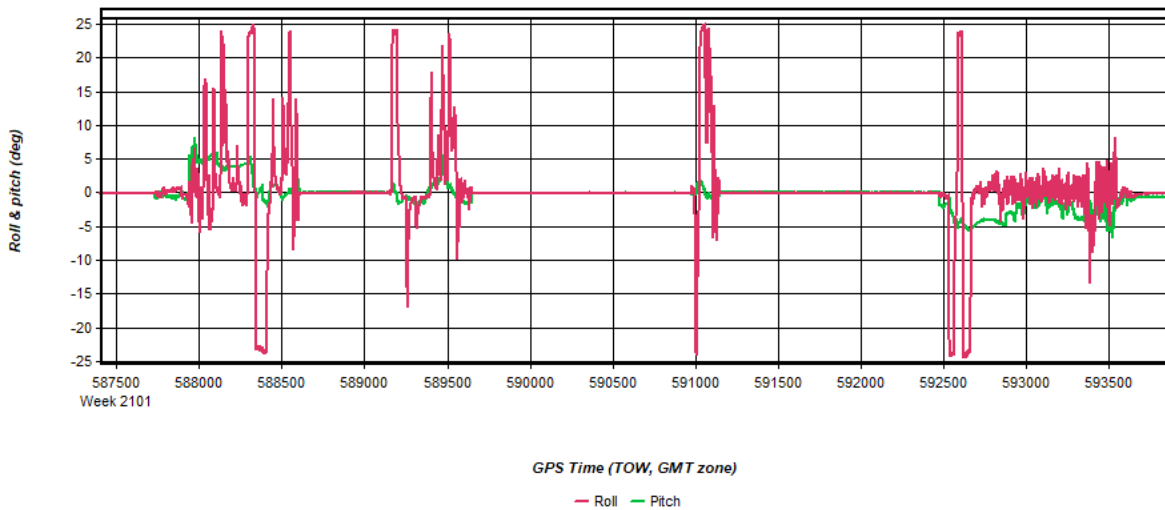
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 11: 20200418190913_19 [Smoothed TC Combined] - Azimuth Plot



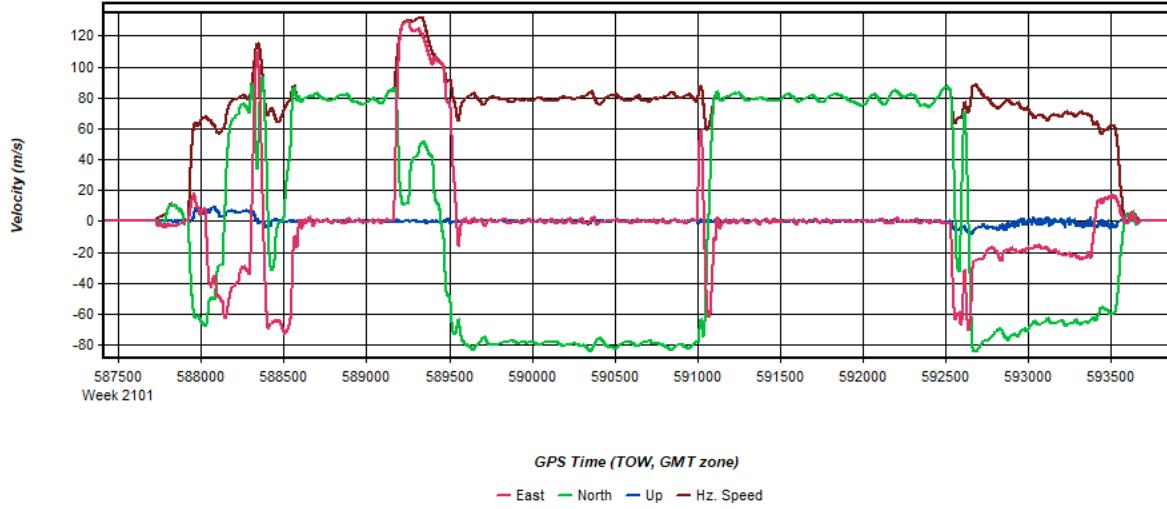
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 12: 20200418190913_19 [Smoothed TC Combined] - Roll & Pitch Plot



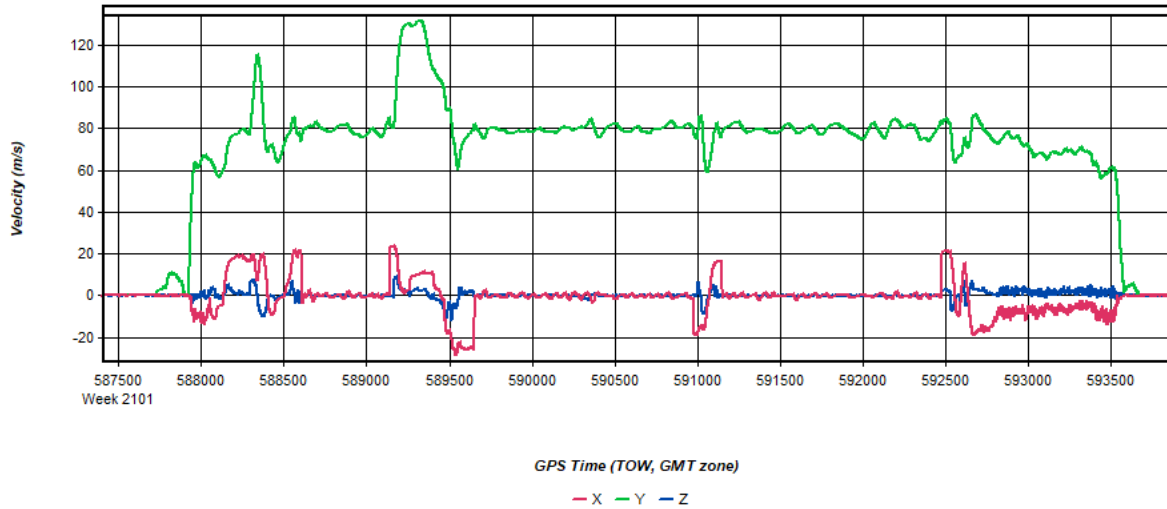
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 13: 20200418190913_19 [Smoothed TC Combined] - Velocity Profile Plot



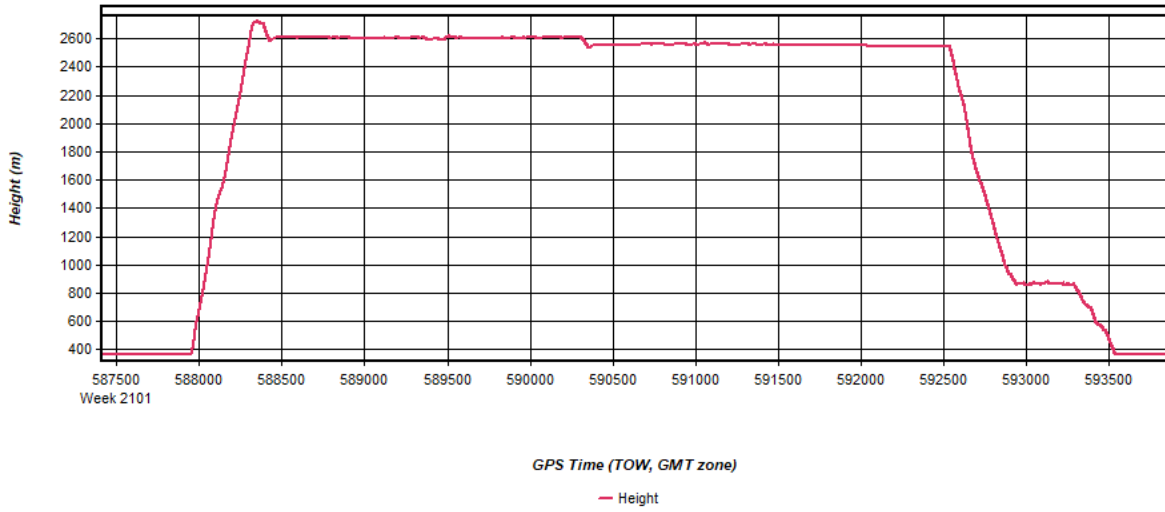
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 14: 20200418190913_19 [Smoothed TC Combined] - Body Frame Velocity Plot



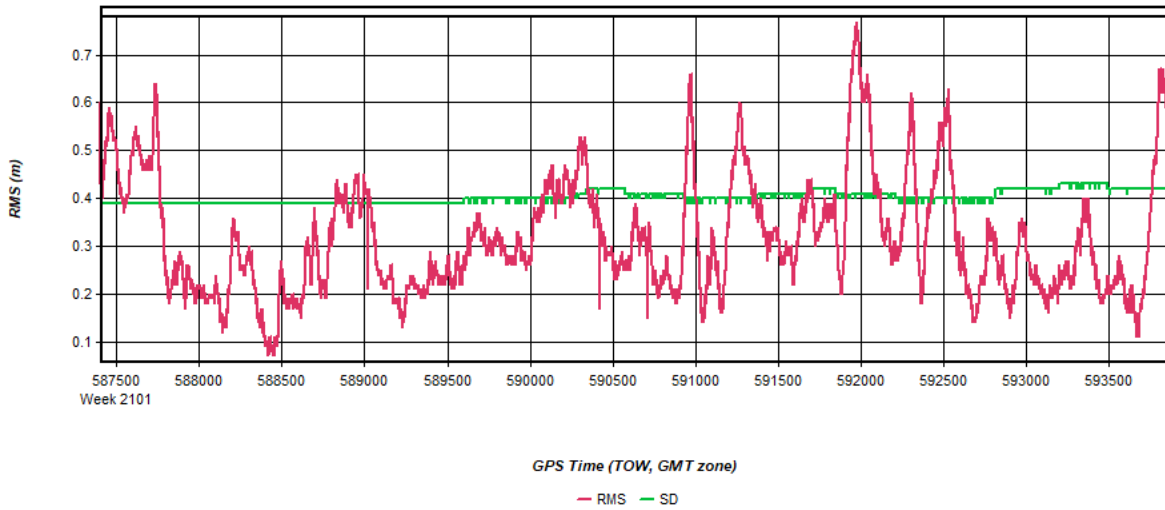
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 15: 20200418190913_19 [Smoothed TC Combined] - Height Profile Plot



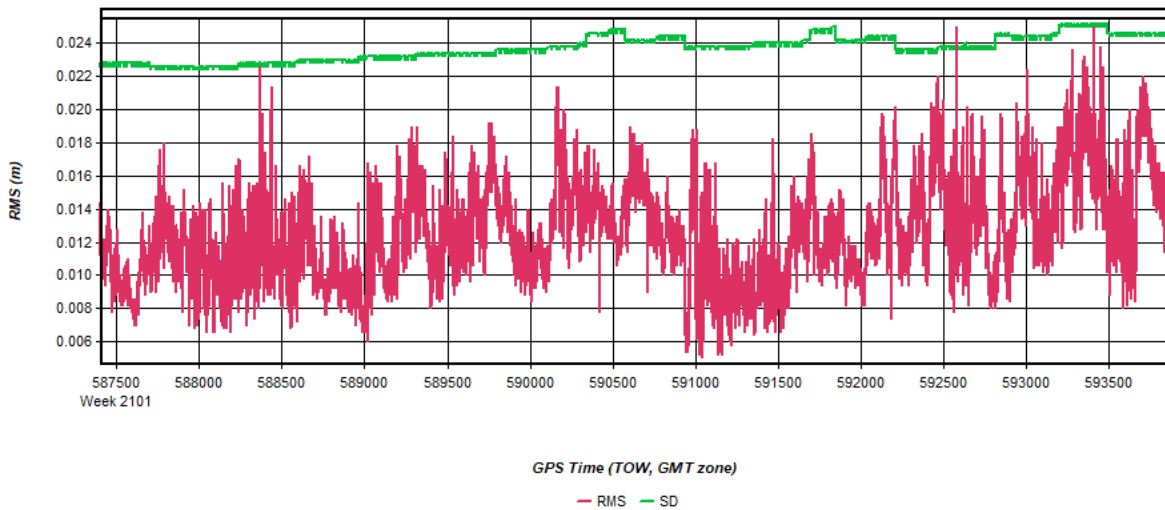
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 16: 20200418190913_19 [Smoothed TC Combined] - C/A Code Residual RMS Plot



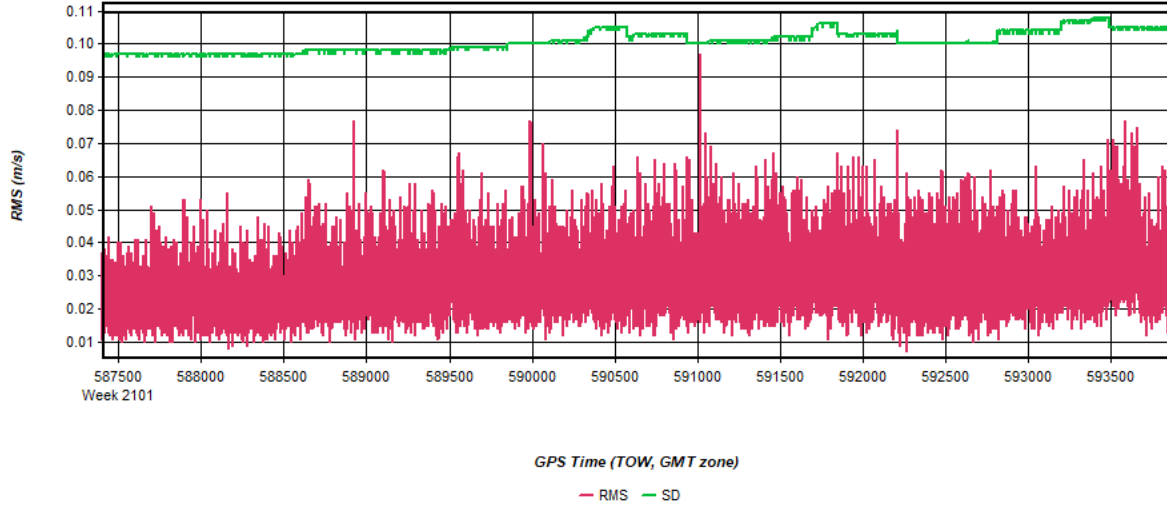
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 17: 20200418190913_19 [Smoothed TC Combined] - Carrier Residual RMS Plot



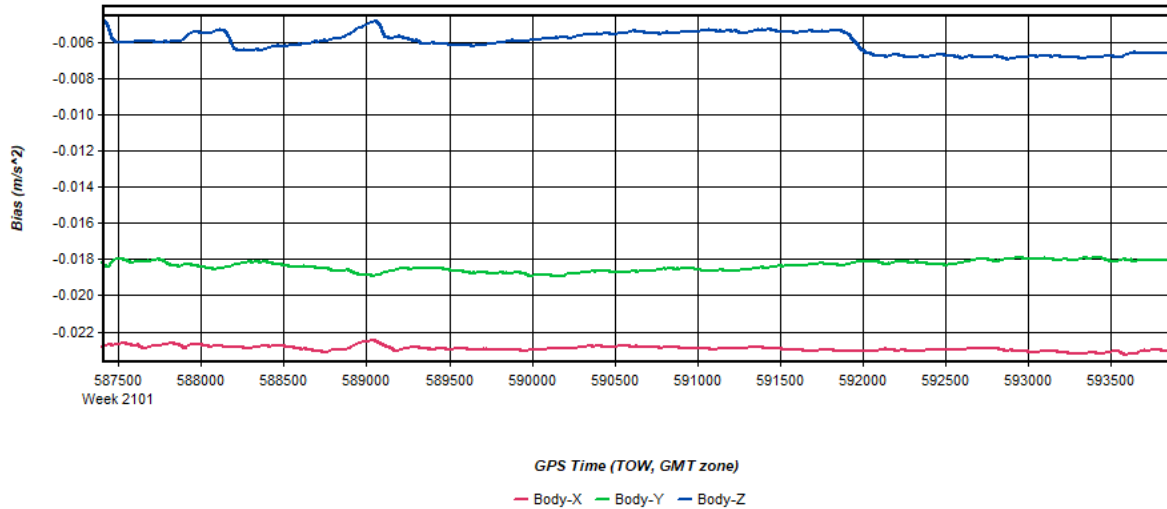
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 18: 20200418190913_19 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



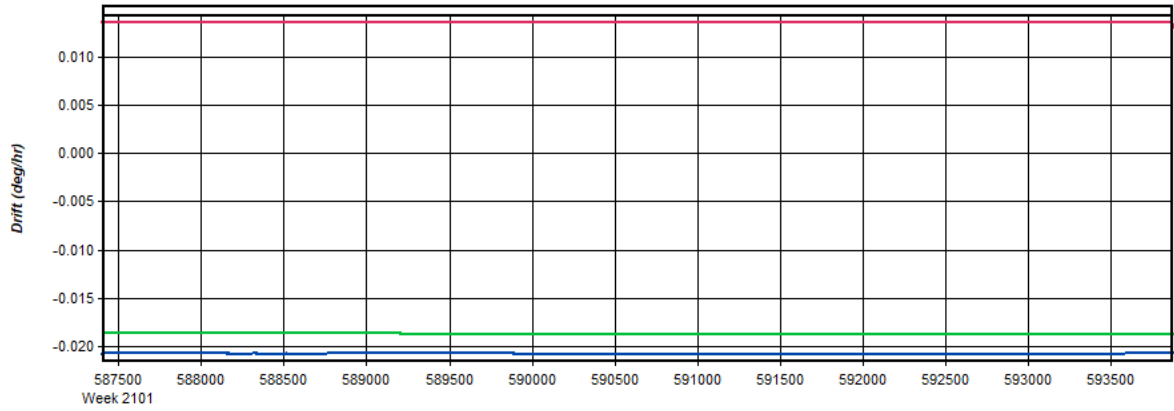
Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 19: 20200418190913_19 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Figure 20: 20200418190913_19 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

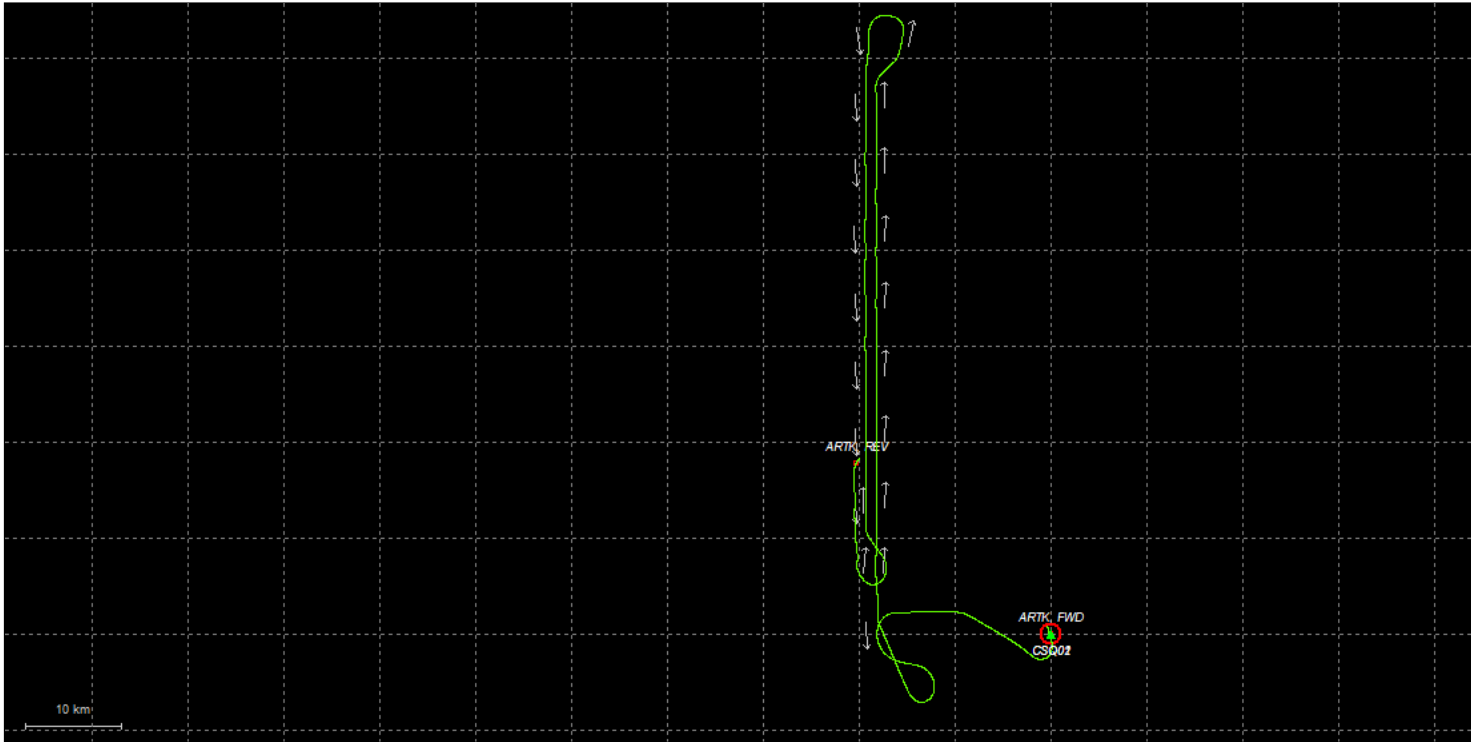
Body-X Body-Y Body-Z

Process	20200418190913_19	by Unknown	on 6/8/2020	at 17:37:09
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Output Results for 20200419010742_20

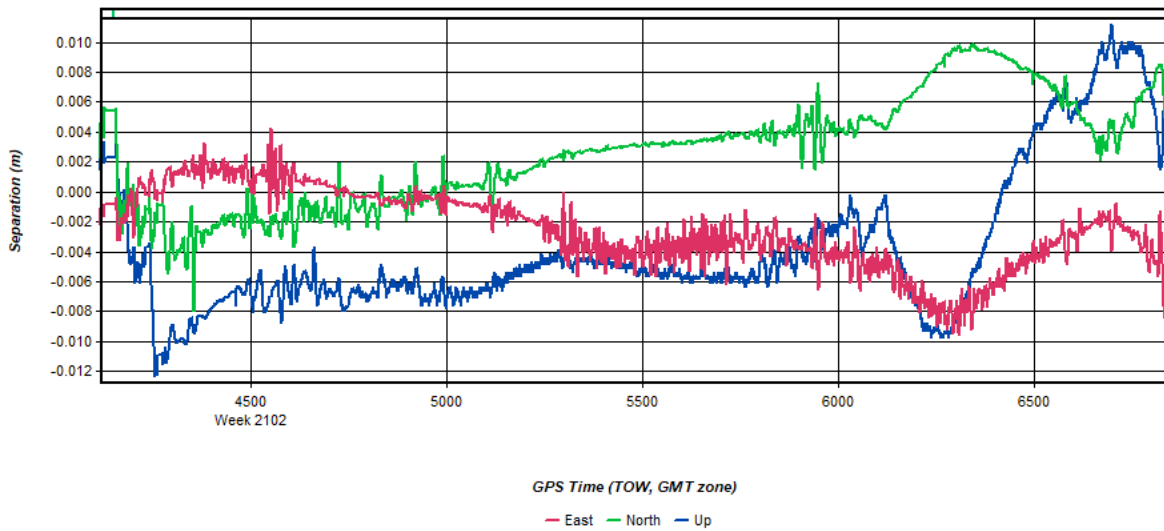
Inertial Explorer Version 8.90.2124
06/10/2020

Figure 1: Smoothed TC Combined - Map



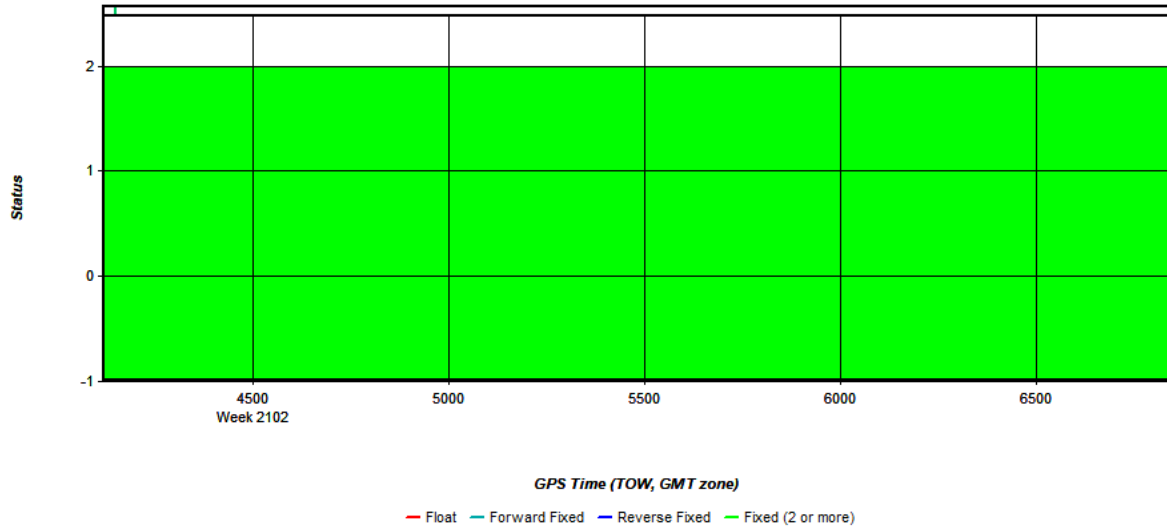
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 2: 20200419010742_20 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



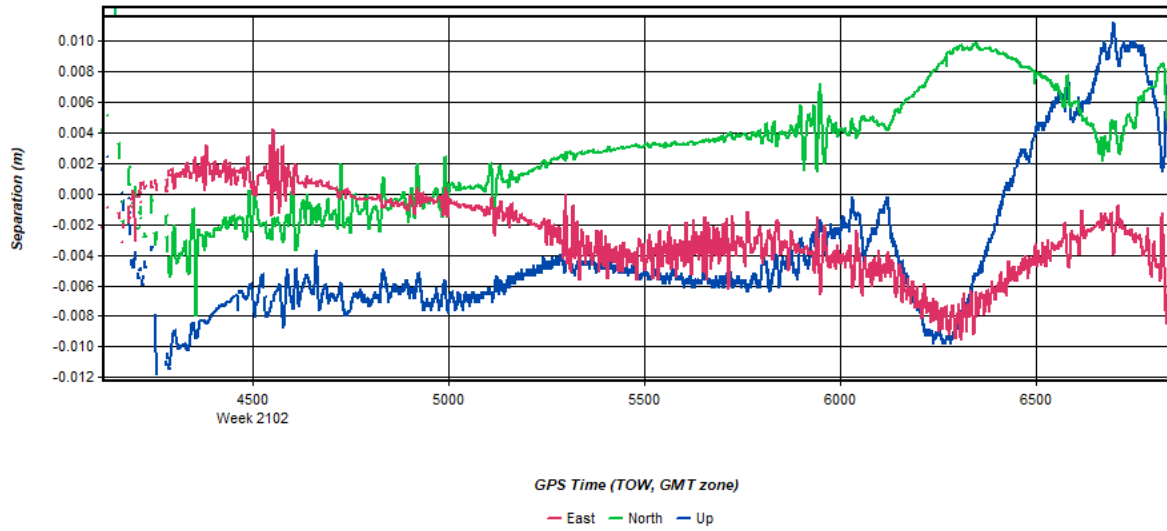
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 3: 20200419010742_20 [Smoothed TC Combined] - Float or Fixed Ambiguity



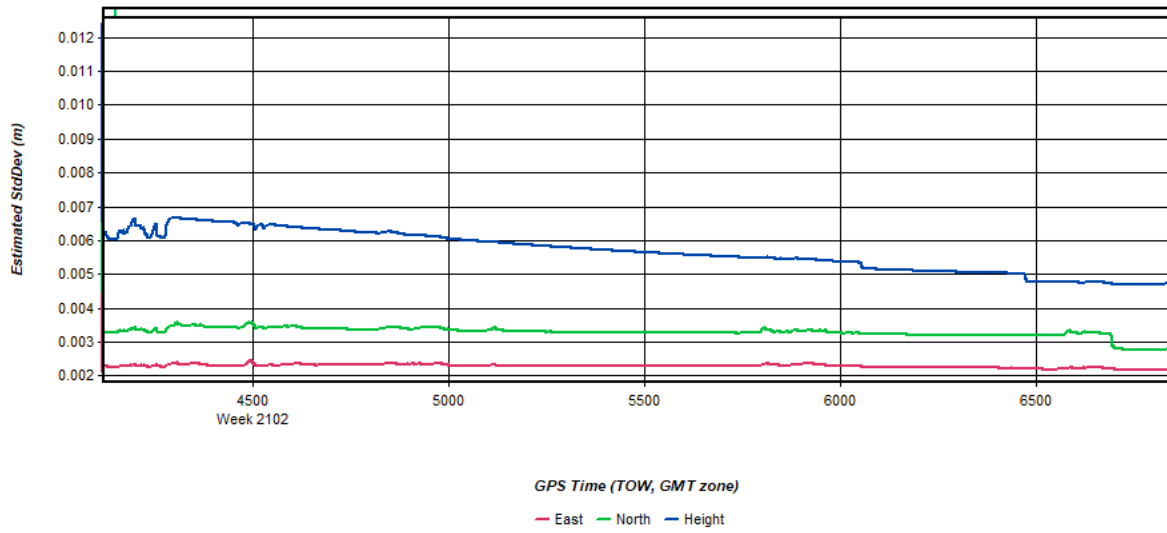
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 4: 20200419010742_20 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



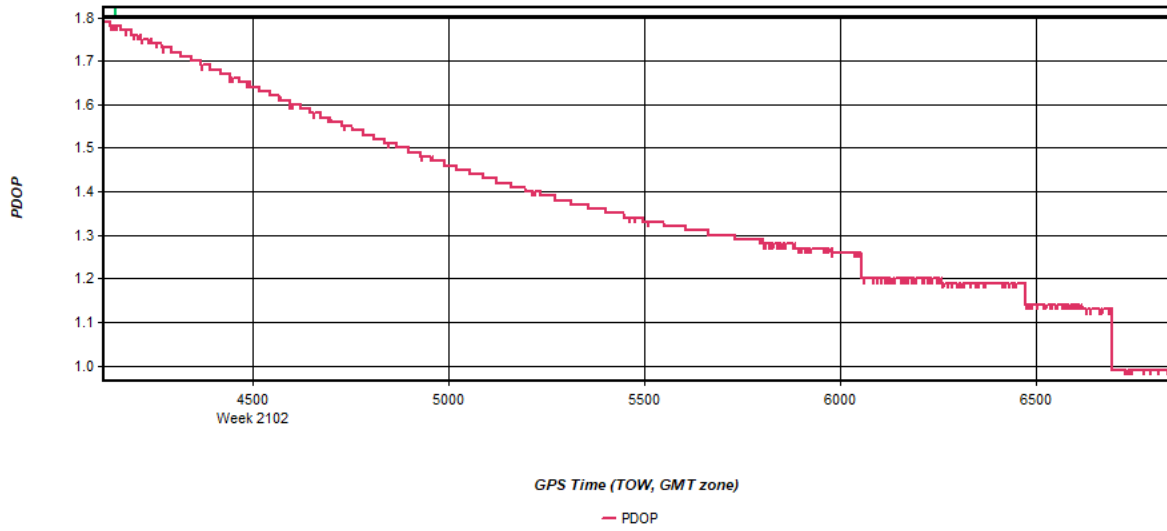
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 5: 20200419010742_20 [Smoothed TC Combined] - Estimated Position Accuracy Plot



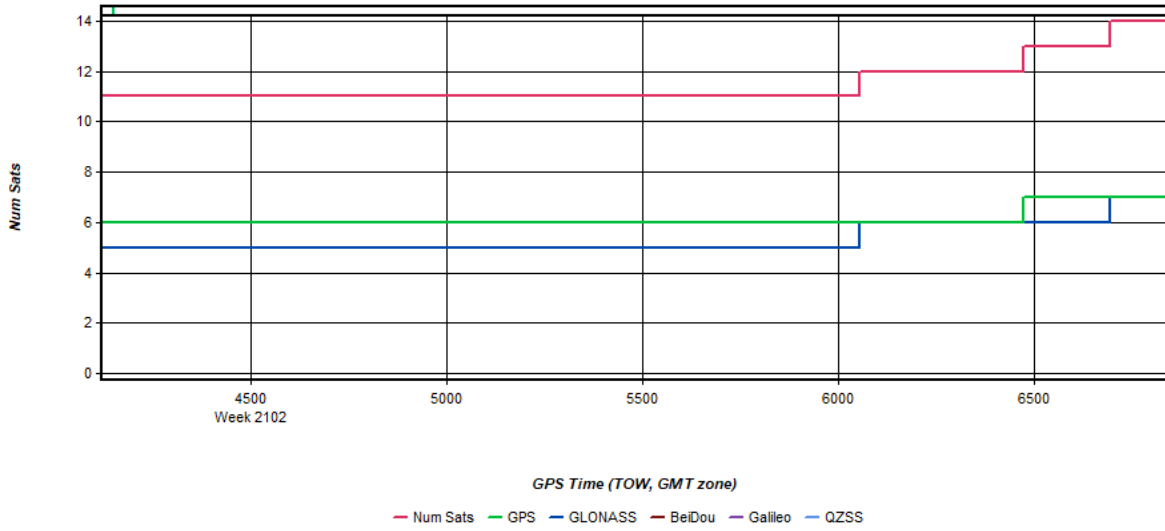
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 6: 20200419010742_20 [Smoothed TC Combined] - PDOP Plot



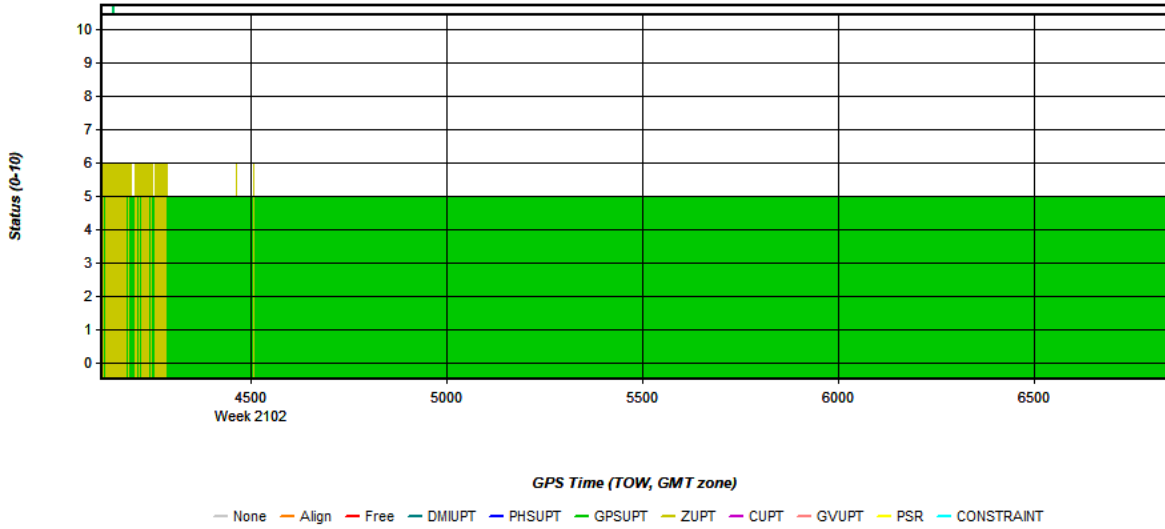
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 7: 20200419010742_20 [Smoothed TC Combined] - Number of Satellites Line Plot



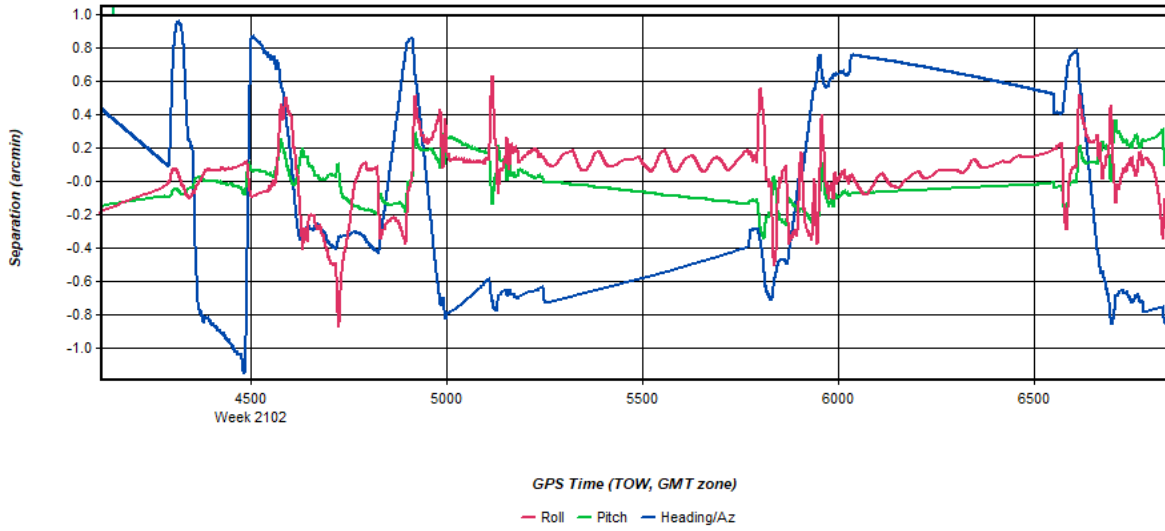
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 8: 20200419010742_20 [Smoothed TC Combined] - Status flag for IMU processing



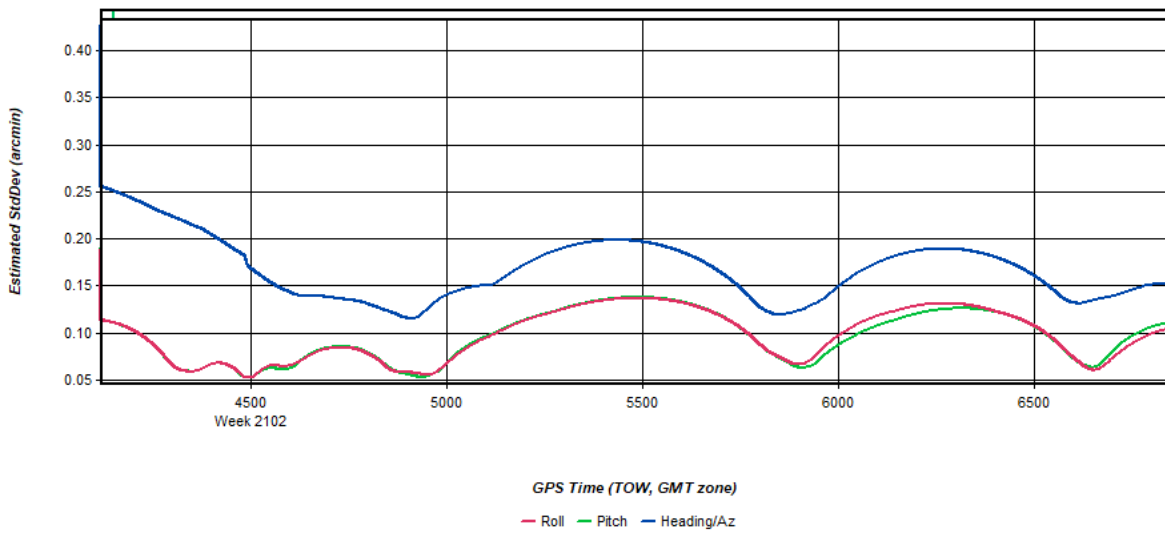
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 9: 20200419010742_20 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



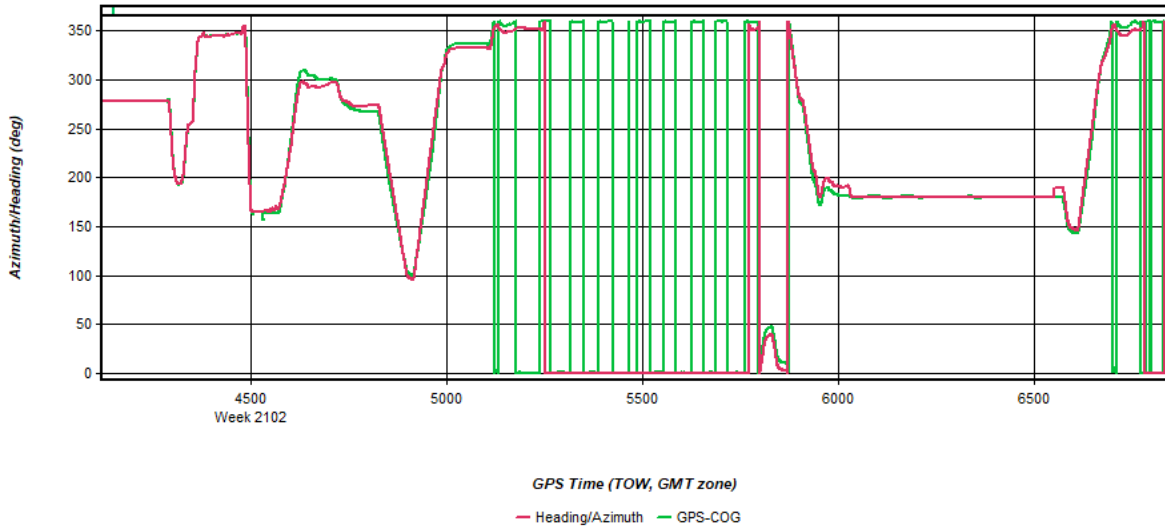
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 10: 20200419010742_20 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



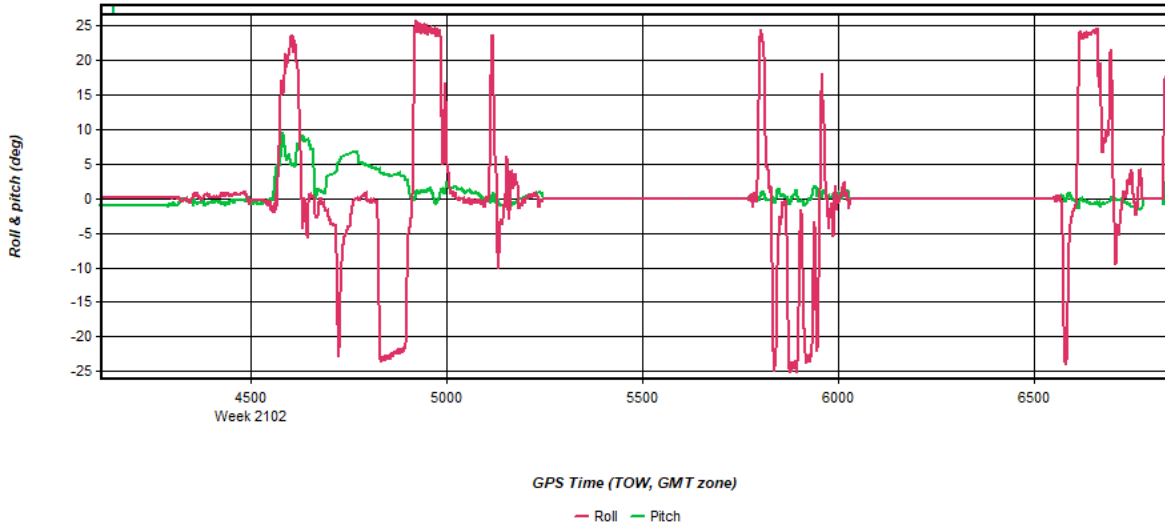
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 11: 20200419010742_20 [Smoothed TC Combined] - Azimuth Plot



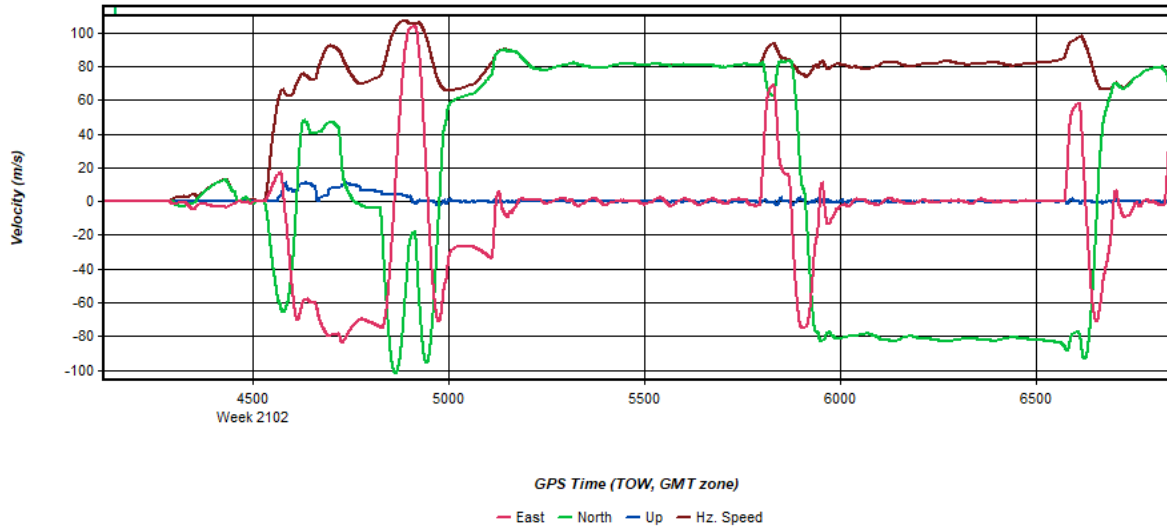
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 12: 20200419010742_20 [Smoothed TC Combined] - Roll & Pitch Plot



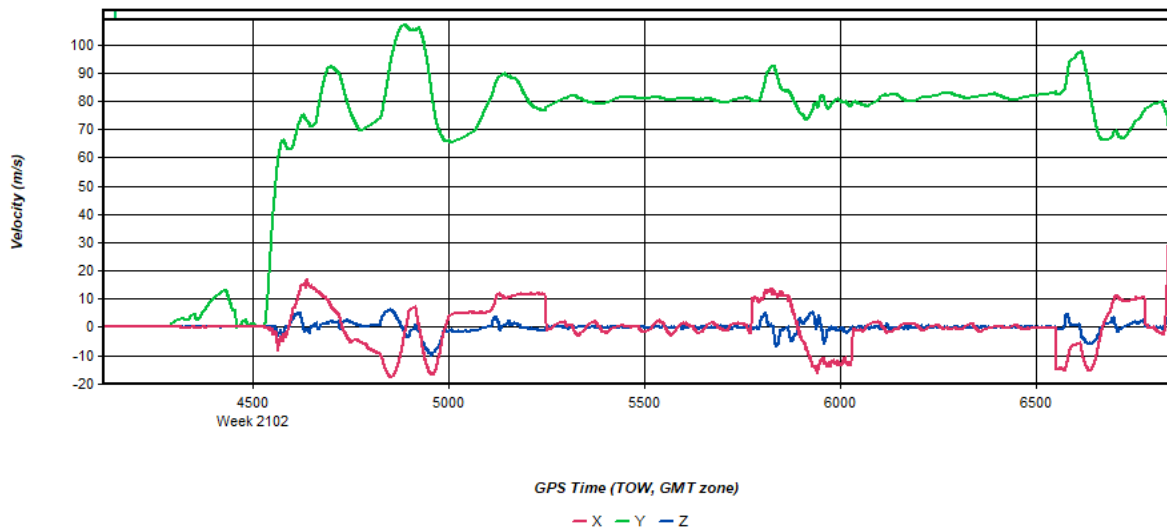
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 13: 20200419010742_20 [Smoothed TC Combined] - Velocity Profile Plot



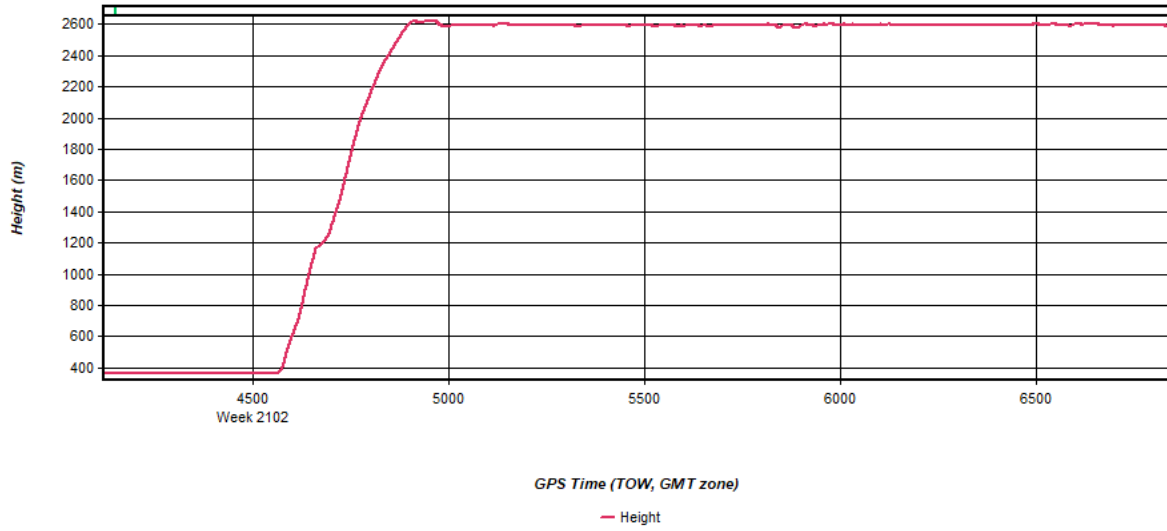
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 14: 20200419010742_20 [Smoothed TC Combined] - Body Frame Velocity Plot



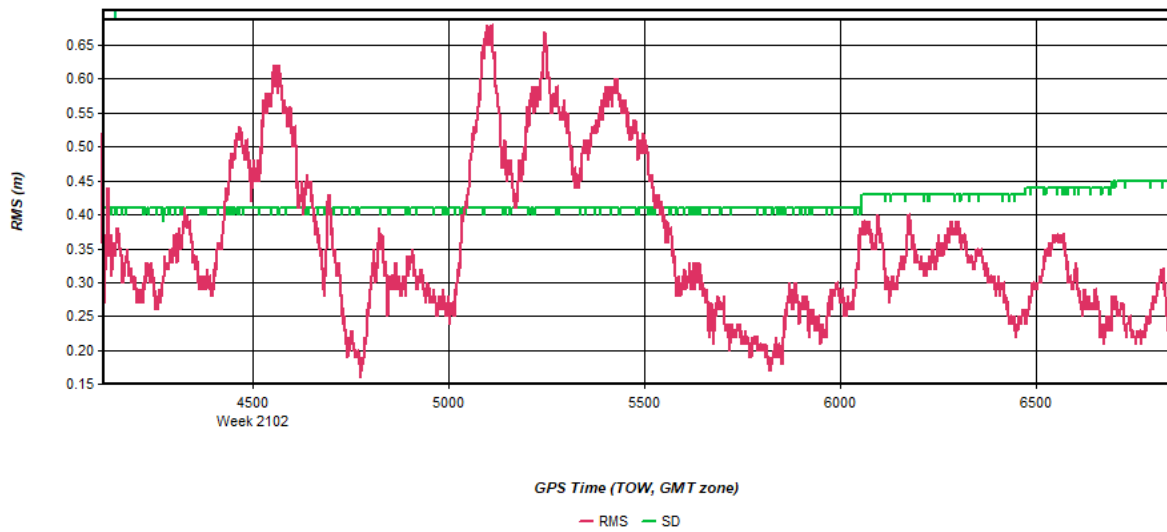
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 15: 20200419010742_20 [Smoothed TC Combined] - Height Profile Plot



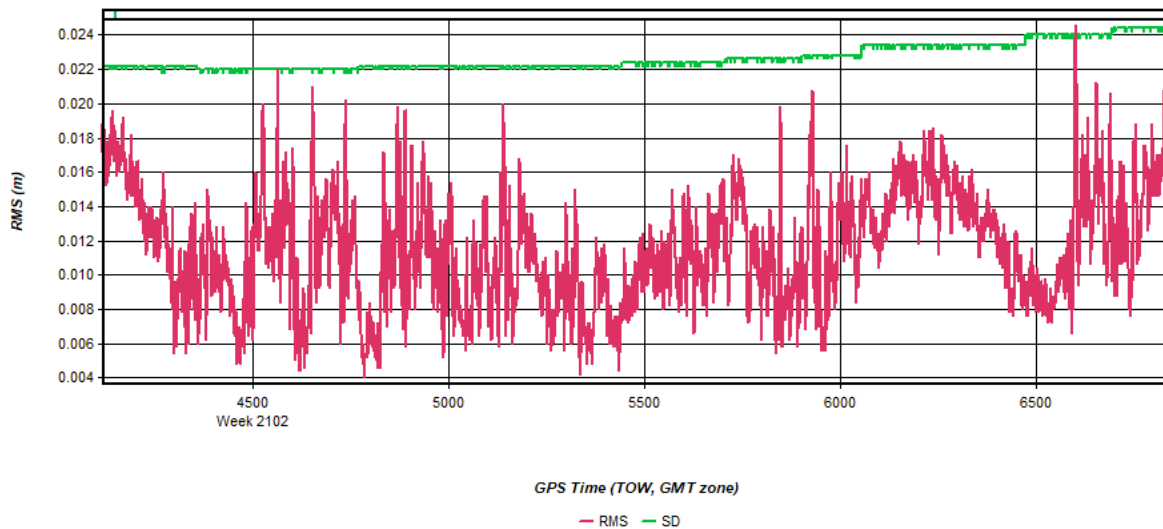
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 16: 20200419010742_20 [Smoothed TC Combined] - C/A Code Residual RMS Plot



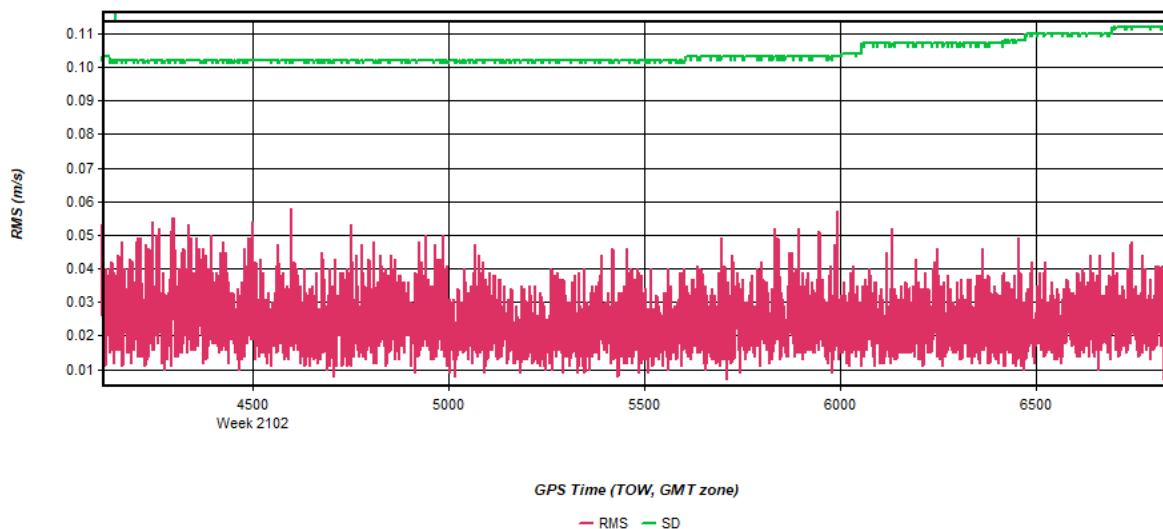
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 17: 20200419010742_20 [Smoothed TC Combined] - Carrier Residual RMS Plot



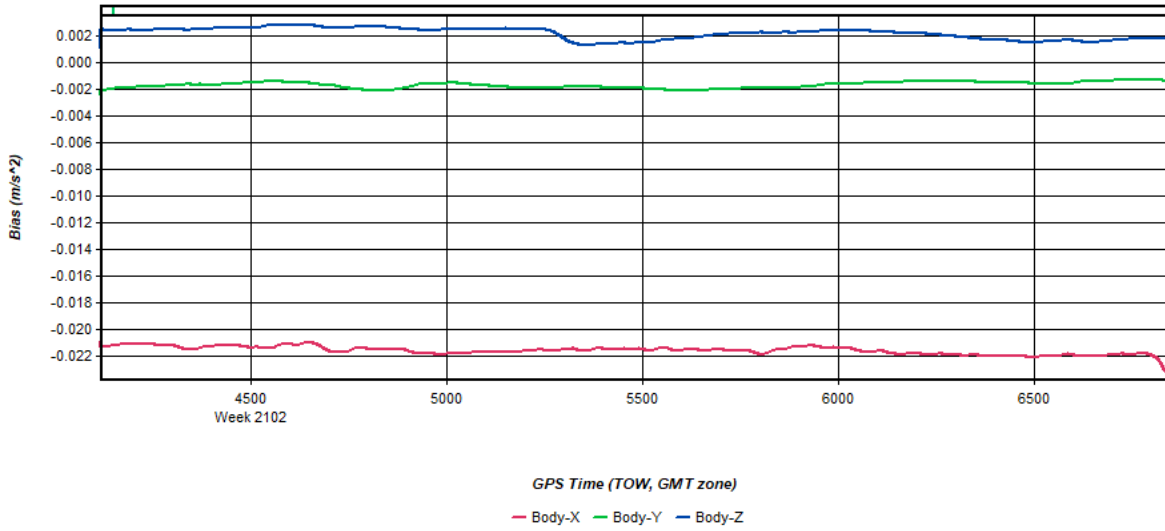
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 18: 20200419010742_20 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



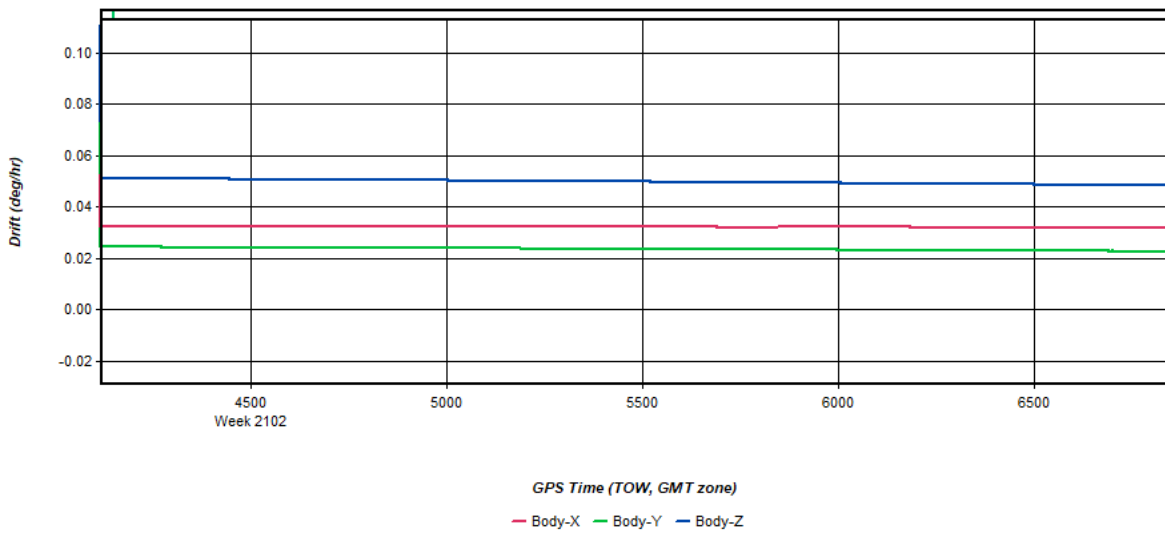
Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 19: 20200419010742_20 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Figure 20: 20200419010742_20 [Smoothed TC Combined] - Gyro Drift Plot

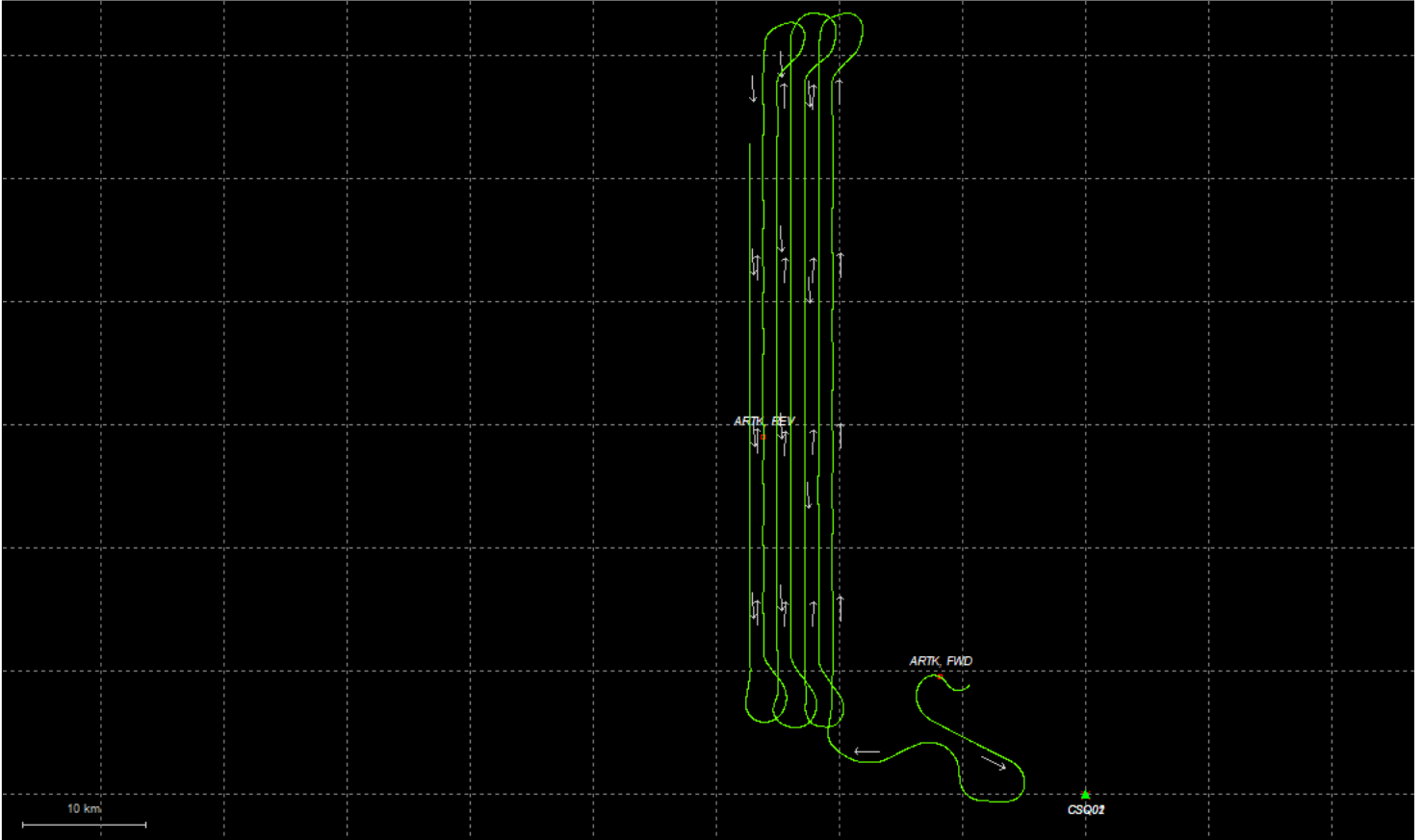


Process	20200419010742_20	by Unknown	on 6/10/2020	at 16:11:14
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Output Results for 20200419015613_20_1

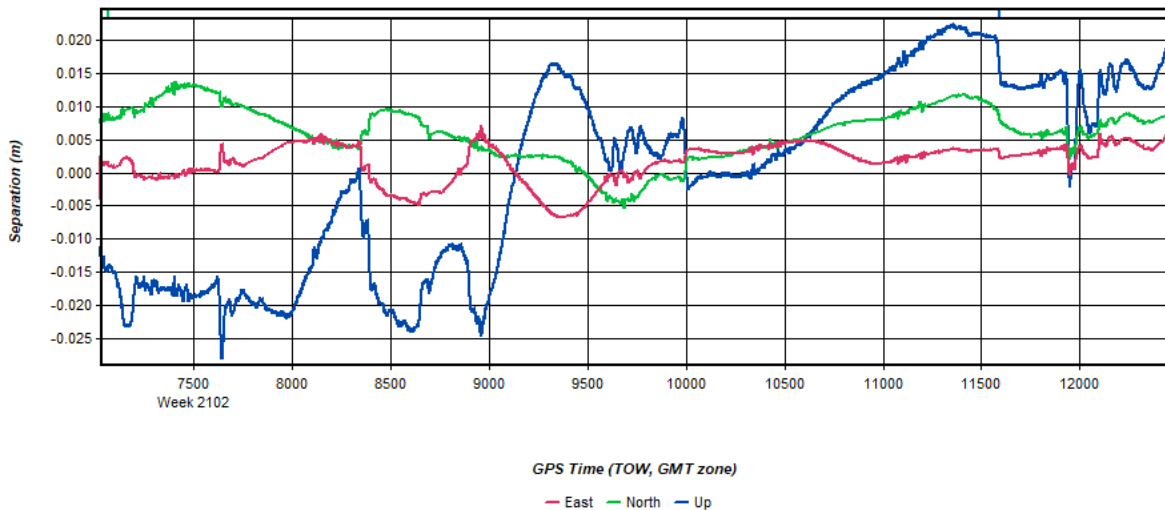
Inertial Explorer Version 8.90.2124
06/08/2020

Figure 1: Smoothed TC Combined - Map



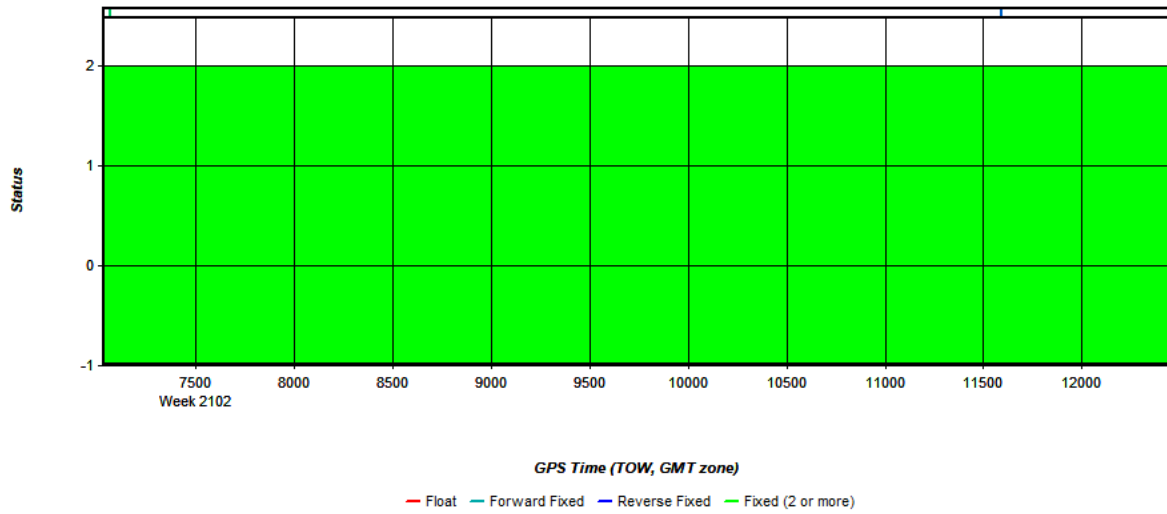
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 2: 20200419015613_20_1 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



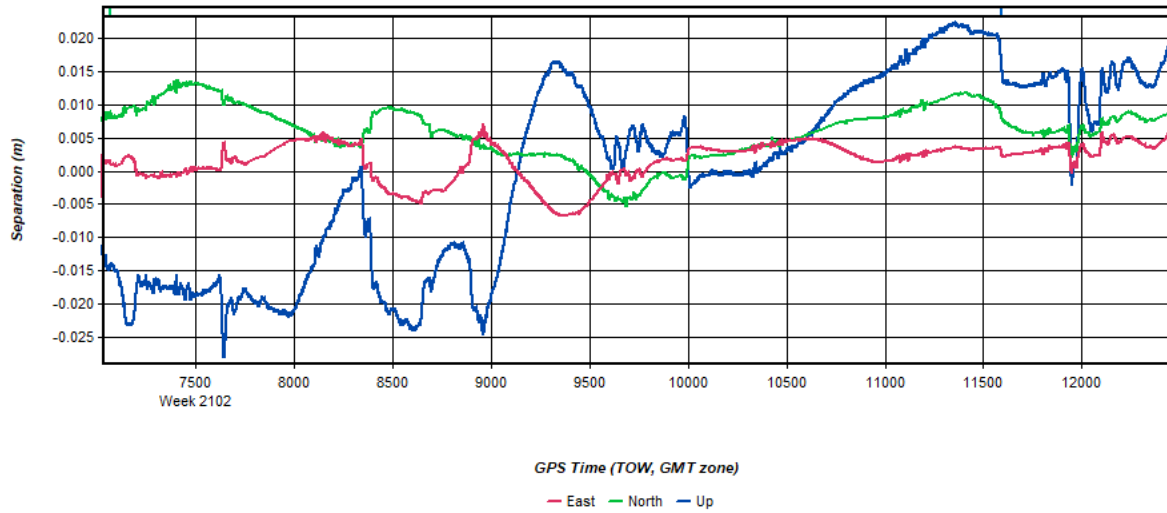
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 3: 20200419015613_20_1 [Smoothed TC Combined] - Float or Fixed Ambiguity



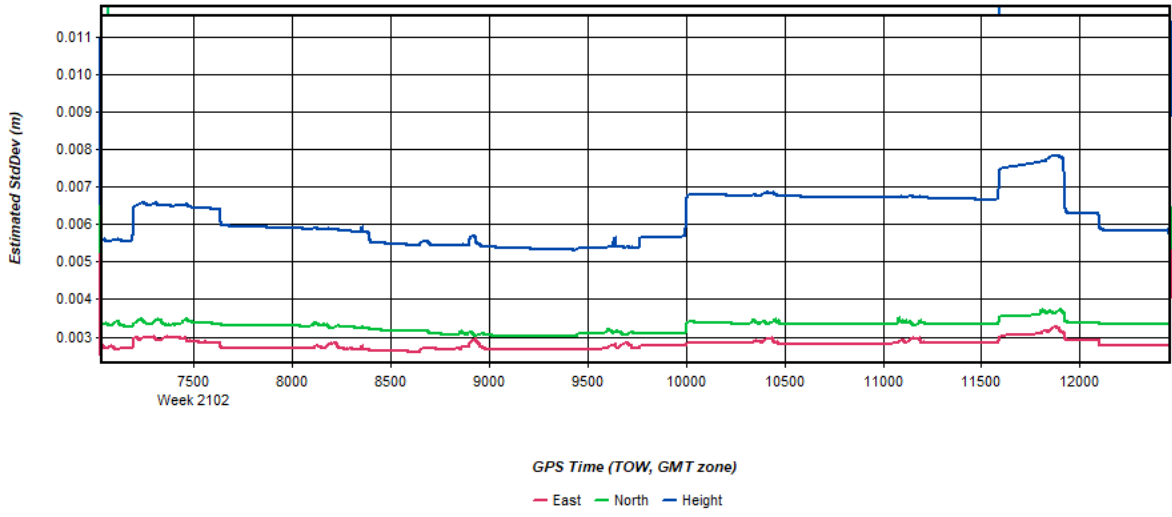
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 4: 20200419015613_20_1 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



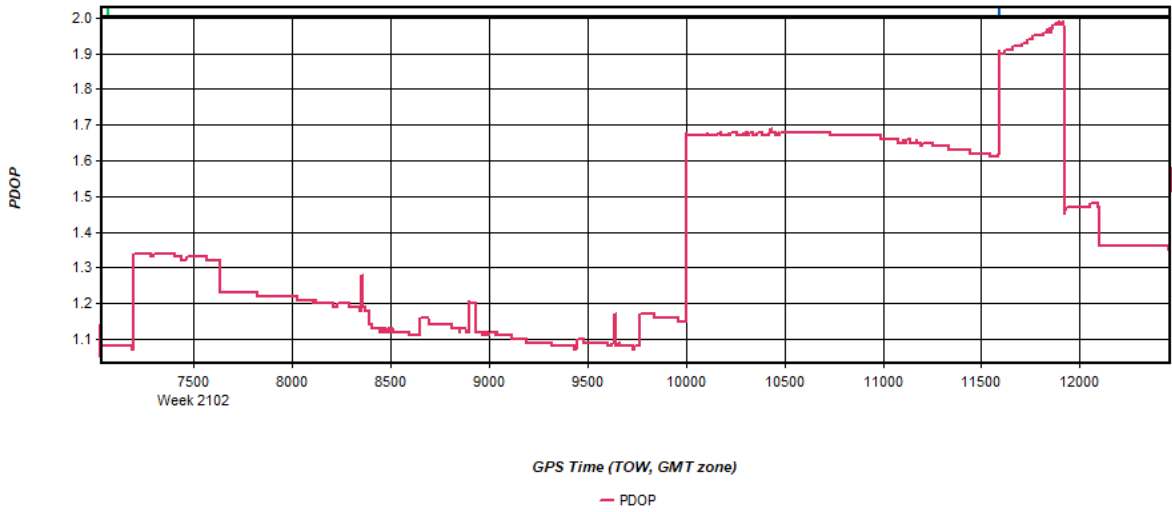
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 5: 20200419015613_20_1 [Smoothed TC Combined] - Estimated Position Accuracy Plot



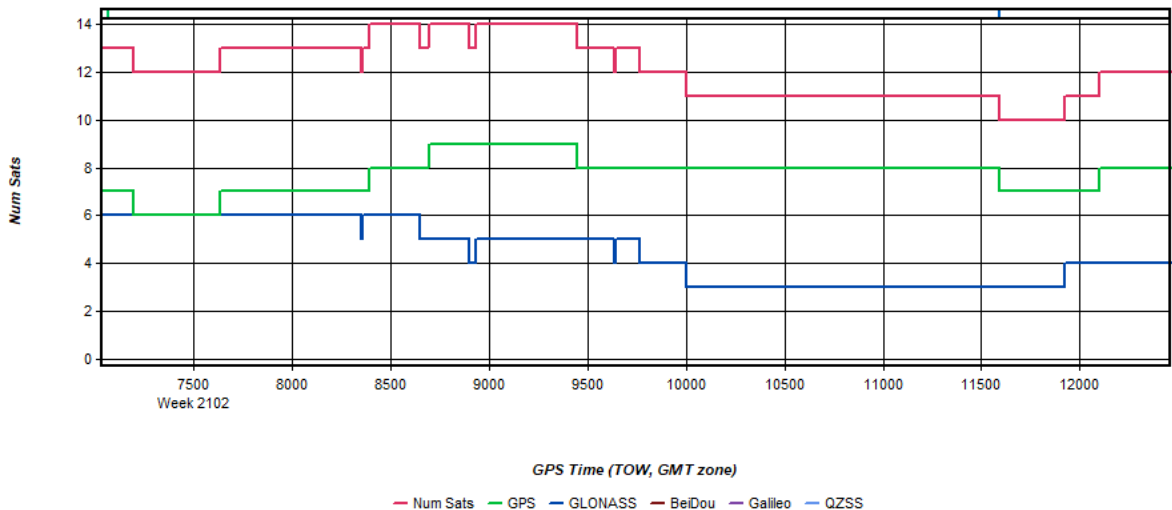
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 6: 20200419015613_20_1 [Smoothed TC Combined] - PDOP Plot



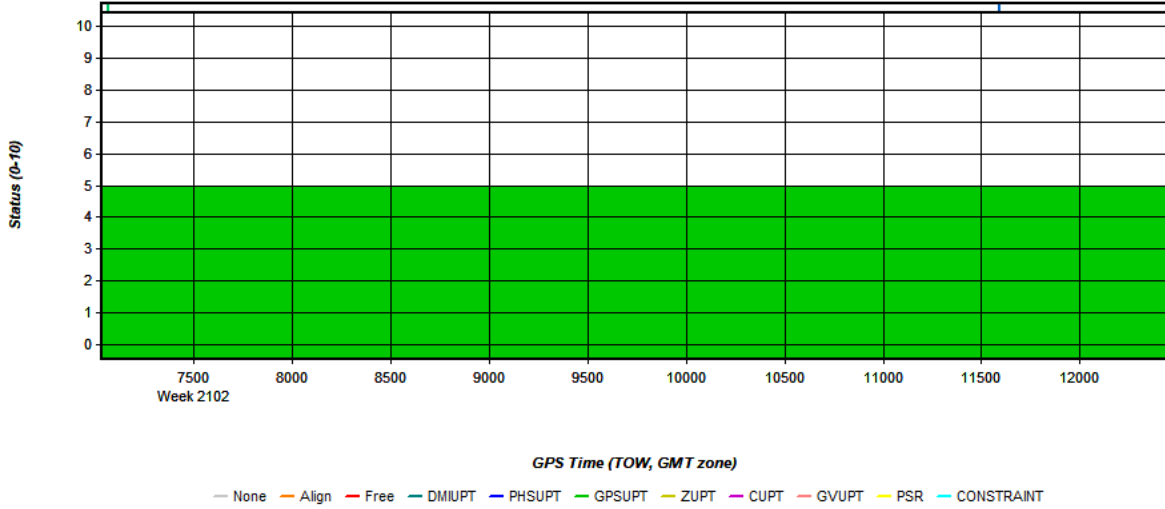
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 7: 20200419015613_20_1 [Smoothed TC Combined] - Number of Satellites Line Plot



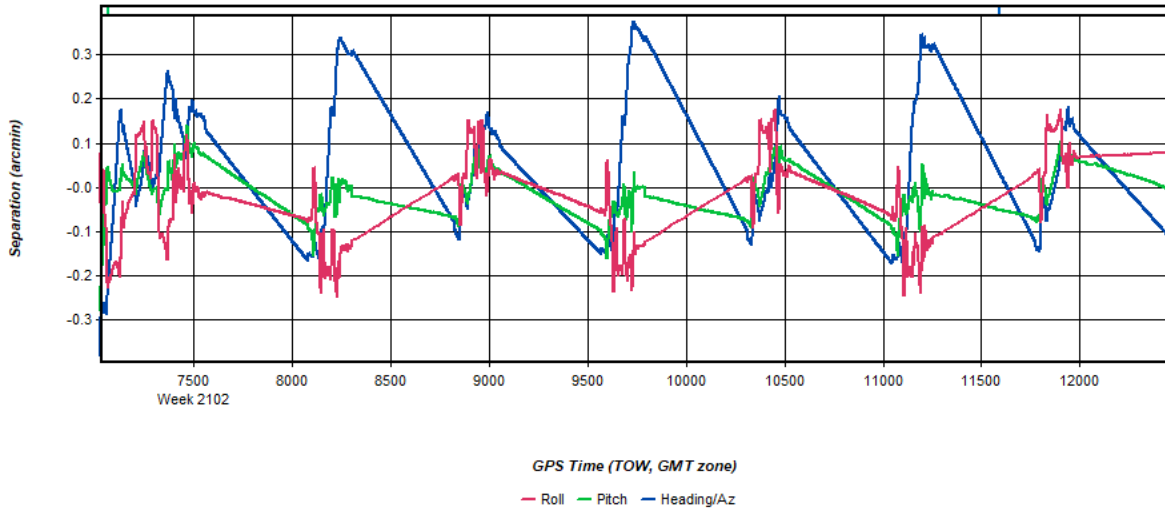
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 8: 20200419015613_20_1 [Smoothed TC Combined] - Status flag for IMU processing



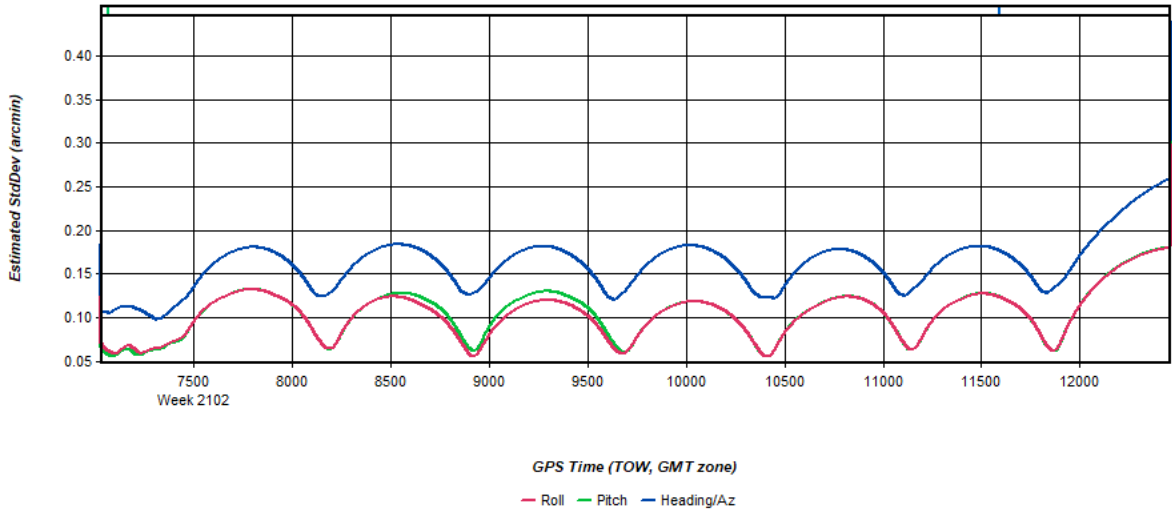
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 9: 20200419015613_20_1 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



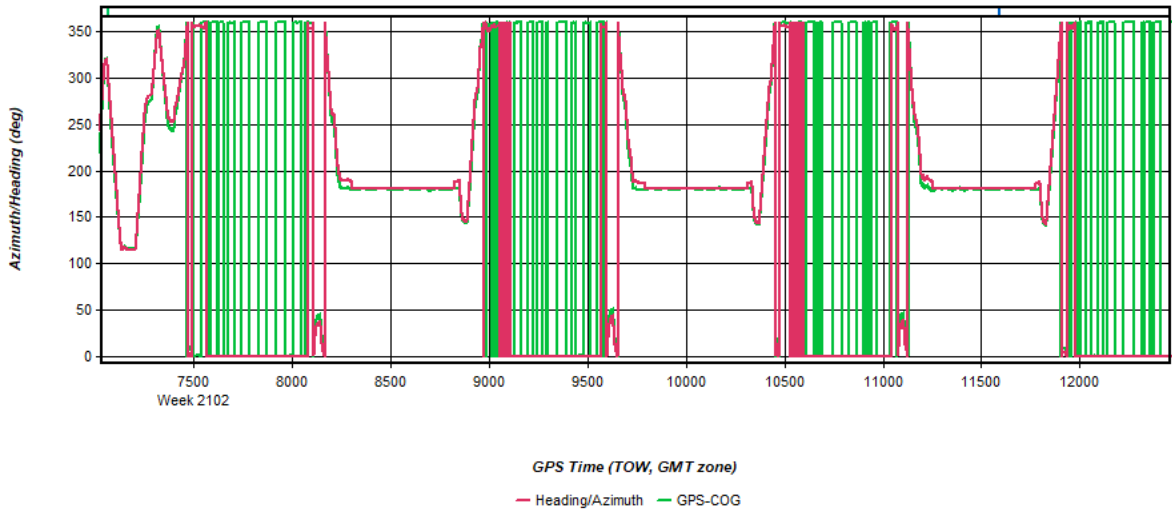
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 10: 20200419015613_20_1 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



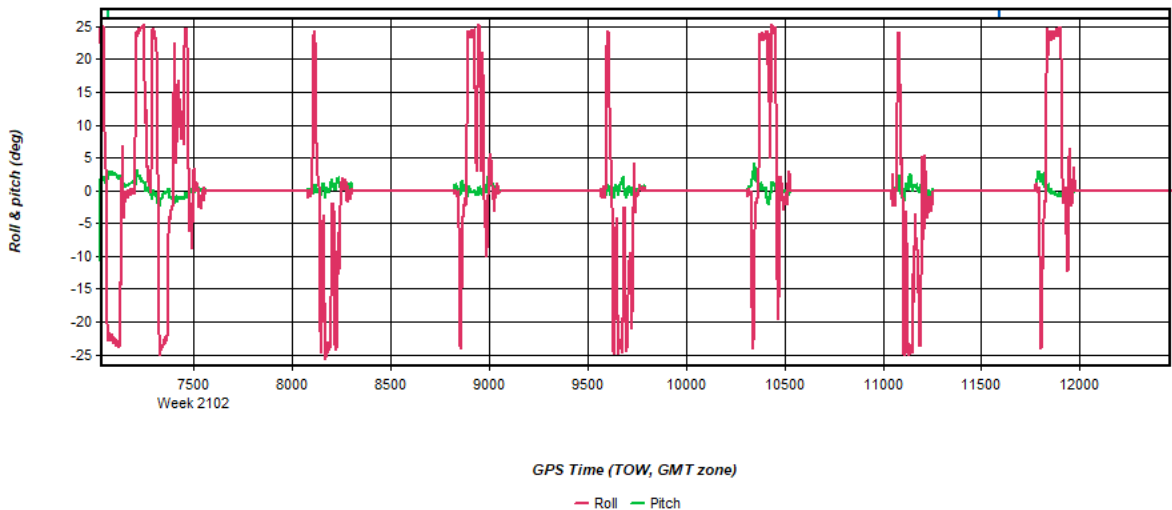
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 11: 20200419015613_20_1 [Smoothed TC Combined] - Azimuth Plot



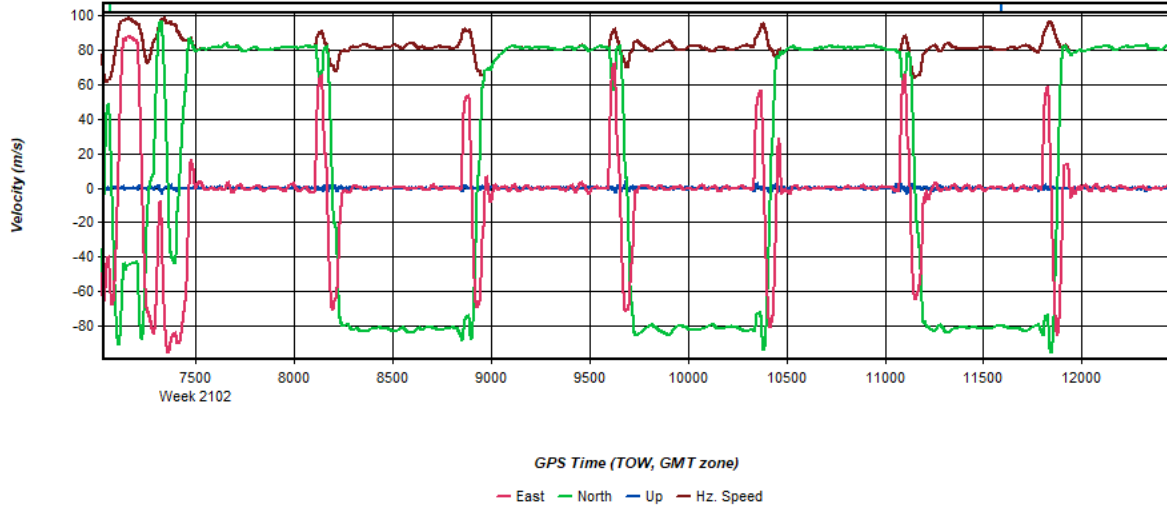
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 12: 20200419015613_20_1 [Smoothed TC Combined] - Roll & Pitch Plot



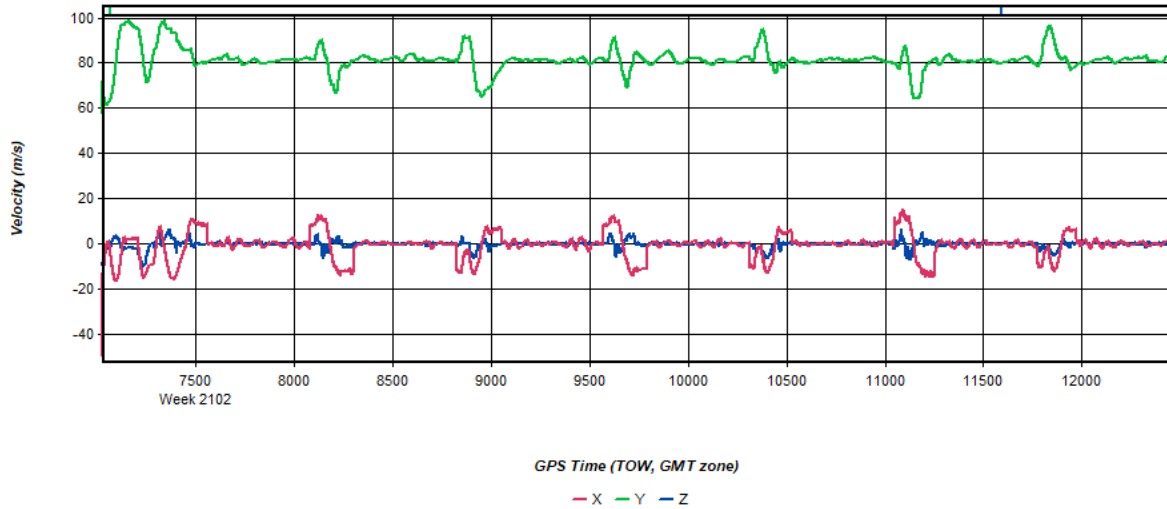
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 13: 20200419015613_20_1 [Smoothed TC Combined] - Velocity Profile Plot



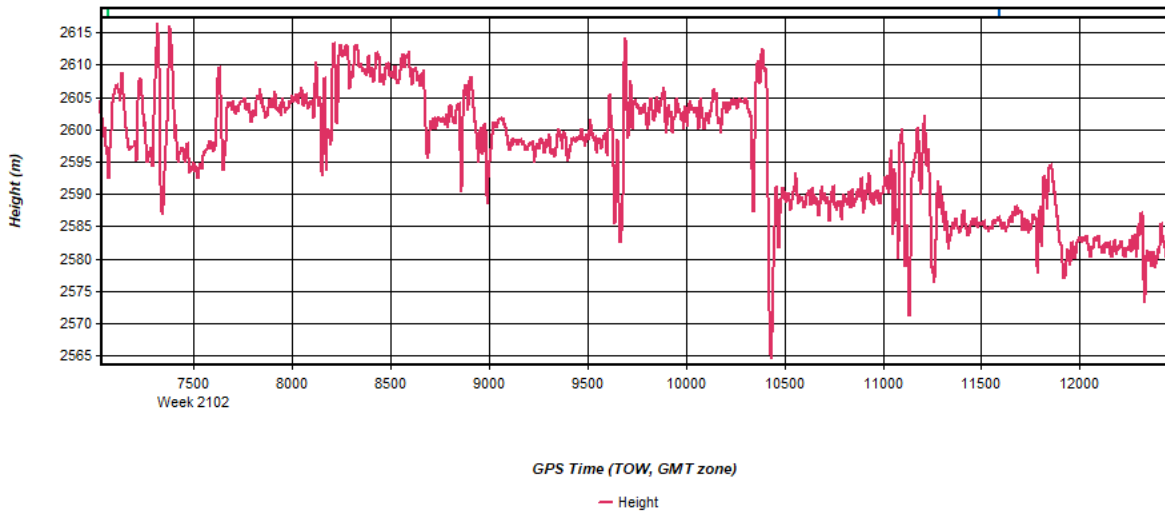
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 14: 20200419015613_20_1 [Smoothed TC Combined] - Body Frame Velocity Plot



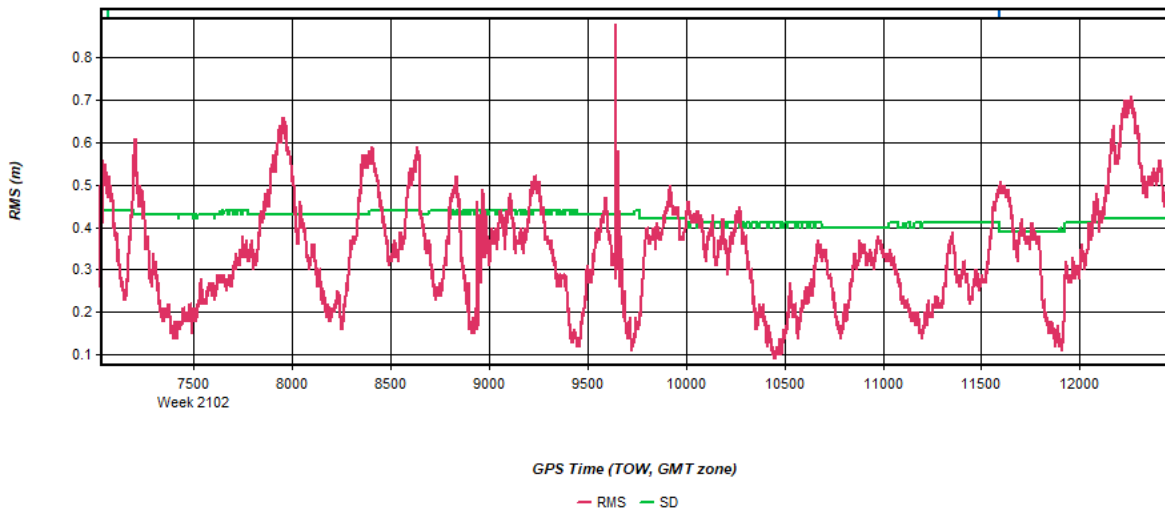
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 15: 20200419015613_20_1 [Smoothed TC Combined] - Height Profile Plot



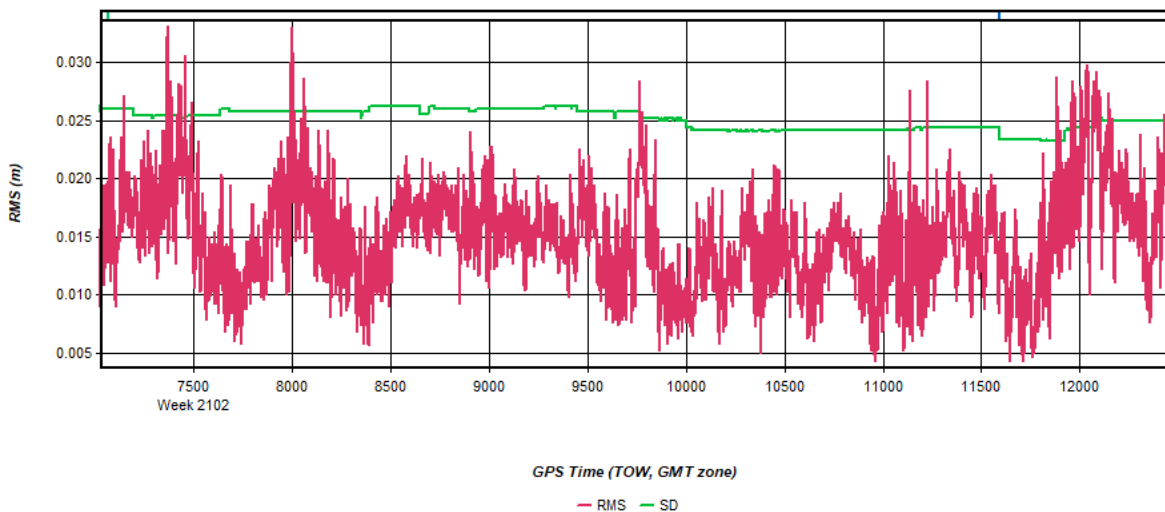
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 16: 20200419015613_20_1 [Smoothed TC Combined] - C/A Code Residual RMS Plot



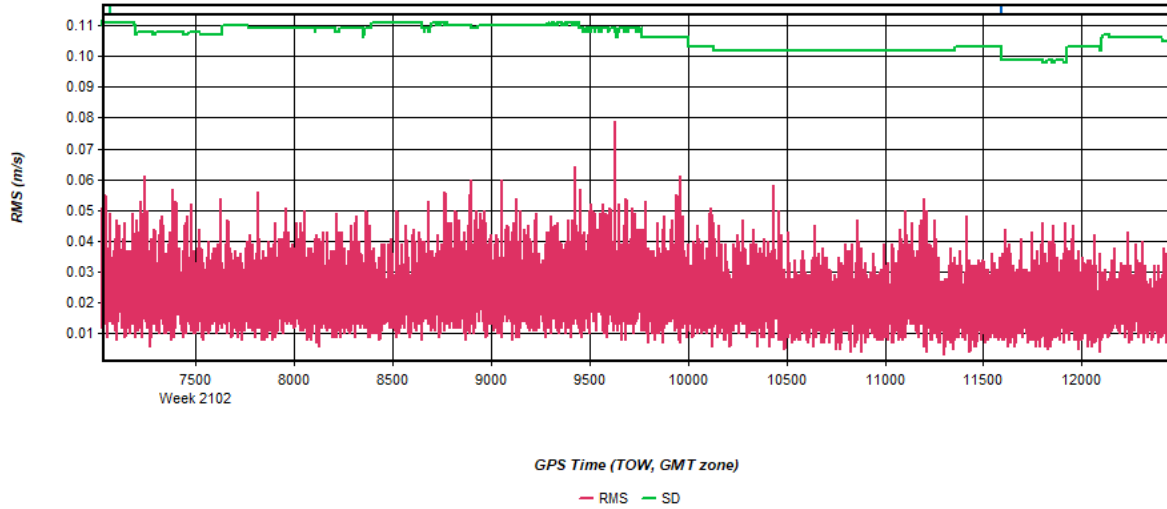
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 17: 20200419015613_20_1 [Smoothed TC Combined] - Carrier Residual RMS Plot



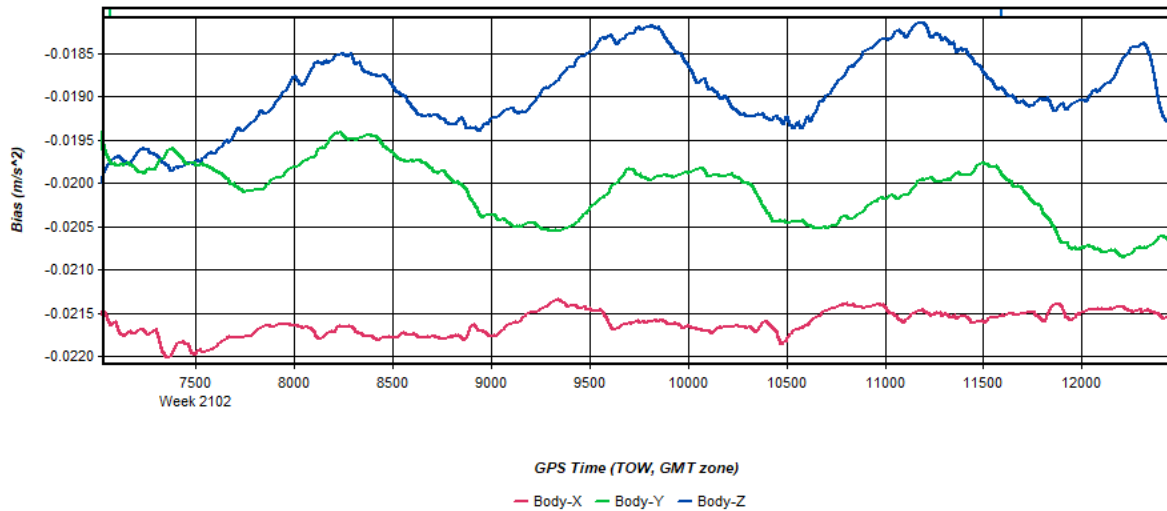
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 18: 20200419015613_20_1 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



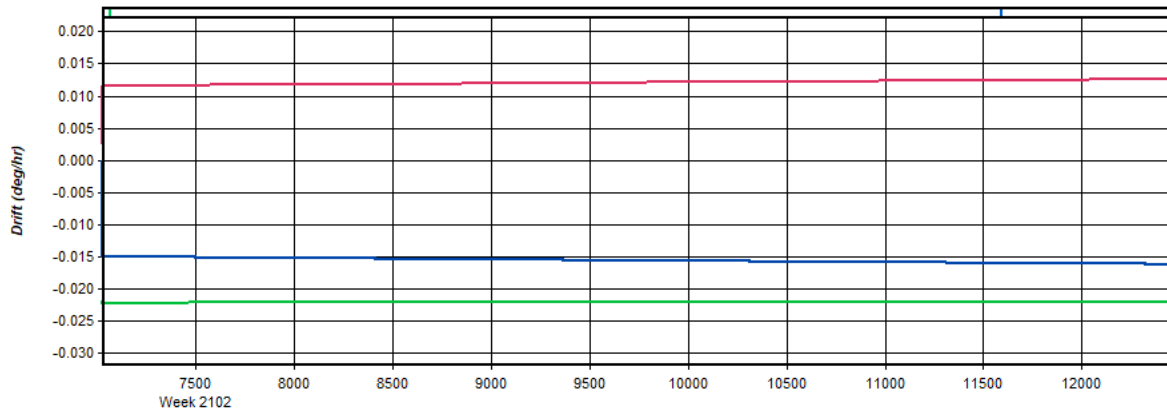
Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 19: 20200419015613_20_1 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Figure 20: 20200419015613_20_1 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

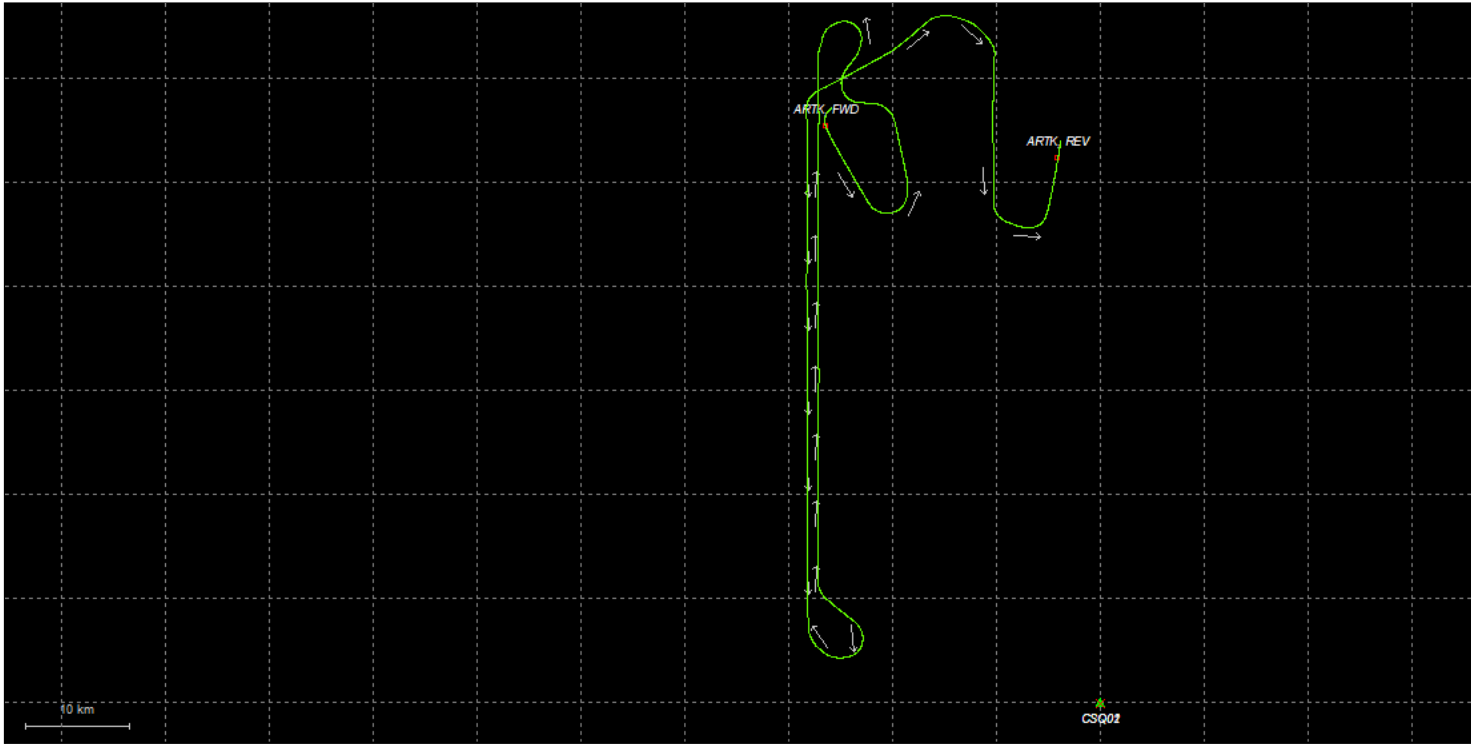
— Body-X — Body-Y — Body-Z

Process	20200419015613_20_1	by Unknown	on 6/8/2020	at 14:11:57
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Output Results for 20200419033011_20_2

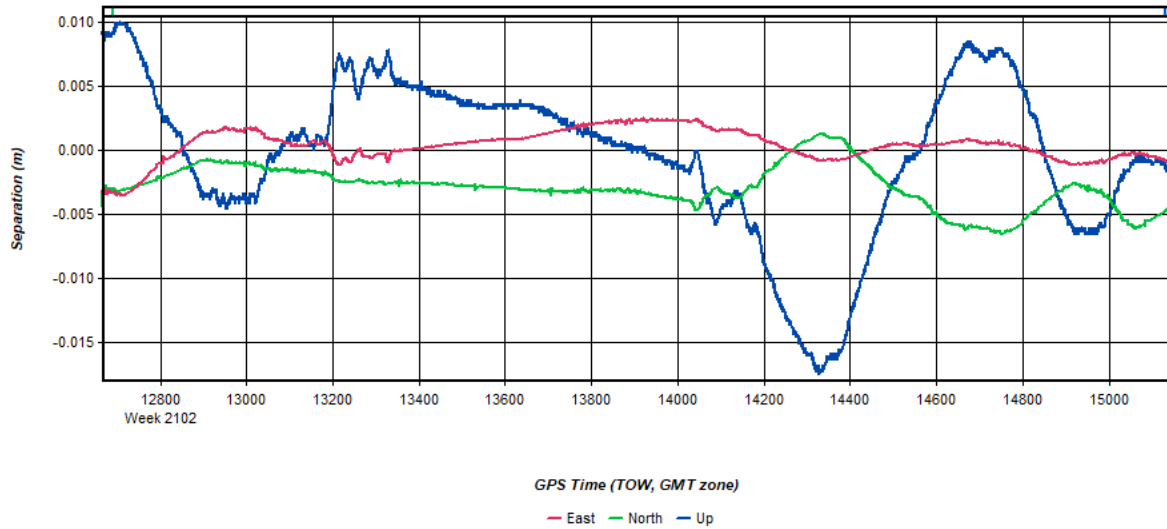
Inertial Explorer Version 8.90.2124
06/10/2020

Figure 1: Smoothed TC Combined - Map



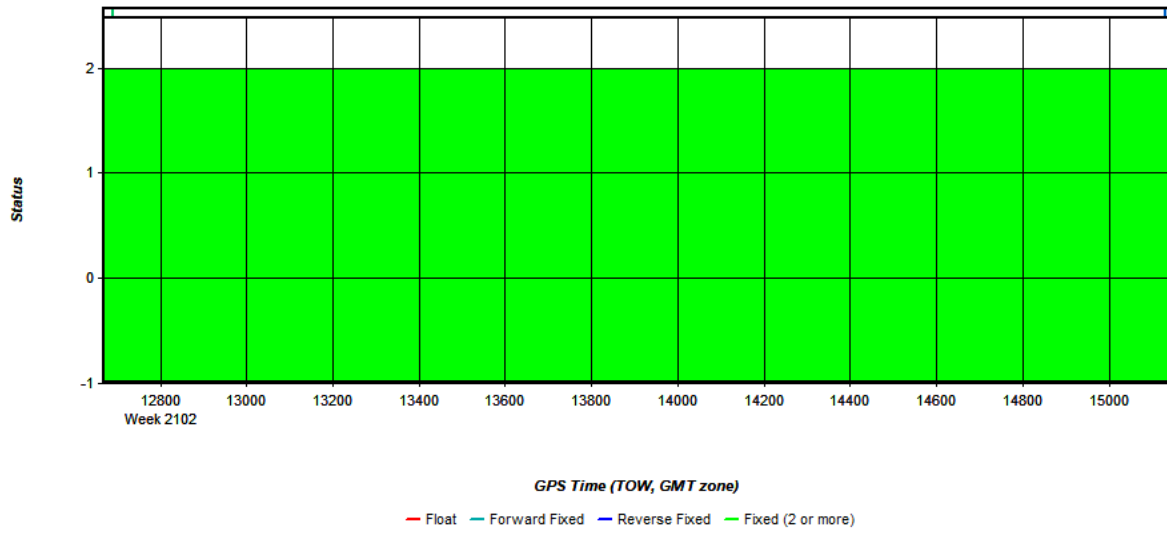
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 2: 20200419033011_20_2 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



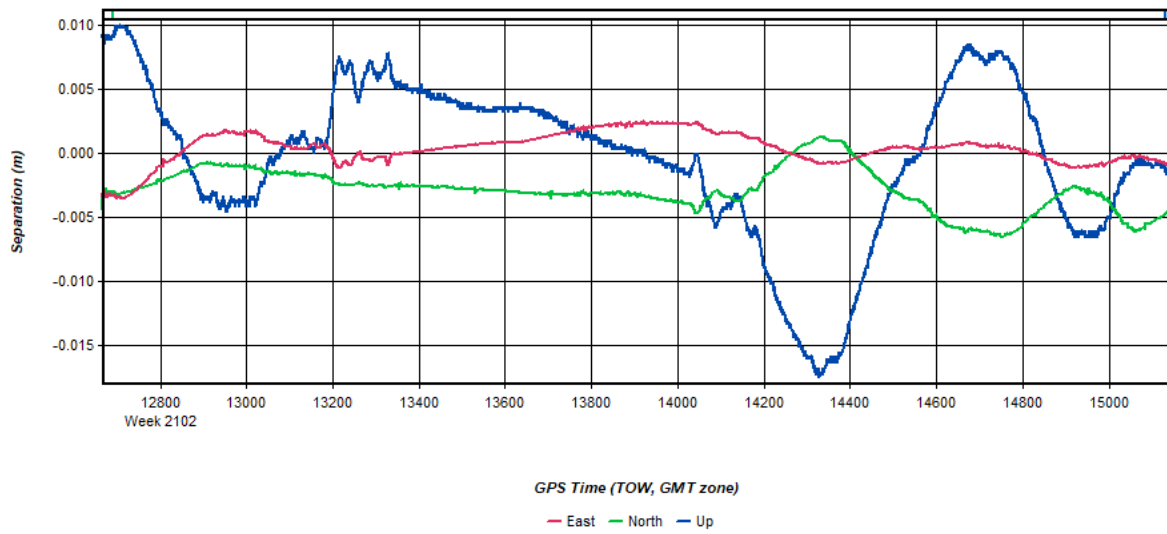
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 3: 20200419033011_20_2 [Smoothed TC Combined] - Float or Fixed Ambiguity



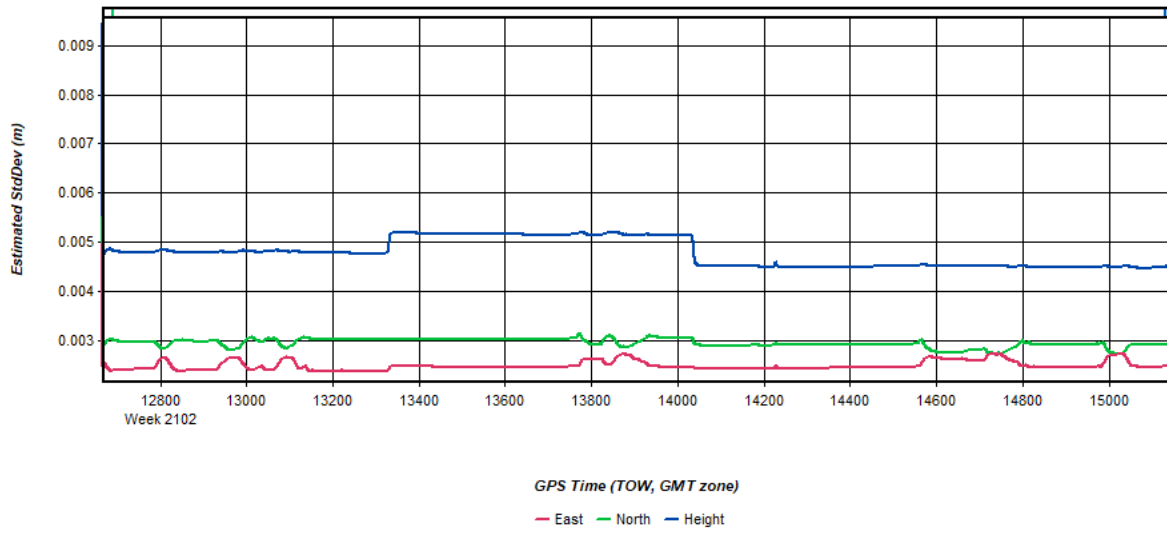
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 4: 20200419033011_20_2 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



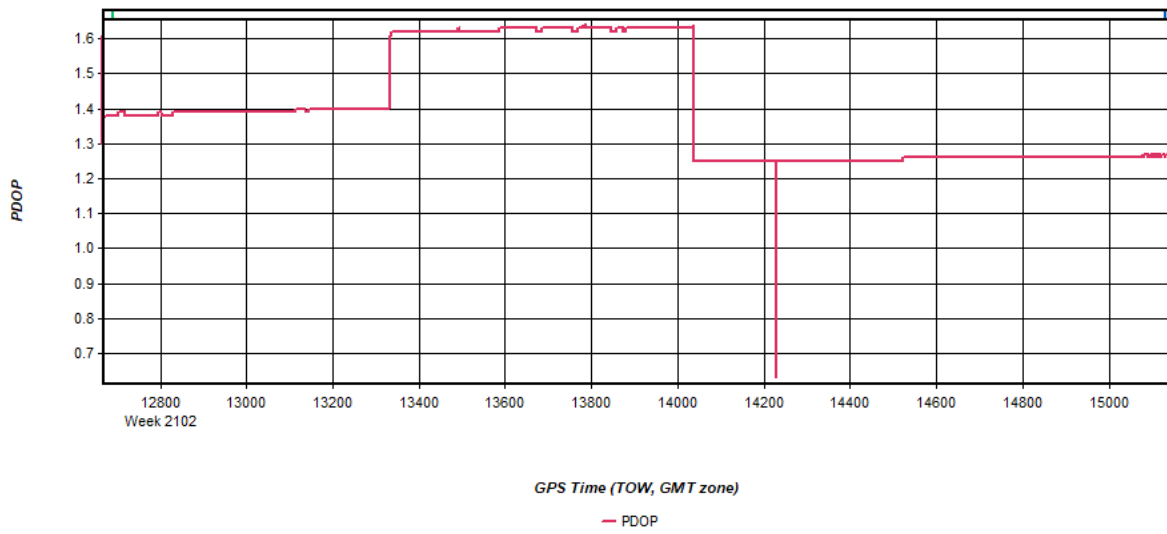
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 5: 20200419033011_20_2 [Smoothed TC Combined] - Estimated Position Accuracy Plot



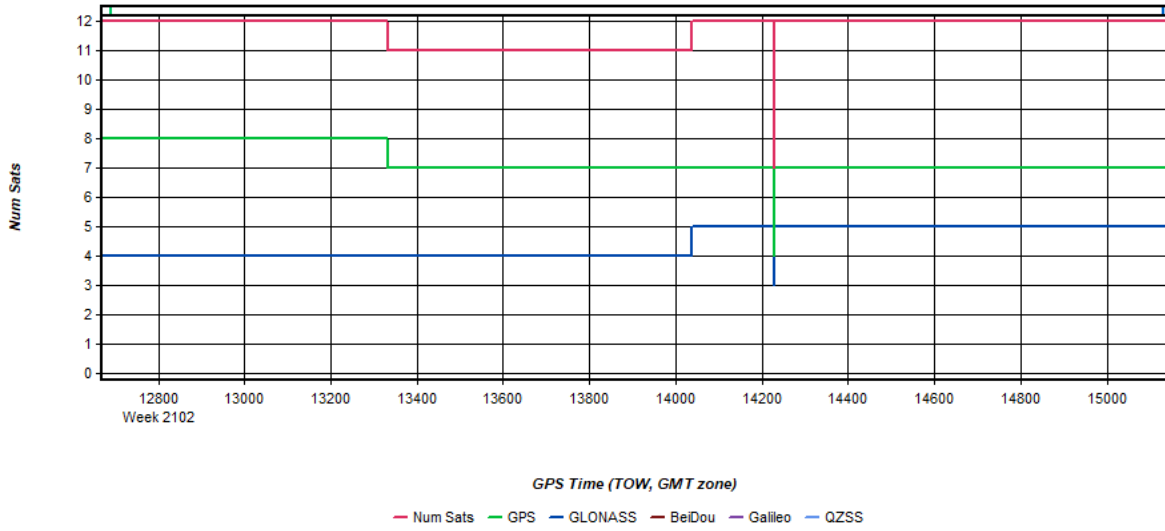
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 6: 20200419033011_20_2 [Smoothed TC Combined] - PDOP Plot



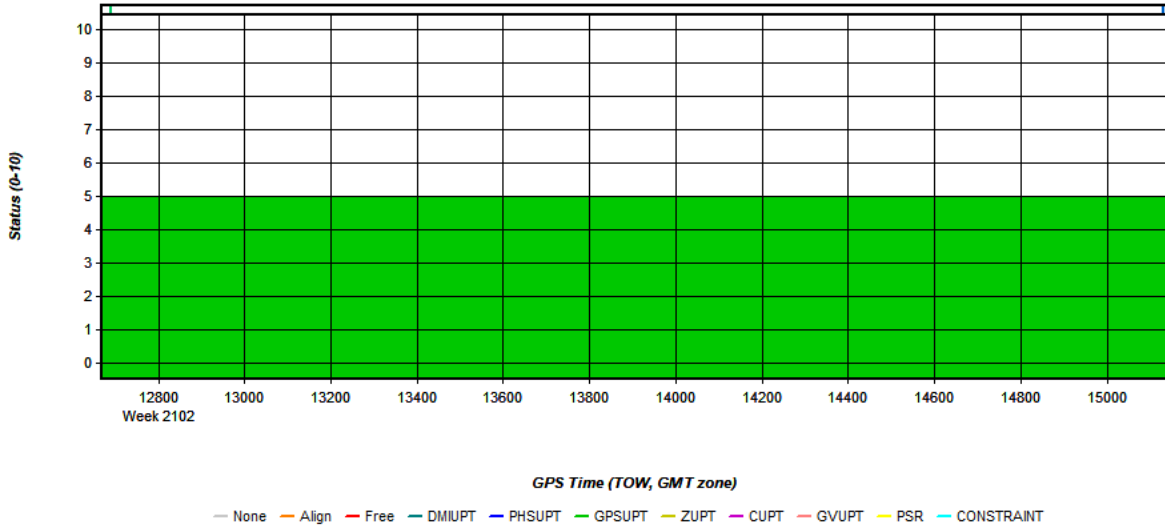
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 7: 20200419033011_20_2 [Smoothed TC Combined] - Number of Satellites Line Plot



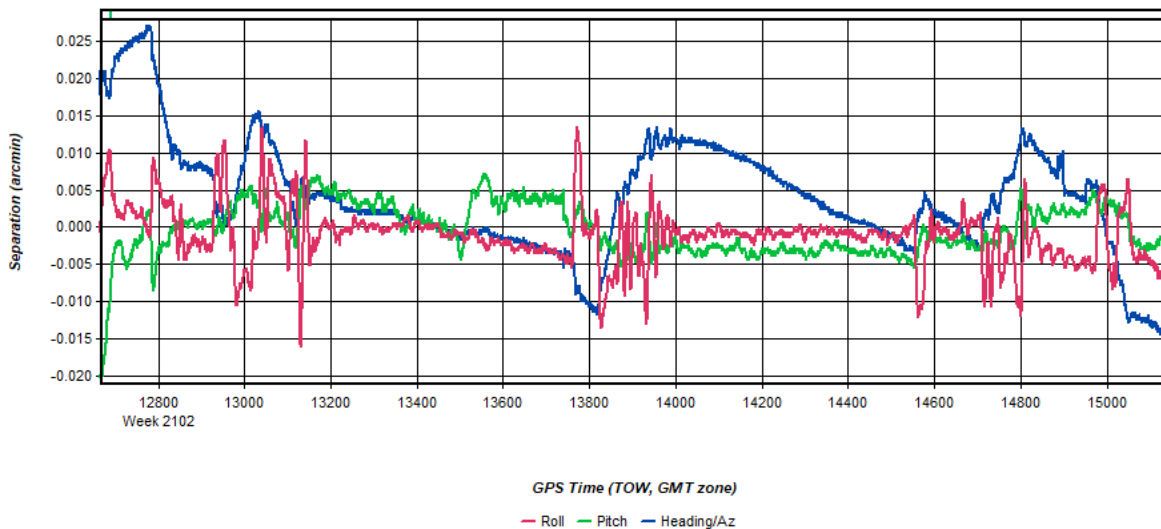
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 8: 20200419033011_20_2 [Smoothed TC Combined] - Status flag for IMU processing



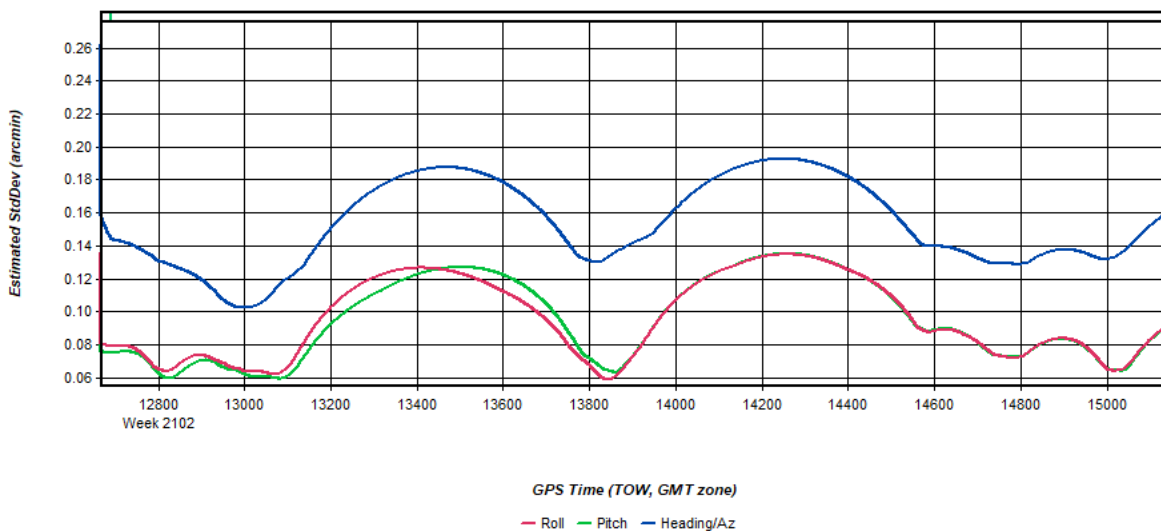
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 9: 20200419033011_20_2 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



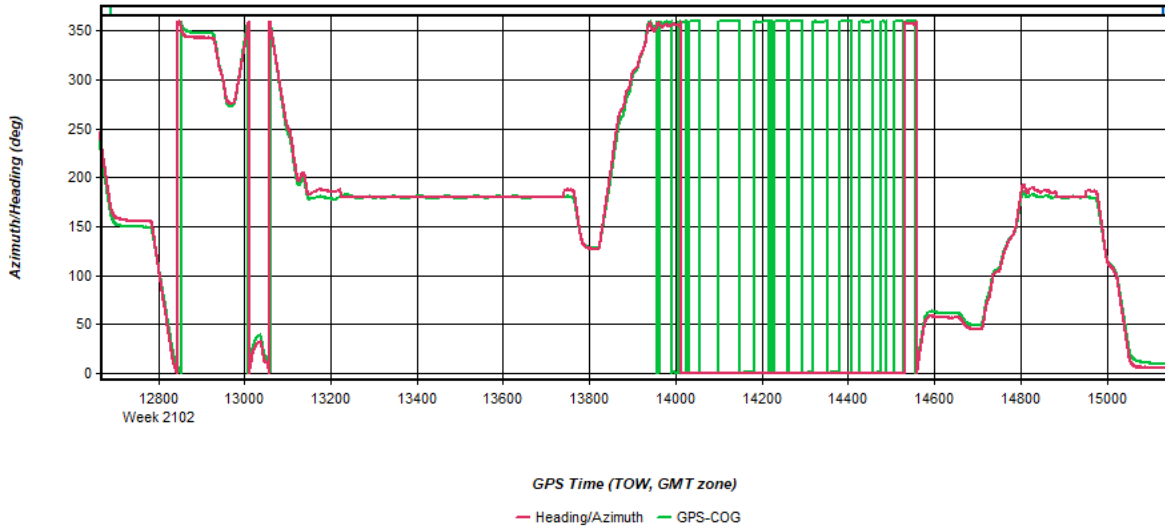
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 10: 20200419033011_20_2 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



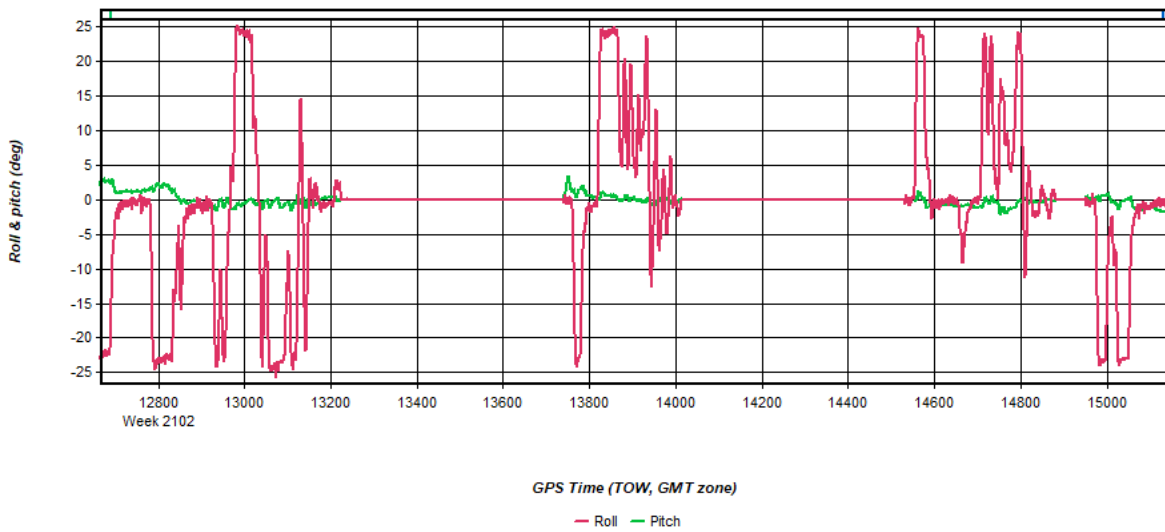
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 11: 20200419033011_20_2 [Smoothed TC Combined] - Azimuth Plot



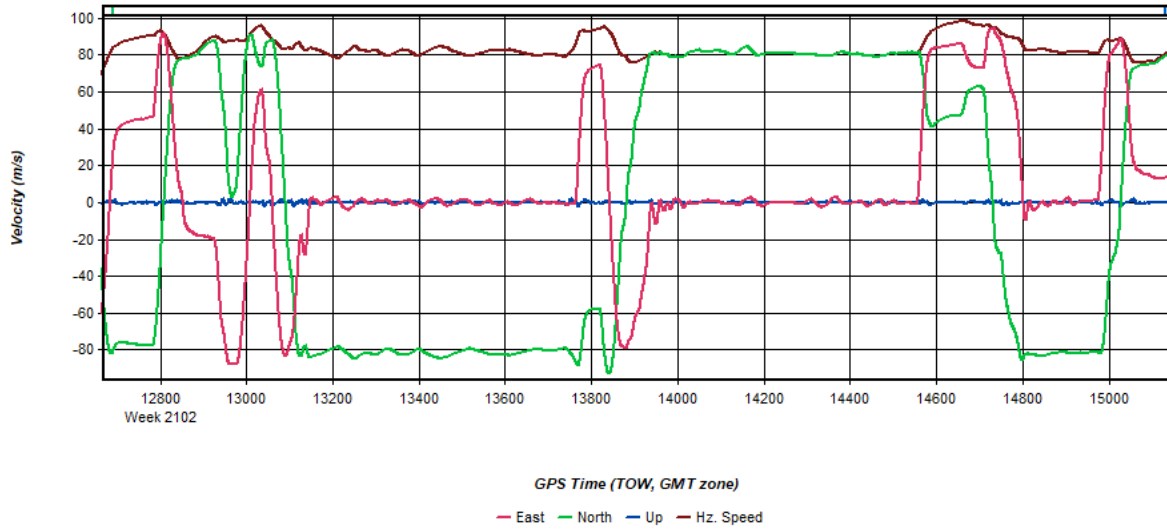
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 12: 20200419033011_20_2 [Smoothed TC Combined] - Roll & Pitch Plot



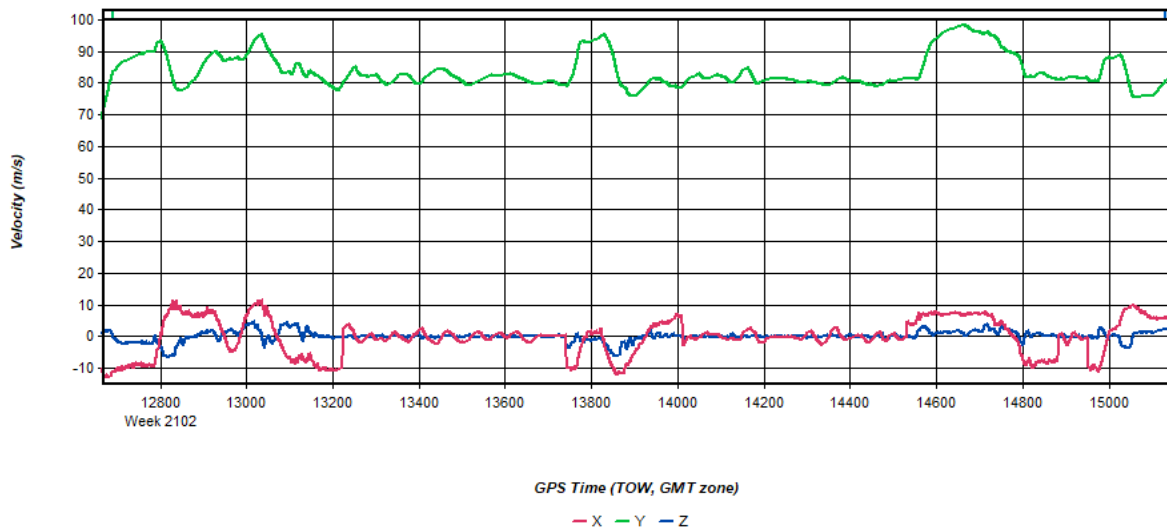
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 13: 20200419033011_20_2 [Smoothed TC Combined] - Velocity Profile Plot



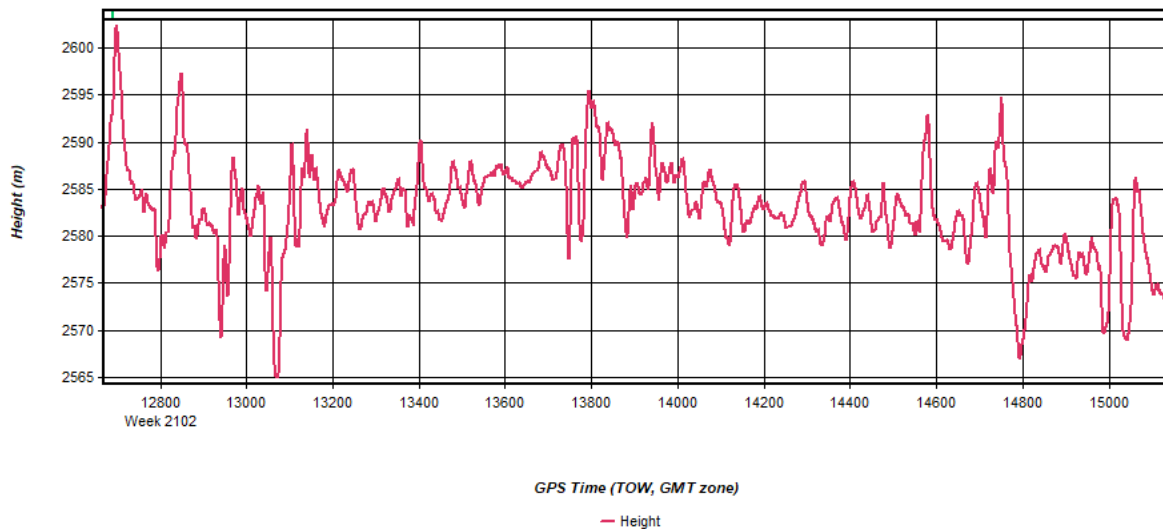
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 14: 20200419033011_20_2 [Smoothed TC Combined] - Body Frame Velocity Plot



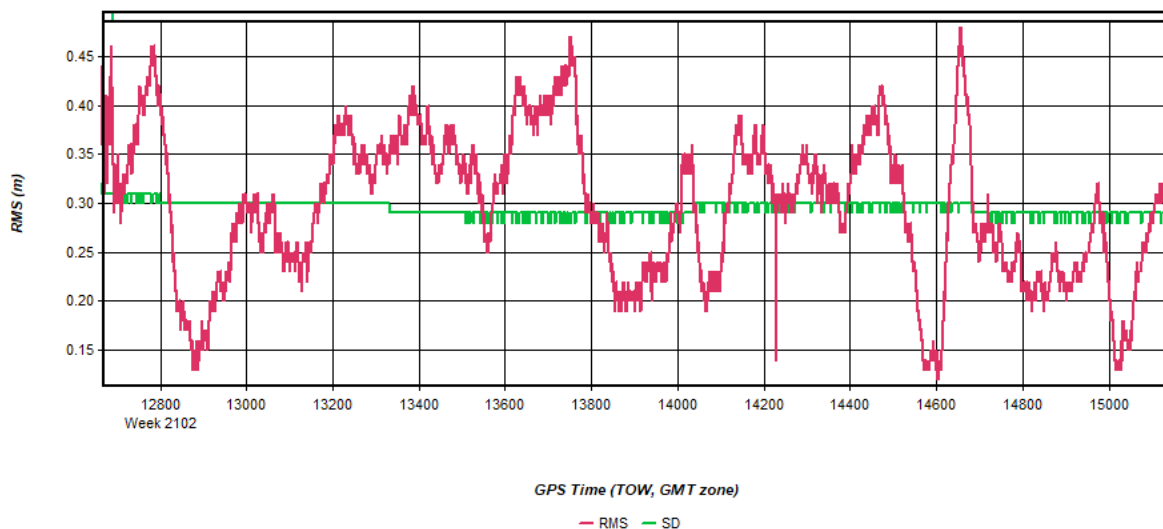
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 15: 20200419033011_20_2 [Smoothed TC Combined] - Height Profile Plot



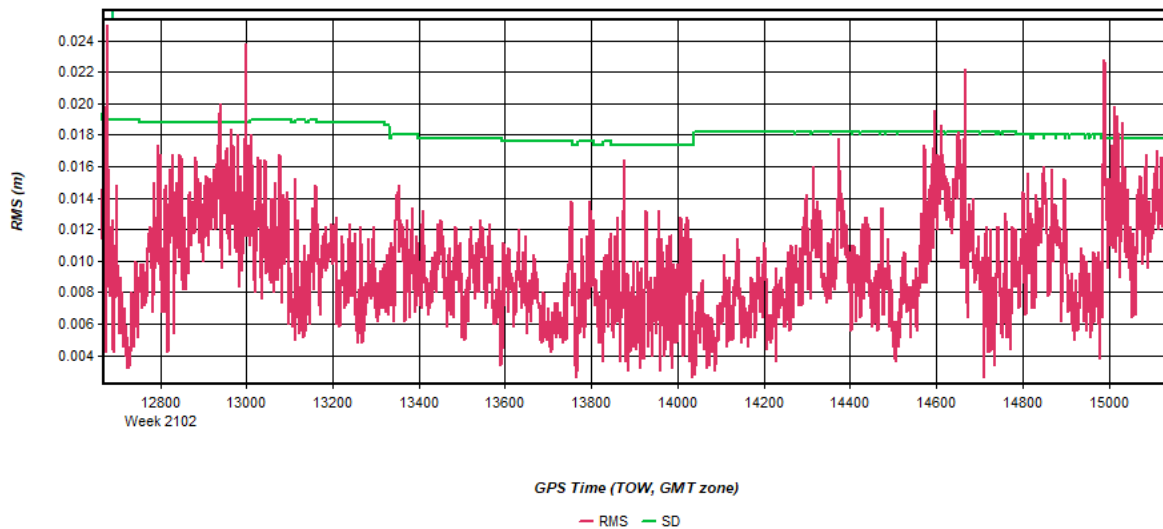
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 16: 20200419033011_20_2 [Smoothed TC Combined] - C/A Code Residual RMS Plot



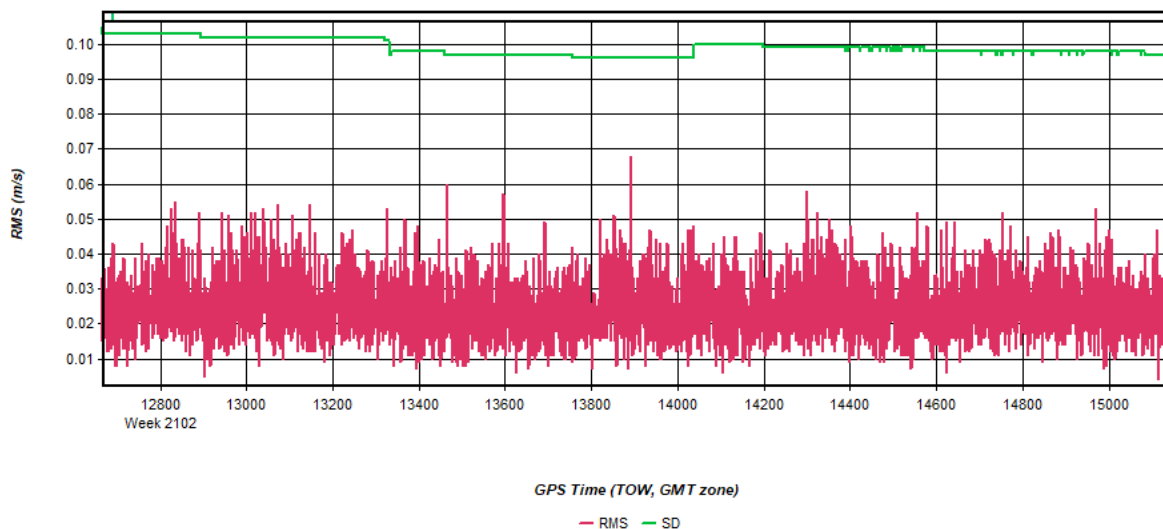
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 17: 20200419033011_20_2 [Smoothed TC Combined] - Carrier Residual RMS Plot



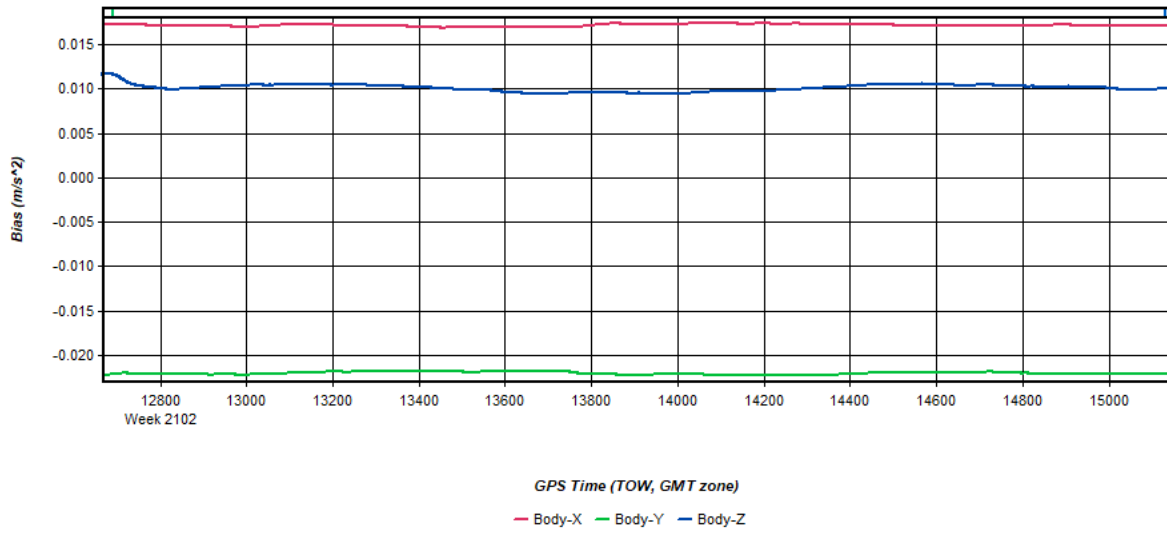
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 18: 20200419033011_20_2 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



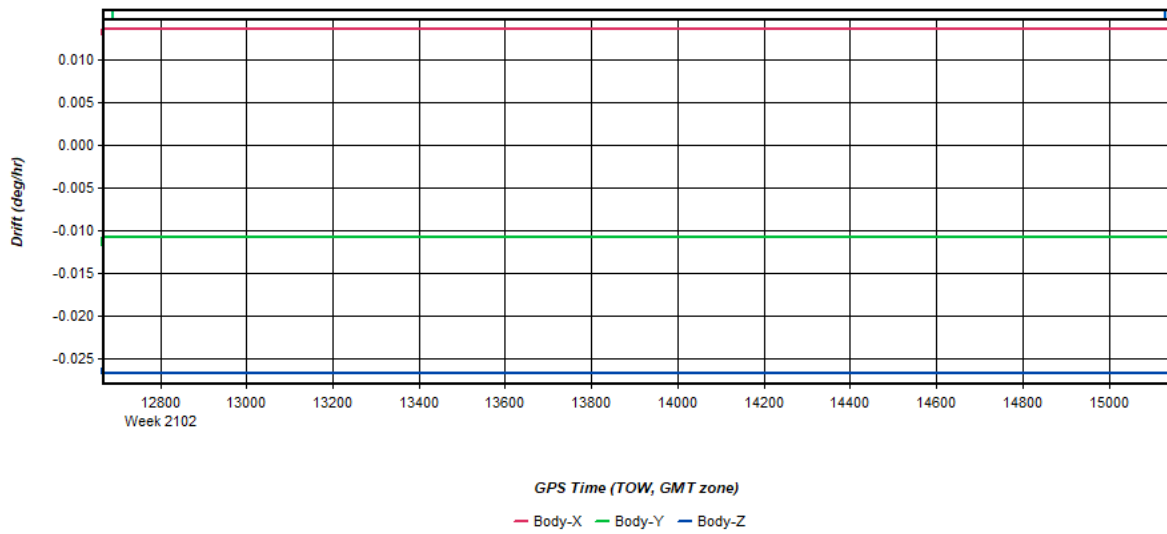
Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 19: 20200419033011_20_2 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Figure 20: 20200419033011_20_2 [Smoothed TC Combined] - Gyro Drift Plot

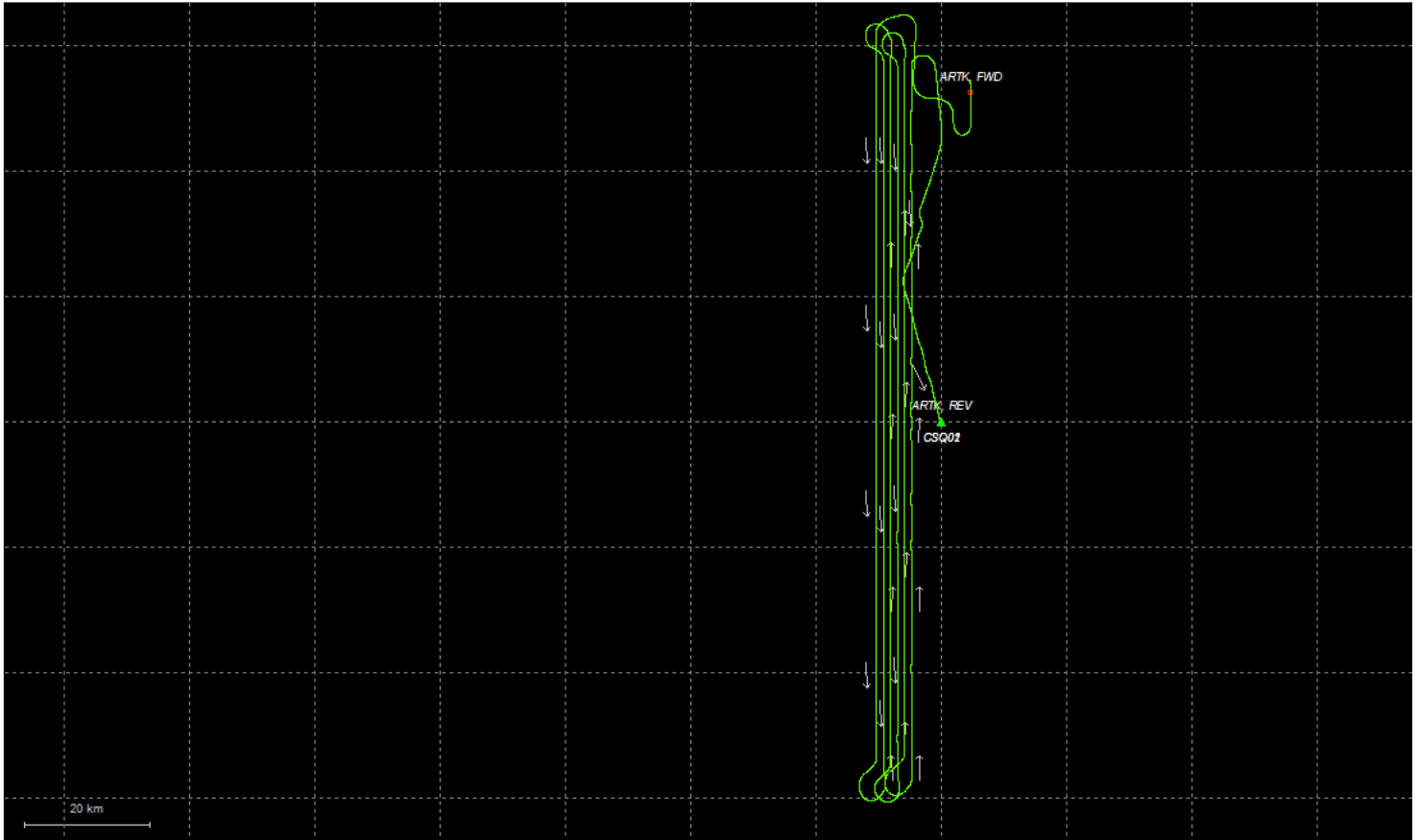


Process	20200419033011_20_2	by Unknown	on 6/10/2020	at 16:44:27
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Output Results for 20200419041514_20_3

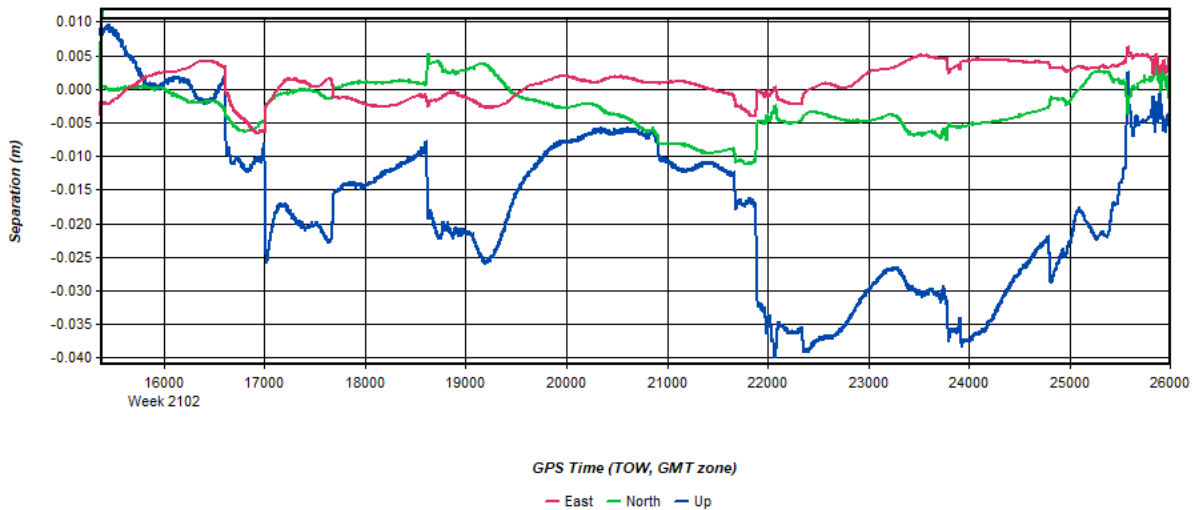
Inertial Explorer Version 8.90.2124
06/08/2020

Figure 1: Smoothed TC Combined - Map



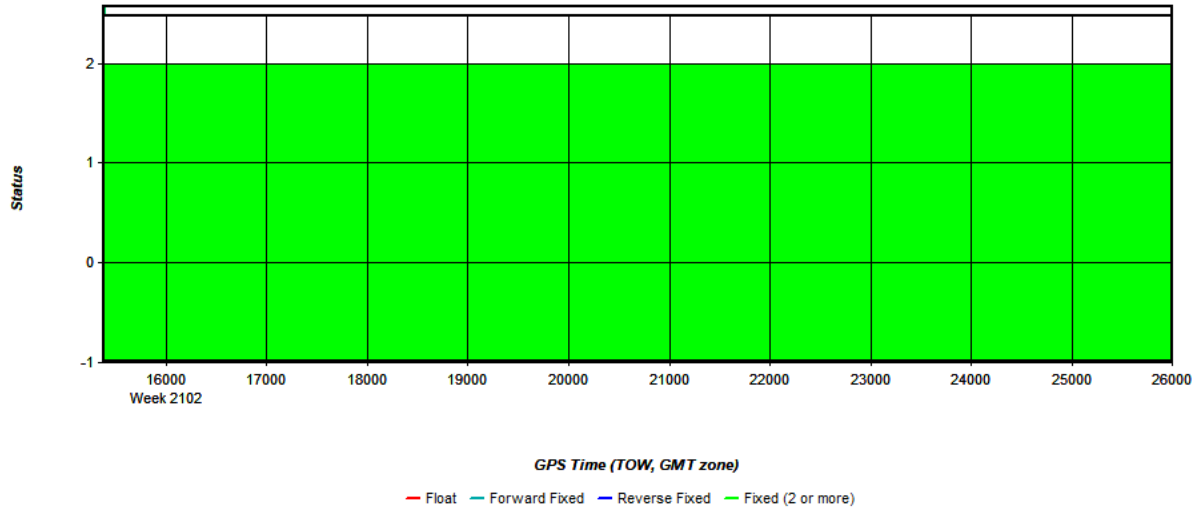
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 2: 20200419041514_20_3 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



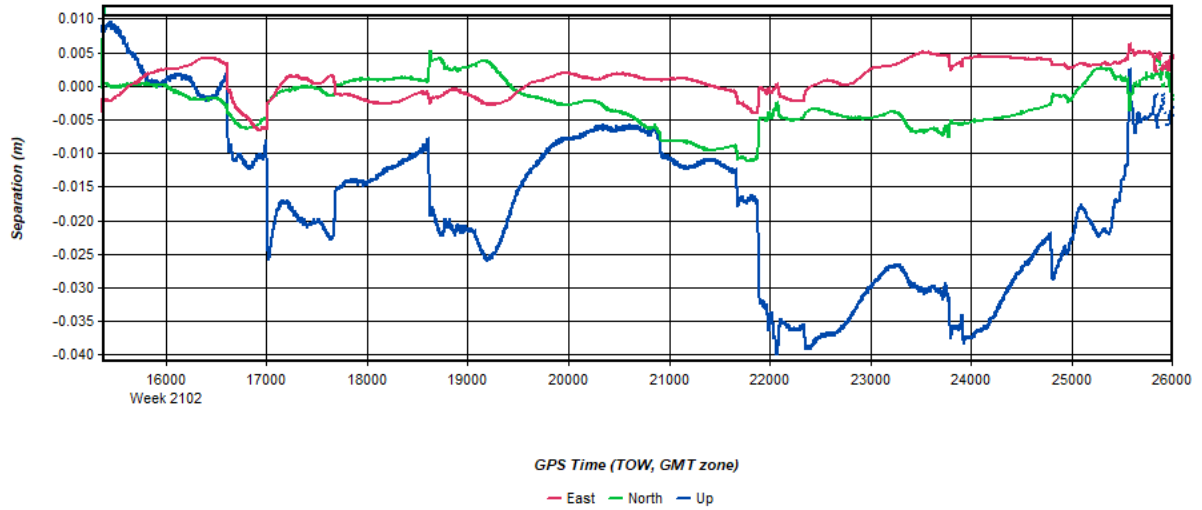
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 3: 20200419041514_20_3 [Smoothed TC Combined] - Float or Fixed Ambiguity



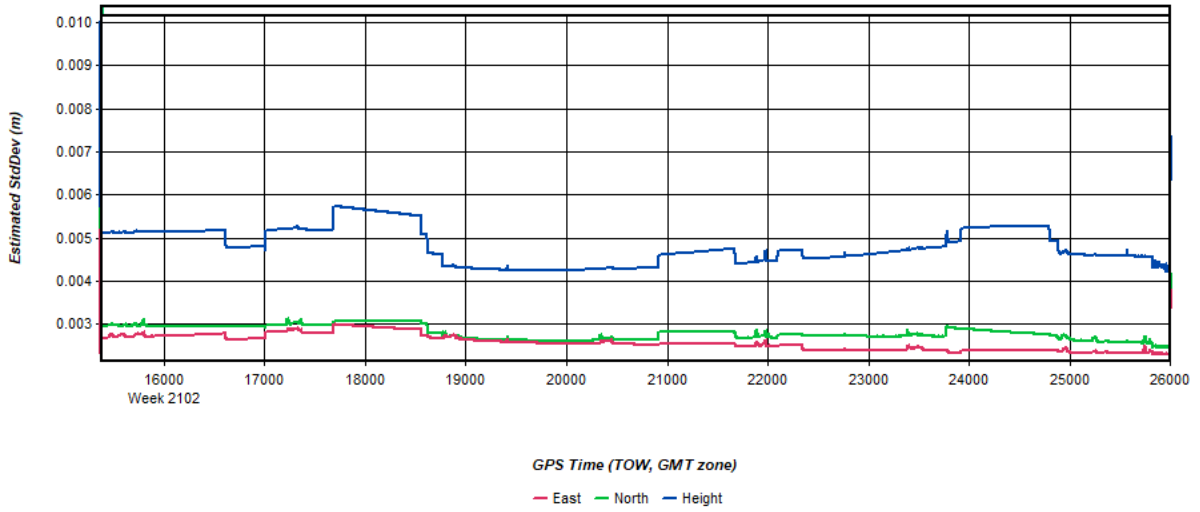
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 4: 20200419041514_20_3 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



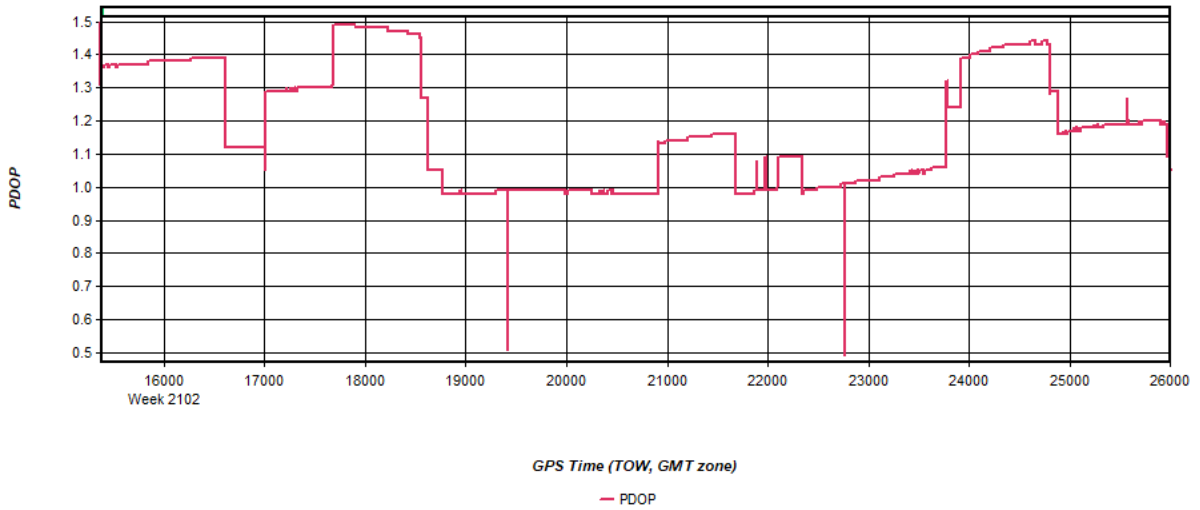
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 5: 20200419041514_20_3 [Smoothed TC Combined] - Estimated Position Accuracy Plot



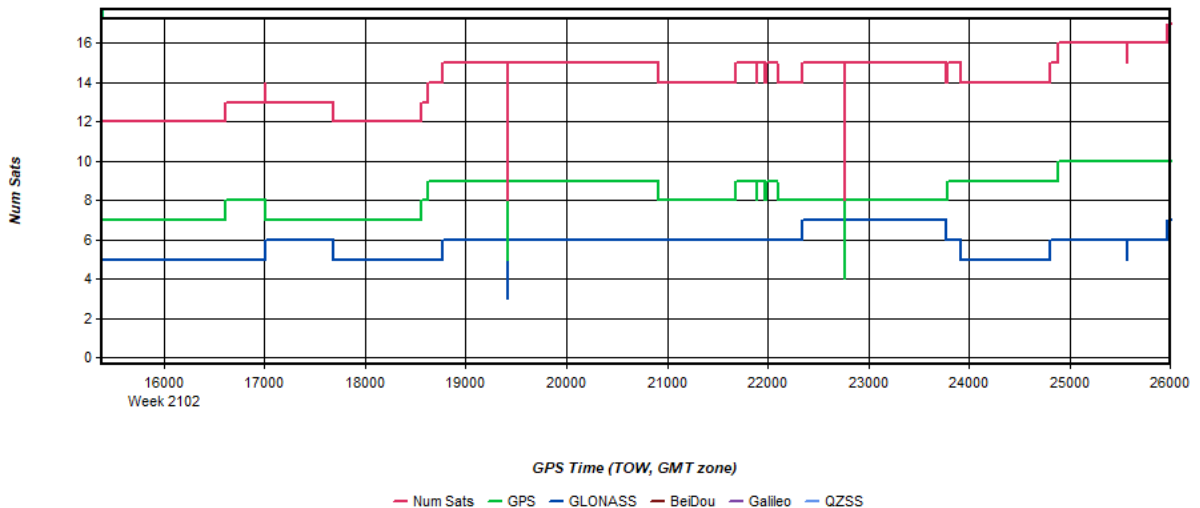
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 6: 20200419041514_20_3 [Smoothed TC Combined] - PDOP Plot



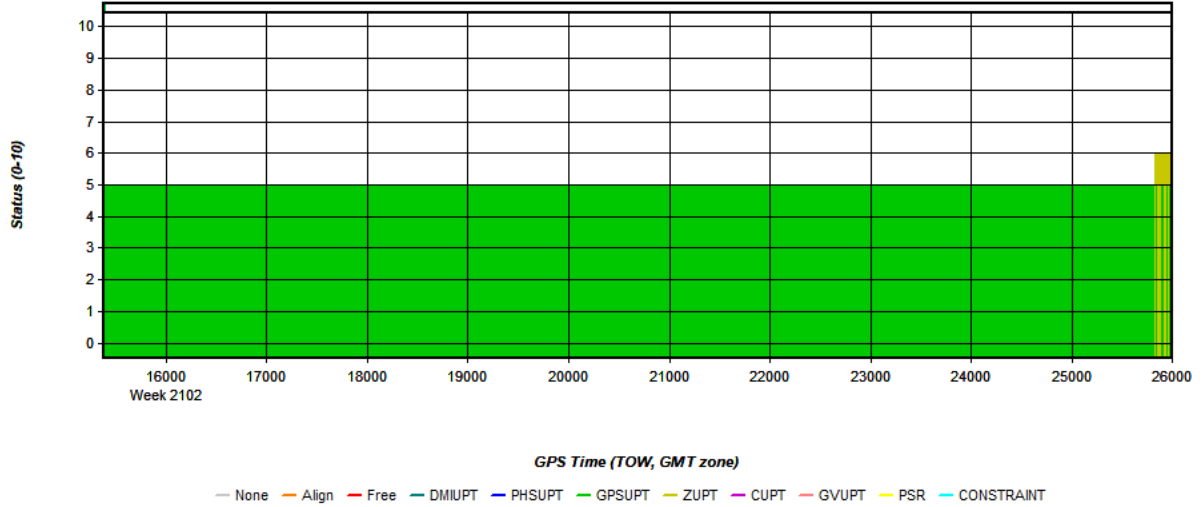
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 7: 20200419041514_20_3 [Smoothed TC Combined] - Number of Satellites Line Plot



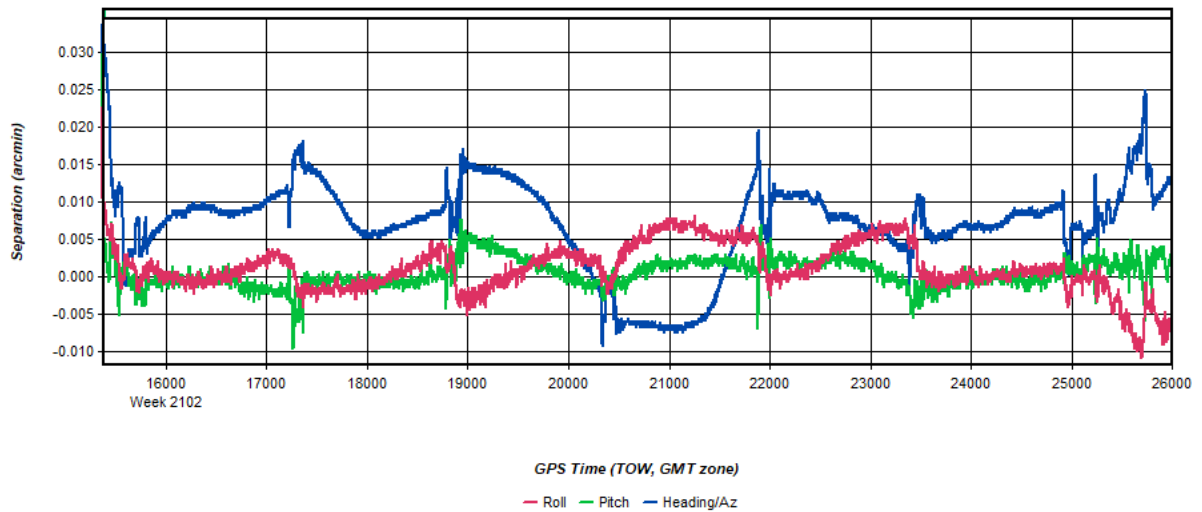
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 8: 20200419041514_20_3 [Smoothed TC Combined] - Status flag for IMU processing



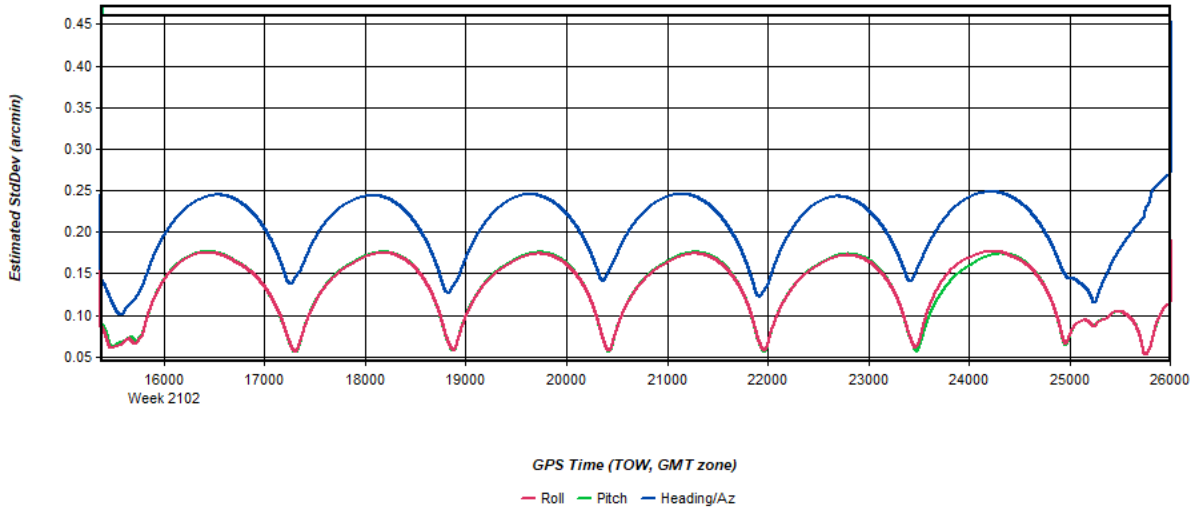
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 9: 20200419041514_20_3 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



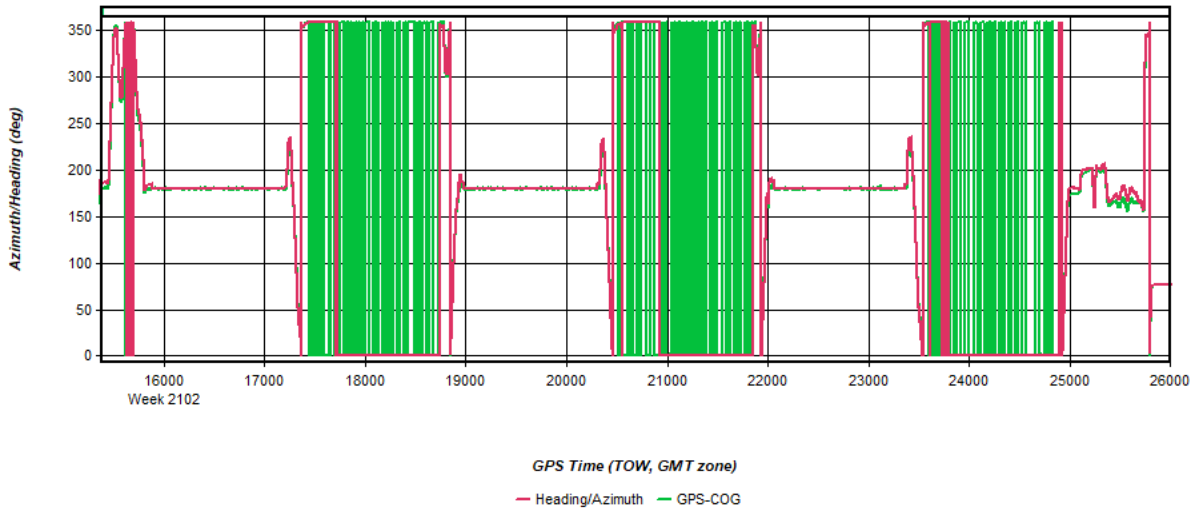
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 10: 20200419041514_20_3 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



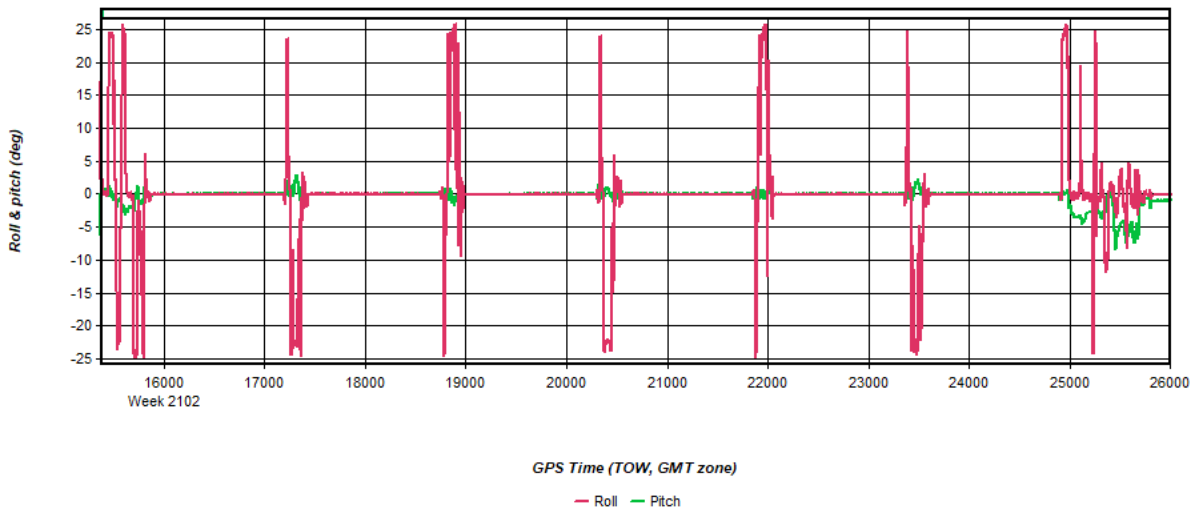
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 11: 20200419041514_20_3 [Smoothed TC Combined] - Azimuth Plot



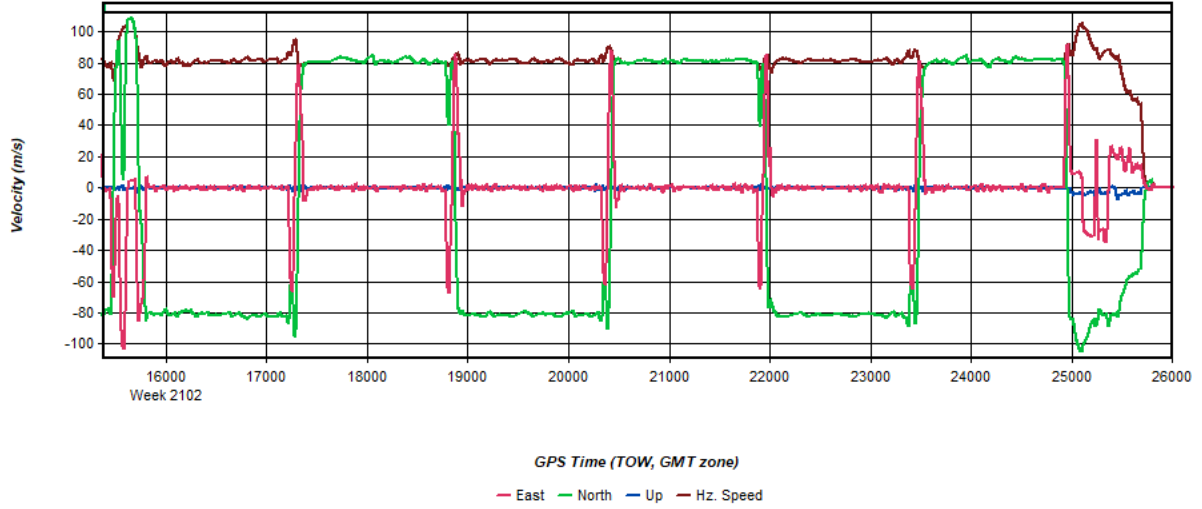
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 12: 20200419041514_20_3 [Smoothed TC Combined] - Roll & Pitch Plot



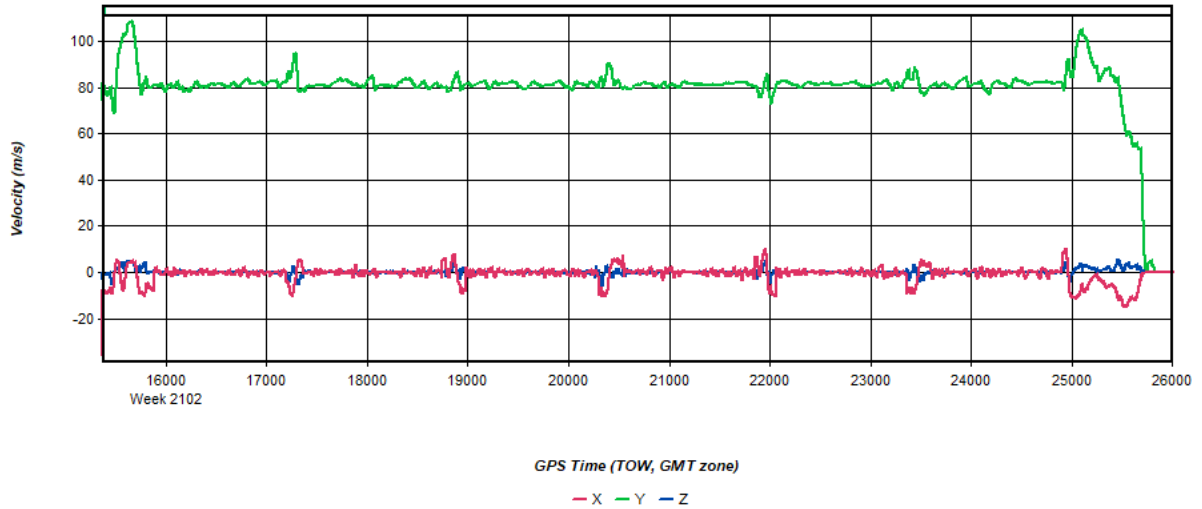
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 13: 20200419041514_20_3 [Smoothed TC Combined] - Velocity Profile Plot



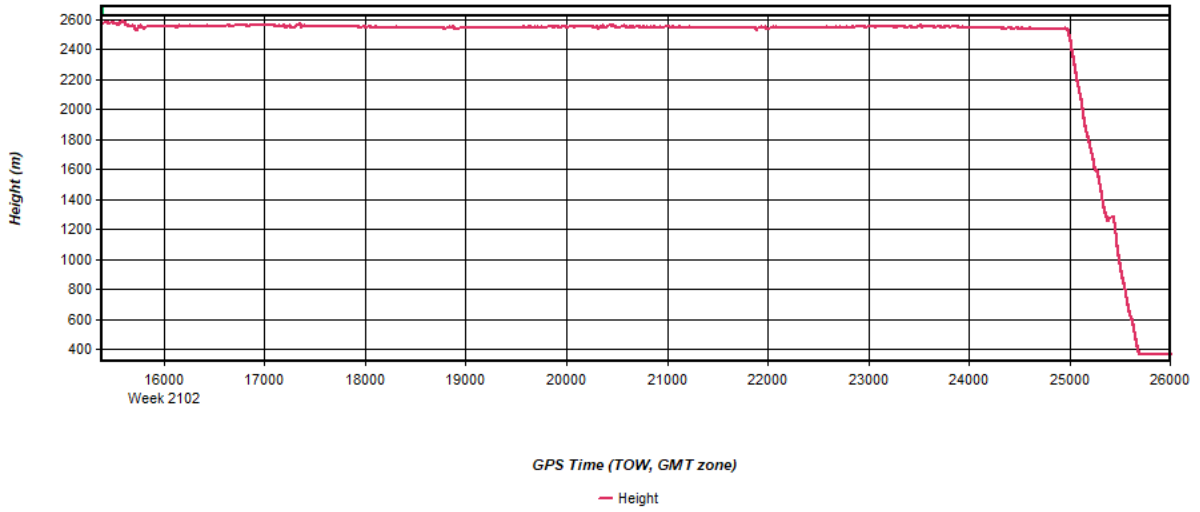
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 14: 20200419041514_20_3 [Smoothed TC Combined] - Body Frame Velocity Plot



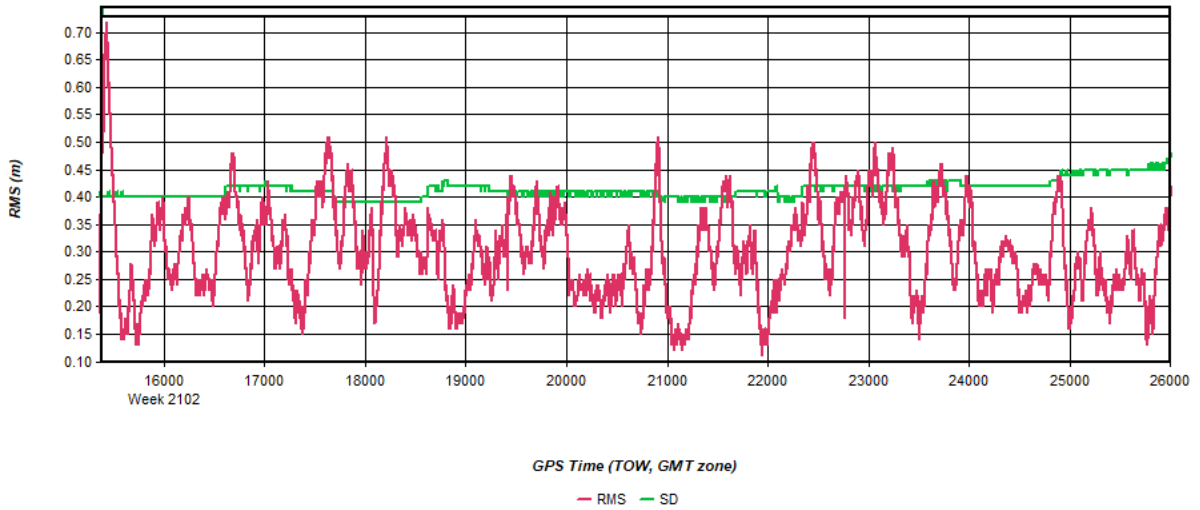
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 15: 20200419041514_20_3 [Smoothed TC Combined] - Height Profile Plot



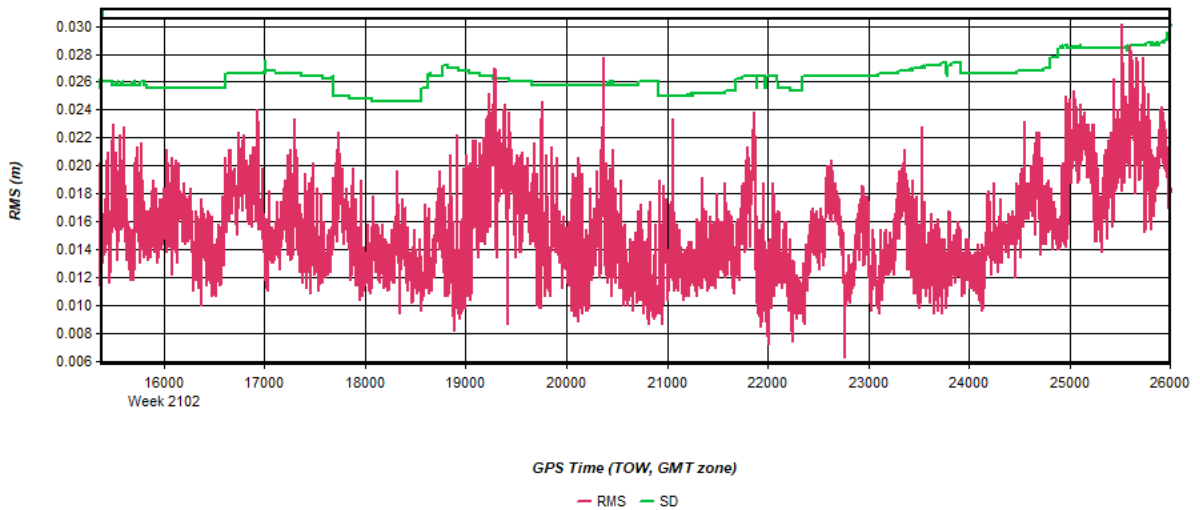
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 16: 20200419041514_20_3 [Smoothed TC Combined] - C/A Code Residual RMS Plot



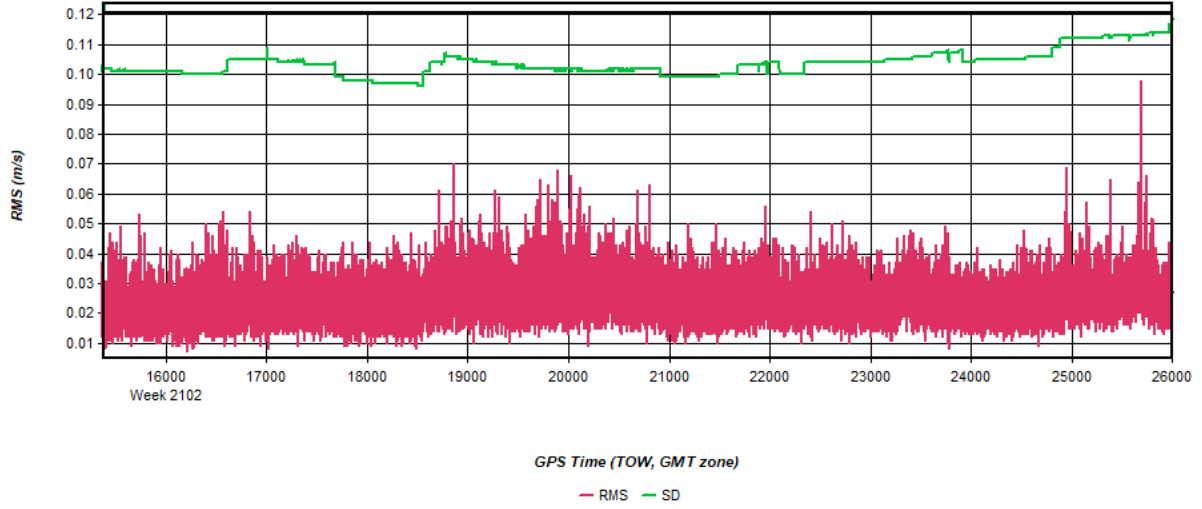
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 17: 20200419041514_20_3 [Smoothed TC Combined] - Carrier Residual RMS Plot



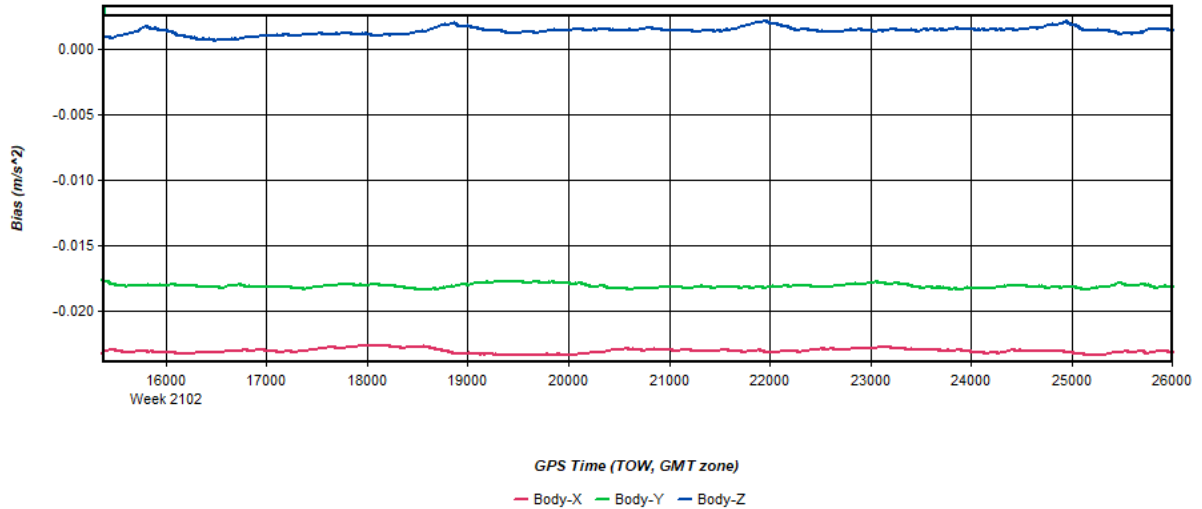
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 18: 20200419041514_20_3 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



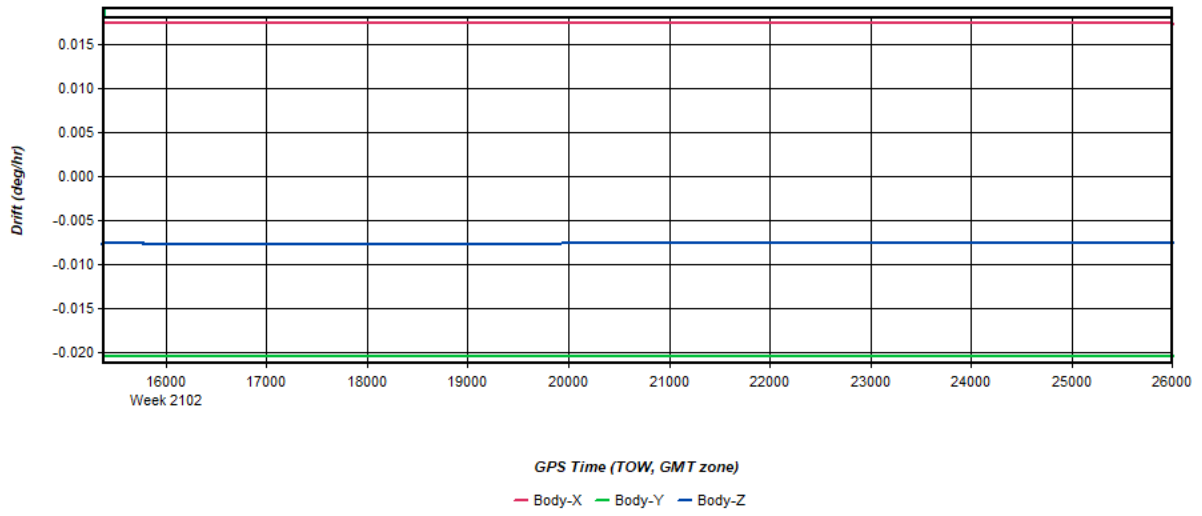
Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 19: 20200419041514_20_3 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Figure 20: 20200419041514_20_3 [Smoothed TC Combined] - Gyro Drift Plot



Process	20200419041514_20_3	by Unknown	on 6/8/2020	at 18:45:46
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Output Results for 20200419123813_21

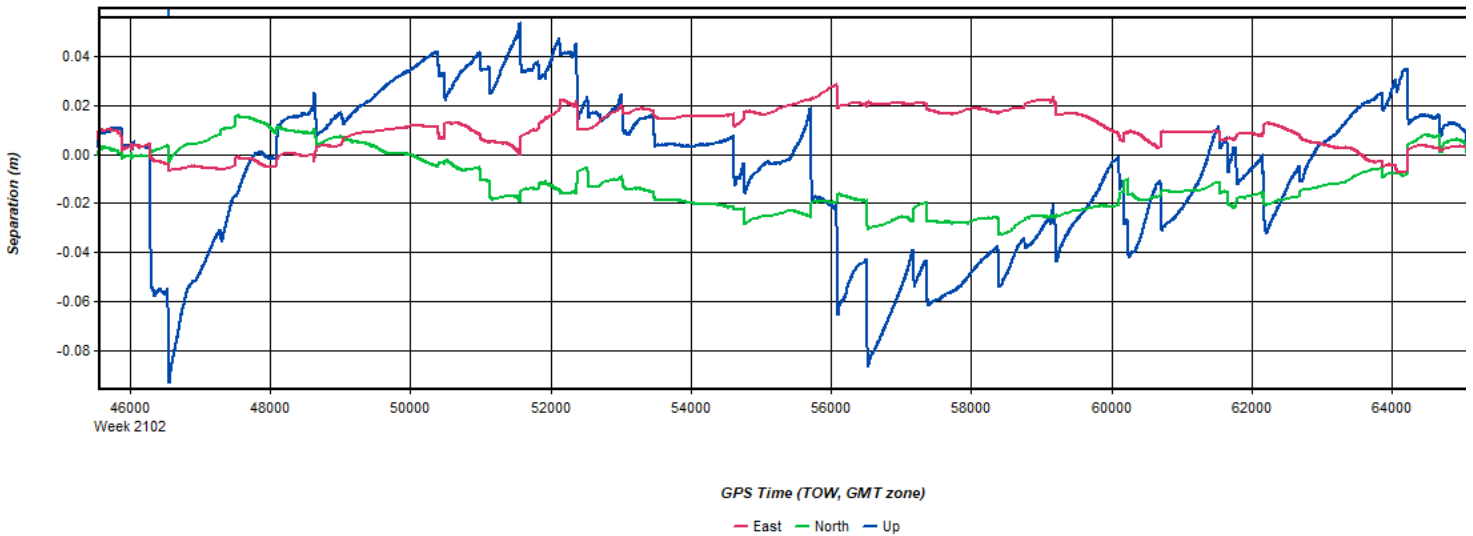
Inertial Explorer Version 8.90.2124
07/08/2020

Figure 1: Smoothed TC Combined - Map



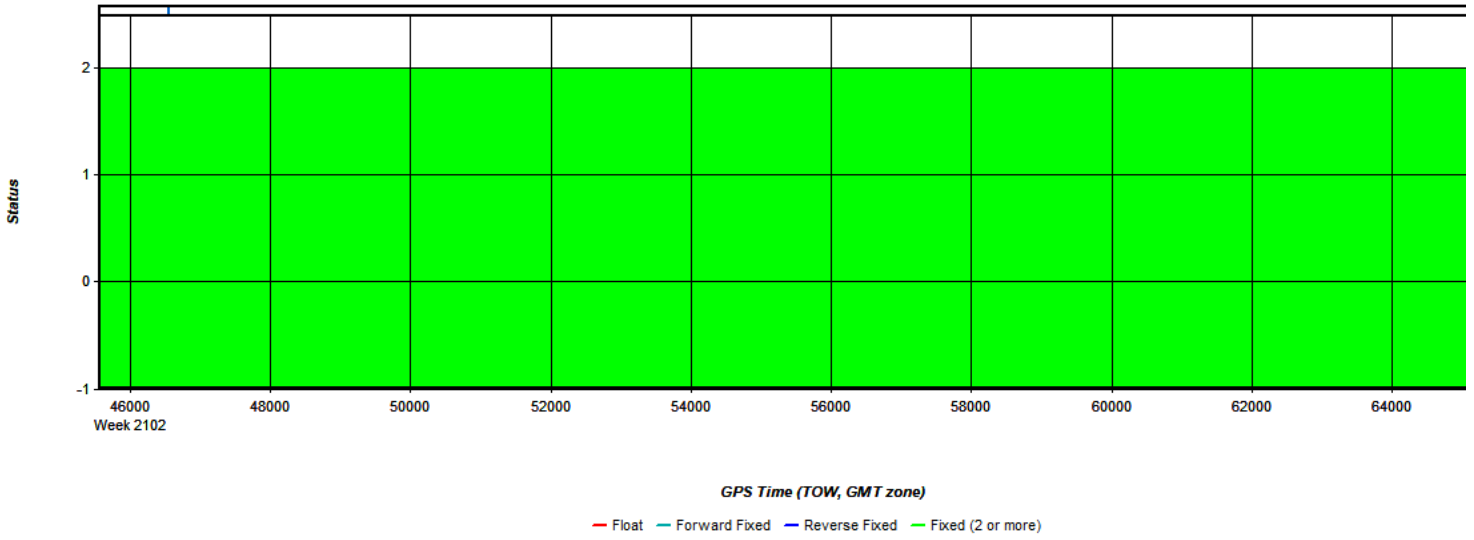
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 2: 20200419123813_21 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



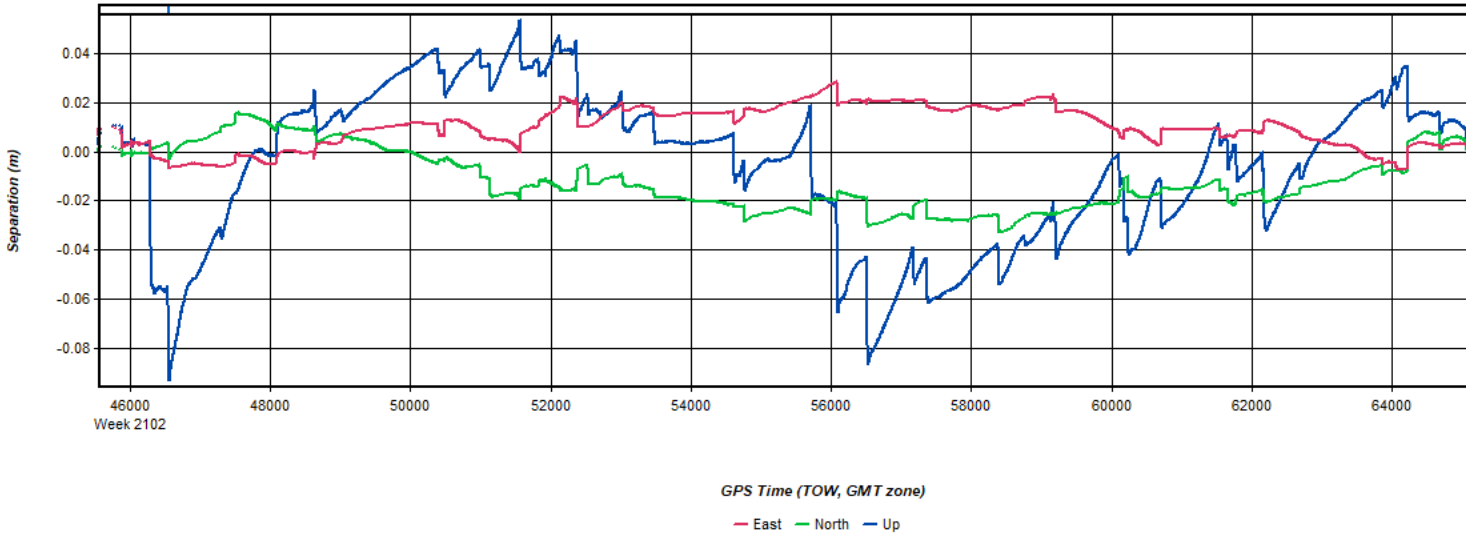
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 3: 20200419123813_21 [Smoothed TC Combined] - Float or Fixed Ambiguity



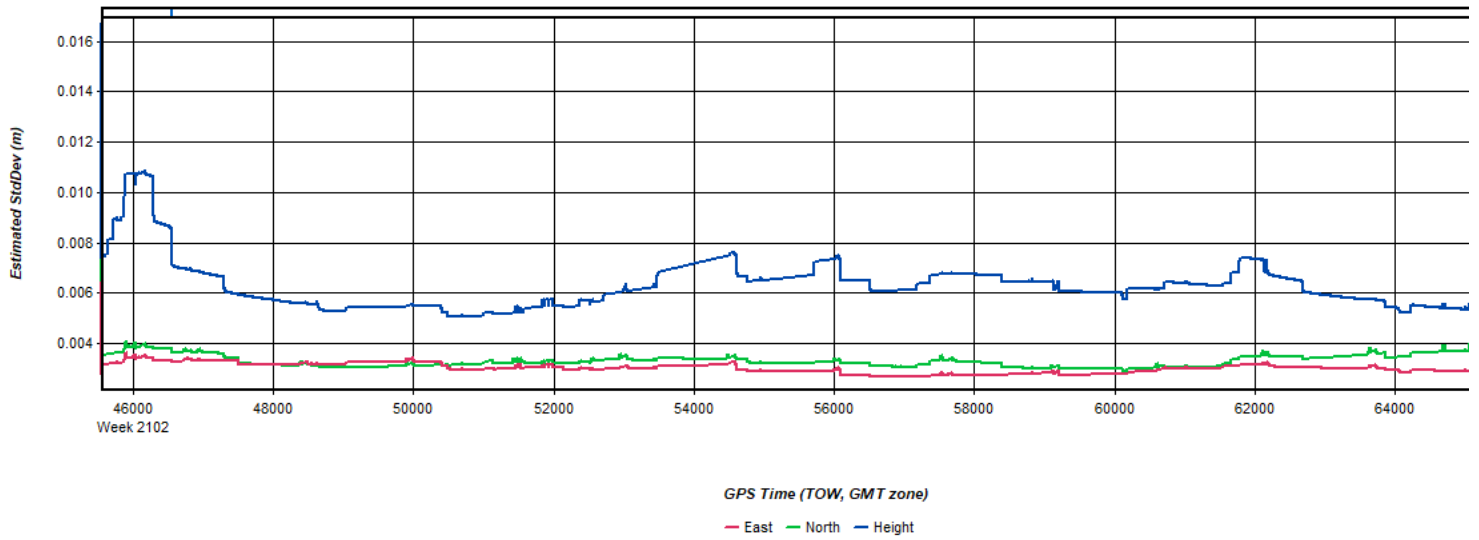
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 4: 20200419123813_21 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



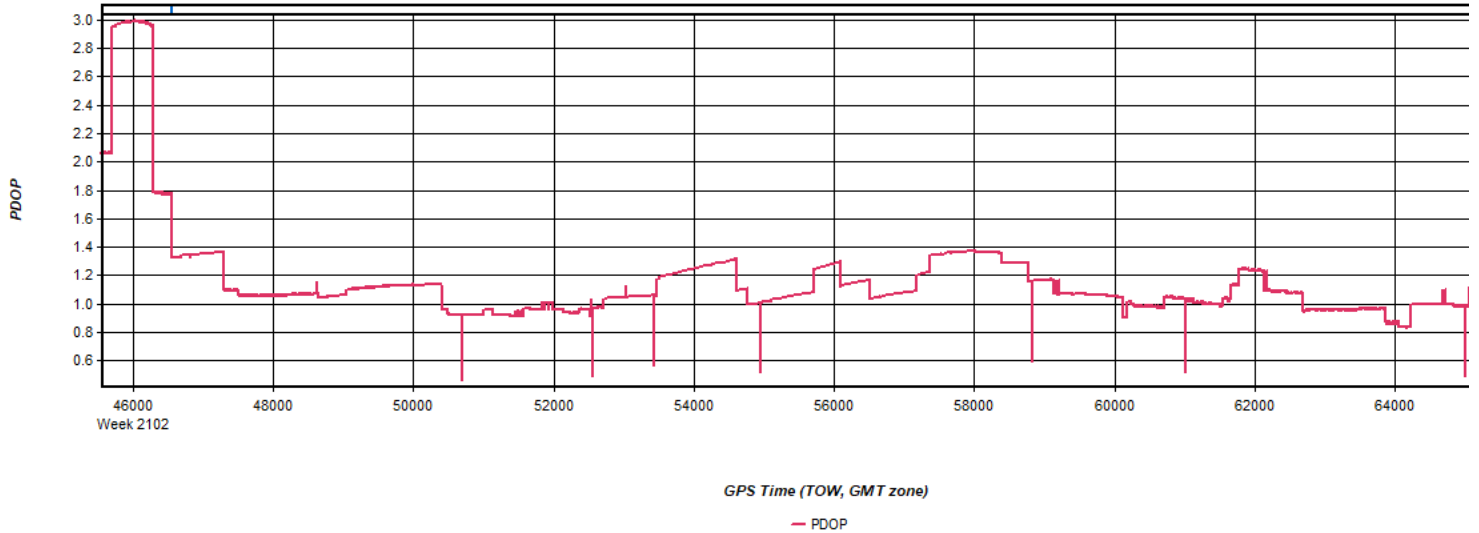
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 5: 20200419123813_21 [Smoothed TC Combined] - Estimated Position Accuracy Plot



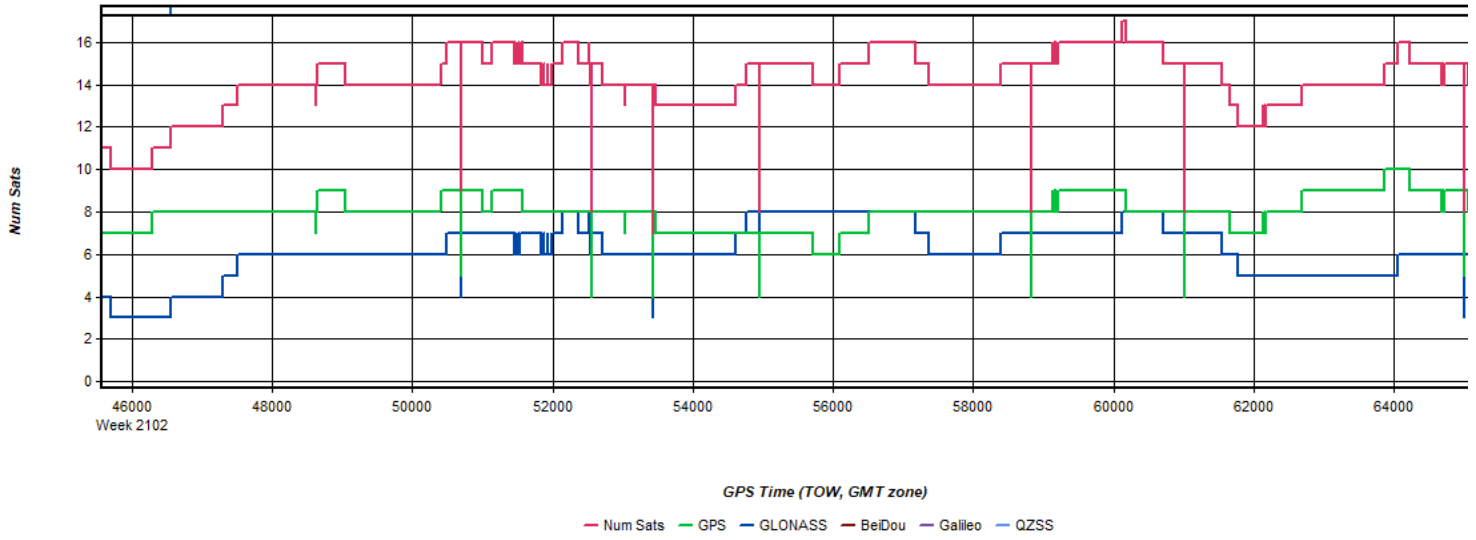
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 6: 20200419123813_21 [Smoothed TC Combined] - PDOP Plot



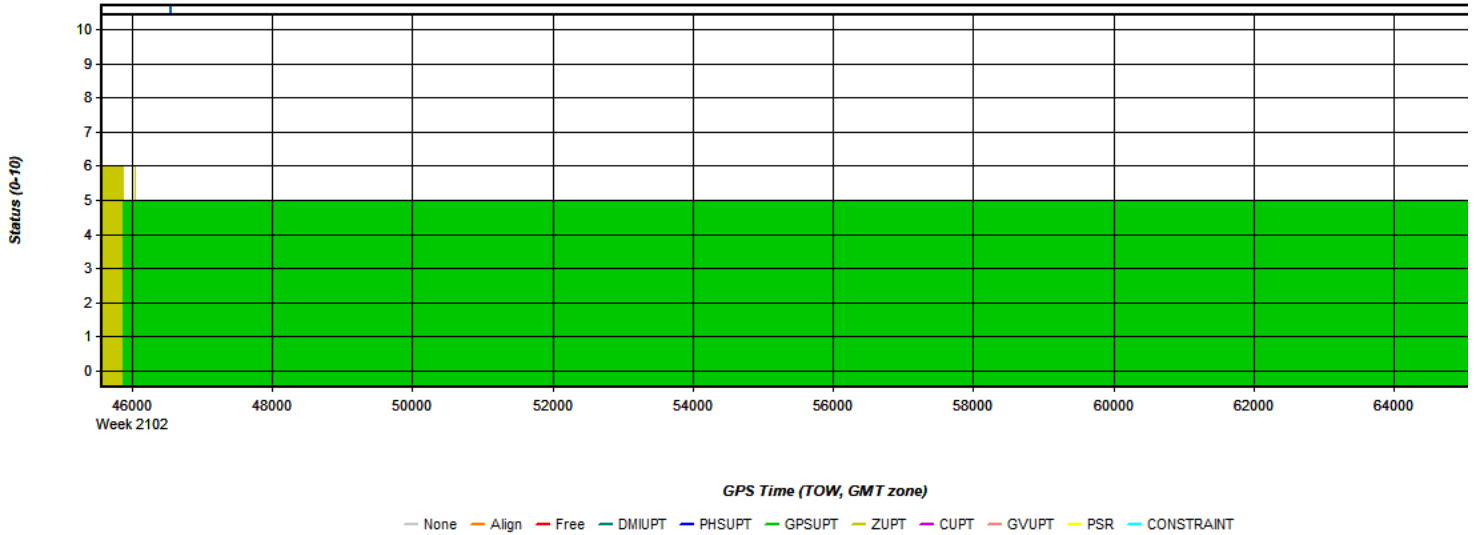
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 7: 20200419123813_21 [Smoothed TC Combined] - Number of Satellites Line Plot



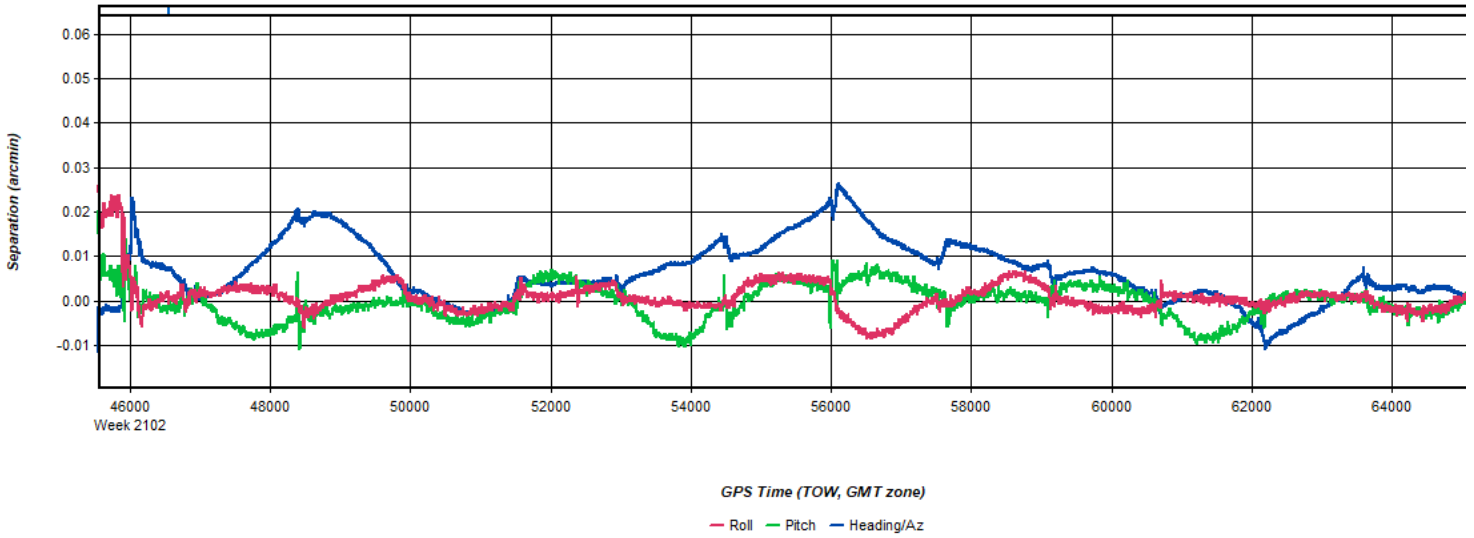
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 8: 20200419123813_21 [Smoothed TC Combined] - Status flag for IMU processing



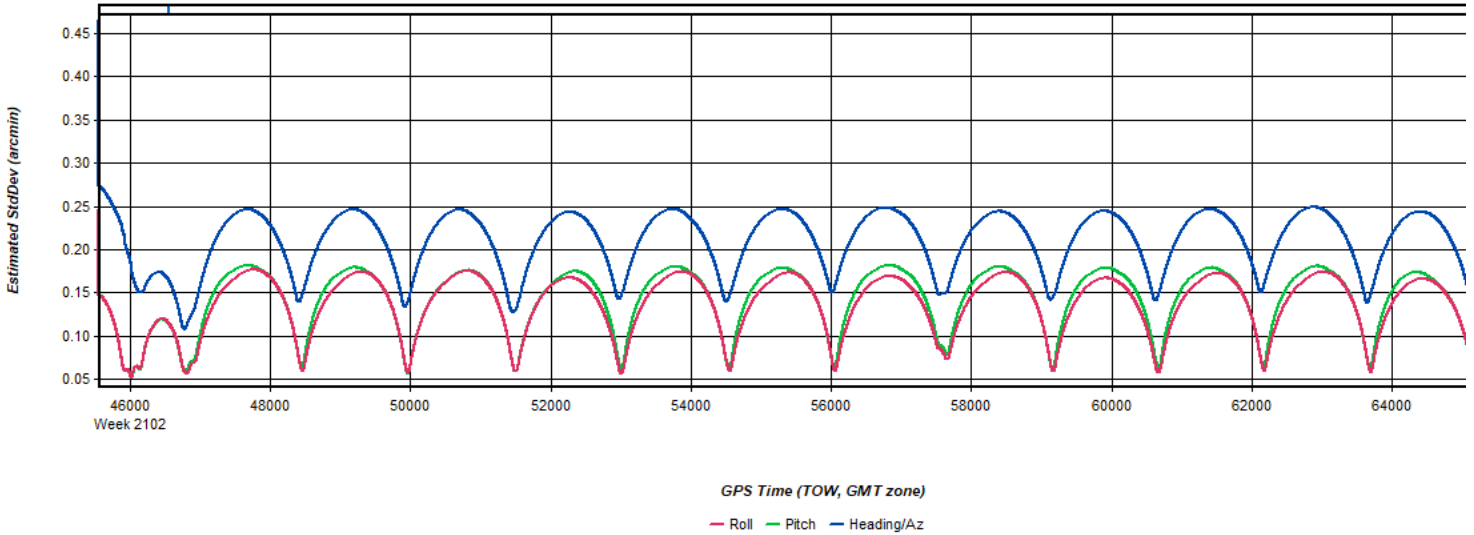
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 9: 20200419123813_21 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



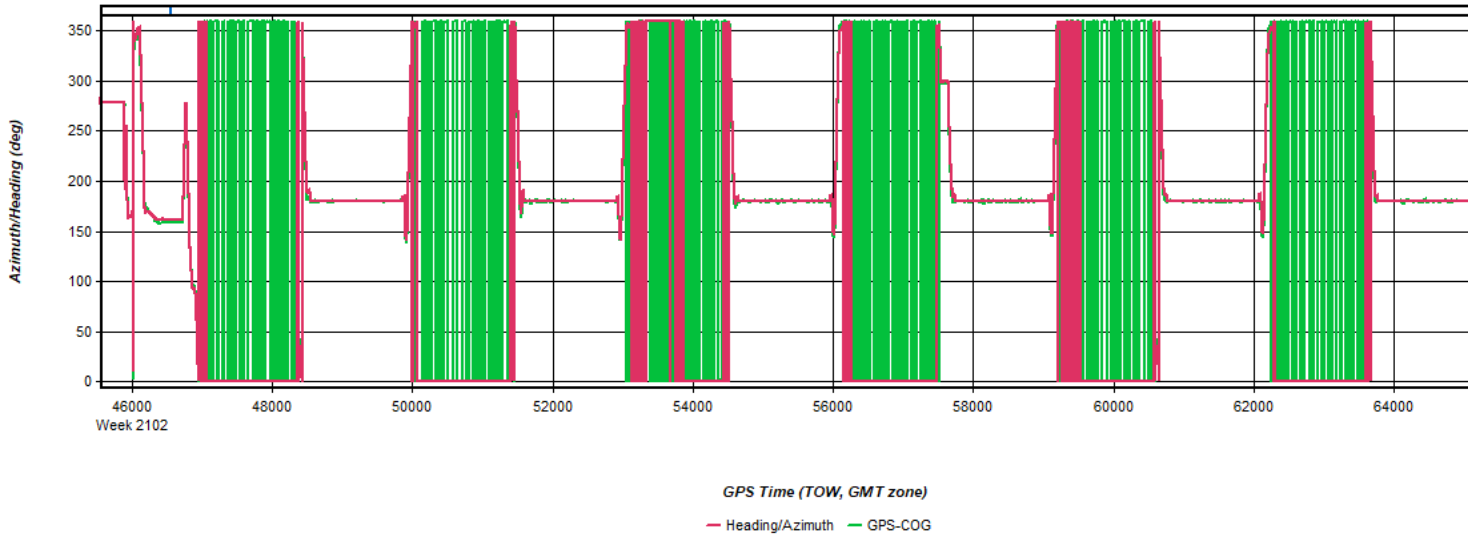
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 10: 20200419123813_21 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



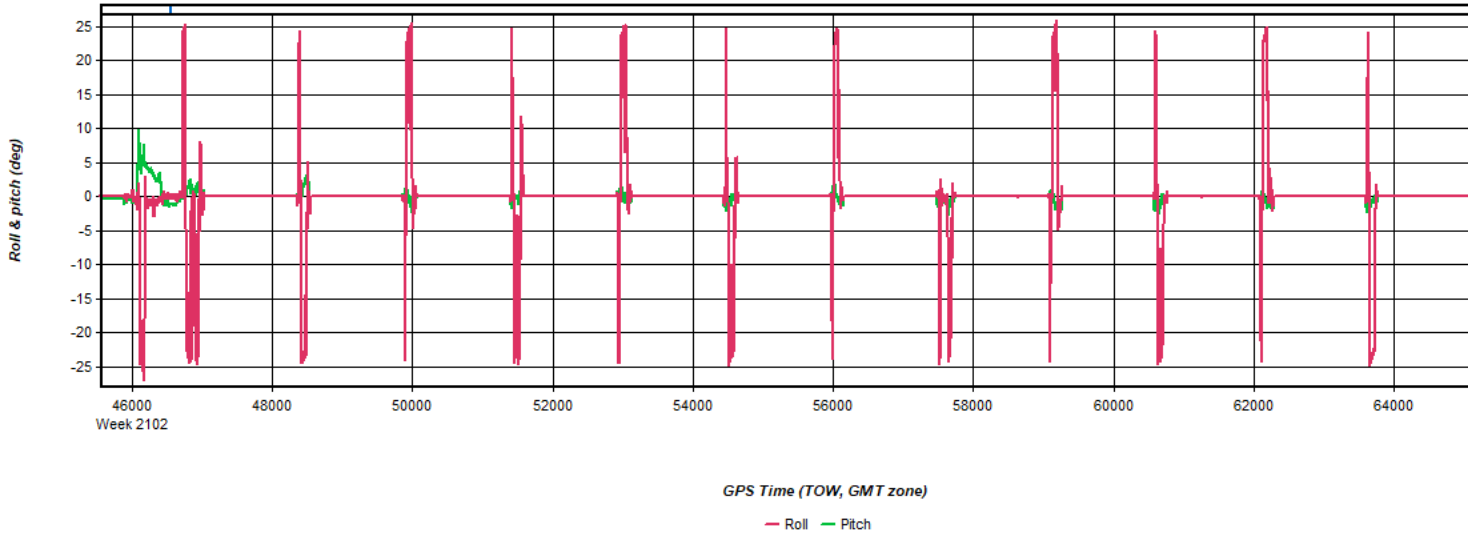
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 11: 20200419123813_21 [Smoothed TC Combined] - Azimuth Plot



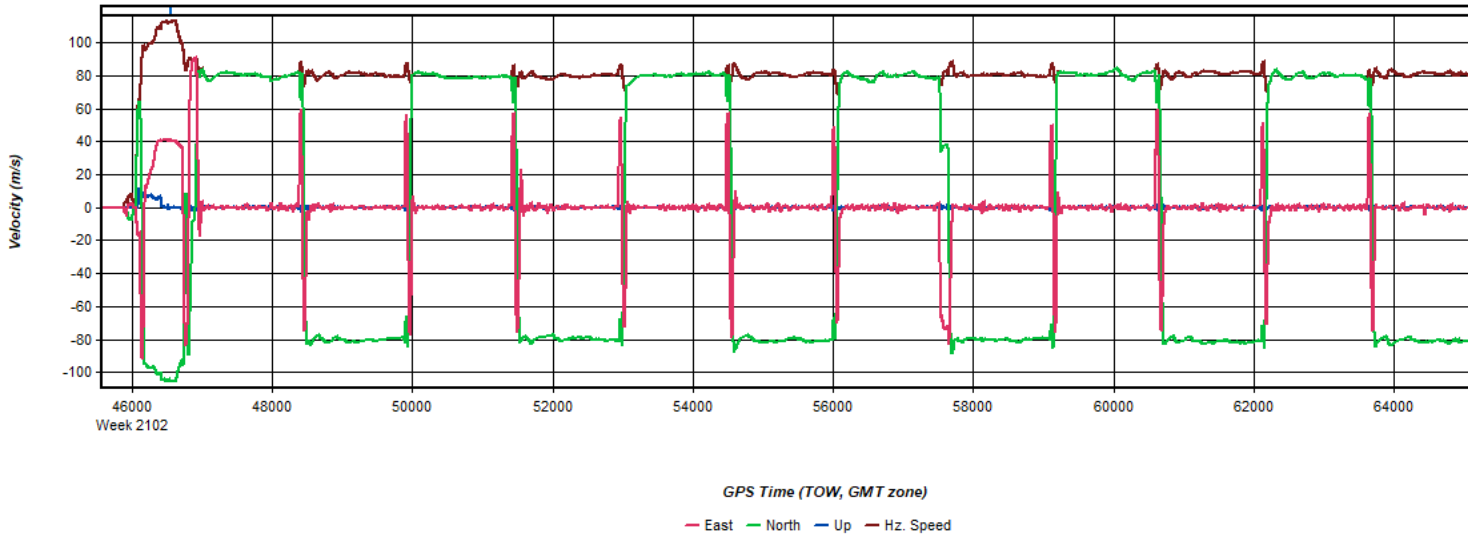
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 12: 20200419123813_21 [Smoothed TC Combined] - Roll & Pitch Plot



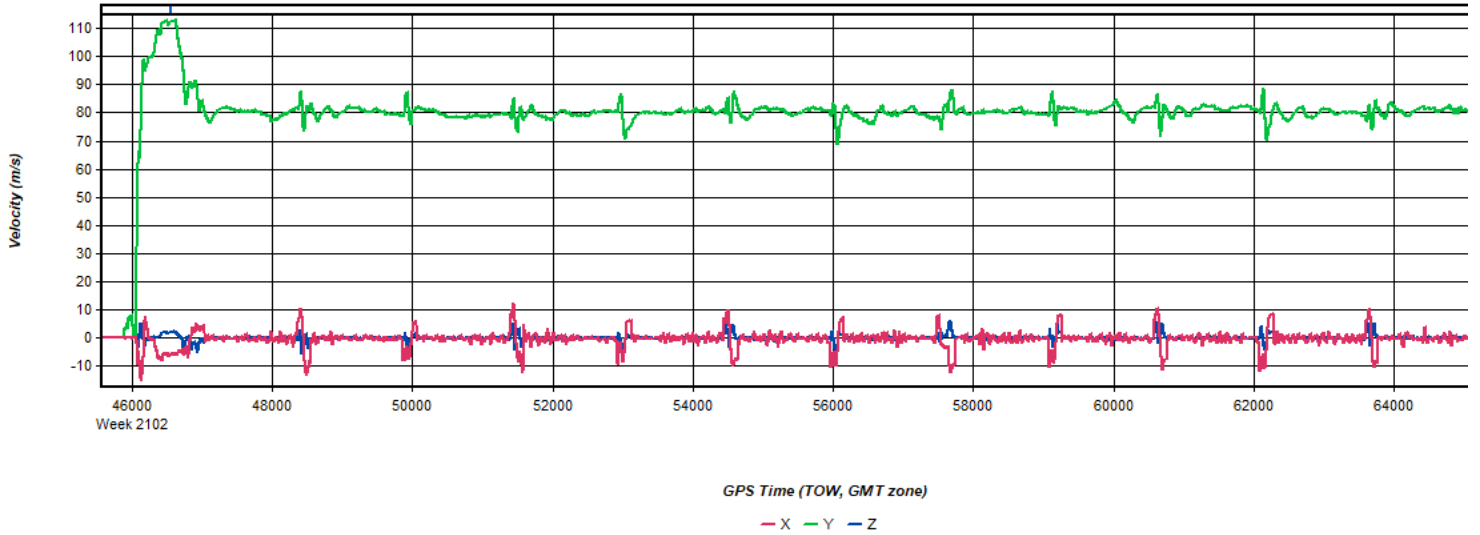
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 13: 20200419123813_21 [Smoothed TC Combined] - Velocity Profile Plot



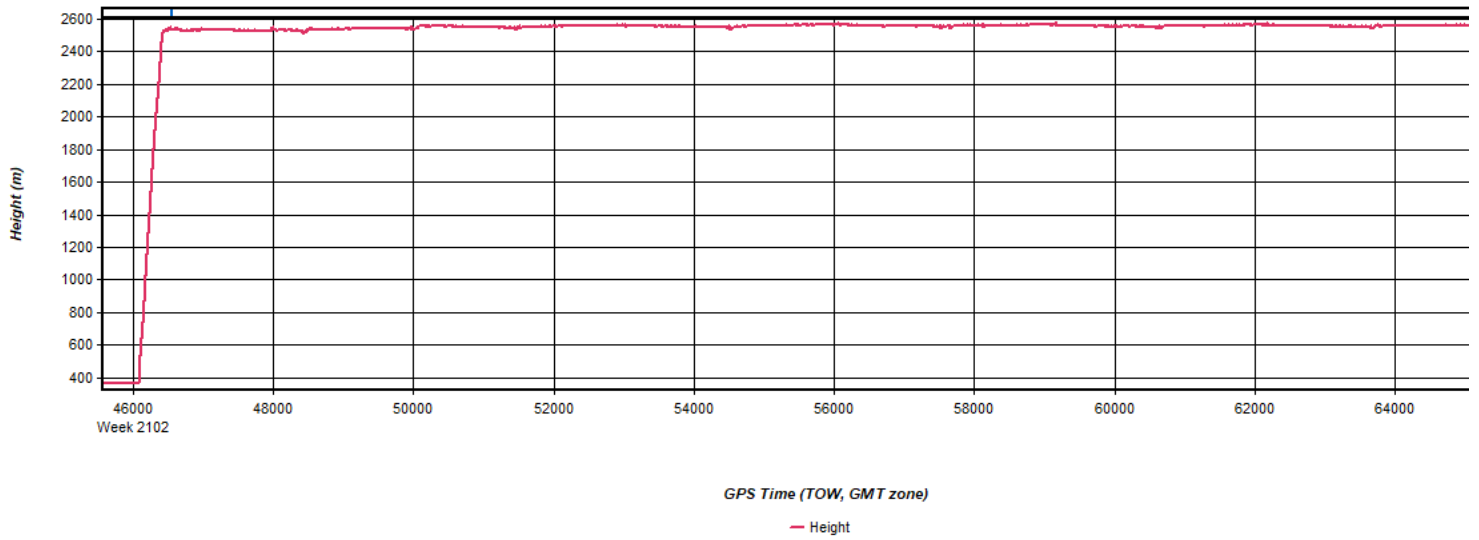
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 14: 20200419123813_21 [Smoothed TC Combined] - Body Frame Velocity Plot



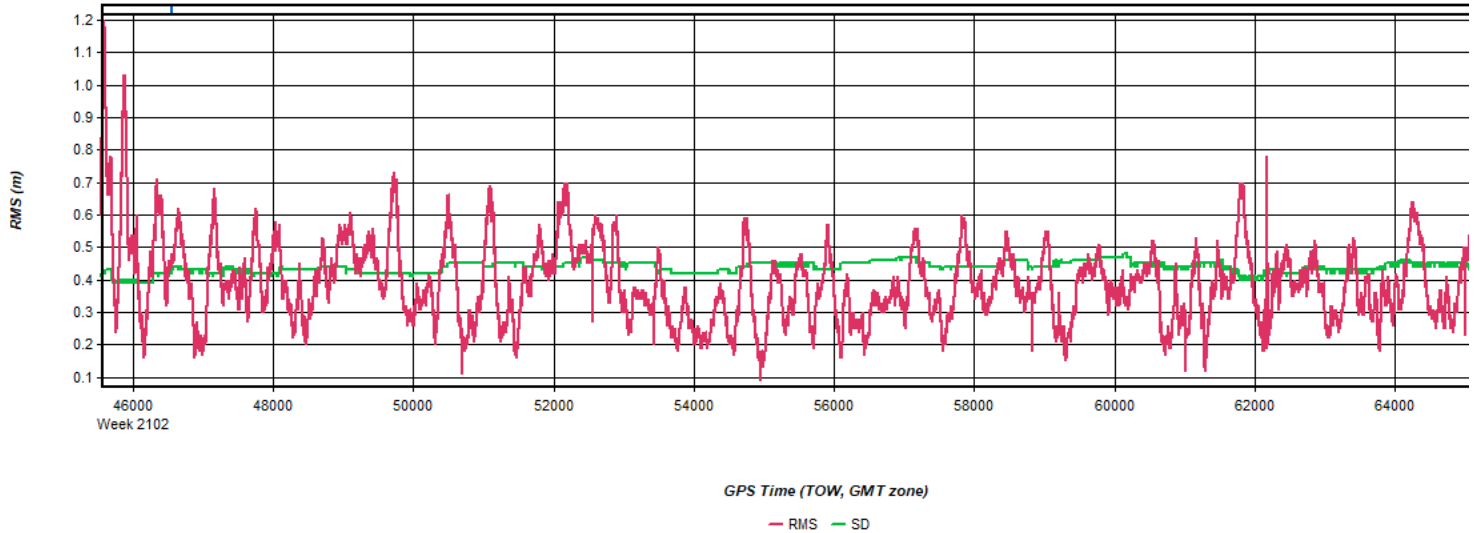
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 15: 20200419123813_21 [Smoothed TC Combined] - Height Profile Plot



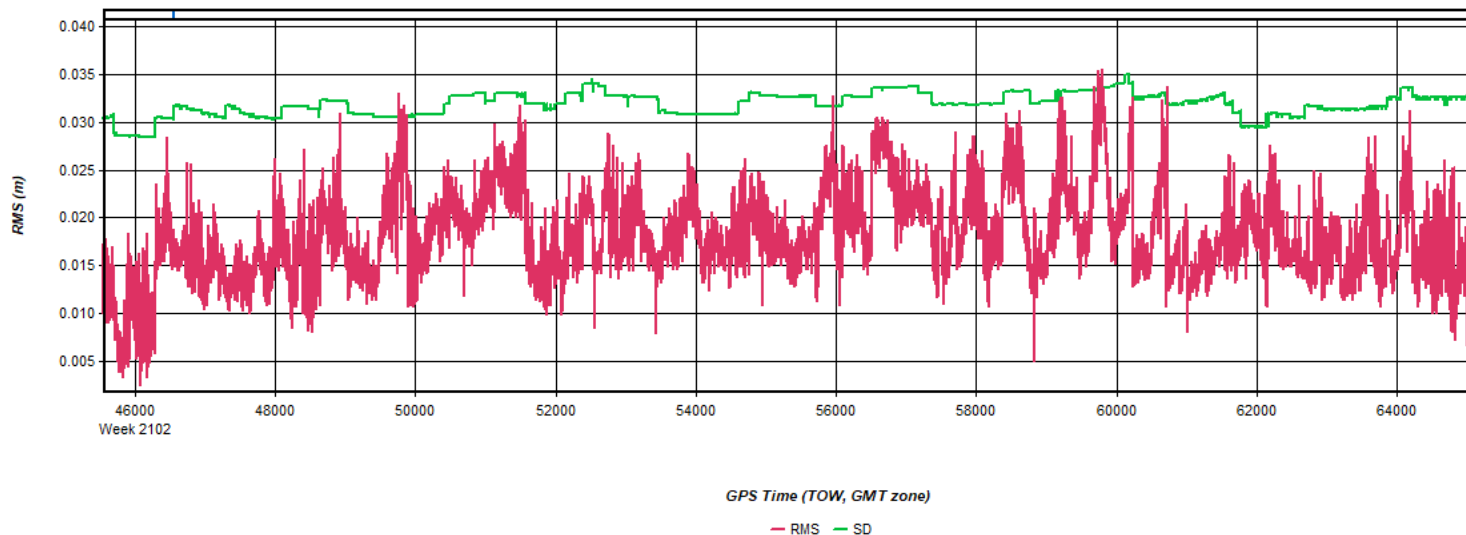
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 16: 20200419123813_21 [Smoothed TC Combined] - C/A Code Residual RMS Plot



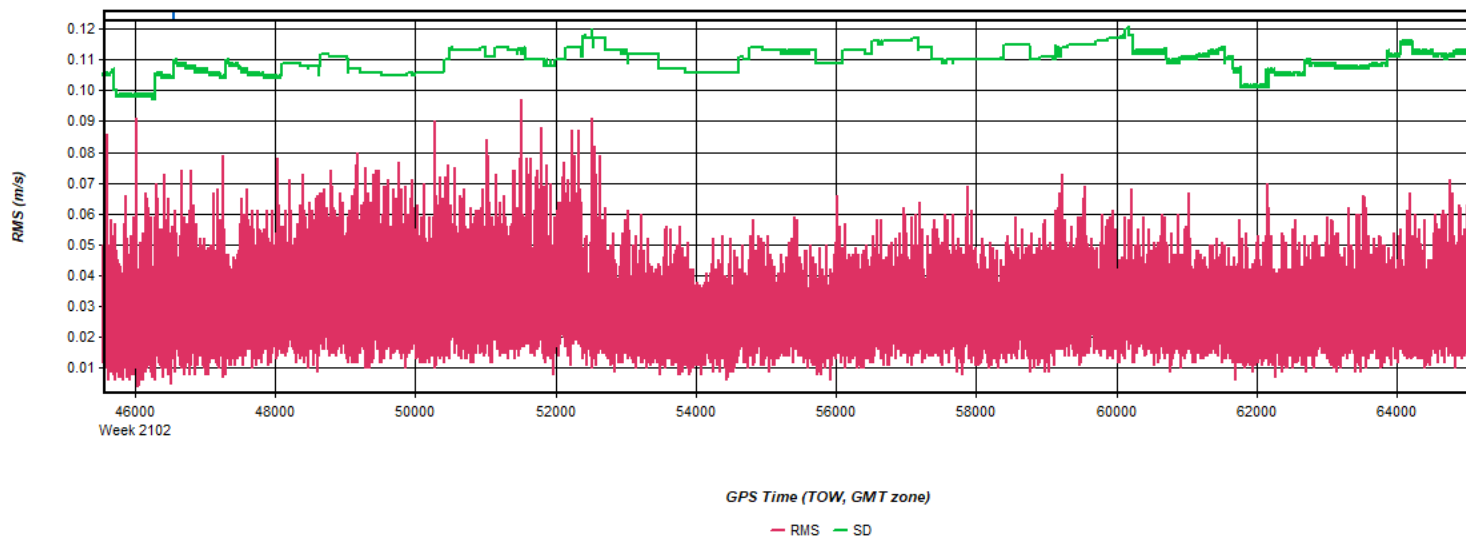
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 17: 20200419123813_21 [Smoothed TC Combined] - Carrier Residual RMS Plot



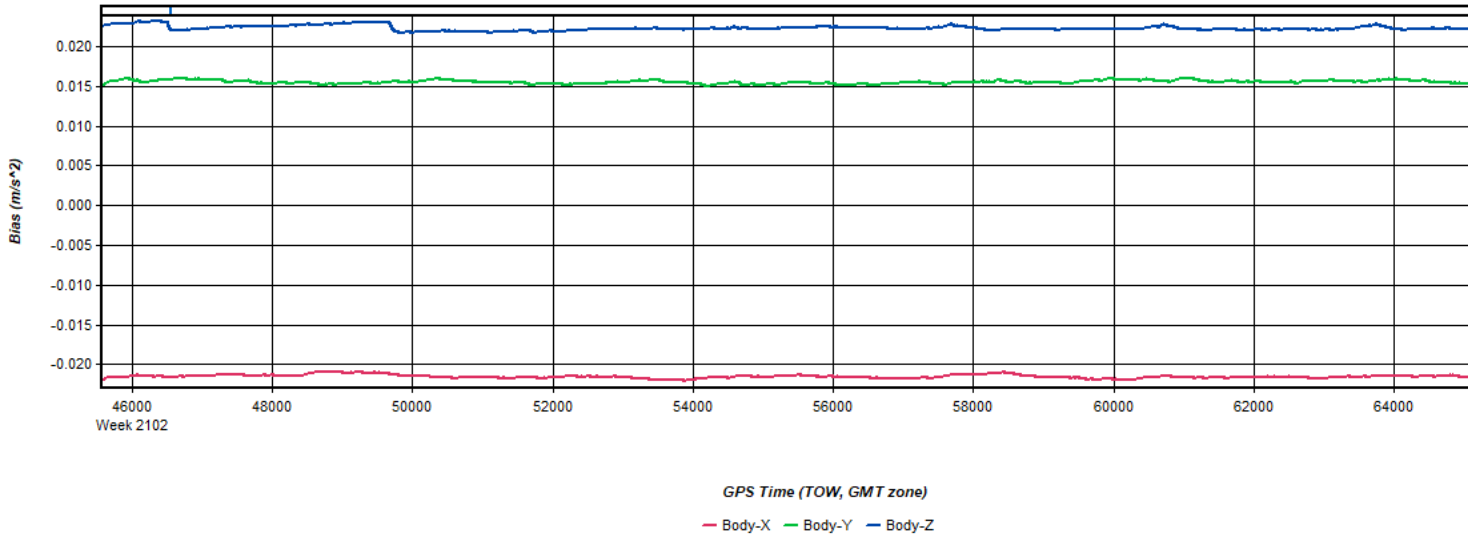
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 18: 20200419123813_21 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



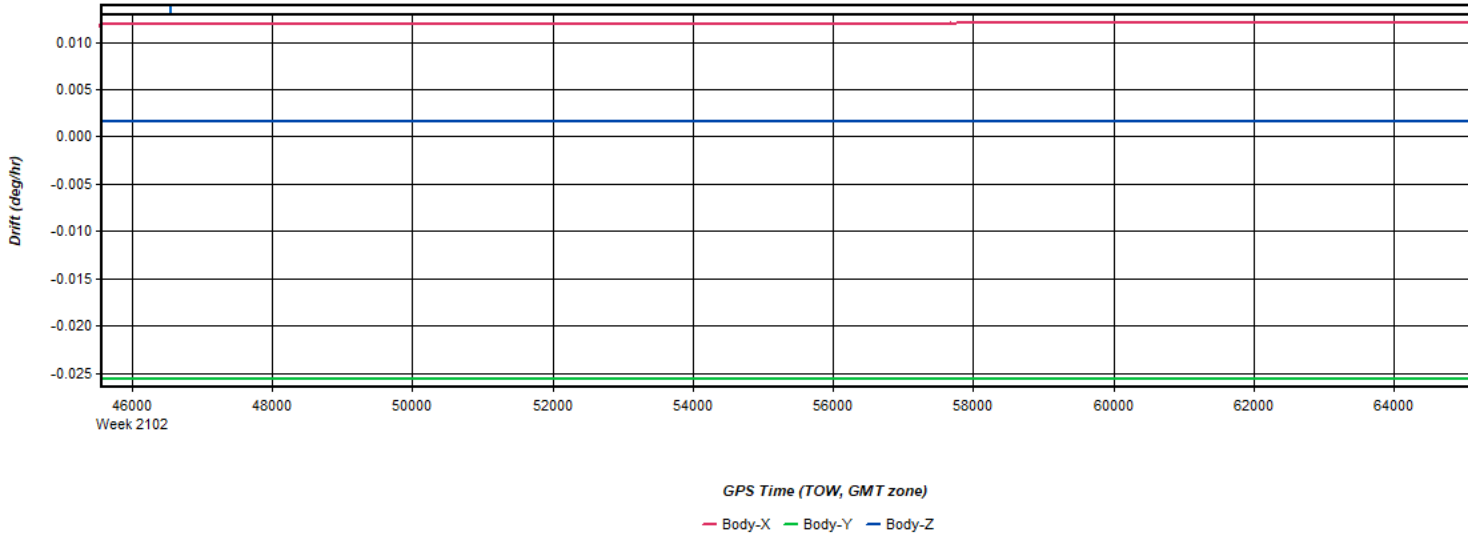
Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 19: 20200419123813_21 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Figure 20: 20200419123813_21 [Smoothed TC Combined] - Gyro Drift Plot

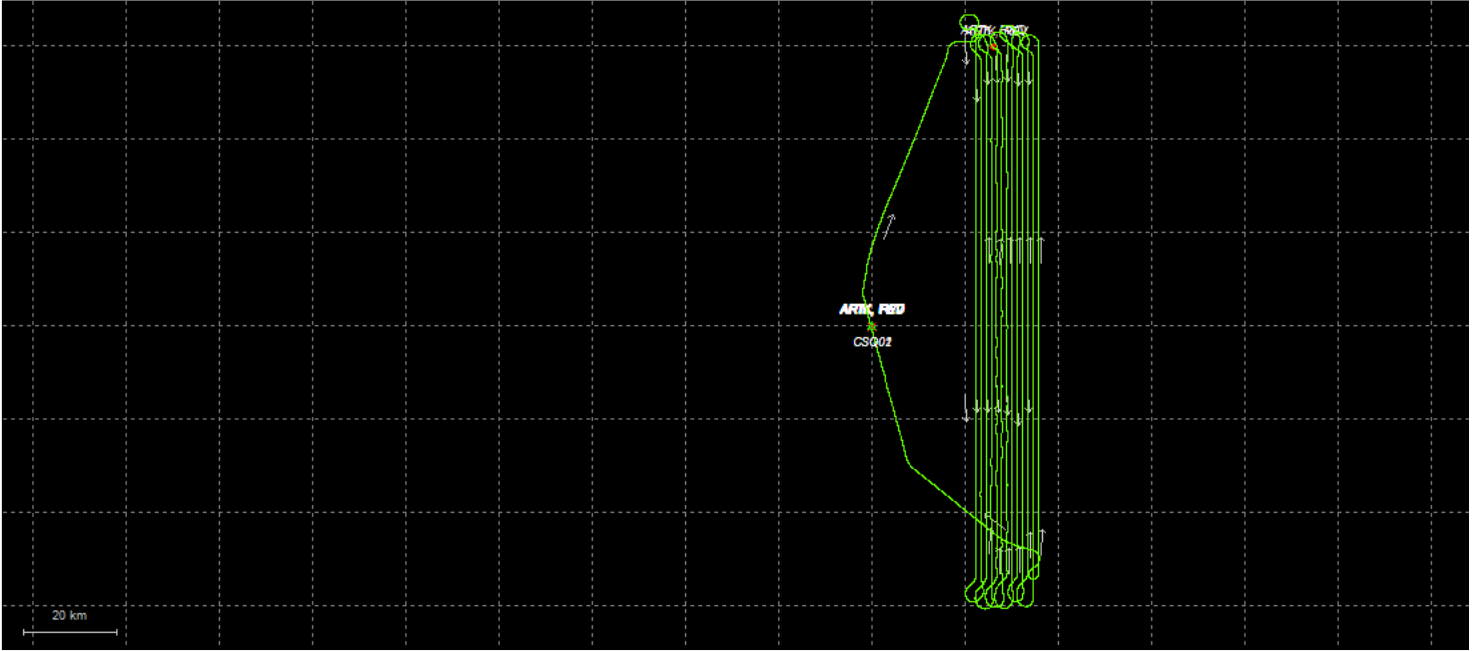


Process	20200419123813_21	by Unknown	on 7/8/2020	at 17:35:42
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Output Results for 20200419190050_22

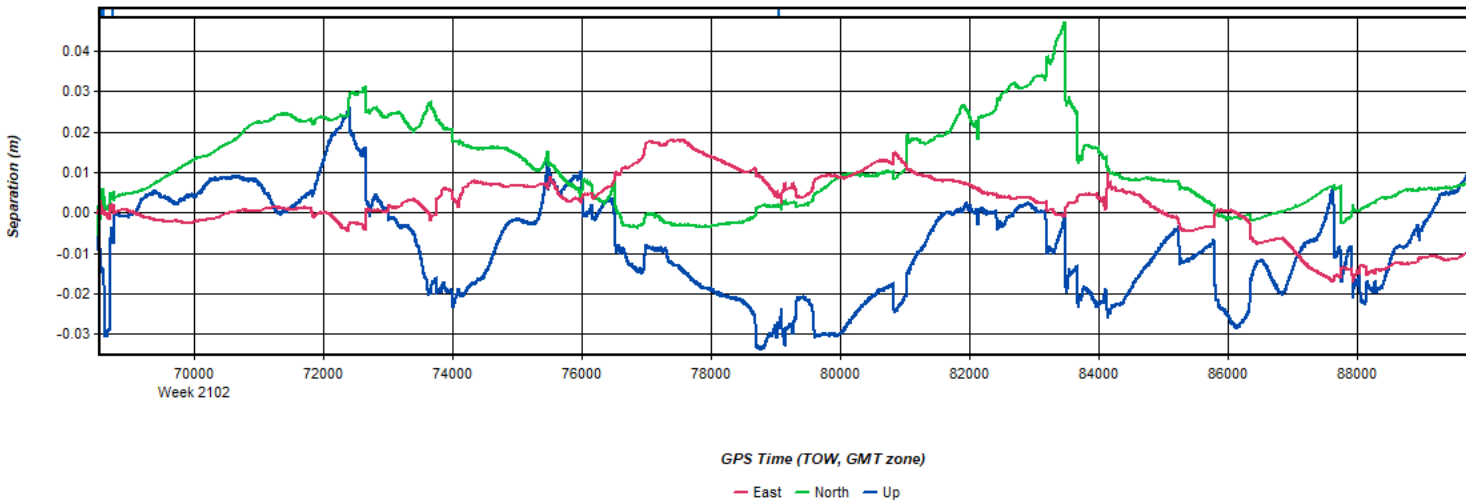
Inertial Explorer Version 8.90.2124
07/07/2020

Figure 1: Smoothed TC Combined - Map



Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 2: 20200419190050_22 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 3: 20200419190050_22 [Smoothed TC Combined] - Float or Fixed Ambiguity

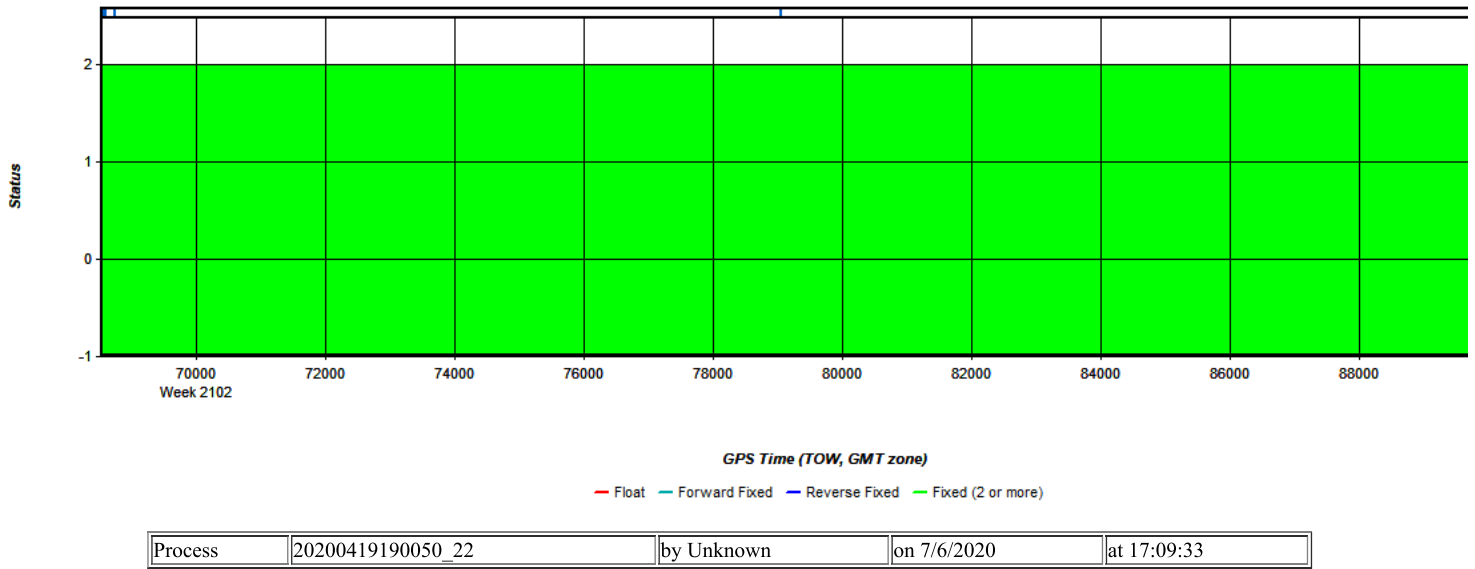


Figure 4: 20200419190050_22 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

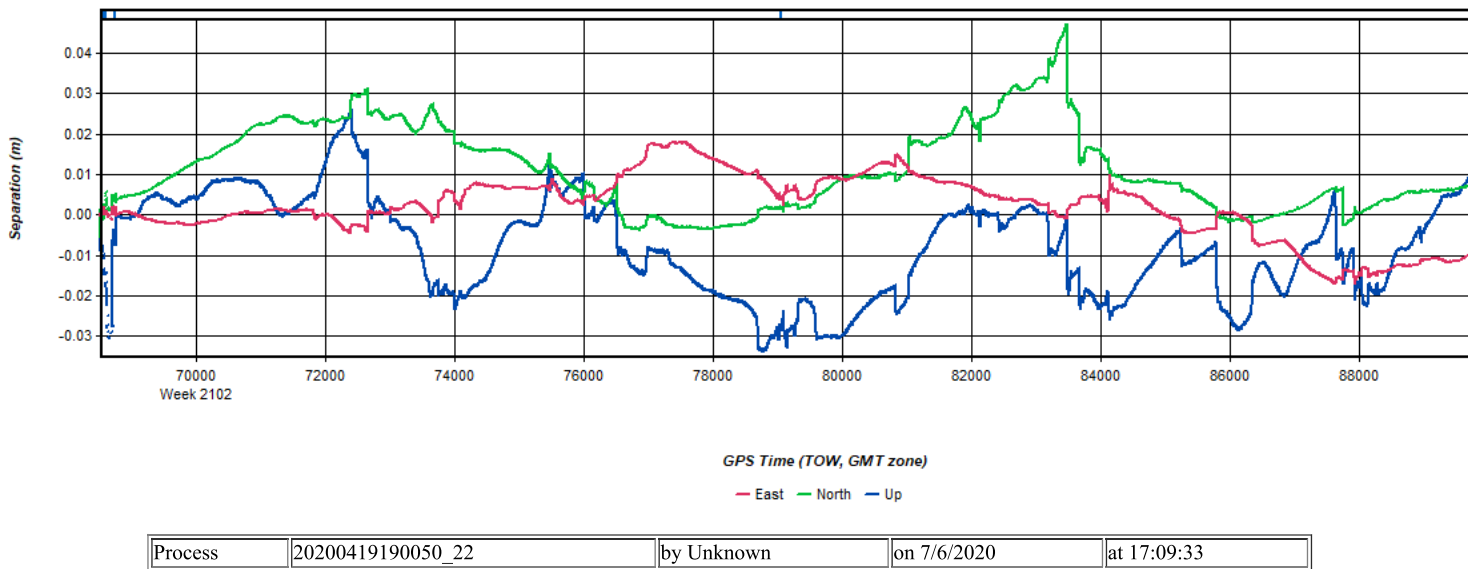


Figure 5: 20200419190050_22 [Smoothed TC Combined] - Estimated Position Accuracy Plot

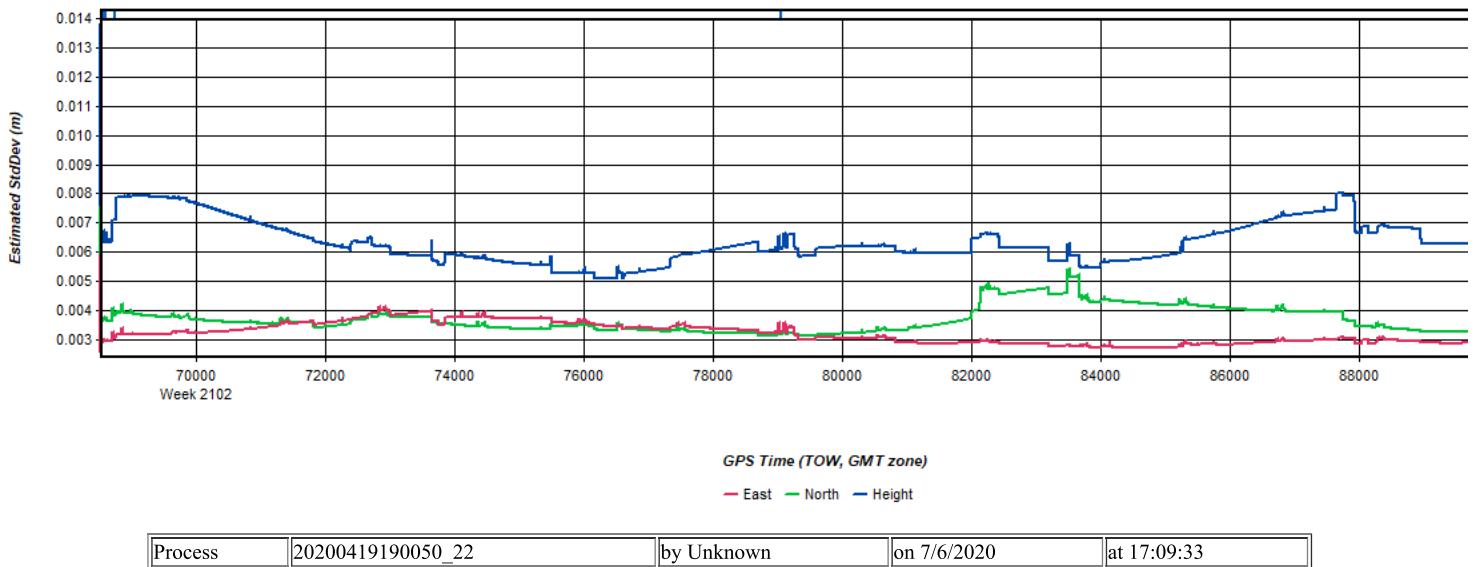
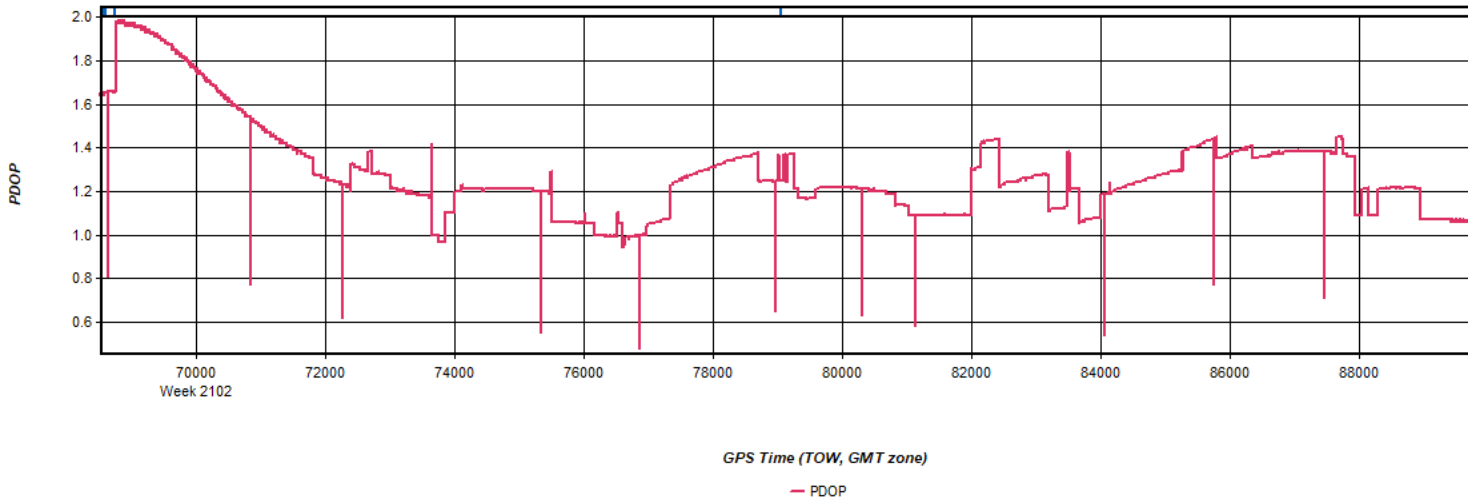
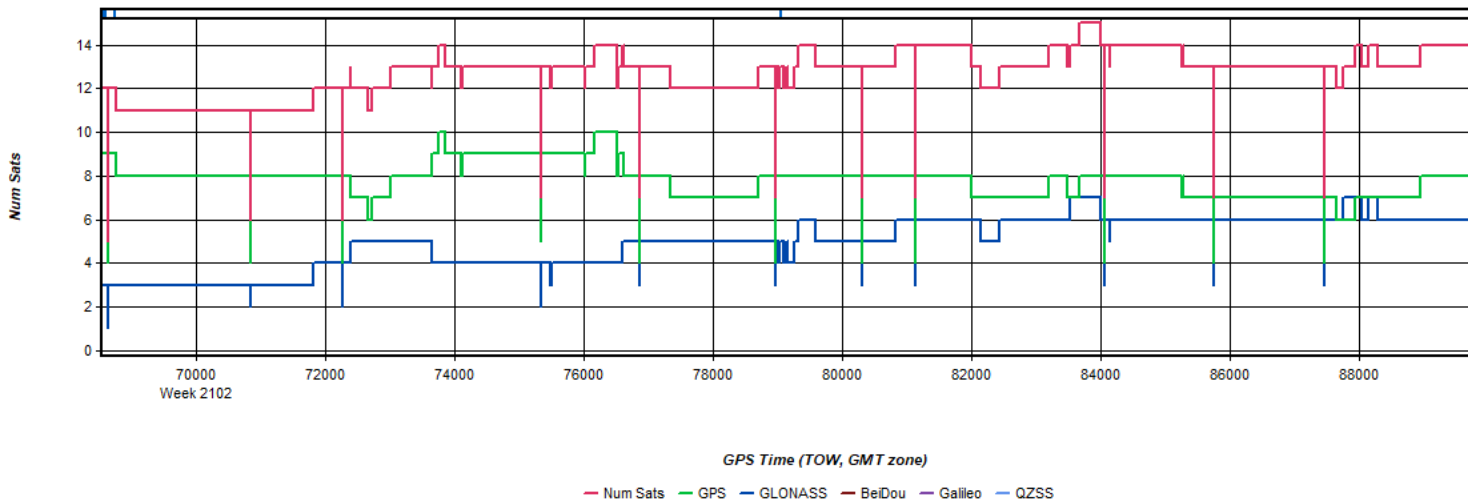


Figure 6: 20200419190050_22 [Smoothed TC Combined] - PDOP Plot



Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 7: 20200419190050_22 [Smoothed TC Combined] - Number of Satellites Line Plot



Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 8: 20200419190050_22 [Smoothed TC Combined] - Status flag for IMU processing

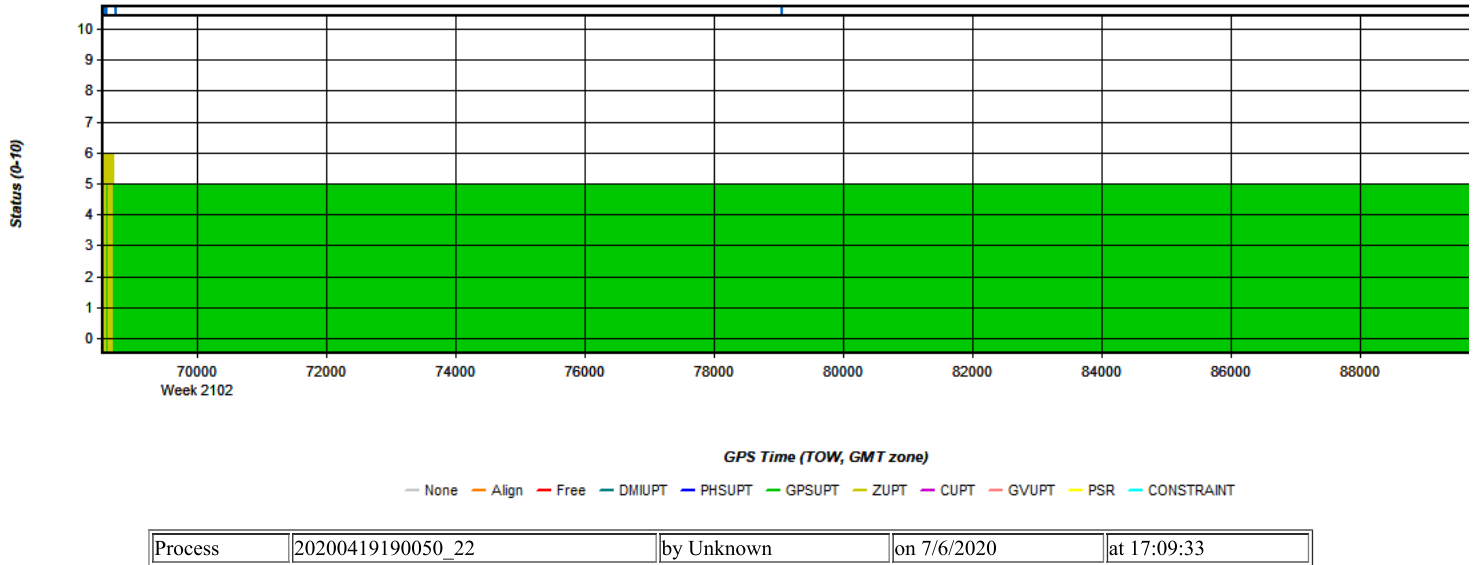


Figure 9: 20200419190050_22 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

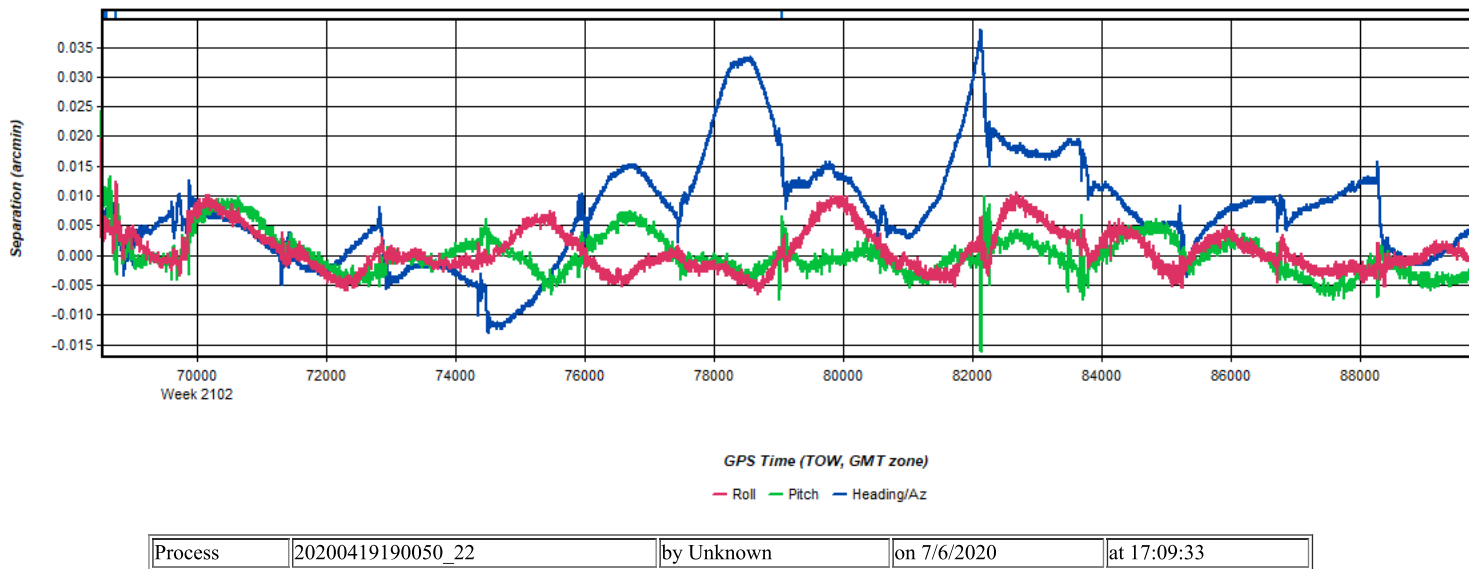


Figure 10: 20200419190050_22 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

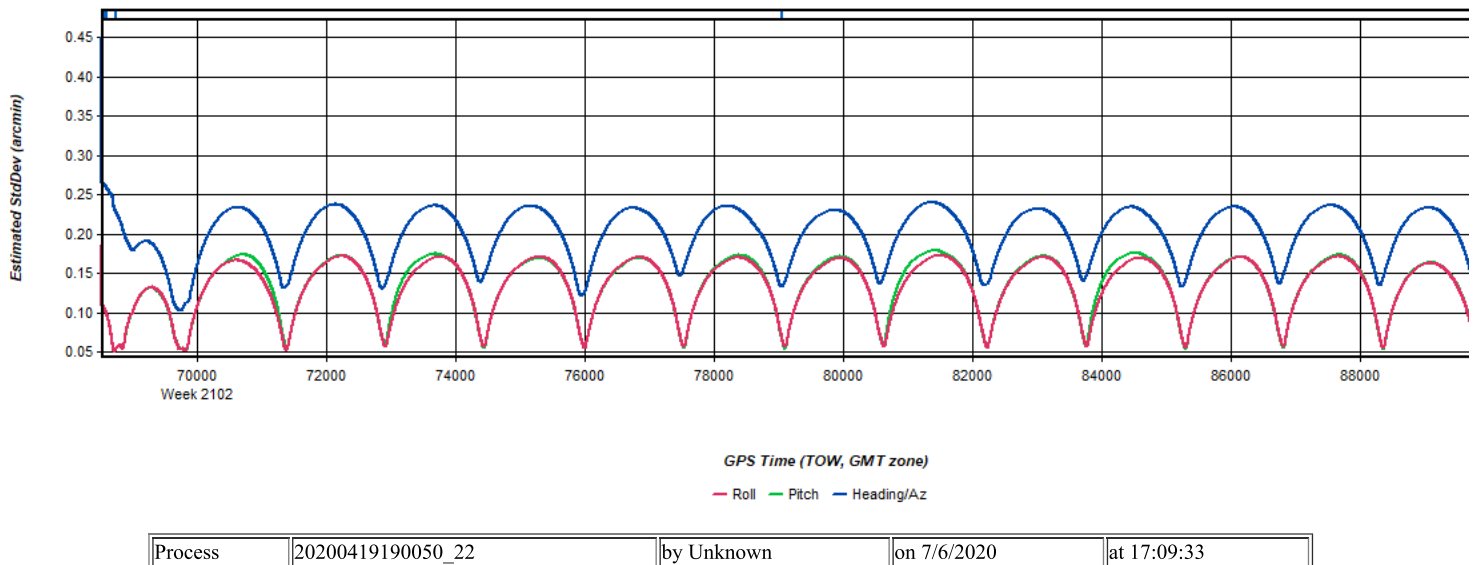
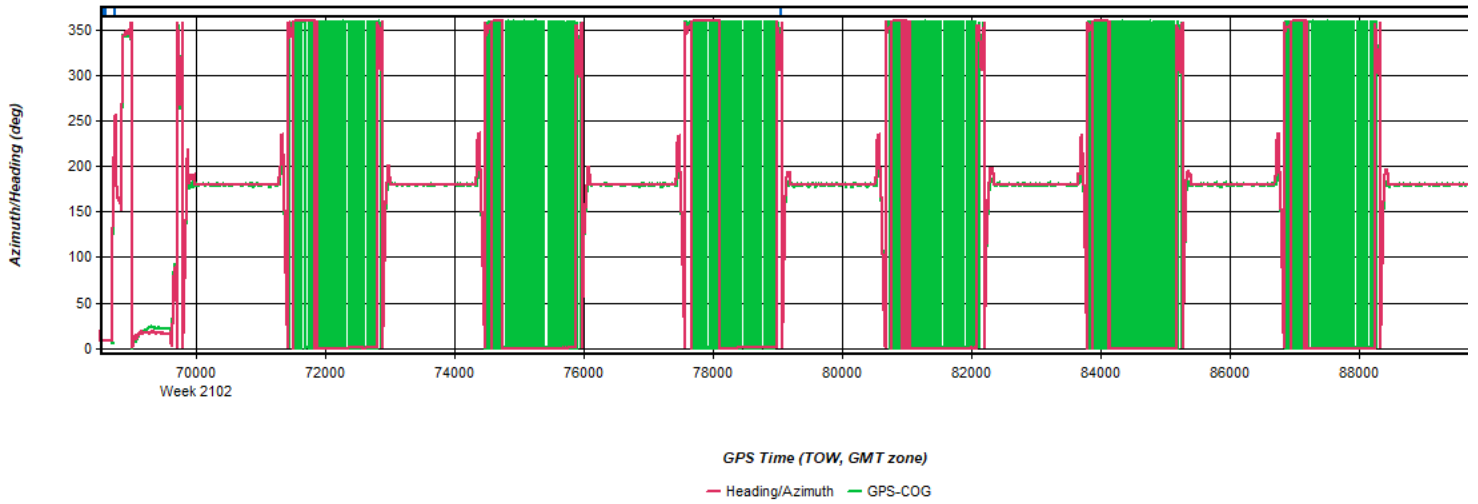
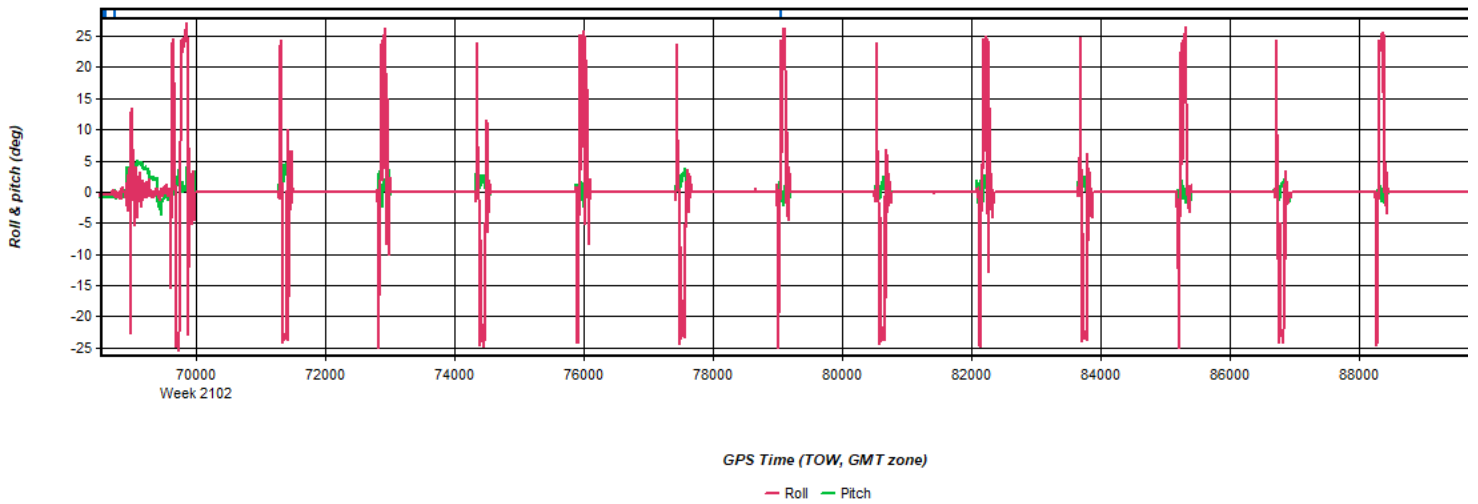


Figure 11: 20200419190050_22 [Smoothed TC Combined] - Azimuth Plot



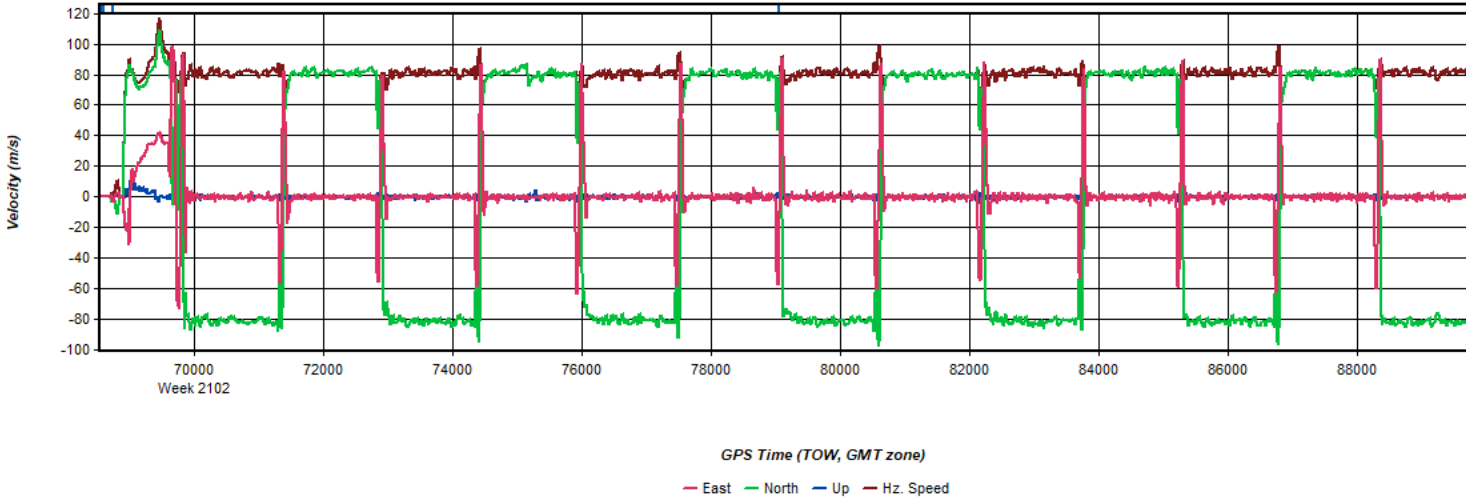
Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 12: 20200419190050_22 [Smoothed TC Combined] - Roll & Pitch Plot



Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 13: 20200419190050_22 [Smoothed TC Combined] - Velocity Profile Plot



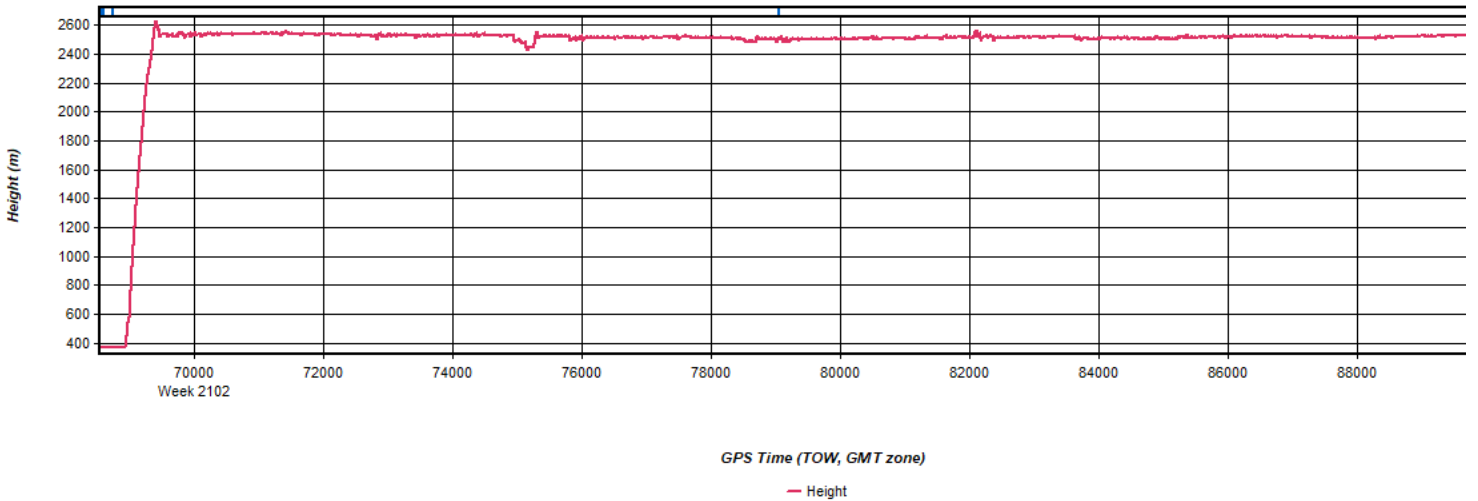
Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 14: 20200419190050_22 [Smoothed TC Combined] - Body Frame Velocity Plot



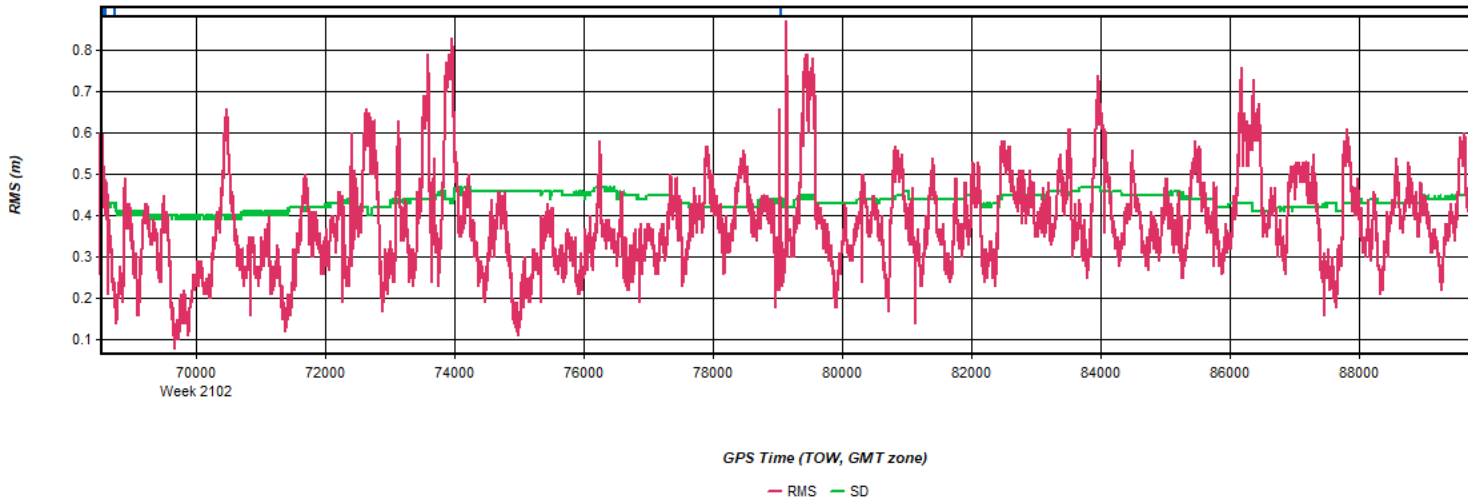
Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 15: 20200419190050_22 [Smoothed TC Combined] - Height Profile Plot



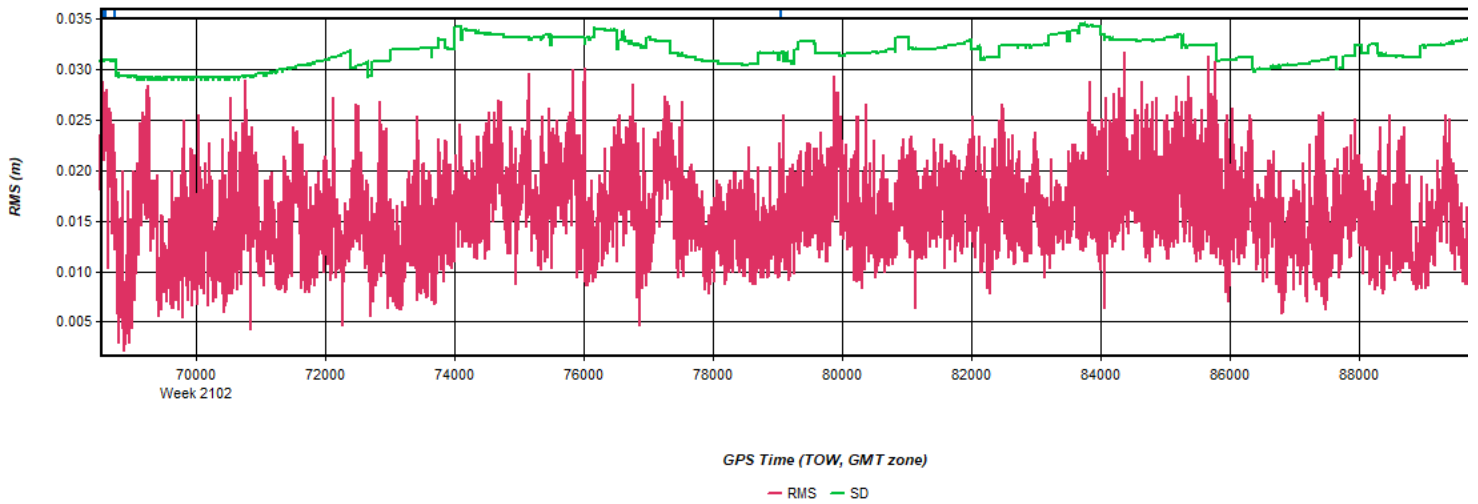
Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 16: 20200419190050_22 [Smoothed TC Combined] - C/A Code Residual RMS Plot



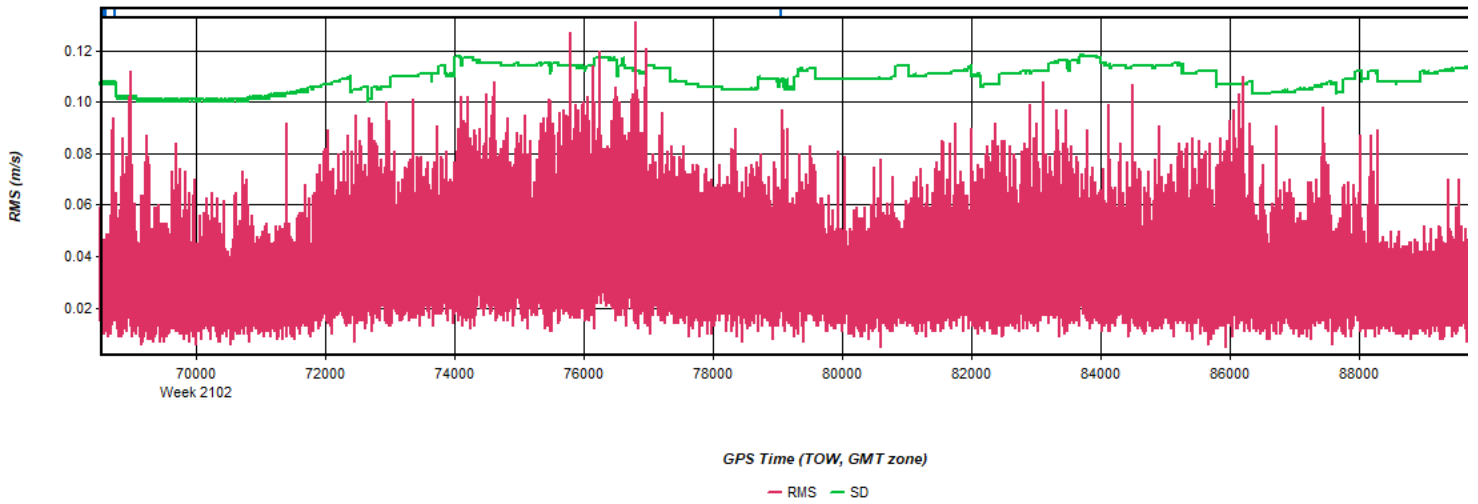
Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 17: 20200419190050_22 [Smoothed TC Combined] - Carrier Residual RMS Plot



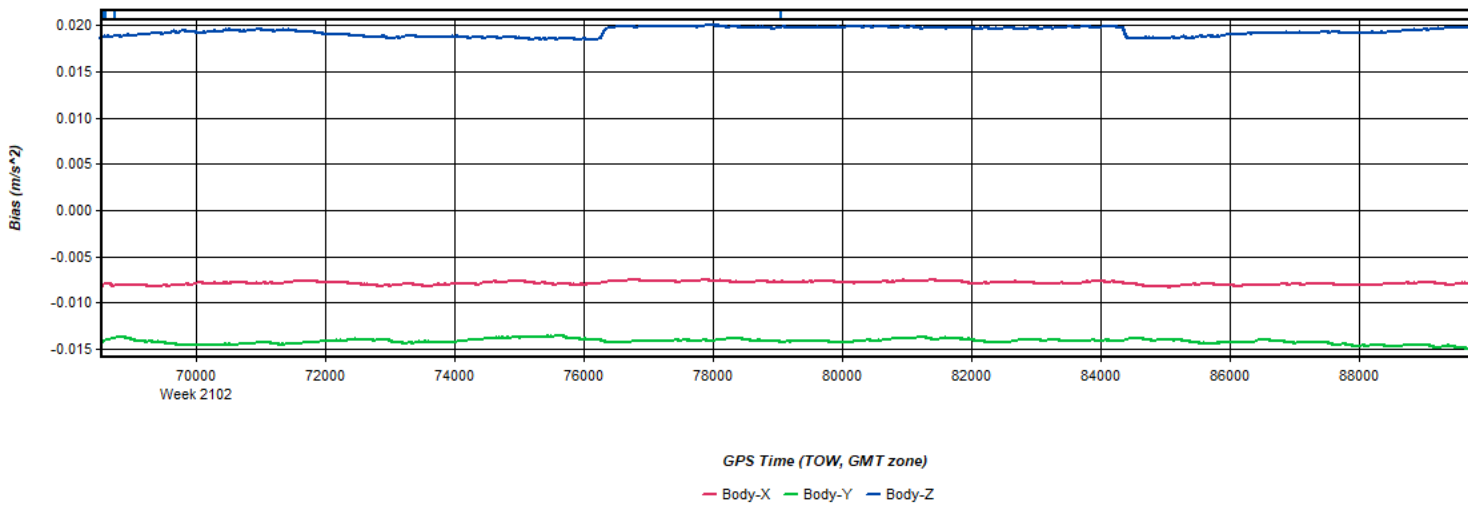
Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 18: 20200419190050_22 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



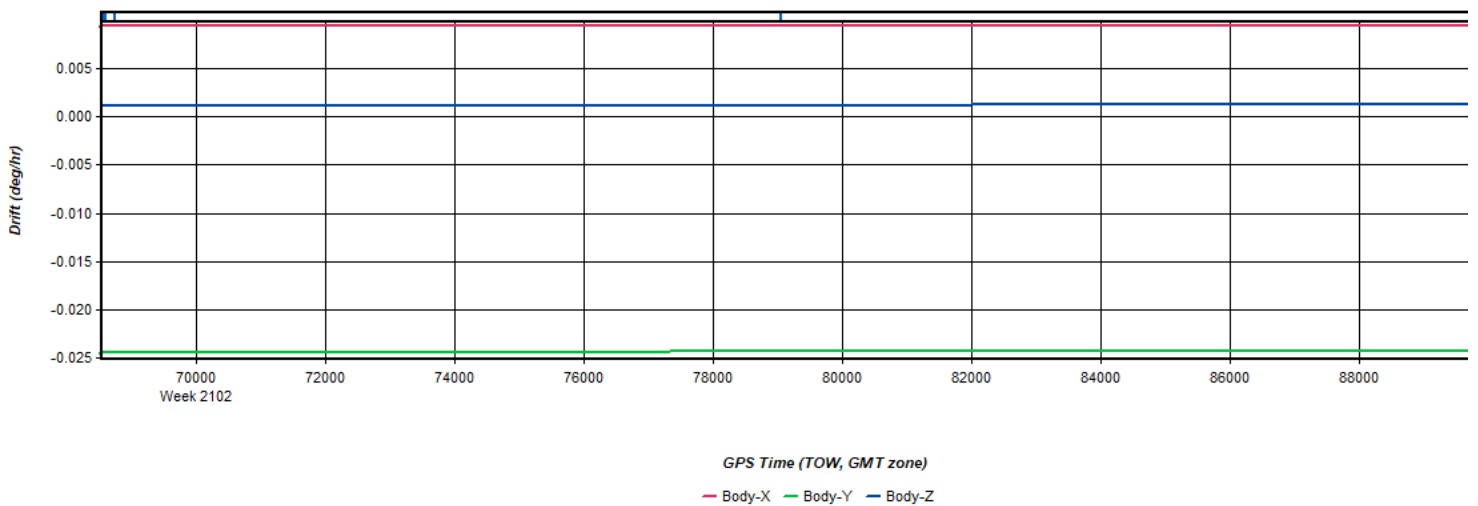
Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 19: 20200419190050_22 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Figure 20: 20200419190050_22 [Smoothed TC Combined] - Gyro Drift Plot



Process	20200419190050_22	by Unknown	on 7/6/2020	at 17:09:33
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Output Results for 20200421012658_23

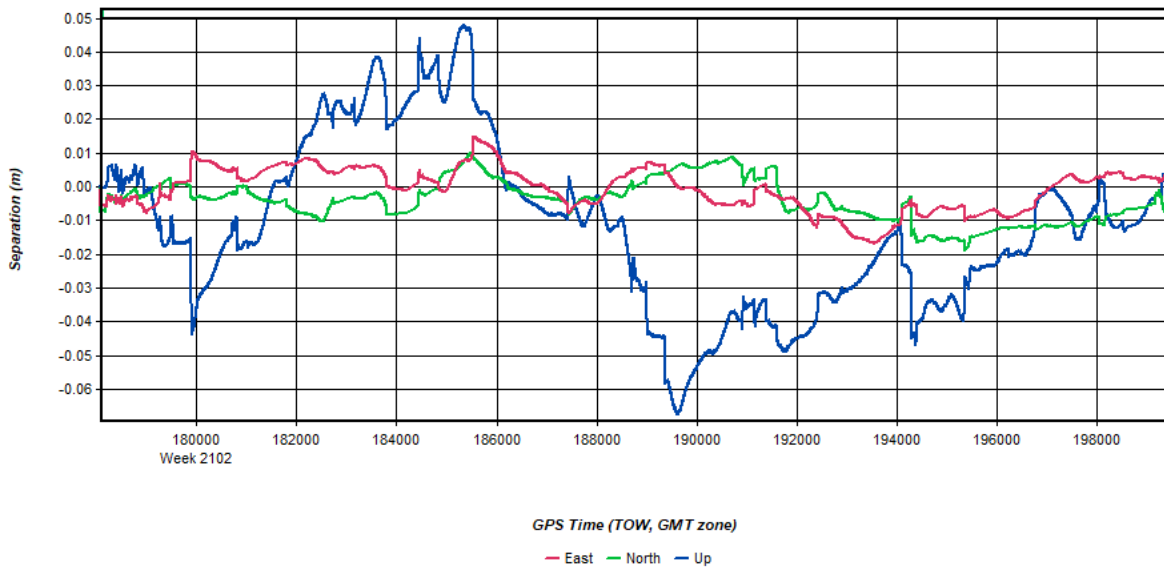
Inertial Explorer Version 8.90.2124
06/09/2020

Figure 1: Smoothed TC Combined - Map



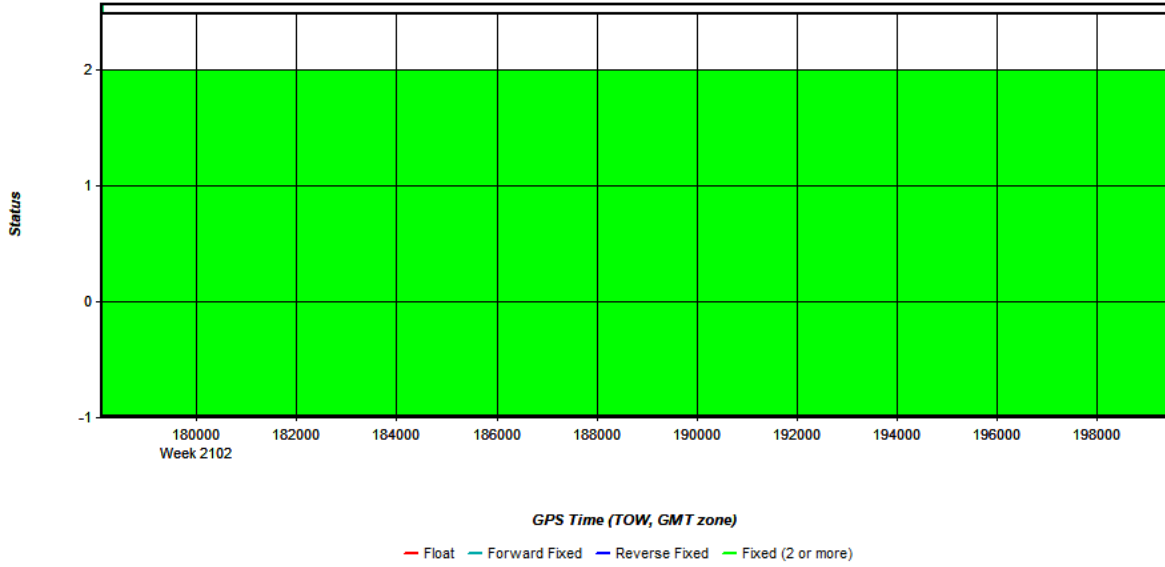
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 2: 20200421012658_23 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



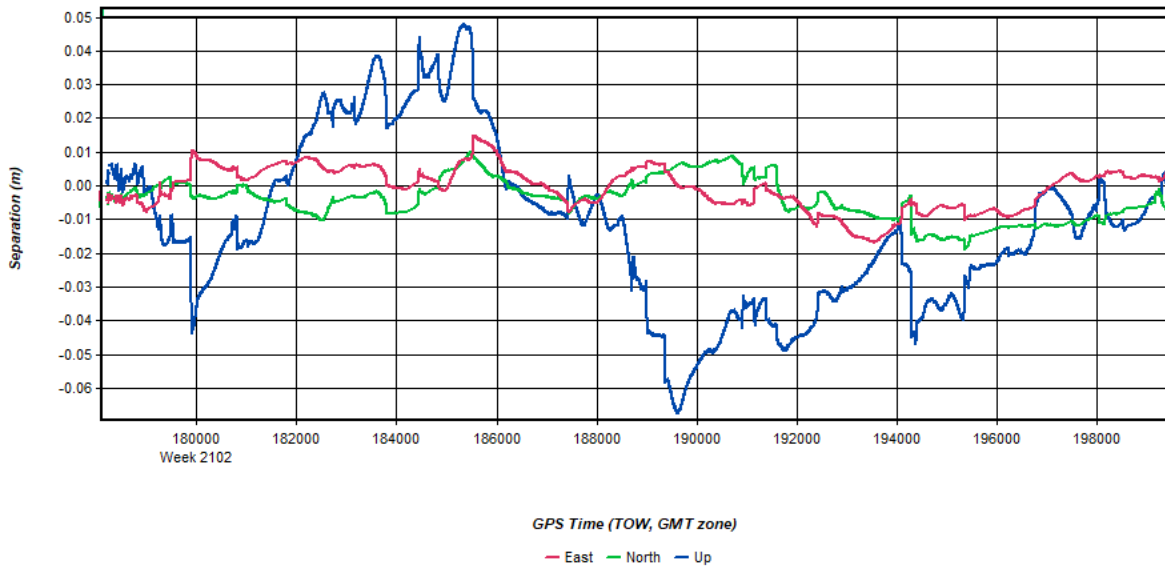
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 3: 20200421012658_23 [Smoothed TC Combined] - Float or Fixed Ambiguity



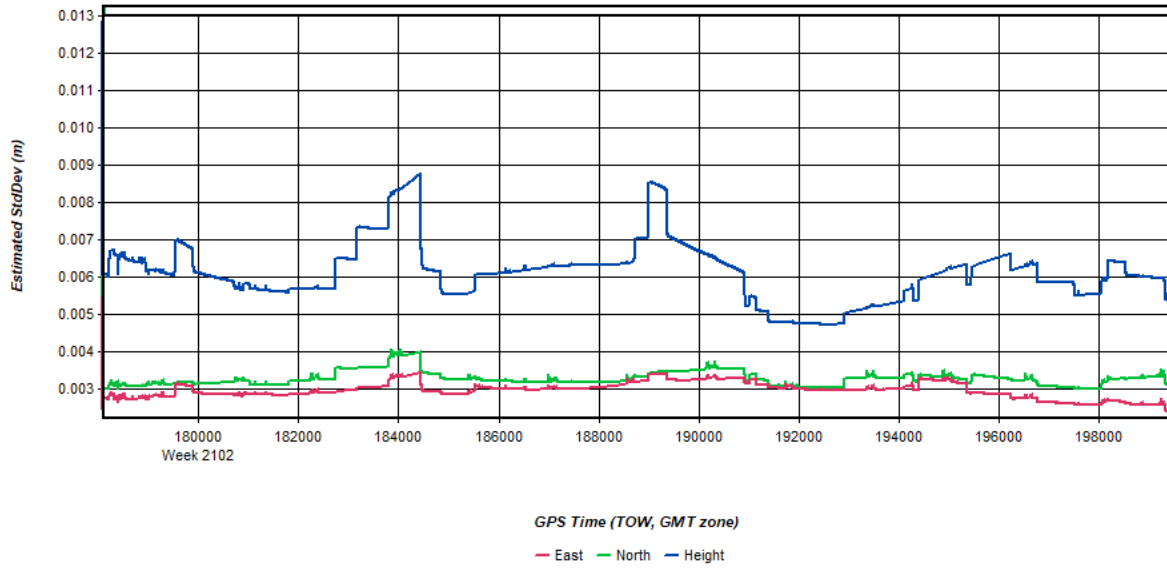
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 4: 20200421012658_23 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



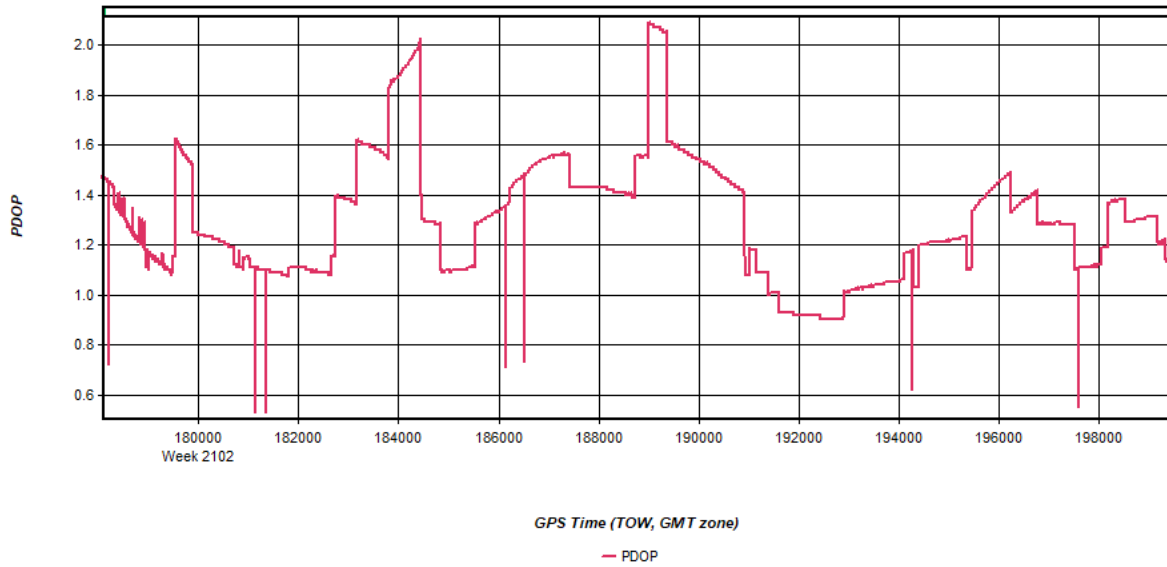
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 5: 20200421012658_23 [Smoothed TC Combined] - Estimated Position Accuracy Plot



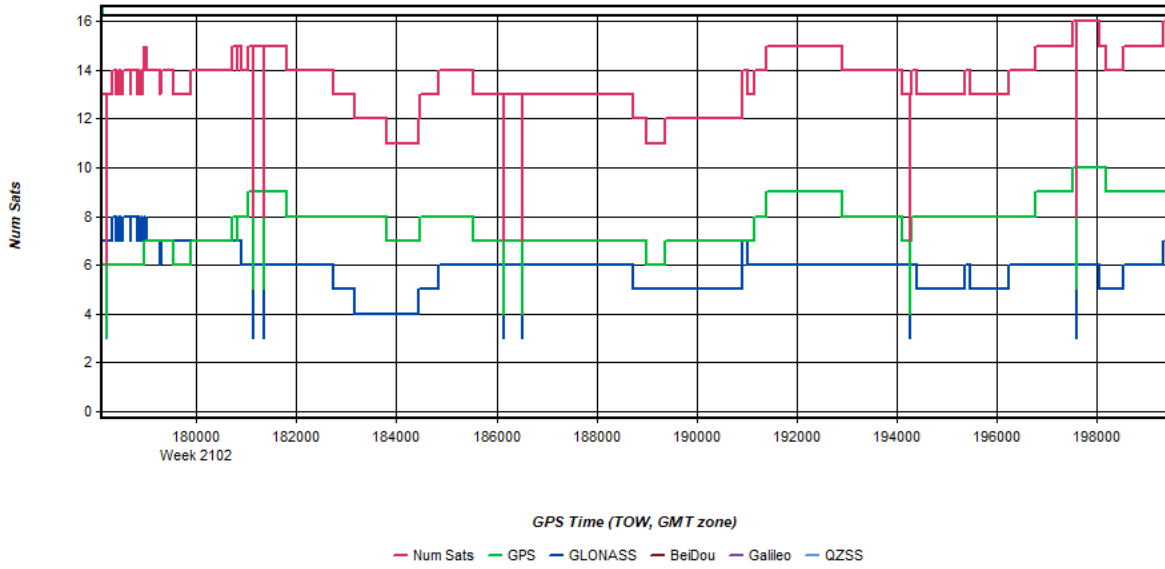
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 6: 20200421012658_23 [Smoothed TC Combined] - PDOP Plot



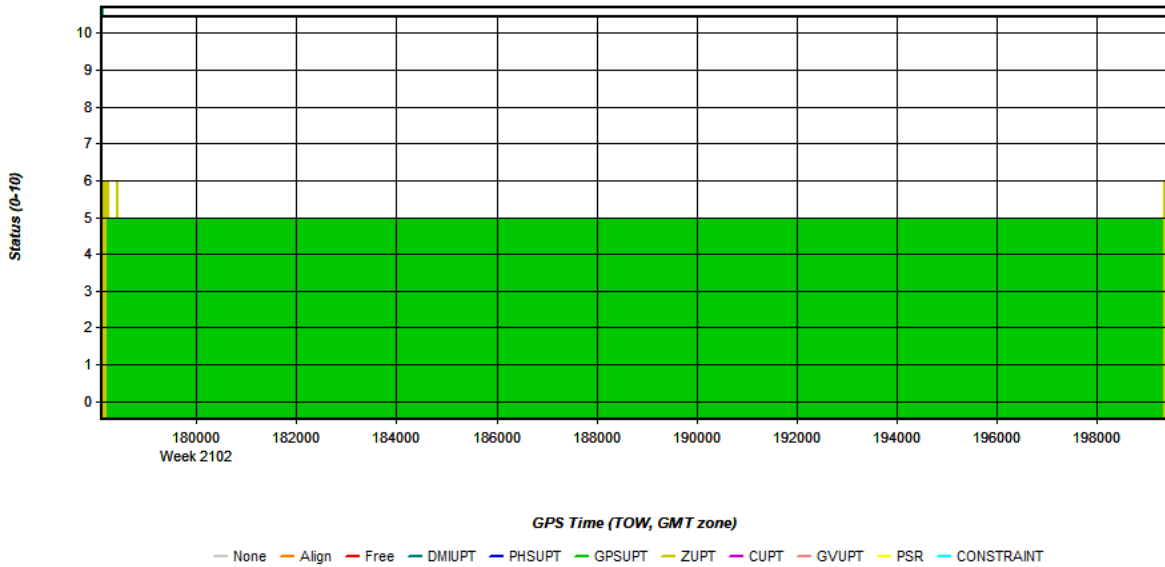
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 7: 20200421012658_23 [Smoothed TC Combined] - Number of Satellites Line Plot



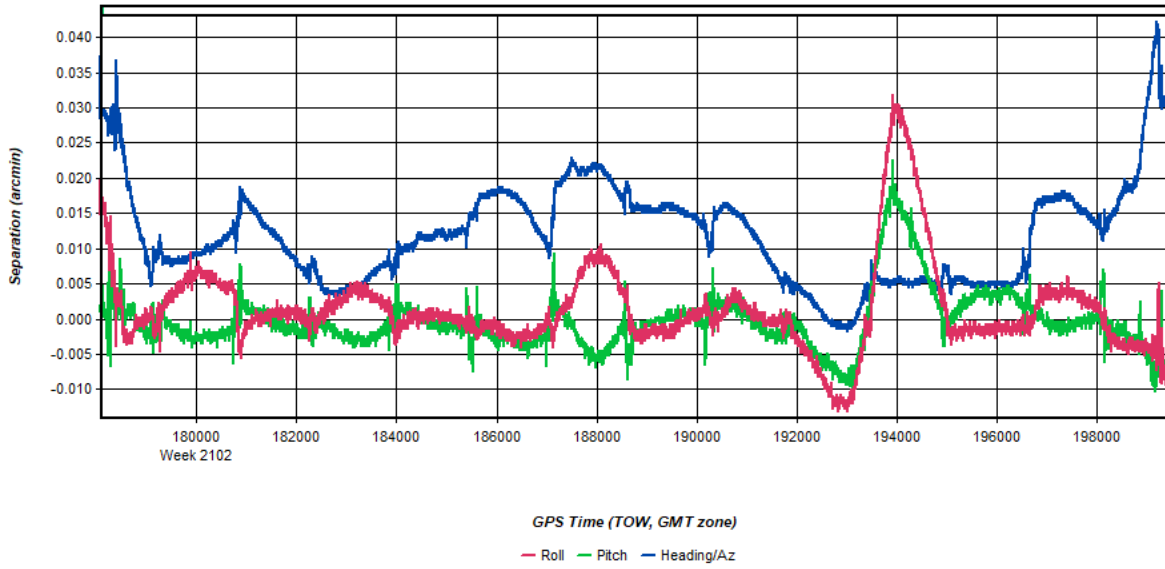
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 8: 20200421012658_23 [Smoothed TC Combined] - Status flag for IMU processing



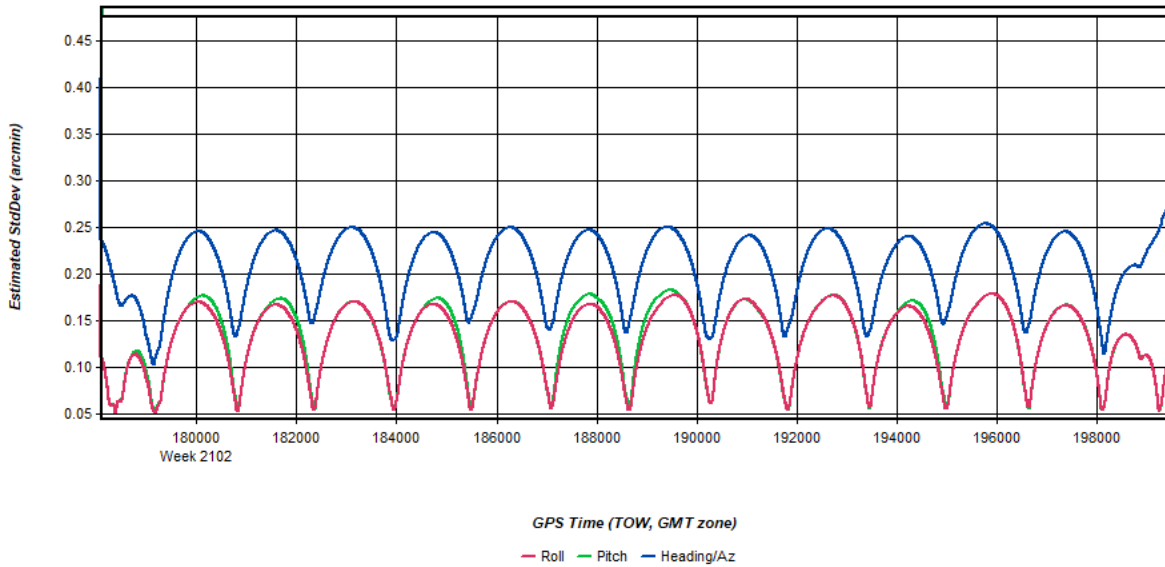
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 9: 20200421012658_23 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



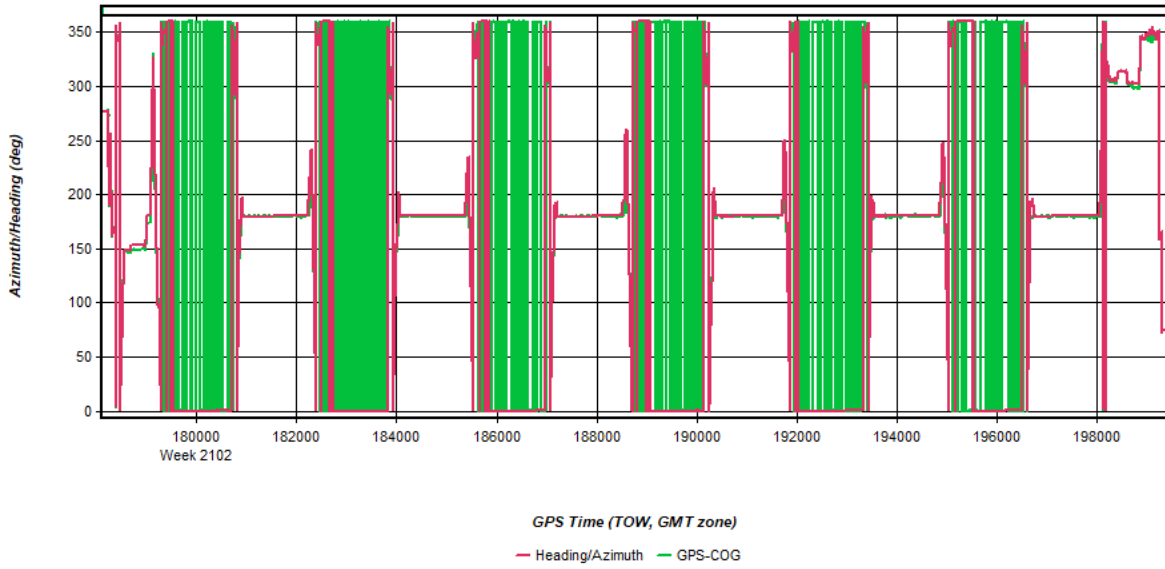
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 10: 20200421012658_23 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



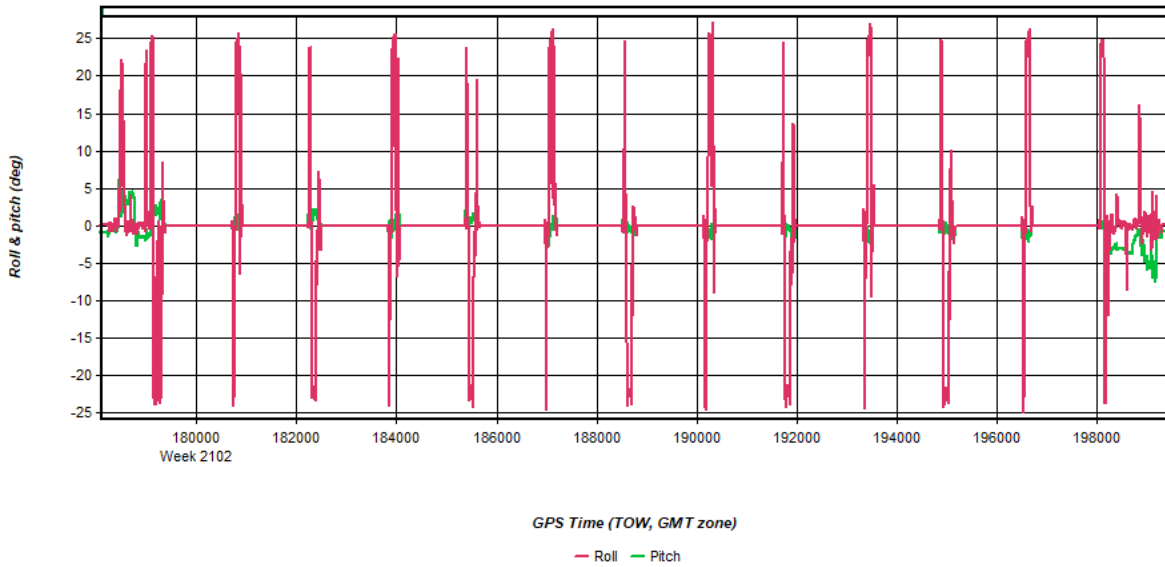
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 11: 20200421012658_23 [Smoothed TC Combined] - Azimuth Plot



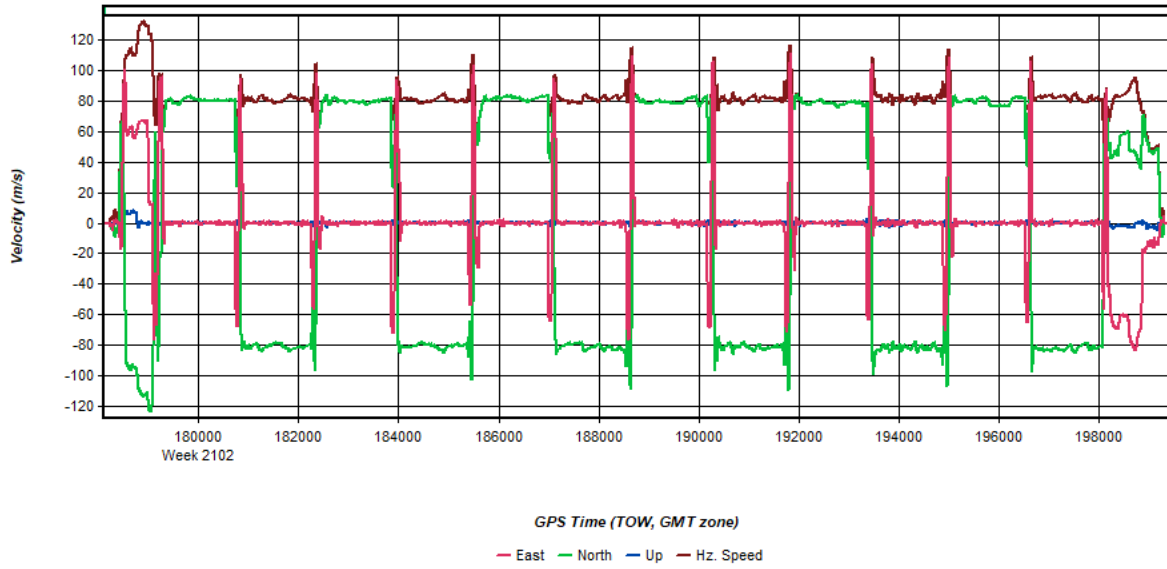
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 12: 20200421012658_23 [Smoothed TC Combined] - Roll & Pitch Plot



Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 13: 20200421012658_23 [Smoothed TC Combined] - Velocity Profile Plot



Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 14: 20200421012658_23 [Smoothed TC Combined] - Body Frame Velocity Plot



Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 15: 20200421012658_23 [Smoothed TC Combined] - Height Profile Plot

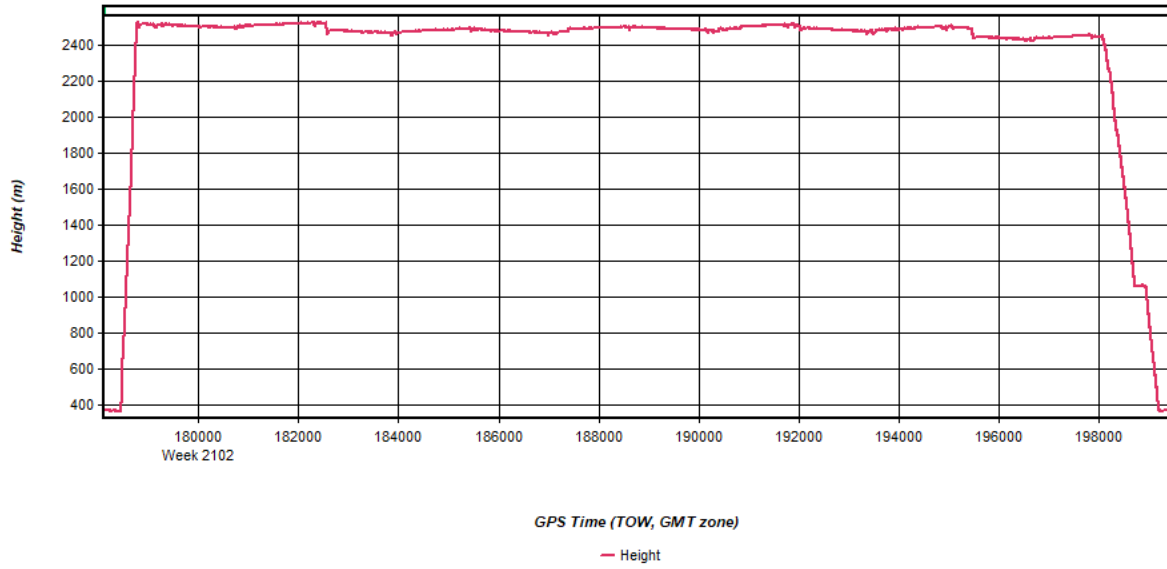


Figure 16: 20200421012658_23 [Smoothed TC Combined] - C/A Code Residual RMS Plot

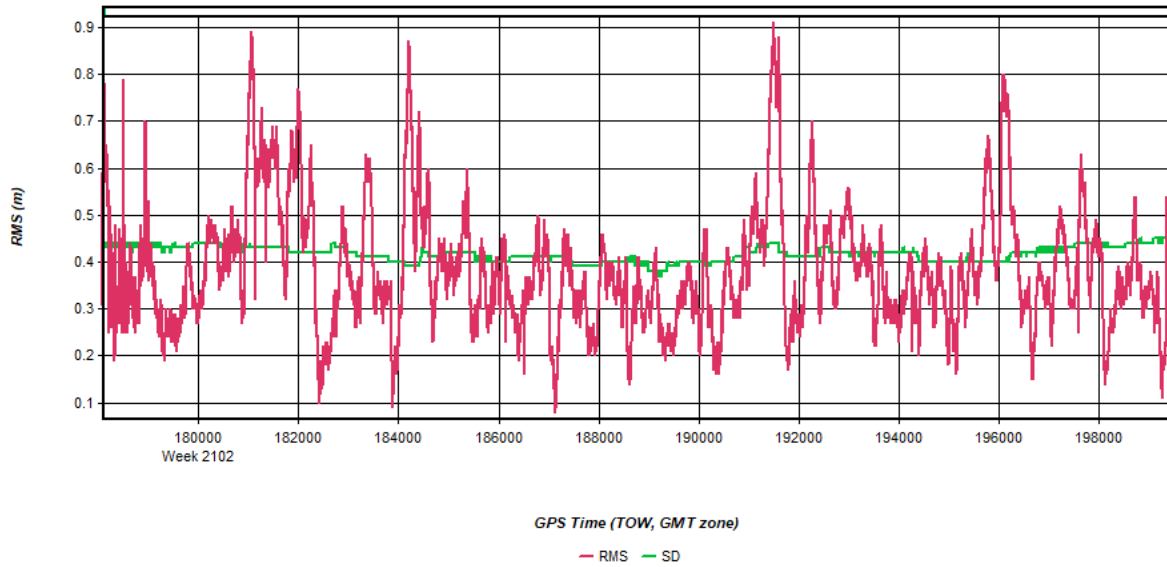
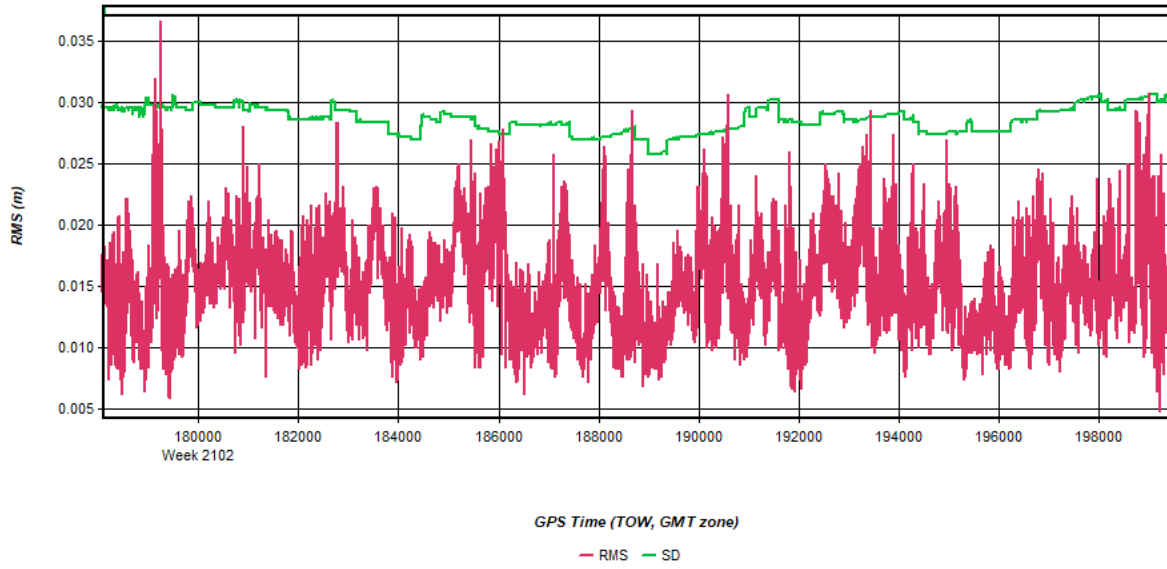
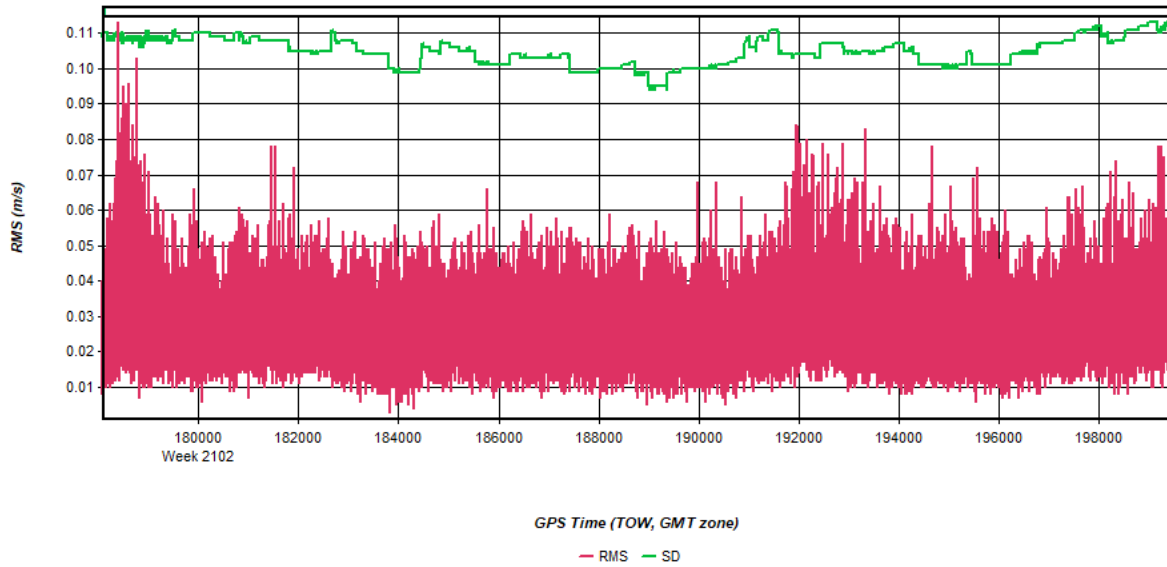


Figure 17: 20200421012658_23 [Smoothed TC Combined] - Carrier Residual RMS Plot



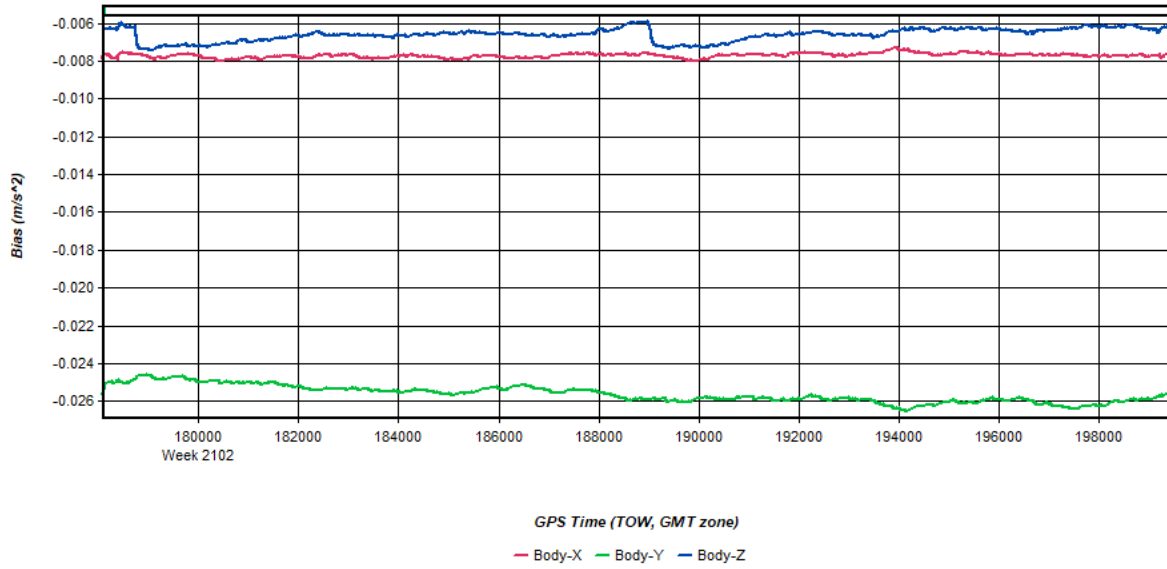
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 18: 20200421012658_23 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



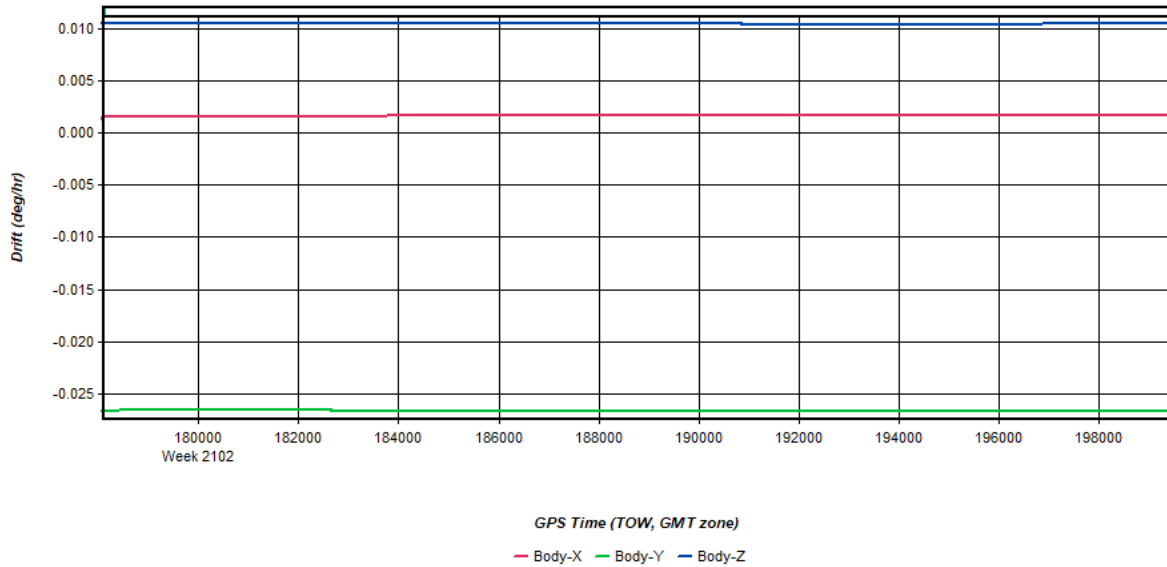
Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 19: 20200421012658_23 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Figure 20: 20200421012658_23 [Smoothed TC Combined] - Gyro Drift Plot

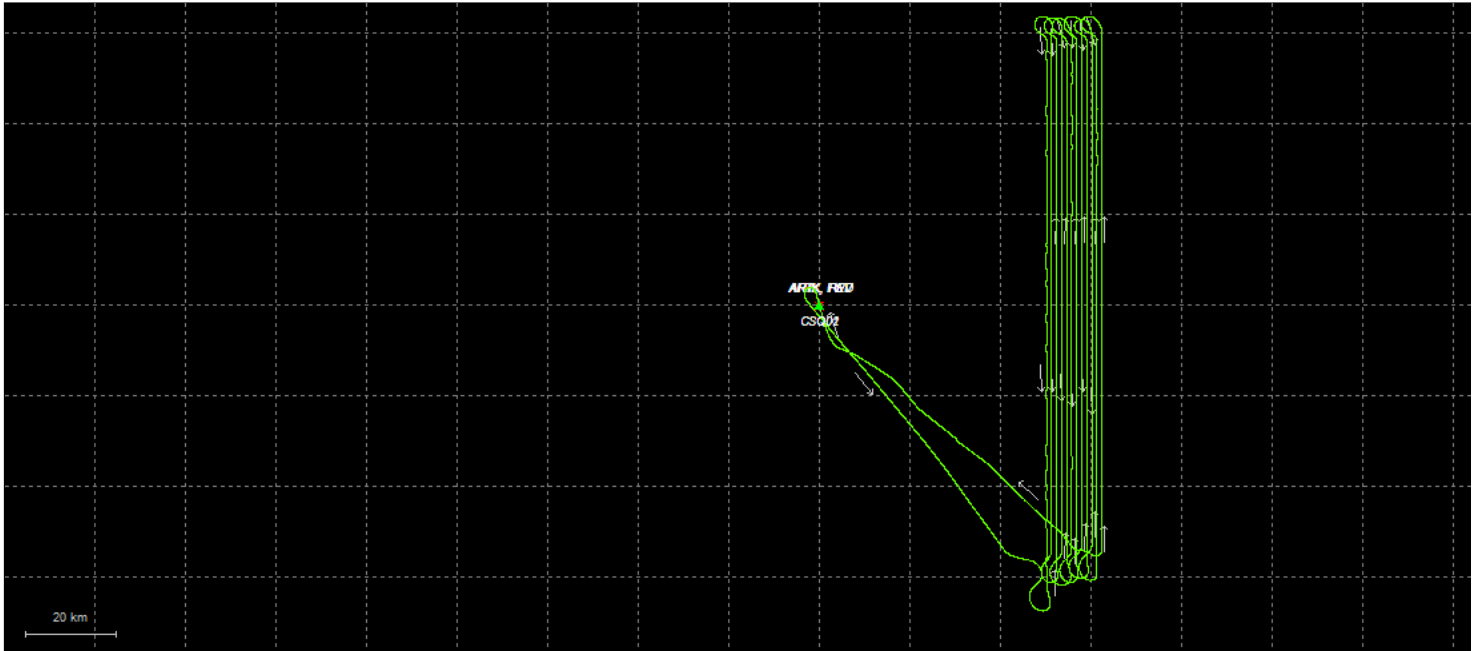


Process	20200421012658_23	by Unknown	on 6/9/2020	at 11:40:20
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Output Results for 20200421125525_24

Inertial Explorer Version 8.90.2124
06/12/2020

Figure 1: Smoothed TC Combined - Map



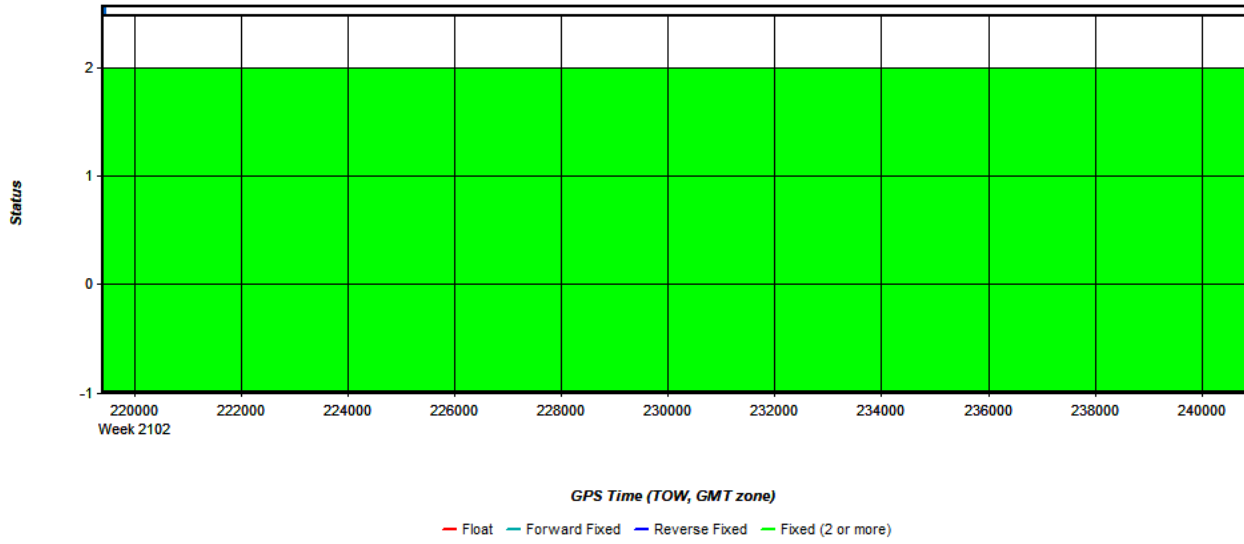
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 2: 20200421125525_24 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 3: 20200421125525_24 [Smoothed TC Combined] - Float or Fixed Ambiguity



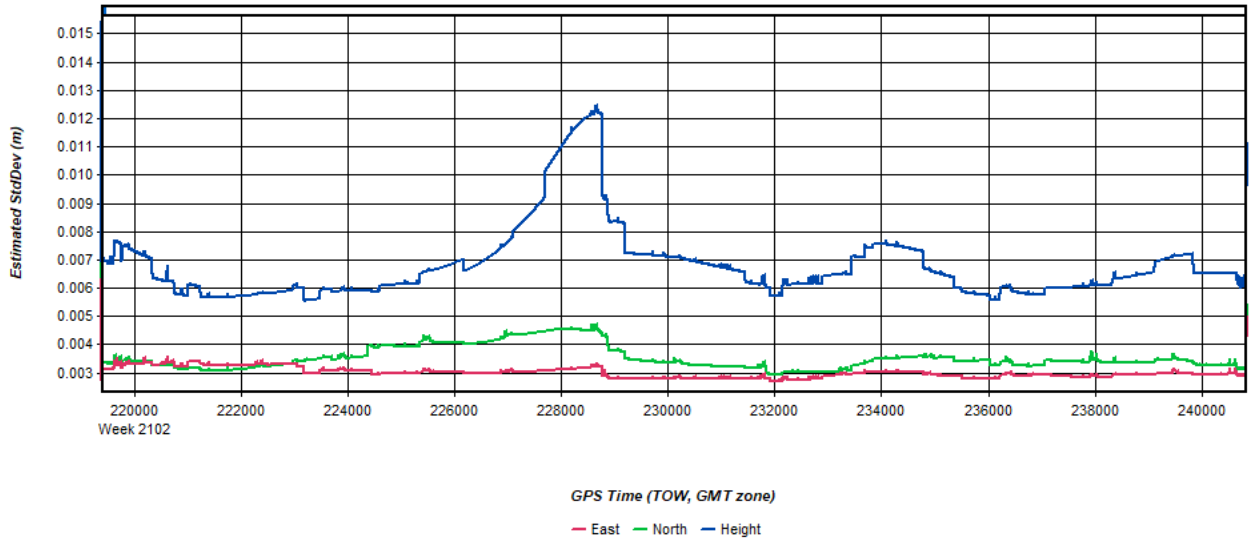
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 4: 20200421125525_24 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



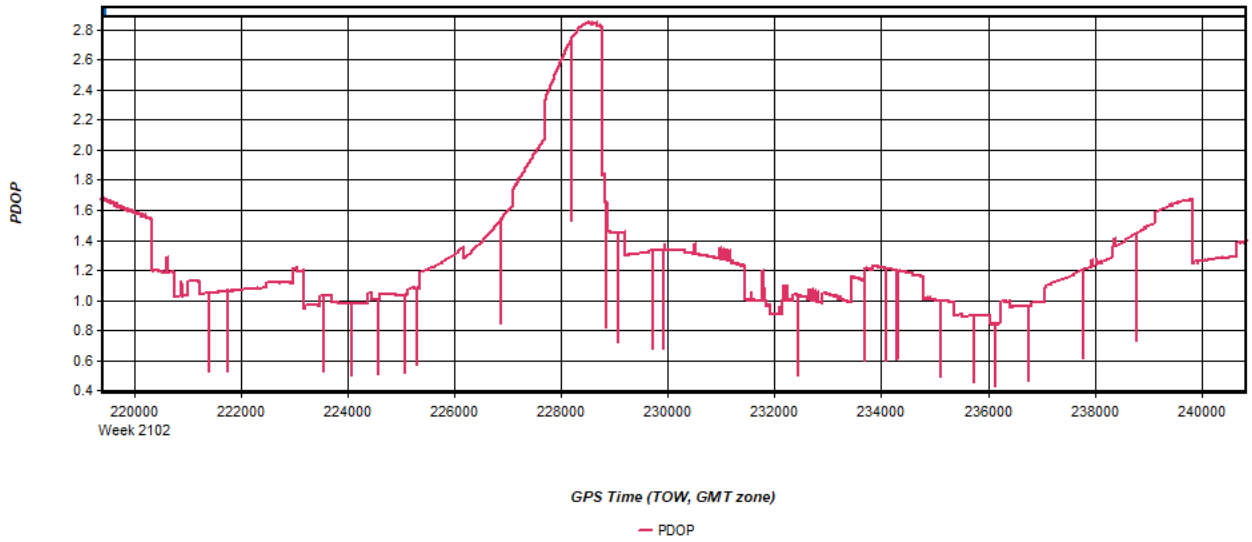
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 5: 20200421125525_24 [Smoothed TC Combined] - Estimated Position Accuracy Plot



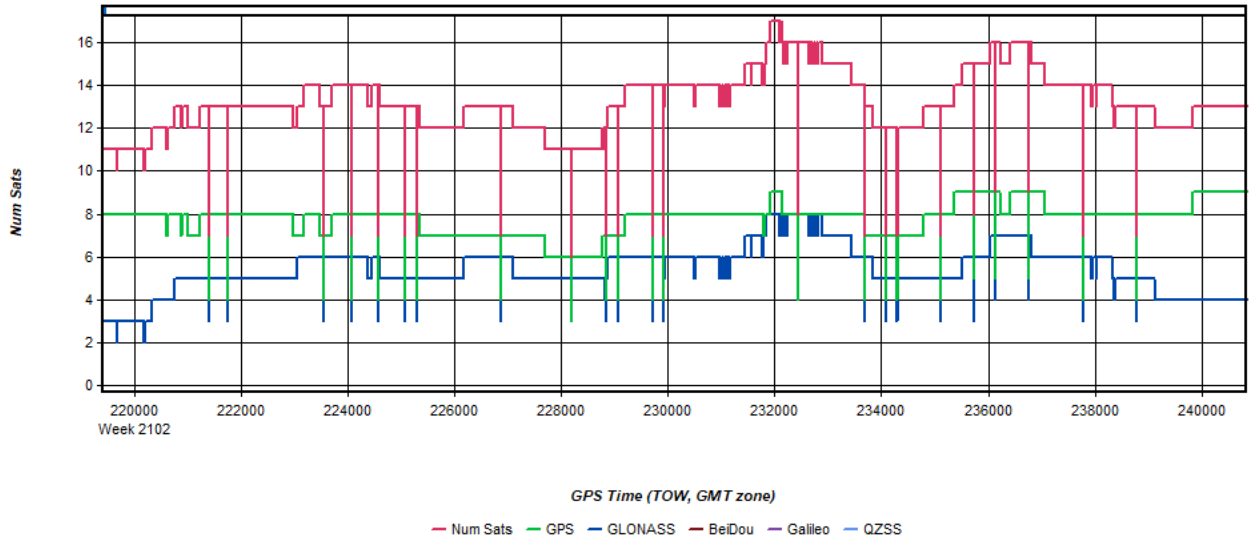
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 6: 20200421125525_24 [Smoothed TC Combined] - PDOP Plot



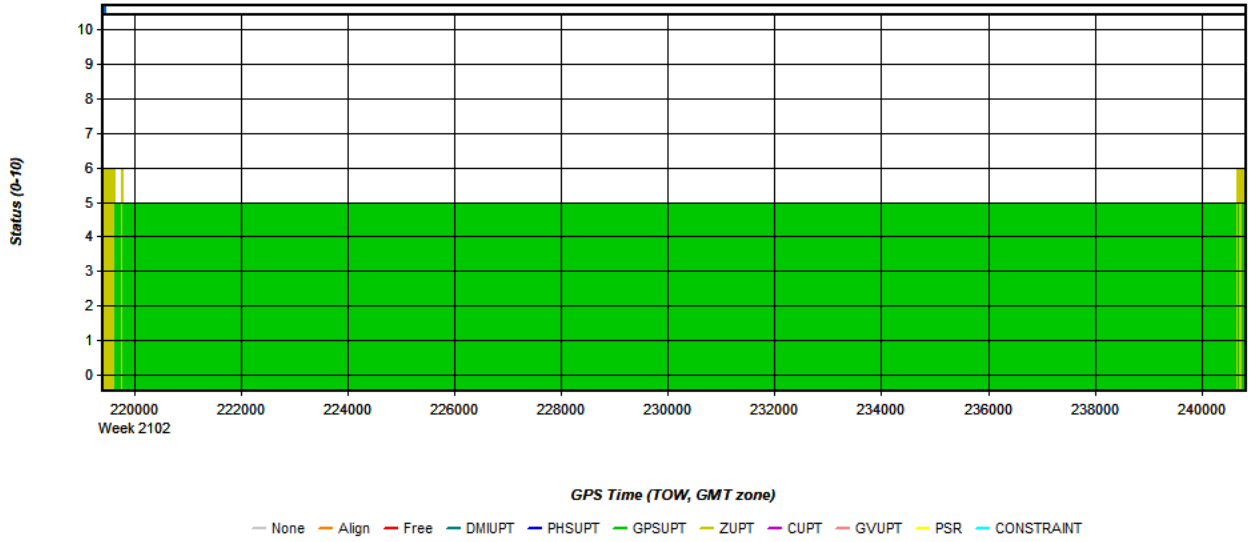
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 7: 20200421125525_24 [Smoothed TC Combined] - Number of Satellites Line Plot



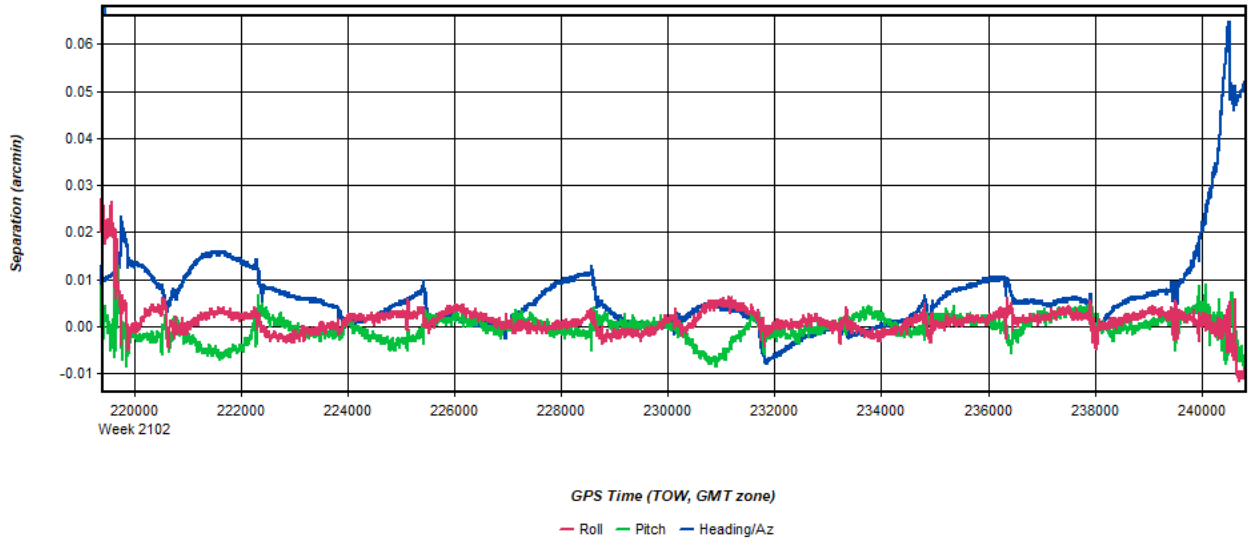
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 8: 20200421125525_24 [Smoothed TC Combined] - Status flag for IMU processing



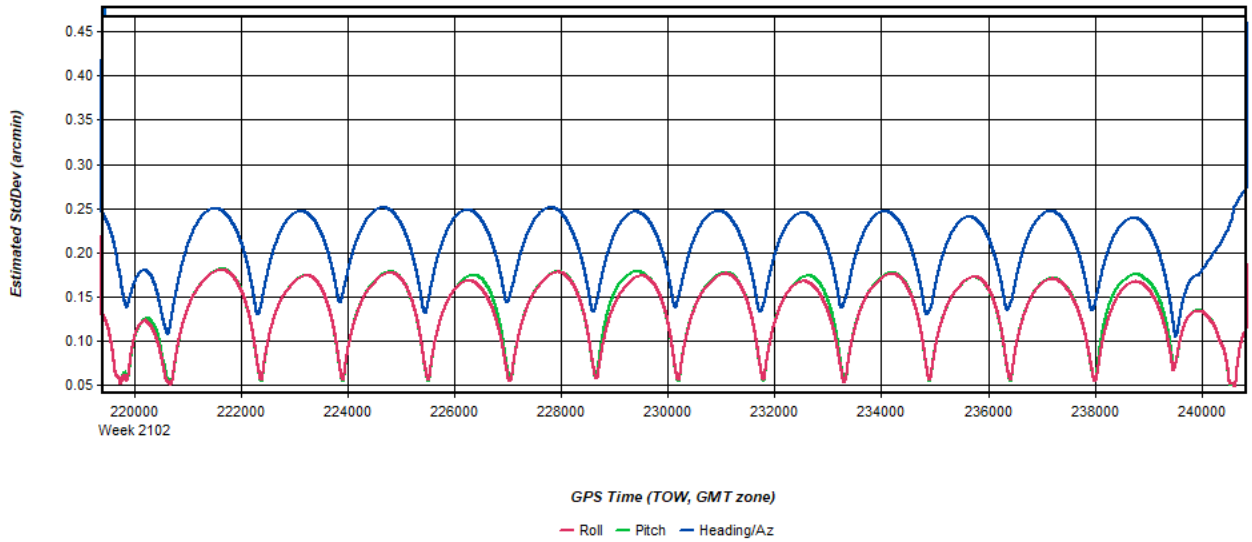
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 9: 20200421125525_24 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



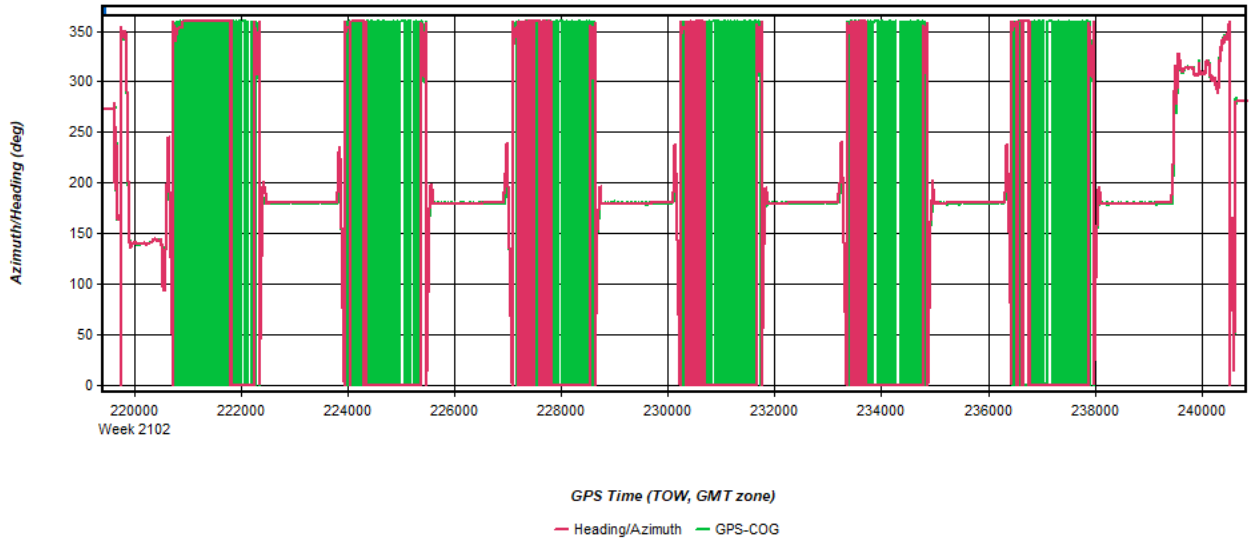
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 10: 20200421125525_24 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



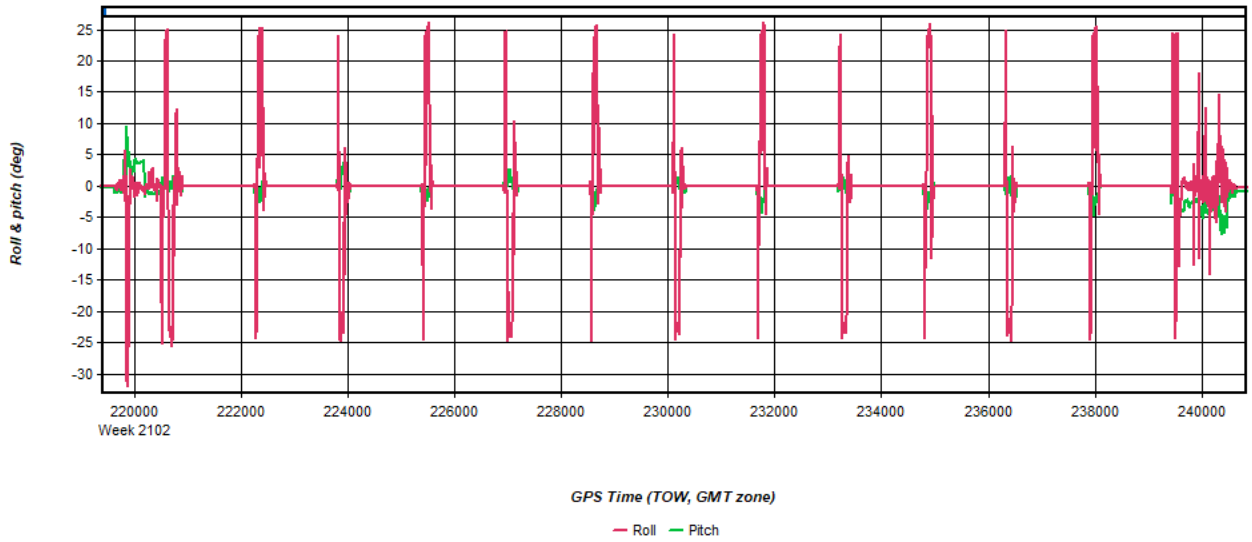
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 11: 20200421125525_24 [Smoothed TC Combined] - Azimuth Plot



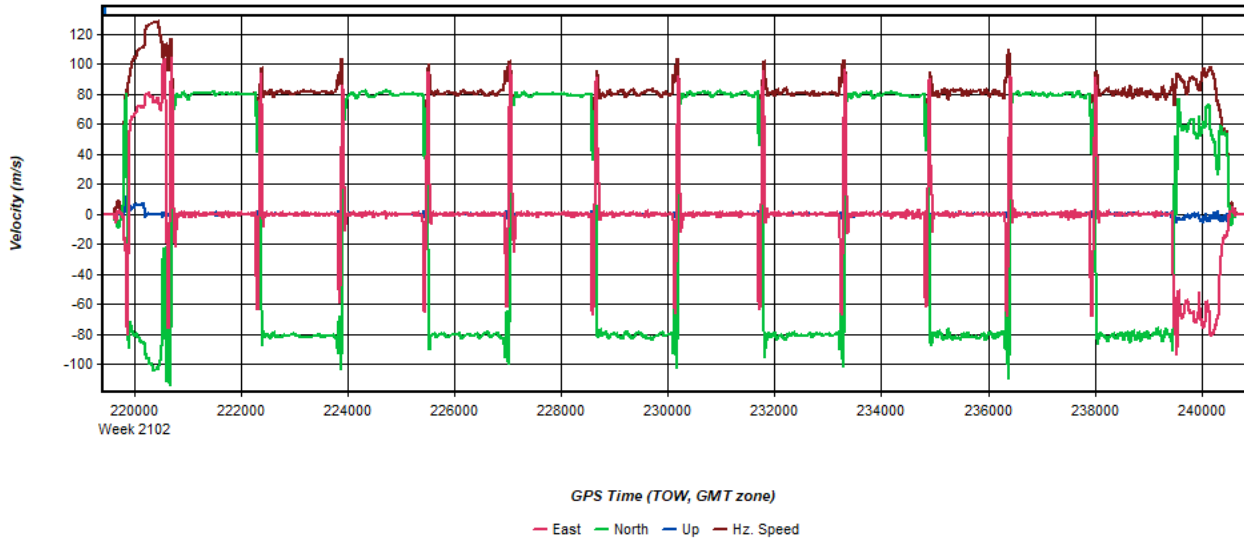
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 12: 20200421125525_24 [Smoothed TC Combined] - Roll & Pitch Plot



Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 13: 20200421125525_24 [Smoothed TC Combined] - Velocity Profile Plot



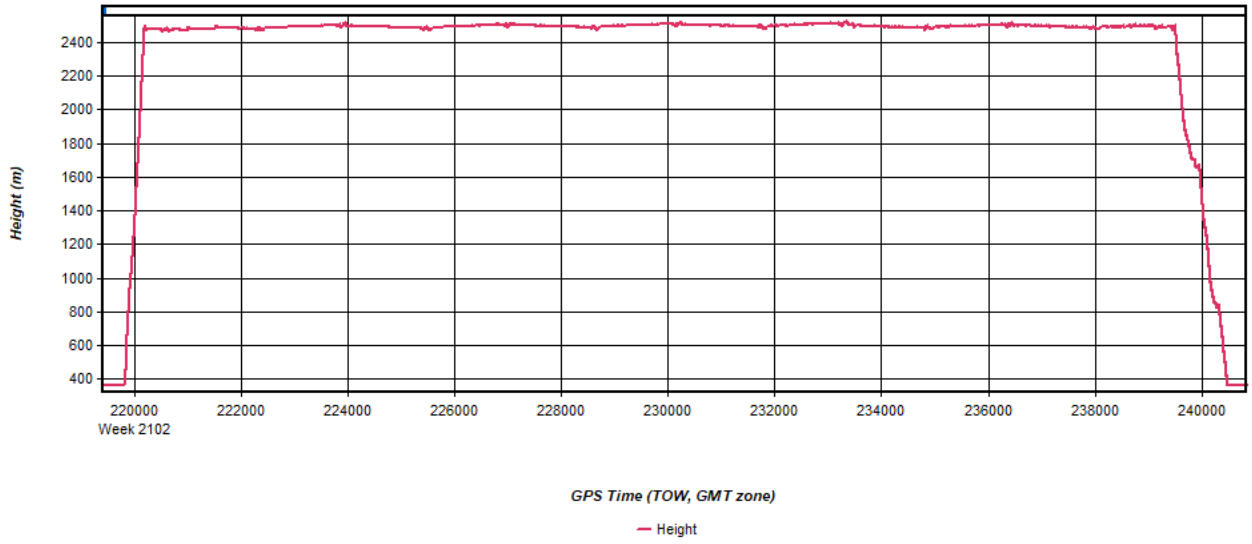
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 14: 20200421125525_24 [Smoothed TC Combined] - Body Frame Velocity Plot



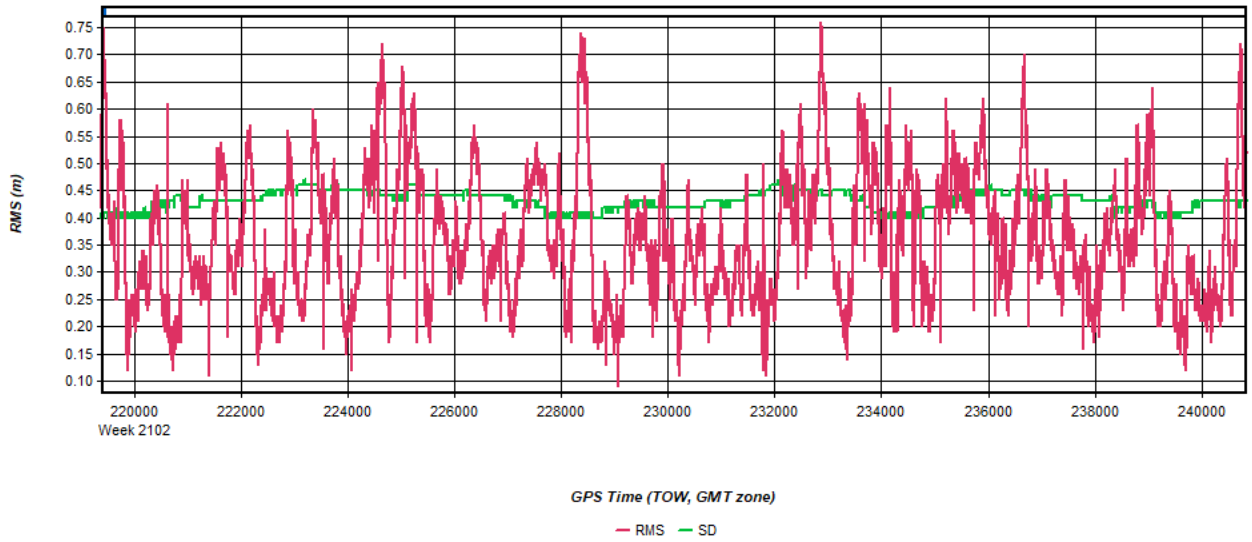
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 15: 20200421125525_24 [Smoothed TC Combined] - Height Profile Plot



Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 16: 20200421125525_24 [Smoothed TC Combined] - C/A Code Residual RMS Plot



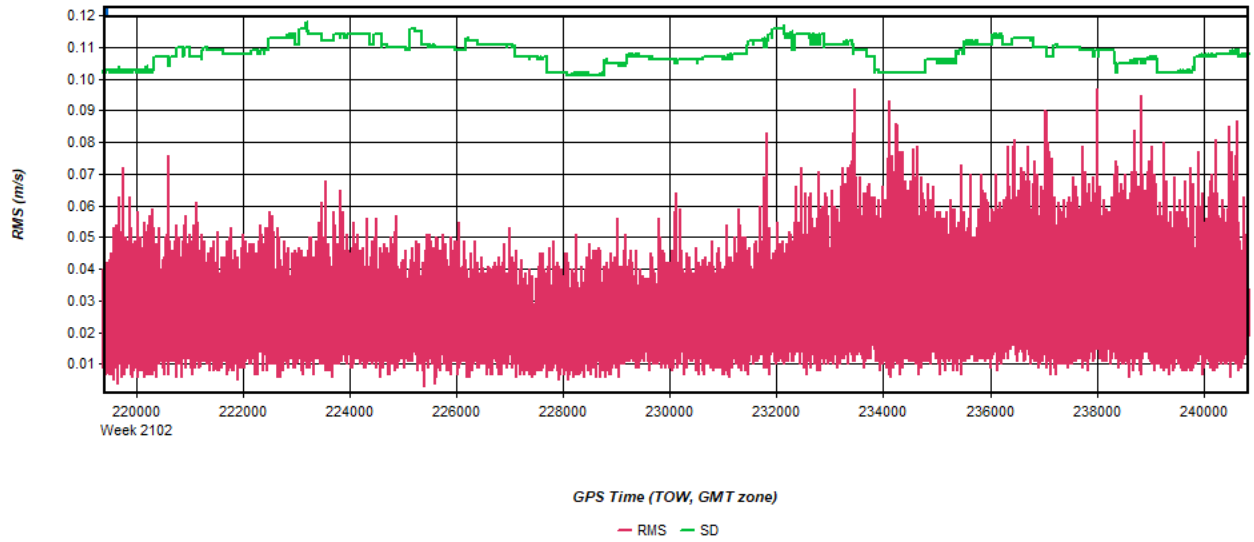
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 17: 20200421125525_24 [Smoothed TC Combined] - Carrier Residual RMS Plot



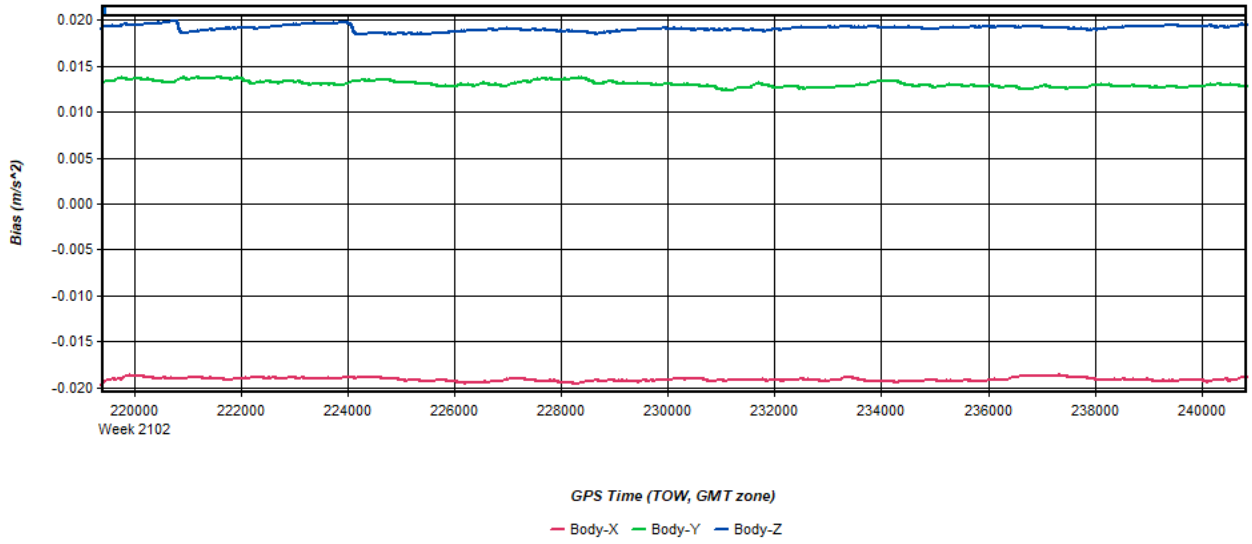
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 18: 20200421125525_24 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



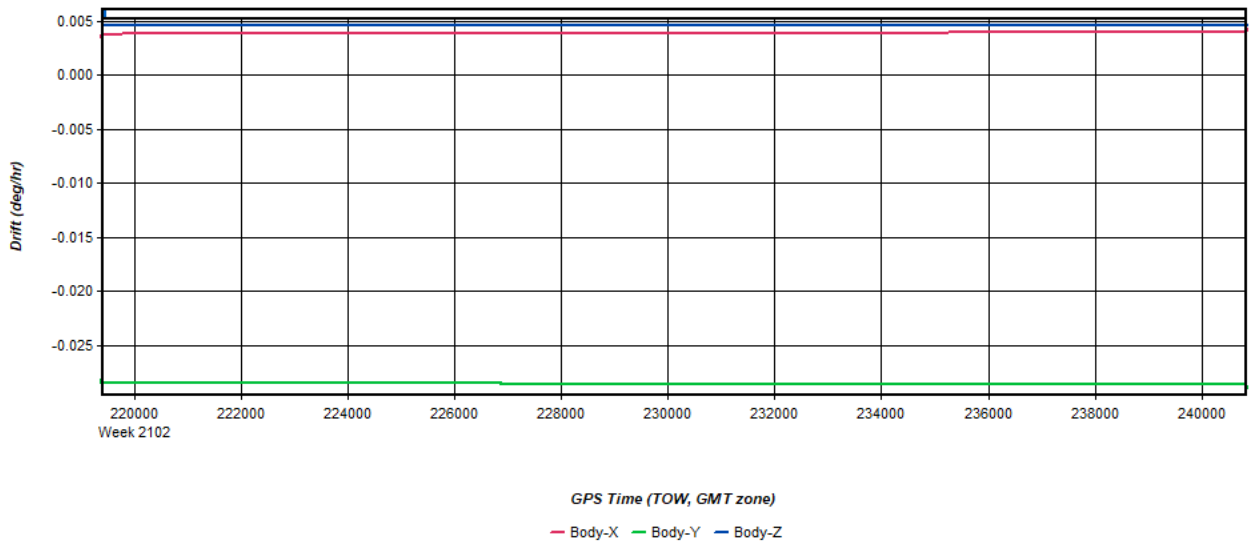
Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 19: 20200421125525_24 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Figure 20: 20200421125525_24 [Smoothed TC Combined] - Gyro Drift Plot

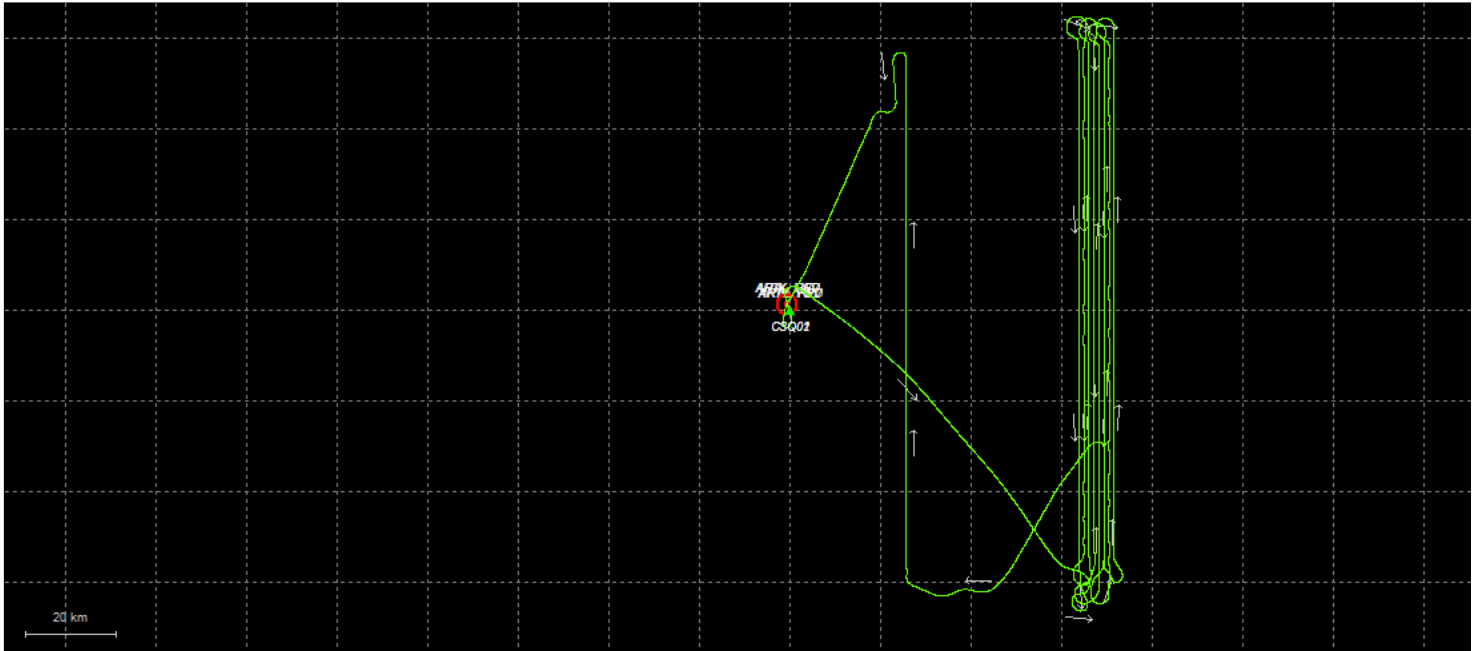


Process	20200421125525_24	by Unknown	on 6/12/2020	at 13:37:46
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Output Results for 20200421200431_25

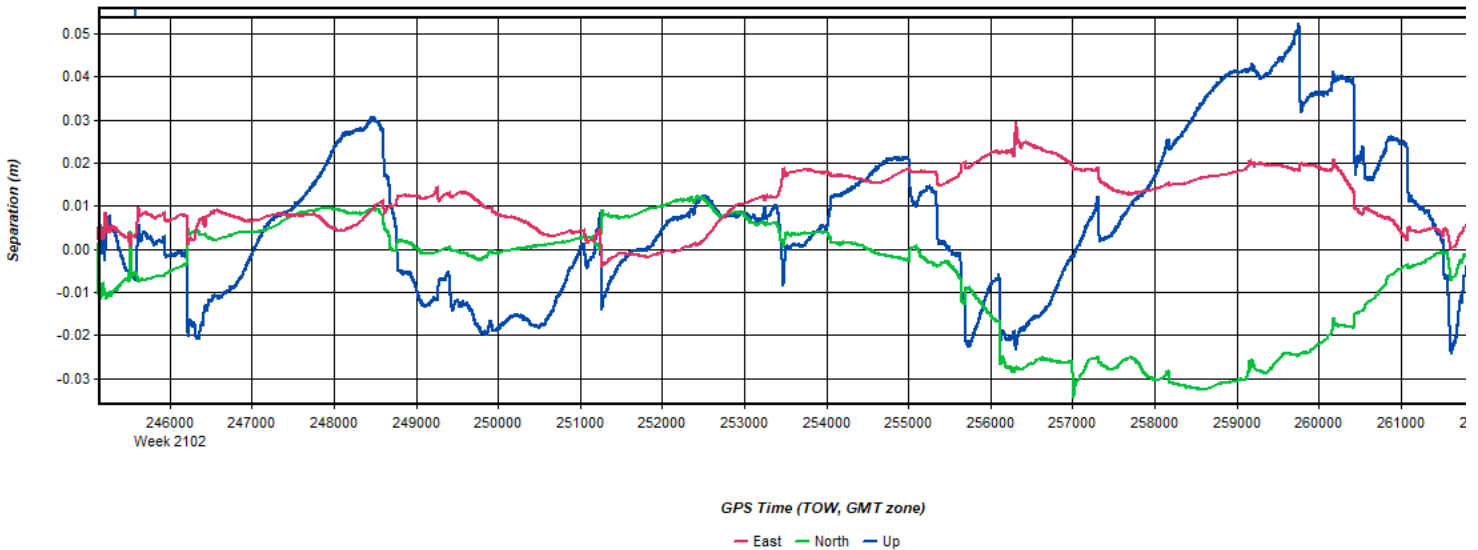
Inertial Explorer Version 8.90.2124
07/09/2020

Figure 1: Smoothed TC Combined - Map



Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 2: 20200421200431_25 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 3: 20200421200431_25 [Smoothed TC Combined] - Float or Fixed Ambiguity

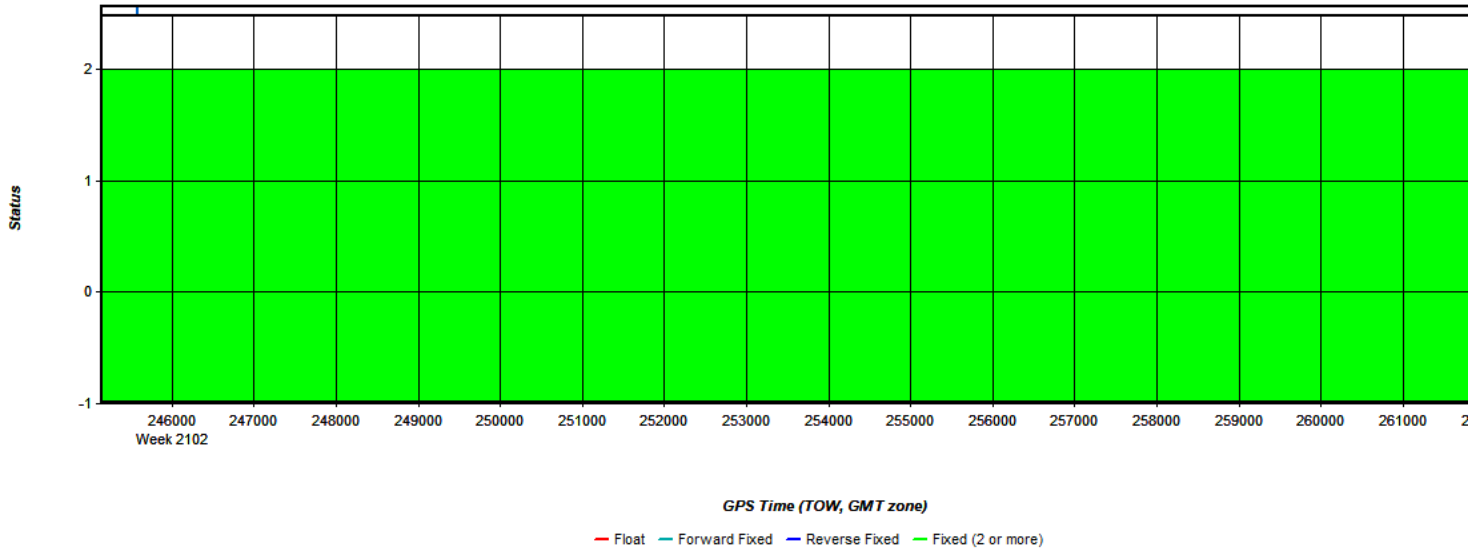


Figure 4: 20200421200431_25 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

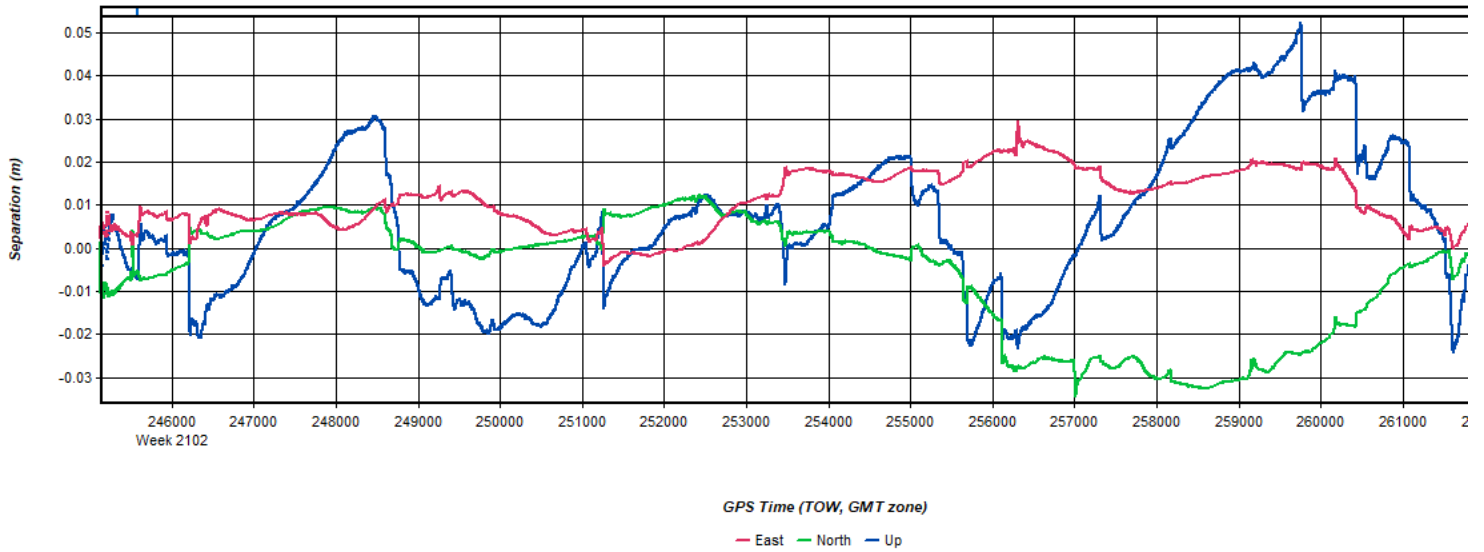
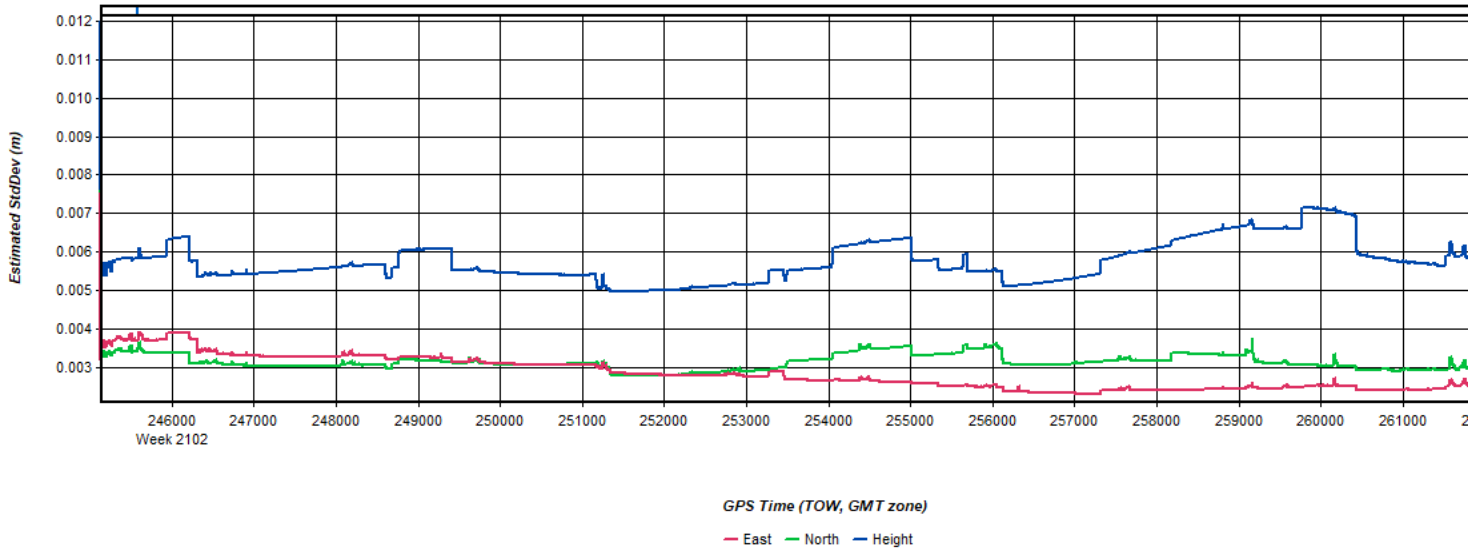
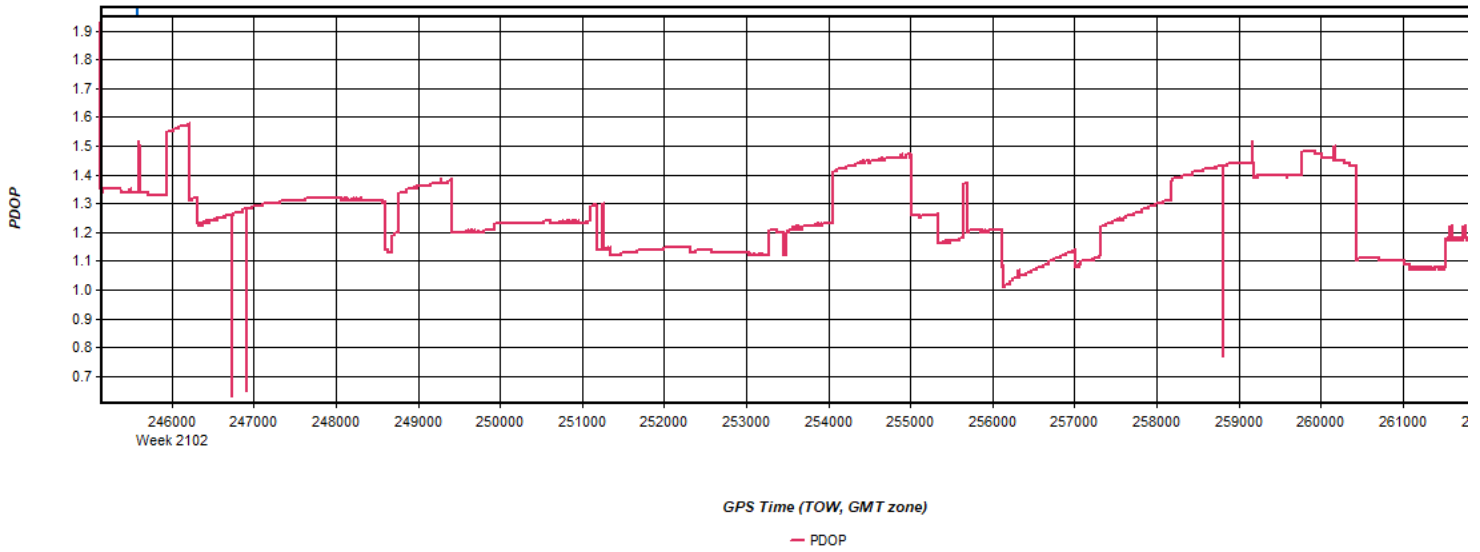


Figure 5: 20200421200431_25 [Smoothed TC Combined] - Estimated Position Accuracy Plot



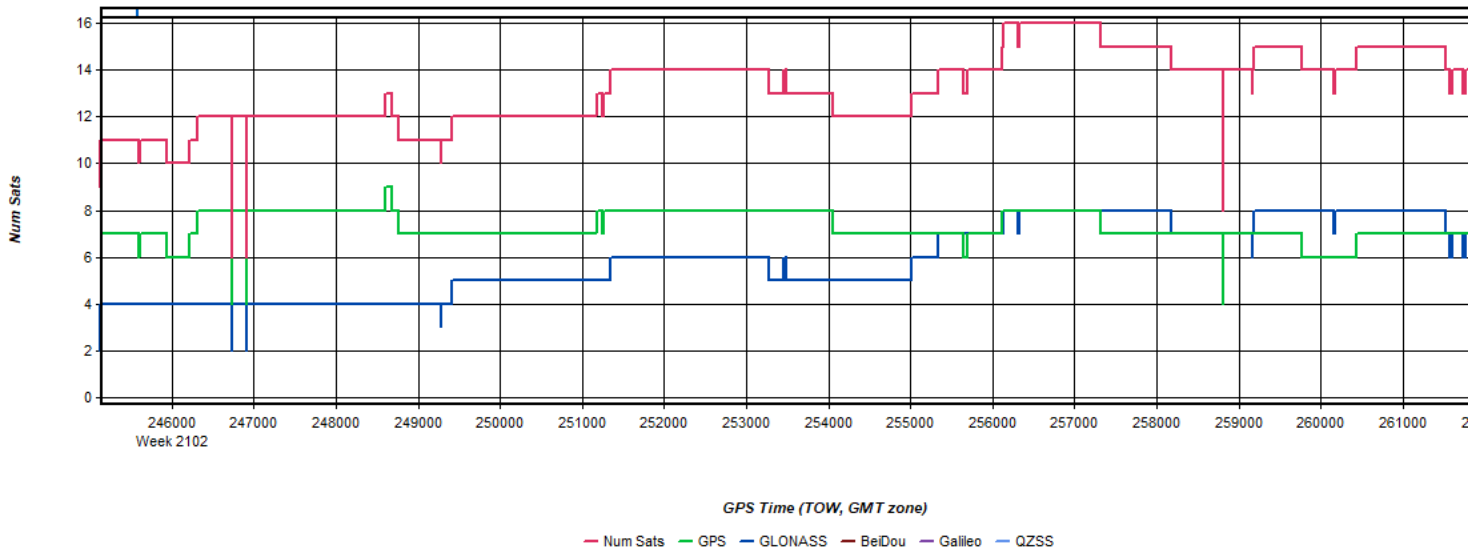
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 6: 20200421200431_25 [Smoothed TC Combined] - PDOP Plot



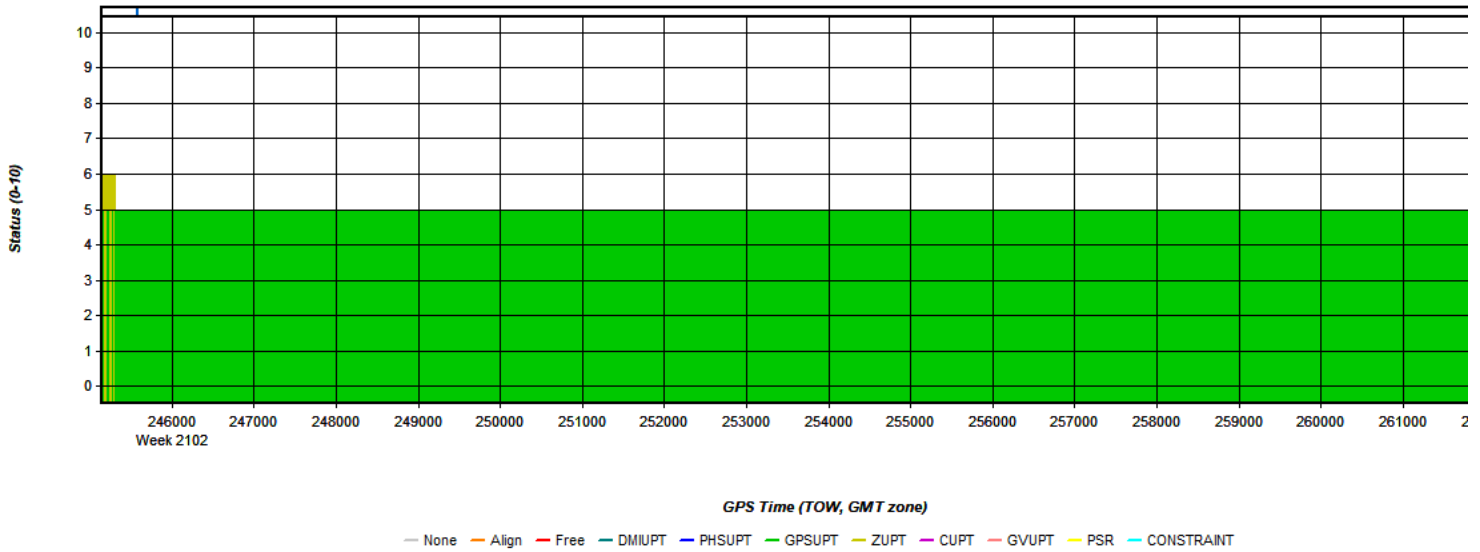
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 7: 20200421200431_25 [Smoothed TC Combined] - Number of Satellites Line Plot



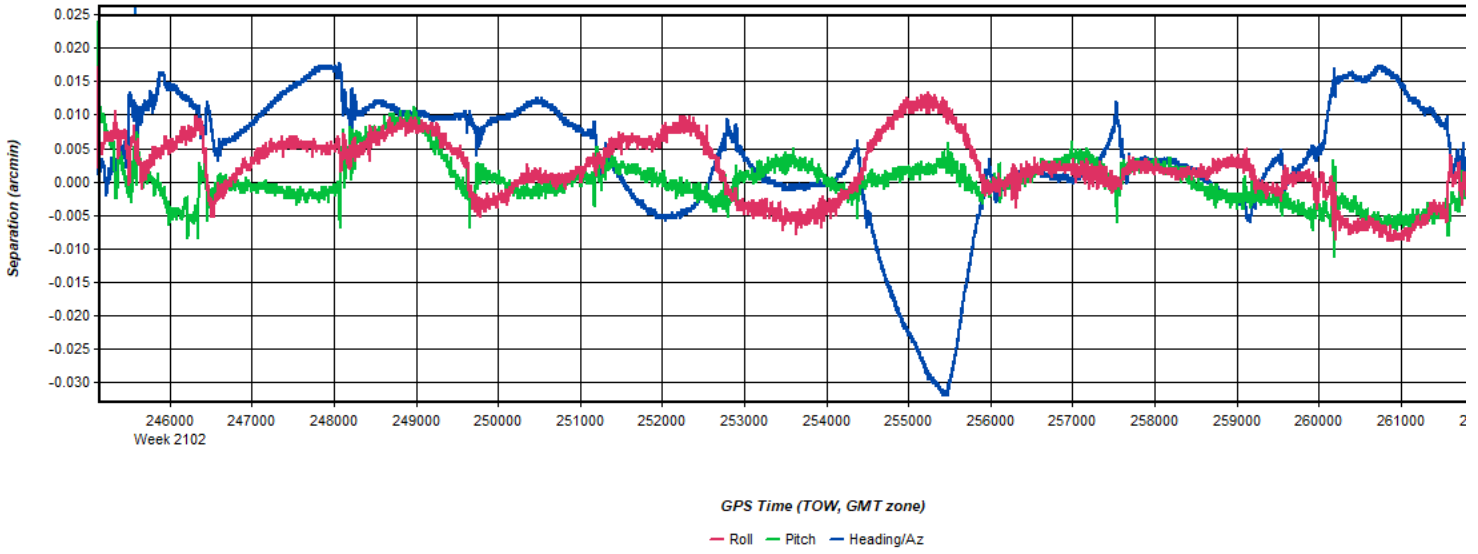
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 8: 20200421200431_25 [Smoothed TC Combined] - Status flag for IMU processing



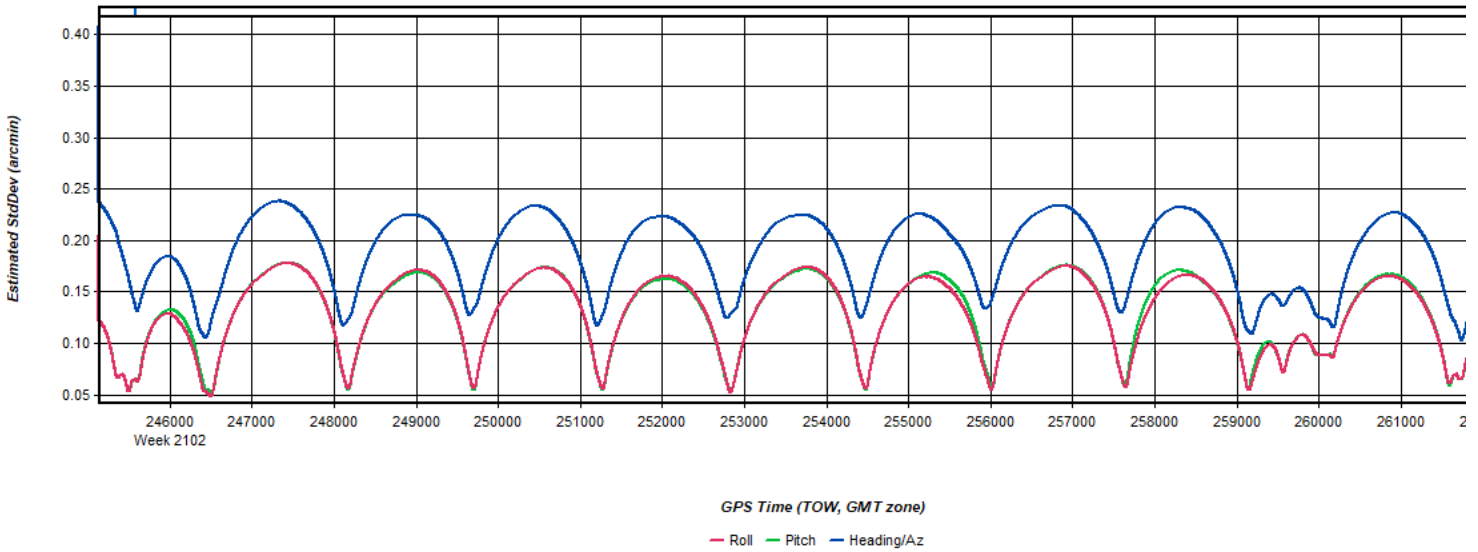
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 9: 20200421200431_25 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 10: 20200421200431_25 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



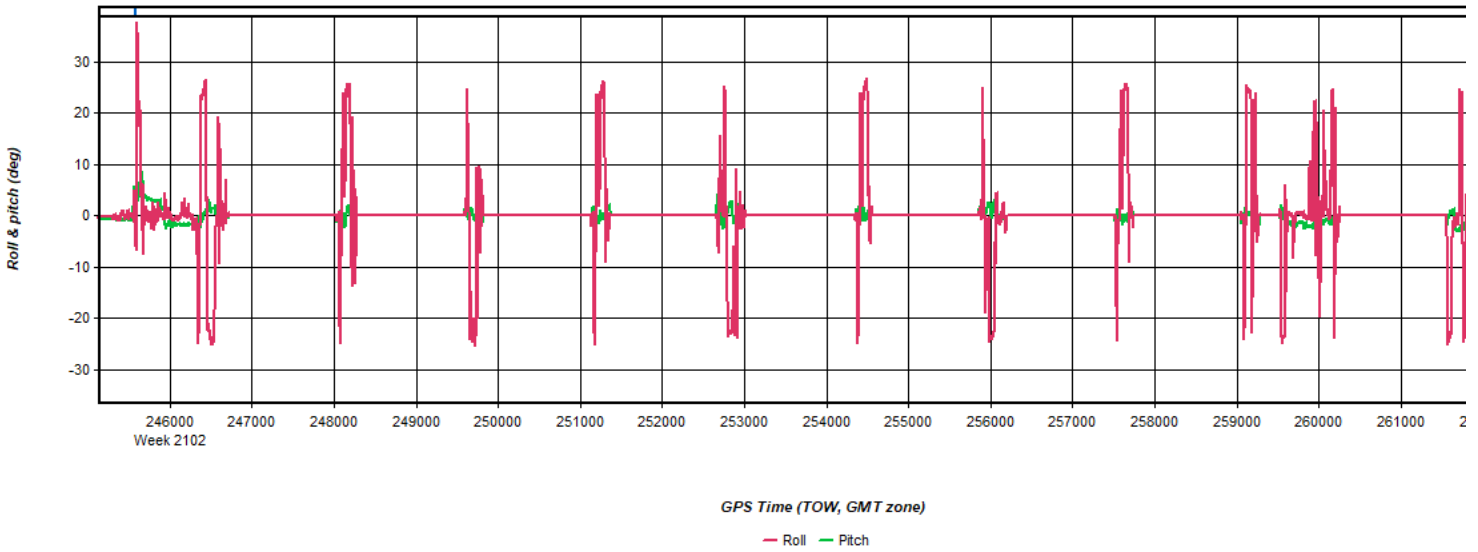
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 11: 20200421200431_25 [Smoothed TC Combined] - Azimuth Plot



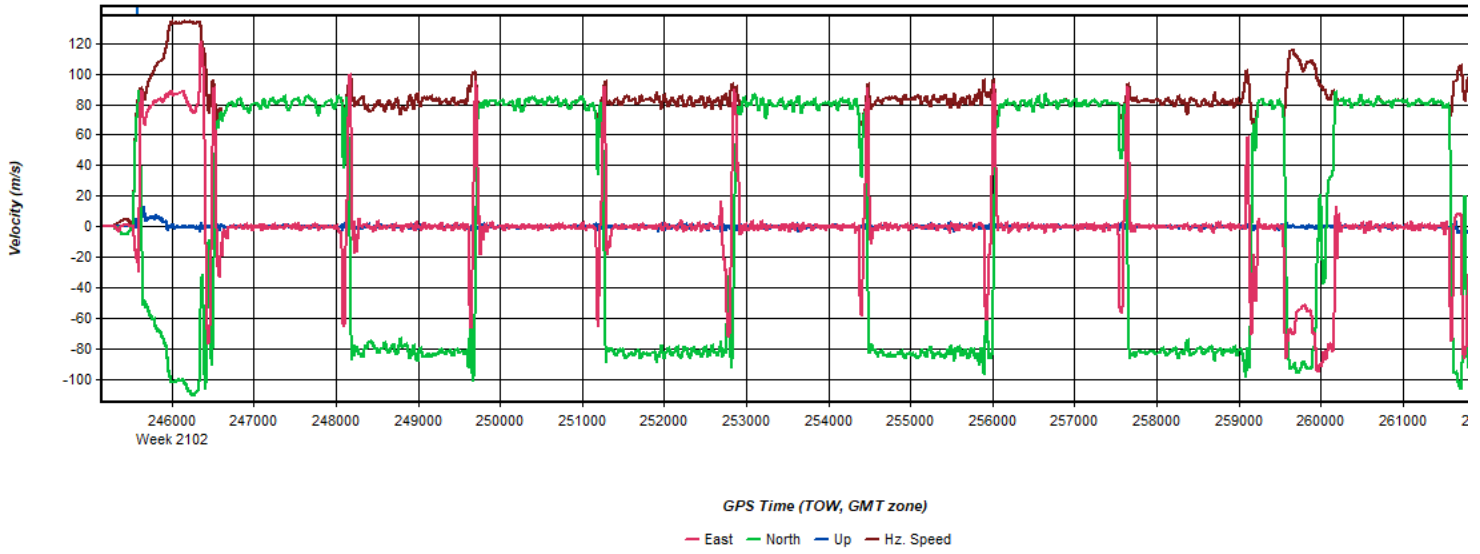
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 12: 20200421200431_25 [Smoothed TC Combined] - Roll & Pitch Plot



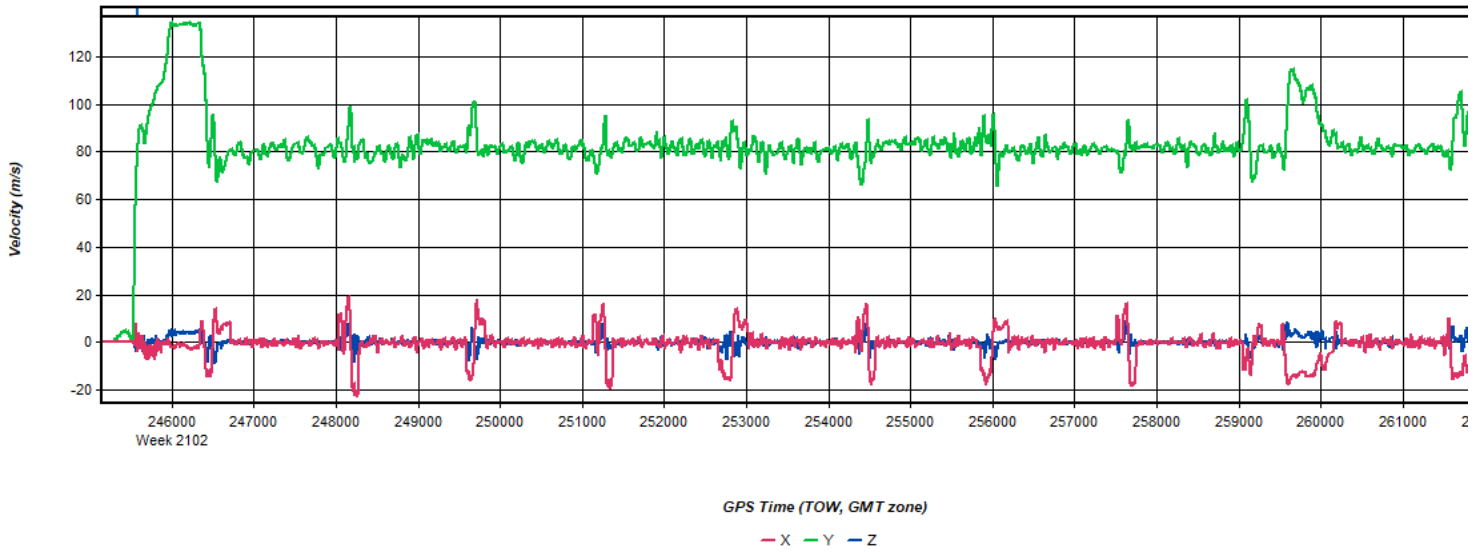
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 13: 20200421200431_25 [Smoothed TC Combined] - Velocity Profile Plot



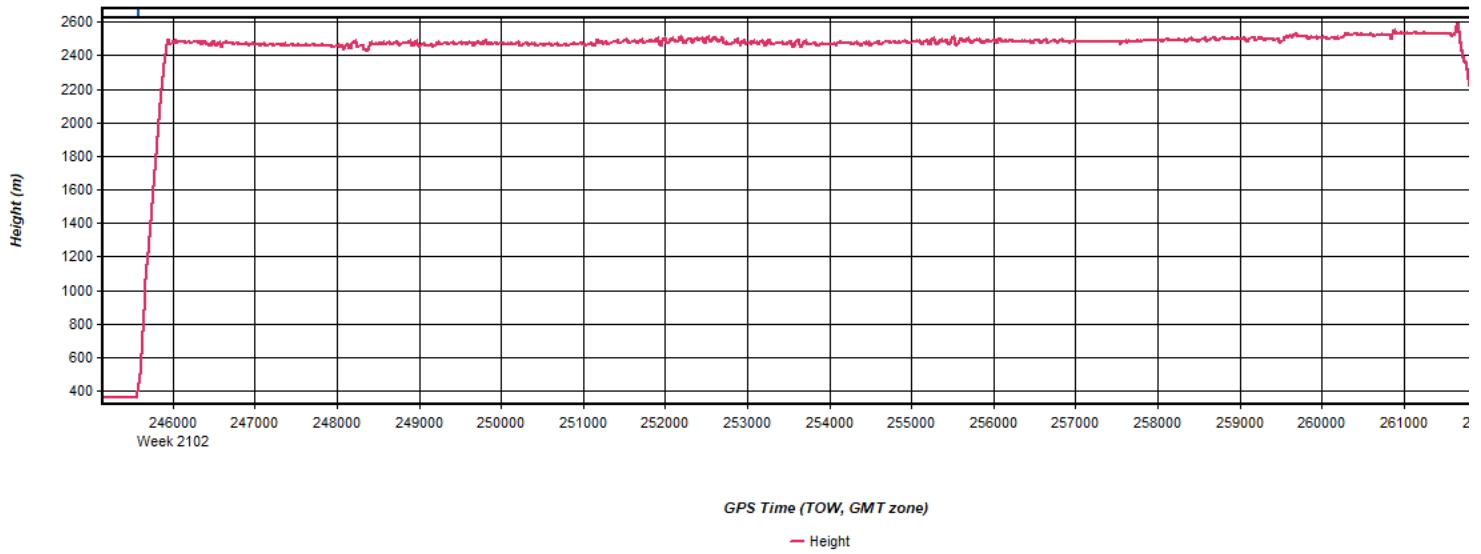
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 14: 20200421200431_25 [Smoothed TC Combined] - Body Frame Velocity Plot



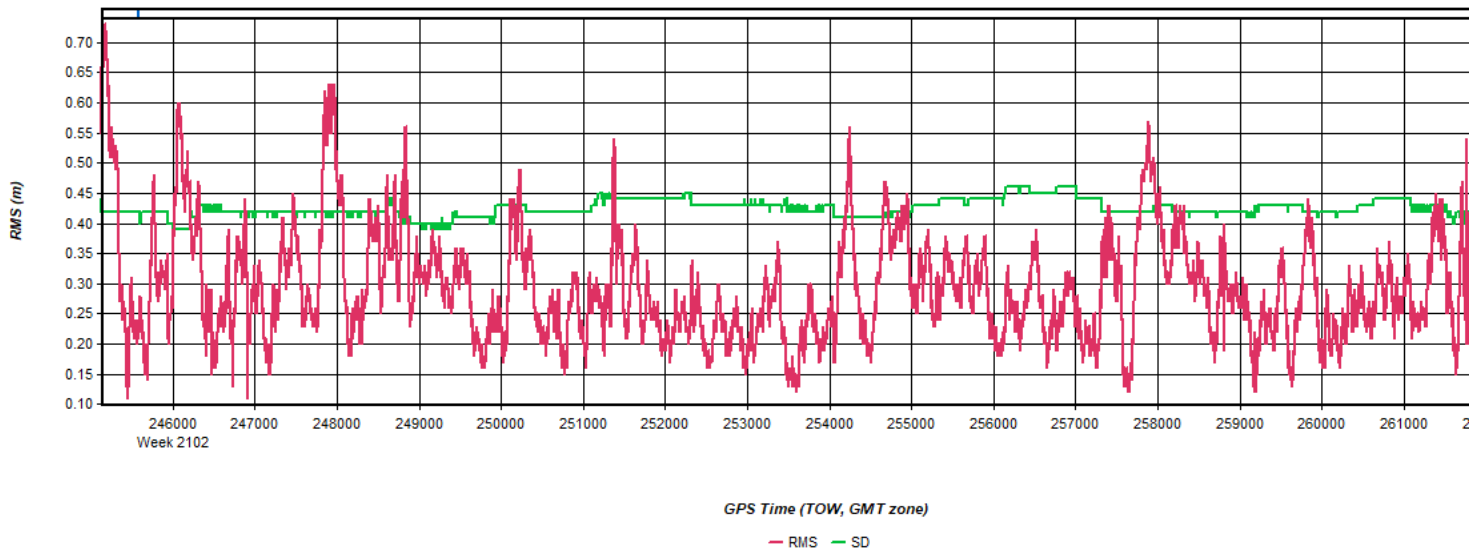
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 15: 20200421200431_25 [Smoothed TC Combined] - Height Profile Plot



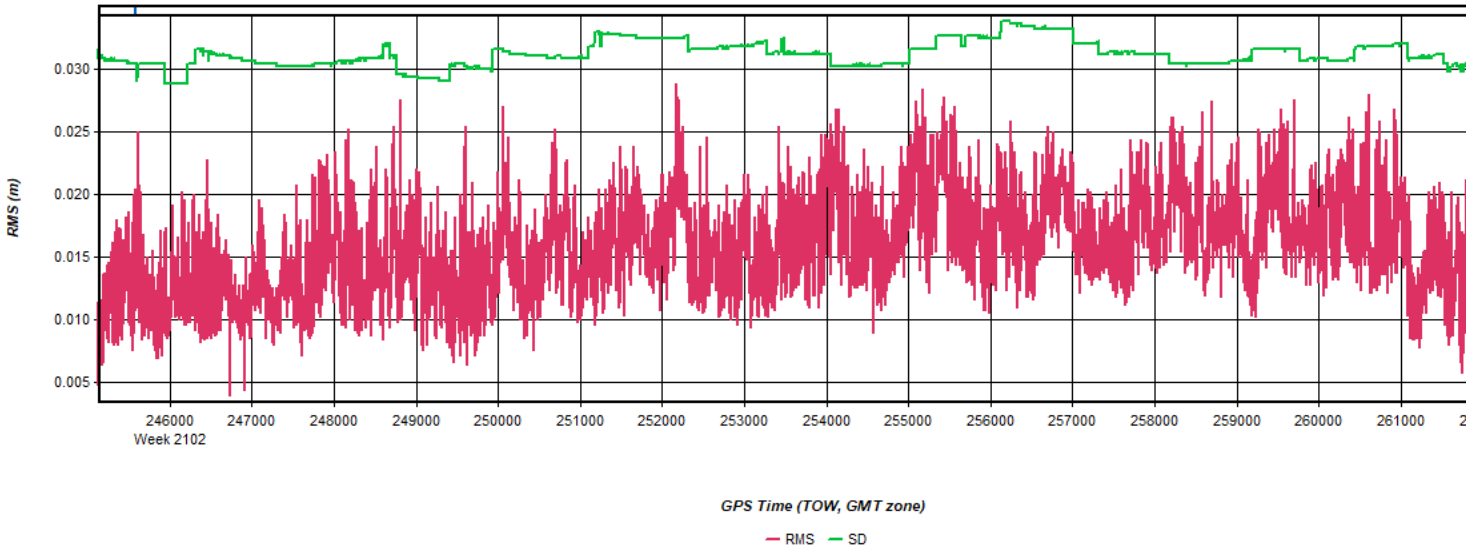
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 16: 20200421200431_25 [Smoothed TC Combined] - C/A Code Residual RMS Plot



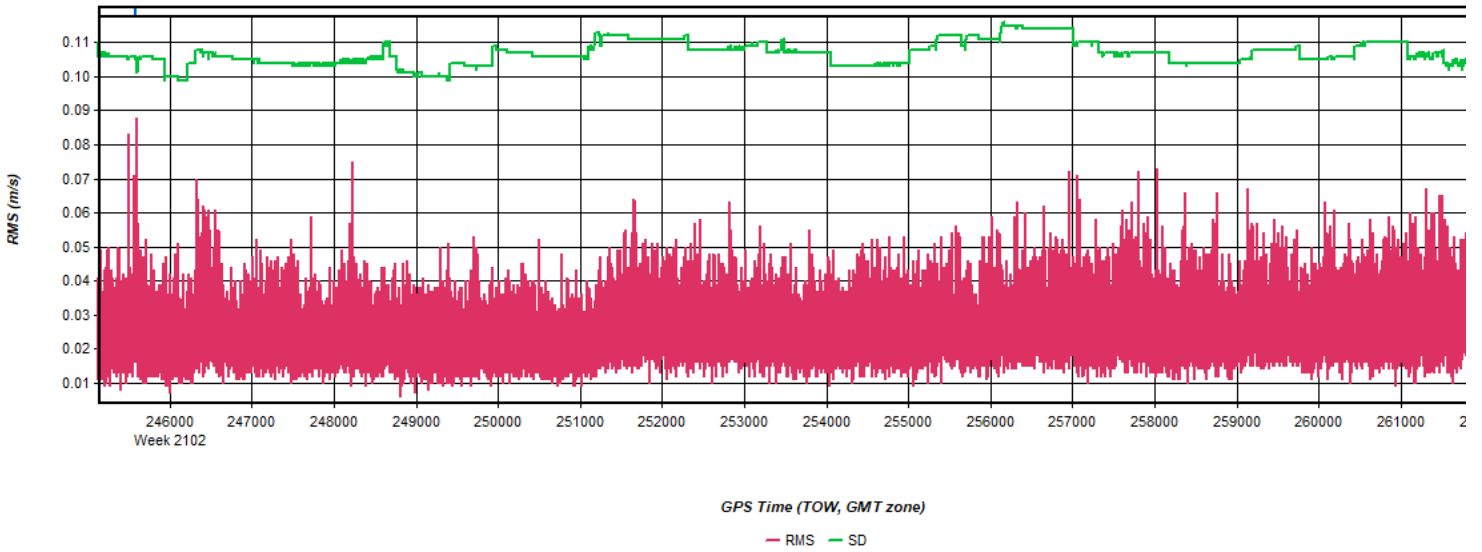
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 17: 20200421200431_25 [Smoothed TC Combined] - Carrier Residual RMS Plot



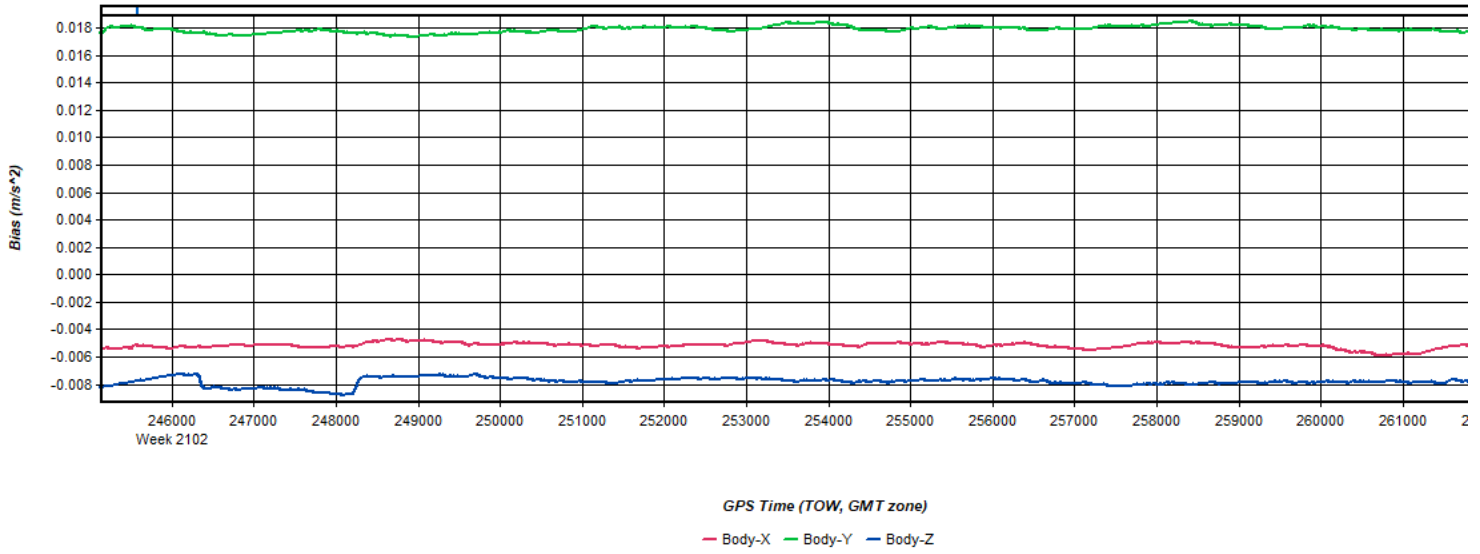
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 18: 20200421200431_25 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



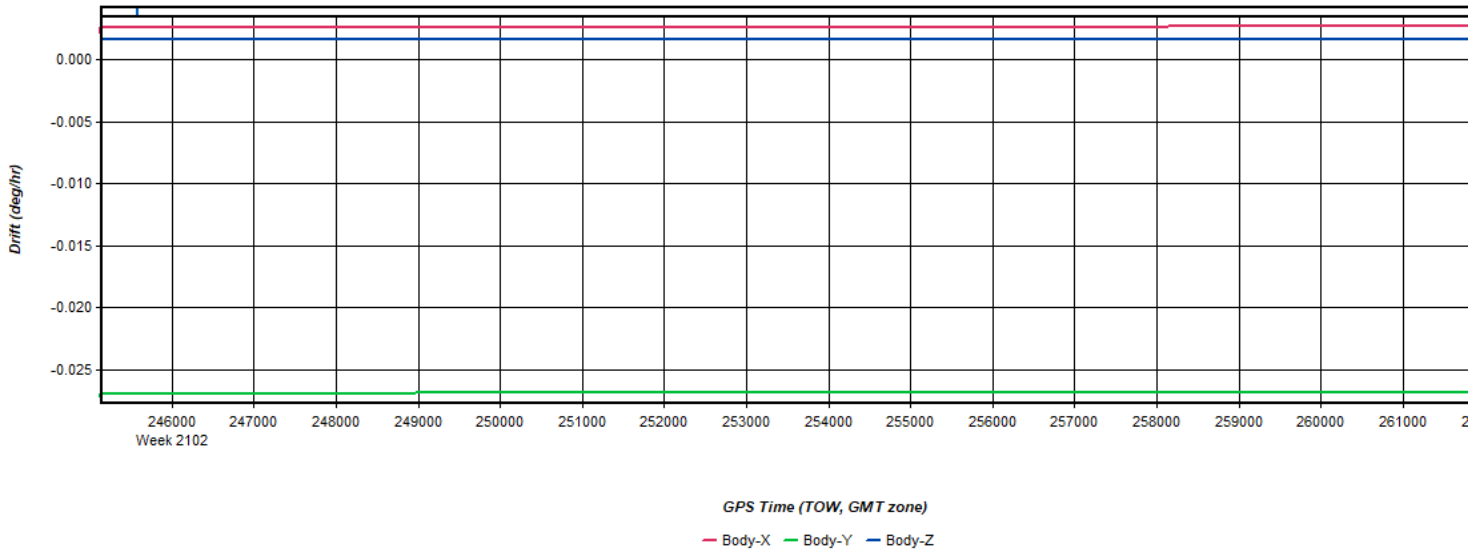
Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 19: 20200421200431_25 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Figure 20: 20200421200431_25 [Smoothed TC Combined] - Gyro Drift Plot



Process	20200421200431_25	by Unknown	on 7/9/2020	at 15:34:55
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Output Results for 20200508141615_26

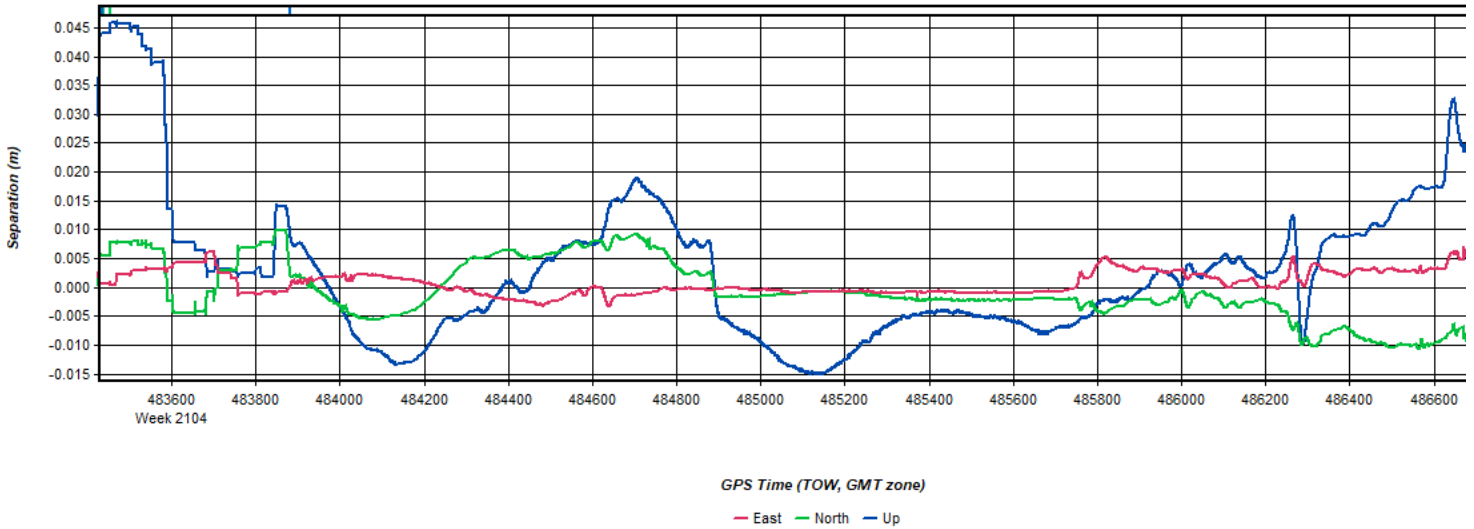
Inertial Explorer Version 8.90.2124
06/17/2020

Figure 1: Smoothed TC Combined - Map



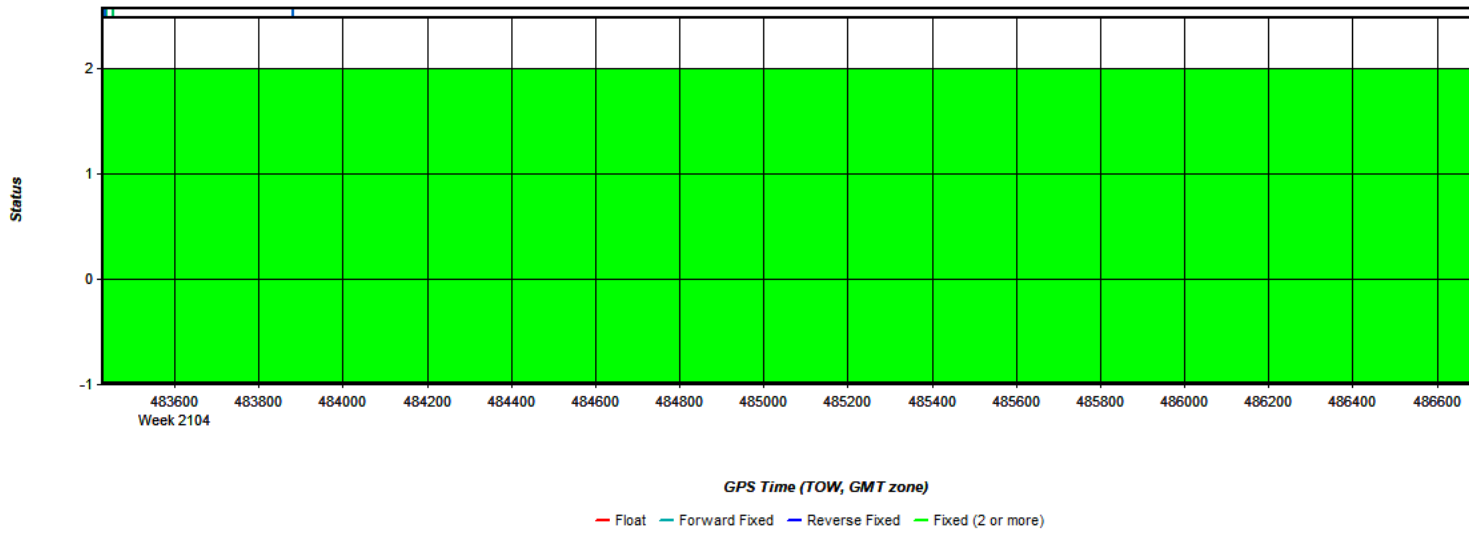
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 2: 20200508141615_26 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



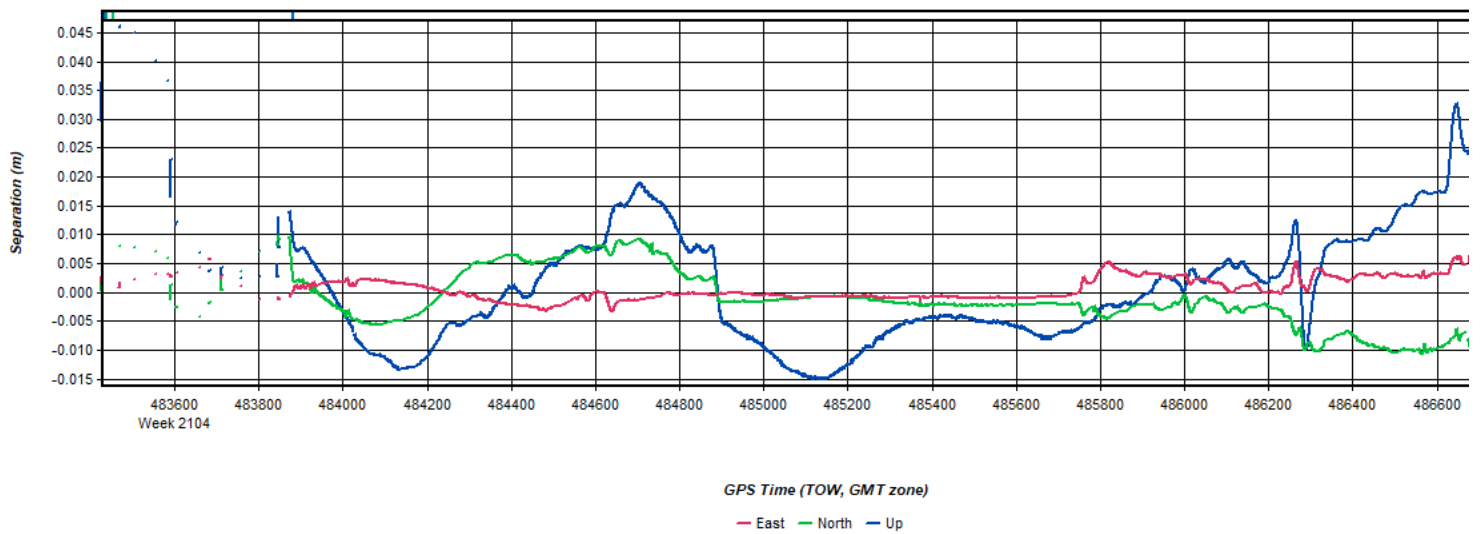
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 3: 20200508141615_26 [Smoothed TC Combined] - Float or Fixed Ambiguity



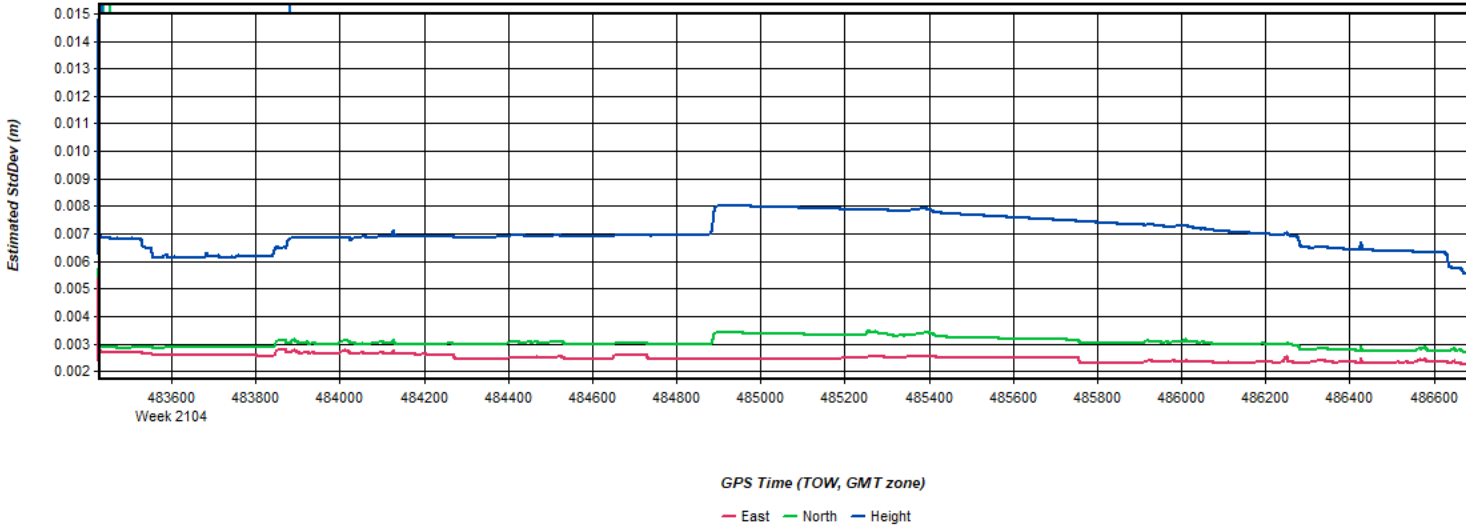
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 4: 20200508141615_26 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



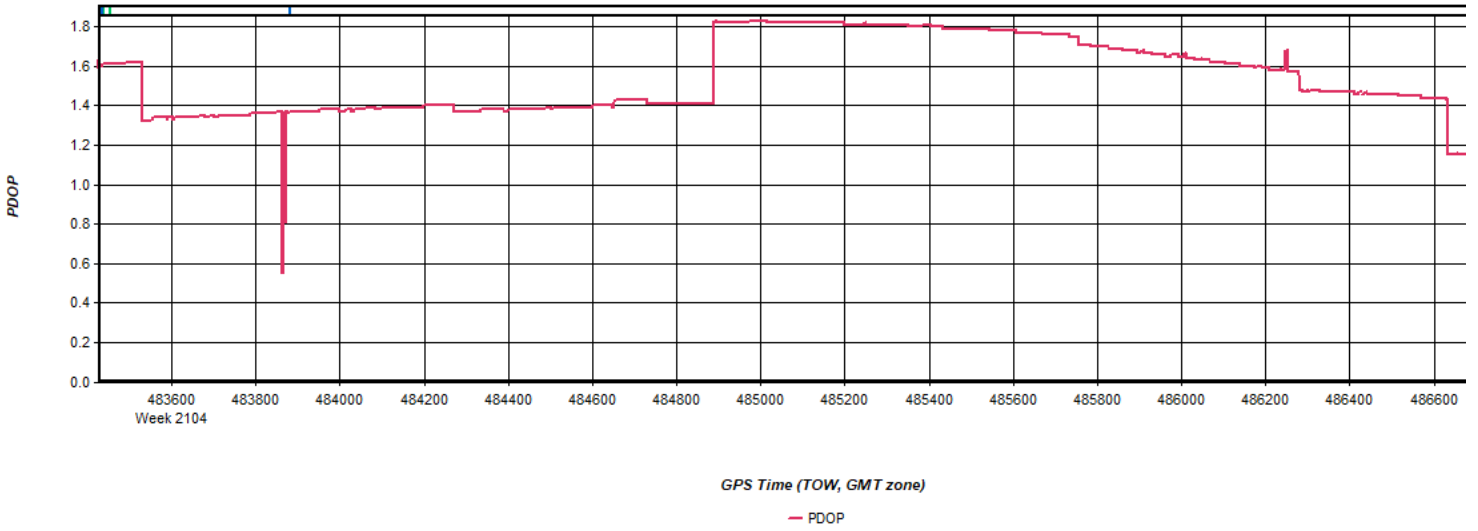
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 5: 20200508141615_26 [Smoothed TC Combined] - Estimated Position Accuracy Plot



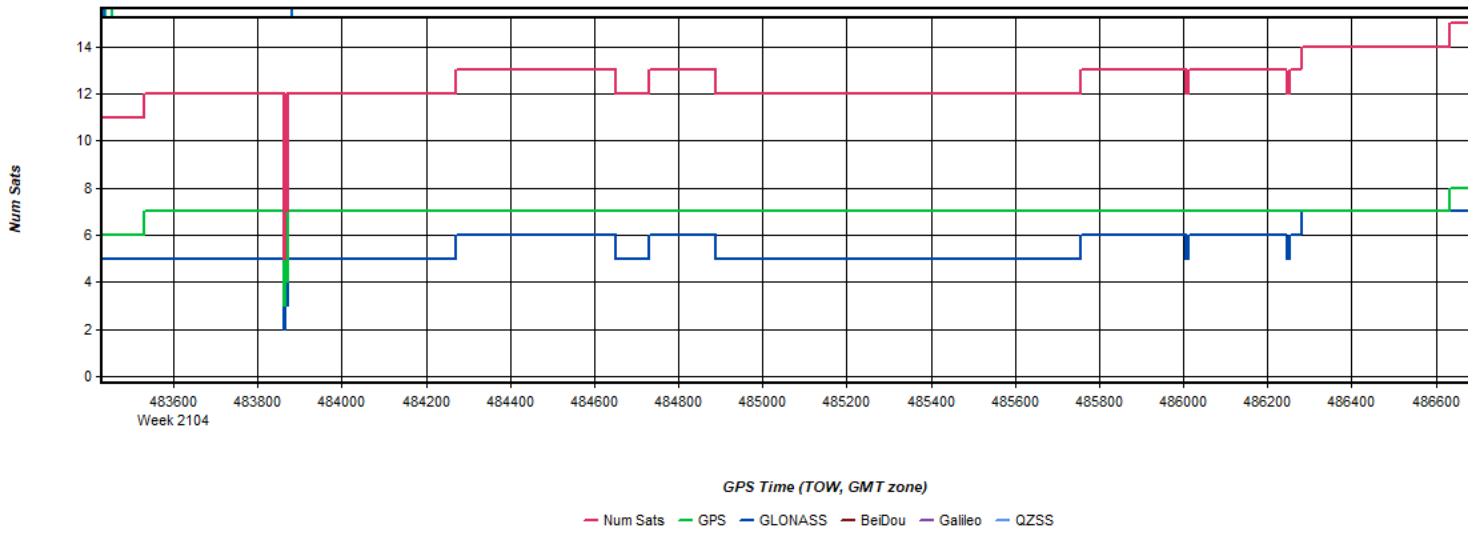
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 6: 20200508141615_26 [Smoothed TC Combined] - PDOP Plot



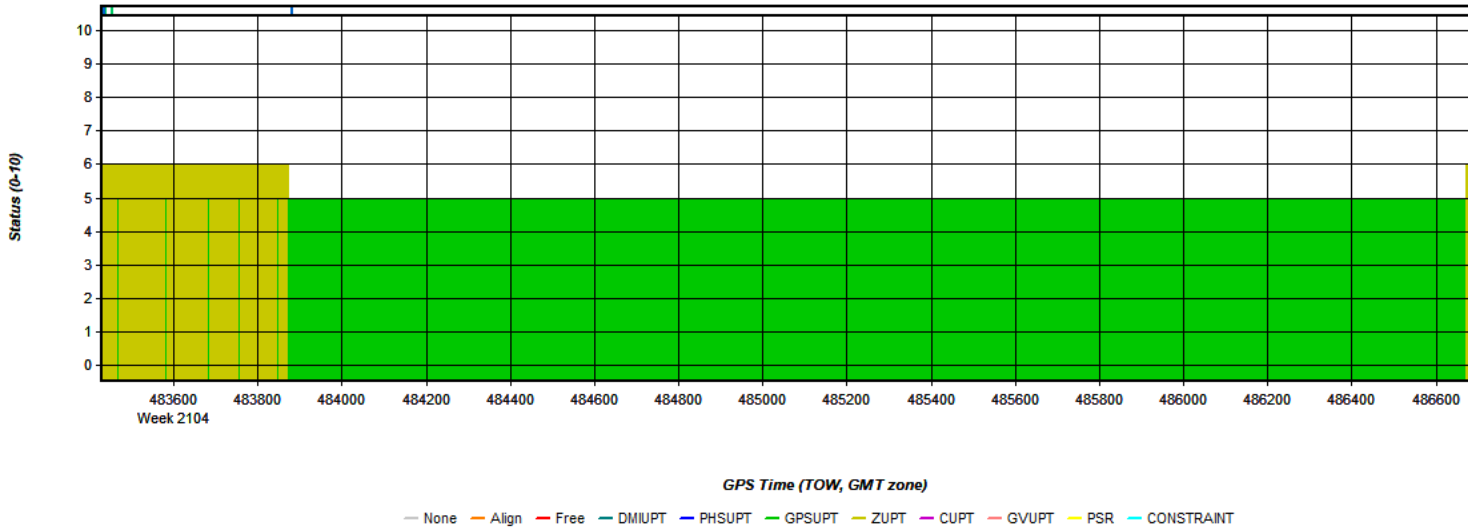
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 7: 20200508141615_26 [Smoothed TC Combined] - Number of Satellites Line Plot



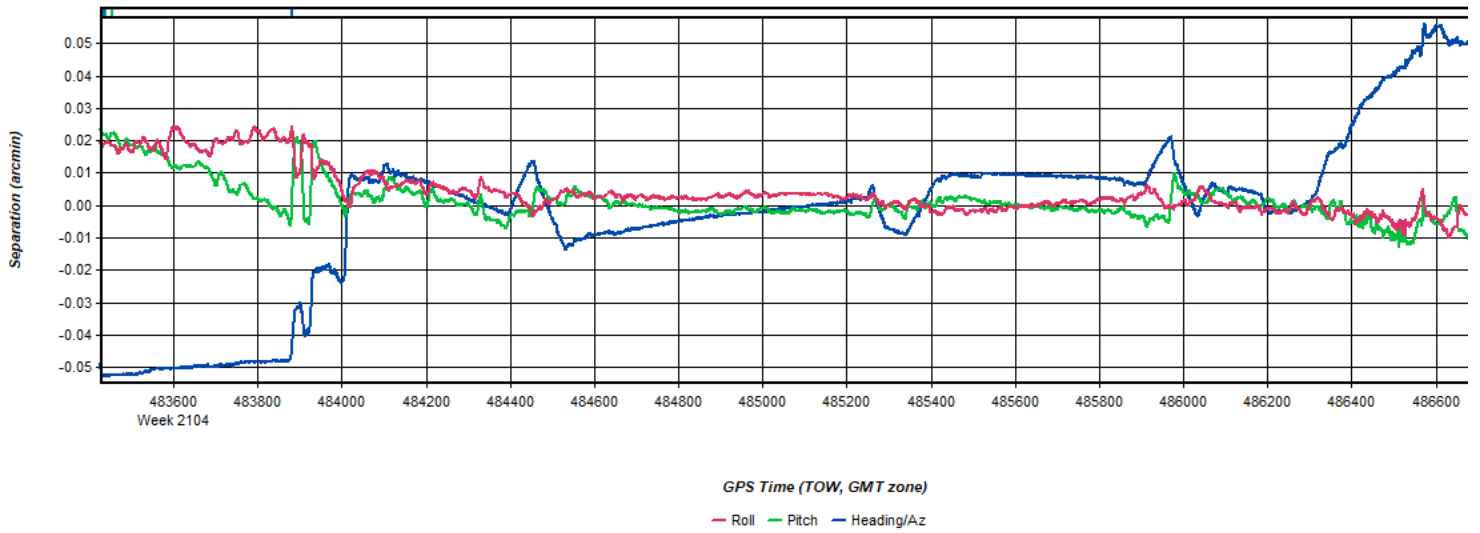
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 8: 20200508141615_26 [Smoothed TC Combined] - Status flag for IMU processing



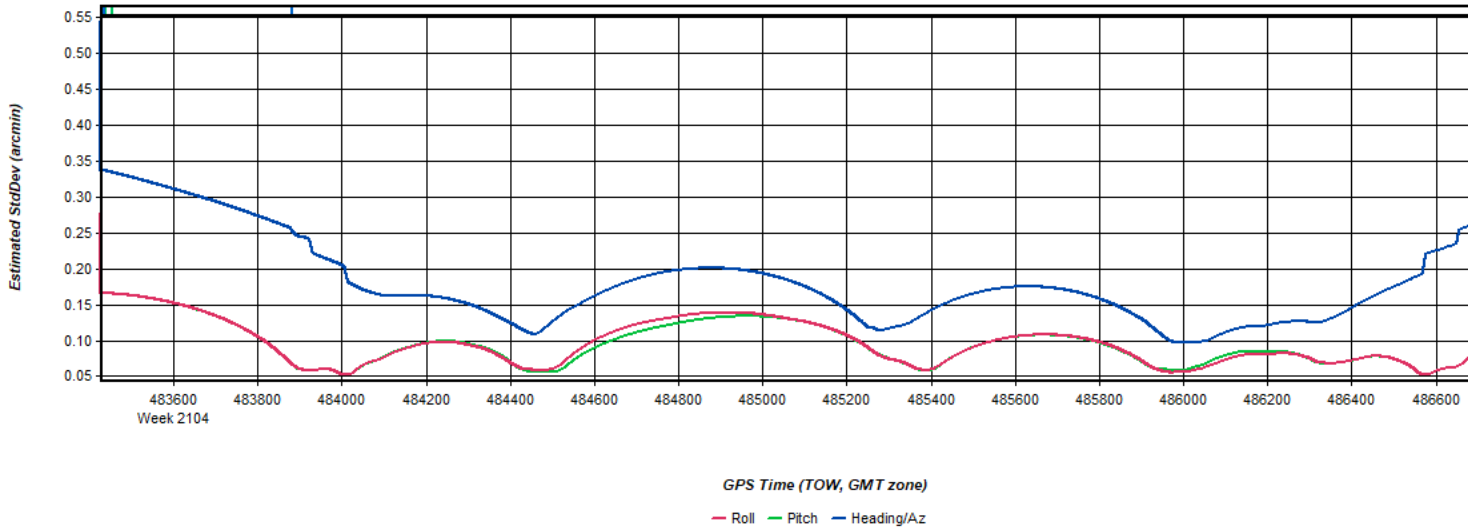
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 9: 20200508141615_26 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



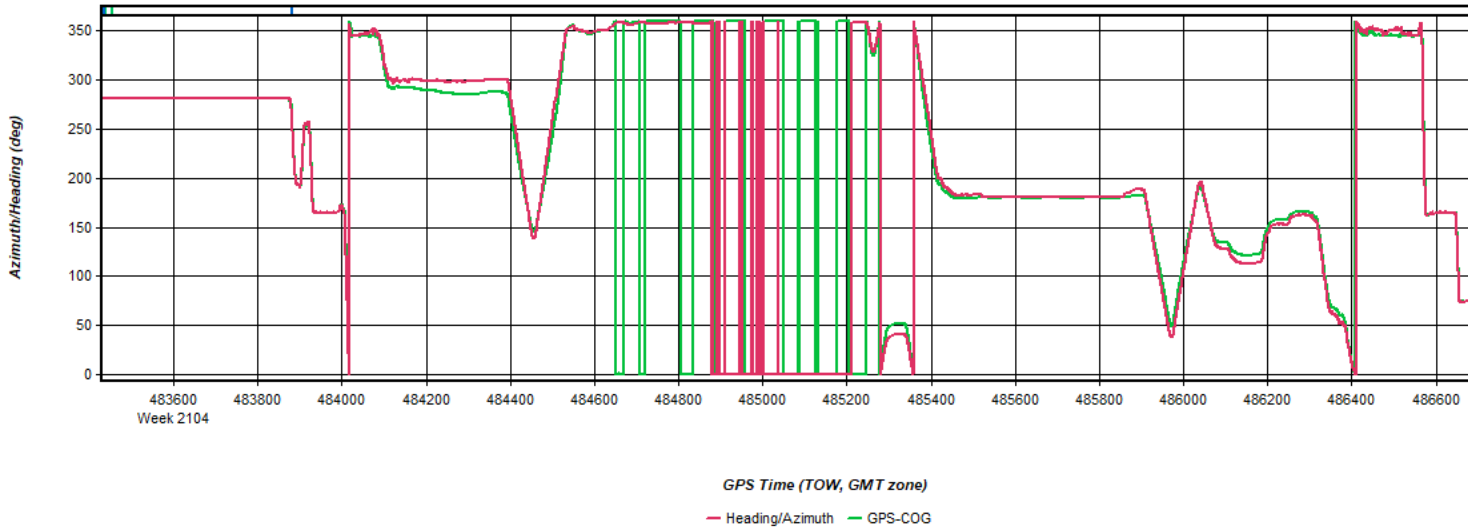
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 10: 20200508141615_26 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



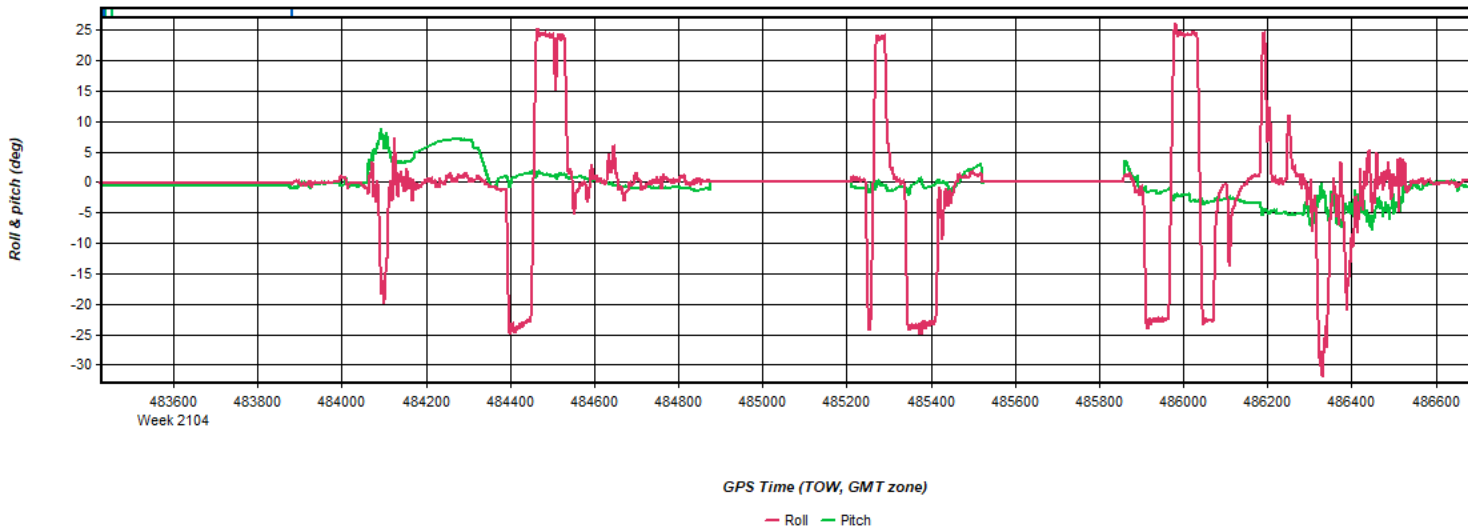
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 11: 20200508141615_26 [Smoothed TC Combined] - Azimuth Plot



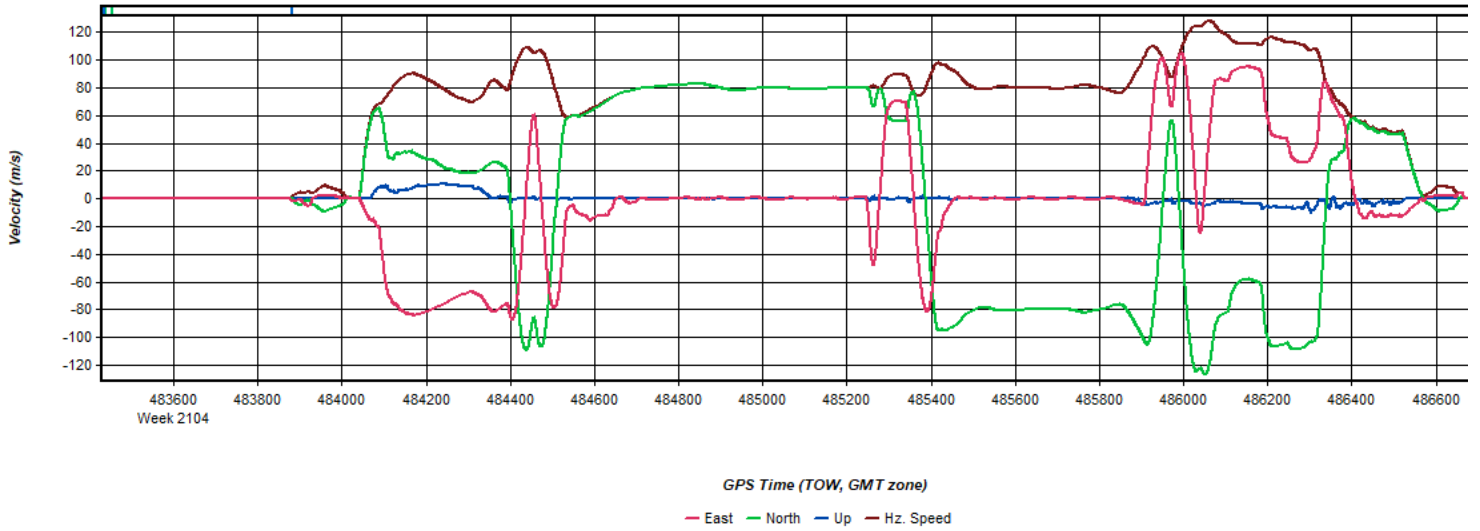
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 12: 20200508141615_26 [Smoothed TC Combined] - Roll & Pitch Plot



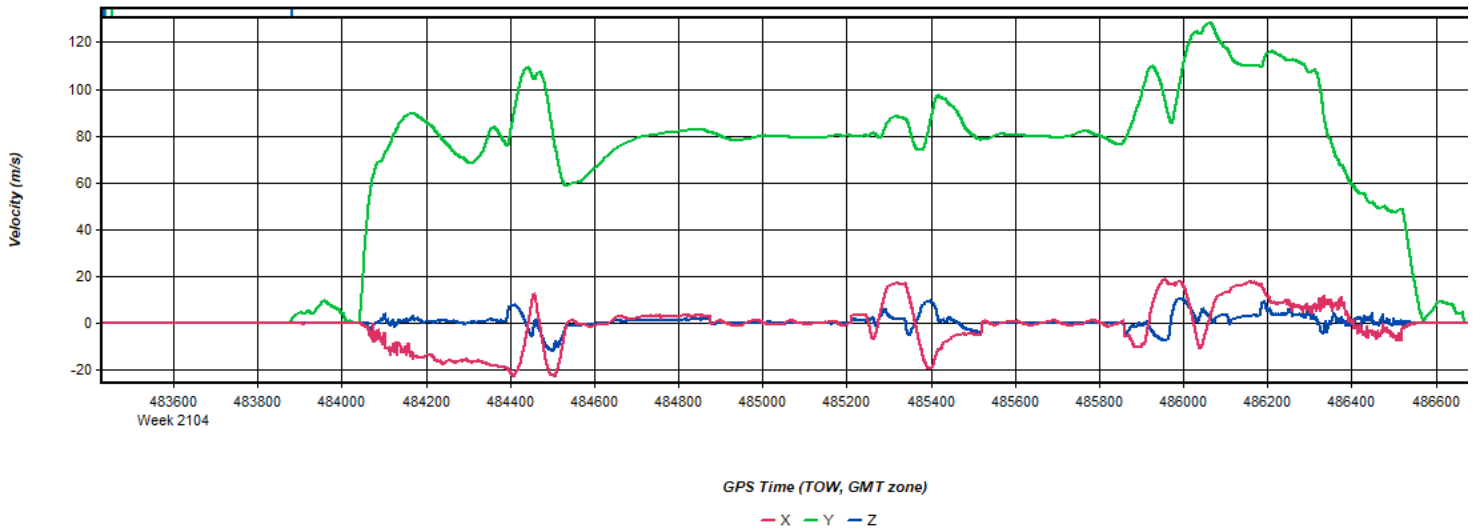
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 13: 20200508141615_26 [Smoothed TC Combined] - Velocity Profile Plot



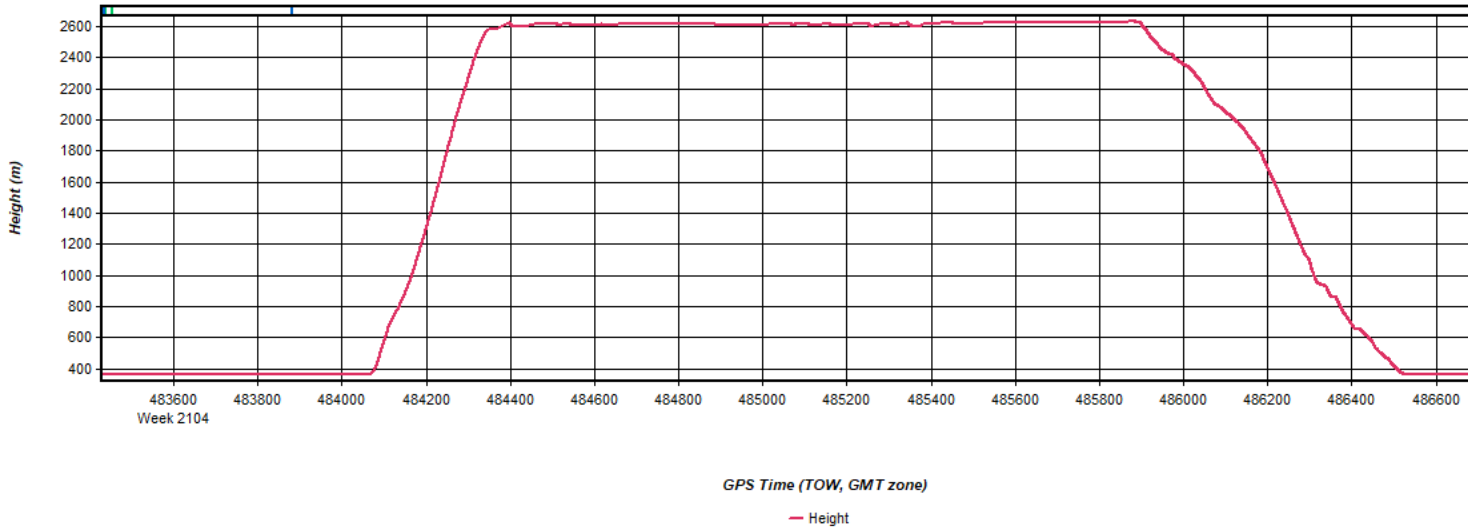
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 14: 20200508141615_26 [Smoothed TC Combined] - Body Frame Velocity Plot



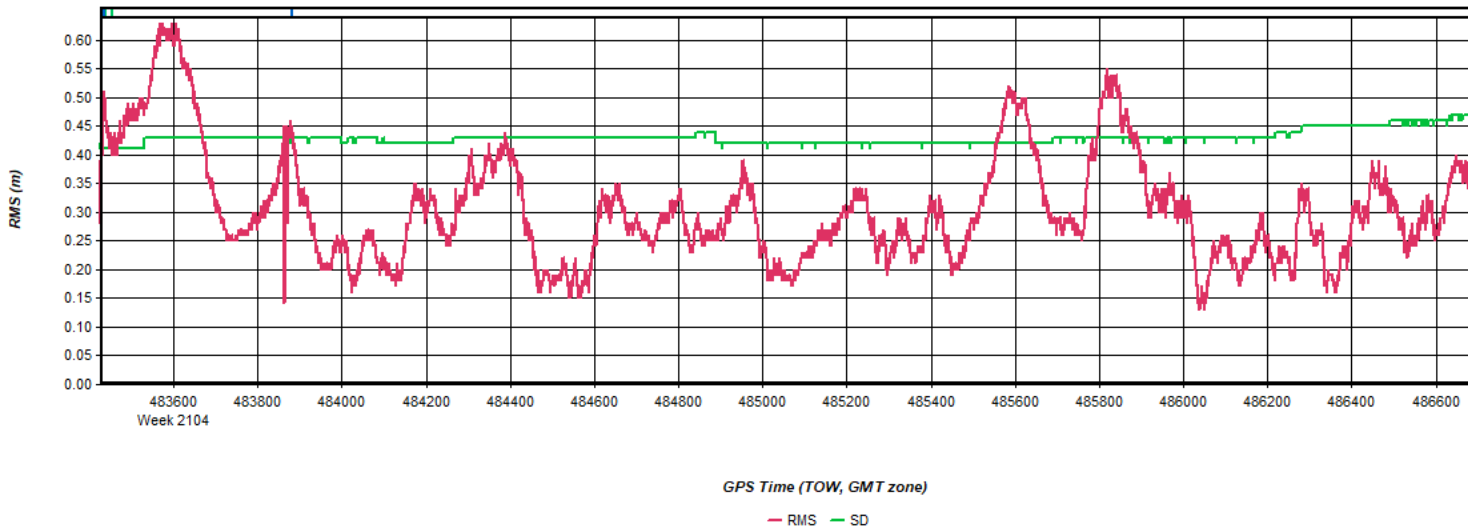
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 15: 20200508141615_26 [Smoothed TC Combined] - Height Profile Plot



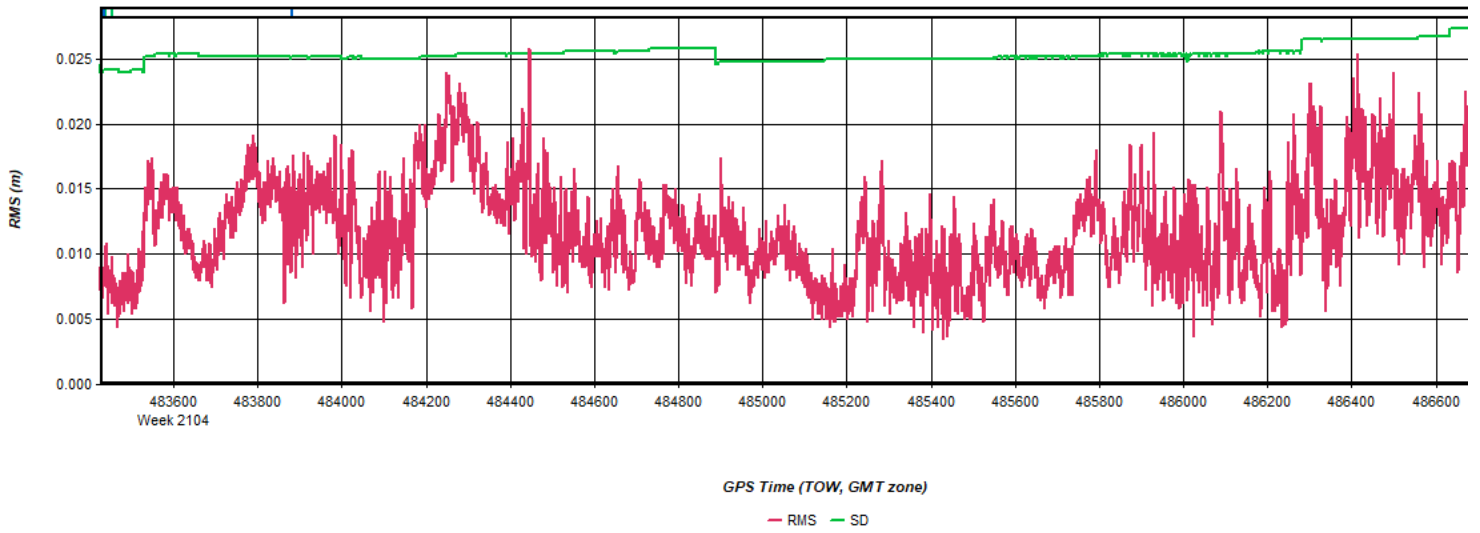
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 16: 20200508141615_26 [Smoothed TC Combined] - C/A Code Residual RMS Plot



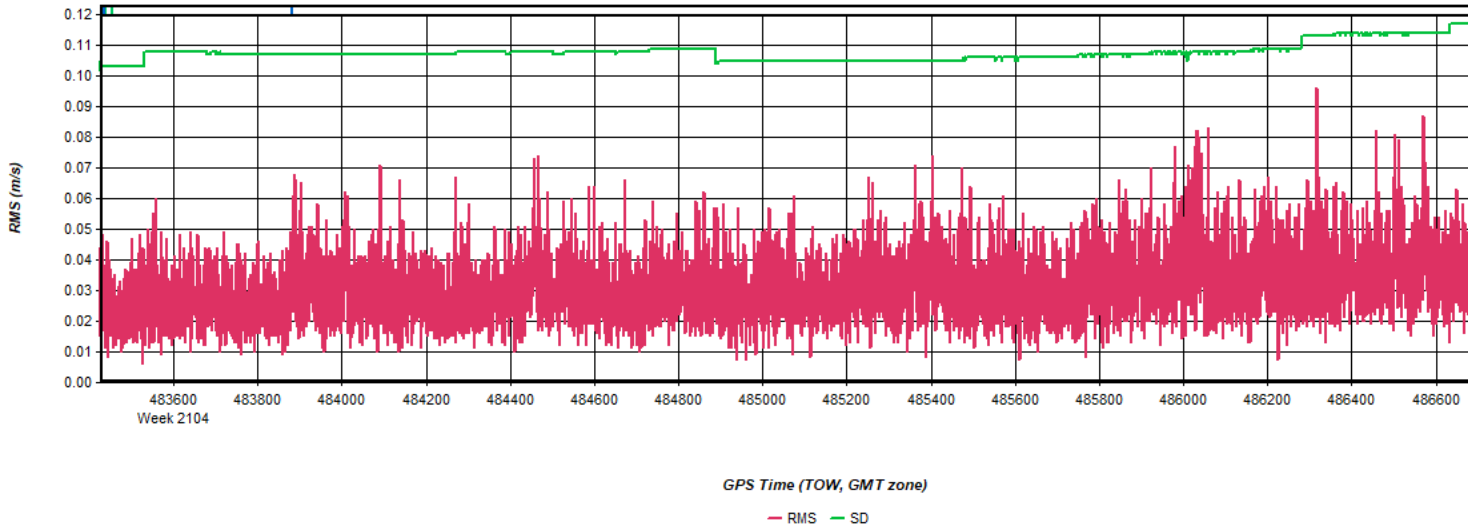
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 17: 20200508141615_26 [Smoothed TC Combined] - Carrier Residual RMS Plot



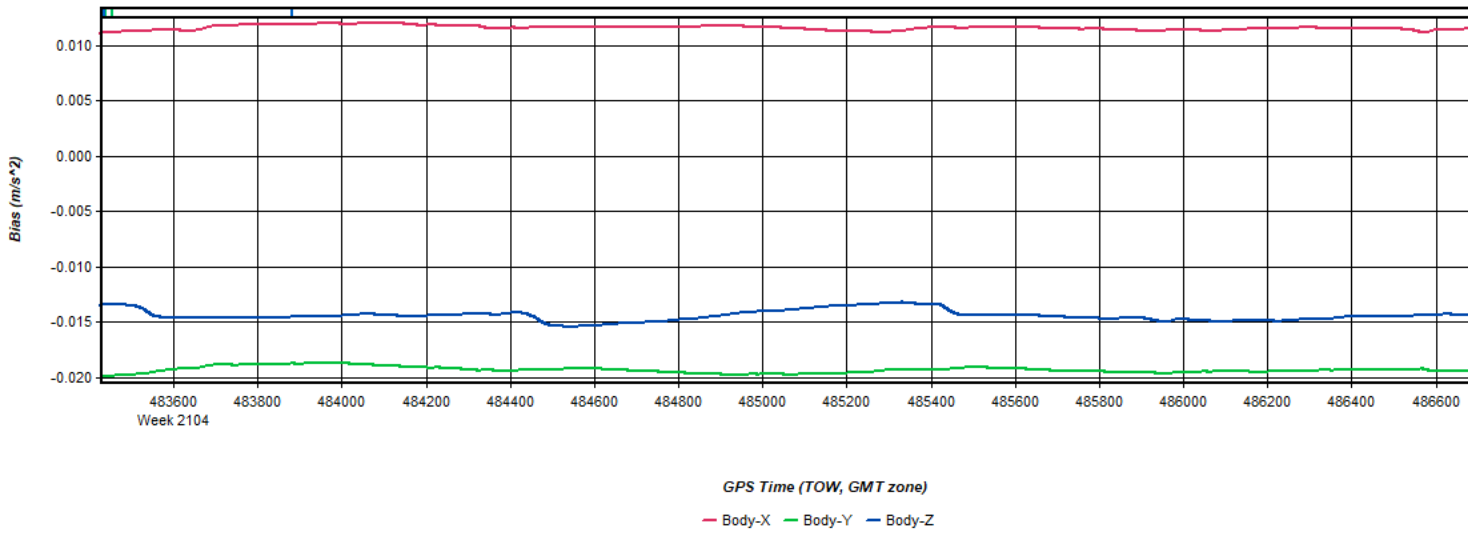
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 18: 20200508141615_26 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot



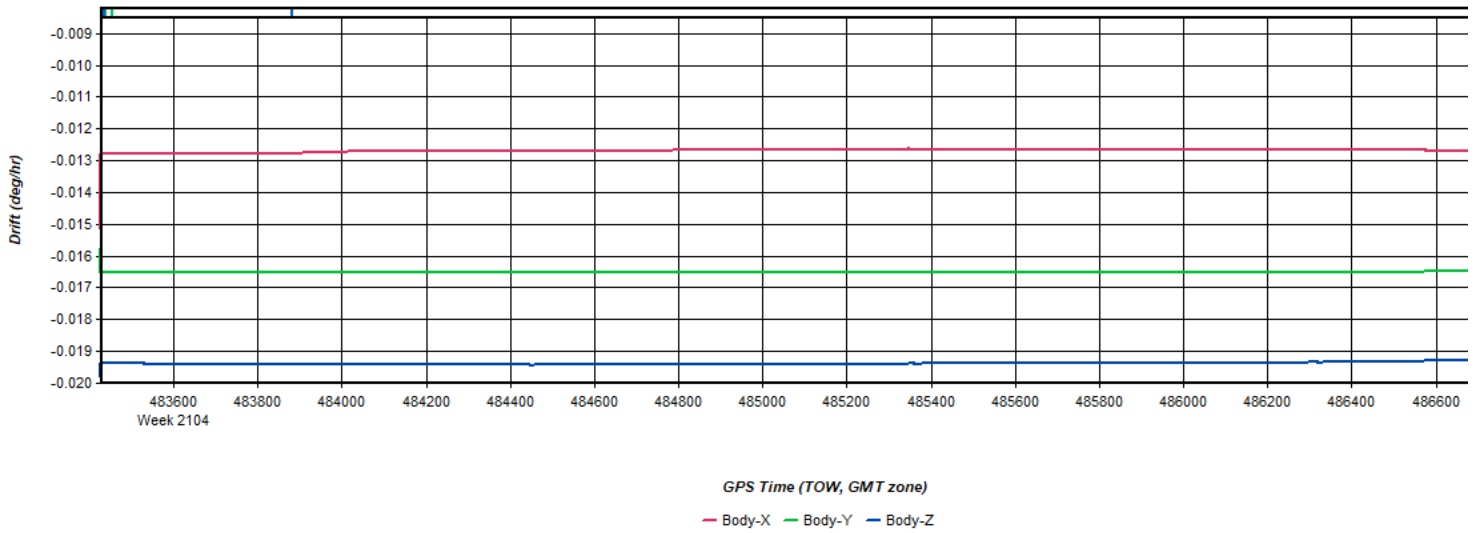
Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 19: 20200508141615_26 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Figure 20: 20200508141615_26 [Smoothed TC Combined] - Gyro Drift Plot



Process	20200508141615_26	by Unknown	on 6/16/2020	at 15:40:16
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Appendix D. Vertical Accuracy



Project Information

Prepared By: DAS
Project Name: G16PC00044_IA_SouthCentral_2020_D20
Sensor Info: TM90524
Required Nominal Pulse Spacing: 0.7
Vendor Name: Digital Aerial Solutions, LLC
Units: Meters
Percent of Extent Tolerance: Extents Not Checked
Date of Aquisition: Start: 3/30/2020 Finish: 5/8/2020

Metadata Information

Tile Index:

Filename: IA_Tiles_DPA_Extent.shp

Number of Polys: 0

Intensity:

Tile Index Attribute: Not Specified

Data Filename: Not Specified

DEM:

Tile Index Attribute: Tile_ID

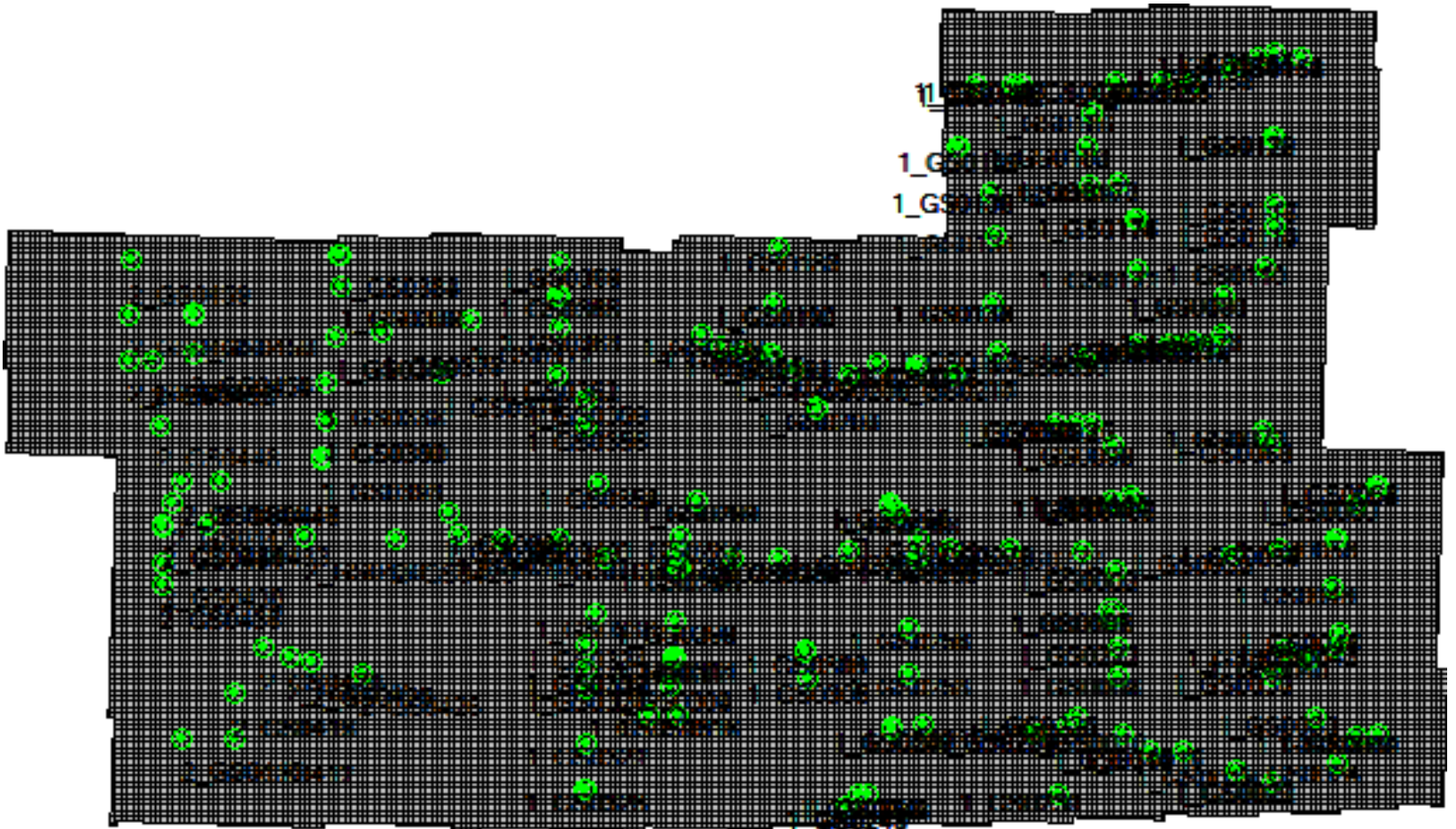
Data Filename: TIFF_Combo

LAS:

Tile Index Attribute: Tile_ID

Data Filename: LAS

Tiled-Data Area



LiDAR Accuracy Assessment Summary

LC Type	# Points	NVA	VVA	RMSE Z
LAS		95% Confidence	95 Percentile	
Bare Earth	156	0.088		0.045
High Vegetation	24		0.130	0.072
Low Vegetation	94		0.202	0.118
Medium Vegetation	27		0.164	0.106
Urban Terrian	54	0.088		0.045
NVA Total:	210	0.088		0.045
VVA Total:	145		0.196	0.109
Total:	355			0.078
DEM		95% Confidence	95 Percentile	
Bare Earth	156	0.093		0.048
High Vegetation	24		0.124	0.071
Low Vegetation	94		0.202	0.118
Medium Vegetation	27		0.172	0.111
Urban Terrian	54	0.085		0.043
NVA Total:	210	0.091		0.047
VVA Total:	145		0.200	0.110
Total:	355			0.078
			Units:	Meters

Coordinates and Offsets of Analyzed Locations

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
1)	<input checked="" type="checkbox"/>	1_GS0006					
		549397.842	4529259.376	255.122	255.164	255.183	
				Bare Earth	0.042	0.061	
2)	<input checked="" type="checkbox"/>	1_GS0008					
		550666.09	4518218.615	260.063	260.113	260.101	
				Bare Earth	0.05	0.038	
3)	<input checked="" type="checkbox"/>	1_GS0009					
		550641.591	4518221.555	259.679	259.71	259.707	
				Bare Earth	0.031	0.028	
4)	<input checked="" type="checkbox"/>	1_GS0011					
		551648.8	4508503.95	265.57	265.571	265.573	
				Bare Earth	0.001	0.003	
5)	<input checked="" type="checkbox"/>	1_GS0013					
		556193.648	4505394.892	262.287	262.267	262.302	
				Bare Earth	-0.02	0.015	
6)	<input checked="" type="checkbox"/>	1_GS0014					
		556168.055	4505407.575	262.361	262.371	262.365	
				Bare Earth	0.01	0.004	
7)	<input checked="" type="checkbox"/>	1_GS0017					
		561779.655	4505418.328	253.756	253.73	253.713	
				Bare Earth	-0.026	-0.044	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
8)	<input checked="" type="checkbox"/>	1_GS0022					
		577507.493	4499790.589	239.118	239.168	239.171	
				Bare Earth	0.05	0.053	
9)	<input checked="" type="checkbox"/>	1_GS0027					
		591981.998	4508055.118	212.173	212.242	212.246	
				Bare Earth	0.069	0.073	
10)	<input checked="" type="checkbox"/>	1_GS0029					
		595760.324	4508187.586	212.522	212.534	212.516	
				Bare Earth	0.012	-0.006	
11)	<input checked="" type="checkbox"/>	1_GS0033					
		585051.737	4511287.633	178.76	178.811	178.817	
				Bare Earth	0.051	0.057	
12)	<input checked="" type="checkbox"/>	1_GS0036					
		577405.955	4518415.678	230.366	230.432	230.461	
				Bare Earth	0.066	0.095	
13)	<input checked="" type="checkbox"/>	1_GS0038					
		579722.706	4523024.437	233.143	233.121	233.122	
				Bare Earth	-0.022	-0.021	
14)	<input checked="" type="checkbox"/>	1_GS0041					
		583763.682	4521239.093	225.093	225.148	225.125	
				Bare Earth	0.055	0.032	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
15)	<input checked="" type="checkbox"/>	1_GS0042				
		588512.687	4523422.585	226.017	225.994	225.991
				Bare Earth	-0.023	-0.026
16)	<input checked="" type="checkbox"/>	1_GS0047				
		589022.537	4525794.849	228.938	228.941	228.943
				Bare Earth	0.003	0.005
17)	<input checked="" type="checkbox"/>	1_GS0049				
		588040.95	4534003.119	204.441	204.437	204.431
				Bare Earth	-0.004	-0.01
18)	<input checked="" type="checkbox"/>	1_GS0053				
		570286.863	4539382.686	230.708	230.622	230.624
				Bare Earth	-0.086	-0.084
19)	<input checked="" type="checkbox"/>	1_GS0056				
		578634.355	4540697.133	231.154	231.197	231.189
				Bare Earth	0.043	0.035
20)	<input checked="" type="checkbox"/>	1_GS0057				
		578607.86	4540694.523	231.281	231.308	231.304
				Bare Earth	0.027	0.023
21)	<input checked="" type="checkbox"/>	1_GS0059				
		588590.379	4542106.56	234.364	234.357	234.344
				Bare Earth	-0.007	-0.02

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
22)	<input checked="" type="checkbox"/>	1_GS0061					
		592009.498	4548656.801	213.212	213.275	213.267	
				Bare Earth	0.063	0.055	
23)	<input checked="" type="checkbox"/>	1_GS0064					
		595740.102	4551681.503	211.752	211.774	211.764	
				Bare Earth	0.022	0.012	
24)	<input checked="" type="checkbox"/>	1_GS0065					
		595773.025	4551681.21	212.039	212.059	212.05	
				Bare Earth	0.02	0.011	
25)	<input checked="" type="checkbox"/>	1_GS0069					
		577129.309	4558914.779	237.307	237.331	237.325	
				Bare Earth	0.024	0.018	
26)	<input checked="" type="checkbox"/>	1_GS0071					
		575977.881	4561183.613	238.184	238.21	238.203	
				Bare Earth	0.026	0.019	
27)	<input checked="" type="checkbox"/>	1_GS0077					
		568477.949	4578081.075	223.714	223.643	223.652	
				Bare Earth	-0.071	-0.062	
28)	<input checked="" type="checkbox"/>	1_GS0080					
		569178.57	4584540.967	257.911	257.852	257.877	
				Bare Earth	-0.059	-0.034	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
29)	<input checked="" type="checkbox"/>	1_GS0081				
		569210.291	4584541.852	258.081	258.016	258.04
				Bare Earth	-0.065	-0.041
30)	<input checked="" type="checkbox"/>	1_GS0083				
		563704.498	4576657.657	238.437	238.419	238.424
				Bare Earth	-0.018	-0.013
31)	<input checked="" type="checkbox"/>	1_GS0085				
		559677.505	4576356.864	233.691	233.681	233.664
				Bare Earth	-0.01	-0.027
32)	<input checked="" type="checkbox"/>	1_GS0087				
		554034.365	4576337.369	243.008	243.055	243.051
				Bare Earth	0.047	0.042
33)	<input checked="" type="checkbox"/>	1_GS0089				
		554006.089	4576301.792	244.129	244.182	244.159
				Bare Earth	0.053	0.03
34)	<input checked="" type="checkbox"/>	1_GS0091				
		544875.802	4573743.039	245.616	245.574	245.582
				Bare Earth	-0.042	-0.034
35)	<input checked="" type="checkbox"/>	1_GS0093				
		543381.295	4562519.247	252.813	252.887	252.872
				Bare Earth	0.074	0.059

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
36)	<input checked="" type="checkbox"/>	1_GS0097				
		539855.762	4562539.938	249.184	249.179	249.184
				Bare Earth	-0.005	0
37)	<input checked="" type="checkbox"/>	1_GS0099				
		549674.442	4558532.095	245.777	245.808	245.797
				Bare Earth	0.031	0.02
38)	<input checked="" type="checkbox"/>	1_GS0103				
		549470.646	4549125.602	254.412	254.463	254.46
				Bare Earth	0.051	0.048
39)	<input checked="" type="checkbox"/>	1_GS0104				
		552709.715	4549786.967	230.794	230.708	230.715
				Bare Earth	-0.086	-0.079
40)	<input checked="" type="checkbox"/>	1_GS0105				
		552705.545	4549818.022	232.073	232.04	232.012
				Bare Earth	-0.033	-0.061
41)	<input checked="" type="checkbox"/>	1_GS0107				
		553526.11	4548947.624	244.112	244.051	244.077
				Bare Earth	-0.061	-0.035
42)	<input checked="" type="checkbox"/>	1_GS0111				
		576107.742	4589799.682	255.155	255.153	255.155
				Bare Earth	-0.002	0

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
43)	<input checked="" type="checkbox"/>	1_GS0113					
		578006.09	4596674.264	248.058	248.105	248.083	
				Bare Earth	0.047	0.025	
44)	<input checked="" type="checkbox"/>	1_GS0117					
		578056.02	4600660.344	249.214	249.255	249.243	
				Bare Earth	0.041	0.029	
45)	<input checked="" type="checkbox"/>	1_GS0119					
		577735.153	4612319.329	255.207	255.233	255.237	
				Bare Earth	0.026	0.03	
46)	<input checked="" type="checkbox"/>	1_GS0120					
		577707.168	4612352.457	255.977	255.979	256.008	
				Bare Earth	0.002	0.031	
47)	<input checked="" type="checkbox"/>	1_GS0121					
		577672.653	4612326.494	257.411	257.472	257.476	
				Bare Earth	0.061	0.065	
48)	<input checked="" type="checkbox"/>	1_GS0122					
		577697.518	4612288.141	256.306	256.388	256.379	
				Bare Earth	0.082	0.073	
49)	<input checked="" type="checkbox"/>	1_GS0125					
		546127.099	4562458.27	252.951	253.012	253.013	
				Bare Earth	0.061	0.062	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
50)	<input checked="" type="checkbox"/>	1_GS0126					
		546132.13	4562482.676	253.251	253.302	253.299	
				Bare Earth	0.051	0.048	
51)	<input checked="" type="checkbox"/>	1_GS0132					
		528789.233	4583296.375	252.653	252.646	252.651	
				Bare Earth	-0.007	-0.002	
52)	<input checked="" type="checkbox"/>	1_GS0138					
		528508.168	4602530.482	260.131	260.079	260.082	
				Bare Earth	-0.052	-0.049	
53)	<input checked="" type="checkbox"/>	1_GS0140					
		522782.181	4610401.436	294.375	294.364	294.372	
				Bare Earth	-0.011	-0.003	
54)	<input checked="" type="checkbox"/>	1_GS0141					
		525877.799	4621607.937	295.68	295.679	295.708	
				Bare Earth	-0.001	0.028	
55)	<input checked="" type="checkbox"/>	1_GS0142					
		525884.618	4621584.744	295.596	295.614	295.63	
				Bare Earth	0.018	0.034	
56)	<input checked="" type="checkbox"/>	1_GS0147					
		534006.881	4621584.319	288.221	288.296	288.297	
				Bare Earth	0.075	0.076	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
57)	<input checked="" type="checkbox"/>	1_GS0148					
		534035.397	4621619.029	289.039	289.127	289.092	
				Bare Earth	0.088	0.053	
58)	<input checked="" type="checkbox"/>	1_GS0150					
		550158.269	4621833.642	249.148	249.182	249.182	
				Bare Earth	0.034	0.034	
59)	<input checked="" type="checkbox"/>	1_GS0151					
		558234.445	4621799.796	258.084	258.118	258.12	
				Bare Earth	0.034	0.036	
60)	<input checked="" type="checkbox"/>	1_GS0152					
		558230.125	4621821.282	258.949	258.899	258.915	
				Bare Earth	-0.05	-0.034	
61)	<input checked="" type="checkbox"/>	1_GS0156					
		563177.862	4621541.018	242.02	241.972	241.96	
				Bare Earth	-0.048	-0.06	
62)	<input checked="" type="checkbox"/>	1_GS0158					
		570441.33	4623987.794	233.002	232.98	232.971	
				Bare Earth	-0.022	-0.031	
63)	<input checked="" type="checkbox"/>	1_GS0159					
		574889.577	4626120.827	229.889	229.918	229.915	
				Bare Earth	0.029	0.026	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS
		Survey X	Survey Y			
			LC Type			
64)	<input checked="" type="checkbox"/>	1_GS0160				
		574887.357	4626149.519	230.195	230.236	230.237
				Bare Earth	0.041	0.042
65)	<input checked="" type="checkbox"/>	1_GS0163				
		582647.169	4626026.666	232.536	232.631	232.629
				Bare Earth	0.095	0.093
66)	<input checked="" type="checkbox"/>	1_GS0165				
		577743.219	4626898.632	228.07	228.142	228.143
				Bare Earth	0.072	0.073
67)	<input checked="" type="checkbox"/>	1_GS0172				
		553826.377	4589161.172	265.308	265.327	265.308
				Bare Earth	0.019	0
68)	<input checked="" type="checkbox"/>	1_GS0174				
		553784.004	4598021.808	252.871	252.887	252.891
				Bare Earth	0.016	0.02
69)	<input checked="" type="checkbox"/>	1_GS0175				
		553814.39	4598014.568	252.368	252.35	252.332
				Bare Earth	-0.018	-0.036
70)	<input checked="" type="checkbox"/>	1_GS0177				
		550518.669	4604290.624	277.664	277.659	277.668
				Bare Earth	-0.005	0.004

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
71)	<input checked="" type="checkbox"/>	1_GS0178					
		550519.589	4604319.746	279.124	279.111	279.114	
				Bare Earth	-0.013	-0.01	
72)	<input checked="" type="checkbox"/>	1_GS0180					
		545818.604	4603923.501	287.759	287.782	287.792	
				Bare Earth	0.023	0.033	
73)	<input checked="" type="checkbox"/>	1_GS0184					
		545390.232	4610487.113	262.122	262.053	262.107	
				Bare Earth	-0.069	-0.015	
74)	<input checked="" type="checkbox"/>	1_GS0188					
		491537.562	4592844.014	266.8	266.786	266.792	
				Bare Earth	-0.014	-0.008	
75)	<input checked="" type="checkbox"/>	1_GS0191					
		490751.003	4583350.03	242.776	242.834	242.816	
				Bare Earth	0.058	0.04	
76)	<input checked="" type="checkbox"/>	1_GS0200					
		478173.91	4578101.34	274.143	NaN	NaN	
				Bare Earth	NaN	NaN	
77)	<input checked="" type="checkbox"/>	1_GS0202					
		481388.77	4575969.731	282.273	282.244	282.229	
				Bare Earth	-0.029	-0.044	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
78)	<input checked="" type="checkbox"/>	1_GS0203					
		494167.114	4571523.793	271.574	271.552	271.551	
				Bare Earth	-0.022	-0.023	
79)	<input checked="" type="checkbox"/>	1_GS0204					
		494175.023	4571498.528	271.192	271.154	271.163	
				Bare Earth	-0.038	-0.029	
80)	<input checked="" type="checkbox"/>	1_GS0208					
		498118.79	4565039.882	273.987	273.968	273.97	
				Bare Earth	-0.019	-0.017	
81)	<input checked="" type="checkbox"/>	1_GS0209					
		503673.783	4570752.782	254.113	254.084	254.062	
				Bare Earth	-0.029	-0.051	
82)	<input checked="" type="checkbox"/>	1_GS0210					
		503706.597	4570750.956	253.777	253.782	253.769	
				Bare Earth	0.005	-0.008	
83)	<input checked="" type="checkbox"/>	1_GS0216					
		515639.517	4572535.873	232.548	232.463	232.473	
				Bare Earth	-0.085	-0.075	
84)	<input checked="" type="checkbox"/>	1_GS0222					
		550548.083	4523431.625	246.777	246.811	246.813	
				Bare Earth	0.034	0.036	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
85)	<input checked="" type="checkbox"/>	1_GS0224					
		543371.669	4511261.843	260.65	260.617	260.627	
				Bare Earth	-0.033	-0.023	
86)	<input checked="" type="checkbox"/>	1_GS0231					
		540246.271	4497952.902	255.339	255.311	255.296	
				Bare Earth	-0.028	-0.043	
87)	<input checked="" type="checkbox"/>	1_GS0232					
		540218.331	4497953.195	254.126	254.107	254.092	
				Bare Earth	-0.019	-0.034	
88)	<input checked="" type="checkbox"/>	1_GS0233					
		536226.738	4508385.458	286.034	286.055	286.046	
				Bare Earth	0.021	0.012	
89)	<input checked="" type="checkbox"/>	1_GS0236					
		536161.68	4508384.534	287.22	287.211	287.21	
				Bare Earth	-0.009	-0.01	
90)	<input checked="" type="checkbox"/>	1_GS0243					
		506914.864	4497748.087	313.876	313.87	313.868	
				Bare Earth	-0.006	-0.008	
91)	<input checked="" type="checkbox"/>	1_GS0244					
		506915.558	4497717.15	314.137	314.125	314.122	
				Bare Earth	-0.012	-0.015	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
92)	<input checked="" type="checkbox"/>	1_GS0247					
		503322.47	4495718.89	295.114	295.064	295.097	
				Bare Earth	-0.05	-0.017	
93)	<input checked="" type="checkbox"/>	1_GS0249					
		503292.625	4495761.626	294.481	294.478	294.485	
				Bare Earth	-0.003	0.004	
94)	<input checked="" type="checkbox"/>	1_GS0251					
		505174.016	4497656.599	313.275	313.27	313.277	
				Bare Earth	-0.005	0.002	
95)	<input checked="" type="checkbox"/>	1_GS0252					
		505173.978	4497713.461	314.451	314.468	314.46	
				Bare Earth	0.017	0.009	
96)	<input checked="" type="checkbox"/>	1_GS0254					
		514052.363	4518954.603	297.875	297.868	297.88	
				Bare Earth	-0.007	0.005	
97)	<input checked="" type="checkbox"/>	1_GS0256					
		514113.623	4526871.422	304.456	304.441	304.438	
				Bare Earth	-0.015	-0.018	
98)	<input checked="" type="checkbox"/>	1_GS0260					
		515675.738	4538888.519	293.089	293.028	293.035	
				Bare Earth	-0.061	-0.054	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
99)	<input checked="" type="checkbox"/>	1_GS0261				
		515711.503	4542305.931	289.536	289.548	289.545
				Bare Earth	0.012	0.009
100)	<input checked="" type="checkbox"/>	1_GS0266				
		510804.813	4548343.354	291.446	291.485	291.477
				Bare Earth	0.039	0.031
101)	<input checked="" type="checkbox"/>	1_GS0272				
		544347.625	4540315.542	205.988	205.926	205.928
				Bare Earth	-0.062	-0.06
102)	<input checked="" type="checkbox"/>	1_GS0275				
		531929.003	4540710.601	221.743	221.758	221.724
				Bare Earth	0.015	-0.019
103)	<input checked="" type="checkbox"/>	1_GS0276				
		531930.254	4540677.517	222.836	222.758	222.773
				Bare Earth	-0.078	-0.063
104)	<input checked="" type="checkbox"/>	1_GS0280				
		503686.384	4540240.983	297.076	297.026	297.04
				Bare Earth	-0.05	-0.036
105)	<input checked="" type="checkbox"/>	1_GS0284				
		491728.379	4538827.973	302.772	302.719	302.709
				Bare Earth	-0.053	-0.063

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
106)	<input checked="" type="checkbox"/>	1_GS0286				
		483710.612	4538794.9	313.609	313.616	313.613
				Bare Earth	0.007	0.004
107)	<input checked="" type="checkbox"/>	1_GS0292				
		477316.285	4548987.27	311.127	311.063	311.077
				Bare Earth	-0.064	-0.05
108)	<input checked="" type="checkbox"/>	1_GS0294				
		474061.06	4539873.369	303.492	303.424	303.407
				Bare Earth	-0.068	-0.085
109)	<input checked="" type="checkbox"/>	1_GS0296				
		474140.112	4537188.89	291.583	291.477	291.478
				Bare Earth	-0.106	-0.105
110)	<input checked="" type="checkbox"/>	1_GS0299				
		473550.947	4528159.649	314.784	314.723	314.737
				Bare Earth	-0.061	-0.047
111)	<input checked="" type="checkbox"/>	1_GS0302				
		473215.947	4521111.771	325.677	325.663	325.671
				Bare Earth	-0.014	-0.006
112)	<input checked="" type="checkbox"/>	1_GS0304				
		472818.937	4516670.828	322.662	322.639	322.632
				Bare Earth	-0.023	-0.03

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
113)	<input checked="" type="checkbox"/>	1_GS0305					
		496633.304	4517871.587	308.423	308.395	308.395	
				Bare Earth	-0.028	-0.028	
114)	<input checked="" type="checkbox"/>	1_GS0309					
		496135.95	4522757.737	306.289	306.302	306.301	
				Bare Earth	0.013	0.012	
115)	<input checked="" type="checkbox"/>	1_GS0310					
		496142.424	4522727.15	305.343	305.376	305.365	
				Bare Earth	0.033	0.022	
116)	<input checked="" type="checkbox"/>	1_GS0316					
		474040.034	4511743.254	321.384	321.331	321.326	
				Bare Earth	-0.053	-0.058	
117)	<input checked="" type="checkbox"/>	1_GS0317					
		474039.913	4511780.717	322.568	322.5	322.507	
				Bare Earth	-0.068	-0.061	
118)	<input checked="" type="checkbox"/>	1_GS0320					
		468940.972	4511837.458	330.246	330.254	330.241	
				Bare Earth	0.008	-0.005	
119)	<input checked="" type="checkbox"/>	1_GS0325					
		457830.187	4498825.412	311.868	311.959	311.976	
				Bare Earth	0.091	0.108	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
120)	<input checked="" type="checkbox"/>	1_GS0326					
		457771.763	4498853.91	311.508	311.583	311.584	
				Bare Earth	0.075	0.076	
121)	<input checked="" type="checkbox"/>	1_GS0328					
		457897.392	4516369.63	333.165	333.251	333.234	
				Bare Earth	0.086	0.069	
122)	<input checked="" type="checkbox"/>	1_GS0332					
		457897.951	4519654.69	338.572	338.605	338.577	
				Bare Earth	0.033	0.005	
123)	<input checked="" type="checkbox"/>	1_GS0333					
		457938.378	4519603.897	338.361	338.391	338.419	
				Bare Earth	0.03	0.058	
124)	<input checked="" type="checkbox"/>	1_GS0338					
		461190.221	4539008.579	283.889	283.908	283.923	
				Bare Earth	0.019	0.034	
125)	<input checked="" type="checkbox"/>	1_GS0348					
		443382.443	4542366.192	337.945	338.022	338.004	
				Bare Earth	0.077	0.059	
126)	<input checked="" type="checkbox"/>	1_GS0352					
		453186.437	4542194.587	323.264	323.197	323.195	
				Bare Earth	-0.067	-0.069	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
				LC Type	ΔZ DEM	ΔZ LAS	
127)	<input checked="" type="checkbox"/>	1_GS0354					
		460169.239	4551849.711	315.251	315.356	315.348	
				Bare Earth	0.105	0.097	
128)	<input checked="" type="checkbox"/>	1_GS0360					
		458137.179	4566421.534	286.073	286.154	286.132	
				Bare Earth	0.081	0.059	
129)	<input checked="" type="checkbox"/>	1_GS0368					
		453194.852	4584687.343	276.659	276.644	276.644	
				Bare Earth	-0.015	-0.015	
130)	<input checked="" type="checkbox"/>	1_GS0370					
		453356.352	4590431.858	284.379	284.387	284.39	
				Bare Earth	0.008	0.011	
131)	<input checked="" type="checkbox"/>	1_GS0376					
		432991.342	4571191.833	314.923	314.895	314.913	
				Bare Earth	-0.028	-0.01	
132)	<input checked="" type="checkbox"/>	1_GS0378					
		422517.215	4578235.573	309.011	309.019	309	
				Bare Earth	0.008	-0.011	
133)	<input checked="" type="checkbox"/>	1_GS0380					
		415256.122	4586297.013	326.037	325.978	325.988	
				Bare Earth	-0.059	-0.049	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
134)	<input checked="" type="checkbox"/>	1_GS0382					
		415342.602	4586297.636	325.474	325.468	325.461	
				Bare Earth	-0.006	-0.013	
135)	<input checked="" type="checkbox"/>	1_GS0384					
		415036.067	4591916.207	321.198	321.165	321.168	
				Bare Earth	-0.033	-0.03	
136)	<input checked="" type="checkbox"/>	1_GS0388					
		412661.44	4569414.903	351.924	351.914	351.916	
				Bare Earth	-0.01	-0.008	
137)	<input checked="" type="checkbox"/>	1_GS0392					
		412679.939	4562977.53	338.821	338.798	338.795	
				Bare Earth	-0.023	-0.026	
138)	<input checked="" type="checkbox"/>	1_GS0394					
		412033.643	4556294.548	345.184	345.156	345.183	
				Bare Earth	-0.028	-0.001	
139)	<input checked="" type="checkbox"/>	2_GS0415					
		387753.452	4507606.905	335.731	335.734	335.713	
				Bare Earth	0.003	-0.018	
140)	<input checked="" type="checkbox"/>	2_GS0417					
		396783.69	4515360.919	357.983	357.931	357.954	
				Bare Earth	-0.052	-0.029	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
141)	<input checked="" type="checkbox"/>	2_GS0419					
		396720.534	4515366.53	360.15	360.167	360.172	
				Bare Earth	0.017	0.022	
142)	<input checked="" type="checkbox"/>	2_GS0421					
		401671.416	4523236.033	370.664	370.648	370.668	
				Bare Earth	-0.016	0.004	
143)	<input checked="" type="checkbox"/>	2_GS0424					
		410383.538	4520777.781	363.491	363.545	363.539	
				Bare Earth	0.054	0.048	
144)	<input checked="" type="checkbox"/>	2_GS0426					
		418936.345	4518920.704	308.276	308.22	308.226	
				Bare Earth	-0.056	-0.05	
145)	<input checked="" type="checkbox"/>	2_GS0432					
		409126.644	4542559.68	365.277	365.271	365.267	
				Bare Earth	-0.006	-0.01	
146)	<input checked="" type="checkbox"/>	2_GS0433					
		392391.665	4544812.81	368.81	368.772	368.772	
				Bare Earth	-0.038	-0.038	
147)	<input checked="" type="checkbox"/>	2_GS0437					
		384214.922	4534205.235	382.862	382.814	382.859	
				Bare Earth	-0.048	-0.003	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
148)	<input checked="" type="checkbox"/>	2_GS0438					
		384223.113	4538016.175	385.021	384.973	384.979	
				Bare Earth	-0.048	-0.043	
149)	<input checked="" type="checkbox"/>	2_GS0442					
		386031.879	4548409.826	398.343	398.313	398.307	
				Bare Earth	-0.03	-0.036	
150)	<input checked="" type="checkbox"/>	2_GS0444					
		387727.078	4552323.343	384.248	384.195	384.204	
				Bare Earth	-0.053	-0.044	
151)	<input checked="" type="checkbox"/>	2_GS0447					
		394113.811	4552234.545	366.454	366.391	366.379	
				Bare Earth	-0.063	-0.075	
152)	<input checked="" type="checkbox"/>	2_GS0448					
		383737.673	4562020.728	396.323	396.289	396.302	
				Bare Earth	-0.034	-0.021	
153)	<input checked="" type="checkbox"/>	2_GS0450					
		378534.895	4573388.583	408.575	408.67	408.684	
				Bare Earth	0.095	0.109	
154)	<input checked="" type="checkbox"/>	2_GS0453					
		382593.152	4573205.812	400.893	400.795	400.81	
				Bare Earth	-0.098	-0.083	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
155)	<input checked="" type="checkbox"/>	2_GS0455					
		389609.083	4574699.605	389.814	389.76	389.724	
				Bare Earth	-0.054	-0.09	
156)	<input checked="" type="checkbox"/>	2_GS0458					
		389797.271	4581450.953	364.984	364.854	364.883	
				Bare Earth	-0.13	-0.101	
157)	<input checked="" type="checkbox"/>	2_GS0459					
		378690.145	4590890.455	384.977	385.04	385.044	
				Bare Earth	0.063	0.067	
158)	<input checked="" type="checkbox"/>	1_GS0002					
		550213.976	4536683.83	195.303	195.333	195.335	
				Urban Terrian	0.03	0.032	
159)	<input checked="" type="checkbox"/>	1_GS0007					
		549346.272	4529285.088	253.204	253.278	253.25	
				Urban Terrian	0.074	0.046	
160)	<input checked="" type="checkbox"/>	1_GS0019					
		571050.661	4502160.823	242.535	242.489	242.454	
				Urban Terrian	-0.046	-0.081	
161)	<input checked="" type="checkbox"/>	1_GS0021					
		577521.122	4499846.203	239.413	239.379	239.401	
				Urban Terrian	-0.034	-0.012	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
162)	<input checked="" type="checkbox"/>	1_GS0023				
		577472.382	4499789.079	239.006	238.991	239.009
				Urban Terrian	-0.015	0.003
163)	<input checked="" type="checkbox"/>	1_GS0024				
		588879.823	4503221.238	226.903	226.913	226.888
				Urban Terrian	0.01	-0.015
164)	<input checked="" type="checkbox"/>	1_GS0037				
		577314.163	4518417.151	230.44	230.438	230.477
				Urban Terrian	-0.002	0.037
165)	<input checked="" type="checkbox"/>	1_GS0046				
		589062.572	4525800.51	228.288	228.284	228.27
				Urban Terrian	-0.004	-0.018
166)	<input checked="" type="checkbox"/>	1_GS0072				
		575952.113	4561162.188	239.203	239.212	239.207
				Urban Terrian	0.009	0.004
167)	<input checked="" type="checkbox"/>	1_GS0073				
		576003.462	4561156.13	238.981	238.969	238.988
				Urban Terrian	-0.012	0.007
168)	<input checked="" type="checkbox"/>	1_GS0075				
		566524.32	4576097.564	241.768	241.744	241.753
				Urban Terrian	-0.024	-0.015

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
169)	<input checked="" type="checkbox"/>	1_GS0096				
		539869.673	4562503.279	249.437	249.442	249.432
				Urban Terrian	0.005	-0.005
170)	<input checked="" type="checkbox"/>	1_GS0114				
		577971.794	4596653.603	247.319	247.341	247.341
				Urban Terrian	0.022	0.022
171)	<input checked="" type="checkbox"/>	1_GS0128				
		529666.792	4574836.332	249.72	249.731	249.728
				Urban Terrian	0.011	0.007
172)	<input checked="" type="checkbox"/>	1_GS0133				
		528809.922	4583314.046	253.431	253.44	253.411
				Urban Terrian	0.009	-0.02
173)	<input checked="" type="checkbox"/>	1_GS0136				
		528555.471	4602540.825	259.502	259.444	259.451
				Urban Terrian	-0.058	-0.051
174)	<input checked="" type="checkbox"/>	1_GS0137				
		528582.523	4602555.598	258.468	258.414	258.411
				Urban Terrian	-0.054	-0.057
175)	<input checked="" type="checkbox"/>	1_GS0162				
		582617.032	4626022.691	232.331	232.409	232.389
				Urban Terrian	0.078	0.058

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
176)	<input checked="" type="checkbox"/>	1_GS0166					
		577717.729	4626881.324	227.747	227.801	227.812	
				Urban Terrian	0.054	0.065	
177)	<input checked="" type="checkbox"/>	1_GS0182					
		545387.78	4610515.184	260.949	260.922	260.924	
				Urban Terrian	-0.027	-0.025	
178)	<input checked="" type="checkbox"/>	1_GS0185					
		546079.772	4616422.302	280.969	280.971	280.97	
				Urban Terrian	0.002	0.001	
179)	<input checked="" type="checkbox"/>	1_GS0186					
		546114.254	4616429.388	281.218	281.238	281.236	
				Urban Terrian	0.02	0.018	
180)	<input checked="" type="checkbox"/>	1_GS0193					
		490048.623	4574381.097	276.183	276.159	276.124	
				Urban Terrian	-0.024	-0.059	
181)	<input checked="" type="checkbox"/>	1_GS0194					
		490078.731	4574380.194	276.682	276.621	276.614	
				Urban Terrian	-0.061	-0.068	
182)	<input checked="" type="checkbox"/>	1_GS0206					
		498089.069	4565133.396	269.227	269.23	269.188	
				Urban Terrian	0.003	-0.039	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
183)	<input checked="" type="checkbox"/>	1_GS0212					
		508597.123	4572832.468	213.67	213.656	213.651	
				Urban Terrian	-0.014	-0.019	
184)	<input checked="" type="checkbox"/>	1_GS0215					
		515671.959	4572475.624	231.664	231.589	231.585	
				Urban Terrian	-0.075	-0.079	
185)	<input checked="" type="checkbox"/>	1_GS0217					
		522299.924	4570774.296	254.938	254.952	254.96	
				Urban Terrian	0.014	0.022	
186)	<input checked="" type="checkbox"/>	1_GS0218					
		522269.207	4570777.373	255.301	255.316	255.322	
				Urban Terrian	0.015	0.021	
187)	<input checked="" type="checkbox"/>	1_GS0225					
		543413.49	4511276.365	261.912	261.932	261.938	
				Urban Terrian	0.02	0.026	
188)	<input checked="" type="checkbox"/>	1_GS0240					
		511317.153	4509346.046	304.118	304.118	304.13	
				Urban Terrian	0	0.012	
189)	<input checked="" type="checkbox"/>	1_GS0241					
		511289.109	4509351.337	303.389	303.438	303.421	
				Urban Terrian	0.049	0.032	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
190)	<input checked="" type="checkbox"/>	1_GS0242				
		506912.64	4497783.165	313.341	313.302	313.318
				Urban Terrian	-0.039	-0.023
191)	<input checked="" type="checkbox"/>	1_GS0258				
		514144.821	4526870.573	304.642	304.615	304.623
				Urban Terrian	-0.027	-0.019
192)	<input checked="" type="checkbox"/>	1_GS0262				
		515706.46	4542276.726	289.867	289.817	289.824
				Urban Terrian	-0.05	-0.043
193)	<input checked="" type="checkbox"/>	1_GS0268				
		512291.22	4546961.802	292.787	292.761	292.789
				Urban Terrian	-0.026	0.002
194)	<input checked="" type="checkbox"/>	1_GS0278				
		521443.56	4540524.428	277.491	277.51	277.523
				Urban Terrian	0.019	0.032
195)	<input checked="" type="checkbox"/>	1_GS0288				
		474352.606	4542771.719	312.79	312.7	312.687
				Urban Terrian	-0.09	-0.103
196)	<input checked="" type="checkbox"/>	1_GS0298				
		473540.001	4528137.663	315.534	315.477	315.466
				Urban Terrian	-0.057	-0.068

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
197)	<input checked="" type="checkbox"/>	1_GS0314				
		473304.802	4521924.666	329.04	328.975	328.987
				Urban Terrian	-0.065	-0.053
198)	<input checked="" type="checkbox"/>	1_GS0331				
		457884.966	4519629.496	338.733	338.758	338.774
				Urban Terrian	0.025	0.041
199)	<input checked="" type="checkbox"/>	1_GS0334				
		457919.499	4523663.097	336.405	336.463	336.465
				Urban Terrian	0.058	0.06
200)	<input checked="" type="checkbox"/>	1_GS0344				
		435685.798	4543181.457	347.459	347.396	347.417
				Urban Terrian	-0.063	-0.042
201)	<input checked="" type="checkbox"/>	1_GS0356				
		458044.911	4561889.867	312.089	312.154	312.14
				Urban Terrian	0.065	0.051
202)	<input checked="" type="checkbox"/>	1_GS0362				
		452883.754	4570595.252	302.283	302.268	302.272
				Urban Terrian	-0.015	-0.011
203)	<input checked="" type="checkbox"/>	1_GS0363				
		453280.935	4579066.477	293.893	293.887	293.873
				Urban Terrian	-0.006	-0.02

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
204)	<input checked="" type="checkbox"/>	1_GS0364				
		453276.623	4579034.875	293.979	293.959	293.958
				Urban Terrian	-0.02	-0.021
205)	<input checked="" type="checkbox"/>	1_GS0372				
		437947.969	4580209.737	255.795	255.813	255.811
				Urban Terrian	0.018	0.016
206)	<input checked="" type="checkbox"/>	1_GS0386				
		414426.846	4577603.581	341.002	340.973	340.962
				Urban Terrian	-0.029	-0.04
207)	<input checked="" type="checkbox"/>	1_GS0391				
		412717.329	4562967.829	339.07	339.029	339.016
				Urban Terrian	-0.041	-0.054
208)	<input checked="" type="checkbox"/>	2_GS0412				
		396670.882	4507322.411	372.386	372.361	372.378
				Urban Terrian	-0.025	-0.008
209)	<input checked="" type="checkbox"/>	2_GS0422				
		406410.752	4521587.617	374.449	374.337	374.335
				Urban Terrian	-0.112	-0.114
210)	<input checked="" type="checkbox"/>	2_GS0434				
		384363.43	4544436.703	393.262	393.192	393.173
				Urban Terrian	-0.07	-0.089

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
211)	<input checked="" type="checkbox"/>	2_GS0441				
		384326.629	4544900.378	395.668	395.595	395.598
				Urban Terrian	-0.073	-0.07
212)	<input checked="" type="checkbox"/>	1_GS0010				
		551678.153	4508519.154	265.062	265.094	265.084
				High Vegetation	0.032	0.022
213)	<input checked="" type="checkbox"/>	1_GS0015				
		556110.959	4505406.872	259.878	259.962	259.966
				High Vegetation	0.084	0.088
214)	<input checked="" type="checkbox"/>	1_GS0018				
		571040.084	4502194.583	241.886	241.823	241.818
				High Vegetation	-0.063	-0.068
215)	<input checked="" type="checkbox"/>	1_GS0025				
		588913.432	4503248.296	226.315	226.387	226.397
				High Vegetation	0.072	0.082
216)	<input checked="" type="checkbox"/>	1_GS0030				
		595748.98	4508173.218	211.376	211.5	211.462
				High Vegetation	0.124	0.086
217)	<input checked="" type="checkbox"/>	1_GS0039				
		579715.093	4523052.963	232.184	232.301	232.302
				High Vegetation	0.117	0.118

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
218)	<input checked="" type="checkbox"/>	1_GS0040				
		583734.726	4521236.611	222.13	222.245	222.26
				High Vegetation	0.115	0.13
219)	<input checked="" type="checkbox"/>	1_GS0044				
		589026.996	4525749.934	228.54	228.562	228.558
				High Vegetation	0.022	0.018
220)	<input checked="" type="checkbox"/>	1_GS0052				
		570246.095	4539369.828	230.732	230.704	230.708
				High Vegetation	-0.028	-0.024
221)	<input checked="" type="checkbox"/>	1_GS0058				
		588574.231	4542081.46	233.751	233.771	233.772
				High Vegetation	0.02	0.021
222)	<input checked="" type="checkbox"/>	1_GS0068				
		577164.49	4558908.734	237.612	237.636	237.635
				High Vegetation	0.024	0.023
223)	<input checked="" type="checkbox"/>	1_GS0074				
		566528.934	4576069.368	241.989	241.966	241.981
				High Vegetation	-0.023	-0.008
224)	<input checked="" type="checkbox"/>	1_GS0088				
		553999.067	4576325.297	242.942	242.976	243.043
				High Vegetation	0.034	0.101

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
225)	<input checked="" type="checkbox"/>	1_GS0094				
		539827.375	4562525.328	248.588	248.622	248.616
				High Vegetation	0.034	0.028
226)	<input checked="" type="checkbox"/>	1_GS0100				
		549495.134	4549149.101	254.105	254.235	254.245
				High Vegetation	0.13	0.14
227)	<input checked="" type="checkbox"/>	1_GS0127				
		529669.441	4574808.403	250.277	250.364	250.365
				High Vegetation	0.087	0.088
228)	<input checked="" type="checkbox"/>	1_GS0129				
		528815.632	4583265.242	251.621	251.727	251.728
				High Vegetation	0.106	0.107
229)	<input checked="" type="checkbox"/>	1_GS0143				
		532255.096	4621706.719	300.873	300.869	300.867
				High Vegetation	-0.004	-0.006
230)	<input checked="" type="checkbox"/>	1_GS0144				
		532229.92	4621690.141	300.957	300.915	300.915
				High Vegetation	-0.042	-0.042
231)	<input checked="" type="checkbox"/>	1_GS0239				
		511331.692	4509364.45	304.541	304.601	304.593
				High Vegetation	0.06	0.052

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
232)	<input checked="" type="checkbox"/>	1_GS0282					
		491714.401	4538767.399	305.376	305.371	305.37	
				High Vegetation	-0.005	-0.006	
233)	<input checked="" type="checkbox"/>	1_GS0339					
		434154.074	4546900.372	302.68	302.652	302.707	
				High Vegetation	-0.028	0.027	
234)	<input checked="" type="checkbox"/>	1_GS0359					
		458112.918	4566411.967	284.138	284.231	284.232	
				High Vegetation	0.093	0.094	
235)	<input checked="" type="checkbox"/>	1_GS0374					
		432942.742	4571175.165	314.74	314.804	314.774	
				High Vegetation	0.064	0.034	
236)	<input checked="" type="checkbox"/>	1_GS0035					
		577383.596	4518410.039	229.093	229.182	229.218	
				Low Vegetation	0.089	0.125	
237)	<input checked="" type="checkbox"/>	1_GS0043					
		588558.742	4523414.764	224.691	224.766	224.798	
				Low Vegetation	0.075	0.107	
238)	<input checked="" type="checkbox"/>	1_GS0054					
		578659.987	4540693.265	230.171	230.317	230.311	
				Low Vegetation	0.146	0.14	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
239)	<input checked="" type="checkbox"/>	1_GS0062					
		595684.899	4551673.71	211.095	211.237	211.229	
				Low Vegetation	0.142	0.134	
240)	<input checked="" type="checkbox"/>	1_GS0076					
		568501.052	4578073.323	223.544	223.655	223.661	
				Low Vegetation	0.111	0.117	
241)	<input checked="" type="checkbox"/>	1_GS0078					
		569145.225	4584533.116	257.238	257.295	257.317	
				Low Vegetation	0.057	0.079	
242)	<input checked="" type="checkbox"/>	1_GS0090					
		544867.119	4573711.913	244.064	244.135	244.152	
				Low Vegetation	0.071	0.088	
243)	<input checked="" type="checkbox"/>	1_GS0092					
		543375.33	4562488.092	251.905	252.07	252.101	
				Low Vegetation	0.165	0.196	
244)	<input checked="" type="checkbox"/>	1_GS0101					
		549508.084	4549174.799	253.887	254.048	254.037	
				Low Vegetation	0.161	0.15	
245)	<input checked="" type="checkbox"/>	1_GS0106					
		553537.496	4548924.703	244.283	244.348	244.341	
				Low Vegetation	0.065	0.058	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
246)	<input checked="" type="checkbox"/>	1_GS0110					
		576117.918	4589826.901	253.809	254.034	253.998	
				Low Vegetation	0.225	0.189	
247)	<input checked="" type="checkbox"/>	1_GS0115					
		577938.799	4596640.461	246.344	246.546	246.547	
				Low Vegetation	0.202	0.203	
248)	<input checked="" type="checkbox"/>	1_GS0116					
		578027.441	4600667.102	248.55	248.748	248.765	
				Low Vegetation	0.198	0.215	
249)	<input checked="" type="checkbox"/>	1_GS0130					
		528807.12	4583236.918	252.133	252.26	252.251	
				Low Vegetation	0.127	0.118	
250)	<input checked="" type="checkbox"/>	1_GS0134					
		529117.892	4595120.855	237.091	237.189	237.163	
				Low Vegetation	0.098	0.072	
251)	<input checked="" type="checkbox"/>	1_GS0145					
		533898.863	4621615.477	289.267	289.521	289.513	
				Low Vegetation	0.254	0.245	
252)	<input checked="" type="checkbox"/>	1_GS0149					
		550164.56	4621860.839	248.494	248.516	248.544	
				Low Vegetation	0.022	0.05	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
253)	<input checked="" type="checkbox"/>	1_GS0154					
		563191.676	4621477.783	239.639	239.696	239.688	
				Low Vegetation	0.057	0.049	
254)	<input checked="" type="checkbox"/>	1_GS0155					
		563187.94	4621507.507	239.754	239.855	239.834	
				Low Vegetation	0.101	0.08	
255)	<input checked="" type="checkbox"/>	1_GS0157					
		570435.464	4624013.418	232.512	232.575	232.584	
				Low Vegetation	0.063	0.072	
256)	<input checked="" type="checkbox"/>	1_GS0164					
		582651.587	4626058.518	232.107	232.259	232.258	
				Low Vegetation	0.152	0.151	
257)	<input checked="" type="checkbox"/>	1_GS0171					
		553797.378	4589170.086	265.115	265.274	265.273	
				Low Vegetation	0.159	0.158	
258)	<input checked="" type="checkbox"/>	1_GS0176					
		553727.147	4598045.05	251.745	251.817	251.816	
				Low Vegetation	0.072	0.071	
259)	<input checked="" type="checkbox"/>	1_GS0179					
		545795.401	4603938.221	286.371	286.512	286.514	
				Low Vegetation	0.141	0.143	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS
		Survey X	Survey Y			
			LC Type			
260)	<input checked="" type="checkbox"/>	1_GS0183				
		545363.75	4610508.15	260.313	260.369	260.381
				Low Vegetation	0.056	0.068
261)	<input checked="" type="checkbox"/>	1_GS0187				
		491512.12	4592852.699	266.513	266.597	266.608
				Low Vegetation	0.084	0.095
262)	<input checked="" type="checkbox"/>	1_GS0190				
		490727.254	4583374.916	242.295	242.447	242.46
				Low Vegetation	0.152	0.165
263)	<input checked="" type="checkbox"/>	1_GS0195				
		485227.294	4574875.586	249.597	249.762	249.799
				Low Vegetation	0.165	0.202
264)	<input checked="" type="checkbox"/>	1_GS0196				
		485202.021	4574864.041	251.521	251.603	251.596
				Low Vegetation	0.082	0.075
265)	<input checked="" type="checkbox"/>	1_GS0198				
		478152.775	4578079.133	273.21	NaN	NaN
				Low Vegetation	NaN	NaN
266)	<input checked="" type="checkbox"/>	1_GS0199				
		478180.785	4578074.225	271.295	NaN	NaN
				Low Vegetation	NaN	NaN

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
267)	<input checked="" type="checkbox"/>	1_GS0201					
		481360.844	4575974.847	281.686	281.816	281.812	
				Low Vegetation	0.13	0.126	
268)	<input checked="" type="checkbox"/>	1_GS0211					
		508569.371	4572825.359	213.746	213.812	213.811	
				Low Vegetation	0.066	0.065	
269)	<input checked="" type="checkbox"/>	1_GS0213					
		515644.634	4572500.886	231.424	231.446	231.438	
				Low Vegetation	0.022	0.013	
270)	<input checked="" type="checkbox"/>	1_GS0226					
		543433.912	4511250.671	260.866	261.035	261.063	
				Low Vegetation	0.169	0.197	
271)	<input checked="" type="checkbox"/>	1_GS0227					
		541786.706	4509971.74	276.898	276.971	276.96	
				Low Vegetation	0.073	0.062	
272)	<input checked="" type="checkbox"/>	1_GS0228					
		541773.851	4509947.251	276.851	276.914	276.903	
				Low Vegetation	0.063	0.052	
273)	<input checked="" type="checkbox"/>	1_GS0234					
		536210.211	4508363.479	285.809	285.9	285.901	
				Low Vegetation	0.091	0.092	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
274)	<input checked="" type="checkbox"/>	1_GS0235					
		536180.527	4508363.1	286.535	286.642	286.656	
				Low Vegetation	0.107	0.121	
275)	<input checked="" type="checkbox"/>	1_GS0237					
		516805.695	4509870.968	259.757	259.799	259.828	
				Low Vegetation	0.042	0.071	
276)	<input checked="" type="checkbox"/>	1_GS0245					
		503301.076	4495739.487	293.5	293.677	293.637	
				Low Vegetation	0.177	0.137	
277)	<input checked="" type="checkbox"/>	1_GS0250					
		505179.848	4497685.747	313.402	313.586	313.578	
				Low Vegetation	0.184	0.176	
278)	<input checked="" type="checkbox"/>	1_GS0253					
		514076.19	4518973.781	297.848	297.878	297.915	
				Low Vegetation	0.03	0.067	
279)	<input checked="" type="checkbox"/>	1_GS0257					
		514091.54	4526850.108	301.317	301.402	301.421	
				Low Vegetation	0.085	0.104	
280)	<input checked="" type="checkbox"/>	1_GS0259					
		515639.655	4538893.059	293.052	293.06	293.051	
				Low Vegetation	0.008	-0.001	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
281)	<input checked="" type="checkbox"/>	1_GS0264					
		510770.276	4548395.354	292.312	292.347	292.35	
				Low Vegetation	0.035	0.038	
282)	<input checked="" type="checkbox"/>	1_GS0265					
		510790.289	4548372.029	291.916	292.134	292.099	
				Low Vegetation	0.218	0.183	
283)	<input checked="" type="checkbox"/>	1_GS0267					
		512277.578	4546938.032	291.815	292.015	292.022	
				Low Vegetation	0.2	0.207	
284)	<input checked="" type="checkbox"/>	1_GS0273					
		531916.383	4540773.218	219.375	219.473	219.442	
				Low Vegetation	0.098	0.067	
285)	<input checked="" type="checkbox"/>	1_GS0277					
		521465.914	4540543.819	277.955	278.051	278.061	
				Low Vegetation	0.096	0.106	
286)	<input checked="" type="checkbox"/>	1_GS0279					
		503677.869	4540267.884	297.774	297.808	297.79	
				Low Vegetation	0.034	0.016	
287)	<input checked="" type="checkbox"/>	1_GS0285					
		483706.847	4538765.388	313.975	314.172	314.168	
				Low Vegetation	0.197	0.193	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
288)	<input checked="" type="checkbox"/>	1_GS0287				
		474324.241	4542782.471	312.187	312.259	312.265
				Low Vegetation	0.072	0.078
289)	<input checked="" type="checkbox"/>	1_GS0289				
		477305.152	4549034	309.88	309.9	309.885
				Low Vegetation	0.02	0.005
290)	<input checked="" type="checkbox"/>	1_GS0291				
		477334.313	4549011.958	310.848	310.828	310.866
				Low Vegetation	-0.02	0.018
291)	<input checked="" type="checkbox"/>	1_GS0295				
		474161.228	4537204.932	290.798	290.811	290.804
				Low Vegetation	0.013	0.005
292)	<input checked="" type="checkbox"/>	1_GS0300				
		473550.263	4528178.451	311.861	311.873	311.865
				Low Vegetation	0.012	0.004
293)	<input checked="" type="checkbox"/>	1_GS0301				
		473188.105	4521144.686	325.864	325.928	325.938
				Low Vegetation	0.064	0.074
294)	<input checked="" type="checkbox"/>	1_GS0303				
		472838.687	4516678.571	321.551	321.708	321.699
				Low Vegetation	0.157	0.148

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
295)	<input checked="" type="checkbox"/>	1_GS0306					
		496602.67	4517898.157	305.257	305.316	305.334	
				Low Vegetation	0.059	0.077	
296)	<input checked="" type="checkbox"/>	1_GS0308					
		496159.199	4522806.532	306.364	306.482	306.471	
				Low Vegetation	0.118	0.107	
297)	<input checked="" type="checkbox"/>	1_GS0313					
		473275.687	4521917.085	328.498	328.587	328.58	
				Low Vegetation	0.089	0.082	
298)	<input checked="" type="checkbox"/>	1_GS0319					
		468966.341	4511847.563	329.742	329.844	329.861	
				Low Vegetation	0.102	0.119	
299)	<input checked="" type="checkbox"/>	1_GS0321					
		457846.95	4506639.583	327.39	327.546	327.572	
				Low Vegetation	0.156	0.182	
300)	<input checked="" type="checkbox"/>	1_GS0322					
		457817.572	4506637.964	327.287	327.46	327.405	
				Low Vegetation	0.173	0.118	
301)	<input checked="" type="checkbox"/>	1_GS0323					
		457797.564	4498838.796	311.834	311.933	311.969	
				Low Vegetation	0.099	0.135	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
302)	<input checked="" type="checkbox"/>	1_GS0327					
		457864.091	4516372.42	332.171	332.265	332.25	
				Low Vegetation	0.094	0.079	
303)	<input checked="" type="checkbox"/>	1_GS0329					
		457908.497	4519598.931	338.514	338.658	338.661	
				Low Vegetation	0.144	0.147	
304)	<input checked="" type="checkbox"/>	1_GS0336					
		459494.054	4529113.651	336.705	336.832	336.84	
				Low Vegetation	0.127	0.135	
305)	<input checked="" type="checkbox"/>	1_GS0340					
		434182.073	4546891.438	300.531	300.643	300.646	
				Low Vegetation	0.112	0.115	
306)	<input checked="" type="checkbox"/>	1_GS0347					
		443384.696	4542330.889	338.059	338.089	338.068	
				Low Vegetation	0.03	0.009	
307)	<input checked="" type="checkbox"/>	1_GS0349					
		453180.264	4542286.567	324.359	324.506	324.496	
				Low Vegetation	0.147	0.137	
308)	<input checked="" type="checkbox"/>	1_GS0353					
		460195.444	4551855.167	315.327	315.478	315.469	
				Low Vegetation	0.151	0.142	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
309)	<input checked="" type="checkbox"/>	1_GS0355					
		458064.821	4561918.519	312.158	312.243	312.245	
				Low Vegetation	0.085	0.087	
310)	<input checked="" type="checkbox"/>	1_GS0365					
		453149.589	4584727.65	277.108	277.259	277.25	
				Low Vegetation	0.151	0.142	
311)	<input checked="" type="checkbox"/>	1_GS0369					
		453354.702	4590455.47	282.881	282.936	282.942	
				Low Vegetation	0.055	0.061	
312)	<input checked="" type="checkbox"/>	1_GS0371					
		437920.457	4580218.647	254.557	254.677	254.666	
				Low Vegetation	0.12	0.109	
313)	<input checked="" type="checkbox"/>	1_GS0377					
		422487.133	4578231.988	309.54	309.545	309.585	
				Low Vegetation	0.005	0.045	
314)	<input checked="" type="checkbox"/>	1_GS0379					
		415281.751	4586305.036	324.754	324.878	324.878	
				Low Vegetation	0.124	0.124	
315)	<input checked="" type="checkbox"/>	1_GS0383					
		415009.603	4591924.807	319.879	319.993	319.984	
				Low Vegetation	0.114	0.105	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
316)	<input checked="" type="checkbox"/>	1_GS0390					
		412754.501	4562923.837	337.914	337.997	338.043	
				Low Vegetation	0.083	0.129	
317)	<input checked="" type="checkbox"/>	1_GS0393					
		412039.548	4556322.839	344.46	344.548	344.539	
				Low Vegetation	0.088	0.079	
318)	<input checked="" type="checkbox"/>	2_GS0411					
		396695.138	4507309.311	372.748	372.844	372.826	
				Low Vegetation	0.096	0.078	
319)	<input checked="" type="checkbox"/>	2_GS0414					
		387732.889	4507580.48	335.129	335.222	335.223	
				Low Vegetation	0.093	0.094	
320)	<input checked="" type="checkbox"/>	2_GS0418					
		396813.795	4515362.865	356.414	356.534	356.518	
				Low Vegetation	0.12	0.104	
321)	<input checked="" type="checkbox"/>	2_GS0420					
		401663.018	4523208.727	371.434	371.662	371.6	
				Low Vegetation	0.228	0.166	
322)	<input checked="" type="checkbox"/>	2_GS0425					
		410388.515	4520709.65	362.629	362.683	362.682	
				Low Vegetation	0.054	0.053	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
323)	<input checked="" type="checkbox"/>	2_GS0429					
		424881.753	4542067.445	362.227	362.32	362.317	
				Low Vegetation	0.093	0.09	
324)	<input checked="" type="checkbox"/>	2_GS0430					
		409141.12	4542621.926	363.47	363.539	363.539	
				Low Vegetation	0.069	0.069	
325)	<input checked="" type="checkbox"/>	2_GS0436					
		384188.537	4534188.911	382.505	382.557	382.546	
				Low Vegetation	0.052	0.041	
326)	<input checked="" type="checkbox"/>	2_GS0443					
		387730.88	4552355.899	383.906	383.98	383.991	
				Low Vegetation	0.074	0.085	
327)	<input checked="" type="checkbox"/>	2_GS0446					
		394086.004	4552229.044	366.23	366.249	366.271	
				Low Vegetation	0.019	0.041	
328)	<input checked="" type="checkbox"/>	2_GS0452					
		382621.96	4573201.316	400.5	400.509	400.528	
				Low Vegetation	0.009	0.028	
329)	<input checked="" type="checkbox"/>	2_GS0454					
		389579.696	4574694.059	387.786	387.763	387.752	
				Low Vegetation	-0.023	-0.034	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
330)	<input checked="" type="checkbox"/>	2_GS0457					
		389800.847	4581492.631	367.024	366.997	367.012	
				Low Vegetation	-0.027	-0.012	
331)	<input checked="" type="checkbox"/>	2_GS0460					
		378436.339	4581354.776	404.059	404.312	404.32	
				Low Vegetation	0.253	0.261	
332)	<input checked="" type="checkbox"/>	1_GS0003					
		550264.269	4536742.284	195.054	195.174	195.18	
				Medium Vegetation	0.12	0.126	
333)	<input checked="" type="checkbox"/>	1_GS0005					
		549383.845	4529241.662	254.33	254.487	254.497	
				Medium Vegetation	0.157	0.167	
334)	<input checked="" type="checkbox"/>	1_GS0016					
		561795.474	4505383.864	253.88	253.869	253.888	
				Medium Vegetation	-0.011	0.008	
335)	<input checked="" type="checkbox"/>	1_GS0026					
		592033.274	4508055.745	209.768	209.802	209.823	
				Medium Vegetation	0.034	0.055	
336)	<input checked="" type="checkbox"/>	1_GS0031					
		595778.765	4508239.414	208.291	208.385	208.42	
				Medium Vegetation	0.094	0.129	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
337)	<input checked="" type="checkbox"/>	1_GS0032					
		585033.265	4511261.004	178.479	178.587	178.581	
				Medium Vegetation	0.108	0.102	
338)	<input checked="" type="checkbox"/>	1_GS0048					
		588042.026	4534035.008	203.941	203.958	204.004	
				Medium Vegetation	0.017	0.063	
339)	<input checked="" type="checkbox"/>	1_GS0060					
		592013.24	4548679.852	211.243	211.449	211.4	
				Medium Vegetation	0.206	0.157	
340)	<input checked="" type="checkbox"/>	1_GS0082					
		563697.591	4576682.528	238.613	238.701	238.706	
				Medium Vegetation	0.088	0.093	
341)	<input checked="" type="checkbox"/>	1_GS0084					
		559644.492	4576370.514	233.077	233.066	233.074	
				Medium Vegetation	-0.011	-0.003	
342)	<input checked="" type="checkbox"/>	1_GS0098					
		549704.264	4558505.54	245.936	245.959	245.969	
				Medium Vegetation	0.023	0.033	
343)	<input checked="" type="checkbox"/>	1_GS0139					
		522752.219	4610394.129	294.184	294.305	294.313	
				Medium Vegetation	0.121	0.129	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
344)	<input checked="" type="checkbox"/>	1_GS0192					
		490761.929	4583385.148	242.404	242.536	242.51	
				Medium Vegetation	0.132	0.106	
345)	<input checked="" type="checkbox"/>	1_GS0207					
		498119.911	4565068.52	273.222	273.252	273.29	
				Medium Vegetation	0.03	0.068	
346)	<input checked="" type="checkbox"/>	1_GS0221					
		550569.461	4523410.917	246.248	246.409	246.391	
				Medium Vegetation	0.161	0.143	
347)	<input checked="" type="checkbox"/>	1_GS0230					
		540264.492	4497983.679	249.893	250.065	250.046	
				Medium Vegetation	0.172	0.153	
348)	<input checked="" type="checkbox"/>	1_GS0248					
		503317.282	4495693.258	290.703	290.851	290.855	
				Medium Vegetation	0.148	0.152	
349)	<input checked="" type="checkbox"/>	1_GS0281					
		491714.261	4538796.97	303.692	303.862	303.808	
				Medium Vegetation	0.17	0.116	
350)	<input checked="" type="checkbox"/>	1_GS0293					
		474032.976	4539861.335	302.139	302.179	302.172	
				Medium Vegetation	0.04	0.033	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
351)	<input checked="" type="checkbox"/>	1_GS0318				
		474049.094	4511812.126	324.039	324.101	324.065
				Medium Vegetation	0.062	0.026
352)	<input checked="" type="checkbox"/>	1_GS0337				
		461184.493	4539050.103	282.804	282.92	282.897
				Medium Vegetation	0.116	0.093
353)	<input checked="" type="checkbox"/>	1_GS0343				
		435667.644	4543199.598	346.974	347.088	347.099
				Medium Vegetation	0.114	0.125
354)	<input checked="" type="checkbox"/>	1_GS0361				
		452913.954	4570568.105	301.11	301.113	301.169
				Medium Vegetation	0.003	0.059
355)	<input checked="" type="checkbox"/>	1_GS0385				
		414396.4	4577616.367	341.628	341.797	341.78
				Medium Vegetation	0.169	0.152
356)	<input checked="" type="checkbox"/>	1_GS0387				
		412689.501	4569406.914	352.145	352.121	352.132
				Medium Vegetation	-0.024	-0.013
357)	<input checked="" type="checkbox"/>	2_GS0439				
		384344.736	4544955.469	397.381	397.352	397.355
				Medium Vegetation	-0.029	-0.026

Coordinates and Offsets of Analyzed Locations (Continued)

	ID					
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
358)	<input checked="" type="checkbox"/>	2_GS0449				
		378554.172	4573367.905	406.693	406.829	406.857
				Medium Vegetation	0.136	0.164

LAS

Nonvegetated Vertical Accuracy

LandCover Type: Bare Earth, Urban Terrian

Minimum DZ: -0.114

Maximum DZ: 0.109

Mean DZ: -0.004

Mean Magnitude DZ: 0.191

Number Observations: 210

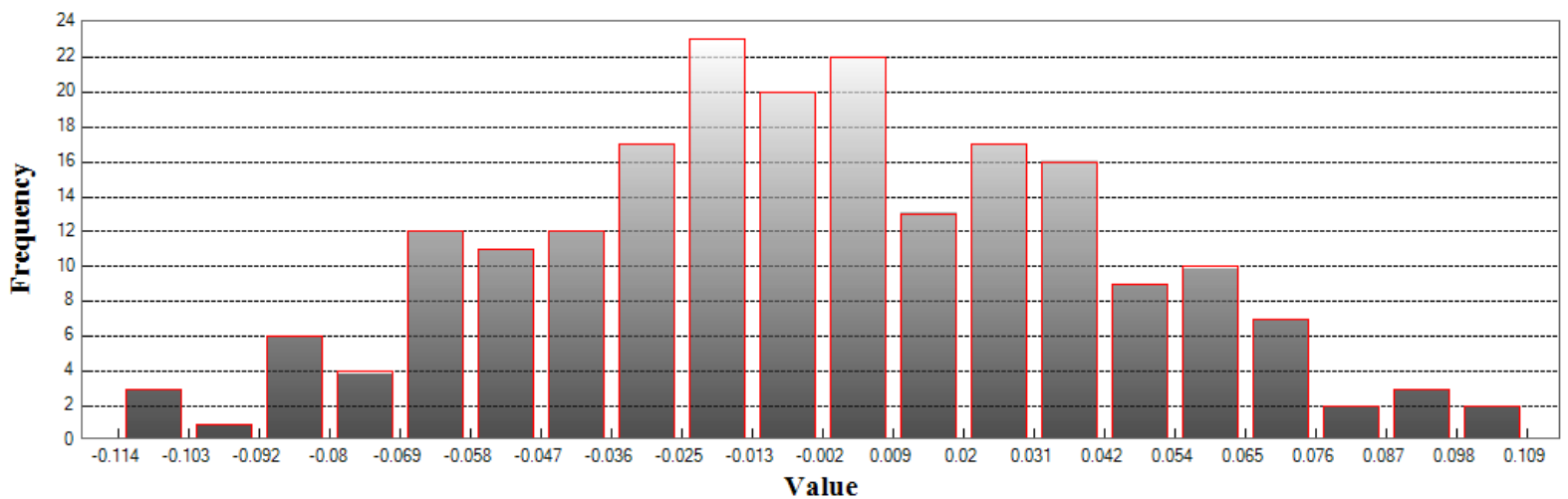
Standard Deviation DZ: 0.045

RMSE Z: 0.045

95% Confidence Level Z: 0.088

Units: Meters

Histogram



Min: -0.114
 Max: 0.109
 Number Of Bins: 20
 Bin Interval: 0.011

LAS (Continued)

Vegetated Vertical Accuracy

LandCover Type: High Vegetation

Minimum DZ: -0.068

Maximum DZ: 0.14

Mean DZ: 0.046

Mean Magnitude DZ: 0.243

Number Observations: 24

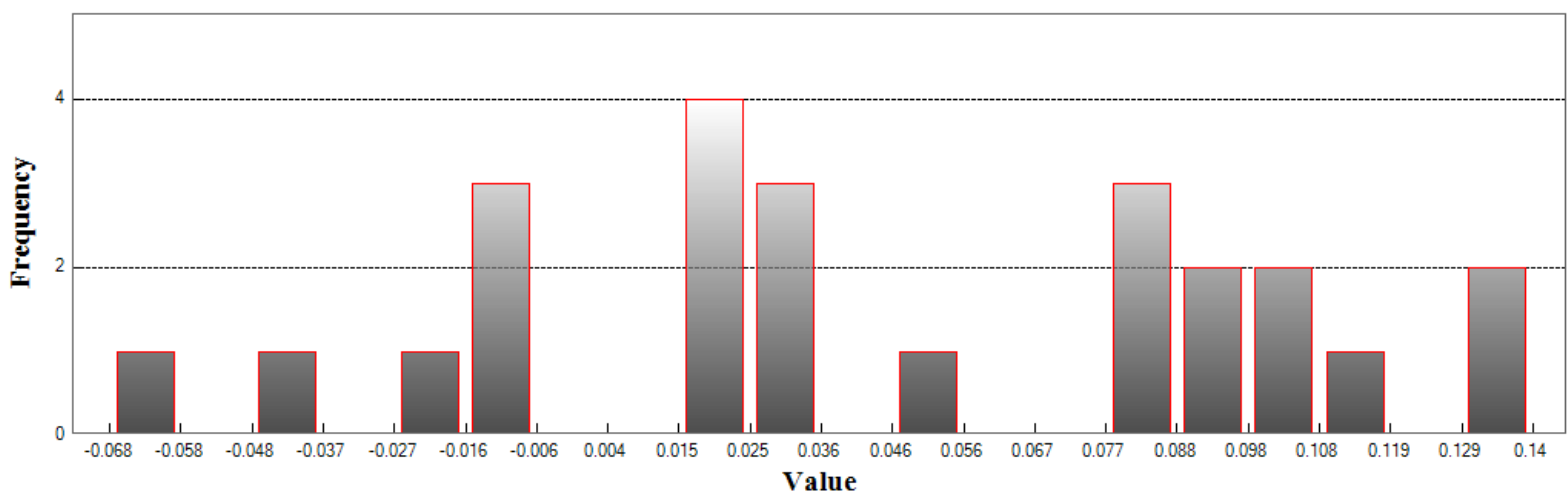
Standard Deviation DZ: 0.057

RMSE Z: 0.072

95th Percentile: 0.13

Units: Meters

Histogram



Min: -0.068

Max: 0.14

Number Of Bins: 20

Bin Interval: 0.01

LAS (Continued)

Vegetated Vertical Accuracy

LandCover Type: Low Vegetation

Minimum DZ: -0.034

Maximum DZ: 0.261

Mean DZ: 0.102

Mean Magnitude DZ: 0.321

Number Observations: 94

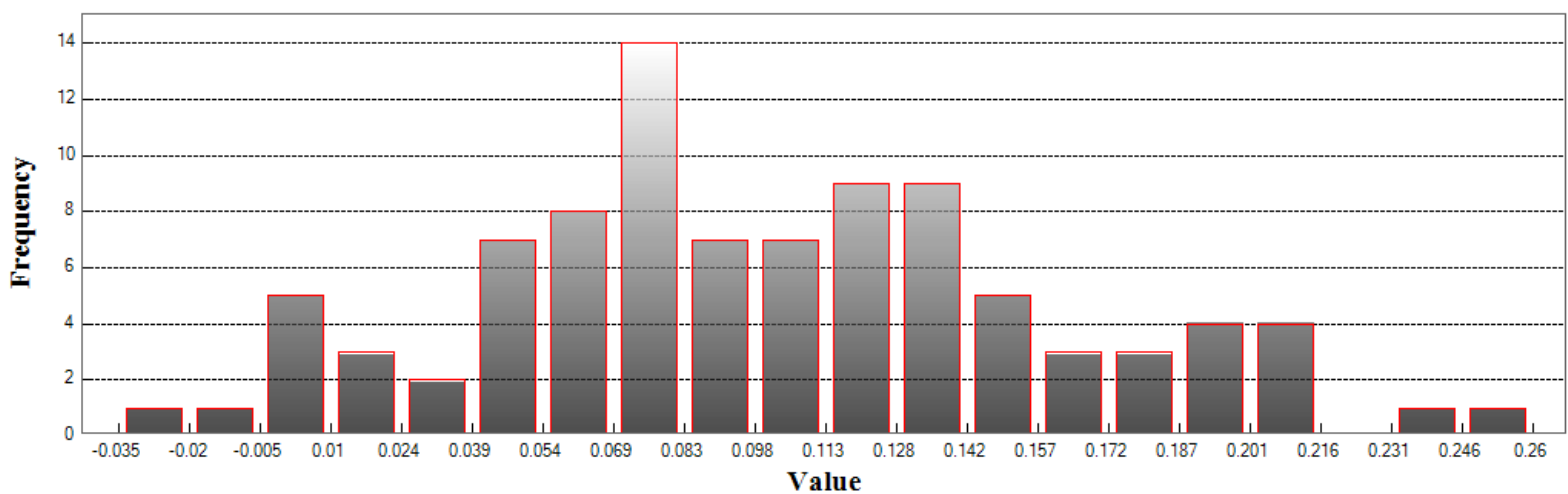
Standard Deviation DZ: 0.06

RMSE Z: 0.118

95th Percentile: 0.202

Units: Meters

Histogram



Min: -0.034

Max: 0.261

Number Of Bins: 20

Bin Interval: 0.015

LAS (Continued)

Vegetated Vertical Accuracy

LandCover Type: Medium Vegetation

Minimum DZ: -0.026

Maximum DZ: 0.167

Mean DZ: 0.089

Mean Magnitude DZ: 0.304

Number Observations: 27

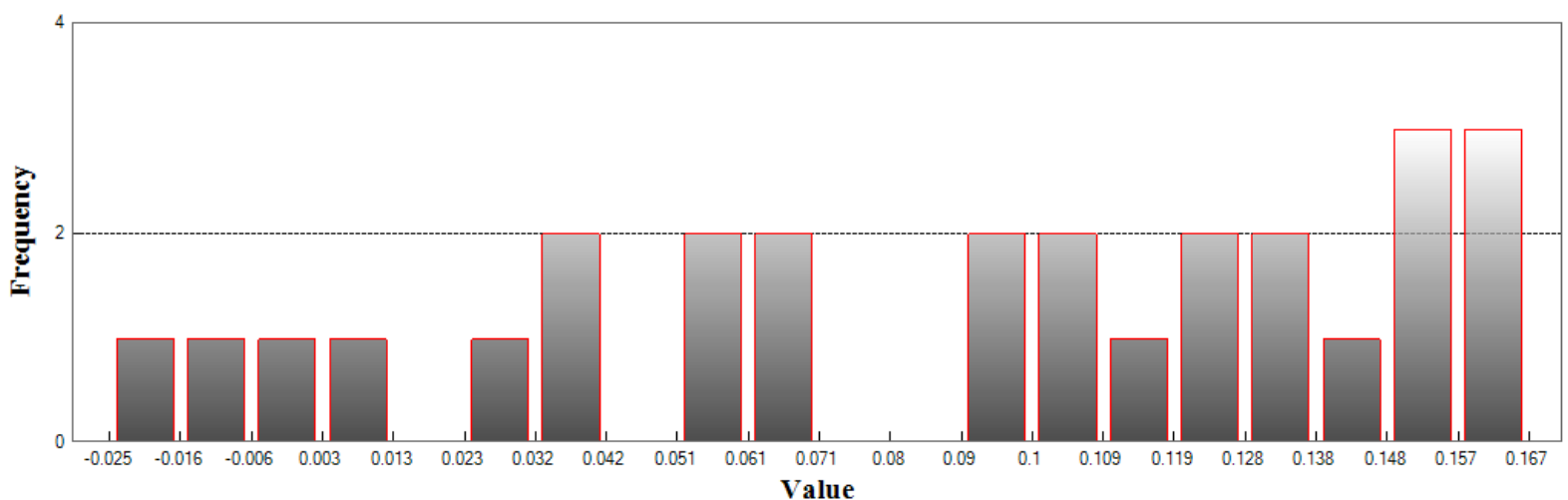
Standard Deviation DZ: 0.059

RMSE Z: 0.106

95th Percentile: 0.164

Units: Meters

Histogram



Min: -0.026

Max: 0.167

Number Of Bins: 20

Bin Interval: 0.01

DEM

Nonvegetated Vertical Accuracy

LandCover Type: Bare Earth, Urban Terrian

Minimum DZ: -0.13

Maximum DZ: 0.105

Mean DZ: -0.004

Mean Magnitude DZ: 0.195

Number Observations: 210

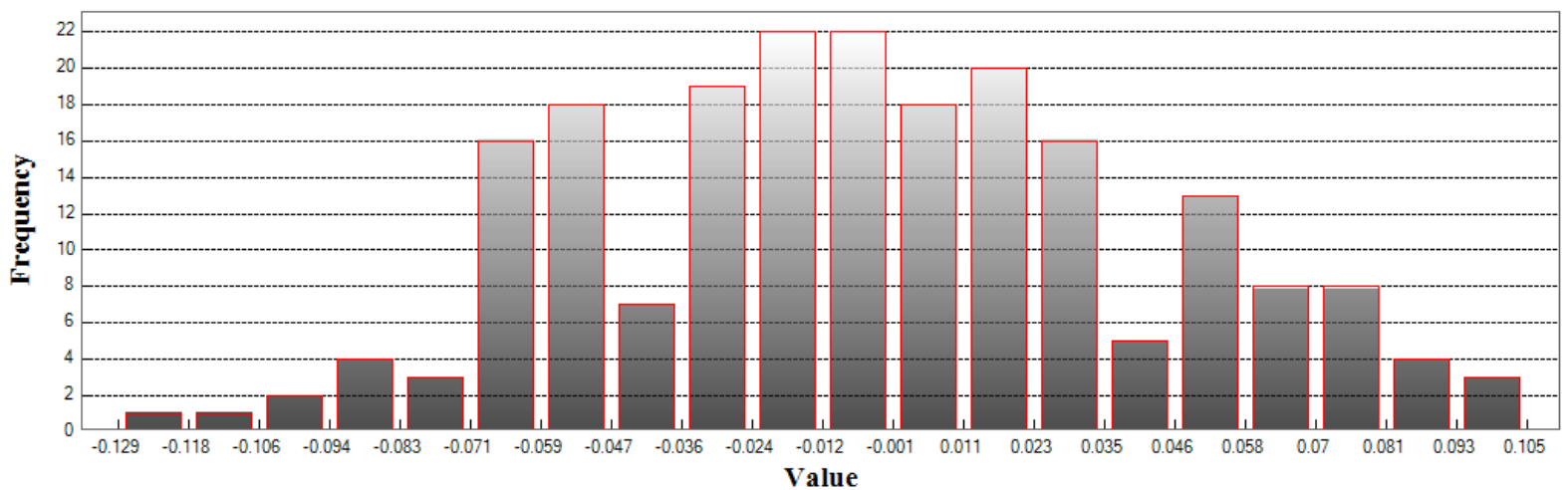
Standard Deviation DZ: 0.046

RMSE Z: 0.047

95% Confidence Level Z: 0.091

Units: Meters

Histogram



Min: -0.13
 Max: 0.105
 Number Of Bins: 20
 Bin Interval: 0.012

DEM (Continued)

Vegetated Vertical Accuracy

LandCover Type: High Vegetation

Minimum DZ: -0.063

Maximum DZ: 0.13

Mean DZ: 0.043

Mean Magnitude DZ: 0.243

Number Observations: 24

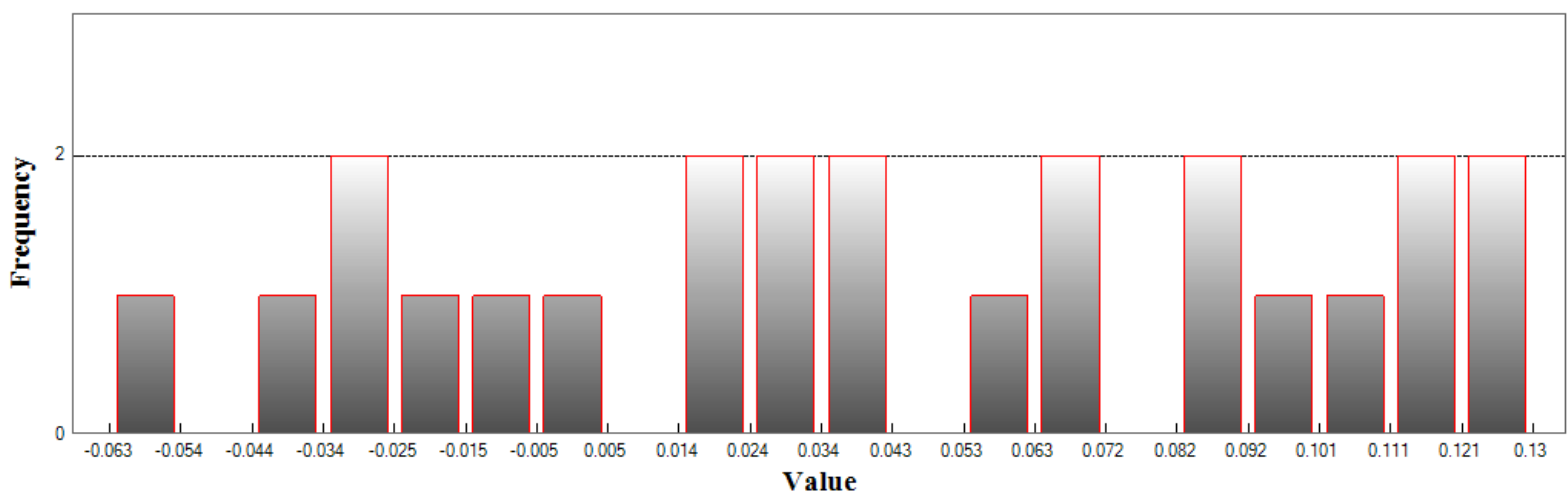
Standard Deviation DZ: 0.057

RMSE Z: 0.071

95th Percentile: 0.124

Units: Meters

Histogram



Min: -0.063

Max: 0.13

Number Of Bins: 20

Bin Interval: 0.01

DEM (Continued)

Vegetated Vertical Accuracy

LandCover Type: Low Vegetation

Minimum DZ: -0.027

Maximum DZ: 0.254

Mean DZ: 0.101

Mean Magnitude DZ: 0.32

Number Observations: 94

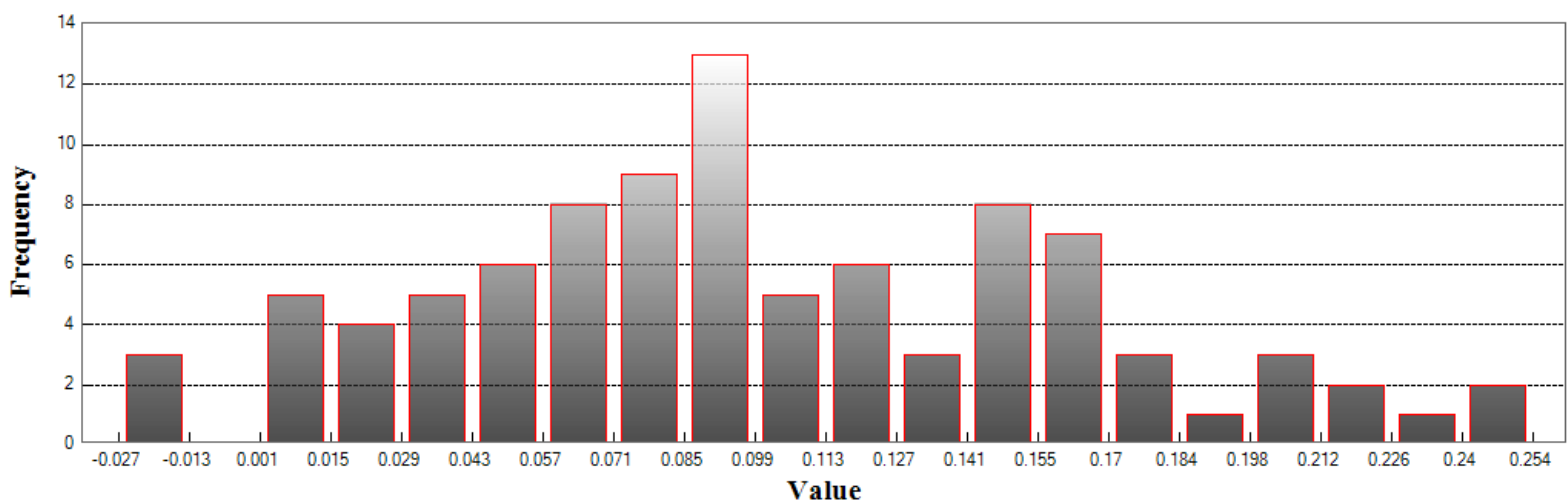
Standard Deviation DZ: 0.063

RMSE Z: 0.118

95th Percentile: 0.202

Units: Meters

Histogram



Min: -0.027

Max: 0.254

Number Of Bins: 20

Bin Interval: 0.014

DEM (Continued)

Vegetated Vertical Accuracy

LandCover Type: Medium Vegetation

Minimum DZ: -0.029

Maximum DZ: 0.206

Mean DZ: 0.087

Mean Magnitude DZ: 0.304

Number Observations: 27

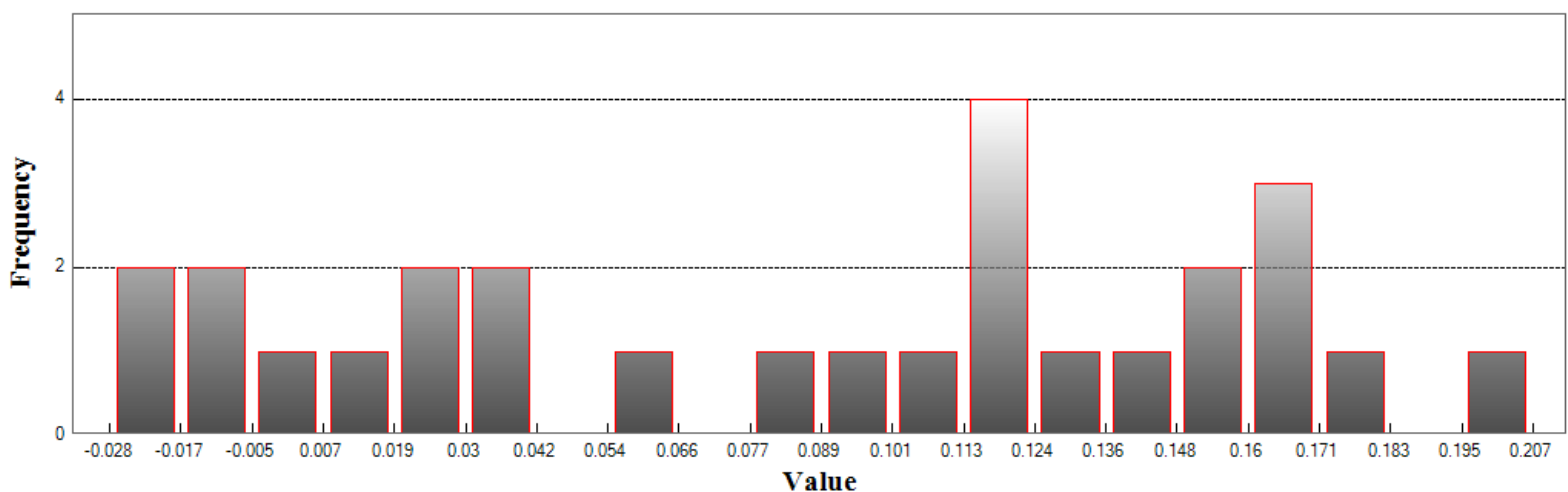
Standard Deviation DZ: 0.07

RMSE Z: 0.111

95th Percentile: 0.172

Units: Meters

Histogram



Min: -0.029

Max: 0.206

Number Of Bins: 20

Bin Interval: 0.012