



LiDAR Mapping Report: AL_17COUNTY_2020_B20

LiDAR Collection, Processing, and QA/QC
140G0220F0084: AL_17County_2020_B20

QL2 LiDAR

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AL 17County_2020_B20

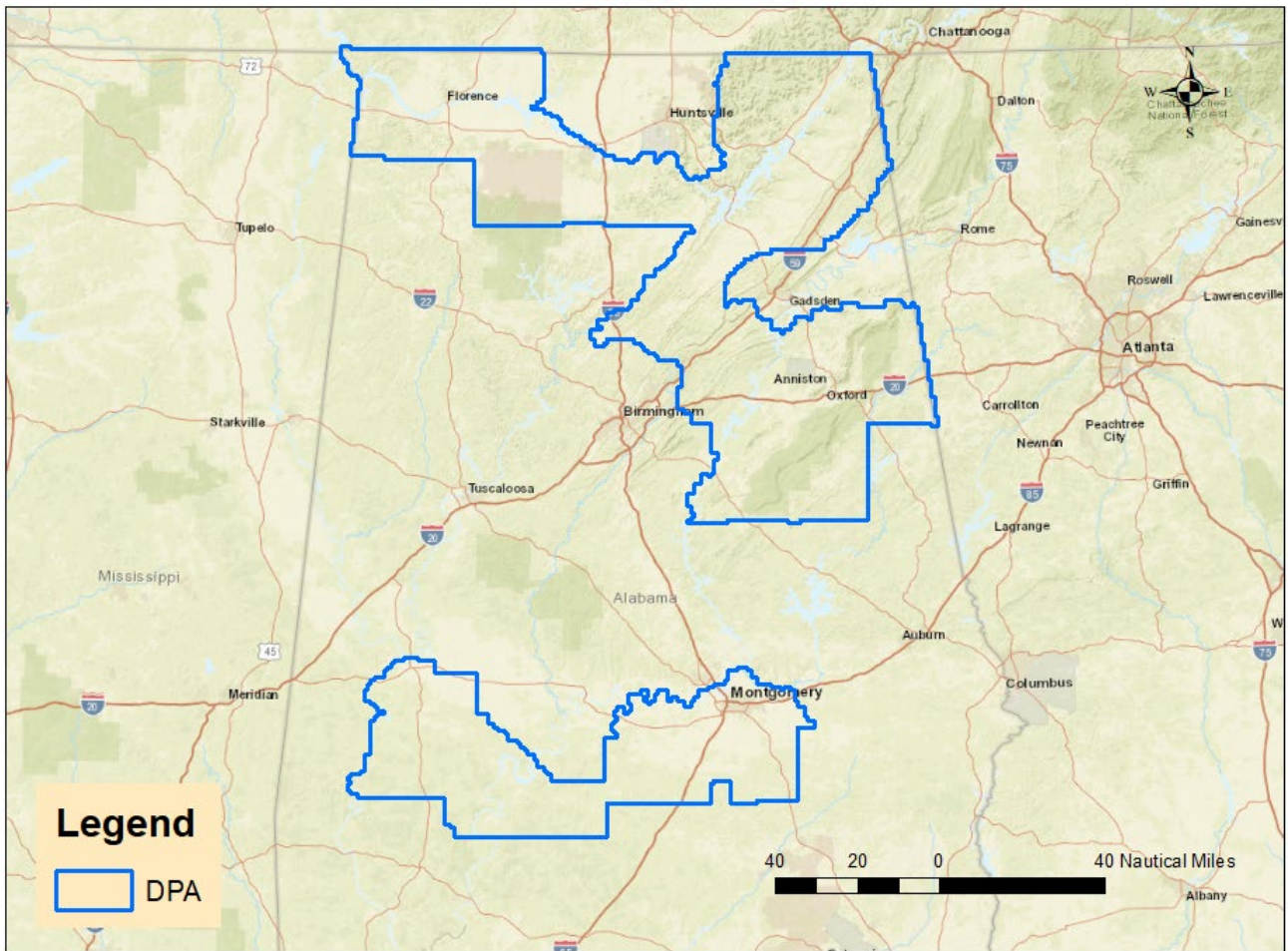


Figure 1 Define Project Area (DPA)

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1 Data Acquisition and Processing

1.1 Introduction

Digital Aerial Solutions, LLC (DAS) was tasked with planning, acquiring, processing and deriving elevation products for Light Detection and Ranging (LiDAR) for the 140G0220F0084: AL_17County_2020_B20. The task order required Spring 2020/Fall 2020 leaf-off LiDAR survey to be collected at an aggregate nominal pulse spacing (ANPS) < 0.71 meters (QL2) including overlap, with up to 2 discrete returns per pulse along with intensity values of each return. Aerial LiDAR was collected over approximately 13,146 square miles in the state of Alabama using the Leica Terrain Mapper as shown in Figure 1's Defined Project Area (DPA).

LiDAR dataset 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 image and bare-earth DEM. Swath separation raster and Maximum Surface Height Raster (MSHR) are also delivered as ancillary data.

The point cloud deliverables are stored in the LAS Version 1.4-point data record format 6. The tiling scheme for the tiled deliverables is a **1,500 x 1,500 meters** grid. Tile naming convection is based on the US National Grid (USNG) format. All deliverables were generated in compliance with the U.S Geological Survey National Geospatial Program Guidelines and Base Specifications, Version 2.1. The spatial reference of the data is as follows;

Horizontal Spatial Reference

- Coordinates: UTM, Zone 16 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)

AL 17County_2020_B20

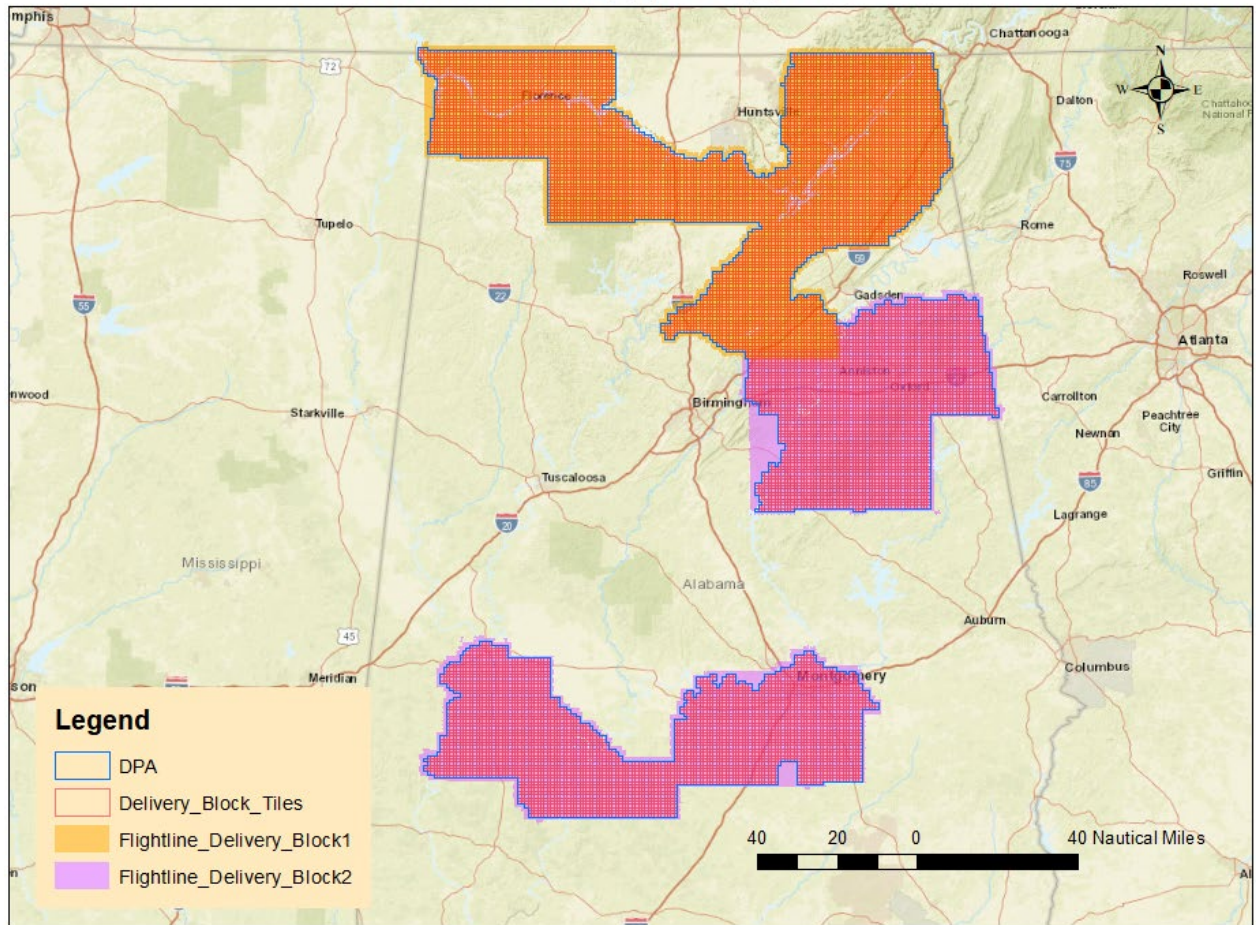


Figure 2 AL_17County_2020_B20 Flightlines

1.2 Mission Acquisition

Mission acquisition for 140G0220F0084: AL_17County_2020_B20 survey was done using K8A1 and KMSL, as base airports. A Leica Terrain Mapper (TM) was used for data collection. Ground GPS base stations were established to collect data at half (0.5) second epoch in support of all airborne acquisitions. All acquisition was completed in 31 missions between December 9, 2020 and February 22, 2021. There was a total of 469 flightlines covering the entire Delivery Block1 AOI, approximately 6440.76 square miles, in the state of Alabama. All mission flight logs and GPS Session forms can be found in Appendix A and B.

1.3 Acquisition Parameters

Acquisition parameters are designed to meet the project task order requirements. The sensor configuration and the flight plan characteristics are selected based on a number of project specific criteria. These include data accuracy, land cover types within the project area and the required nominal pulse spacing. Aggregate Nominal Pulse Density (ANPD) for QL2 is no less than 2ppm. Table 1 summarizes the project parameters for AL 17County 2020 B20.

Parameter (QL2)	Terrain Mapper (SN90524)
Flying Height Above Ground Level:	7,546 feet
Nominal Sidelap:	30 %
Nominal Speed Over Ground:	160 Knots
Field of View:	40°
Laser Rate:	650.00 kHz
Scan Rate:	150.00 Hz
Average Point Spacing:	0.58 meters

Table 1 Flight Parameters

1.4 Mission Conditions

The acquisition mission for **140G0220F0084: AL 17County_2020_B20** survey was conducted under optimal collection conditions.

2 ABGNSS-inertial Processing

2.1 Airborne GPS/IMU

Aircraft	Sensor	GPS Lever Arm (m)	IMU Lever Arm (m)
C421_NA811A	TM_9054	X: -0.030, Y: 0.048, Z: -1.048	X: 0.124, Y: -0.025, Z: 0.014

Table 2 Aircraft and Lever Arms

GPS Base Station Coordinates: North American Datum 1983 (2011), Vertical Ellipsoid, Meters

Name	Latitude	Longitude	Ellipsoid (m)
Guntersville Municipal Airport -K8A1	34° 23' 54.00607"	86° 16'17.27789"	155.202
Northwest Alabama Regional Airport-KMSL	34°44' 46.80931"	87° 37' 3.37570"	137.893

Table 3 Base station Locations

2.2 SMOOTH BEST ESTIMATE OF TRAJECTORY (SBET)

Inertial Explorer 8.90 software was used to compute inertial solution file (*.sol) for each mission using ground GPS base station (K8A1, KMSL) and OPUS position coordinate in table 3 above. The resulting solution was checked to ensure a minimum accuracy of +/- 0.10m, combined separation, for horizontal and vertical positions respectively. 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, in table 2, 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. Graphical results for all lifts can be found in Appendix D.

2.3 Point Cloud Creation

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.

2.4 Geometric Calibration

LiDAR data calibration was done using Leica HxMap v2.7.0 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.

After LiDAR Matching is complete, QA tool is run on the Block to verify quality of results. QA Tool measurements are 2D patches with vertical statistics computed, therefore patches are only found on open terrain with moderate slope. Patches are not expected in areas of forest or crop, or on mountainous slopes. The 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. HxMap's detailed QA results can be found in Appendix E.

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. 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 maybe found in section 3.2

For **140G0220F0084: AL 17County_2020_B20 QL2** LiDAR project, the control lines listed below were used in data adjustment.

Point ID	Easting	Northing	Ortho Height
1_GS0040	576064.317	3856966.626	420.728
1_GS0055	584875.61	3822285.011	188.336
1_GS0103	551784.983	3761755.985	228.644
2_GS0166	630360.5	3721721.769	287.305
2_GS0190	581522.077	3717475.943	168.524
2_GS0218	588676.306	3672884.704	249.436
2_GS0241	616977.886	3674188.066	293.302
2_GS0265	528120.064	3814834.87	189.734
2_GS0270	512367.128	3811836.098	214.906
2_GS0287	477452.511	3834468.095	182.522
3_GS0341	475860.042	3809883.435	200.599
3_GS0344	467790.905	3799263.42	289.134
3_GS0354	440298.394	3833494.607	147.142
3_GS0358	514202.211	3750159.419	165.794
3_GS0365	562920.838	3717922.168	157.045
3_GS0381	579561.917	3569536.256	65.914
3_GS0389	582069.474	3542514.198	139.744
3_GS0415	523849.85	3570875.027	66.461
3_GS0433	522128.771	3542982.663	83.133
3_GS0441	532532.497	3554539.743	66.133
4_GS0494	446831.793	3554289.764	40.213
4_GS0506	445674.628	3540055.99	54.42
4_GS0530	425106.74	3572263.988	42.3
1_GS0004	564849.048	3784686.904	299.446
1_GS0011	562921.151	3799261.033	187.514
1_GS0018	547574.296	3808684.849	311.769
1_GS0025	567582.785	3817736.426	374.304
1_GS0033	574495.242	3836957.737	187.404
1_GS0047	594068.253	3852360.369	190.332
1_GS0052	594185.36	3832740.203	182.01
1_GS0066	603401.802	3793171.35	213.225
1_GS0074	600742.126	3812325.137	386.117
1_GS0080	586885.194	3799208.106	335.628
1_GS0088	544397.629	3780798.333	256.965
1_GS0094	530668.74	3805240.318	181.08
1_GS0110	529710.539	3755410.853	134.671
1_GS0116	538881.495	3744171.808	190.539
1_GS0125	550051.761	3736462.581	210.672
1_GS0132	562292.245	3735135.231	194.297
1_GS0138	565842.737	3747366.658	180.889
2_GS0147	600337.664	3746315.304	164.321
2_GS0154	614301.444	3743905.023	213.64
2_GS0158	631847.054	3725213.877	303.634

2_GS0177	592765.592	3718638.753	173.305
2_GS0184	587262.209	3730360.744	150.776
2_GS0197	575266.656	3700230.621	183.052
2_GS0204	574611.759	3687340.36	157.266
2_GS0212	564977.16	3672949.3	175.154
2_GS0226	595896.923	3705710.978	179.833
2_GS0233	598955.178	3687352.011	321.18
2_GS0249	614151.604	3693291.006	342.37
2_GS0255	612810.568	3719501.638	190.328
2_GS0261	538979.978	3814711.629	367.798
2_GS0273	508883.837	3808225.132	189.468
2_GS0280	501104.72	3824444.943	180.626
2_GS0282	501111.769	3824507.041	180.989
2_GS0289	471616.665	3838233.026	174.867
2_GS0295	462878.758	3845878.027	178.773
2_GS0297	465035.587	3852549.327	186.713
3_GS0302	472722.338	3853734.744	191.504
3_GS0312	451793.679	3868564.459	226.377
3_GS0318	438149.969	3849910.112	128.818
3_GS0324	421593.118	3843606.458	138.682
3_GS0330	421620.597	3837787.039	151.717
3_GS0339	480657.891	3811251.164	198.96
3_GS0350	459015.578	3815924.588	197.413
3_GS0367	569909.184	3583769.932	65.207
3_GS0376	588521.617	3577835.578	75.097
3_GS0385	588375.12	3550087.131	138.573
3_GS0395	556652.229	3553511.626	90.462
3_GS0399	555026.973	3562191.284	83.606
3_GS0407	550035.128	3572751.861	55.992
3_GS0408	542429.982	3570322.375	66.782
3_GS0413	527601.084	3570092.914	48.635
3_GS0421	518931.409	3564942.272	118.088
3_GS0422	514791.715	3557488.784	91.332
3_GS0426	518186.467	3546086.135	89.071
3_GS0430	508187.656	3539509.825	63.475
3_GS0445	544148.975	3566923.141	84.244
4_GS0453	487770.74	3539092.921	67.471
4_GS0462	468116.139	3538226.193	43.581
4_GS0475	465714.644	3550806.317	42.093
4_GS0483	443386.632	3585823.469	74.986
4_GS0518	412385.119	3550426.109	48.617
4_GS0540	415868.229	3583550.57	70.502

Table 4 Ground Control Points

3. Geometric Quality

3.1 Point Cloud

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.

Figure 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.

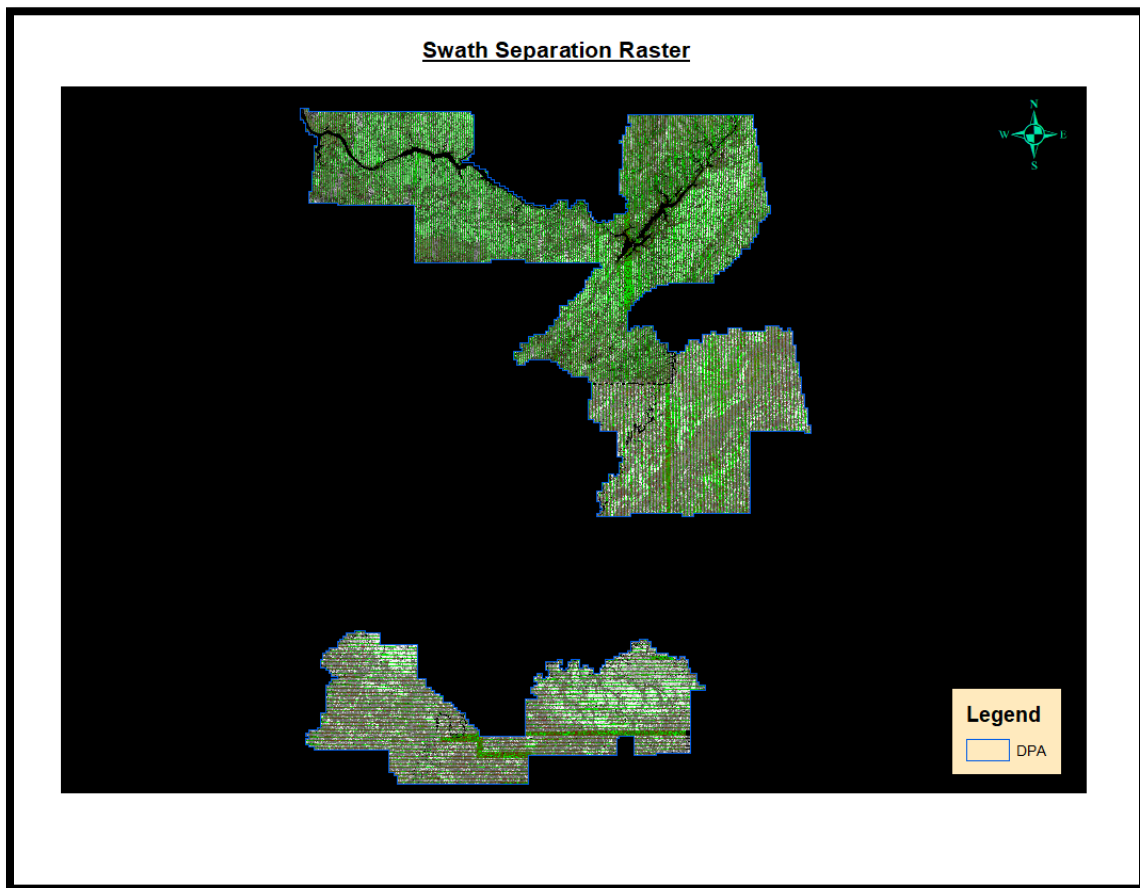


Figure 3 Swath Separation Raster

3.2 Accuracy Assessment

This data set was produced to meet ASPRS “Positional Accuracy Standards for Digital Geospatial Data” (2014) for a 36.0 (cm) RMSE_x / RMSE_y Horizontal Accuracy Class which equates to Positional Horizontal Accuracy = +/- 71.0 cm at a 95%

The absolute vertical accuracy of the point cloud data is assessed against ground check point data. For the **140G0220F0084: AL 17County_2020_B20** project, ground check point data were surveyed using VRS- GPS techniques.

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. Calculations were produced to meet ASPRS “Positional Accuracy Standards for Digital Geospatial Data” (2014).

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.

Tested Accuracy	RMSE _z	NVA	VVA
Classified LiDAR	0.051	256	185
Digital Elevation Model	0.051	256	185

Table 5 Tested RMSE_z of NVA, NVA and VVA of LiDAR Point Cloud and Digital Elevation Model

Total #	# NVA	# VVA
441	256	185

Table 6 Number of Survey Points used to calculate accuracy of data.

4. Production

4.1 Point Cloud Classification

Georeferenced information was applied to the swath point cloud LAS files. Geometrically calibrated swath point cloud was cut into 1,500-meter x 1,500-meter LAS 1.4 format tiles for point cloud classification. Tiled point cloud data was processed in Terrasolid's TerraScan software to assign initial classification values. The TerraScan software provides a number of automated routines to algorithmically detect and assign points to their appropriate classes. 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 were made where necessary to correct for misclassified points.

4.2 Breakline Collection

Hydrographic breakline features were compiled in ArcGIS Desktop v10.7.0, using LiDAR intensity ortho and surface terrain model of the entire project area. The 2D features were checked to ensure they had no geometric or topological errors. Three-dimensional (3D) breakline conflation was done using a fully automated elevation conflation method in GeoCue LP360 v.2021.1.47.0 software. QA/QC procedure was done in ArcGIS Desktop using python scripts to check for monotonicity and vertical variance, to ensure that the 3D breakline features met 3DEP requirements.

4.3 DEM Generation

Bare earth Digital Elevation Model (DEM) was created using LP360 v.2021.1.47.0 software. Input data for DEM creation include classified LAS point cloud (bare earth, class2), 3D hydrographic breaklines, and project tile index. The breakline features were used to classify water (class 9) and ignored ground (class 20) in the point cloud. These points (classes 9 & 20) are excluded in the DEM generation. Raster (DEM) production methodology include, hydro breakline enforcement and bilinear interpolation resample. Final DEM are exported in GEOTIFF format and tiled to USNG tile extent. GDAL V2.4.2 was used to write final header information for all DEM products.

Appendix A. Flight Logs



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties			Lift	Temp °C Before	Temp °C After	Pressure (kPa)			Sensor Operator		
					1	8	15	102.00			Chuck Harris		
Date/Julian:		12/9/2020		Disk Drive			Sensor					Pilot	
Hobbs End		14:10		TM MM30 (103, 104)			TM_90524					Anthony Kosinski	
Hobbs ST		10:07		TARGET	MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		4		7,500		160	K8A1_1		K8A1_2		1.500	C421_N811A	Guntersville (K8A1)
∠	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		
	81	81 N	16:38	16:40	5°	8255	153	4901	21	1.2	0.6		
	80	80 S	16:45		185°	8261	163	4899	21	1.2	0.6	Airstart	
	81	81 N	17:01	17:03	4°	8249	153	4895	23	1.1	0.6		
	80	80 S	17:07	17:10	186°	8220	158	4893	23	1.1	0.6		
	79	79 N	17:15	17:20	5°	8173	155	4888	20	1.1	0.6		
	78	78 S	17:25	17:32	184°	8179	157	4884	20	1.1	0.6		
	77	77 N	17:36	17:44	5°	8166	153	4879	21	1.1	0.6		
	76	76 S	17:49	17:59	184°	8171	155	4872	22	1.2	0.6		
	75	75 N	18:03	18:16	5°	8097	151	4863	22	1.1	0.6		
	74	74 S	18:20	18:33	184°	8084	156	4851	23	1.1	0.6		
	73	73 N	18:37	18:52	5°	8028	150	4839	20	1.3	0.7		
	72	72 S	18:55	19:11	184°	8031	155	4820	20	1.3	0.7		
	71	71 N	19:14	19:30	4°	8000	147	4811	20	1.4	0.7		
	70	70 S	19:34	19:49	185°	8025	161	4797	22	1.2	0.7		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties			Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
					2	18		10		101.69		Geoffrey McCall		
Date/Julian:		12/9/2020			Disk Drive			Sensor				Pilot		
Hobbs End		18:07			TM MM30 (103, 104)			TM_90524				Mike Wasielewski		
Hobbs ST		14:37			TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		3.5			7,500		160	K8A1_1		K8A1_2		1.500	C441-N207SS	Guntersville (K8A1)
∠	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	69N	21:05	21:21	3°	7982	152	6863	19	1.2	0.7			
	68	69S	21:25	21:40	184°	8057	162	6850	19	1.1	0.7			
	67	67N	21:45	22:01	2°	7998	155	6838	19	1.3	0.8			
	66	66S	22:05	22:21	186°	8019	151	6823	21	1.2	0.7			
	65	65N	22:26	22:42	4°	7995	153	6809	21	1.2	0.7			
	64	64S	22:47	23:03	188°	8003	163	6797	21	1.3	0.7			
	63	63N	23:08	23:24	5°	7977	157	6784	20	1.3	0.7			
	62	62S	23:29	23:46	185°	7992	156	6771	19	1.8	0.8			



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties		Lift	Temp °C Before	Temp °C After	Pressure (kPa)		Sensor Operator			
				3	10	19	102.03	Chuck Harris				
Date/Julian:		12/10/2020		Disk Drive		Sensor					Pilot	
Hobbs End		13:01		TM MM30 (103, 104)		TM_90524					Anthony Kosinski	
Hobbs ST		8:51		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		4.1		7,500	160	K8A1_1		K8A1_2		1.500	C421_N811A	Guntersville, AL (K8A1)
∟	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 N	15:16	15:33	4°	7941	160	4780	18	1.2	0.7	
	60	60 S	15:37	15:54	185°	7926	153	4767	22	1.0	0.6	
	59	59 N	15:58	16:15	4°	7975	155	4751	24	1.1	0.6	
	58	58 S	16:18	16:36	184°	7963	153	4735	21	1.2	0.6	
	57	57 N	16:40	16:57	4°	7960	157	4720	21	1.2	0.6	
	56	56 S	17:01	17:19	184°	7942	153	4703	23	1.2	0.6	
	55	55 N	17:22	17:40	4°	7948	157	4689	23	1.1	0.6	
	54	54 S	17:43	18:01	184°	7938	155	4671	22	1.2	0.6	
	53	53 N	18:05	18:23	5°	7942	152	4654	23	1.1	0.6	
	52	52 S	18:26	18:44	184°	7956	156	4636	22	1.3	0.7	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties			Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
					4	21		16		102.00		Geoffrey McCall		
Date/Julian:		12/9/2020			Disk Drive			Sensor				Pilot		
Hobbs End		16:58			TM MM30 (103, 104)			TM_90524				Mike Wasielewski		
Hobbs ST		13:22			TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		3.6			7,500		160	K8A1_1		K8A1_2		1.500	C441-N207SS	Guntersville (K8A1)
∠	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			
	51	51N	19:45	20:04	4°	7995	156	6757	22	1.1	0.7			
	50	50S	20:08	20:27	185°	7979	161	6742	20	1.3	0.8			
	49	49N	20:32	20:51	4°	7890	155	6724	18	1.8	1			
	48	48S	20:55	21:14	187°	7872	161	6708	19	1.5	0.9			
	47	47N	21:19	21:38	4°	7955	156	6692	21	1.2	0.7			
	46	46S	21:42	22:00	185°	7932	161	6674	19	1.3	0.7			
	45	45N	22:05	22:23	4°	7985	154	6659	20	1.2	0.7			
	44	44S	22:27	22:45	184°	7955	155	6642	22	1.2	0.6			



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties		Lift	Temp °C Before	Temp °C After	Pressure (kPa)		Sensor Operator			
				5	10	14	102.07		Chuck Harris			
Date/Julian:	12/11/2020		Disk Drive			Sensor				Pilot		
Hobbs End	11:40		TM MM30 (103, 104)			TM_90524				Wes Ashmore		
Hobbs ST	8:01		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time	3.6		7,500	160	K8A1_1		K8A1_2		1.500	C421_N811A	Guntersville (K8A1)	
∠	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	
	43	43 N	14:28	14:47	4°	7911	151	4618	17	1.5	0.8	
	42	42 S	14:51	15:09	184°	7884	152	4602	20	1.2	0.7	
	41	41 N	15:13	15:32	4°	7907	158	4587	21	1.2	0.7	
	40	40 S	15:36	15:56	185°	7928	152	4569	21	1.1	0.6	
	39	39 N	15:59	16:18	4°	7960	154	4551	22	1.1	0.6	
	38	38 S	16:21	16:40	184°	7922	157	4533	19	1.3	0.6	
	37	37 N	16:44	17:03	4°	7961	157	4515	20	1.1	0.6	
	36	36 S	17:06	17:25	184°	7906	157	4492	19	1.2	0.6	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties		Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
				6	15		15.6		101.79		Geoffrey McCall		
Date/Julian:		12/11/2020		Disk Drive			Sensor					Pilot	
Hobbs End		15:45		TM MM30 (107, 108)			TM_90524					Anthony Kosinski	
Hobbs ST		12:15		TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		3.5		7,500		160	K8A1_1		K8A1_2		1.500	C441-N207SS	Guntersville (K8A1)
∠	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		
	35	35N	18:29	18:48	4°	7925	159	6626	18	1.4	0.8		
	34	34S	18:52	19:11	185°	7915	152	6610	17	1.3	0.8		
	33	33N	19:15	19:35	3°	7967	157	6592	18	1.3	0.8		
	32	32S	19:38	19:57	185°	7910	150	6574	18	1.2	0.7		
	31	31N	20:01	20:20	5°	7958	157	6557	15	1.3	0.8		
	30	30S	20:24	20:43	184°	7911	151	6541	13	1.8	0.9		
	29	29N	20:47	21:05	4°	7959	157	6524	17	1.2	0.7		
	28	28S	21:09	21:28	185°	7902	152	6508	18	1.2	0.7		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties			Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
					7	10		15		101.83		Chuck Harris		
Date/Julian:		12/13/2020			Disk Drive			Sensor				Pilot		
Hobbs End		16:05			TM MM30 (103, 104)			TM_90524				Anthony Kosinski		
Hobbs ST		12:15			TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		3.5			7,500		160	K8A1_1		K8A1_2		1.500	C421_N811A	Guntersville (K8A1)
∠	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			
	27	27 N	18:47	19:07	4°	7865	155	4479	18	1.5	0.7			
	26	26 S	19:11	19:30	184°	7941	152	4463	20	1.2	0.7			
	25	25 N	19:34	19:54	4°	7932	152	4446	19	1.1	0.7			
	24	24 S	19:58	20:17	184°	7888	157	4427	15	1.5	0.8			
	23	23 N	20:20	20:39	4°	7931	153	4412	15	1.6	0.8			
	22	22 S	20:43	21:02	184°	7922	158	4396	19	1.1	0.7			
	21	21 N	21:05	21:24	4°	7959	153	4379	19	1.2	0.7			
	20	20 S	21:28	21:48	184°	7902	161	4363	20	1.2	0.7			



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties			Lift	Temp °C Before	Temp °C After	Pressure (kPa)	Sensor Operator			
					8	12	11	101.56	Geoffrey McCall			
Date/Julian:	12/13/2020		Disk Drive			Sensor					Pilot	
Hobbs End	17:47		TM MM30 (107, 108)			TM_90524					Mike Wasielewski	
Hobbs ST	16:34		TARGET MSL	Target AIRSPD		Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time	1.2		7,500	160	K8A1_1		K8A1_2		1.500	C441-N207SS	Guntersville (K8A1)	
∟	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	
	19	19N	22:49	23:08	4°	7948	166	6490	21	1.1	0.6	
	18	18S	23:12	23:33	184°	7939	155	6474	19	1.5	0.7	Possible clouds last mile



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties			Lift	Temp °C Before	Temp °C After	Pressure (kPa)	Sensor Operator			
					9	0	7	103.25	Chuck Harris			
Date/Julian:		12/18/2020		Disk Drive			Sensor				Pilot	
Hobbs End		12:48		TM MM30 (103, 104)			TM_90524				Anthony Kosinski	
Hobbs ST		8:52		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		3.9		7,500	160	K8A1_1		K8A1_2		1.500	C421_N811A	Guntersville (K8A1)
∟	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	
17	17 N	15:15	15:35	3°	7945	150	4344	25	1.0	0.6		
16	16 S	15:39	15:59	184°	7948	155	4326	20	1.2	0.6		
15	15 N	16:03	16:23	4°	7915	155	4306	19	1.2	0.6		
14	14 S	16:27	16:48	184°	7931	155	4286	20	1.2	0.6		
13	13 N	16:52	17:13	4°	8005	160	4270	20	1.1	0.6		
12	12 S	17:16	17:38	183°	8000	151	4251	21	1.2	0.6		
11	11 N	17:42	18:04	4°	8001	157	4233	20	1.1	0.6		
10	10 S	18:08	18:30	184°	7969	155	4214	18	1.4	0.7		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties			Lift	Temp °C Before	Temp °C After	Pressure (kPa)			Sensor Operator		
					10	8	8	100.47			Geoffrey McCall		
Date/Julian:		12/13/2020			Disk Drive			Sensor			Pilot		
Hobbs End		16:17			TM MM30 (107, 108)			TM_90524			Wes Ashmore		
Hobbs ST		13:28			TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		2.8			7,500	160	K8A1_1		K8A1_2		1.500	C441-N207SS	Guntersville (K8A1)
∟	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		
	9	9N	19:42	20:03	3°	7915	162	6458	14	1.8	1.1		
	8	8S	20:06	20:28	186°	7913	159	6438	14	1.8	1		
	7	7N	20:31	20:53	3°	7945	152	6418	19	1.2	0.8		
	6	6S	20:57	21:19	185°	7906	158	6400	19	1.4	0.8		
	5	5N	21:23	21:45	5°	7936	156	6379	20	1.2	0.7		
	4	4S	21:50		185°	7925	155	6361	21	1.2	0.6	AT 3:55 SCREEN LOCKED UP. WOULD NOT RESTAR	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties		Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
				11	2		8		102.68		Chuck Harris		
Date/Julian:		12/19/2020		Disk Drive			Sensor					Pilot	
Hobbs End		11:43		TM MM30 (103, 104)			TM_90524					Anthony Kosinski	
Hobbs ST		8:36		TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		3		7,500		160	K8A1_1		K8A1_2		1.500	C421_N811A	Guntersville (K8A1)
∠	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		
	4	4 N	15:03	15:25	4°	7950	152	4195	21	1.1	0.6		
	3	3 S	15:29	15:38	184°	7917	158	4176	23	1.1	0.6		
	2	2 N	15:42	15:50	4°	7953	160	4165	21	1.2	0.6		
	1	1 S	15:54	16:01	184°	7955	155	4158	21	1.3	0.6		
	135	135 S	16:02	16:21	184°	7953	158	4149	21	1.2	0.6		
	136	136 N	16:24	16:43	4°	7972	162	4131	21	1.2	0.6		
	137	137 S	16:48	17:07	184°	7930	153	4113	21	1.2	0.7		
	138	138 N	17:10	17:29	4°	7946	160	4095	21	1.2	0.7		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties		Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
				12	8		10		102.24		Geoffrey McCall		
Date/Julian:		12/19/2020		Disk Drive			Sensor					Pilot	
Hobbs End		15:30		TM MM30 (107, 108)			TM_90524					Wes Ashmore	
Hobbs ST		12:14		TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		3.4		7,500		160	K8A1_1		K8A1_2		1.500	C441-N207SS	Guntersville (K8A1)
∟	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		
	139	139S	18:30	18:49	184°	7955	155	6356	19	1.3	0.8		
	140	140N	18:53	19:12	4°	7970	165	6338	20	1.3	0.7		
	134	134S	19:15	19:33	184°	7929	151	6321	19	1.3	0.8		
	141	141N	19:37	19:43	4°	7963	153	6303	14	1.8	1		
	142	142S	19:47	19:53	183°	7935	146	6298	14	1.8	1		
	143	143N	19:57	20:04	4°	7953	161	6292	14	1.8	0.9		
	144	144S	20:07	20:14	183°	7946	146	6285	17	1.4	0.8		
	145	145N	20:18	20:24	4°	7941	159	6278	17	1.2	0.7		
	146	146S	20:28	20:34	182°	7914	157	6274	18	1.1	0.7		
	147	147N	20:38	20:44	3°	7922	164	6269	17	1.2	0.7		
	148	148S	20:48	20:55	185°	7908	155	6264	17	1.1	0.7		
	149	149N	20:58	21:05	4°	7934	147	6258	16	1.3	0.8		
	150	150S	21:09	21:15	186°	7891	160	6251	17	1.3	0.8		
	151	151N	21:19	21:25	4°	7926	154	6244	20	1.1	0.6		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties		Lift	Temp °C Before	Temp °C After	Pressure (kPa)			Sensor Operator		
				13	4	12	101.66			Cynthia Williams		
Date/Julian:		1/14/1900		Disk Drive			Sensor			Pilot		
Hobbs End				TM MM30 (101, 102)			TM_90524			Anthony Kosinski		
Hobbs ST				TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		3.7		7,500	160	K8A1-11		K8A1-22		1.500	C421_N811A	Guntersville (K8A1)
∠	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	
	273	273	15:53	16:01	184°	71814	152	5101	20	1.2	0.6	
	272	272	16:04	16:11	0°	7845	152	5094	1	1.3	0.7	
	271	271	16:15	16:22	184°	7891	151	5088	17	1.5	0.8	
	270	270	16:25	16:33	2°	7934	158	5083	18	1.5	0.7	
	269	269	16:37	16:45	184°	7899	151	5075	18	1.5	0.7	Gimbal Pav Error
	268	268	16:48	16:57	4°	7923	154	5069	18	1.3	0.7	
	267	267	17:00	17:08	183°	7872	158	5064	19	1.2	0.7	
	266	266	17:11	17:20	2°	7917	146	5057	19	1.1	0.7	Gimbal Pav Error
	265	265	17:23	17:31	184°	7845	156	5050	19	1.1	0.7	
	264	264	17:35	17:43	3°	7881	157	5043	18	1.2	0.7	
	263	263	17:46	17:55	184°	7847	150	5035	16	1.4	0.7	
	274	274	17:59	18:06	5°	7965	156	5028	15	1.6	0.8	
	275	275	18:10	18:18	184°	7926	1563	5021	15	1.6	0.8	
	276	276	18:21	18:28	3°	7952	153	5014	19	1.2	0.7	
	277	277	18:32	18:40	184°	7904	151	5007	20	1.1	0.7	
	278	278	18:43	18:50	5°	7957	165	5003	20	1.1	0.7	
	279	279	18:54	19:02	186°	7879	150	4995	19	1.2	0.7	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties		Lift	Temp °C Before	Temp °C After	Pressure (kPa)		Sensor Operator			
				14	13	9	100.81		Cynthia Williams			
Date/Julian:		1/14/1900		Disk Drive			Sensor			Pilot		
Hobbs End		TM MM30 (101, 102)			TM_90524					Wes Ashmore		
Hobbs ST		TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		3.1		7,500	160	K8A1-11		K8A1-22	1.500	C421_N811A	Guntersville (K8A1)	
∠	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	20:32	20:39	186°	7871	150	4988	21	1.3	0.7	
	153	153	20:42	20:49	4°	7888	158	1982	22	1.1	0.6	
	154	154	20:53		184°	7850	144	4079	21	1.4	0.7	AirStart (System Crash)
	154	154	21:16	21:23	184°	7852	144	4079	21	1.4	0.7	
	155	155	21:26	21:32	5°	7906	164	4072	22	1.2	0.7	
	156	156	21:36	21:41	184°	7839	146	4069	24	1.2	0.6	
	157	157	21:44	21:49	4°	7862	158	4064	24	1.2	0.6	Roll Mount Error
	158	158	21:53	21:59	184°	7546	151	4059	24	1.2	0.6	
	159	159	22:01	22:06	5°	7839	152	4055	23	1.3	0.6	
	160	160	22:11	22:15	184°	7806	152	4052	24	1.2	0.6	
	123	123	22:26	22:40	5°	8065	155	4048	24	1.2	0.6	
	122	122	22:43	22:56	183°	7939	163	4036	23	1.4	0.6	
	121	121	23:00	23:13	3°	8011	150	4024	24	1.2	0.7	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties		Lift	Temp °C Before	Temp °C After	Pressure (kPa)		Sensor Operator			
				15	7	9	100.85		Cynthia Williams			
Date/Julian:	1.15.21	Disk Drive				Sensor						
Hobbs End		TM MM30 (103, 104)				TM_90524		Anthony Kosinski				
Hobbs ST		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:		
Flight Time	1.36	7,500	160	K8A1-1		K8A1-2		1.500	C421_N811A	Guntersville (K8A1)		
∠	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	
	280	280	15:32	15:40	184°	7895	162	40011	1.1	0.6		
	281	281	15:42	15:49	2°	7940	163	4002	1.1	0.6		
	282	282	15:53	16:00	184°	7916	145	3996	1.1	0.6		
	283	283	16:04	16:12	3°	7943	151	3987	1.2	0.7		
	284	284	16:15	16:23	184°	7902	156	3976	1.5	0.8		Light Cloud 5 miles in
	285	289	16:25		5°	7932	165	3967	1.3	0.2		Clouds Line Aborted



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties			Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
					16	8		10		101.52		Cynthia Williams		
Date/Julian:		1.17.21			Disk Drive			Sensor				Pilot		
Hobbs End					TM MM30 (103, 104)			TM_90524				Anthony Kosinski		
Hobbs ST					TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		3.5			7,500		160	K8A1-1		K8A1-2		1.500	C421_N811A	Guntersville (K8A1)
∠	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			
	82	82	16:16	16:18	183°	7685	153	3962	20	1.2	0.2			
	83	83	16:27	16:25	4°	7676	152	3962	21	1.1	0.6			
	84	84	16:29	16:33	183°	76610	156	3959	20	1.4	0.7			
	85	85	16:36	16:40	4°	7671	154	3956	20	1.3	0.7	Roll Mount Out of Limit		
	86	86	16:43	16:47	185°	7669	157	3952	20	1.2	0.7			
	87	88	16:50	16:53	4°	7673	153	3949	19	1.2	0.7	Cut off Cloud Refly		
	88	88	16:57		184°	7662	155	3946				Cut off Cloud Refly		
	89	89	17:00											
	91	91	17:05	17:07	183°	7658	161	3946	18	1.1	0.6			
	92	92	17:10	17:14	6°	7669	155	3944	18	1.1	0.6			
	93	93	17:18	7:21	185°	7641	161	3939	16	1.2	0.7			
	94	94	17:25	17:29	4°	7655	147	3935	16	1.2	0.7			
	90	90	17:31	17:35	185°	7705	162	3930	15	1.3	0.8			
	89	89	17:39	17:42	5°	7727	143	3927	14	1.6	0.8			
	88	88	17:46	17:50	185°	7702	152	3925	14	1.6	0.9			
	95	95	17:53		5°	7709	155	3920	14			Abort Clouds		
	98	98	17:57	18:02	4°	7705	156	3920	16	1.6	0.9			
	99	99	18:05	18:10	183°	7700	155	3914	16	1.6	0.9			
	95	95	18:21	18:25	4°	7701	155	3909	17	1.1	0.7			
	96	96	18:29	18:32	183°	7697	158	3907	17	1.1	0.7			
	97	97	18:36	18:40	3°	7694	149	3904	17	1.1	0.7			
	100	100	18:44	18:50	182°	7694	164	3900	17	1.1	0.7	Clouds @ End		
	101	101	18:54	18:59	3°	7702	153	3895	18	1.2	0.6	Clouds @ 7mile		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties_2020		Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator			
				17	3		9		101.86		Cynthia Williams			
Date/Julian:		1.18.2021		Disk Drive			Sensor					Pilot		
Hobbs End					TM MM30 (103, 104)			TM_90524					Wes Ashmore	
Hobbs ST				TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time		3.1		8000ft		160	K8A1-1		K8A1-2		1.500	C421_N811A	K8A1 (Gunterville, AL)	
∠	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			
	101	101	15:16	15:22	184°	7229	164	3887	21	1.1	0.6			
	1544	1534	15:25	15:31	2°	146	145	33881	22	1.1	0.6			
	103	103	15:34	15:41	183°	7758	151	3876	27	1.1	0.6			
	104	104	15:44	15:53	4°	7752	150	3872	22	1.1	0.6			
	105	105	15:56	16:04	183°	7750	154	3866	20	1.3	0.7			
	106	106	16:08	16:16	3°	7761	154	3859	20	1.3	0.7			
	107	107	16:19	16:27	184°	7766	147	3850	21	1.2	0.7			
	108	108	16:30	16:40	4°	7760	155	3843	21	1.3	0.7			
	109	109	16:34	1:53	184°	7806	152	3834	21	1.2	0.7			
	110	110	16:56	17:06	5°	7784	156	3825	21	1.2	0.7			
	111	111	17:09	17:19	184°	7791	155	3818	21	1.1	0.7			
	112	112	17:22	17:33	4°	7754	153	3807	20	1.2	0.7			
	113	113	17:36	17:46	185°	7788	160	3798	15	1.7	0.7			



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties_2020		Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
				18	6		3		101.90		Cynthia Williams		
Date/Julian:		2.02.21		Disk Drive			Sensor			Pilot			
Hobbs End		TM MM30 (103, 104)				TM_90524			Wes Ashmore				
Hobbs ST		TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:		
Flight Time		3.5		8000ft		160	K8A1-1		K8A1-2		1.500	C421_N811A	K8A1 (Gunterville, AL)
∠	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		
	285	285	21:05	21:15	5°	7915	142	3788	24	1.2	0.6	pav stablization low	
	286	286	21:18	21:26	183°	7940	154	3782	25	1.1	0.6	pav missing	
	287	287	37:37	37:44	3751°	3758	143	3773	23	1.3	0.6		
	288	288	21:43	21:51	184°	7949	154	3765	25	1.2	0.6	pav missing	
	289	289	21:55	22:04	4°	7906	146	3758	24	1.1	0.6		
	290	290	22:08	22:15	184°	7930	157	3751	23	1.2	0.6	pav missing	
	291	291	22:19	22:28	3°	7909	146	3744	20	1.4	0.6		
	292	292	22:32	22:39	184°	7931	1547	3737	19	1.3	0.7		
	293	293	22:44	22:52	4°	7908	147	3731	20	1.2	0.7		
	294	294	22:56	23:03	183°	7931	156	3724	16	1.5	0.7		
	295	295	23:08	23:16	4°	7897	147	33719	15	1.8	0.8		
	296	296	23:20	23:27	184°	7980	158	3711	15	1.5	0.9		
	297	297	23:32	23:40	4°	795	149	3704	17	1.3	0.8		
	298	298	23:44	23:51	184°	7978	159	3698	20	1.3	0.8		
	299	299	23:55	4:50	4°	7959	139	3691	20	1.1	0.7		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties_2020			Lift	Temp °C Before	Temp °C After	Pressure (kPa)	Sensor Operator			
					20	8	8	101.83	Cynthia Williams			
Date/Julian:	02.3.21		Disk Drive			Sensor					Pilot	
Hobbs End			TM MM30 (103, 104)			TM_90524					Wes Ashmore	
Hobbs ST			TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time	3.3		8000ft	160	K8A1-1		K8A1-2		1.500	C421_N811A	K8A1 (Gunterville, AL)	
∠	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	
	114	114	18:31	18:42	183°	7814	144	3684	21	1.3	0.7	
	115	115	18:45	18:55	5°	7791	153	3675	21	1.2	0.7	
	116	116	18:59	19:09	183°	7806	160	3664	20	1.3	0.7	
	117	117	19:13	19:25	3°	7785	155	3655	20	1.3	0.7	
	118	118	19:28	19:40	184°	7872	167	3644	20	1.3	0.7	
	119	119	19:44	19:57	8°	7856	155	3665	18	2.1	0.9	
	120	120	20:00	20:12	184°	7869	158	3672	20	1.5	0.8	
	127	127	20:15	20:34	4°	7934	156	3611	21	1.2	0.6	
	128	128	20:37	20:56	184°	7965	157	3593	21	1.2	0.6	
	129	129	20:59	21:18	4°	7972	157	3577	21	1.2	0.6	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties_2020			Lift	Temp °C Before	Temp °C After	Pressure (kPa)		Sensor Operator			
					21	8	5	101.86		Cynthia Williams			
Date/Julian:		02.3.21			Disk Drive		Sensor				Pilot		
					TM MM30 (103, 104)		TM_90524				Wes Ashmore		
Hobbs End		Hobbs ST		Flight Time	TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
				2.2	8000ft	160	K8A1-1		K8A1-2		1.500	C421_N811A	K8A1 (Gunterville, AL)
∠	Flight Line	Mission Line	UTC time:		Direction	GPS Altitude	Speed	Available MM Space	S/Vs	Position Acc.		Comments and Conditions:	
			Begin:	End:						AVG PDOP	AVG HDOP		
	130	130	22:31	22:50	4°	7970	157	3561	22	1.3	0.7		
	131	131	22:53	23:12	184°	7975	157	3545	20	1.5	0.8		
	132	132	23:16	23:25	6°	7927	157	3529	20	1.4	0.8		
	72	72	23:50	:5	6°	8006	151	3514	23	1.3	0.8	Refly	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties_2020			Lift	Temp °C Before	Temp °C After	Pressure (kPa)				Sensor Operator	
					23	9		8	101.46				Cynthia Williams
Date/Julian:		2.5.21		Disk Drive			Sensor					Pilot	
Hobbs End		TM MM30 (103, 104)			TM_90524							Wes Ashmore	
Hobbs ST		TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height		Aircraft	Airport Identification:	
Flight Time		3.5		8000ft	160	KMSL-1		KMSL-2		1.500	C421_N811A	KMSL (Muscle Shoals, AL)	
∠	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		
	262	262	20:36	20:45	182°	7869	155	3502	19	1.5	0.7		
	261	261	20:48	20:57	4°	7878	163	3495	22	1.5	0.6		
	260	260	21:00	21:09	184°	7912	155	3489	23	1.2	0.6		
	259	259	21:13	21:22	5°	7903	157	3482	21	1.4	0.6		
	258	258	21:25	21:34	183°	7903	157	3475	21	1.2	0.6		
	257	257	21:38	21:47	4°	7920	159	3469	21	1.2	0.6		
	256	256	21:50	21:59	183°	7925	163	3463	21	1.2	0.6		
	255	255	22:02	22:12	3°	7926	157	3465	21	1.5	0.7		
	254	254	22:15	22:25	184°	7938	164	3449	20	1.4	0.7		
	253	253	22:29	22:39	1°	7861	154	3442	20	1.2	0.8		
	252	252	22:42	22:53	183..0	7929	151	3433	16	1.5	0.7		
	251	251	22:56	23:07	4°	7928	156	3426	18	1.3	0.7		
	250	250	23:10	23:21	183°	7993	158	3419	17	1.2	0.7		
	249	249	23:24	23:36	4°	7890	160	3410	17	1.2	0.7		



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties_2020			Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator	
					25	12		11		101.52		Cynthia Williams	
Date/Julian:		2.6.21		Disk Drive			Sensor					Pilot	
Hobbs End		TM MM30 (103, 104)			TM_90524							Wes Ashmore	
Hobbs ST		TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:		
Flight Time		2.7		8000ft		160	KMSL-1		KMSL-2		1.500	C421_N811A	KMSL (Muscle Shoals, AL)
∟	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		
	248	248	19:15	19:26	3°	7929	161	2401	20	1.1	0.7		
	247	247	19:29	19:41	180°	7837	162	3390	21	1.5	0.8		
	246	246	19:44	19:56	3°	7882	148	3381	20	1.4	0.8		
	245	245	20:04	20:21	183°	7916	152	3369	23	1.2	0.6		
	244	244	20:24	20:42	5°	7925	163	3352	23	1.2	0.6		
	243	243	20:45	2:02	18°	7910	152	3336	25	1.1	0.6		
	242	242	21:05	21:33	5°	7902	165	3319	23	1.2	0.6	roll mount limit	
	241	241	21:26		184°	7887	145	3301	22	1.2	0.6	line abort rain	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties_2020				Lift	Temp °C Before	Temp °C After	Pressure (kPa)	Sensor Operator		
						27	9	6	101.93	Cynthia Williams		
Date/Julian:	2.8.21	Disk Drive				Sensor <th>Pilot</th>						Pilot
Hobbs End		TM MM30 (101, 102)				TM_90524						Wes Ashmore
Hobbs ST		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:		
Flight Time	3.6	8000ft	160	KMSL-1		KMSL-2		1.500	C421_N811A	KMSL (Muscle Shoals, AL)		
∠	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	
	232	232	:11	:29	183°	7905	147	4689	19	1.1	0.6	
	231	231	:32	:49	3°	7947	159	4674	18	1.1	0.7	
	230	230	:53	1:12	185°	7911	147	4662	18	1.2	0.7	
	229	229	11:14	1:31	2°	7954	167	4648	19	1.1	0.7	
	228	228	1:35	1:53	185°	7853	151	4633	17	1.3	0.8	
	227	227	1:56	2:13	4°	7926	167	4617	17	1.4	0.8	
	226	226	2:16	2:35	183°	7850	150	4603	16	1.4	0.8	
	225	225	2:37	20:55	2°	7913	162	4388	13	1.5	0.8	
	224	224	2:58	3:16	185°	7855	152	4575	17	1.5	0.9	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties_2020				Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator	
						28	24		22		101.73		Cynthia Williams	
Date/Julian:		2.10.21		Disk Drive			Sensor					Pilot		
Hobbs End		TM MM30 (103, 104)				TM_90524						Wes Ashmore		
Hobbs ST		TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height		Aircraft	Airport Identification:		
Flight Time		3.5		8000ft		160	KMSL-1		KMSL-2		1.500	C421_N811A	KMSL (Muscle Shoals, AL)	
∟	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			
	223	223	19:43	20:01	183°	7902	162	3296	20	1.3	0.7			
	222	222	20:04	20:22	5°	7934	166	3276	20	1.3	0.7			
	221	221	20:25	20:43	183°	7904	153	3257	23	1.1	0.6	Pav Data Missing		
	220	220	20:45	21:03	3°	7952	163	3239	23	1.1	0.6			
	219	219	21:06	21:23	183°	7910	165	3222	24	1.4	0.6	Roll Mount		
	218	218	21:26	21:43	2°	7936	151	3201	23	1.1	0.6			
	217	217	21:46	22:04	183°	7924	151	3182	20	1.4	0.7			
	216	216	22:06	22:24	3°	7929	154	3165	22	1.2	0.7			
	215	215	22:27	22:44	183°	7880	158	3147	21	1.4	0.8			



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties		Lift	Temp °C Before	Temp °C After	Pressure (kPa)		Sensor Operator			
				29	21	8	101.63		Chuck Harris			
Date/Julian:		2/10/2021		Disk Drive		Sensor <th>Pilot</th>				Pilot		
Hobbs End		20:36		TM MM30 (101, 102)		TM_90524				Anthony Kosinski		
Hobbs ST		17:17		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		3.2		7,500	160	KMSL-1		KMSL-2		1.500	C421_N811A	Florence (KMSL)
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		
214	214 S	23:38	23:49	183°	7855	157	4532	21	1.2	0.7		
213	213 N	23:52	24:04	3°	7869	156	4521	21	1.2	0.7	Mount roll limit at 2 deg	
212	212 S	24:07	24:17	184°	7872	155	4510	22	1.1	0.6		
211	211 N	24:21	24:31	4°	7880	150	4500	21	1.2	0.7		
210	210 S	24:35	24:46	184°	7750	152	4489	18	1.3	0.8		
209	209 N	24:49	1:00	3°	7756	152	4479	18	1.3	0.8		
208	208 S	1:03	1:14	184°	7769	154	4465	20	1.3	0.8		
207	207 N	1:17	1:28	4°	7757	159	4452	19	1.3	0.8		
206	206 S	1:31	1:42	183°	7757	152	4443	18	1.5	0.9		
205	205 N	1:45	1:56	4°	7772	152	4432	18	1.3	0.8		
204	204 S	2:00	2:10	183°	7745	155	4421	18	1.4	0.8		
203	203 N	2:13	-	3°	7773	153	4409	18	1.4	0.8	Over Clouds, FlightPro Freeze, line aborted	



Digital Aerial Solutions Flight Log

Project/Flight Plan:		AL_Counties			Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
					30	13		13		101.96		Chuck Harris		
Date/Julian:		2/22/2021			Disk Drive			Sensor				Pilot		
Hobbs End		17:05			TM MM30 (107, 108)			TM_90524				Anthony Kosinski		
Hobbs ST		13:19			TARGET MSL		Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:
Flight Time		3.7			7,500		160	KMSL-1		KMSL-2		1.500	C421_N811A	Florence (KMSL)
∠	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			
	185	185 S	19:41	19:52	183°	7833	157	6045	24	1.1	0.6	Refly, Gimbal data PAV missing		
	187	187 N	19:55	20:06	3°	7853	150	6035	24	1.1	0.6			
	188	188 S	20:10	20:21	183°	7832	151	6025	24	1.2	0.6			
	189	189 N	20:25	20:36	4°	7857	159	6016	24	1.2	0.6	89% R last 5 mi, possible snow		
	190	190 S	20:39	20:50	184°	7853	147	6005	23	1.2	0.6			
	191	191 N	20:55	21:06	4°	7786	155	5996	21	1.4	0.7			
	192	192 S	21:10	21:20	183°	7782	150	5986	21	1.3	0.7			
	193	193 N	21:25	21:35	4°	7784	154	5977	18	1.4	0.7			
	194	194 S	21:39	21:50	184°	7773	153	5968	18	1.3	0.7			
	195	195 N	21:54	22:05	3°	7786	157	5957	18	13.0	0.7			
	196	196 S	22:09	22:19	184°	7765	152	5951	19	1.2	0.7			
	197	197 N	22:23	22:34	3°	7792	146	5942	19	1.2	0.7			
	198	198 S	22:38	22:49	183°	7783	155	5933	19	1.1	0.6			



Digital Aerial Solutions Flight Log

Project/Flight Plan:	AL_Counties		Lift	Temp °C Before		Temp °C After		Pressure (kPa)		Sensor Operator		
			31	11		8		101.93		Chuck Harris		
Date/Julian:	2/22/2021		Disk Drive			Sensor					Pilot	
Hobbs End	19:56		TM MM30 (107, 108)			TM_90524					Wes Ashmore	
Hobbs ST	17:45		TARGET MSL	Target AIRSPD	Base Name	PID	Base Name	PID	Base Height	Aircraft	Airport Identification:	
Flight Time	2.1		7,500	160	KMSL-1		KMSL-2		1.500	C421_N811A	Florence (KMSL)	
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		
199	199 S	24:07	24:18	183°	7781	150	5923	19	1.1	0.7		
200	200 N	24:22	24:33	3°	7808	159	5914	20	1.0	0.6		
201	201 S	24:36	24:47	184°	7727	151	5906	20	1.0	0.6		
202	202 N	24:51	1:02	4°	7748	151	5897	20	1.1	0.7		
203	203 S	1:05	1:16	183°	7788	155	5889	19	1.3	0.7		
1289	1289 N	1:34	1:35	4°	7936	158	5880	20	1.3	0.6	Refly	

Appendix B. Base Station GPS Session Forms

GPS SESSION FORM



Contract # / TO # G16PC00044		Client / Project Name USGS AL_17County_2020_B20		Date 1/14/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia williams	
Monument Name/Designation K8A1-1			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		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 GS-15		Data Collector Serial No. 1506684	
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) 1/14/2021		Start Time (UTC) 14:03		Approx. Lat. (if available) 34 23 54.00250N	
End Date (UTC) 1/14/2021		End Time (UTC) 22:07		Approx. Long. (if available) 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 1/14/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation K8A1-2			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		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 GS-15		Data Collector Serial No. 1516674	
Antenna Part No. 6194452		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) 1/14/2021		Start Time (UTC) 13:57		Approx. Lat. (if available) 34 23 53.46690N	
End Date (UTC) 1/14/2021		End Time (UTC) 22:07		Approx. Long. (if available) 86 16 17.63269W	
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 USGS AL_17County_2020_B20		Date 1/15/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia williams	
Monument Name/Designation K8A1-1			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 1514_0115_093243.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		Data Collector Serial No. 1506684	
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) 1/15/2021		Start Time (UTC) 13:27		Approx. Lat. (if available) 34 23 54.00250N	
End Date (UTC) 1/15/2021		End Time (UTC) 18:15		Approx. Long. (if available) 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 1/15/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation K8A1-2			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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> 6674_0115_092838.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		Data Collector Serial No. 1516674	
Antenna Part No. 6194452		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) 1/15/2021		Start Time (UTC) 13:33		Approx. Lat. <i>(if available)</i> 34 23 53.46690N	
End Date (UTC) 1/15/2021		End Time (UTC) 18:15		Approx. Long. <i>(if available)</i> 86 16 17.63269W	
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 USGS AL_17County_2020_B20		Date 1/17/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia williams	
Monument Name/Designation K8A1-1			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 1514_0117_102552.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		Data Collector Serial No. 1506684	
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) 1/17/2021		Start Time (UTC) 14:27		Approx. Lat. (if available) 34 23 54.00250N	
End Date (UTC) 1/17/2021		End Time (UTC) 18:33		Approx. Long. (if available) 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 1/17/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation K8A1-2			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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> 6674_0117_102114.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		Data Collector Serial No. 1516674	
Antenna Part No. 6194452		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) 1/17/2021		Start Time (UTC) 14:21		Approx. Lat. <i>(if available)</i> 34 23 53.46690N	
End Date (UTC) 1/17/2021		End Time (UTC) 18:31		Approx. Long. <i>(if available)</i> 86 16 17.63269W	
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 USGS AL_17County_2020_B20		Date 1/18/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia williams	
Monument Name/Designation K8A1-1			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 6674_0118_093648.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		Data Collector Serial No. 1506684	
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) 1/18/2021		Start Time (UTC) 13:27		Approx. Lat. (if available) 34 23 54.00250N	
End Date (UTC) 1/18/2021		End Time (UTC) 17:00		Approx. Long. (if available) 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 1/18/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation K8A1-2			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 1514_0118_094008.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		Data Collector Serial No. 1516674	
Antenna Part No. 6194452		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) 1/18/2021		Start Time (UTC) 13:21		Approx. Lat. (if available) 34 23 53.46690N	
End Date (UTC) 1/18/2021		End Time (UTC) 17:00		Approx. Long. (if available) 86 16 17.63269W	
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 USGS AL_17County_2020_B20		Date 2/2/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation K8A1_01			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 6674_0202_113355.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/2/2021		Start Time (UTC) 15:29		Approx. Lat. (if available) 34 23 54.00250N	
End Date (UTC) 2/2/2021		End Time (UTC) 0:26		Approx. Long. (if available) 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 2/2/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation K8A1_2			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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_0202_112908.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/2/2021		Start Time (UTC) 15:33		Approx. Lat. <i>(if available)</i> 34 23 53.46690N	
End Date (UTC) 2/2/2021		End Time (UTC) 0:26		Approx. Long. <i>(if available)</i> 86 16 17.63269W	
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 USGS AL_17County_2020_B20		Date 2/3/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation K8A1_01			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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_0203_074113.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/3/2021		Start Time (UTC) 12:41		Approx. Lat. <i>(if available)</i> 34 23 54.00250N	
End Date (UTC) 2/3/2021		End Time (UTC) 1:15		Approx. Long. <i>(if available)</i> 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 2/3/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Cynthia Williams	
Monument Name/Designation K8A1_2			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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> 6674_0203_074140.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/3/2021		Start Time (UTC) 12:42		Approx. Lat. <i>(if available)</i> 34 23 53.46690 N	
End Date (UTC) 2/3/2021		End Time (UTC) 1:15		Approx. Long. <i>(if available)</i> 86 16 17.63269 W	
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 USGS AL_17County_2020_B20		Date 2/5/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation KMSL-1			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 1514_0205_094808.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/5/2021		Start Time (UTC) 14:48		Approx. Lat. (if available) 34 44 46.83322 N	
End Date (UTC) 2/6/2021		End Time (UTC) 0:01		Approx. Long. (if available) 87 37 3.40824 W	
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 USGS AL_17County_2020_B20		Date 2/5/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation KMSL-2			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 6674_0205_094922.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/5/2021		Start Time (UTC) 14:48		Approx. Lat. (if available) 34 44 46.18342 N	
End Date (UTC) 2/5/2021		End Time (UTC) 23:59		Approx. Long. (if available) 87 37 3.41292 W	
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 USGS AL_17County_2020_B20		Date 2/6/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation KMSL-1			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 1514_0206_083111.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/6/2021		Start Time (UTC) 14:31		Approx. Lat. (if available) 34 44 46.83322 N	
End Date (UTC) 2/6/2021		End Time (UTC) 21:49		Approx. Long. (if available) 87 37 3.40824 W	
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 USGS AL_17County_2020_B20		Date 2/6/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation KMSL-2			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 6674_0206_083240.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/6/2021		Start Time (UTC) 14:32		Approx. Lat. (if available) 34 44 46.18342 N	
End Date (UTC) 2/6/2021		End Time (UTC) 22:01		Approx. Long. (if available) 87 37 3.41292 W	
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 USGS AL_17County_2020_B20		Date 2/8/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation KMSL-1			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 1514_0208_142937.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/8/2021		Start Time (UTC) 19:30		Approx. Lat. (if available) 34 44 46.83322 N	
End Date (UTC) 2/9/2021		End Time (UTC) 3:45		Approx. Long. (if available) 87 37 3.40824 W	
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 USGS AL_17County_2020_B20		Date 2/8/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation KMSL-2			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 6674_0208_143113.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/8/2021		Start Time (UTC) 19:31		Approx. Lat. (if available) 34 44 46.18342 N	
End Date (UTC) 2/9/2021		End Time (UTC) 3:45		Approx. Long. (if available) 87 37 3.41292 W	
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 USGS AL_17County_2020_B20		Date 2/10/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation KMSL-1			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 1514_0210_105504.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/10/2021		Start Time (UTC) 15:55		Approx. Lat. (if available) 34 44 46.83322 N	
End Date (UTC) 2/11/2021		End Time (UTC) 4:07		Approx. Long. (if available) 87 37 3.40824 W	
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 USGS AL_17County_2020_B20		Date 2/10/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation KMSL-2			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 6674_0210_105524.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/10/2021		Start Time (UTC) 15:55		Approx. Lat. (if available) 34 44 46.18342 N	
End Date (UTC) 2/11/2021		End Time (UTC) 4:07		Approx. Long. (if available) 87 37 3.41292 W	
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 USGS AL_17County_2020_B20		Date 2/22/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation KMSL-1			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 1514_0222_140104.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/22/2021		Start Time (UTC) 19:01		Approx. Lat. (if available) 34 44 46.83322 N	
End Date (UTC) 2/23/2021		End Time (UTC) 2:13		Approx. Long. (if available) 87 37 3.40824 W	
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 USGS AL_17County_2020_B20		Date 2/22/2021	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation KMSL-2			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		Collection Type (circle one) <input checked="" type="radio"/> ABGPS <input type="radio"/> STATIC <input type="radio"/> RTK		File Name (receiver generated) 6674_0222_135733.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 2/22/2021		Start Time (UTC) 18:58		Approx. Lat. (if available) 34 44 46.18342 N	
End Date (UTC) 2/23/2021		End Time (UTC) 2:07		Approx. Long. (if available) 87 37 3.41292 W	
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 USGS AL_17County_2020_B20		Date 12/9/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_01			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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 GS-15		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) 12/9/2020		Start Time (UTC) 15:47		Approx. Lat. <i>(if available)</i> 34 23 54.00250N	
End Date (UTC) 12/10/2020		End Time (UTC) 0:21		Approx. Long. <i>(if available)</i> 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 12/9/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_2			Exact Stamping (include photo in survey report) N/A		
Monument No./PID N/A		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 GS-15		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) 12/9/2020		Start Time (UTC) 15:47		Approx. Lat. (if available) 34 23 53.46690N	
End Date (UTC) 12/10/2020		End Time (UTC) 0:24		Approx. Long. (if available) 86 16 17.63269W	
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 USGS AL_17County_2020_B20		Date 12/10/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_01			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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 GS-15		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) 12/10/2020		Start Time (UTC) 14:17		Approx. Lat. <i>(if available)</i> 34 23 54.00250N	
End Date (UTC) 12/10/2020		End Time (UTC)		Approx. Long. <i>(if available)</i> 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 12/10/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_2			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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 GS-15		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) 12/10/2020		Start Time (UTC) 14:18		Approx. Lat. <i>(if available)</i> 34 23 53.46690N	
End Date (UTC) 12/10/2020		End Time (UTC)		Approx. Long. <i>(if available)</i> 86 16 17.63269W	
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 USGS AL_17County_2020_B20		Date 12/11/2020	
DAS Project No.		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_01			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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_1211_053601.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 12/11/2020		Start Time (UTC) 13:36		Approx. Lat. <i>(if available)</i> 34 23 54.00250N	
End Date (UTC) 12/11/2020		End Time (UTC) 21:50		Approx. Long. <i>(if available)</i> 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 12/11/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_2			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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_1211_083820.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 12/11/2020		Start Time (UTC) 13:38		Approx. Lat. <i>(if available)</i> 34 23 53.46690N	
End Date (UTC) 12/11/2020		End Time (UTC) 21:51		Approx. Long. <i>(if available)</i> 86 16 17.63269W	
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 USGS AL_17County_2020_B20		Date 12/13/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_01			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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_1213_100701.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 12/13/2020		Start Time (UTC) 18:07		Approx. Lat. <i>(if available)</i> 34 23 54.00250N	
End Date (UTC) 12/14/2020		End Time (UTC) 0:00		Approx. Long. <i>(if available)</i> 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 12/13/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_2			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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_1213_130714.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 12/13/2020		Start Time (UTC) 18:07		Approx. Lat. <i>(if available)</i> 34 23 53.46690N	
End Date (UTC) 12/14/2020		End Time (UTC) 0:03		Approx. Long. <i>(if available)</i> 86 16 17.63269W	
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 USGS AL_17County_2020_B20		Date 12/18/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_01			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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_1218_060845.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 12/18/2020		Start Time (UTC) 14:13		Approx. Lat. <i>(if available)</i> 34 23 54.00250 N	
End Date (UTC) 12/18/2020		End Time (UTC) 22:44		Approx. Long. <i>(if available)</i> 86 16 17.28941 W	
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 USGS AL_17County_2020_B20		Date 12/18/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_2			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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_1218_090924.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 12/18/2020		Start Time (UTC) 14:09		Approx. Lat. <i>(if available)</i> 34 23 53.46690N	
End Date (UTC) 12/18/2020		End Time (UTC) 22:43		Approx. Long. <i>(if available)</i> 86 16 17.63269W	
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 USGS AL_17County_2020_B20		Date 12/19/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_01			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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_1219_060646.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 12/19/2020		Start Time (UTC) 14:06		Approx. Lat. <i>(if available)</i> 34 23 54.00250N	
End Date (UTC) 12/19/2020		End Time (UTC) 21:51		Approx. Long. <i>(if available)</i> 86 16 17.28941W	
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 USGS AL_17County_2020_B20		Date 12/19/2020	
DAS Project No. 20005		Survey Firm DAS		Operator Name Chuckquan Harris	
Monument Name/Designation K8A1_2			Exact Stamping <i>(include photo in survey report)</i> N/A		
Monument No./PID N/A		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_1219_090730.m00	
Receiver Manufacturer N/A		Receiver Model N/A		Receiver Serial No. N/A	
Data Collector Manufacturer Leica		Data Collector Model GS-15		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) 12/19/2020		Start Time (UTC) 14:08		Approx. Lat. <i>(if available)</i> 34 23 53.46690N	
End Date (UTC) 12/19/2020		End Time (UTC) 21:30		Approx. Long. <i>(if available)</i> 86 16 17.63269W	
Describe any abnormalities and/or problems encountered during the session, include time of occurrence and duration.			Site Diagram/Setup-Photo		

Appendix C. Vertical Accuracy Calculations



Project Information

Prepared By: DAS
Project Name: AL 17County_2020_B20
Sensor Info: Leica TM
Required Nominal Pulse Spacing: 0.72
Vendor Name: Digital Aerial Solutions, LLC
Units: Meters
Percent of Extent Tolerance: Extents Not Checked
Date of Aquisition: Start: 12/9/2020 Finish: 2/22/2021

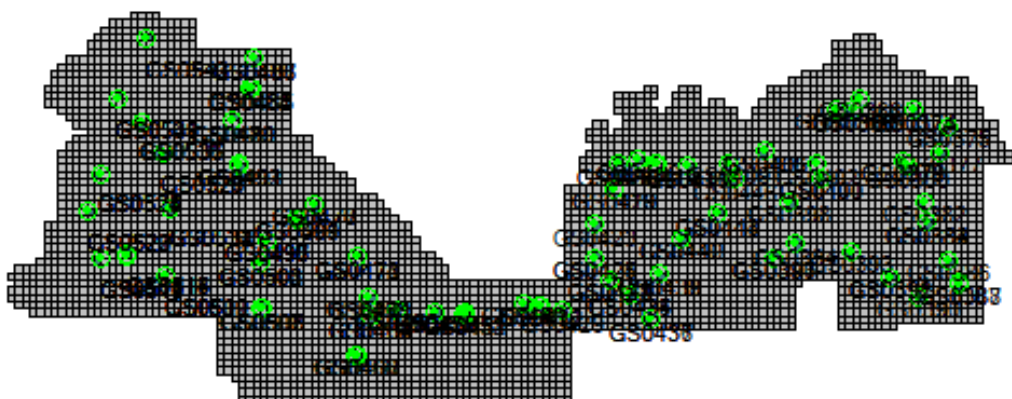
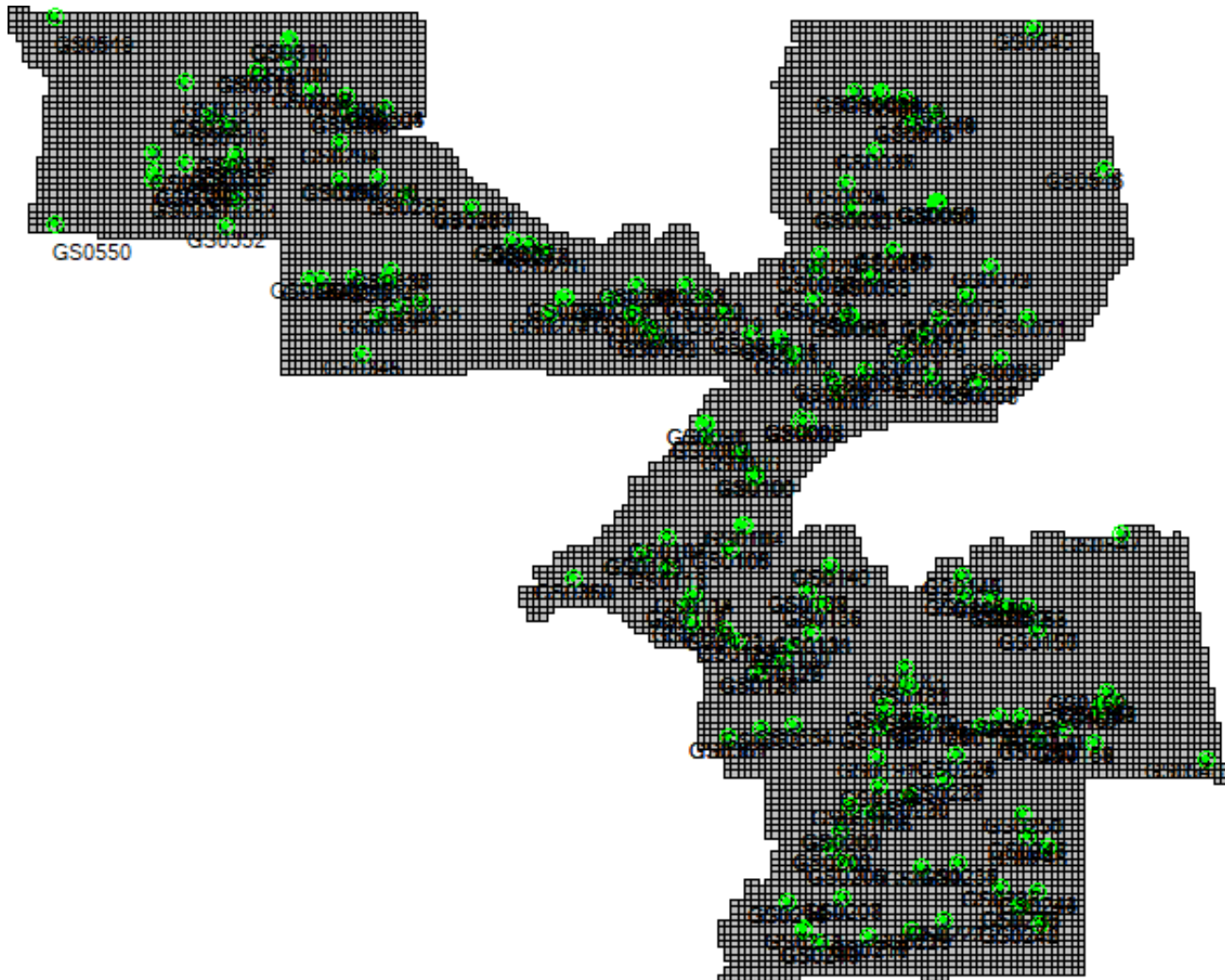
Metadata Information

Tile Index:
Filename: AL_Index_DAS_DPA_Final.shp
Number of Polys: 0
Intensity:
Tile Index Attribute: Not Specified
Data Filename: Not Specified

DEM:
Tile Index Attribute: Tile_ID
Data Filename: DEM

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	121	0.083		0.042
High Vegetation	92		0.092	0.054
Low Vegetation	43		0.136	0.080
Medium Vegetation	50		0.115	0.060
Urban Terrain	135	0.079		0.040
NVA Total:	256	0.081		0.041
VVA Total:	185		0.123	0.062
Total:	441			0.051
DEM		95% Confidence	95 Percentile	
Bare Earth	121	0.089		0.045
High Vegetation	92		0.106	0.058
Low Vegetation	43		0.179	0.091
Medium Vegetation	50		0.134	0.064
Urban Terrain	135	0.086		0.044
NVA Total:	256	0.087		0.044
VVA Total:	185		0.134	0.068
Total:	441			0.051
			Units:	Meters

Coordinates and Offsets of Analyzed Locations

	ID						
		Survey X	Survey Y	Z1	Z DEM	Z LAS	
				LC Type	ΔZ DEM	ΔZ LAS	
1)	<input checked="" type="checkbox"/>	GS0005					
		564894.028	3784684.609	299.361	299.343	299.341	
				Bare Earth	-0.018	-0.02	
2)	<input checked="" type="checkbox"/>	GS0006					
		564895.977	3784710.055	299.38	299.337	299.345	
				Bare Earth	-0.043	-0.035	
3)	<input checked="" type="checkbox"/>	GS0015					
		559700.855	3802798.488	189.076	189.077	189.072	
				Bare Earth	0.001	-0.004	
4)	<input checked="" type="checkbox"/>	GS0023					
		567155.362	3811694.051	194.336	194.321	194.311	
				Bare Earth	-0.015	-0.025	
5)	<input checked="" type="checkbox"/>	GS0024					
		567138.382	3811717.586	195.043	194.995	194.997	
				Bare Earth	-0.048	-0.047	
6)	<input checked="" type="checkbox"/>	GS0027					
		567628.364	3817705.166	374.281	374.291	374.28	
				Bare Earth	0.01	-0.001	
7)	<input checked="" type="checkbox"/>	GS0036					
		580473.726	3844273.596	227.078	227.003	227.005	
				Bare Earth	-0.075	-0.073	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID						
		Survey X	Survey Y	Z1	Z DEM	Z LAS	
				LC Type	ΔZ DEM	ΔZ LAS	
8)	<input checked="" type="checkbox"/>	GS0041					
		576094.579	3856978.523	421.772	421.786	421.789	
				Bare Earth	0.014	0.017	
9)	<input checked="" type="checkbox"/>	GS0045					
		589108.888	3850622.5	191.295	191.325	191.333	
				Bare Earth	0.03	0.038	
10)	<input checked="" type="checkbox"/>	GS0057					
		584867.007	3822243.15	188.197	188.118	188.117	
				Bare Earth	-0.079	-0.08	
11)	<input checked="" type="checkbox"/>	GS0059					
		579915.534	3816899.853	202.15	202.178	202.18	
				Bare Earth	0.028	0.03	
12)	<input checked="" type="checkbox"/>	GS0061					
		575070.262	3807795.867	184.264	184.231	184.223	
				Bare Earth	-0.033	-0.041	
13)	<input checked="" type="checkbox"/>	GS0064					
		593026.21	3794386.717	348.917	348.893	348.882	
				Bare Earth	-0.024	-0.035	
14)	<input checked="" type="checkbox"/>	GS0073					
		606367.815	3818544.701	399.246	399.208	399.218	
				Bare Earth	-0.038	-0.028	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
15)	<input checked="" type="checkbox"/>	GS0077					
		595067.856	3807506.76	358.614	358.555	358.568	
				Bare Earth	-0.059	-0.046	
16)	<input checked="" type="checkbox"/>	GS0086					
		551249.929	3778031.624	267.21	267.249	267.252	
				Bare Earth	0.039	0.042	
17)	<input checked="" type="checkbox"/>	GS0093					
		532751.665	3803364.248	182.273	182.271	182.269	
				Bare Earth	-0.002	-0.004	
18)	<input checked="" type="checkbox"/>	GS0098					
		527551.73	3808185.621	179.635	179.66	179.66	
				Bare Earth	0.025	0.025	
19)	<input checked="" type="checkbox"/>	GS0104					
		551796.464	3761790.359	228.584	228.608	228.617	
				Bare Earth	0.024	0.033	
20)	<input checked="" type="checkbox"/>	GS0106					
		548728.1	3756607.351	261.681	261.711	261.71	
				Bare Earth	0.03	0.029	
21)	<input checked="" type="checkbox"/>	GS0107					
		534788.787	3759119.444	158.218	158.253	158.253	
				Bare Earth	0.035	0.035	

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"/>	GS0108					
		534783.359	3759091.321	157.901	157.932	157.924	
				Bare Earth	0.031	0.023	
23)	<input checked="" type="checkbox"/>	GS0111					
		529734.883	3755439.426	135.287	135.304	135.308	
				Bare Earth	0.017	0.021	
24)	<input checked="" type="checkbox"/>	GS0119					
		540580.797	3740415.223	322.502	322.483	322.492	
				Bare Earth	-0.019	-0.01	
25)	<input checked="" type="checkbox"/>	GS0120					
		540550.011	3740418.072	321.891	321.876	321.879	
				Bare Earth	-0.015	-0.012	
26)	<input checked="" type="checkbox"/>	GS0122					
		547478.517	3738872.571	225.785	225.909	225.91	
				Bare Earth	0.124	0.125	
27)	<input checked="" type="checkbox"/>	GS0131					
		562304.157	3735172.948	194.211	194.258	194.244	
				Bare Earth	0.047	0.033	
28)	<input checked="" type="checkbox"/>	GS0134					
		566840.082	3738122.569	187.147	187.179	187.199	
				Bare Earth	0.032	0.052	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
29)	<input checked="" type="checkbox"/>	GS0139					
		565848.448	3747338.466	181.398	181.484	181.49	
				Bare Earth	0.086	0.092	
30)	<input checked="" type="checkbox"/>	GS0148					
		600333.953	3746285.233	164.208	164.211	164.221	
				Bare Earth	0.003	0.013	
31)	<input checked="" type="checkbox"/>	GS0150					
		606057.739	3745906.424	177.189	177.213	177.216	
				Bare Earth	0.024	0.027	
32)	<input checked="" type="checkbox"/>	GS0155					
		614331.137	3743916.874	214.124	214.126	214.13	
				Bare Earth	0.002	0.006	
33)	<input checked="" type="checkbox"/>	GS0157					
		616393.572	3738896.61	257.851	257.835	257.843	
				Bare Earth	-0.016	-0.008	
34)	<input checked="" type="checkbox"/>	GS0163					
		634042.734	3723066.547	317.48	317.435	317.464	
				Bare Earth	-0.045	-0.016	
35)	<input checked="" type="checkbox"/>	GS0164					
		634135.661	3723066.306	316.18	316.156	316.143	
				Bare Earth	-0.024	-0.037	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
36)	<input checked="" type="checkbox"/>	GS0171					
		622424.302	3717012.081	306.75	306.783	306.767	
				Bare Earth	0.033	0.017	
37)	<input checked="" type="checkbox"/>	GS0178					
		592725.645	3718647.109	173.421	173.44	173.459	
				Bare Earth	0.019	0.038	
38)	<input checked="" type="checkbox"/>	GS0181					
		588034.962	3726491.017	182.119	182.23	182.233	
				Bare Earth	0.111	0.114	
39)	<input checked="" type="checkbox"/>	GS0189					
		581544.597	3717489.367	168.082	168.077	168.081	
				Bare Earth	-0.005	-0.001	
40)	<input checked="" type="checkbox"/>	GS0199					
		575293.456	3700228.233	183.714	183.73	183.715	
				Bare Earth	0.016	0.001	
41)	<input checked="" type="checkbox"/>	GS0203					
		571248.636	3690429.372	138.938	138.938	138.933	
				Bare Earth	0	-0.005	
42)	<input checked="" type="checkbox"/>	GS0207					
		573471.505	3679866.157	167.647	167.65	167.643	
				Bare Earth	0.003	-0.004	

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"/>	GS0208					
		573441.54	3679864.314	167.566	167.612	167.62	
				Bare Earth	0.046	0.054	
44)	<input checked="" type="checkbox"/>	GS0213					
		564983.803	3672921.876	173.01	173.102	173.035	
				Bare Earth	0.092	0.025	
45)	<input checked="" type="checkbox"/>	GS0215					
		561628.127	3678963.145	146.83	146.83	146.858	
				Bare Earth	0	0.028	
46)	<input checked="" type="checkbox"/>	GS0217					
		579324.455	3671243.577	258.904	258.907	258.929	
				Bare Earth	0.003	0.025	
47)	<input checked="" type="checkbox"/>	GS0219					
		588647.585	3672873.317	251.021	251.058	251.044	
				Bare Earth	0.037	0.023	
48)	<input checked="" type="checkbox"/>	GS0220					
		588622.044	3672860.864	252.49	252.609	252.556	
				Bare Earth	0.119	0.066	
49)	<input checked="" type="checkbox"/>	GS0225					
		598686.401	3711028.833	187.381	187.416	187.392	
				Bare Earth	0.035	0.011	

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"/>	GS0230					
		588293.774	3702070.295	175.511	175.604	175.592	
				Bare Earth	0.093	0.081	
51)	<input checked="" type="checkbox"/>	GS0242					
		616947.267	3674204.657	292.399	292.392	292.423	
				Bare Earth	-0.007	0.024	
52)	<input checked="" type="checkbox"/>	GS0248					
		614178.972	3693299.601	342.076	342.032	342.027	
				Bare Earth	-0.044	-0.049	
53)	<input checked="" type="checkbox"/>	GS0251					
		613338.494	3698408.56	300.856	300.874	300.854	
				Bare Earth	0.018	-0.002	
54)	<input checked="" type="checkbox"/>	GS0253					
		616643.711	3714818.381	215.74	215.772	215.787	
				Bare Earth	0.032	0.047	
55)	<input checked="" type="checkbox"/>	GS0274					
		508882.457	3808194.706	189.825	189.841	189.842	
				Bare Earth	0.016	0.017	
56)	<input checked="" type="checkbox"/>	GS0277					
		504470.484	3823736.501	174.816	174.822	174.825	
				Bare Earth	0.006	0.009	

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"/>	GS0278					
		504450.073	3823668.434	174.316	174.351	174.35	
				Bare Earth	0.035	0.034	
58)	<input checked="" type="checkbox"/>	GS0284					
		491940.52	3831673.075	187.676	187.709	187.707	
				Bare Earth	0.033	0.031	
59)	<input checked="" type="checkbox"/>	GS0286					
		477483.379	3834477.004	182.787	182.799	182.795	
				Bare Earth	0.012	0.008	
60)	<input checked="" type="checkbox"/>	GS0298					
		465066.361	3852571.524	186.671	186.684	186.685	
				Bare Earth	0.013	0.014	
61)	<input checked="" type="checkbox"/>	GS0304					
		472711.391	3853796.392	192.745	192.842	192.833	
				Bare Earth	0.097	0.088	
62)	<input checked="" type="checkbox"/>	GS0307					
		456464.978	3857708.105	202.327	202.266	202.282	
				Bare Earth	-0.061	-0.045	
63)	<input checked="" type="checkbox"/>	GS0311					
		451774.843	3868591.549	226.764	226.719	226.715	
				Bare Earth	-0.045	-0.049	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
64)	<input checked="" type="checkbox"/>	GS0314					
		444441.494	3861463.592	207.987	207.911	207.91	
				Bare Earth	-0.076	-0.077	
65)	<input checked="" type="checkbox"/>	GS0320					
		434448.273	3851919.015	180.208	180.273	180.279	
				Bare Earth	0.065	0.071	
66)	<input checked="" type="checkbox"/>	GS0326					
		421564.224	3843615.604	138.838	138.877	138.877	
				Bare Earth	0.039	0.039	
67)	<input checked="" type="checkbox"/>	GS0327					
		422324.614	3839749.878	142.996	143.057	143.035	
				Bare Earth	0.061	0.039	
68)	<input checked="" type="checkbox"/>	GS0331					
		421599.884	3837818.438	150.87	150.885	150.875	
				Bare Earth	0.015	0.005	
69)	<input checked="" type="checkbox"/>	GS0342					
		471236.002	3808134.954	308.176	308.109	308.152	
				Bare Earth	-0.067	-0.024	
70)	<input checked="" type="checkbox"/>	GS0351					
		456137.971	3816108.726	198.477	198.423	198.393	
				Bare Earth	-0.054	-0.084	

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"/>	GS0355					
		438886.646	3841079.437	153.571	153.429	153.425	
				Bare Earth	-0.142	-0.146	
72)	<input checked="" type="checkbox"/>	GS0356					
		438934.77	3841071.574	153.82	153.698	153.704	
				Bare Earth	-0.122	-0.116	
73)	<input checked="" type="checkbox"/>	GS0362					
		548398.185	3715128.149	215.02	215.068	215.061	
				Bare Earth	0.048	0.041	
74)	<input checked="" type="checkbox"/>	GS0369					
		568420.688	3581399.849	72.476	72.425	72.434	
				Bare Earth	-0.051	-0.042	
75)	<input checked="" type="checkbox"/>	GS0378					
		578829.553	3570782.415	65.146	65.173	65.175	
				Bare Earth	0.027	0.029	
76)	<input checked="" type="checkbox"/>	GS0380					
		579591.844	3569542.373	65.904	65.91	65.894	
				Bare Earth	0.006	-0.01	
77)	<input checked="" type="checkbox"/>	GS0387					
		590689.682	3545340.508	142.928	142.97	142.928	
				Bare Earth	0.042	0	

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"/>	GS0390					
		582060.004	3542537.516	138.649	138.738	138.708	
				Bare Earth	0.089	0.059	
79)	<input checked="" type="checkbox"/>	GS0392					
		576115.377	3546486.038	137.632	137.639	137.66	
				Bare Earth	0.007	0.028	
80)	<input checked="" type="checkbox"/>	GS0396					
		552012.769	3550647.628	99.467	99.446	99.445	
				Bare Earth	-0.021	-0.022	
81)	<input checked="" type="checkbox"/>	GS0397					
		551982.508	3550651.992	100.385	100.4	100.393	
				Bare Earth	0.015	0.008	
82)	<input checked="" type="checkbox"/>	GS0401					
		561727.325	3567151.684	76.218	76.185	76.196	
				Bare Earth	-0.033	-0.022	
83)	<input checked="" type="checkbox"/>	GS0409					
		542406.593	3570314.007	66.707	66.707	66.7	
				Bare Earth	0	-0.007	
84)	<input checked="" type="checkbox"/>	GS0416					
		523806.538	3570879.57	66.497	66.522	66.505	
				Bare Earth	0.025	0.008	

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"/>	GS0417					
		519917.899	3570030.948	130.707	130.697	130.702	
				Bare Earth	-0.01	-0.004	
86)	<input checked="" type="checkbox"/>	GS0418					
		519940.604	3570049.106	128.881	128.898	128.865	
				Bare Earth	0.017	-0.016	
87)	<input checked="" type="checkbox"/>	GS0424					
		514776.713	3550584.733	62.262	62.264	62.288	
				Bare Earth	0.002	0.026	
88)	<input checked="" type="checkbox"/>	GS0425					
		514767.869	3550630.322	61.644	61.676	61.689	
				Bare Earth	0.032	0.045	
89)	<input checked="" type="checkbox"/>	GS0427					
		518197.027	3546042.536	89.003	89.037	89.019	
				Bare Earth	0.034	0.016	
90)	<input checked="" type="checkbox"/>	GS0436					
		526301.056	3537844.871	94.342	94.305	94.355	
				Bare Earth	-0.037	0.013	
91)	<input checked="" type="checkbox"/>	GS0438					
		528170.759	3547300.927	99.5	99.517	99.514	
				Bare Earth	0.017	0.014	

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"/>	GS0442					
		532570.981	3554568.898	66.634	66.622	66.628	
				Bare Earth	-0.012	-0.006	
93)	<input checked="" type="checkbox"/>	GS0443					
		540339.501	3559795.818	62.953	62.927	62.979	
				Bare Earth	-0.026	0.026	
94)	<input checked="" type="checkbox"/>	GS0451					
		487767.226	3539067.586	66.968	66.972	66.979	
				Bare Earth	0.004	0.011	
95)	<input checked="" type="checkbox"/>	GS0452					
		487739.816	3539078.727	66.568	66.655	66.651	
				Bare Earth	0.087	0.083	
96)	<input checked="" type="checkbox"/>	GS0457					
		481571.597	3539495.739	92.962	93.001	92.997	
				Bare Earth	0.039	0.035	
97)	<input checked="" type="checkbox"/>	GS0466					
		465365.075	3530350.862	82.816	82.798	82.815	
				Bare Earth	-0.018	-0.001	
98)	<input checked="" type="checkbox"/>	GS0467					
		465379.107	3530378.799	81.472	81.431	81.45	
				Bare Earth	-0.041	-0.022	

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"/>	GS0469					
		468047.038	3542481.868	48.655	48.656	48.661	
				Bare Earth	0.001	0.006	
100)	<input checked="" type="checkbox"/>	GS0471					
		468048.266	3542417.392	51.799	51.807	51.842	
				Bare Earth	0.008	0.043	
101)	<input checked="" type="checkbox"/>	GS0479					
		439703.727	3579071.478	73.639	73.569	73.571	
				Bare Earth	-0.07	-0.068	
102)	<input checked="" type="checkbox"/>	GS0485					
		443436.629	3585831.934	72.651	72.654	72.614	
				Bare Earth	0.003	-0.037	
103)	<input checked="" type="checkbox"/>	GS0495					
		446824.295	3554258.202	39.817	39.864	39.86	
				Bare Earth	0.047	0.043	
104)	<input checked="" type="checkbox"/>	GS0498					
		446801.654	3554176.864	39.929	39.991	39.975	
				Bare Earth	0.062	0.046	
105)	<input checked="" type="checkbox"/>	GS0499					
		452995.903	3558802.763	49.851	49.88	49.884	
				Bare Earth	0.029	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
106)	<input checked="" type="checkbox"/>	GS0503				
		445636.251	3549478.592	41.557	41.59	41.586
				Bare Earth	0.033	0.029
107)	<input checked="" type="checkbox"/>	GS0507				
		445648.964	3540022.567	54.275	54.305	54.299
				Bare Earth	0.03	0.024
108)	<input checked="" type="checkbox"/>	GS0508				
		445676.863	3540000.398	54.133	54.179	54.183
				Bare Earth	0.046	0.05
109)	<input checked="" type="checkbox"/>	GS0511				
		425894.58	3546861.243	60.635	60.69	60.704
				Bare Earth	0.055	0.069
110)	<input checked="" type="checkbox"/>	GS0517				
		412349.955	3550428.843	47.343	47.302	47.319
				Bare Earth	-0.041	-0.024
111)	<input checked="" type="checkbox"/>	GS0521				
		409676.248	3560298.465	43.7	43.684	43.713
				Bare Earth	-0.016	0.013
112)	<input checked="" type="checkbox"/>	GS0522				
		409714.574	3560274.546	44.853	44.891	44.872
				Bare Earth	0.038	0.019

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"/>	GS0523					
		409715.107	3560242.207	44.78	44.816	44.783	
				Bare Earth	0.036	0.003	
114)	<input checked="" type="checkbox"/>	GS0525					
		412190.138	3568035.276	58.447	58.455	58.415	
				Bare Earth	0.008	-0.032	
115)	<input checked="" type="checkbox"/>	GS0526					
		412210.418	3568001.142	56.893	56.901	56.884	
				Bare Earth	0.008	-0.009	
116)	<input checked="" type="checkbox"/>	GS0529					
		425148.23	3572251.38	42.721	42.708	42.712	
				Bare Earth	-0.013	-0.009	
117)	<input checked="" type="checkbox"/>	GS0532					
		426784.553	3560951.903	83.318	83.31	83.338	
				Bare Earth	-0.008	0.02	
118)	<input checked="" type="checkbox"/>	GS0533					
		426810.283	3560963.936	84.07	84.056	84.093	
				Bare Earth	-0.014	0.023	
119)	<input checked="" type="checkbox"/>	GS0537					
		420799.02	3578921.009	28.965	28.956	28.979	
				Bare Earth	-0.009	0.014	

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"/>	GS0538					
		415856.276	3583587.045	71.409	71.395	71.414	
				Bare Earth	-0.014	0.005	
121)	<input checked="" type="checkbox"/>	GS0541					
		415892.295	3583535.812	70.663	70.643	70.671	
				Bare Earth	-0.02	0.008	
122)	<input checked="" type="checkbox"/>	GS0003					
		572515.025	3791462.374	313.314	313.344	313.331	
				Urban Terrain	0.03	0.017	
123)	<input checked="" type="checkbox"/>	GS0007					
		564897.1	3784754.958	299.406	299.349	299.35	
				Urban Terrain	-0.057	-0.056	
124)	<input checked="" type="checkbox"/>	GS0013					
		562943.058	3799215.189	184.421	184.433	184.433	
				Urban Terrain	0.012	0.012	
125)	<input checked="" type="checkbox"/>	GS0017					
		553284.944	3803977.41	312.537	312.51	312.524	
				Urban Terrain	-0.027	-0.013	
126)	<input checked="" type="checkbox"/>	GS0020					
		543040.154	3811825.55	324.554	324.581	324.578	
				Urban Terrain	0.027	0.024	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID						
		Survey X	Survey Y	Z1	Z DEM	Z LAS	
				LC Type	ΔZ DEM	ΔZ LAS	
127)	<input checked="" type="checkbox"/>	GS0021					
		543039.372	3811798.031	323.679	323.712	323.694	
				Urban Terrain	0.033	0.015	
128)	<input checked="" type="checkbox"/>	GS0026					
		567609.541	3817722.492	374.509	374.503	374.495	
				Urban Terrain	-0.006	-0.014	
129)	<input checked="" type="checkbox"/>	GS0032					
		575960.23	3831452.328	195.551	195.573	195.572	
				Urban Terrain	0.022	0.021	
130)	<input checked="" type="checkbox"/>	GS0035					
		574416.658	3836968.861	188.566	188.57	188.545	
				Urban Terrain	0.004	-0.021	
131)	<input checked="" type="checkbox"/>	GS0038					
		581953.745	3856987.93	511.612	511.61	511.613	
				Urban Terrain	-0.002	0.001	
132)	<input checked="" type="checkbox"/>	GS0039					
		581986.025	3857007.367	511.872	511.869	511.862	
				Urban Terrain	-0.003	-0.01	
133)	<input checked="" type="checkbox"/>	GS0042					
		581982.523	3856875.785	512.34	512.315	512.323	
				Urban Terrain	-0.025	-0.017	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID						
		Survey X	Survey Y	Z1	Z DEM	Z LAS	
				LC Type	ΔZ DEM	ΔZ LAS	
134)	<input checked="" type="checkbox"/>	GS0043					
		587487.676	3856072.812	512.668	512.57	512.567	
				Urban Terrain	-0.098	-0.101	
135)	<input checked="" type="checkbox"/>	GS0046					
		589072.805	3850633.161	190.813	190.793	190.796	
				Urban Terrain	-0.02	-0.017	
136)	<input checked="" type="checkbox"/>	GS0050					
		594313.19	3832828.395	186.225	186.198	186.201	
				Urban Terrain	-0.027	-0.024	
137)	<input checked="" type="checkbox"/>	GS0051					
		594324.626	3832856.704	186.156	186.114	186.111	
				Urban Terrain	-0.042	-0.045	
138)	<input checked="" type="checkbox"/>	GS0054					
		594199.635	3832760.661	182.199	182.211	182.225	
				Urban Terrain	0.012	0.026	
139)	<input checked="" type="checkbox"/>	GS0056					
		584866.463	3822312.577	188.726	188.657	188.66	
				Urban Terrain	-0.069	-0.067	
140)	<input checked="" type="checkbox"/>	GS0062					
		575048.629	3807778.985	183.56	183.486	183.495	
				Urban Terrain	-0.074	-0.065	

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"/>	GS0068					
		603439.186	3793153.707	213.617	213.632	213.635	
				Urban Terrain	0.015	0.018	
142)	<input checked="" type="checkbox"/>	GS0070					
		608483.336	3798409.637	231.776	231.775	231.785	
				Urban Terrain	-0.001	0.009	
143)	<input checked="" type="checkbox"/>	GS0076					
		595048.988	3807478.051	358.291	358.207	358.249	
				Urban Terrain	-0.084	-0.042	
144)	<input checked="" type="checkbox"/>	GS0079					
		591726.478	3803315.012	357.854	357.792	357.8	
				Urban Terrain	-0.062	-0.054	
145)	<input checked="" type="checkbox"/>	GS0081					
		586931.649	3799216.111	336.245	336.176	336.186	
				Urban Terrain	-0.069	-0.059	
146)	<input checked="" type="checkbox"/>	GS0089					
		544430.111	3780801.756	256.101	256.065	256.082	
				Urban Terrain	-0.036	-0.019	
147)	<input checked="" type="checkbox"/>	GS0095					
		530643.284	3805219.545	182.34	182.305	182.311	
				Urban Terrain	-0.035	-0.029	

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"/>	GS0096					
		530611.463	3805209.693	182.967	182.968	182.961	
				Urban Terrain	0.001	-0.006	
149)	<input checked="" type="checkbox"/>	GS0097					
		527588.922	3808128.619	183.008	182.981	182.992	
				Urban Terrain	-0.027	-0.016	
150)	<input checked="" type="checkbox"/>	GS0101					
		554387.019	3772801.733	238.305	238.351	238.344	
				Urban Terrain	0.046	0.039	
151)	<input checked="" type="checkbox"/>	GS0113					
		534943.753	3752394.801	168.038	168.003	168.019	
				Urban Terrain	-0.035	-0.019	
152)	<input checked="" type="checkbox"/>	GS0114					
		540805.085	3746746.127	183.118	183.121	183.112	
				Urban Terrain	0.003	-0.006	
153)	<input checked="" type="checkbox"/>	GS0115					
		540824.275	3746771.509	183.478	183.455	183.47	
				Urban Terrain	-0.023	-0.008	
154)	<input checked="" type="checkbox"/>	GS0117					
		538864.176	3744203.435	190.387	190.436	190.445	
				Urban Terrain	0.049	0.058	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
				LC Type	ΔZ DEM	ΔZ LAS	
155)	<input checked="" type="checkbox"/>	GS0126					
		555205.045	3729443.099	215.853	215.807	215.821	
				Urban Terrain	-0.046	-0.032	
156)	<input checked="" type="checkbox"/>	GS0127					
		555220.772	3729468.293	215.143	215.108	215.114	
				Urban Terrain	-0.035	-0.029	
157)	<input checked="" type="checkbox"/>	GS0128					
		560373.215	3731856.968	215.784	215.763	215.797	
				Urban Terrain	-0.021	0.013	
158)	<input checked="" type="checkbox"/>	GS0136					
		568906.359	3744315.062	173.329	173.404	173.416	
				Urban Terrain	0.075	0.087	
159)	<input checked="" type="checkbox"/>	GS0141					
		571019.804	3752931.996	193.135	193.174	193.152	
				Urban Terrain	0.039	0.017	
160)	<input checked="" type="checkbox"/>	GS0144					
		600032.223	3750812.455	183.06	183.062	183.055	
				Urban Terrain	0.002	-0.005	
161)	<input checked="" type="checkbox"/>	GS0145					
		600018.402	3750841.054	183.57	183.566	183.559	
				Urban Terrain	-0.004	-0.011	

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"/>	GS0152				
		609983.928	3744095.474	192.563	192.571	192.572
				Urban Terrain	0.008	0.009
163)	<input checked="" type="checkbox"/>	GS0159				
		631815.699	3725203.843	303.977	303.961	303.953
				Urban Terrain	-0.016	-0.024
164)	<input checked="" type="checkbox"/>	GS0160				
		631799.117	3725229.422	304.438	304.442	304.43
				Urban Terrain	0.004	-0.008
165)	<input checked="" type="checkbox"/>	GS0167				
		630394.226	3721765.403	286.199	286.203	286.19
				Urban Terrain	0.004	-0.009
166)	<input checked="" type="checkbox"/>	GS0168				
		629070.874	3714060.609	251.784	251.79	251.794
				Urban Terrain	0.006	0.01
167)	<input checked="" type="checkbox"/>	GS0169				
		629063.91	3714032.998	251.581	251.584	251.581
				Urban Terrain	0.003	0
168)	<input checked="" type="checkbox"/>	GS0175				
		603887.466	3717657.164	199.468	199.451	199.446
				Urban Terrain	-0.017	-0.022

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"/>	GS0180					
		590405.483	3720817.195	189.583	189.644	189.585	
				Urban Terrain	0.061	0.002	
170)	<input checked="" type="checkbox"/>	GS0182					
		588054.755	3726463.996	182.435	182.459	182.471	
				Urban Terrain	0.024	0.036	
171)	<input checked="" type="checkbox"/>	GS0186					
		583095.401	3721764.777	157.341	157.296	157.345	
				Urban Terrain	-0.045	0.004	
172)	<input checked="" type="checkbox"/>	GS0187					
		583103.682	3721716.549	157.038	157.04	157.039	
				Urban Terrain	0.002	0.001	
173)	<input checked="" type="checkbox"/>	GS0191					
		581062.898	3710739.198	175.132	175.14	175.116	
				Urban Terrain	0.008	-0.016	
174)	<input checked="" type="checkbox"/>	GS0194					
		581758.13	3704434.027	176.057	176.037	176.038	
				Urban Terrain	-0.02	-0.019	
175)	<input checked="" type="checkbox"/>	GS0196					
		580396.795	3698894.679	176.814	176.762	176.788	
				Urban Terrain	-0.052	-0.026	

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"/>	GS0201					
		573088.996	3694784.686	175.051	175.058	175.027	
				Urban Terrain	0.007	-0.024	
177)	<input checked="" type="checkbox"/>	GS0205					
		574603.264	3687366.739	157.553	157.565	157.568	
				Urban Terrain	0.012	0.015	
178)	<input checked="" type="checkbox"/>	GS0210					
		568673.859	3670033.122	172.763	172.845	172.826	
				Urban Terrain	0.082	0.063	
179)	<input checked="" type="checkbox"/>	GS0221					
		595906.591	3674874.38	290.742	290.701	290.705	
				Urban Terrain	-0.041	-0.037	
180)	<input checked="" type="checkbox"/>	GS0227					
		595934.038	3705720.393	179.373	179.382	179.368	
				Urban Terrain	0.009	-0.005	
181)	<input checked="" type="checkbox"/>	GS0228					
		595872.812	3705713.505	180.586	180.639	180.586	
				Urban Terrain	0.053	0	
182)	<input checked="" type="checkbox"/>	GS0231					
		591018.109	3686725.499	293.886	293.823	293.828	
				Urban Terrain	-0.063	-0.058	

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"/>	GS0232					
		590998.427	3686705.678	292.777	292.8	292.738	
				Urban Terrain	0.023	-0.039	
184)	<input checked="" type="checkbox"/>	GS0234					
		598980.743	3687341.949	321.463	321.47	321.445	
				Urban Terrain	0.007	-0.018	
185)	<input checked="" type="checkbox"/>	GS0236					
		608423.958	3682270.121	343.139	343.147	343.128	
				Urban Terrain	0.008	-0.011	
186)	<input checked="" type="checkbox"/>	GS0237					
		608398.449	3682305.924	343.204	343.206	343.188	
				Urban Terrain	0.002	-0.016	
187)	<input checked="" type="checkbox"/>	GS0239					
		612656.687	3677928.867	337.589	337.552	337.565	
				Urban Terrain	-0.037	-0.024	
188)	<input checked="" type="checkbox"/>	GS0243					
		616420.417	3681168.032	327.809	327.827	327.823	
				Urban Terrain	0.018	0.014	
189)	<input checked="" type="checkbox"/>	GS0244					
		616389.751	3681163.043	327.703	327.683	327.701	
				Urban Terrain	-0.02	-0.002	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
190)	<input checked="" type="checkbox"/>	GS0246					
		618818.962	3691144.628	317.481	317.511	317.474	
				Urban Terrain	0.03	-0.007	
191)	<input checked="" type="checkbox"/>	GS0252					
		616652.73	3714800.821	216.929	216.904	216.914	
				Urban Terrain	-0.025	-0.015	
192)	<input checked="" type="checkbox"/>	GS0256					
		612832.667	3719526.456	190.23	190.291	190.25	
				Urban Terrain	0.061	0.02	
193)	<input checked="" type="checkbox"/>	GS0257					
		607889.915	3719745.044	201.411	201.45	201.442	
				Urban Terrain	0.039	0.031	
194)	<input checked="" type="checkbox"/>	GS0263					
		538956.141	3814709.635	367.522	367.463	367.462	
				Urban Terrain	-0.059	-0.06	
195)	<input checked="" type="checkbox"/>	GS0266					
		528095.771	3814815.793	190.102	190.072	190.07	
				Urban Terrain	-0.03	-0.032	
196)	<input checked="" type="checkbox"/>	GS0268					
		522616.233	3811659.428	185.972	185.979	185.976	
				Urban Terrain	0.007	0.004	

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"/>	GS0276					
		508343.886	3821623.405	186.508	186.503	186.494	
				Urban Terrain	-0.005	-0.014	
198)	<input checked="" type="checkbox"/>	GS0281					
		501117.97	3824474.988	180.927	180.884	180.876	
				Urban Terrain	-0.043	-0.051	
199)	<input checked="" type="checkbox"/>	GS0290					
		471618.394	3838265.913	174.774	174.795	174.793	
				Urban Terrain	0.021	0.019	
200)	<input checked="" type="checkbox"/>	GS0292					
		462959.712	3837800.766	171.818	171.804	171.801	
				Urban Terrain	-0.014	-0.017	
201)	<input checked="" type="checkbox"/>	GS0294					
		462877.542	3845845.337	178.815	178.808	178.807	
				Urban Terrain	-0.007	-0.008	
202)	<input checked="" type="checkbox"/>	GS0296					
		465031.103	3852580.619	187.648	187.615	187.63	
				Urban Terrain	-0.033	-0.018	
203)	<input checked="" type="checkbox"/>	GS0299					
		464224.394	3856281.219	195.066	195.096	195.084	
				Urban Terrain	0.03	0.018	

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"/>	GS0303				
		472703.116	3853766.443	191.676	191.734	191.731
				Urban Terrain	0.058	0.055
205)	<input checked="" type="checkbox"/>	GS0306				
		456488.873	3857719.842	203.128	203.007	203.018
				Urban Terrain	-0.121	-0.11
206)	<input checked="" type="checkbox"/>	GS0309				
		451500.513	3863529.356	222.67	222.602	222.595
				Urban Terrain	-0.068	-0.075
207)	<input checked="" type="checkbox"/>	GS0313				
		444415.111	3861457.228	207.824	207.754	207.748
				Urban Terrain	-0.07	-0.076
208)	<input checked="" type="checkbox"/>	GS0317				
		440182.04	3843413.471	160.853	160.74	160.737
				Urban Terrain	-0.113	-0.116
209)	<input checked="" type="checkbox"/>	GS0321				
		434432.973	3851947.848	179.832	179.914	179.887
				Urban Terrain	0.082	0.055
210)	<input checked="" type="checkbox"/>	GS0323				
		428804.656	3859435.53	173.643	173.628	173.643
				Urban Terrain	-0.015	0

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"/>	GS0329				
		422355.208	3839800.599	141.999	142.07	142.054
				Urban Terrain	0.071	0.055
212)	<input checked="" type="checkbox"/>	GS0332				
		428965.499	3841321.213	154.045	154.072	154.073
				Urban Terrain	0.027	0.028
213)	<input checked="" type="checkbox"/>	GS0333				
		428966.796	3841351.912	153.563	153.62	153.615
				Urban Terrain	0.057	0.052
214)	<input checked="" type="checkbox"/>	GS0337				
		473946.165	3817837.33	198.975	199.002	198.994
				Urban Terrain	0.027	0.019
215)	<input checked="" type="checkbox"/>	GS0345				
		467796.14	3799291.898	289.235	289.239	289.257
				Urban Terrain	0.004	0.022
216)	<input checked="" type="checkbox"/>	GS0346				
		473162.036	3815409.093	195.891	195.933	195.937
				Urban Terrain	0.042	0.046
217)	<input checked="" type="checkbox"/>	GS0347				
		466244.445	3816334.948	196.457	196.434	196.438
				Urban Terrain	-0.023	-0.019

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"/>	GS0374					
		581057.373	3581381.51	66.221	66.191	66.174	
				Urban Terrain	-0.03	-0.047	
219)	<input checked="" type="checkbox"/>	GS0384					
		583710.208	3557910.787	83.972	84.003	83.98	
				Urban Terrain	0.031	0.008	
220)	<input checked="" type="checkbox"/>	GS0386					
		588411.134	3550089.946	138.373	138.399	138.392	
				Urban Terrain	0.026	0.019	
221)	<input checked="" type="checkbox"/>	GS0393					
		568280.752	3551922.282	97.991	97.939	97.96	
				Urban Terrain	-0.052	-0.031	
222)	<input checked="" type="checkbox"/>	GS0402					
		560848.377	3570053.832	67.373	67.309	67.333	
				Urban Terrain	-0.064	-0.04	
223)	<input checked="" type="checkbox"/>	GS0405					
		550017.529	3572730.126	56.092	56.069	56.067	
				Urban Terrain	-0.023	-0.025	
224)	<input checked="" type="checkbox"/>	GS0410					
		534067.321	3569708.022	84.104	84.134	84.111	
				Urban Terrain	0.03	0.007	

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"/>	GS0411					
		534035.075	3569707.577	84.174	84.164	84.148	
				Urban Terrain	-0.01	-0.026	
226)	<input checked="" type="checkbox"/>	GS0420					
		518955.141	3564979.438	117.79	117.829	117.807	
				Urban Terrain	0.039	0.017	
227)	<input checked="" type="checkbox"/>	GS0423					
		514798.821	3557517.356	91.299	91.23	91.233	
				Urban Terrain	-0.069	-0.066	
228)	<input checked="" type="checkbox"/>	GS0428					
		518159.359	3546104.356	89.338	89.28	89.321	
				Urban Terrain	-0.058	-0.017	
229)	<input checked="" type="checkbox"/>	GS0431					
		503405.914	3540802.222	88.795	88.807	88.796	
				Urban Terrain	0.012	0.001	
230)	<input checked="" type="checkbox"/>	GS0434					
		522139.948	3542960.416	83.51	83.489	83.469	
				Urban Terrain	-0.021	-0.041	
231)	<input checked="" type="checkbox"/>	GS0435					
		522134.882	3543015.117	82.759	82.747	82.745	
				Urban Terrain	-0.012	-0.014	

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"/>	GS0444					
		540367.736	3559759.135	64.14	64.085	64.095	
				Urban Terrain	-0.055	-0.045	
233)	<input checked="" type="checkbox"/>	GS0446					
		544172.544	3566902.944	84.077	84.05	84.049	
				Urban Terrain	-0.027	-0.028	
234)	<input checked="" type="checkbox"/>	GS0449					
		499922.753	3541151.744	76.174	76.13	76.157	
				Urban Terrain	-0.044	-0.017	
235)	<input checked="" type="checkbox"/>	GS0456					
		481597.451	3539485.635	93.136	93.157	93.138	
				Urban Terrain	0.021	0.002	
236)	<input checked="" type="checkbox"/>	GS0460					
		473721.651	3539812.357	51.786	51.787	51.782	
				Urban Terrain	0.001	-0.004	
237)	<input checked="" type="checkbox"/>	GS0461					
		473693.698	3539789.05	51.991	51.999	51.994	
				Urban Terrain	0.008	0.003	
238)	<input checked="" type="checkbox"/>	GS0473					
		465664.493	3550804.048	41.934	41.91	41.904	
				Urban Terrain	-0.024	-0.03	

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"/>	GS0477					
		456654.628	3561823.171	61.263	61.236	61.223	
				Urban Terrain	-0.027	-0.04	
240)	<input checked="" type="checkbox"/>	GS0478					
		456629.868	3561808.939	60.928	60.92	60.91	
				Urban Terrain	-0.008	-0.018	
241)	<input checked="" type="checkbox"/>	GS0480					
		439687.618	3579108.021	74.085	74.075	74.05	
				Urban Terrain	-0.01	-0.035	
242)	<input checked="" type="checkbox"/>	GS0484					
		443358.65	3585833.127	75.557	75.48	75.473	
				Urban Terrain	-0.077	-0.084	
243)	<input checked="" type="checkbox"/>	GS0501					
		453006.564	3558742.494	49.647	49.642	49.633	
				Urban Terrain	-0.005	-0.014	
244)	<input checked="" type="checkbox"/>	GS0505					
		445695.563	3540088.305	54.141	54.122	54.114	
				Urban Terrain	-0.019	-0.027	
245)	<input checked="" type="checkbox"/>	GS0515					
		417798.575	3551191.538	45.784	45.777	45.776	
				Urban Terrain	-0.007	-0.008	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
246)	<input checked="" type="checkbox"/>	GS0519				
		412416.648	3550421.597	49.112	49.09	49.093
				Urban Terrain	-0.022	-0.019
247)	<input checked="" type="checkbox"/>	GS0534				
		426810.963	3560936.476	84.752	84.721	84.72
				Urban Terrain	-0.031	-0.032
248)	<input checked="" type="checkbox"/>	GS0536				
		420819.648	3578894.351	29.377	29.349	29.356
				Urban Terrain	-0.028	-0.021
249)	<input checked="" type="checkbox"/>	GS0539				
		415830.586	3583589.018	70.267	70.186	70.164
				Urban Terrain	-0.081	-0.103
250)	<input checked="" type="checkbox"/>	GS0543				
		421793.151	3596115.439	47.943	47.94	47.931
				Urban Terrain	-0.003	-0.012
251)	<input checked="" type="checkbox"/>	GS0545				
		615396.784	3871051.163	202.753	202.738	202.741
				Urban Terrain	-0.015	-0.012
252)	<input checked="" type="checkbox"/>	GS0546				
		631267.318	3840268.295	267.677	267.646	267.644
				Urban Terrain	-0.031	-0.033

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"/>	GS0547					
		634962.714	3760127.898	223.797	223.755	223.775	
				Urban Terrain	-0.042	-0.022	
254)	<input checked="" type="checkbox"/>	GS0548					
		653542.938	3710490.649	307.507	307.507	307.498	
				Urban Terrain	0	-0.01	
255)	<input checked="" type="checkbox"/>	GS0549					
		400437.459	3873865.109	220.655	220.462	220.46	
				Urban Terrain	-0.193	-0.195	
256)	<input checked="" type="checkbox"/>	GS0550					
		400197.313	3828214.588	221.179	221.131	221.12	
				Urban Terrain	-0.048	-0.059	
257)	<input checked="" type="checkbox"/>	GS0002					
		572502.329	3791433.996	313.072	313.127	313.089	
				High Vegetation	0.055	0.017	
258)	<input checked="" type="checkbox"/>	GS0008					
		564857.866	3784728.695	298.834	298.784	298.799	
				High Vegetation	-0.05	-0.035	
259)	<input checked="" type="checkbox"/>	GS0010					
		571236.896	3793967.561	316.265	316.287	316.281	
				High Vegetation	0.022	0.016	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
260)	<input checked="" type="checkbox"/>	GS0012					
		562916.594	3799203.516	184.594	184.618	184.621	
				High Vegetation	0.024	0.027	
261)	<input checked="" type="checkbox"/>	GS0014					
		559720.523	3802784.522	189.013	189.013	189.015	
				High Vegetation	0	0.002	
262)	<input checked="" type="checkbox"/>	GS0016					
		553286.331	3803947.235	311.825	311.871	311.863	
				High Vegetation	0.046	0.038	
263)	<input checked="" type="checkbox"/>	GS0029					
		568639.172	3821408.298	372.828	372.812	372.806	
				High Vegetation	-0.016	-0.022	
264)	<input checked="" type="checkbox"/>	GS0031					
		575956.419	3831487.574	196.996	197.065	197.07	
				High Vegetation	0.069	0.074	
265)	<input checked="" type="checkbox"/>	GS0034					
		574449.141	3836959.817	187.56	187.561	187.57	
				High Vegetation	0.001	0.01	
266)	<input checked="" type="checkbox"/>	GS0044					
		587537.75	3856058.478	513.202	513.132	513.131	
				High Vegetation	-0.07	-0.071	

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"/>	GS0048					
		594034.628	3852354.139	189.882	189.885	189.878	
				High Vegetation	0.003	-0.004	
268)	<input checked="" type="checkbox"/>	GS0058					
		579879.741	3816893.445	202.857	202.918	202.926	
				High Vegetation	0.061	0.069	
269)	<input checked="" type="checkbox"/>	GS0060					
		575049.234	3807817.085	184.44	184.452	184.423	
				High Vegetation	0.012	-0.017	
270)	<input checked="" type="checkbox"/>	GS0072					
		606387.042	3818585.62	401.216	401.177	401.174	
				High Vegetation	-0.039	-0.042	
271)	<input checked="" type="checkbox"/>	GS0075					
		600750.856	3812364.94	386.676	386.699	386.699	
				High Vegetation	0.023	0.023	
272)	<input checked="" type="checkbox"/>	GS0085					
		551263.835	3778065.749	267.182	267.192	267.198	
				High Vegetation	0.01	0.016	
273)	<input checked="" type="checkbox"/>	GS0087					
		544421.386	3780763.163	256.815	256.873	256.877	
				High Vegetation	0.058	0.062	

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"/>	GS0092					
		532737.261	3803389.091	183.01	183.11	183.086	
				High Vegetation	0.1	0.076	
275)	<input checked="" type="checkbox"/>	GS0100					
		554405.182	3772776.254	239.139	239.329	239.336	
				High Vegetation	0.19	0.197	
276)	<input checked="" type="checkbox"/>	GS0105					
		548699.58	3756620.18	261.976	262.079	262.078	
				High Vegetation	0.103	0.102	
277)	<input checked="" type="checkbox"/>	GS0109					
		529703.877	3755381.223	133.888	133.954	133.945	
				High Vegetation	0.066	0.057	
278)	<input checked="" type="checkbox"/>	GS0112					
		534971.813	3752385.31	167.657	167.677	167.681	
				High Vegetation	0.02	0.024	
279)	<input checked="" type="checkbox"/>	GS0129					
		560373.298	3731829.128	216.877	216.863	216.87	
				High Vegetation	-0.014	-0.007	
280)	<input checked="" type="checkbox"/>	GS0130					
		562277.282	3735180.732	194.422	194.448	194.449	
				High Vegetation	0.026	0.027	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
281)	<input checked="" type="checkbox"/>	GS0133				
		566849.899	3738097.527	185.396	185.555	185.532
				High Vegetation	0.159	0.136
282)	<input checked="" type="checkbox"/>	GS0140				
		571003.856	3752907.631	192.935	193.026	193.001
				High Vegetation	0.091	0.066
283)	<input checked="" type="checkbox"/>	GS0153				
		614296.404	3743933.29	213.656	213.682	213.682
				High Vegetation	0.026	0.026
284)	<input checked="" type="checkbox"/>	GS0156				
		616410.476	3738866.343	257.802	257.867	257.803
				High Vegetation	0.065	0.001
285)	<input checked="" type="checkbox"/>	GS0161				
		634099.171	3723079.483	316.354	316.338	316.325
				High Vegetation	-0.016	-0.029
286)	<input checked="" type="checkbox"/>	GS0162				
		634069.507	3723087.469	316.305	316.29	316.29
				High Vegetation	-0.015	-0.015
287)	<input checked="" type="checkbox"/>	GS0165				
		630360.787	3721750.254	287.553	287.66	287.655
				High Vegetation	0.107	0.102

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
288)	<input checked="" type="checkbox"/>	GS0170					
		622412.693	3717035.796	307.348	307.336	307.326	
				High Vegetation	-0.012	-0.022	
289)	<input checked="" type="checkbox"/>	GS0183					
		587292.292	3730351.777	151.101	151.101	151.141	
				High Vegetation	0	0.04	
290)	<input checked="" type="checkbox"/>	GS0192					
		581080.668	3710709.737	174.424	174.427	174.412	
				High Vegetation	0.003	-0.012	
291)	<input checked="" type="checkbox"/>	GS0195					
		580405.542	3698859.025	178.174	178.19	178.194	
				High Vegetation	0.016	0.02	
292)	<input checked="" type="checkbox"/>	GS0198					
		575274.798	3700259.848	183.951	183.918	183.943	
				High Vegetation	-0.033	-0.008	
293)	<input checked="" type="checkbox"/>	GS0200					
		573096.321	3694813.261	176.906	176.893	176.927	
				High Vegetation	-0.013	0.021	
294)	<input checked="" type="checkbox"/>	GS0202					
		571246.574	3690464.587	138.207	138.218	138.23	
				High Vegetation	0.011	0.023	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
295)	<input checked="" type="checkbox"/>	GS0206				
		574568.192	3687363.166	155.557	155.603	155.639
				High Vegetation	0.046	0.082
296)	<input checked="" type="checkbox"/>	GS0214				
		561622.348	3678991.57	145.968	145.951	145.998
				High Vegetation	-0.017	0.03
297)	<input checked="" type="checkbox"/>	GS0216				
		579328.52	3671276.111	260.054	260.155	260.146
				High Vegetation	0.101	0.092
298)	<input checked="" type="checkbox"/>	GS0235				
		599005.299	3687323.144	321.449	321.48	321.485
				High Vegetation	0.031	0.036
299)	<input checked="" type="checkbox"/>	GS0238				
		612724.398	3677926.761	336.676	336.674	336.712
				High Vegetation	-0.002	0.036
300)	<input checked="" type="checkbox"/>	GS0240				
		617005.477	3674197.115	293.971	293.971	294.039
				High Vegetation	0	0.068
301)	<input checked="" type="checkbox"/>	GS0262				
		539008.93	3814717.009	367.456	367.456	367.444
				High Vegetation	0	-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
302)	<input checked="" type="checkbox"/>	GS0291				
		462959.14	3837833.974	171.626	171.674	171.672
				High Vegetation	0.048	0.046
303)	<input checked="" type="checkbox"/>	GS0301				
		472731.67	3853765.233	192.234	192.33	192.326
				High Vegetation	0.096	0.092
304)	<input checked="" type="checkbox"/>	GS0305				
		456508.196	3857743.33	203.767	203.736	203.702
				High Vegetation	-0.031	-0.066
305)	<input checked="" type="checkbox"/>	GS0316				
		440213.14	3843421.005	160.539	160.428	160.42
				High Vegetation	-0.111	-0.119
306)	<input checked="" type="checkbox"/>	GS0319				
		438181.465	3849905.971	128.99	128.908	128.92
				High Vegetation	-0.082	-0.071
307)	<input checked="" type="checkbox"/>	GS0322				
		428771.849	3859441.788	172.737	172.77	172.758
				High Vegetation	0.033	0.021
308)	<input checked="" type="checkbox"/>	GS0340				
		475828.561	3809888.546	200.649	200.743	200.739
				High Vegetation	0.094	0.09

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"/>	GS0343					
		471248.24	3808108.965	306.835	306.871	306.88	
				High Vegetation	0.036	0.045	
310)	<input checked="" type="checkbox"/>	GS0366					
		569905.872	3583739.015	65.585	65.621	65.614	
				High Vegetation	0.036	0.029	
311)	<input checked="" type="checkbox"/>	GS0368					
		568399.37	3581377.341	72.849	72.839	72.845	
				High Vegetation	-0.01	-0.004	
312)	<input checked="" type="checkbox"/>	GS0373					
		581049.295	3581410.641	66.604	66.589	66.568	
				High Vegetation	-0.015	-0.036	
313)	<input checked="" type="checkbox"/>	GS0375					
		588488.573	3577821.009	77.776	77.782	77.806	
				High Vegetation	0.006	0.03	
314)	<input checked="" type="checkbox"/>	GS0379					
		578820.686	3570806.548	65.064	65.074	65.084	
				High Vegetation	0.01	0.02	
315)	<input checked="" type="checkbox"/>	GS0382					
		583225.66	3562253.778	84.547	84.568	84.578	
				High Vegetation	0.021	0.031	

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"/>	GS0383					
		583688.089	3557939.627	83.754	83.717	83.76	
				High Vegetation	-0.037	0.006	
317)	<input checked="" type="checkbox"/>	GS0388					
		590704.044	3545364.616	143.805	143.832	143.806	
				High Vegetation	0.027	0.001	
318)	<input checked="" type="checkbox"/>	GS0391					
		576075.005	3546481.954	137.726	137.832	137.806	
				High Vegetation	0.106	0.08	
319)	<input checked="" type="checkbox"/>	GS0394					
		556635.795	3553484.687	90.338	90.326	90.341	
				High Vegetation	-0.012	0.003	
320)	<input checked="" type="checkbox"/>	GS0400					
		561734.626	3567122.173	76.611	76.575	76.578	
				High Vegetation	-0.036	-0.033	
321)	<input checked="" type="checkbox"/>	GS0406					
		550001.386	3572754.302	55.987	55.992	55.973	
				High Vegetation	0.005	-0.014	
322)	<input checked="" type="checkbox"/>	GS0429					
		508223.66	3539547.022	63.635	63.633	63.617	
				High Vegetation	-0.002	-0.018	

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"/>	GS0432					
		503433.928	3540782.301	87.44	87.493	87.485	
				High Vegetation	0.053	0.045	
324)	<input checked="" type="checkbox"/>	GS0437					
		526266.158	3537846.134	95.172	95.201	95.195	
				High Vegetation	0.029	0.023	
325)	<input checked="" type="checkbox"/>	GS0439					
		528170.626	3547274.52	99.994	99.983	99.993	
				High Vegetation	-0.011	-0.001	
326)	<input checked="" type="checkbox"/>	GS0450					
		499942.222	3541163.204	76.374	76.404	76.418	
				High Vegetation	0.03	0.044	
327)	<input checked="" type="checkbox"/>	GS0454					
		487789.147	3539125.573	66.997	66.996	67.029	
				High Vegetation	-0.001	0.032	
328)	<input checked="" type="checkbox"/>	GS0455					
		481636.235	3539478.938	93.079	93.085	93.128	
				High Vegetation	0.006	0.049	
329)	<input checked="" type="checkbox"/>	GS0464					
		468121.829	3538299.802	43.377	43.414	43.436	
				High Vegetation	0.037	0.059	

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"/>	GS0465					
		468155.134	3538300.766	43.217	43.317	43.307	
				High Vegetation	0.1	0.09	
331)	<input checked="" type="checkbox"/>	GS0472					
		465677.463	3550782.129	41.746	41.831	41.815	
				High Vegetation	0.085	0.069	
332)	<input checked="" type="checkbox"/>	GS0474					
		465638.739	3550793.607	41.857	41.738	41.827	
				High Vegetation	-0.119	-0.03	
333)	<input checked="" type="checkbox"/>	GS0476					
		456656.89	3561792.963	59.352	59.42	59.395	
				High Vegetation	0.068	0.043	
334)	<input checked="" type="checkbox"/>	GS0481					
		439717.661	3579050.751	73.145	73.186	73.159	
				High Vegetation	0.041	0.014	
335)	<input checked="" type="checkbox"/>	GS0482					
		443407.076	3585841.472	74.2	74.285	74.231	
				High Vegetation	0.085	0.031	
336)	<input checked="" type="checkbox"/>	GS0488					
		444219.458	3592032.6	62.366	62.359	62.354	
				High Vegetation	-0.007	-0.012	

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"/>	GS0493					
		441133.87	3569978.198	50.497	50.529	50.536	
				High Vegetation	0.032	0.039	
338)	<input checked="" type="checkbox"/>	GS0500					
		452996.013	3558772.357	49.451	49.518	49.484	
				High Vegetation	0.067	0.033	
339)	<input checked="" type="checkbox"/>	GS0502					
		445644.81	3549448.938	41.105	41.184	41.157	
				High Vegetation	0.079	0.052	
340)	<input checked="" type="checkbox"/>	GS0504					
		445630.947	3549504.288	41.806	41.887	41.882	
				High Vegetation	0.081	0.076	
341)	<input checked="" type="checkbox"/>	GS0513					
		417804.757	3551167.168	45.676	45.743	45.716	
				High Vegetation	0.067	0.04	
342)	<input checked="" type="checkbox"/>	GS0514					
		417834.443	3551172.094	46.889	46.858	46.874	
				High Vegetation	-0.031	-0.015	
343)	<input checked="" type="checkbox"/>	GS0520					
		409684.692	3560262.52	44.629	44.703	44.718	
				High Vegetation	0.074	0.089	

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"/>	GS0524					
		412220.856	3568037.864	57.439	57.473	57.424	
				High Vegetation	0.034	-0.015	
345)	<input checked="" type="checkbox"/>	GS0527					
		425148.526	3572285.584	41.959	41.986	42.011	
				High Vegetation	0.027	0.052	
346)	<input checked="" type="checkbox"/>	GS0531					
		426773.38	3560926.734	83.735	83.82	83.806	
				High Vegetation	0.085	0.071	
347)	<input checked="" type="checkbox"/>	GS0535					
		420850.133	3578913.615	29.694	29.729	29.734	
				High Vegetation	0.035	0.04	
348)	<input checked="" type="checkbox"/>	GS0542					
		421764.193	3596097.183	48.078	48.078	48.107	
				High Vegetation	0	0.029	
349)	<input checked="" type="checkbox"/>	GS0037					
		580448.89	3844300.334	227.201	227.263	227.276	
				Low Vegetation	0.062	0.075	
350)	<input checked="" type="checkbox"/>	GS0053					
		594178.781	3832716.424	182.159	182.129	182.155	
				Low Vegetation	-0.03	-0.004	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
351)	<input checked="" type="checkbox"/>	GS0123					
		549999.223	3736482.465	211.652	211.781	211.784	
				Low Vegetation	0.129	0.132	
352)	<input checked="" type="checkbox"/>	GS0124					
		550025.574	3736480.056	211.476	211.61	211.612	
				Low Vegetation	0.134	0.136	
353)	<input checked="" type="checkbox"/>	GS0137					
		565832.204	3747385.845	180.48	180.609	180.62	
				Low Vegetation	0.129	0.14	
354)	<input checked="" type="checkbox"/>	GS0146					
		600365.354	3746326.512	164.859	164.826	164.881	
				Low Vegetation	-0.033	0.022	
355)	<input checked="" type="checkbox"/>	GS0179					
		590412.68	3720846.57	188.59	188.601	188.62	
				Low Vegetation	0.011	0.03	
356)	<input checked="" type="checkbox"/>	GS0188					
		581579.858	3717479.267	169.462	169.47	169.522	
				Low Vegetation	0.008	0.06	
357)	<input checked="" type="checkbox"/>	GS0193					
		581766.268	3704400.793	175.694	175.696	175.729	
				Low Vegetation	0.002	0.035	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
358)	<input checked="" type="checkbox"/>	GS0222					
		595882.593	3674883.648	290.687	290.76	290.737	
				Low Vegetation	0.073	0.05	
359)	<input checked="" type="checkbox"/>	GS0224					
		598715.112	3711039.456	187.639	187.656	187.673	
				Low Vegetation	0.017	0.033	
360)	<input checked="" type="checkbox"/>	GS0229					
		588326.648	3702089.42	174.821	174.906	174.906	
				Low Vegetation	0.085	0.085	
361)	<input checked="" type="checkbox"/>	GS0245					
		618800.383	3691136.045	318.033	318.123	318.128	
				Low Vegetation	0.09	0.095	
362)	<input checked="" type="checkbox"/>	GS0247					
		614206.758	3693309.354	341.893	341.876	341.871	
				Low Vegetation	-0.017	-0.022	
363)	<input checked="" type="checkbox"/>	GS0264					
		528149.14	3814833.485	188.945	188.917	188.925	
				Low Vegetation	-0.028	-0.02	
364)	<input checked="" type="checkbox"/>	GS0267					
		522628.585	3811686.724	185.621	185.655	185.661	
				Low Vegetation	0.034	0.04	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
365)	<input checked="" type="checkbox"/>	GS0269					
		512399.167	3811823.601	215.078	215.141	215.127	
				Low Vegetation	0.063	0.049	
366)	<input checked="" type="checkbox"/>	GS0271					
		512336.264	3811839.465	214.029	214.104	214.093	
				Low Vegetation	0.075	0.064	
367)	<input checked="" type="checkbox"/>	GS0275					
		508318.804	3821644.996	186.106	186.197	186.175	
				Low Vegetation	0.091	0.069	
368)	<input checked="" type="checkbox"/>	GS0288					
		471585.686	3838249.888	175.393	175.627	175.592	
				Low Vegetation	0.234	0.199	
369)	<input checked="" type="checkbox"/>	GS0300					
		464194.206	3856268.095	194.465	194.559	194.536	
				Low Vegetation	0.094	0.071	
370)	<input checked="" type="checkbox"/>	GS0308					
		451531.518	3863530.779	222.611	222.577	222.582	
				Low Vegetation	-0.034	-0.029	
371)	<input checked="" type="checkbox"/>	GS0310					
		451754.253	3868612.584	227.333	227.292	227.307	
				Low Vegetation	-0.041	-0.026	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
				LC Type	ΔZ DEM	ΔZ LAS	
372)	<input checked="" type="checkbox"/>	GS0328					
		422331.605	3839779.576	142.148	142.207	142.213	
				Low Vegetation	0.059	0.065	
373)	<input checked="" type="checkbox"/>	GS0336					
		473963.116	3817809.007	198.808	198.945	198.944	
				Low Vegetation	0.137	0.135	
374)	<input checked="" type="checkbox"/>	GS0348					
		466260.42	3816369.053	195.815	195.891	195.895	
				Low Vegetation	0.076	0.08	
375)	<input checked="" type="checkbox"/>	GS0349					
		459046.326	3815946.874	196.163	196.307	196.293	
				Low Vegetation	0.144	0.13	
376)	<input checked="" type="checkbox"/>	GS0352					
		437945.137	3827448.785	207.919	207.878	207.88	
				Low Vegetation	-0.041	-0.039	
377)	<input checked="" type="checkbox"/>	GS0353					
		440271.139	3833473.506	147.291	147.192	147.198	
				Low Vegetation	-0.099	-0.093	
378)	<input checked="" type="checkbox"/>	GS0363					
		555787.545	3717147.48	176.496	176.535	176.54	
				Low Vegetation	0.039	0.044	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
379)	<input checked="" type="checkbox"/>	GS0364					
		562897.246	3717889.984	157.301	157.357	157.334	
				Low Vegetation	0.056	0.033	
380)	<input checked="" type="checkbox"/>	GS0398					
		555004.467	3562142.891	83.168	83.347	83.291	
				Low Vegetation	0.179	0.123	
381)	<input checked="" type="checkbox"/>	GS0412					
		527567.366	3570092.034	48.551	48.598	48.573	
				Low Vegetation	0.047	0.022	
382)	<input checked="" type="checkbox"/>	GS0414					
		527636.223	3570095.668	48.512	48.638	48.599	
				Low Vegetation	0.126	0.087	
383)	<input checked="" type="checkbox"/>	GS0440					
		532562.646	3554547.323	66.917	66.978	66.97	
				Low Vegetation	0.061	0.053	
384)	<input checked="" type="checkbox"/>	GS0458					
		481543.328	3539499.639	93.338	93.433	93.396	
				Low Vegetation	0.095	0.058	
385)	<input checked="" type="checkbox"/>	GS0468					
		465389.629	3530404.522	80.032	80.062	80.088	
				Low Vegetation	0.03	0.055	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
386)	<input checked="" type="checkbox"/>	GS0487					
		444231.828	3592090.751	59.784	59.781	59.814	
				Low Vegetation	-0.003	0.03	
387)	<input checked="" type="checkbox"/>	GS0491					
		441134.653	3569942.65	50.02	50.058	50.07	
				Low Vegetation	0.038	0.05	
388)	<input checked="" type="checkbox"/>	GS0492					
		441155.719	3569959.282	50.064	50.11	50.134	
				Low Vegetation	0.046	0.07	
389)	<input checked="" type="checkbox"/>	GS0496					
		446818.896	3554231.138	40.097	40.139	40.137	
				Low Vegetation	0.042	0.04	
390)	<input checked="" type="checkbox"/>	GS0497					
		446817.106	3554199.601	39.651	39.842	39.77	
				Low Vegetation	0.191	0.119	
391)	<input checked="" type="checkbox"/>	GS0528					
		425176.157	3572252.734	42.852	42.984	42.956	
				Low Vegetation	0.132	0.104	
392)	<input checked="" type="checkbox"/>	GS0009					
		571248.758	3793997.937	316.358	316.334	316.347	
				Medium Vegetation	-0.024	-0.011	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
393)	<input checked="" type="checkbox"/>	GS0019					
		547557.746	3808644.778	313.213	313.268	313.238	
				Medium Vegetation	0.055	0.025	
394)	<input checked="" type="checkbox"/>	GS0022					
		543057.274	3811785.528	322.692	322.78	322.789	
				Medium Vegetation	0.088	0.097	
395)	<input checked="" type="checkbox"/>	GS0028					
		568662.112	3821419.574	372.161	372.139	372.158	
				Medium Vegetation	-0.022	-0.003	
396)	<input checked="" type="checkbox"/>	GS0049					
		594036.587	3852326.327	190.135	190.135	190.134	
				Medium Vegetation	0	-0.001	
397)	<input checked="" type="checkbox"/>	GS0065					
		593010.059	3794366.942	349.139	349.162	349.118	
				Medium Vegetation	0.023	-0.021	
398)	<input checked="" type="checkbox"/>	GS0067					
		603428.804	3793196.305	214.864	214.894	214.907	
				Medium Vegetation	0.03	0.043	
399)	<input checked="" type="checkbox"/>	GS0069					
		608500.177	3798442.642	230.998	231.041	231.063	
				Medium Vegetation	0.043	0.065	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID						
		Survey X	Survey Y	Z1	Z DEM	Z LAS	
				LC Type	ΔZ DEM	ΔZ LAS	
400)	<input checked="" type="checkbox"/>	GS0071					
		614204.644	3807557.633	273.66	273.685	273.699	
				Medium Vegetation	0.025	0.039	
401)	<input checked="" type="checkbox"/>	GS0078					
		591700.509	3803292.901	357.734	357.711	357.711	
				Medium Vegetation	-0.023	-0.023	
402)	<input checked="" type="checkbox"/>	GS0082					
		586992.071	3799235.258	336.116	336.132	336.125	
				Medium Vegetation	0.016	0.009	
403)	<input checked="" type="checkbox"/>	GS0083					
		578401.57	3795801.048	323.616	323.681	323.701	
				Medium Vegetation	0.065	0.085	
404)	<input checked="" type="checkbox"/>	GS0084					
		578428.035	3795776.672	324.534	324.568	324.553	
				Medium Vegetation	0.034	0.019	
405)	<input checked="" type="checkbox"/>	GS0090					
		543292.192	3784063.932	253.863	253.861	253.853	
				Medium Vegetation	-0.002	-0.01	
406)	<input checked="" type="checkbox"/>	GS0091					
		543268.006	3784092.05	253.168	253.194	253.168	
				Medium Vegetation	0.026	0	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
407)	<input checked="" type="checkbox"/>	GS0102					
		551768.649	3761724.946	228.024	228.035	228.072	
				Medium Vegetation	0.011	0.048	
408)	<input checked="" type="checkbox"/>	GS0118					
		538837.446	3744177.725	190.822	190.879	190.891	
				Medium Vegetation	0.057	0.069	
409)	<input checked="" type="checkbox"/>	GS0121					
		547482.091	3738844.774	226.099	226.234	226.214	
				Medium Vegetation	0.135	0.115	
410)	<input checked="" type="checkbox"/>	GS0135					
		568910.369	3744344.299	172.609	172.71	172.724	
				Medium Vegetation	0.101	0.115	
411)	<input checked="" type="checkbox"/>	GS0149					
		606028.598	3745909.888	176.078	176.079	176.117	
				Medium Vegetation	0.001	0.039	
412)	<input checked="" type="checkbox"/>	GS0151					
		609953.631	3744105.09	192.354	192.406	192.403	
				Medium Vegetation	0.052	0.049	
413)	<input checked="" type="checkbox"/>	GS0174					
		603875.273	3717684.061	201.148	201.213	201.175	
				Medium Vegetation	0.065	0.027	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID						
		Survey X	Survey Y	Z1	Z DEM	Z LAS	
				LC Type	ΔZ DEM	ΔZ LAS	
414)	<input checked="" type="checkbox"/>	GS0176					
		592743.572	3718657.414	173.479	173.486	173.47	
				Medium Vegetation	0.007	-0.009	
415)	<input checked="" type="checkbox"/>	GS0185					
		583085.711	3721737.729	155.683	155.749	155.743	
				Medium Vegetation	0.066	0.06	
416)	<input checked="" type="checkbox"/>	GS0209					
		568664.281	3670061.769	172.397	172.516	172.481	
				Medium Vegetation	0.119	0.084	
417)	<input checked="" type="checkbox"/>	GS0211					
		564990.416	3672980.124	175.009	175.031	175.037	
				Medium Vegetation	0.022	0.028	
418)	<input checked="" type="checkbox"/>	GS0250					
		613307.729	3698412.939	301.739	301.704	301.696	
				Medium Vegetation	-0.035	-0.043	
419)	<input checked="" type="checkbox"/>	GS0254					
		612804.583	3719530.59	190.552	190.596	190.595	
				Medium Vegetation	0.044	0.043	
420)	<input checked="" type="checkbox"/>	GS0258					
		607855.558	3719776.208	201.942	202.008	202.003	
				Medium Vegetation	0.066	0.06	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
421)	<input checked="" type="checkbox"/>	GS0272				
		508866.338	3808248.949	188.885	188.908	188.916
				Medium Vegetation	0.023	0.031
422)	<input checked="" type="checkbox"/>	GS0279				
		501076.523	3824483.436	180.932	180.915	180.91
				Medium Vegetation	-0.017	-0.022
423)	<input checked="" type="checkbox"/>	GS0283				
		491915.887	3831692.743	187.571	187.636	187.645
				Medium Vegetation	0.065	0.074
424)	<input checked="" type="checkbox"/>	GS0285				
		477514.426	3834479.548	182.433	182.467	182.467
				Medium Vegetation	0.034	0.034
425)	<input checked="" type="checkbox"/>	GS0293				
		462897.421	3845823.357	178.673	178.766	178.77
				Medium Vegetation	0.093	0.097
426)	<input checked="" type="checkbox"/>	GS0325				
		421562.137	3843588.804	138.381	138.412	138.436
				Medium Vegetation	0.031	0.055
427)	<input checked="" type="checkbox"/>	GS0338				
		480628.993	3811245.47	197.847	197.866	197.906
				Medium Vegetation	0.019	0.059

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
				LC Type	ΔZ DEM	ΔZ LAS	
428)	<input checked="" type="checkbox"/>	GS0359					
		514212.291	3750185.79	165.431	165.423	165.41	
				Medium Vegetation	-0.008	-0.021	
429)	<input checked="" type="checkbox"/>	GS0360					
		514240.718	3750170.342	165.83	165.819	165.822	
				Medium Vegetation	-0.011	-0.008	
430)	<input checked="" type="checkbox"/>	GS0361					
		548373.349	3715109.069	215.444	215.476	215.434	
				Medium Vegetation	0.032	-0.01	
431)	<input checked="" type="checkbox"/>	GS0370					
		565081.442	3581481.685	82.41	82.41	82.371	
				Medium Vegetation	0	-0.039	
432)	<input checked="" type="checkbox"/>	GS0377					
		586503.593	3572540.262	92.094	92.144	92.158	
				Medium Vegetation	0.05	0.064	
433)	<input checked="" type="checkbox"/>	GS0419					
		518952.914	3564951.184	117.469	117.479	117.488	
				Medium Vegetation	0.01	0.019	
434)	<input checked="" type="checkbox"/>	GS0459					
		473716.587	3539784.983	51.386	51.443	51.436	
				Medium Vegetation	0.057	0.05	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
				LC Type	ΔZ DEM	ΔZ LAS	
435)	<input checked="" type="checkbox"/>	GS0463					
		468114.755	3538269.361	43.463	43.51	43.528	
				Medium Vegetation	0.047	0.065	
436)	<input checked="" type="checkbox"/>	GS0470					
		468047.105	3542445.385	50.358	50.317	50.36	
				Medium Vegetation	-0.041	0.002	
437)	<input checked="" type="checkbox"/>	GS0486					
		444217.968	3592063.267	61.416	61.432	61.426	
				Medium Vegetation	0.016	0.01	
438)	<input checked="" type="checkbox"/>	GS0509					
		425910.026	3546842.526	60.283	60.541	60.47	
				Medium Vegetation	0.258	0.187	
439)	<input checked="" type="checkbox"/>	GS0510					
		425873.341	3546826.807	60.213	60.281	60.294	
				Medium Vegetation	0.068	0.081	
440)	<input checked="" type="checkbox"/>	GS0512					
		425926.63	3546857.221	60.802	60.936	60.914	
				Medium Vegetation	0.134	0.112	
441)	<input checked="" type="checkbox"/>	GS0516					
		412316.914	3550433.471	45.673	45.689	45.72	
				Medium Vegetation	0.016	0.047	

LAS

Nonvegetated Vertical Accuracy

LandCover Type: Bare Earth, Urban Terrain

Minimum DZ: -0.195

Maximum DZ: 0.125

Mean DZ: -0.004

Mean Magnitude DZ: 0.175

Number Observations: 256

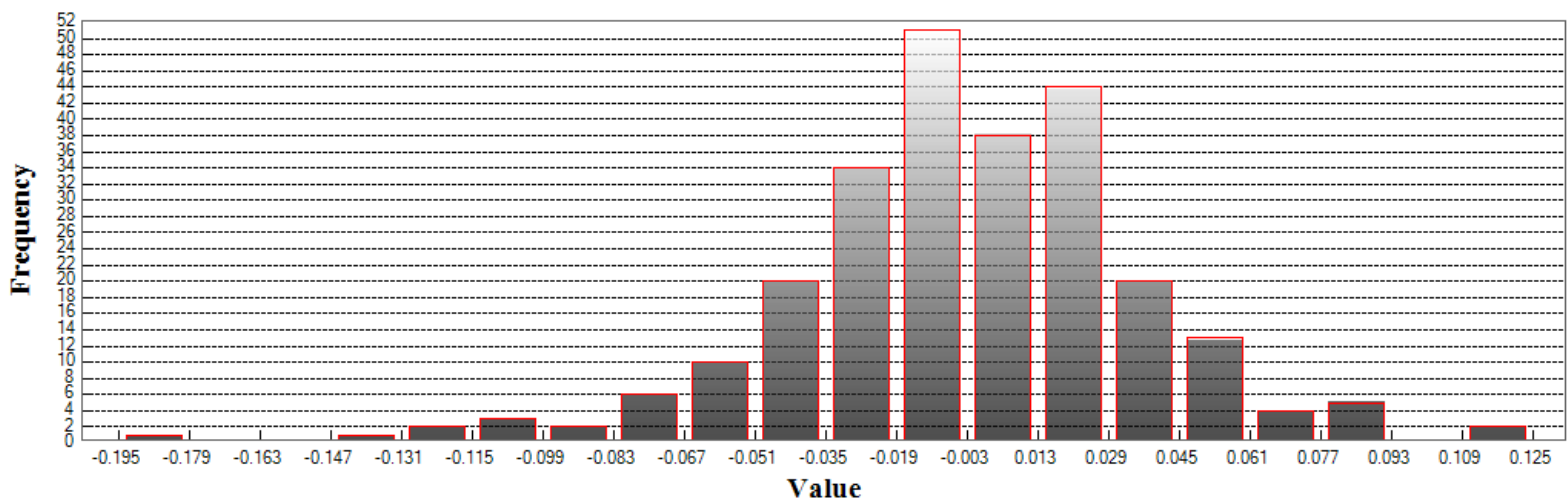
Standard Deviation DZ: 0.041

RMSE Z: 0.041

95% Confidence Level Z: 0.081

Units: Meters

Histogram



Min: -0.195
 Max: 0.125
 Number Of Bins: 20
 Bin Interval: 0.016

LAS (Continued)

Vegetated Vertical Accuracy

LandCover Type: High Vegetation

Minimum DZ: -0.119

Maximum DZ: 0.197

Mean DZ: 0.026

Mean Magnitude DZ: 0.205

Number Observations: 92

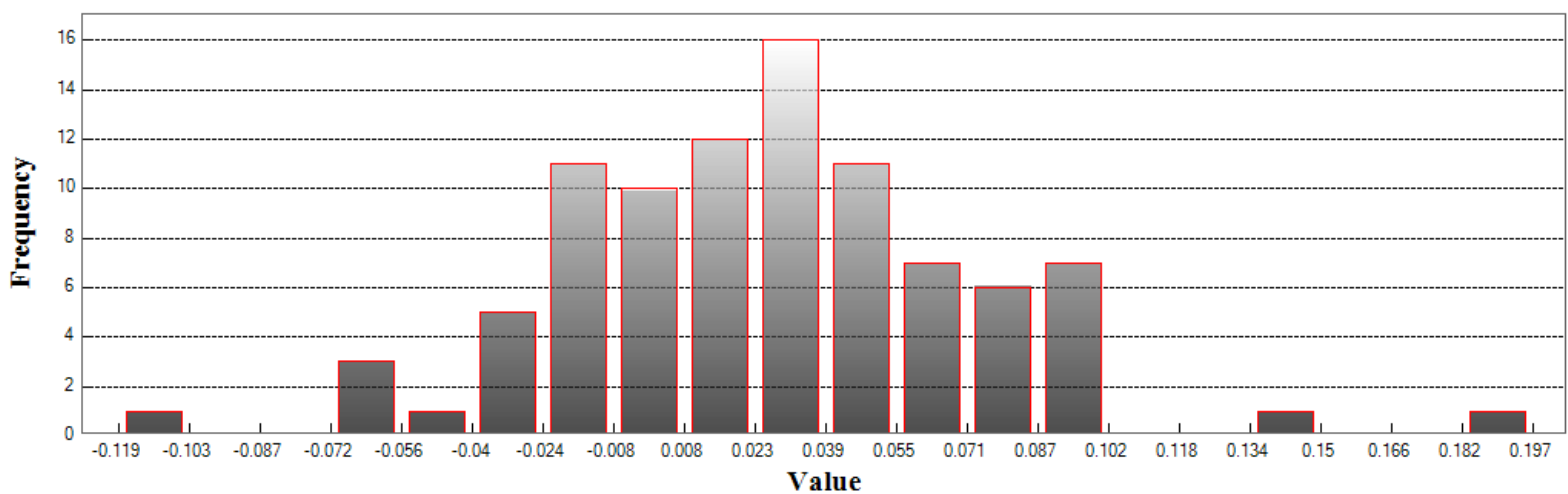
Standard Deviation DZ: 0.047

RMSE Z: 0.054

95th Percentile: 0.092

Units: Meters

Histogram



Min: -0.119

Max: 0.197

Number Of Bins: 20

Bin Interval: 0.016

LAS (Continued)

Vegetated Vertical Accuracy

LandCover Type: Low Vegetation

Minimum DZ: -0.093

Maximum DZ: 0.199

Mean DZ: 0.057

Mean Magnitude DZ: 0.26

Number Observations: 43

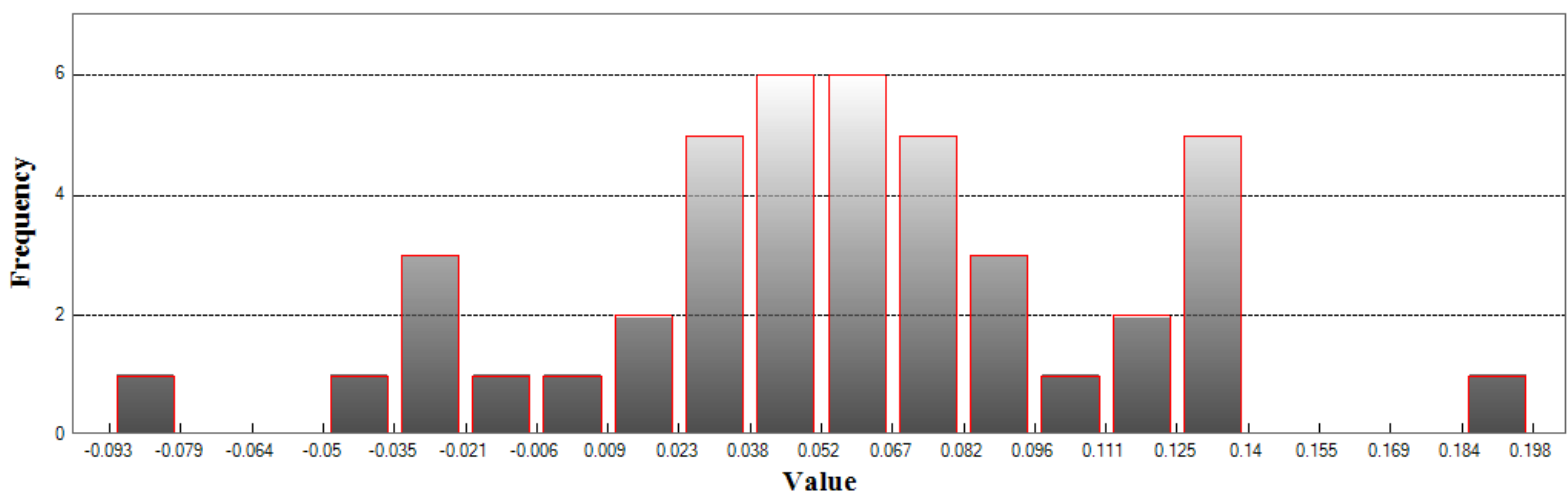
Standard Deviation DZ: 0.056

RMSE Z: 0.08

95th Percentile: 0.136

Units: Meters

Histogram



Min: -0.093

Max: 0.199

Number Of Bins: 20

Bin Interval: 0.015

LAS (Continued)

Vegetated Vertical Accuracy

LandCover Type: Medium Vegetation

Minimum DZ: -0.043

Maximum DZ: 0.187

Mean DZ: 0.038

Mean Magnitude DZ: 0.216

Number Observations: 50

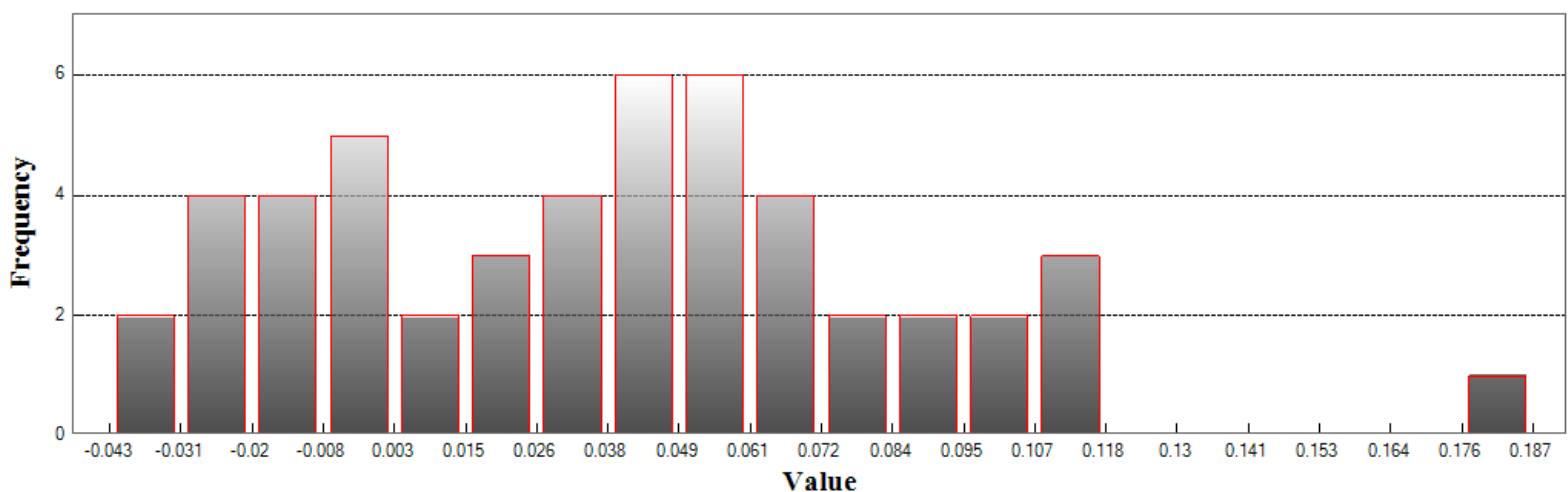
Standard Deviation DZ: 0.046

RMSE Z: 0.06

95th Percentile: 0.115

Units: Meters

Histogram



Min: -0.043

Max: 0.187

Number Of Bins: 20

Bin Interval: 0.011

DEM

Nonvegetated Vertical Accuracy

LandCover Type: Bare Earth, Urban Terrain

Minimum DZ: -0.193

Maximum DZ: 0.124

Mean DZ: -0.003

Mean Magnitude DZ: 0.183

Number Observations: 256

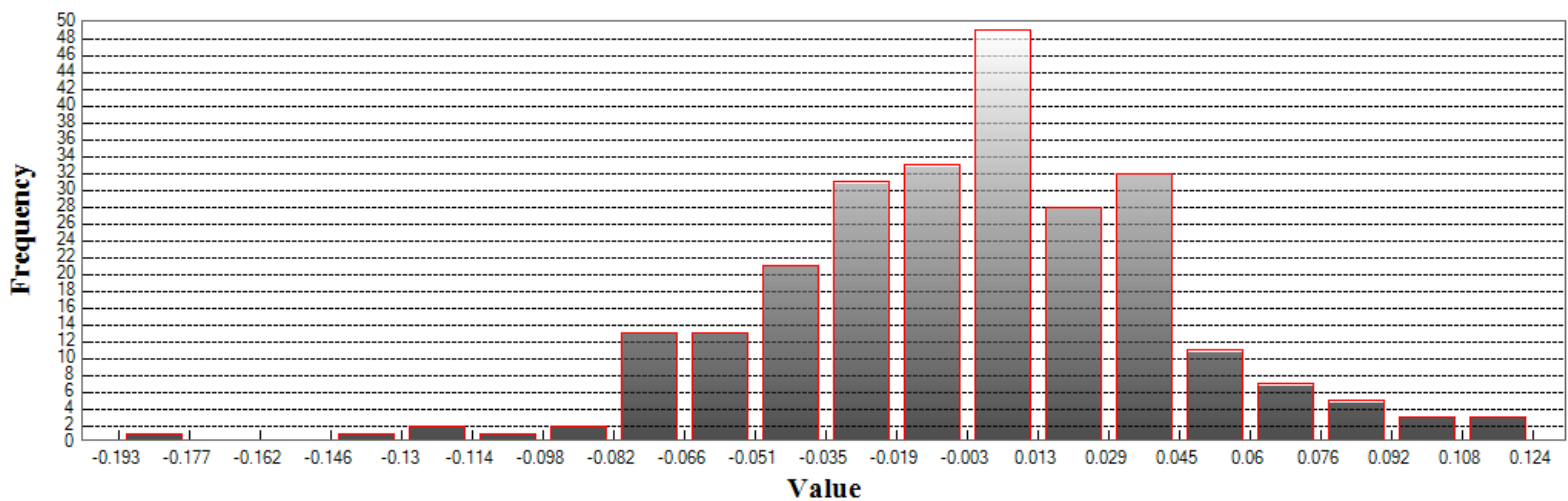
Standard Deviation DZ: 0.045

RMSE Z: 0.044

95% Confidence Level Z: 0.087

Units: Meters

Histogram



Min: -0.193
 Max: 0.124
 Number Of Bins: 20
 Bin Interval: 0.016

DEM (Continued)

Vegetated Vertical Accuracy

LandCover Type: High Vegetation

Minimum DZ: -0.119

Maximum DZ: 0.19

Mean DZ: 0.026

Mean Magnitude DZ: 0.208

Number Observations: 92

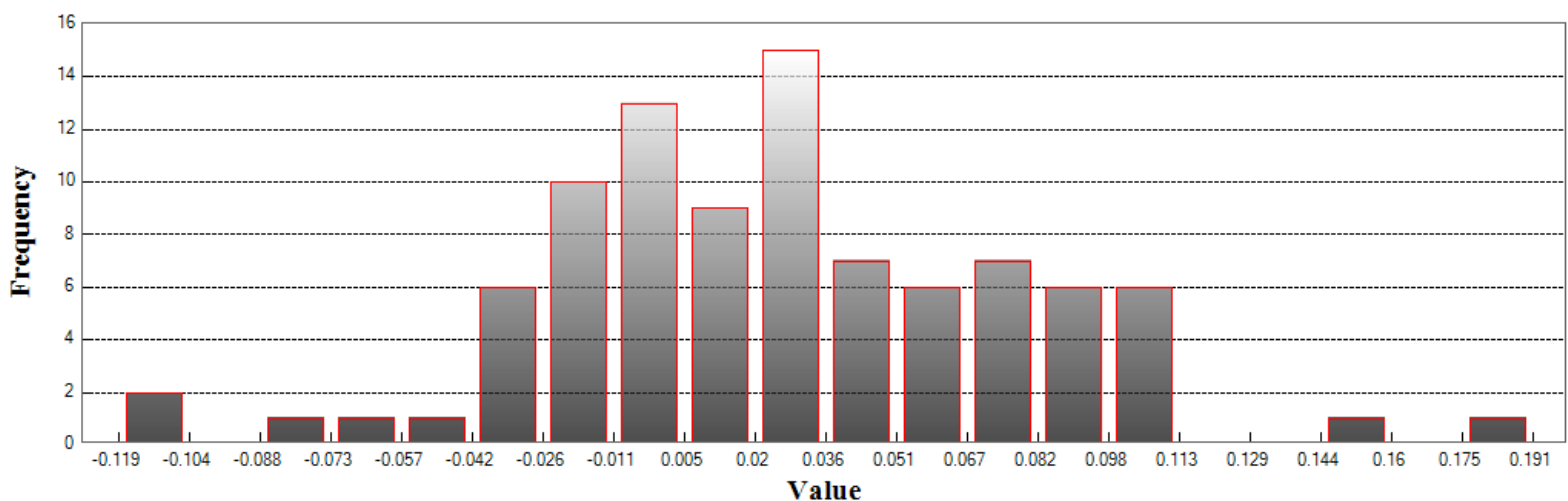
Standard Deviation DZ: 0.052

RMSE Z: 0.058

95th Percentile: 0.106

Units: Meters

Histogram



Min: -0.119

Max: 0.19

Number Of Bins: 20

Bin Interval: 0.015

DEM (Continued)

Vegetated Vertical Accuracy

LandCover Type: Low Vegetation

Minimum DZ: -0.099

Maximum DZ: 0.234

Mean DZ: 0.058

Mean Magnitude DZ: 0.271

Number Observations: 43

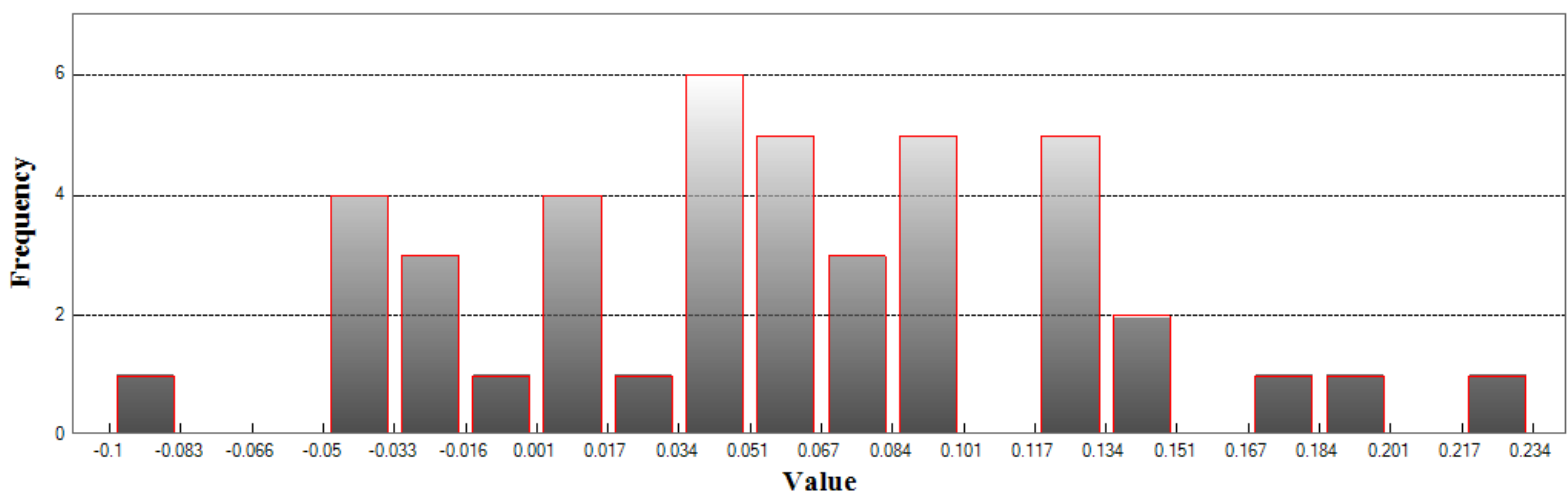
Standard Deviation DZ: 0.07

RMSE Z: 0.091

95th Percentile: 0.179

Units: Meters

Histogram



Min: -0.099

Max: 0.234

Number Of Bins: 20

Bin Interval: 0.017

DEM (Continued)

Vegetated Vertical Accuracy

LandCover Type: Medium Vegetation

Minimum DZ: -0.041

Maximum DZ: 0.258

Mean DZ: 0.038

Mean Magnitude DZ: 0.214

Number Observations: 50

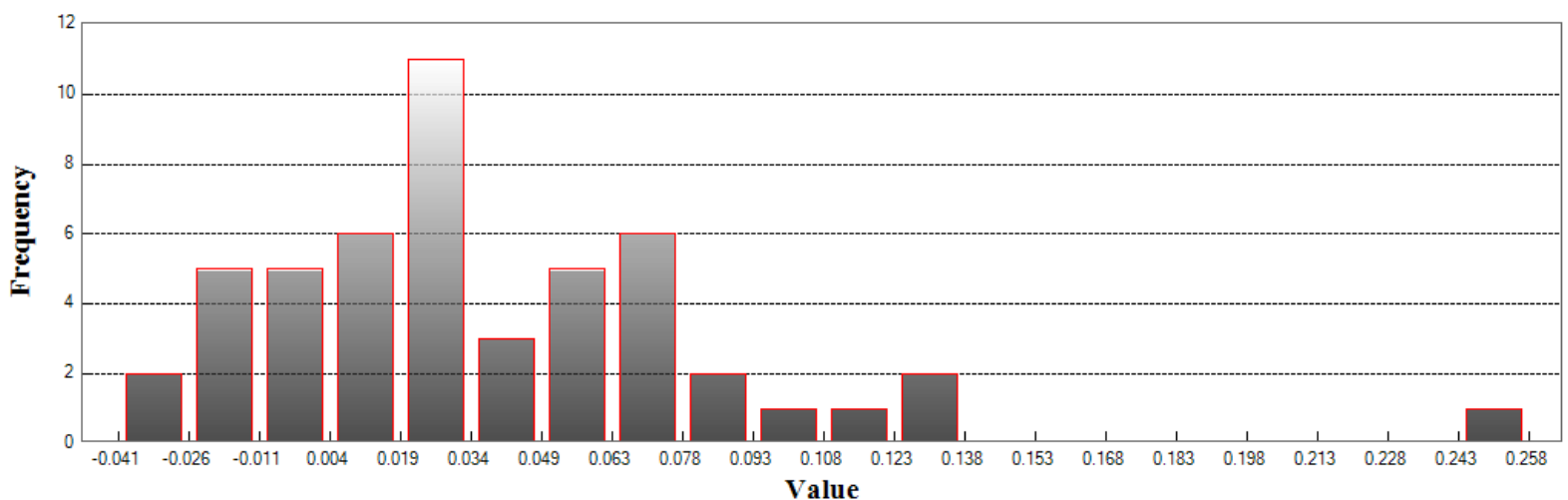
Standard Deviation DZ: 0.052

RMSE Z: 0.064

95th Percentile: 0.134

Units: Meters

Histogram



Min: -0.041

Max: 0.258

Number Of Bins: 20

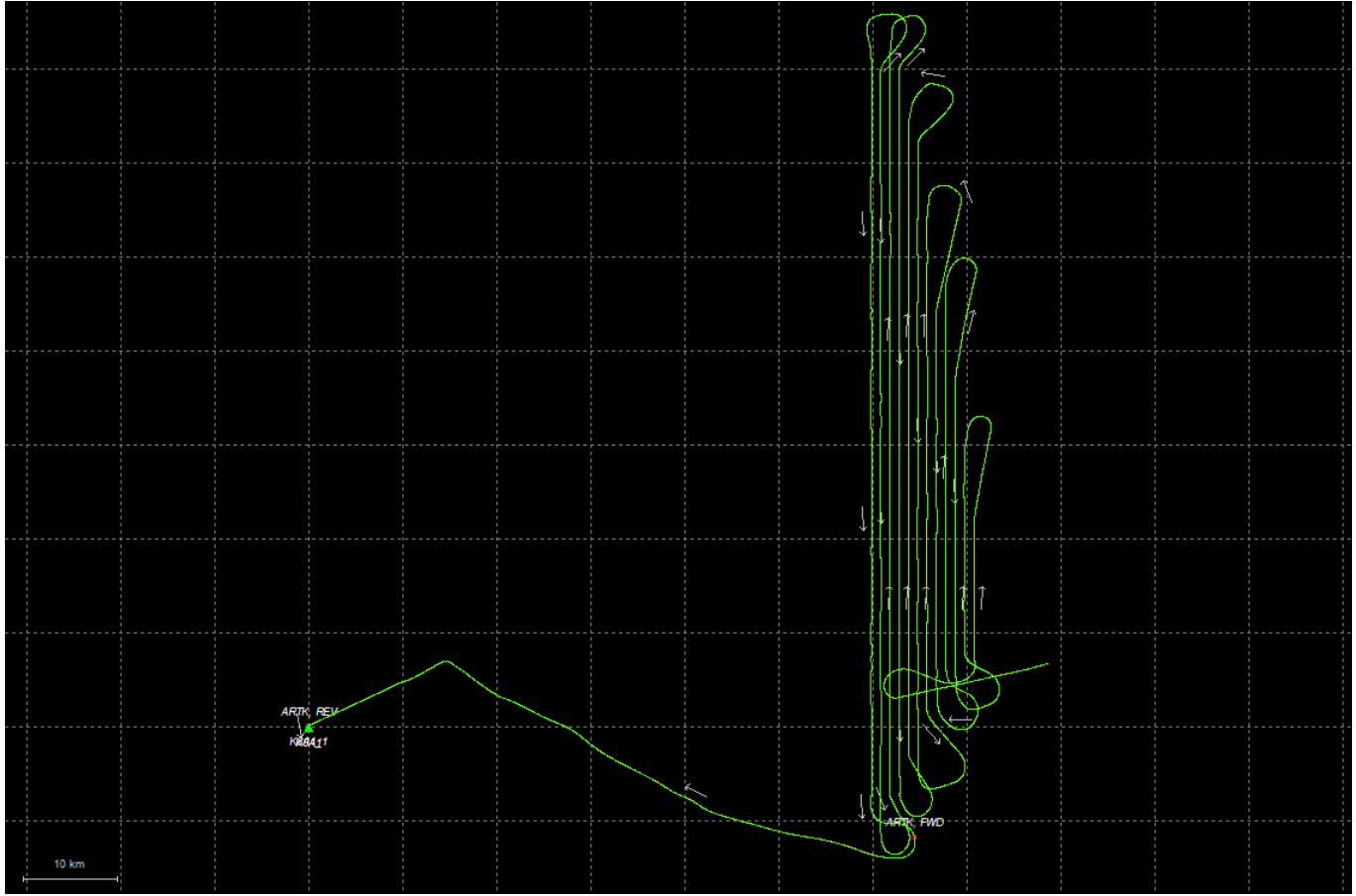
Bin Interval: 0.015

Appendix D. Inertial Explorer

Output Results for 20201209165334_1

Inertial Explorer Version 8.90.2124
12/20/2021

Figure 1: Smoothed TC Combined - Map



Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 2: 20201209165334_1 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot

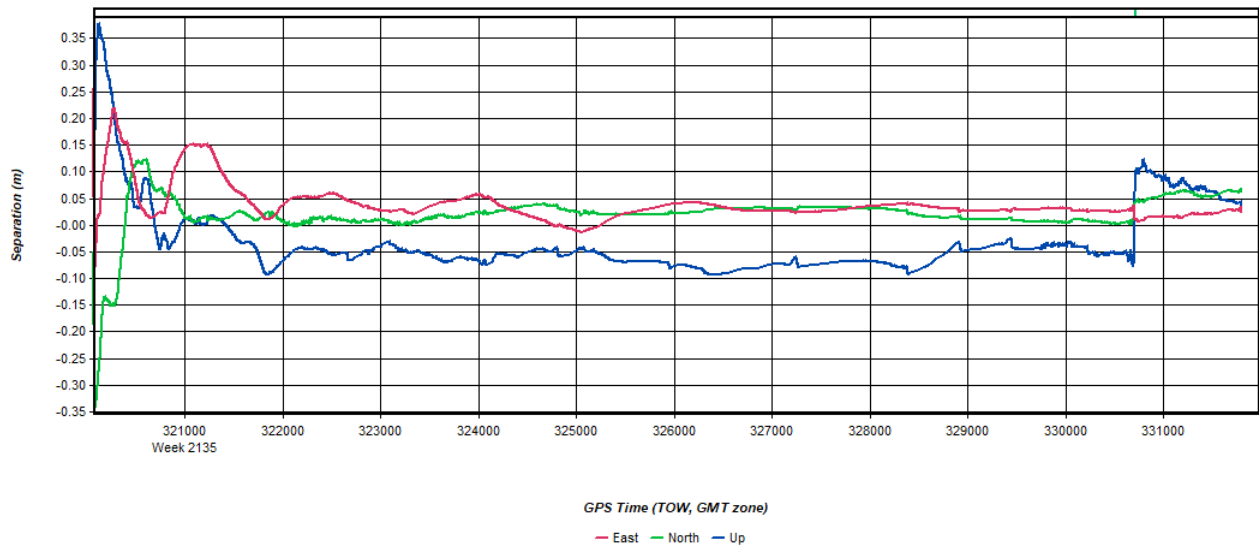


Figure 3: 20201209165334_1 [Smoothed TC Combined] - Float or Fixed Ambiguity

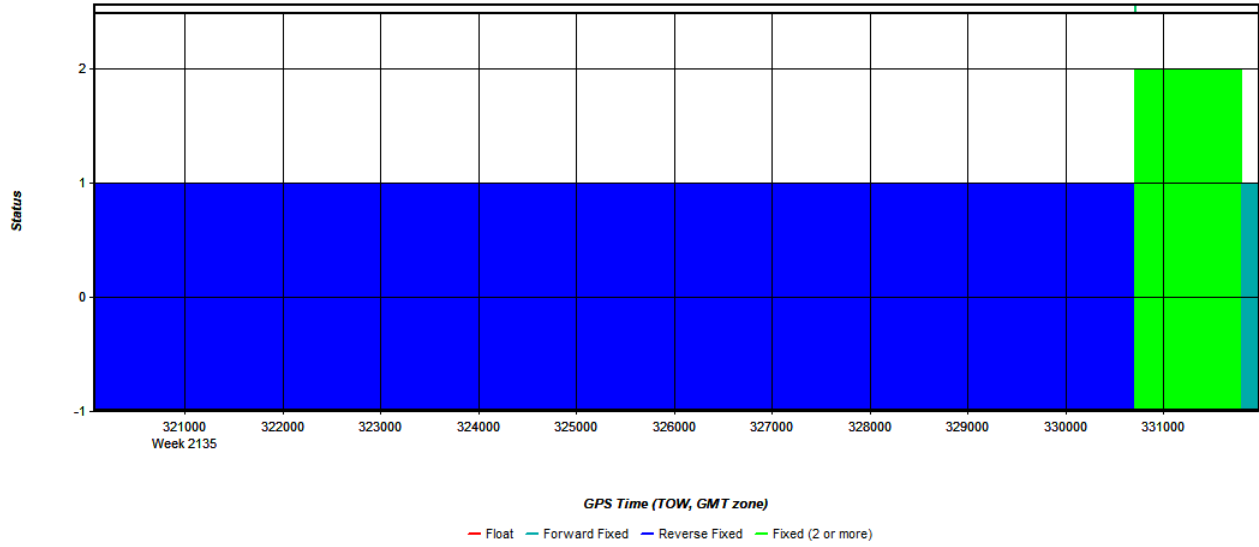


Figure 4: 20201209165334_1 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

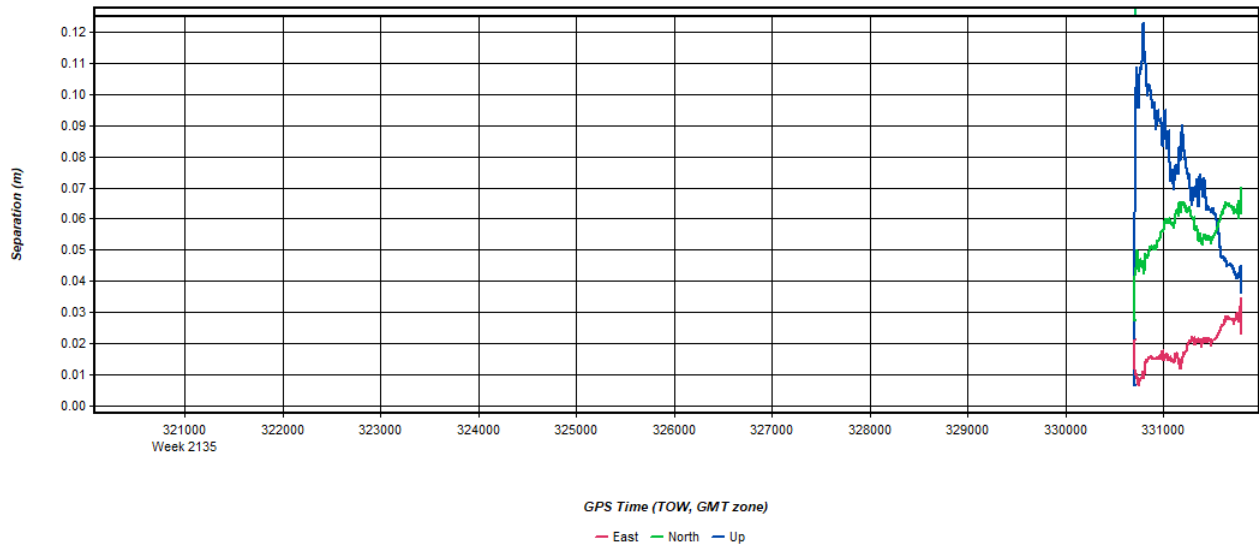
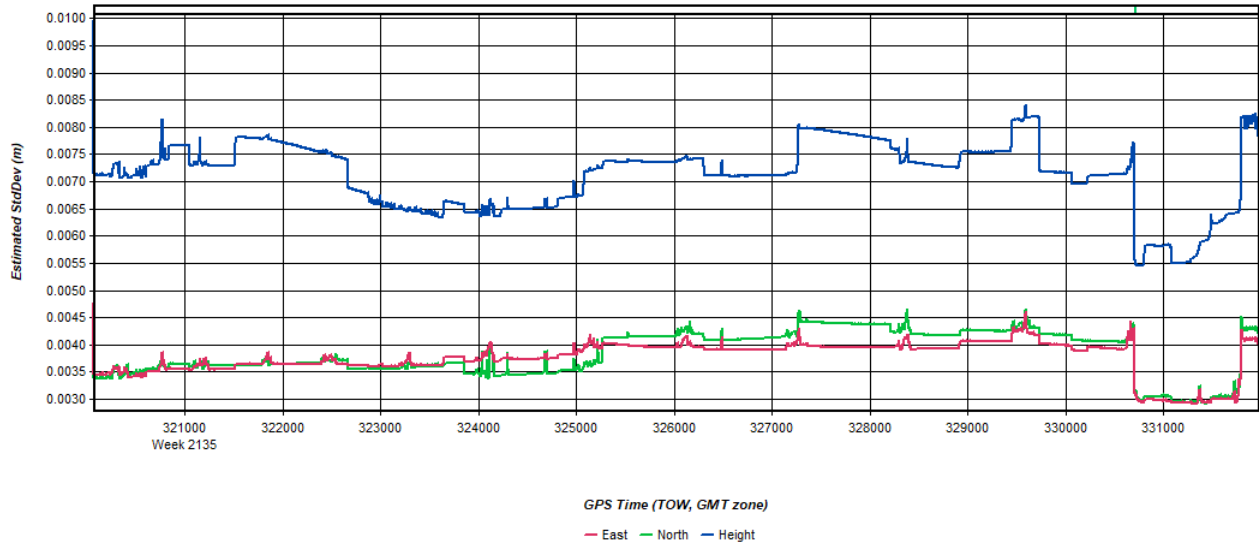
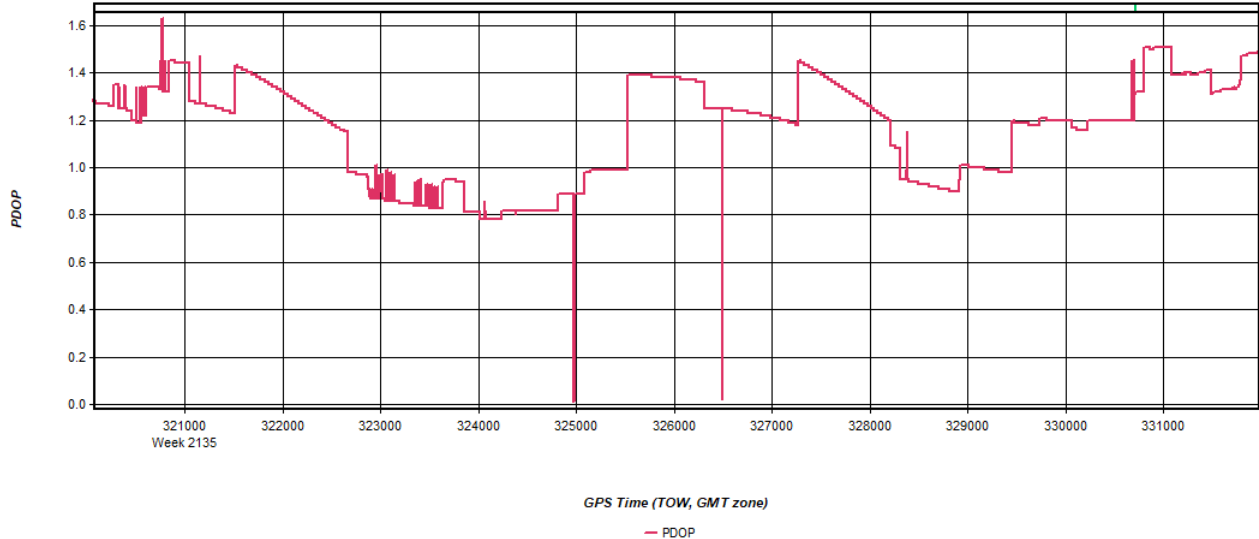


Figure 5: 20201209165334_1 [Smoothed TC Combined] - Estimated Position Accuracy Plot



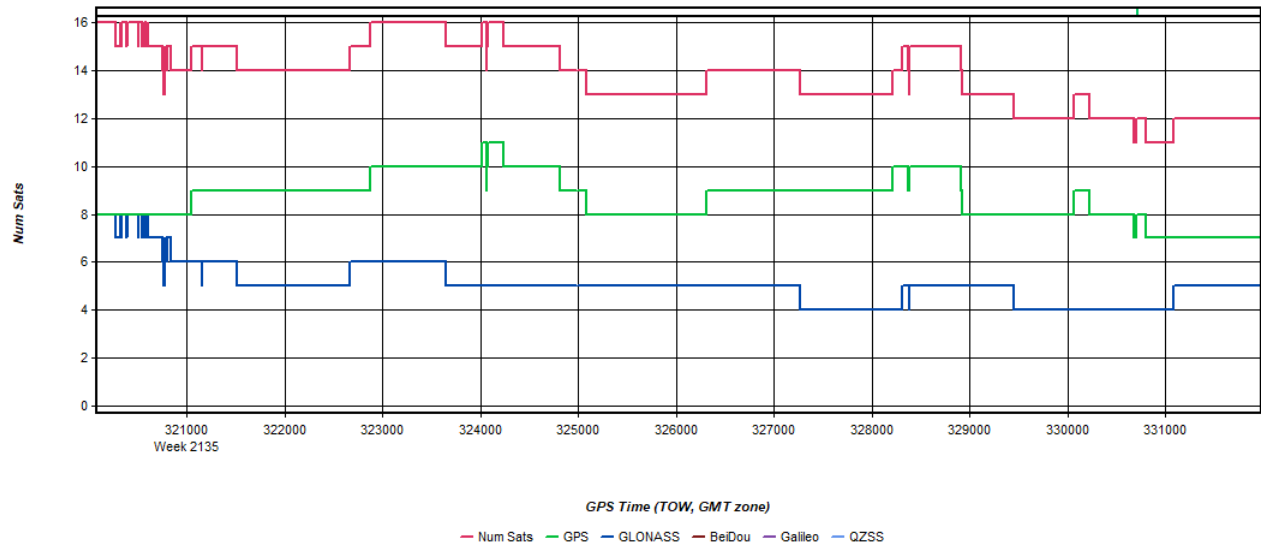
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 6: 20201209165334_1 [Smoothed TC Combined] - PDOP Plot



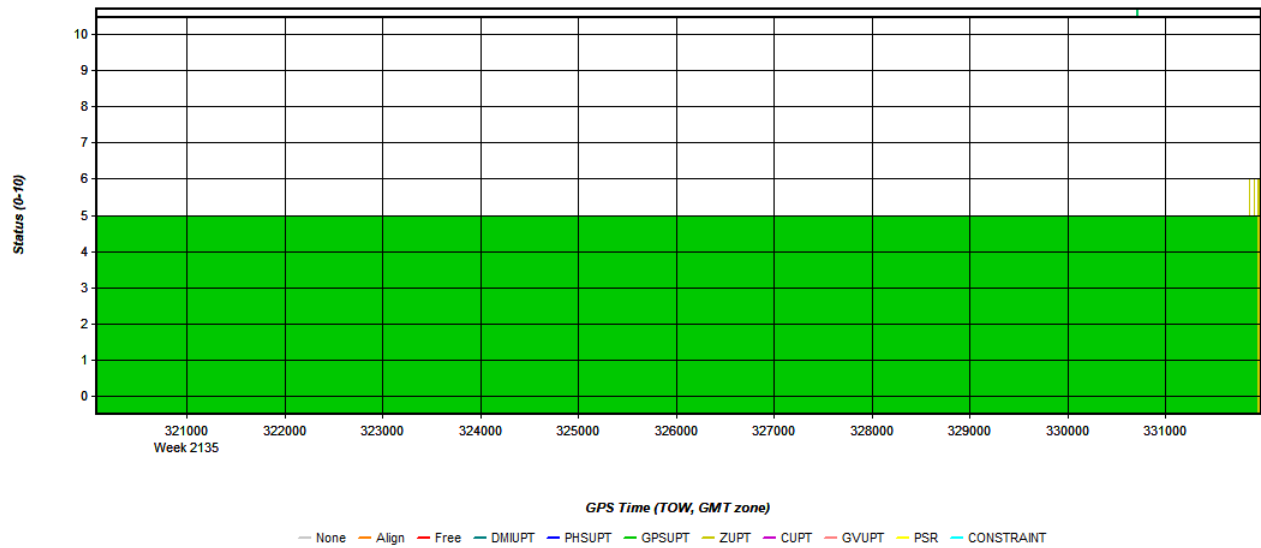
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 7: 20201209165334_1 [Smoothed TC Combined] - Number of Satellites Line Plot



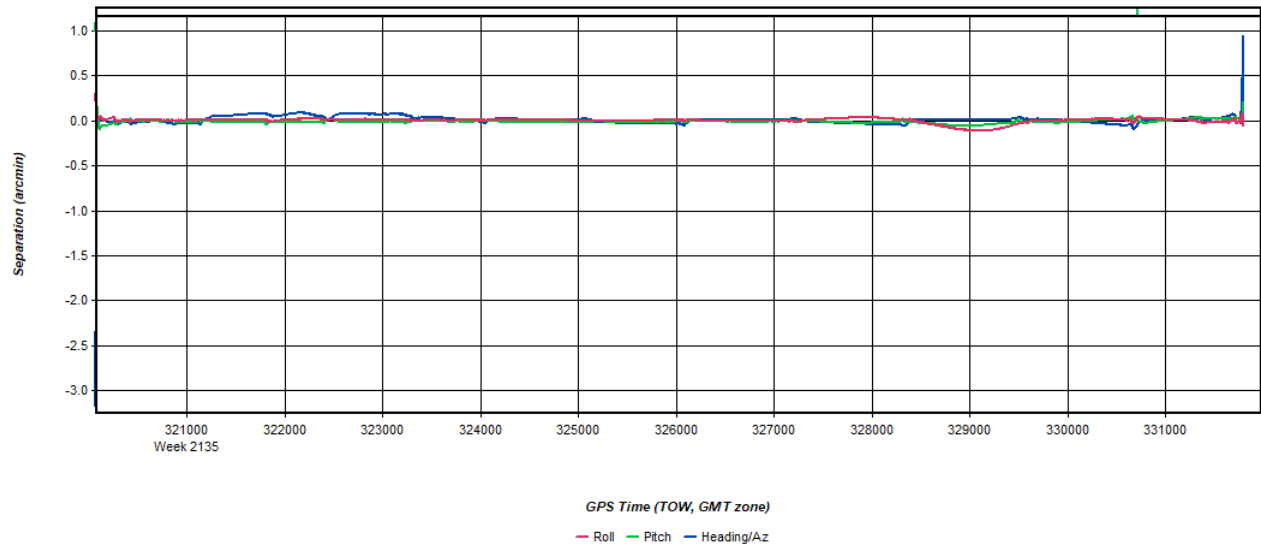
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 8: 20201209165334_1 [Smoothed TC Combined] - Status flag for IMU processing



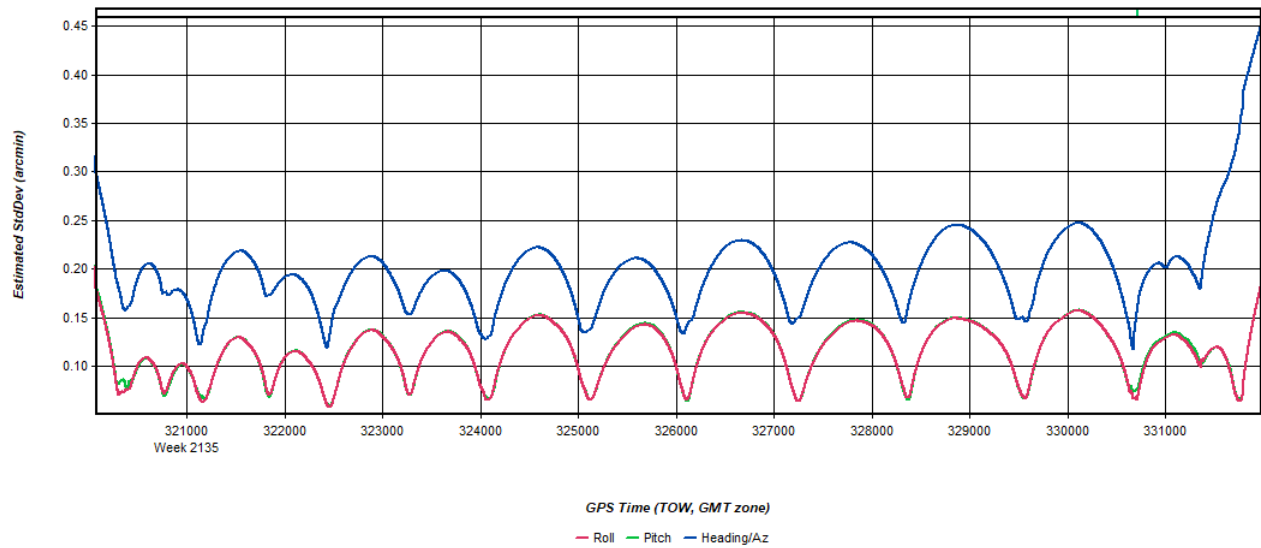
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 9: 20201209165334_1 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



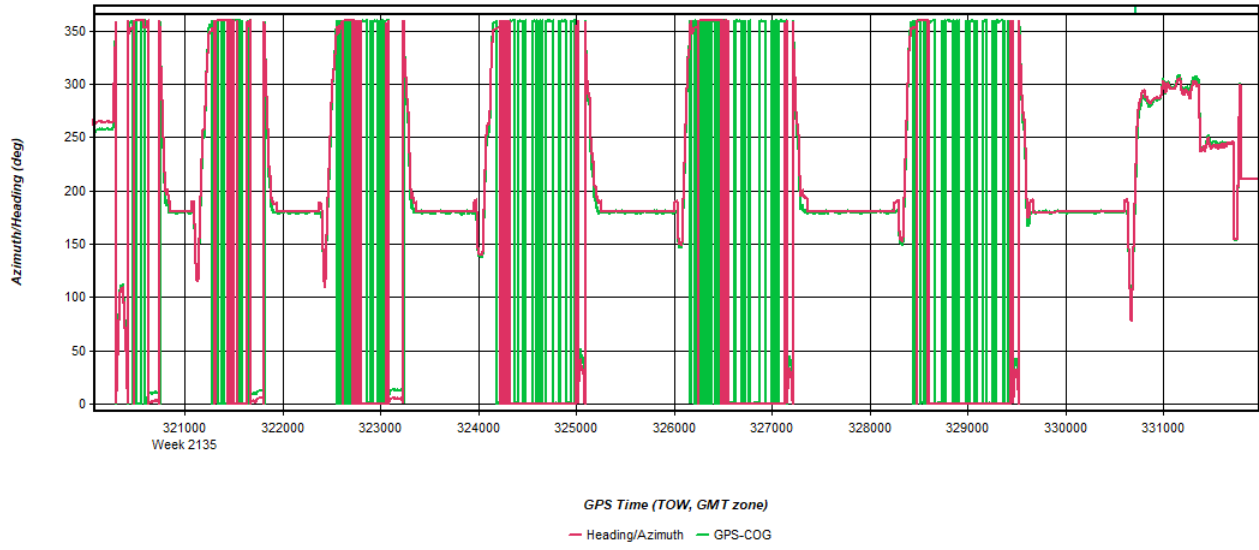
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 10: 20201209165334_1 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



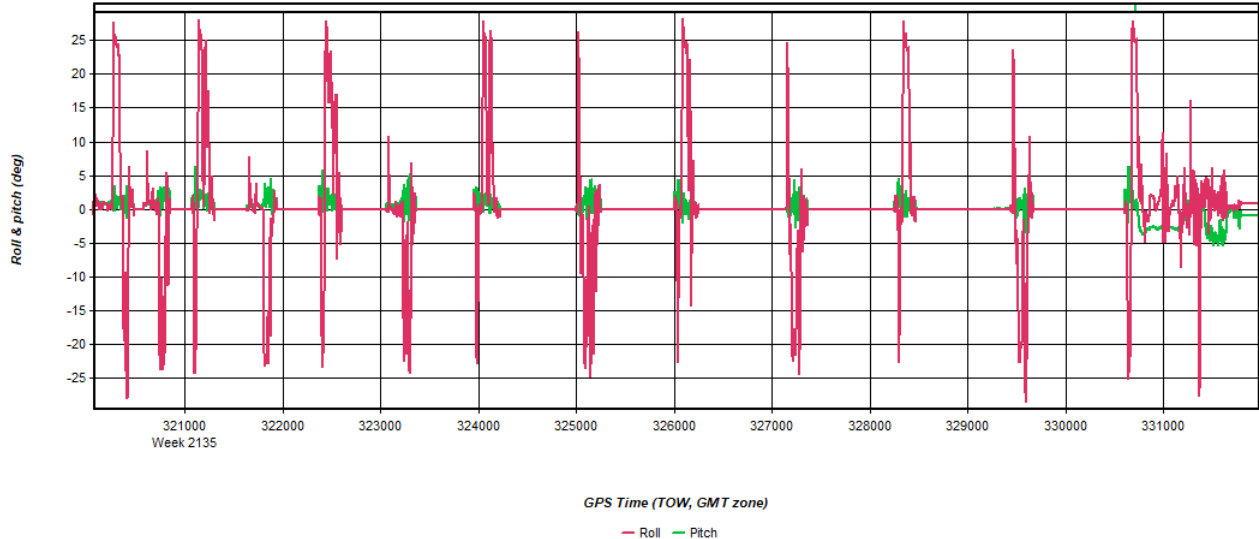
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 11: 20201209165334_1 [Smoothed TC Combined] - Azimuth Plot



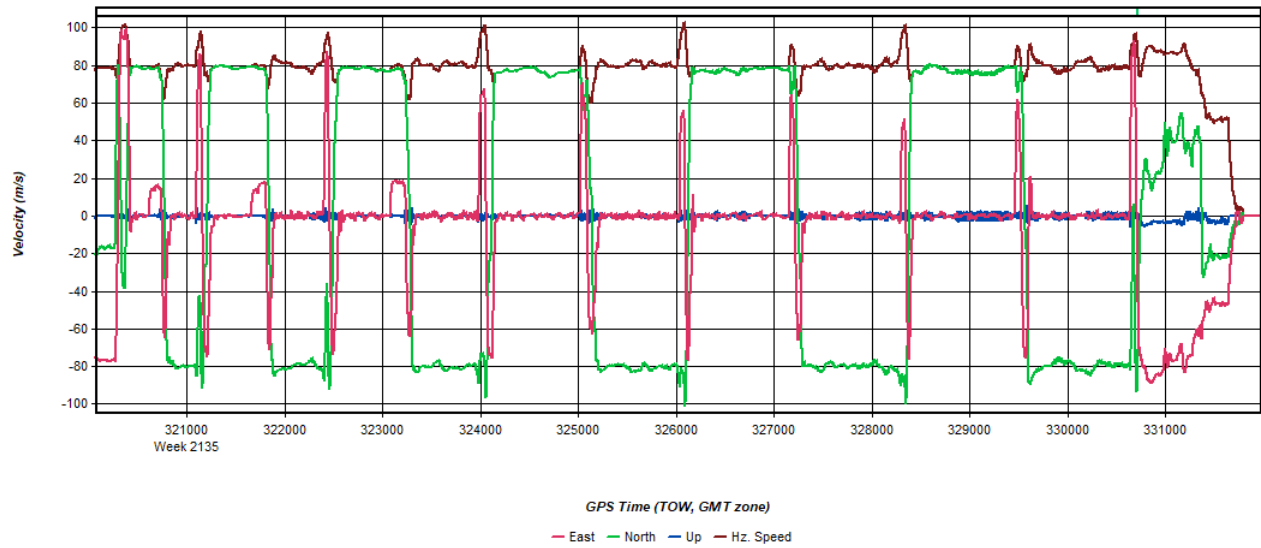
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 12: 20201209165334_1 [Smoothed TC Combined] - Roll & Pitch Plot



Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 13: 20201209165334_1 [Smoothed TC Combined] - Velocity Profile Plot



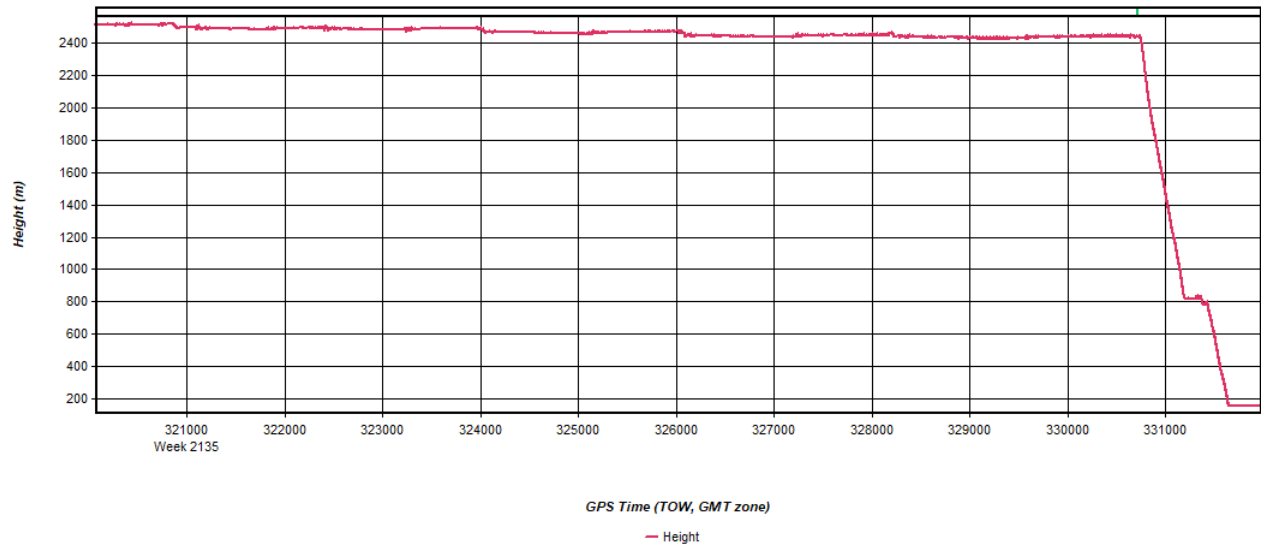
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 14: 20201209165334_1 [Smoothed TC Combined] - Body Frame Velocity Plot



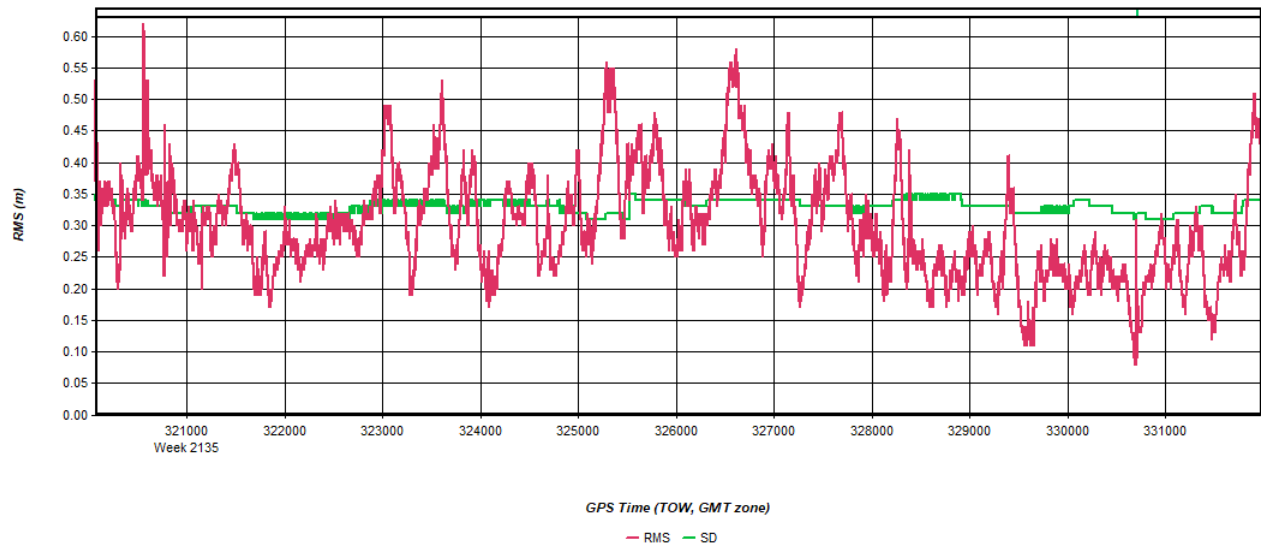
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 15: 20201209165334_1 [Smoothed TC Combined] - Height Profile Plot



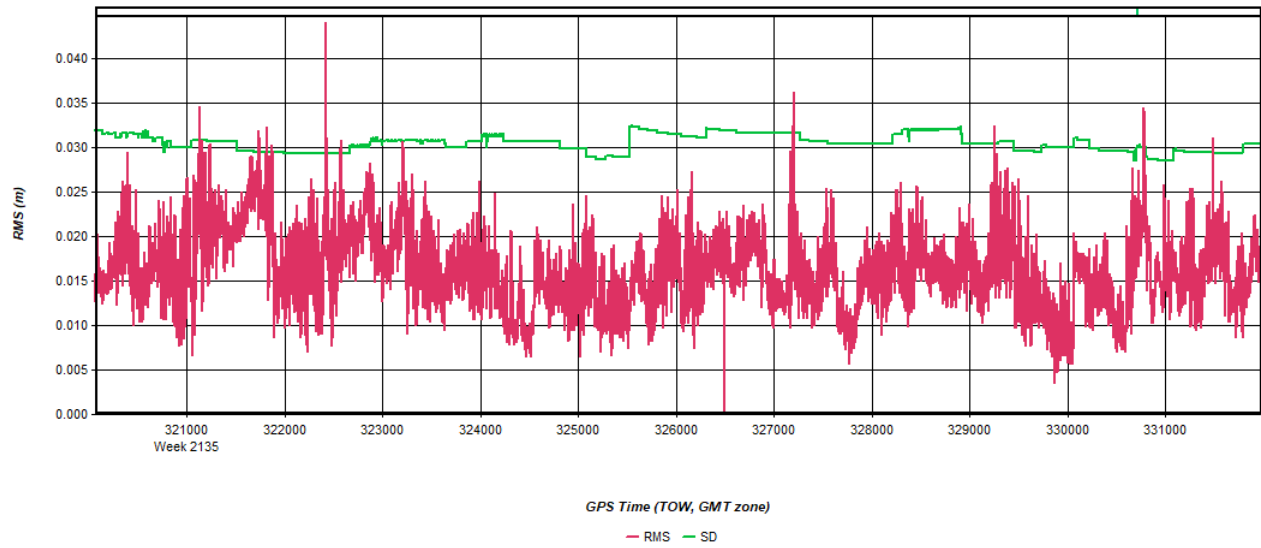
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 16: 20201209165334_1 [Smoothed TC Combined] - C/A Code Residual RMS Plot



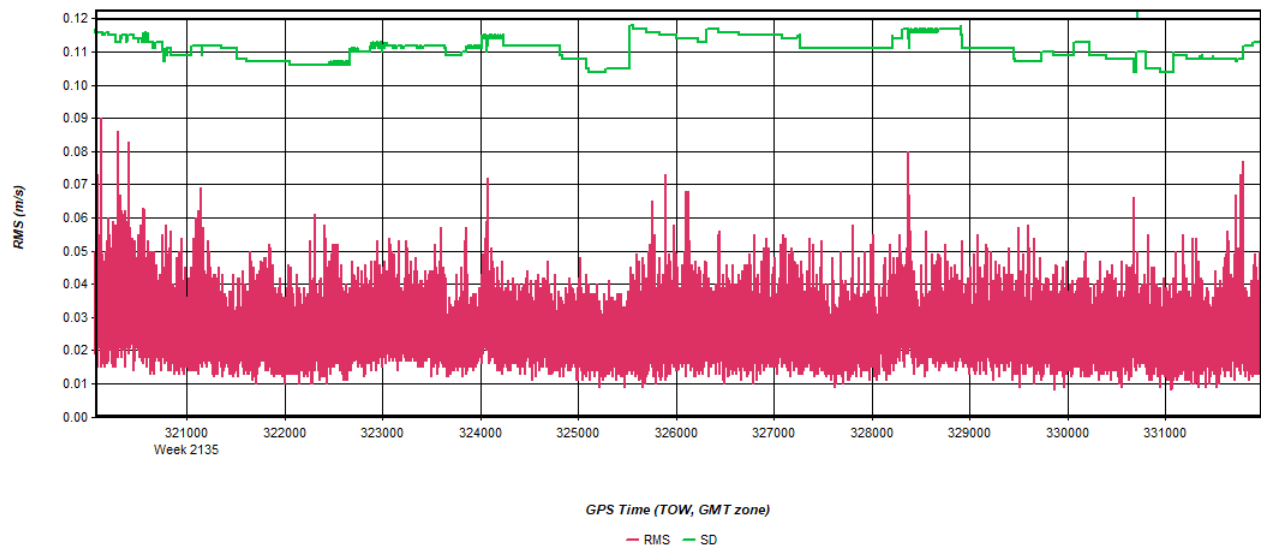
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 17: 20201209165334_1 [Smoothed TC Combined] - Carrier Residual RMS Plot



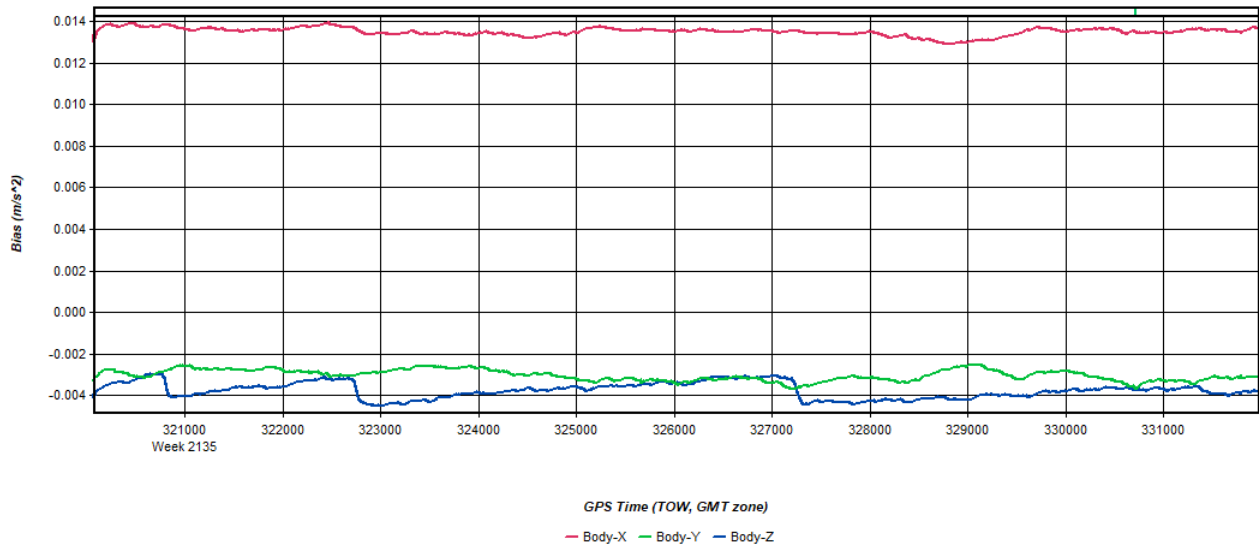
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 18: 20201209165334_1 [Smoothed TC Combined] - Doppler Residual RMS Plot



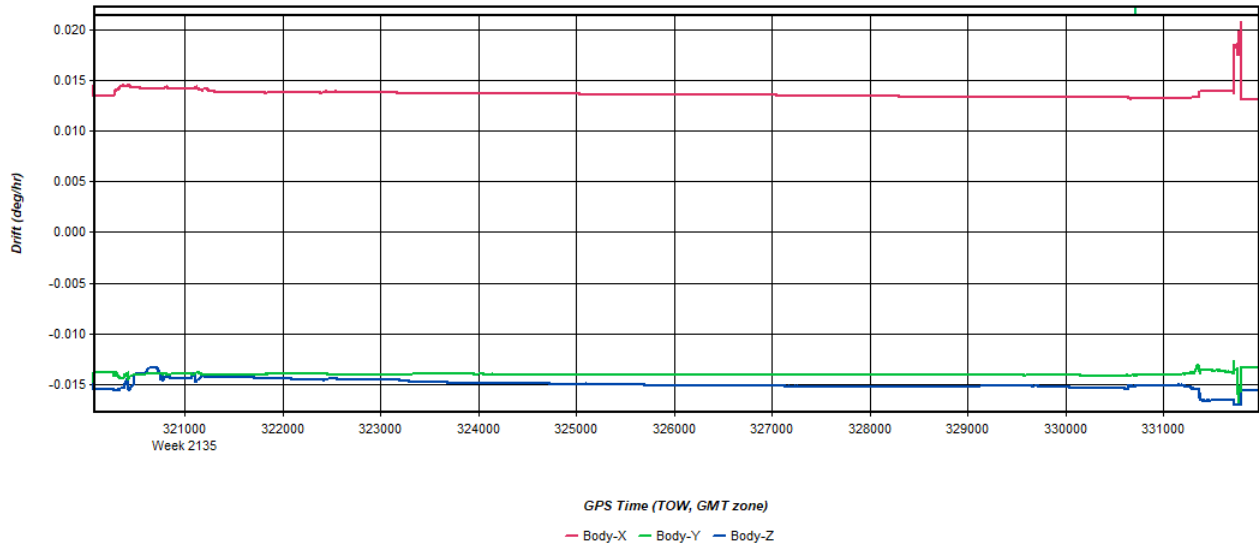
Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 19: 20201209165334_1 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Figure 20: 20201209165334_1 [Smoothed TC Combined] - Gyro Drift Plot

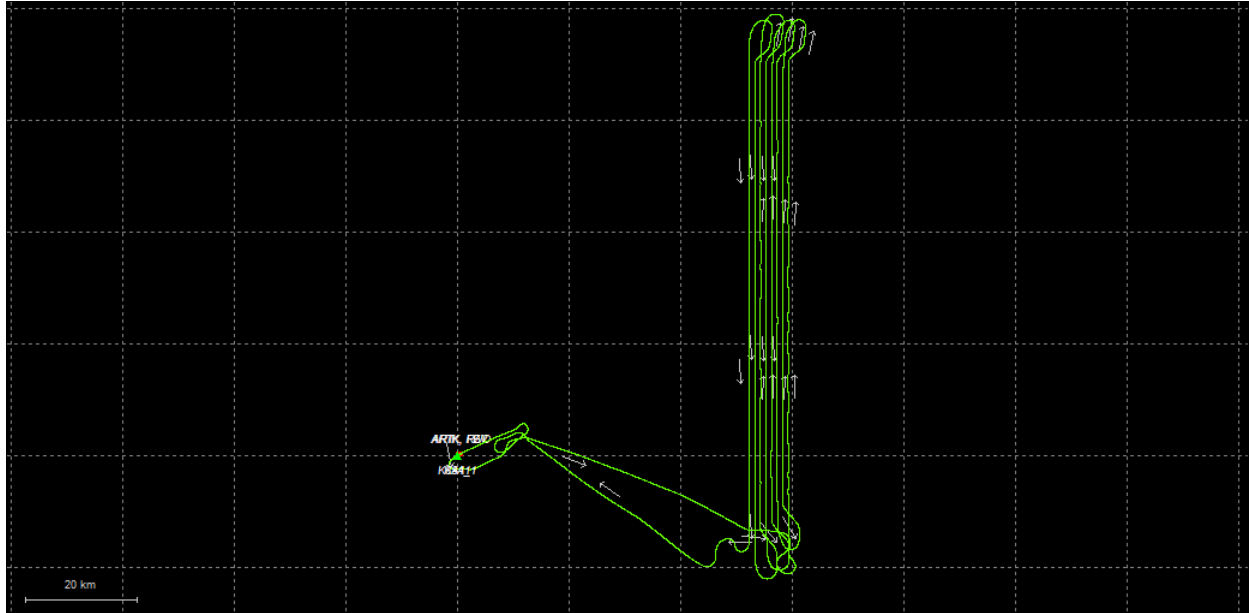


Process	20201209165334_1	by Unknown	on 12/19/2020	at 11:53:51
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Output Results for 20201209203945_2

Inertial Explorer Version 8.90.2124
12/19/2020

Figure 1: Smoothed TC Combined - Map



Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 2: 20201209203945_2 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 3: 20201209203945_2 [Smoothed TC Combined] - Float or Fixed Ambiguity

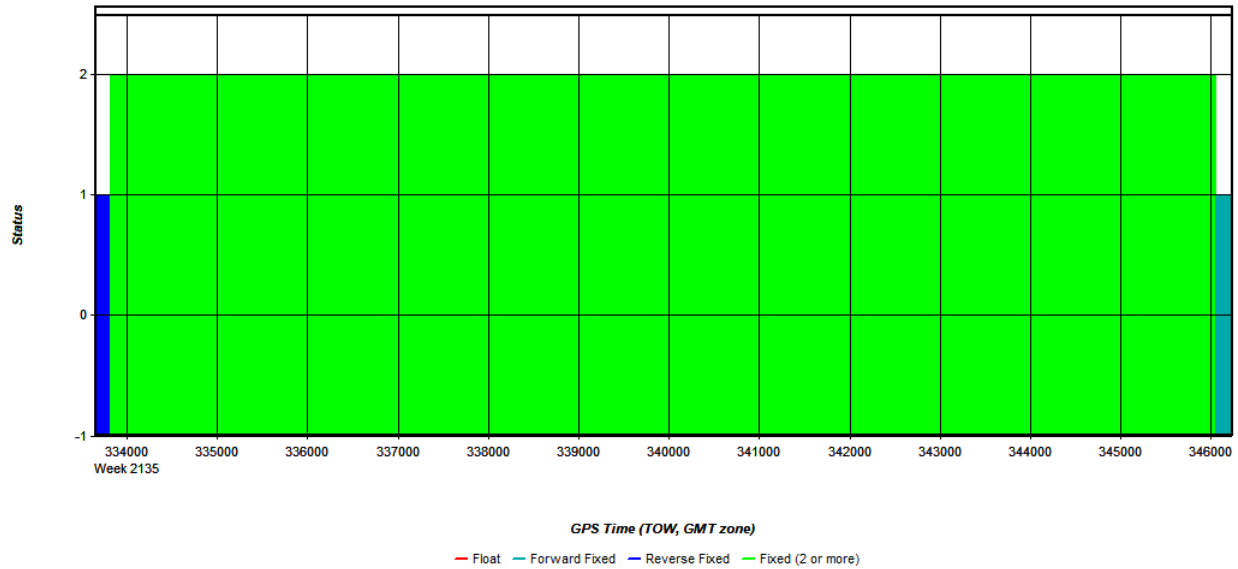
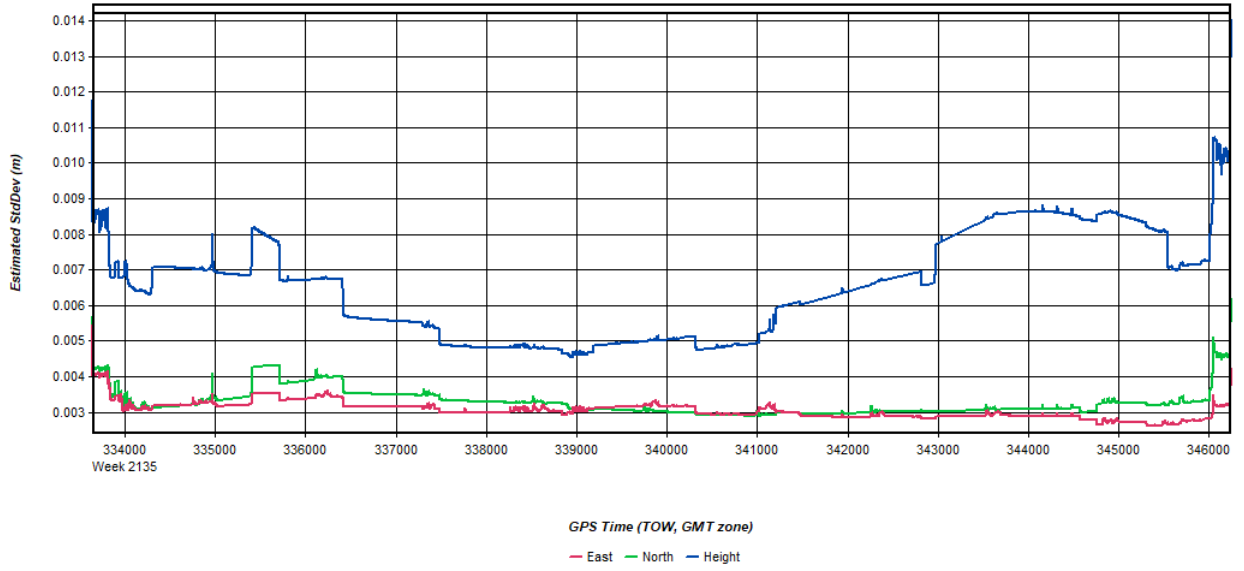


Figure 4: 20201209203945_2 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

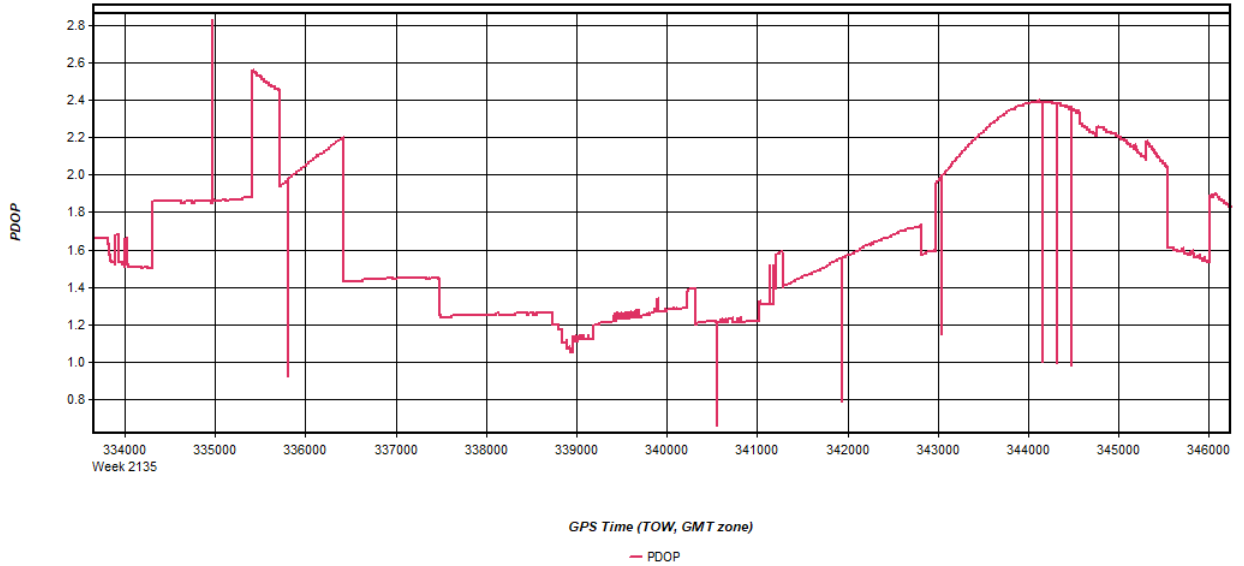


Figure 5: 20201209203945_2 [Smoothed TC Combined] - Estimated Position Accuracy Plot



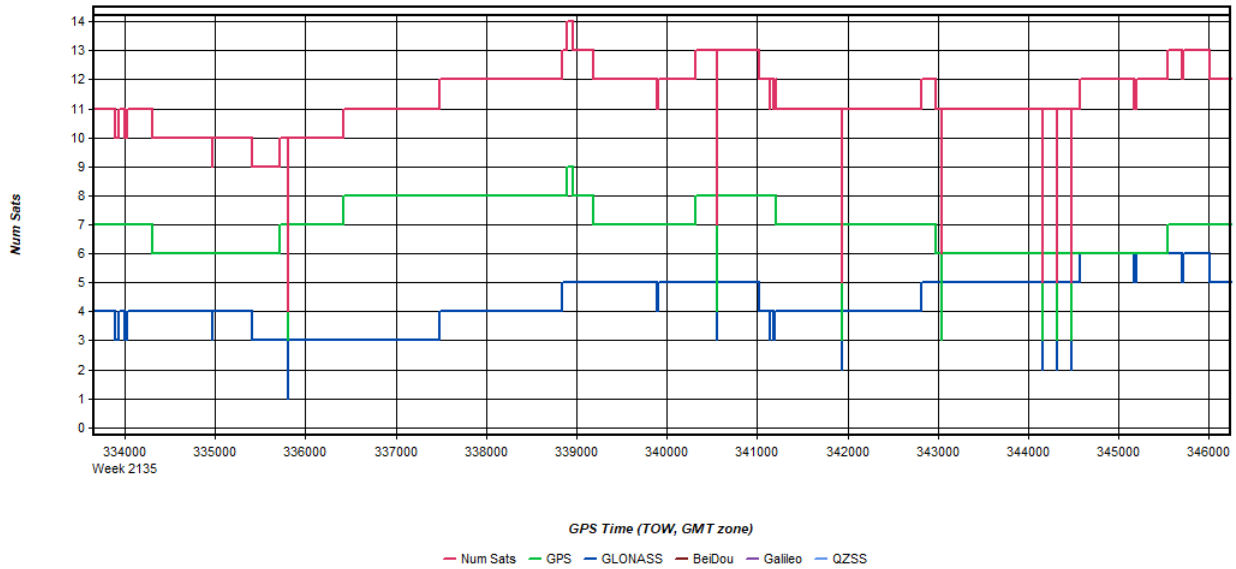
Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 6: 20201209203945_2 [Smoothed TC Combined] - PDOP Plot



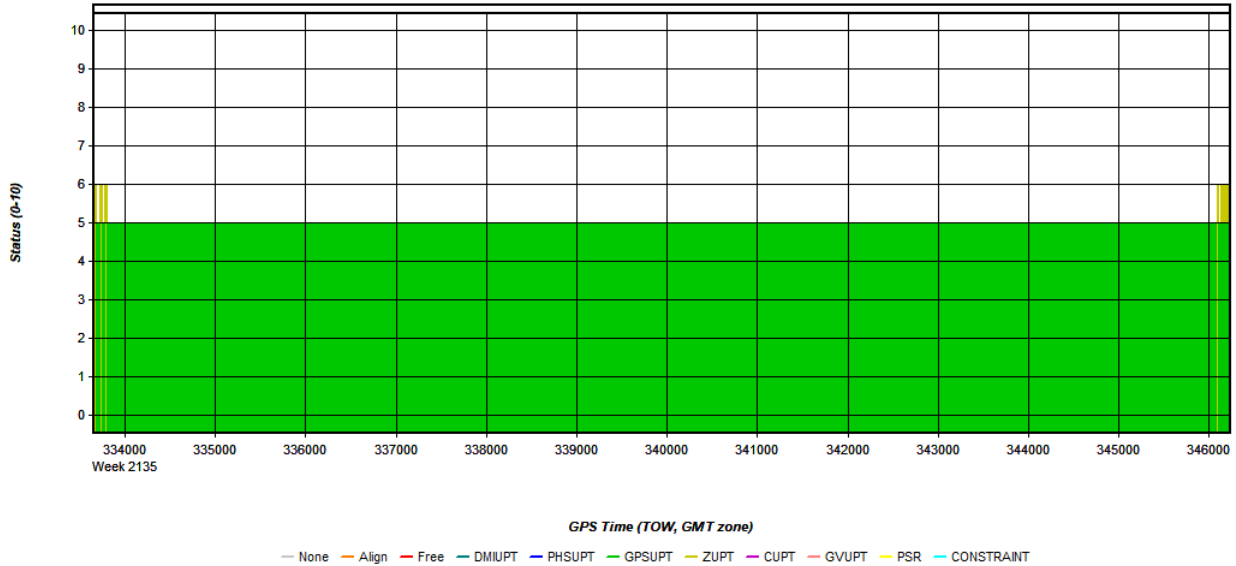
Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 7: 20201209203945_2 [Smoothed TC Combined] - Number of Satellites Line Plot



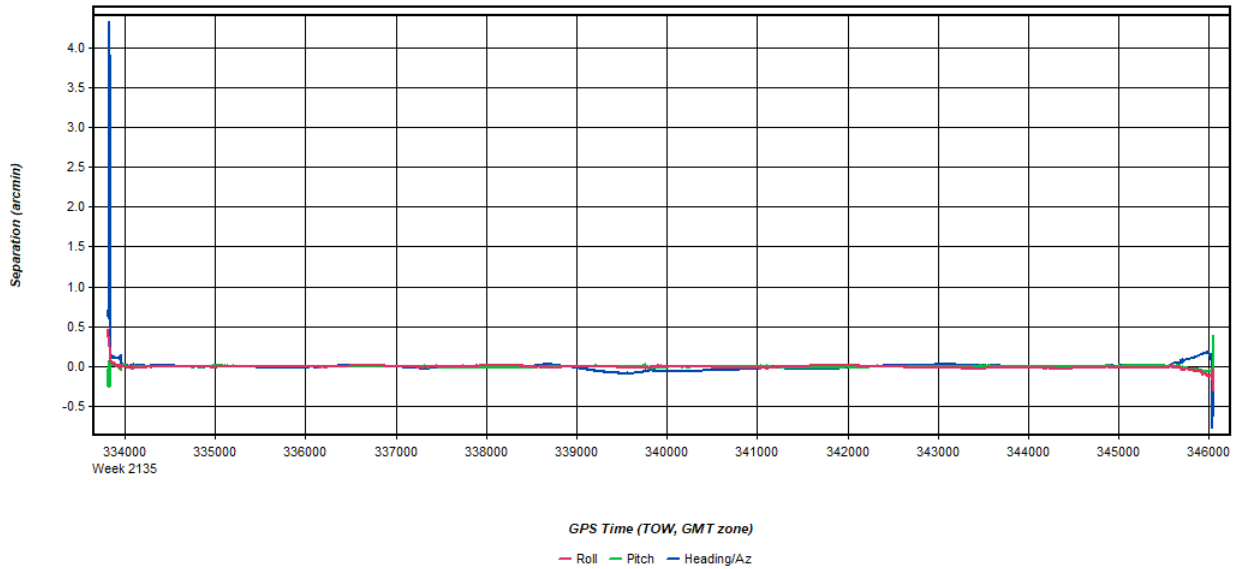
Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 8: 20201209203945_2 [Smoothed TC Combined] - Status flag for IMU processing



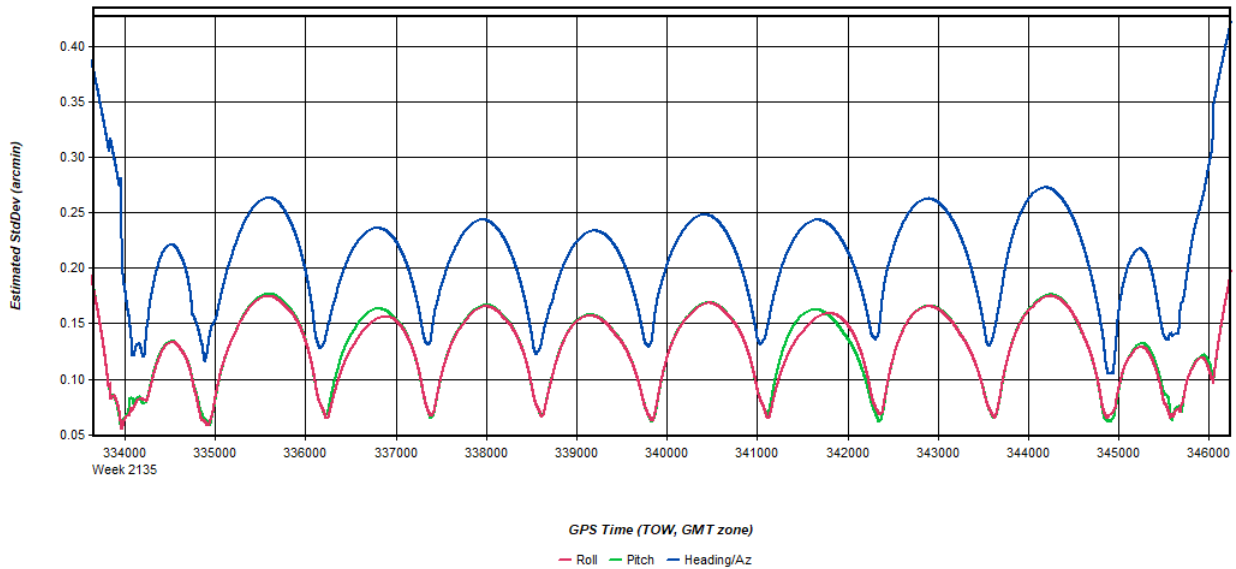
Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 9: 20201209203945_2 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



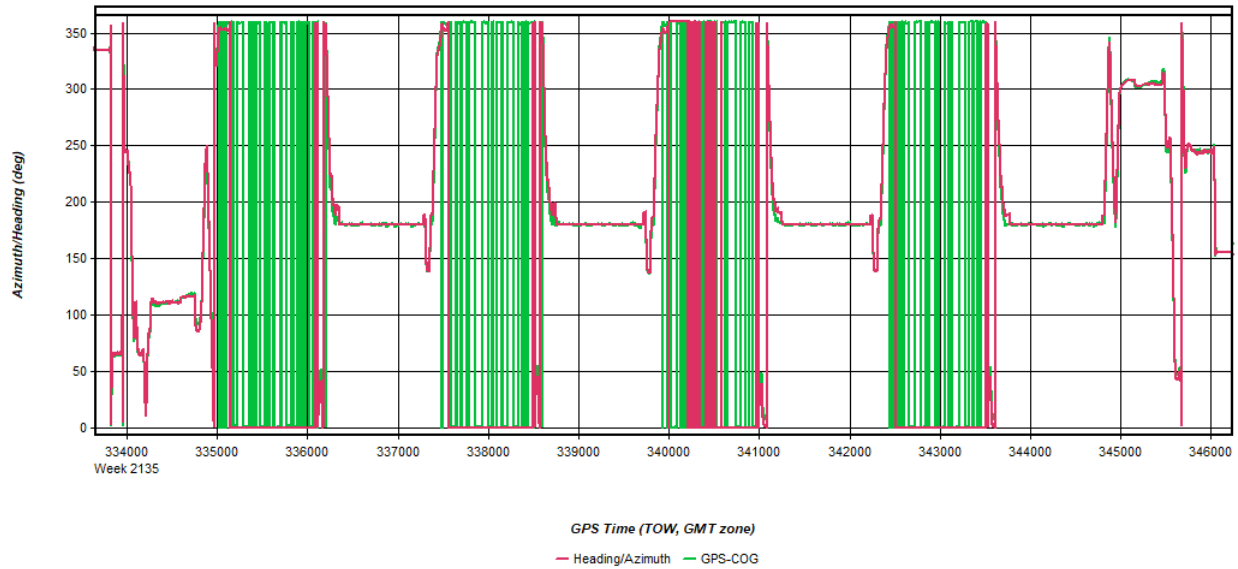
Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 10: 20201209203945_2 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



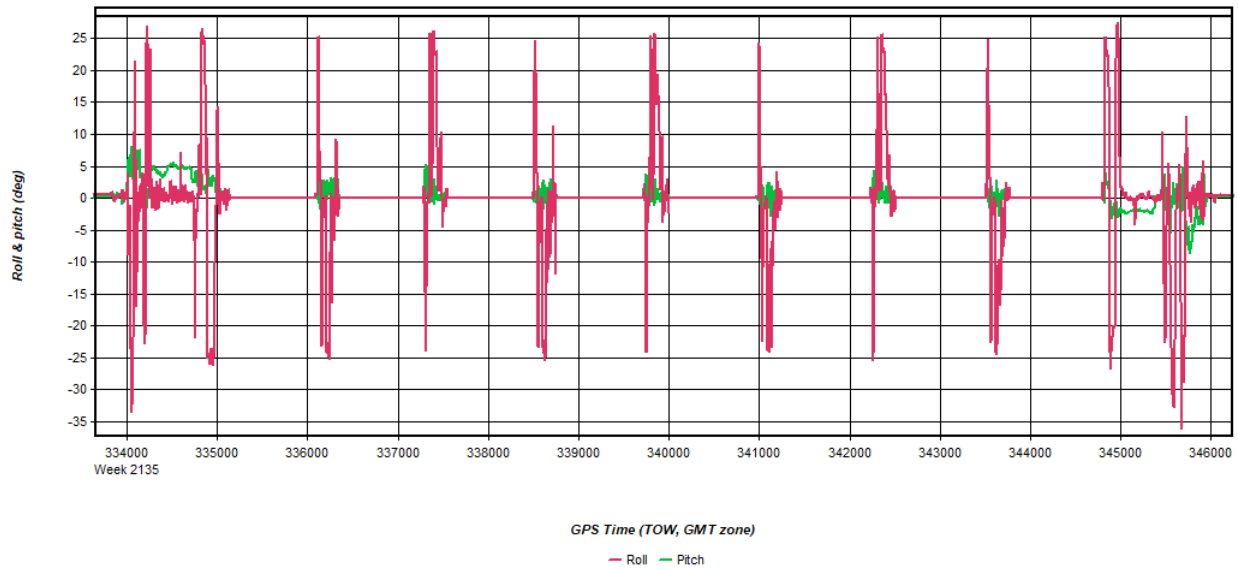
Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 11: 20201209203945_2 [Smoothed TC Combined] - Azimuth Plot



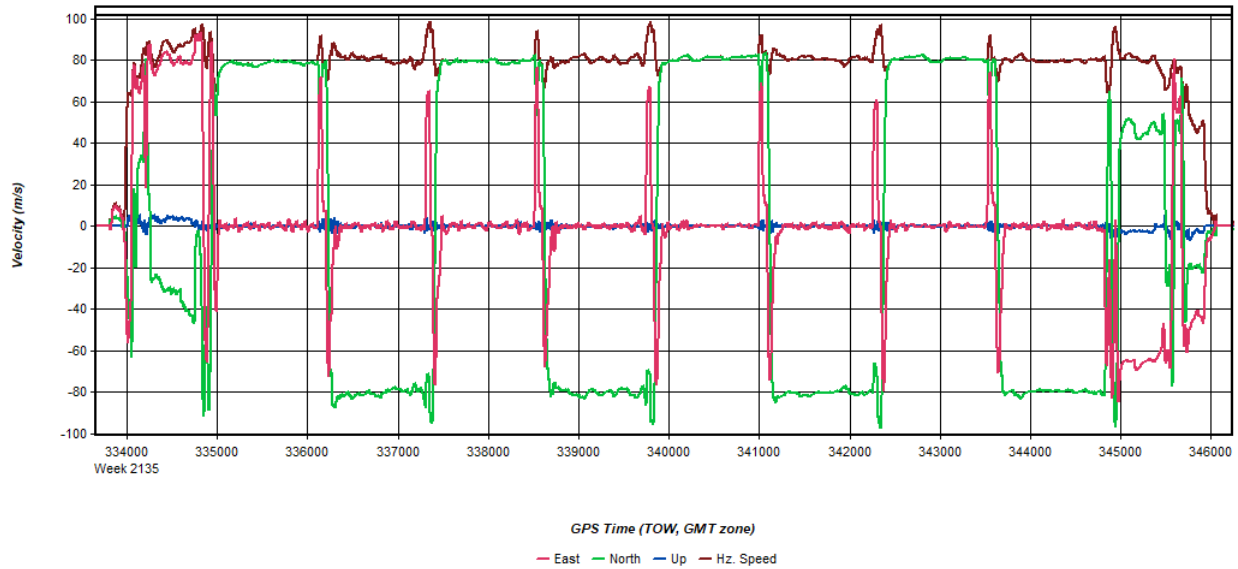
Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 12: 20201209203945_2 [Smoothed TC Combined] - Roll & Pitch Plot



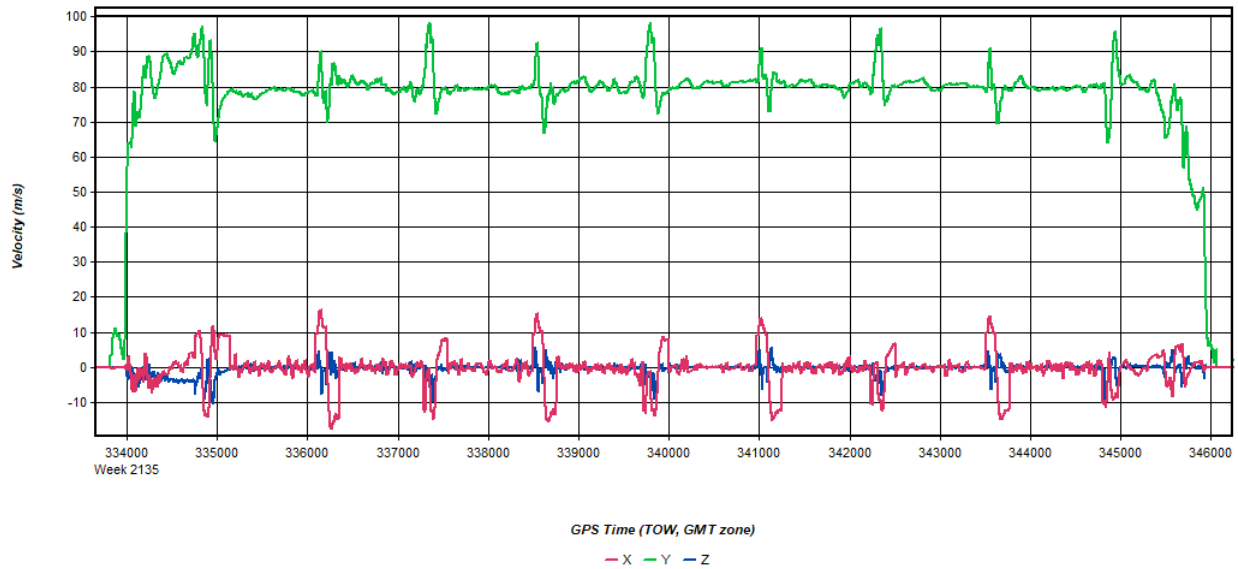
Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 13: 20201209203945_2 [Smoothed TC Combined] - Velocity Profile Plot



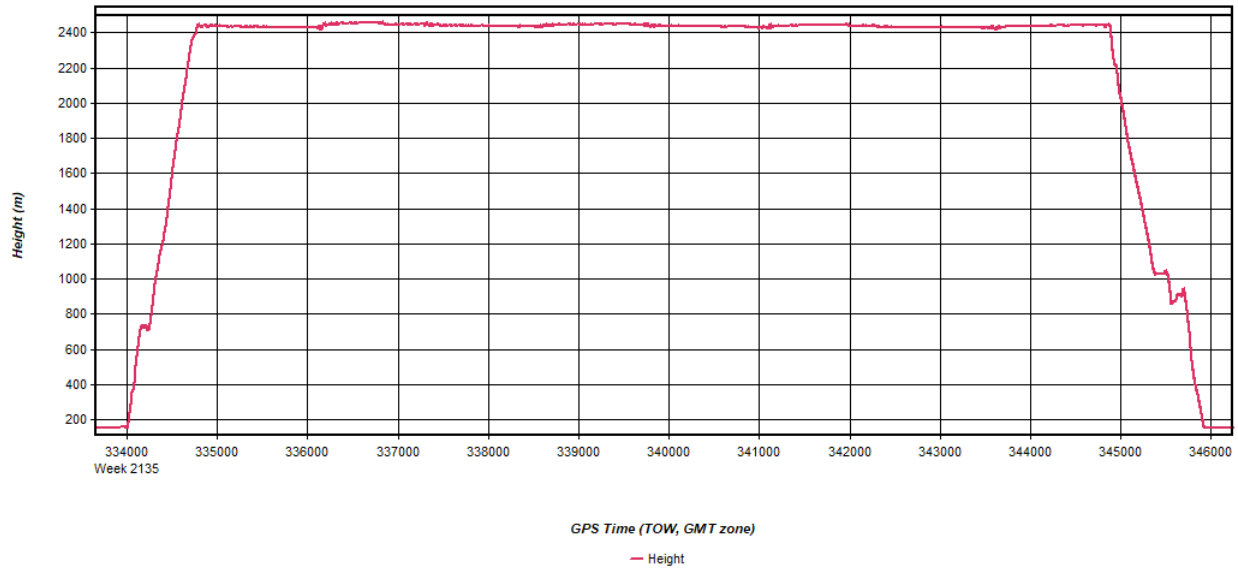
Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 14: 20201209203945_2 [Smoothed TC Combined] - Body Frame Velocity Plot



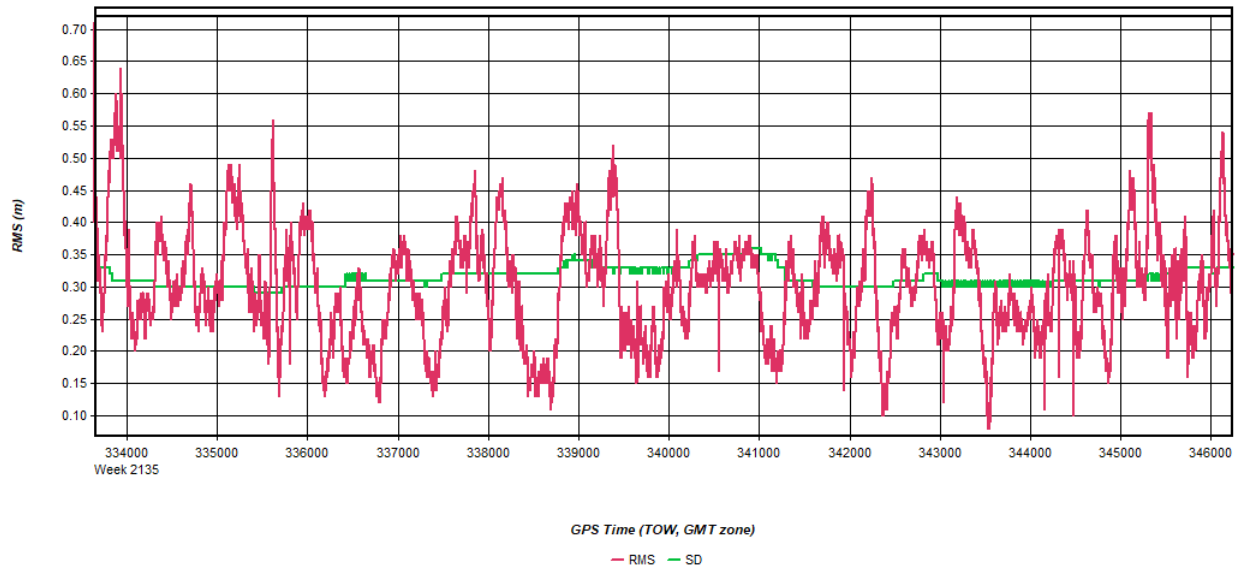
Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 15: 20201209203945_2 [Smoothed TC Combined] - Height Profile Plot



Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 16: 20201209203945_2 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 17: 20201209203945_2 [Smoothed TC Combined] - Carrier Residual RMS Plot

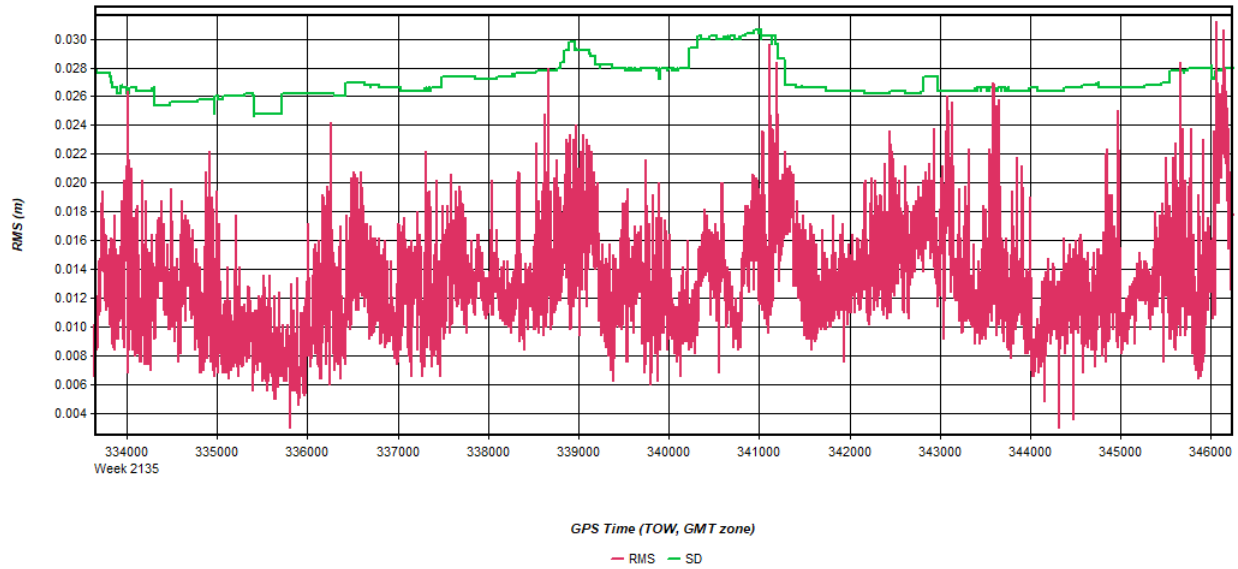


Figure 18: 20201209203945_2 [Smoothed TC Combined] - Doppler Residual RMS Plot

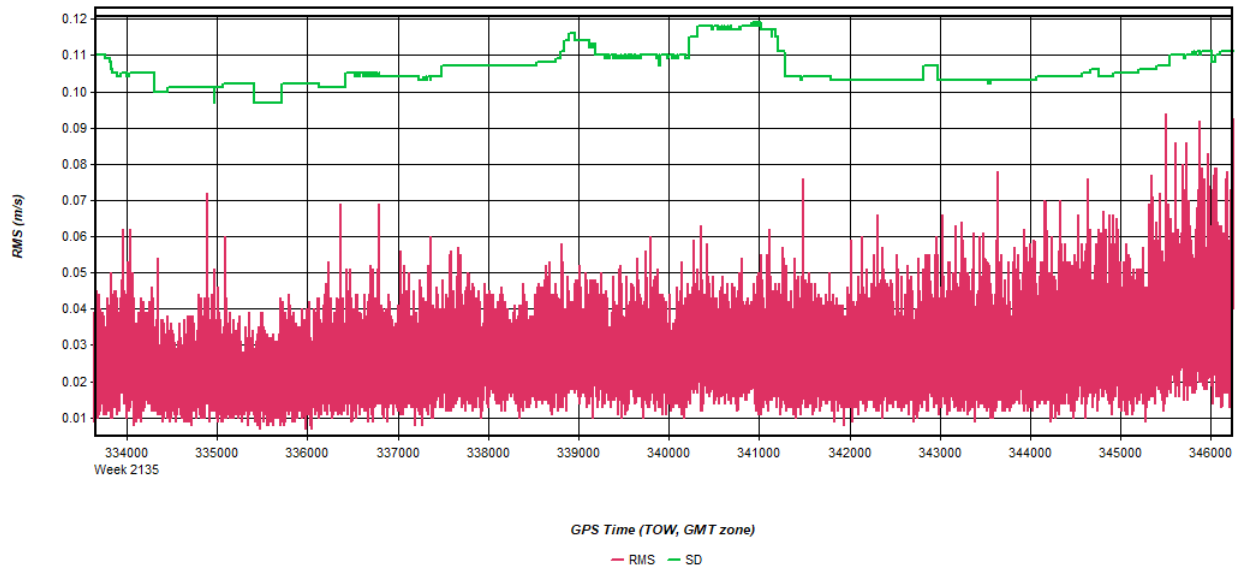
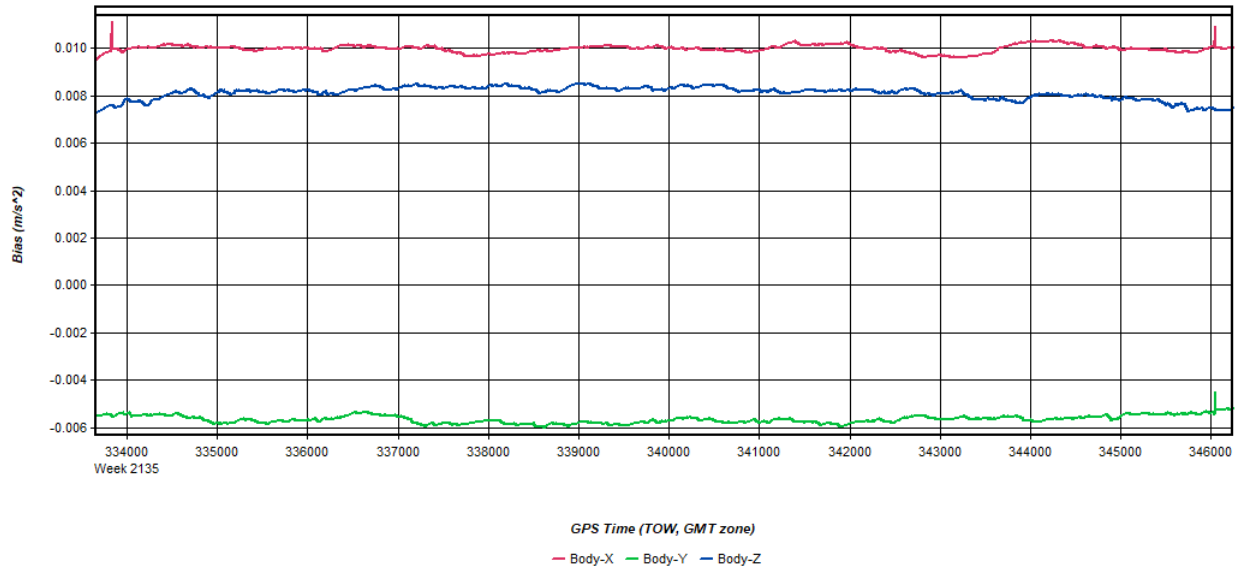
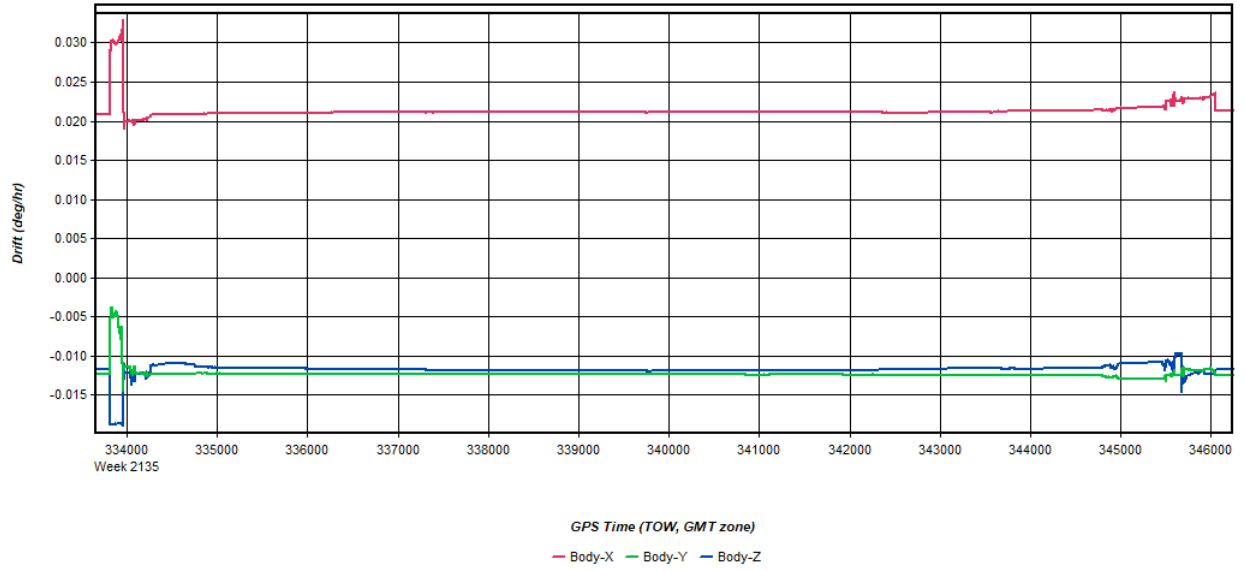


Figure 19: 20201209203945_2 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Figure 20: 20201209203945_2 [Smoothed TC Combined] - Gyro Drift Plot

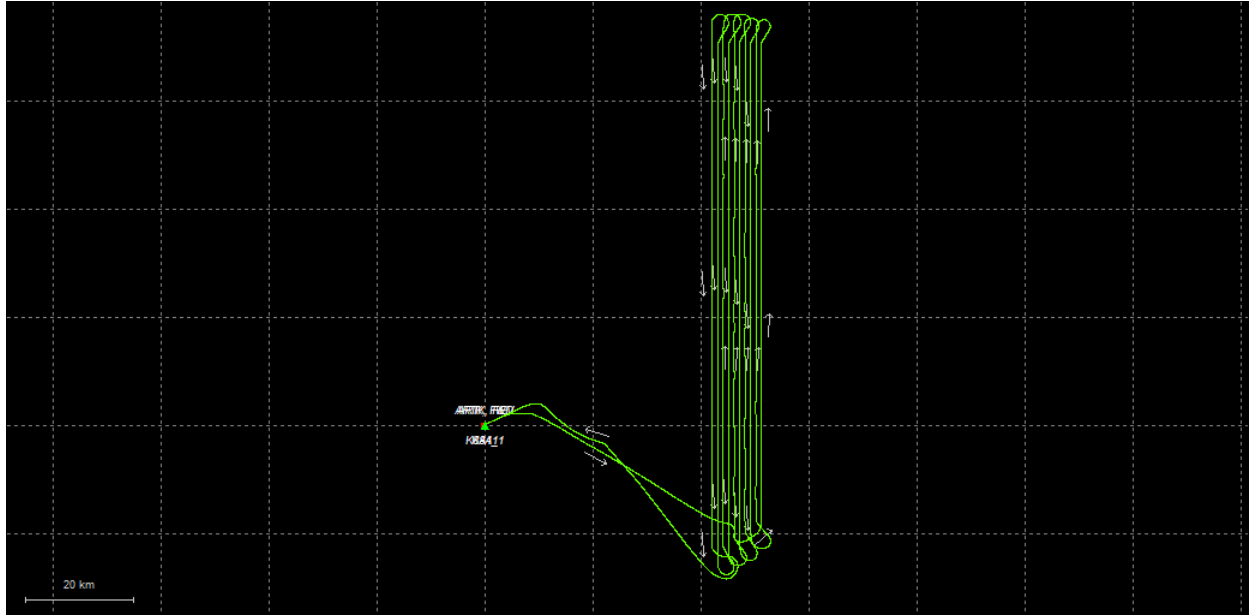


Process	20201209203945_2	by Unknown	on 12/19/2020	at 11:23:26
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Output Results for 20201210145344_3

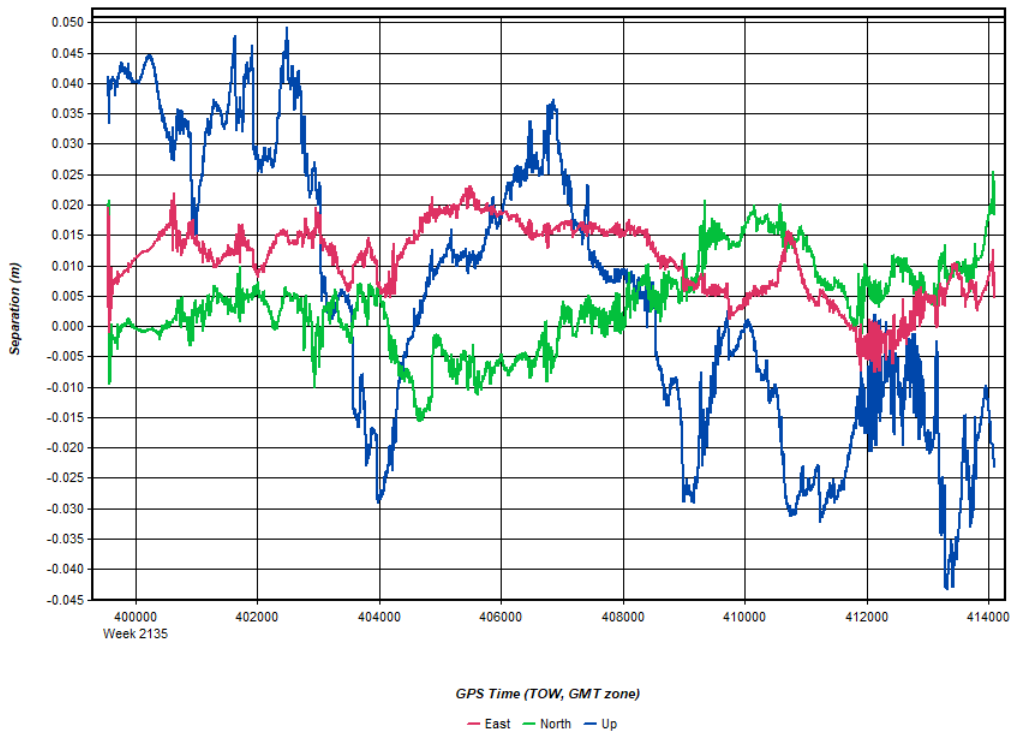
Inertial Explorer Version 8.90.2124
12/18/2020

Figure 1: Smoothed TC Combined - Map



Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 2: 20201210145344_3 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 3: 20201210145344_3 [Smoothed TC Combined] - Float or Fixed Ambiguity

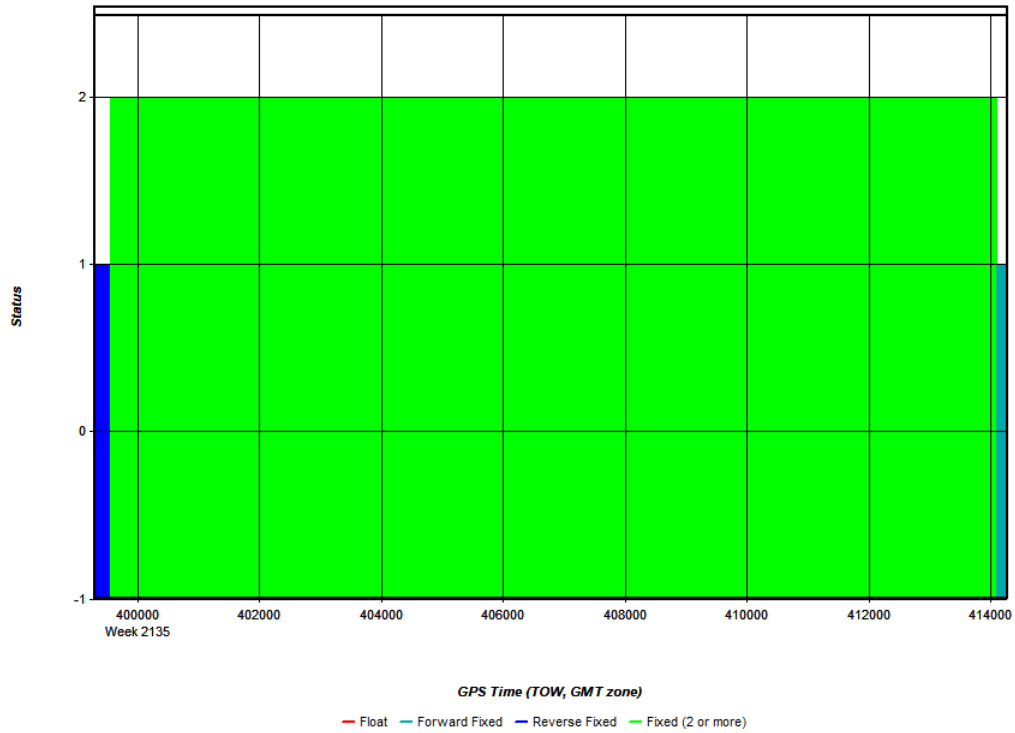


Figure 4: 20201210145344_3 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

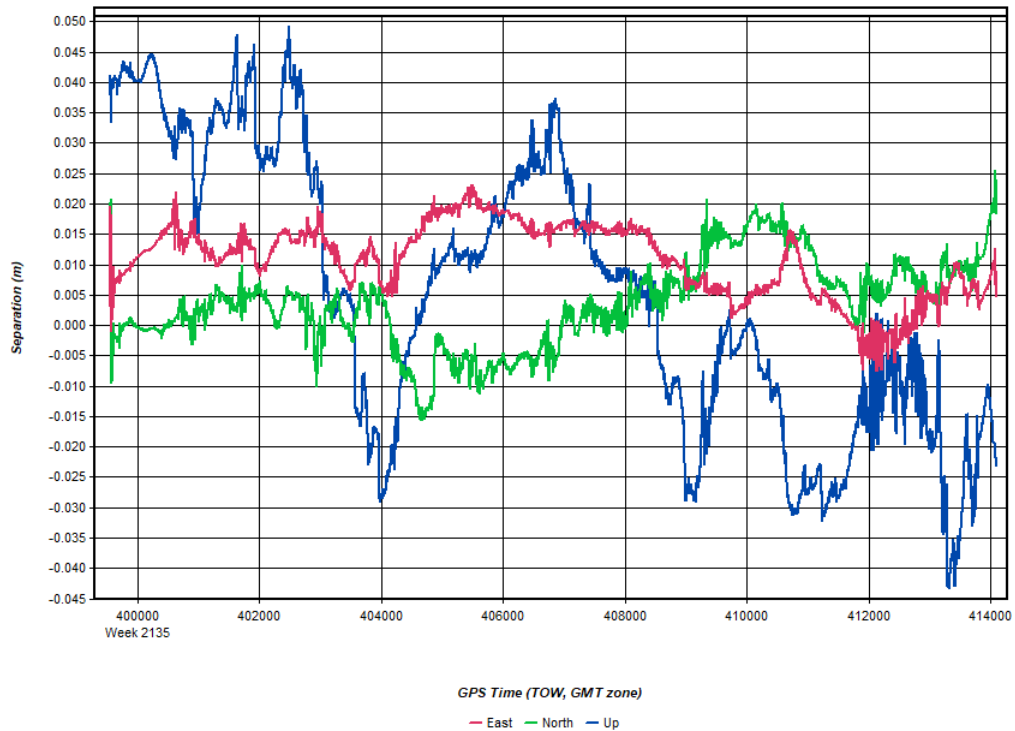
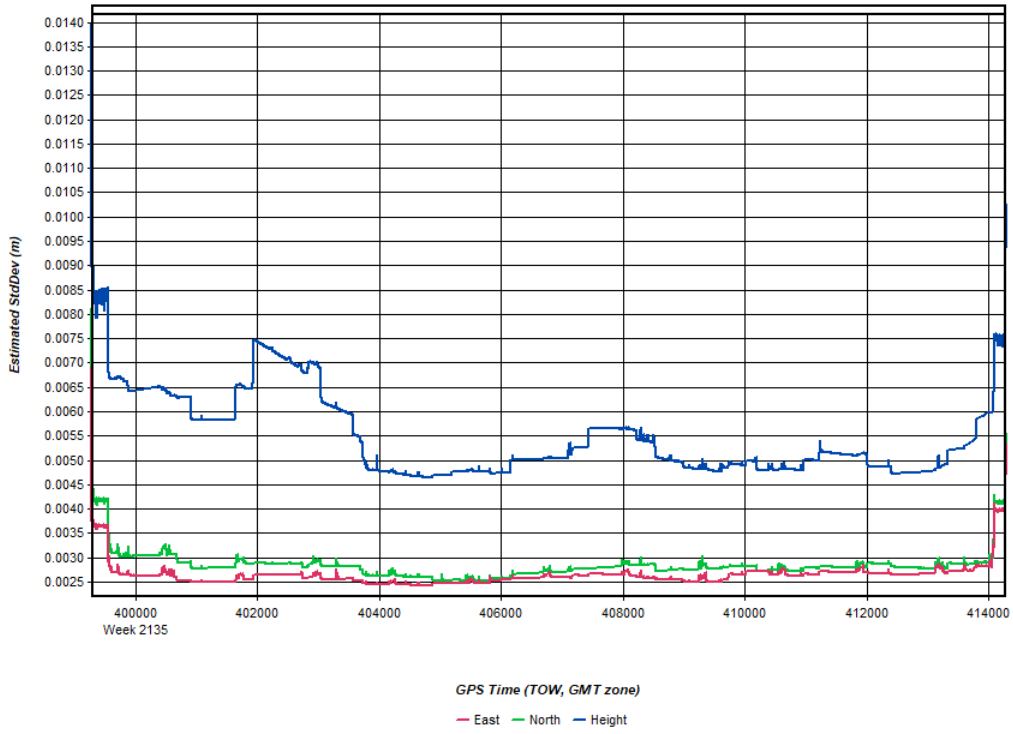
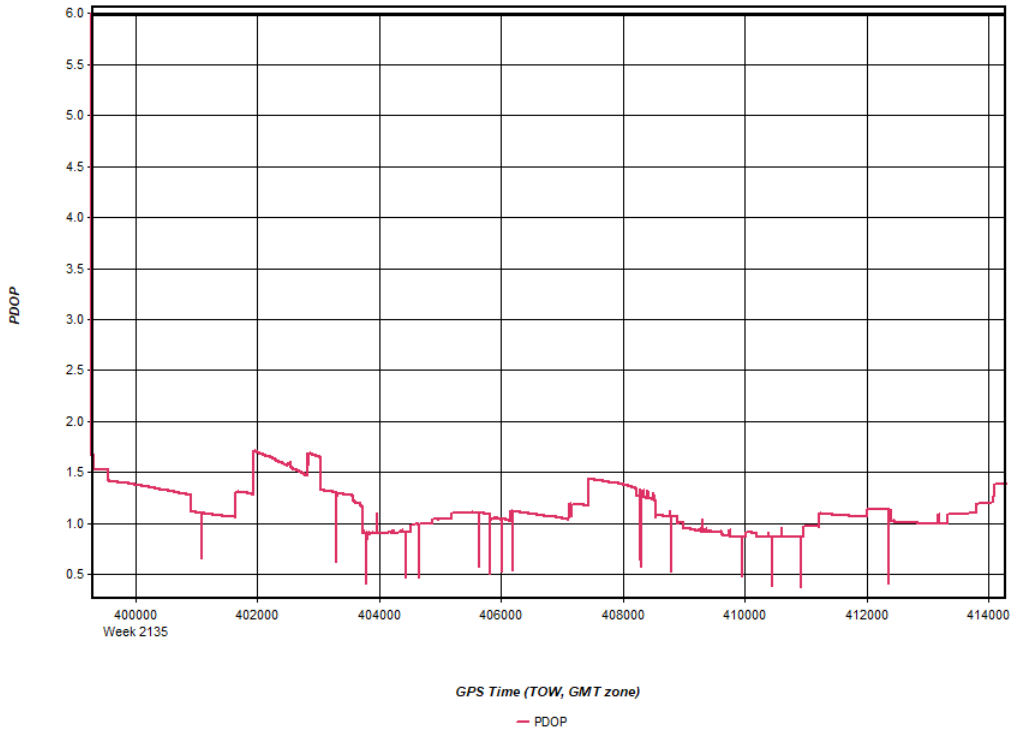


Figure 5: 20201210145344_3 [Smoothed TC Combined] - Estimated Position Accuracy Plot



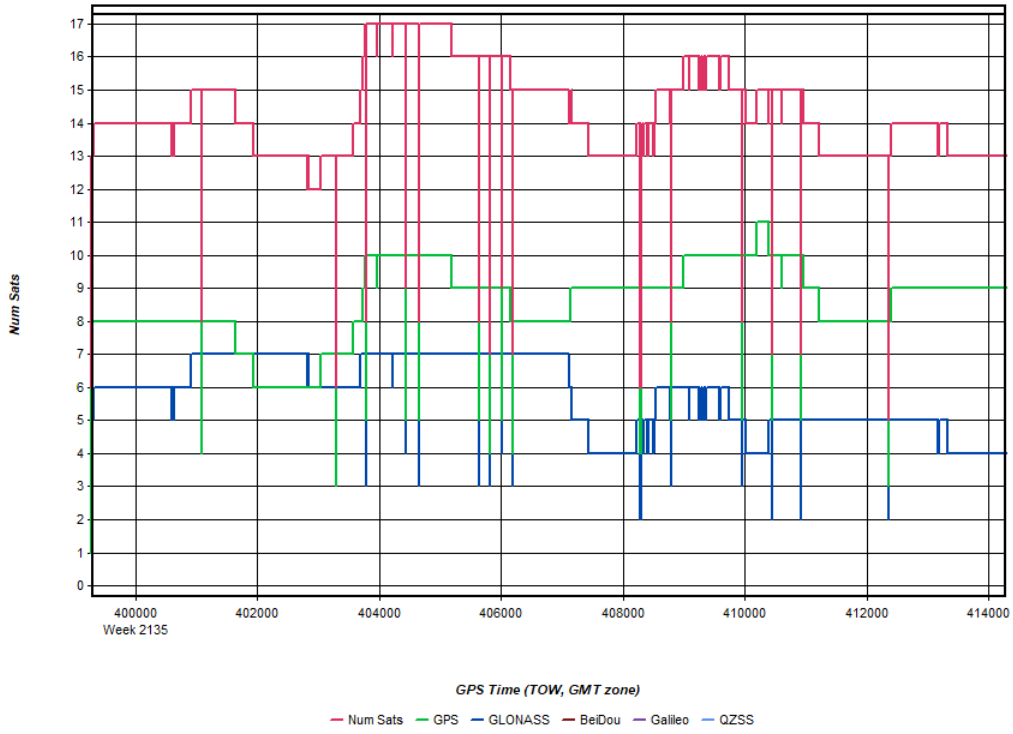
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 6: 20201210145344_3 [Smoothed TC Combined] - PDOP Plot



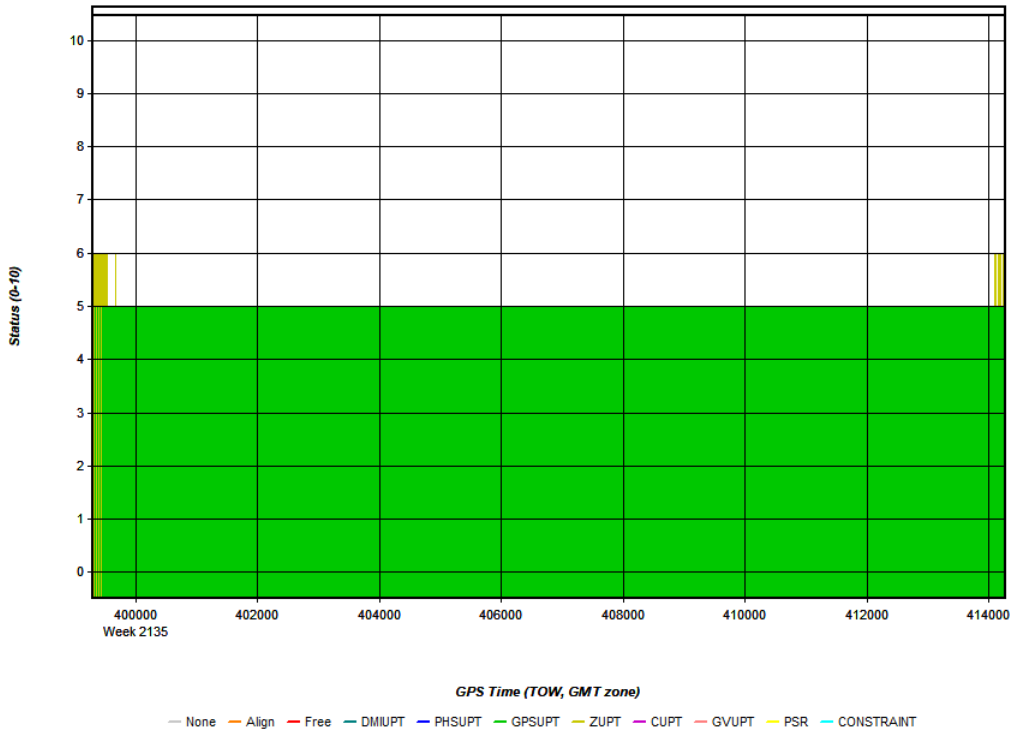
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 7: 20201210145344_3 [Smoothed TC Combined] - Number of Satellites Line Plot



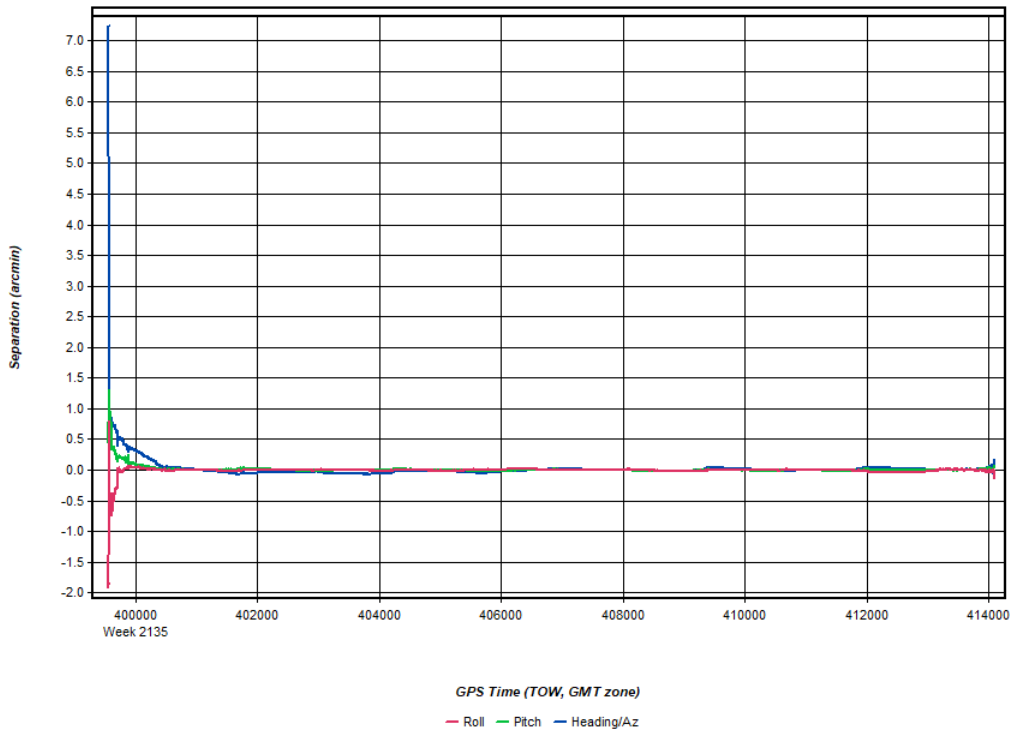
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 8: 20201210145344_3 [Smoothed TC Combined] - Status flag for IMU processing



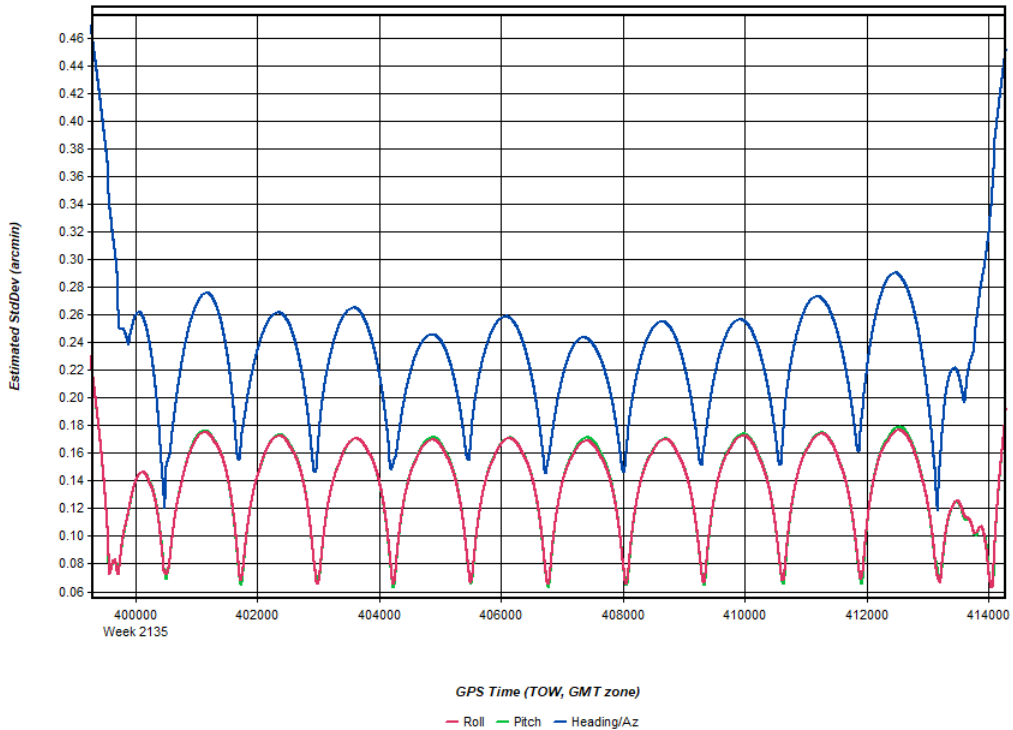
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 9: 20201210145344_3 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



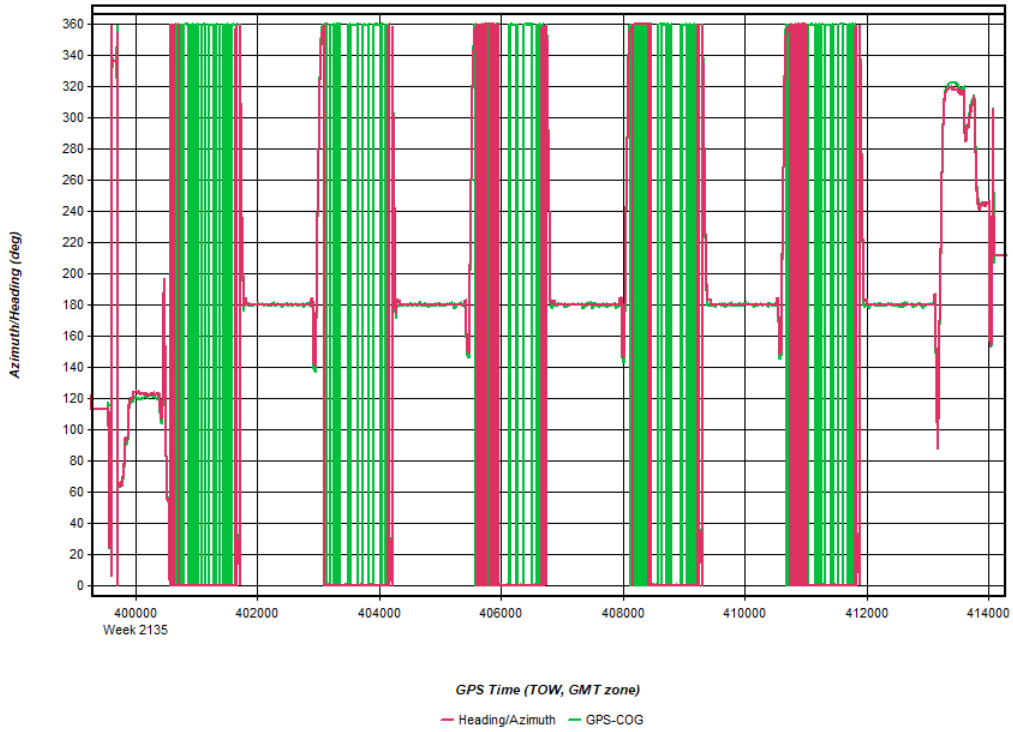
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 10: 20201210145344_3 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



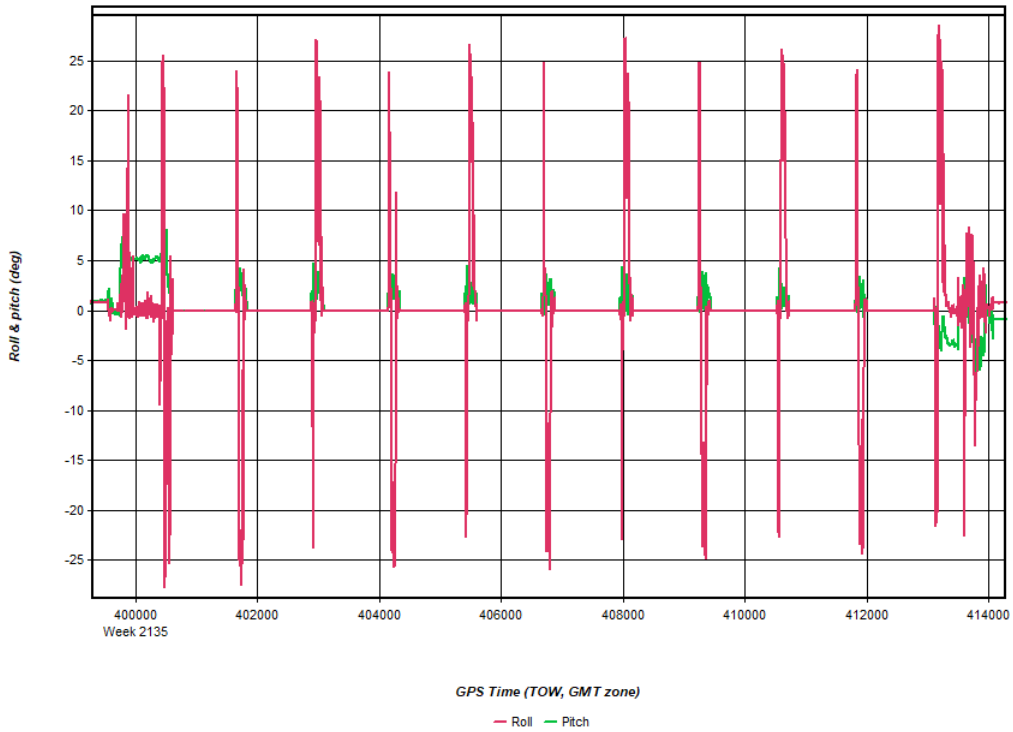
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 11: 20201210145344_3 [Smoothed TC Combined] - Azimuth Plot



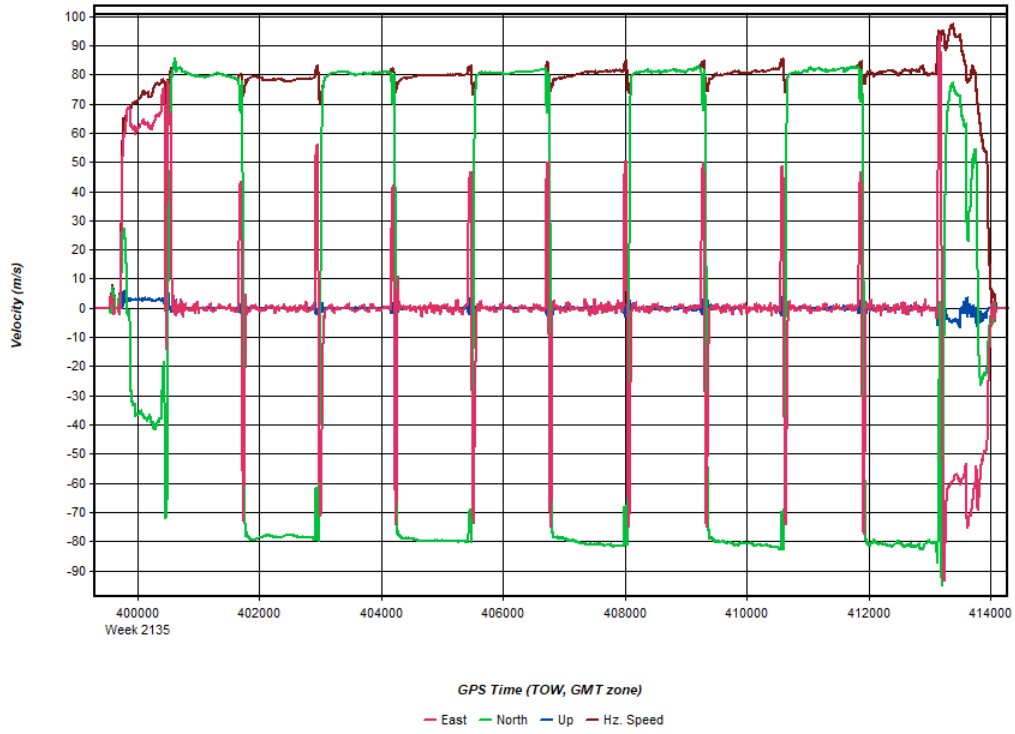
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 12: 20201210145344_3 [Smoothed TC Combined] - Roll & Pitch Plot



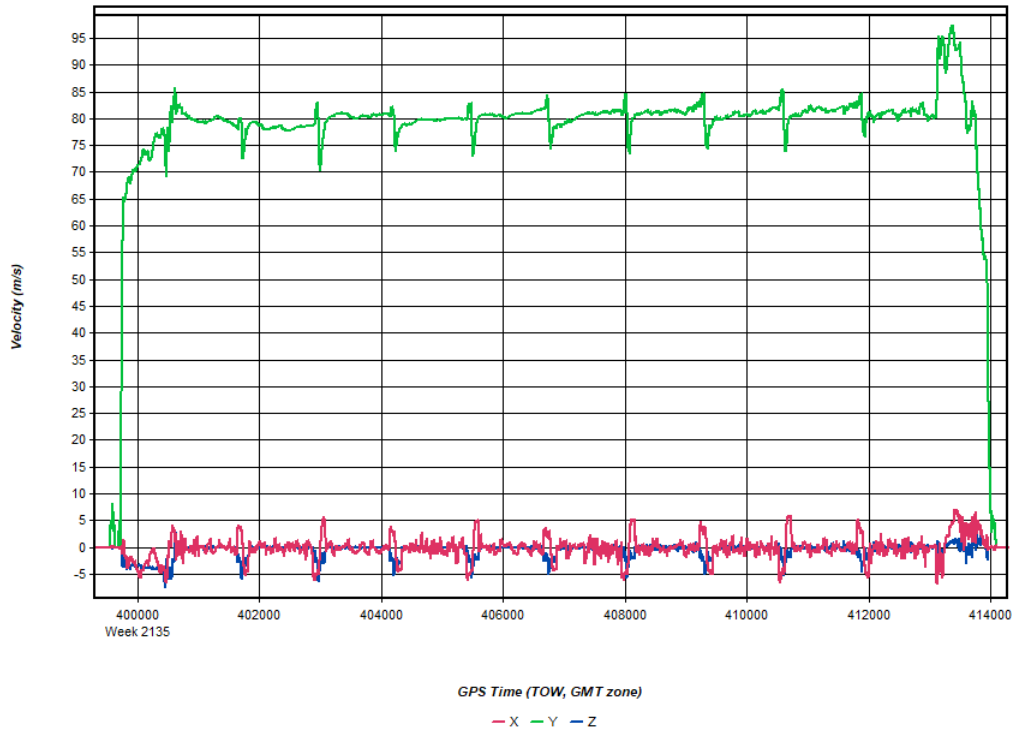
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 13: 20201210145344_3 [Smoothed TC Combined] - Velocity Profile Plot



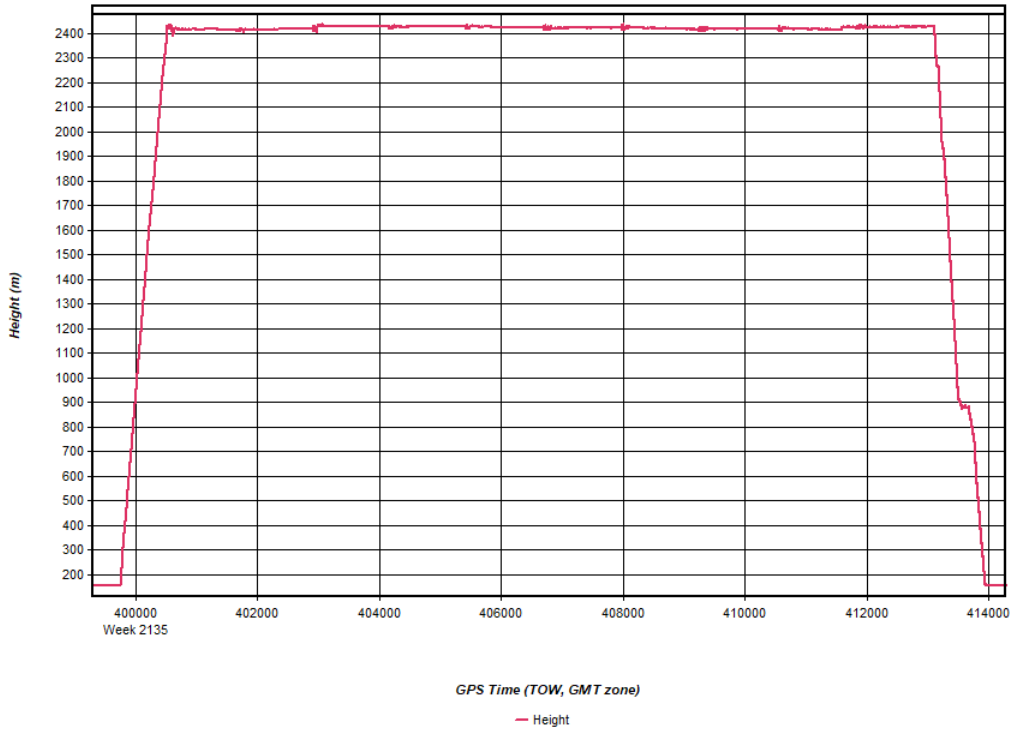
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 14: 20201210145344_3 [Smoothed TC Combined] - Body Frame Velocity Plot



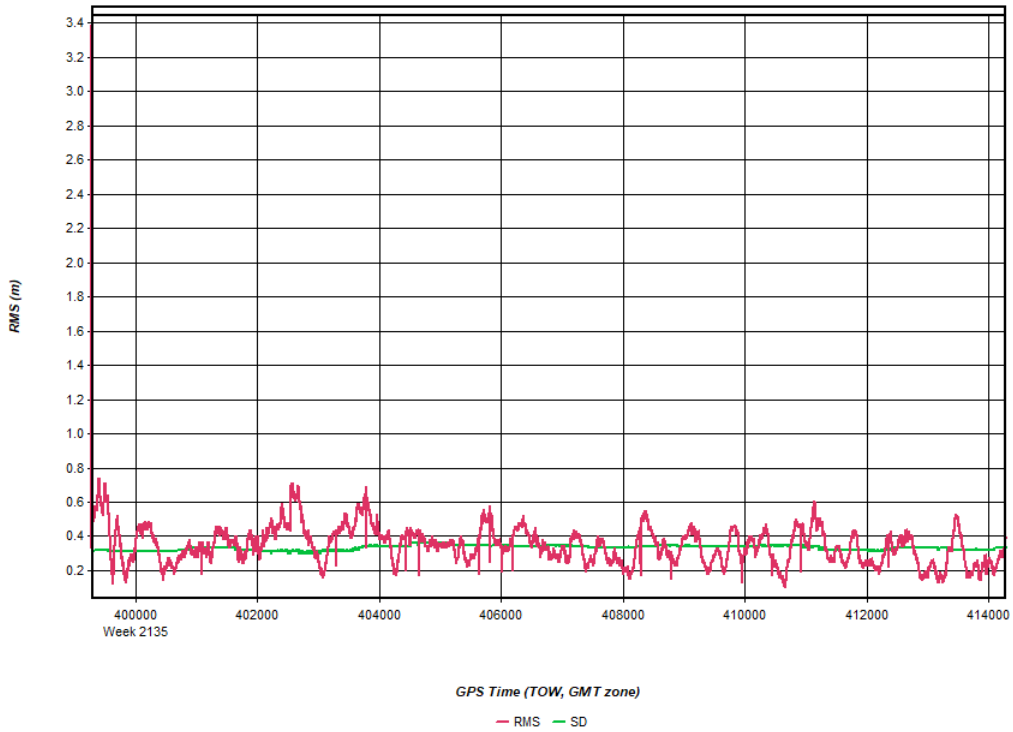
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 15: 20201210145344_3 [Smoothed TC Combined] - Height Profile Plot



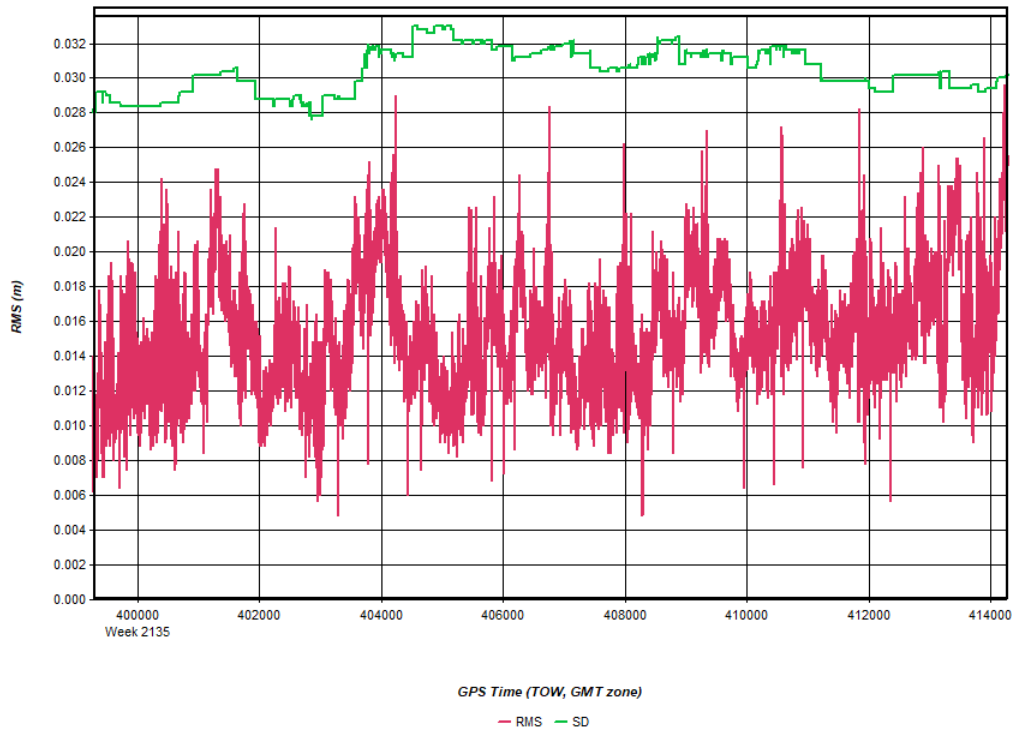
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 16: 20201210145344_3 [Smoothed TC Combined] - C/A Code Residual RMS Plot



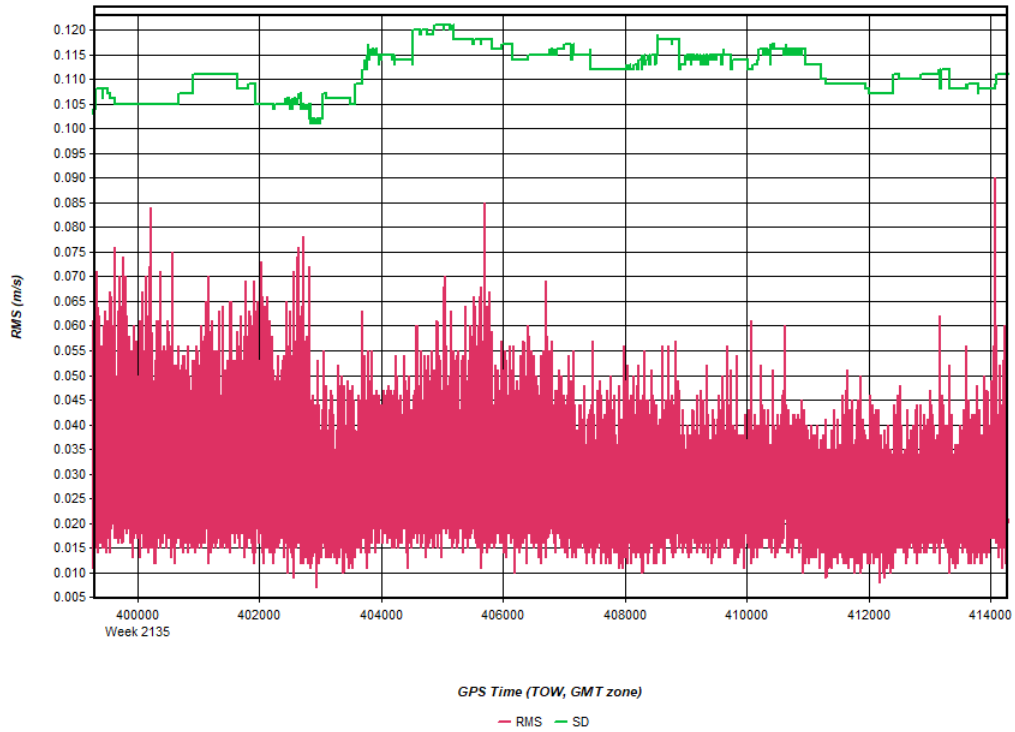
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 17: 20201210145344_3 [Smoothed TC Combined] - Carrier Residual RMS Plot



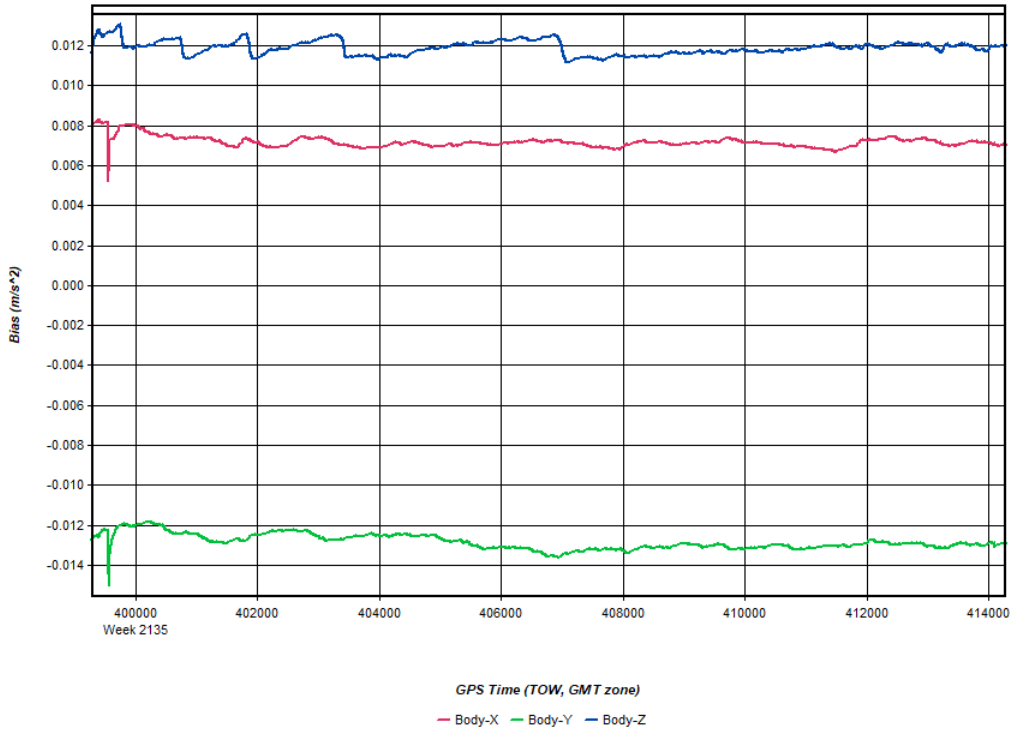
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 18: 20201210145344_3 [Smoothed TC Combined] - Doppler Residual RMS Plot



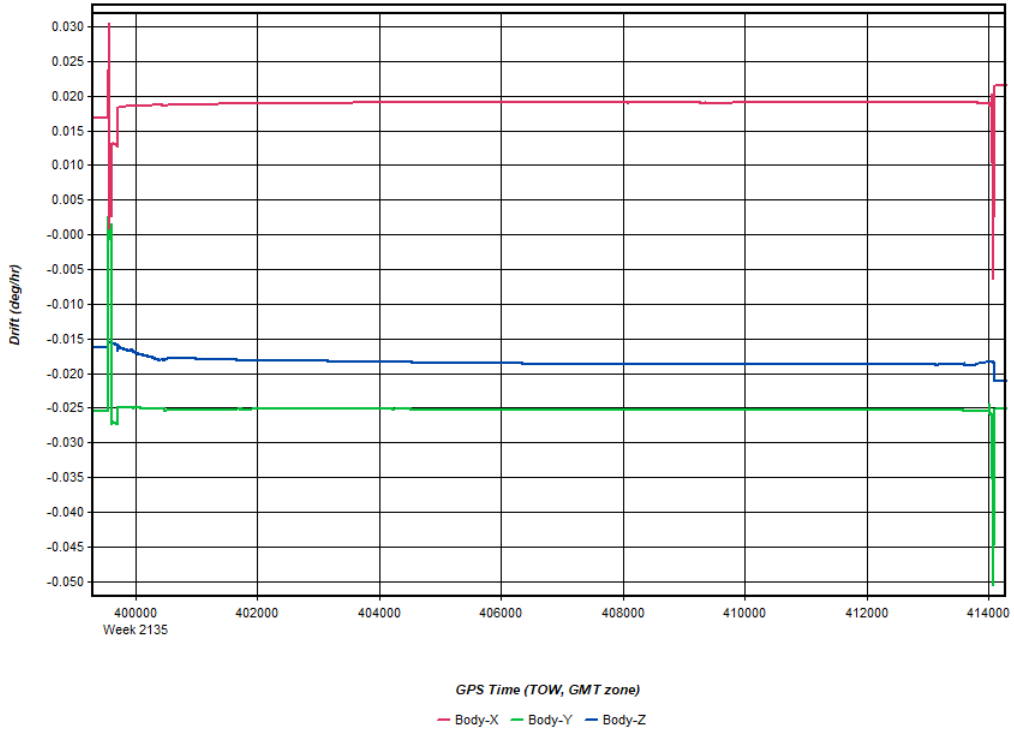
Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 19: 20201210145344_3 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Figure 20: 20201210145344_3 [Smoothed TC Combined] - Gyro Drift Plot

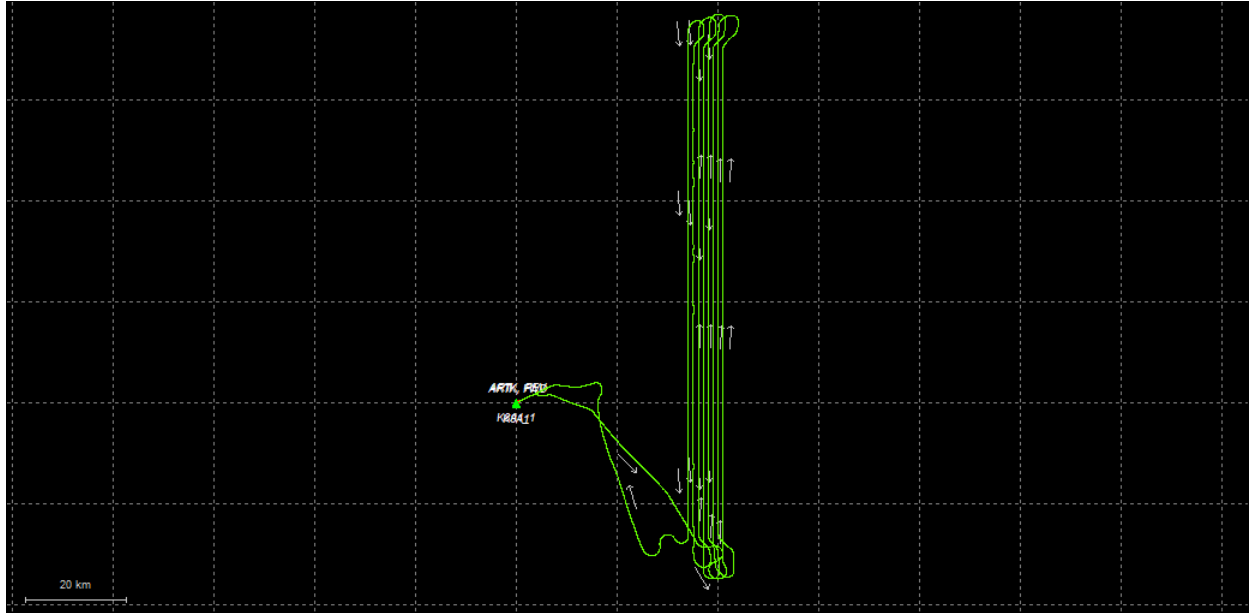


Process	20201210145344_3	by Unknown	on 12/18/2020	at 15:21:44
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Output Results for 20201210192415_4

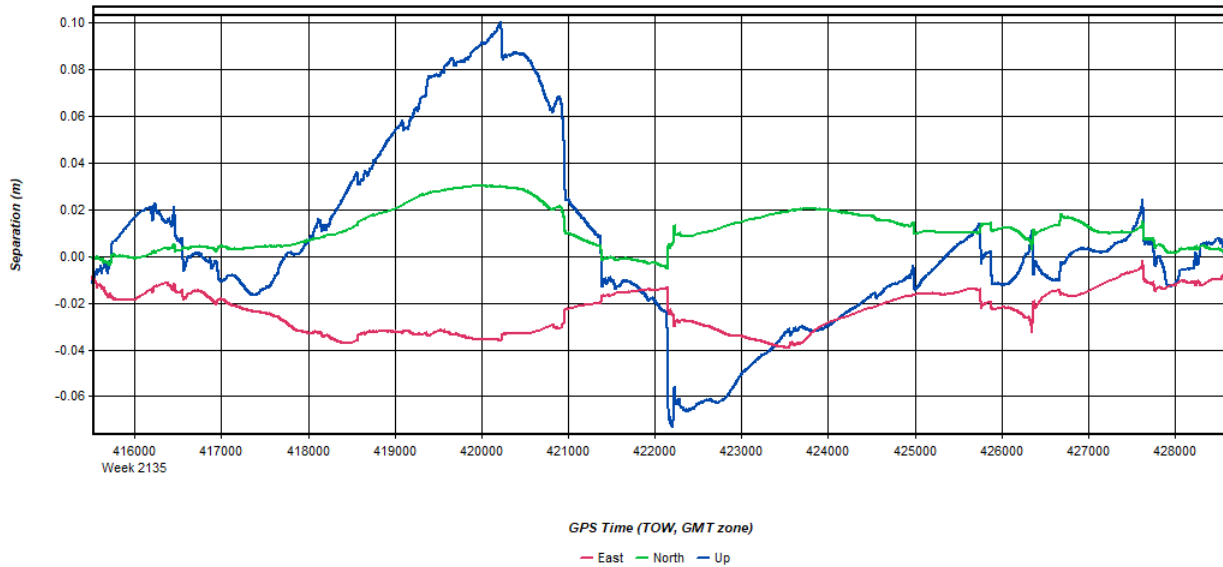
Inertial Explorer Version 8.90.2124
12/18/2020

Figure 1: Smoothed TC Combined - Map



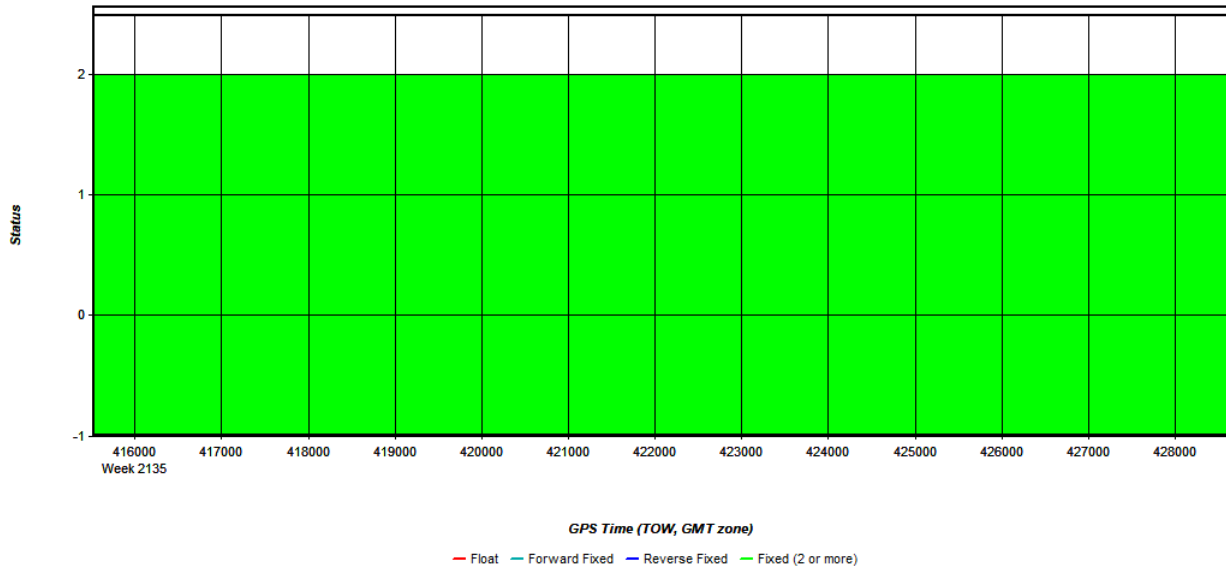
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 2: 20201210192415_4 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



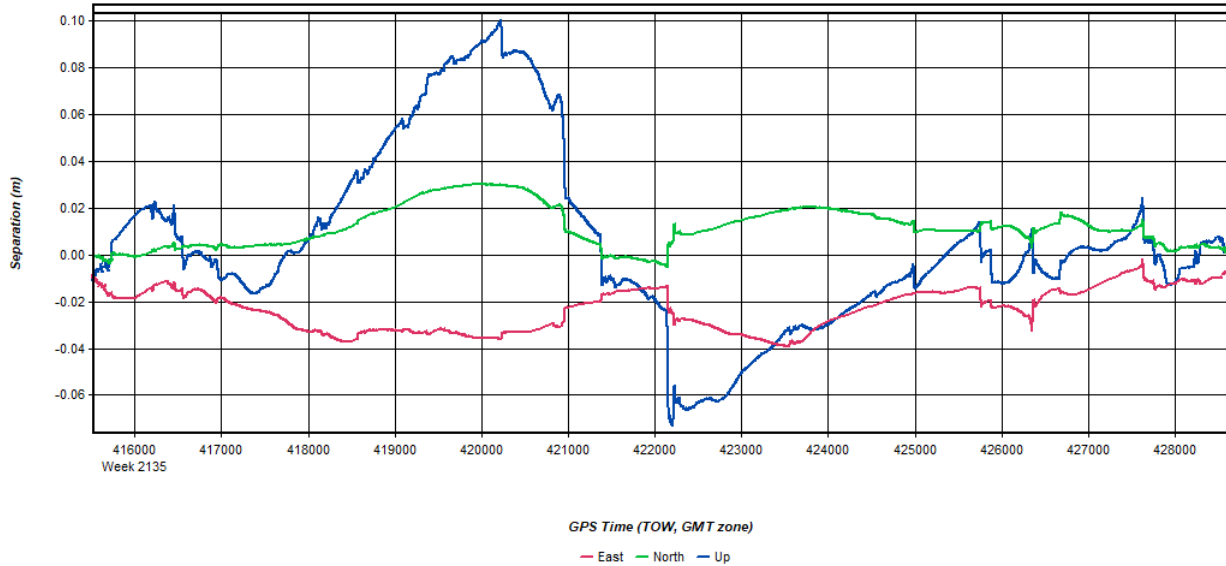
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 3: 20201210192415_4 [Smoothed TC Combined] - Float or Fixed Ambiguity



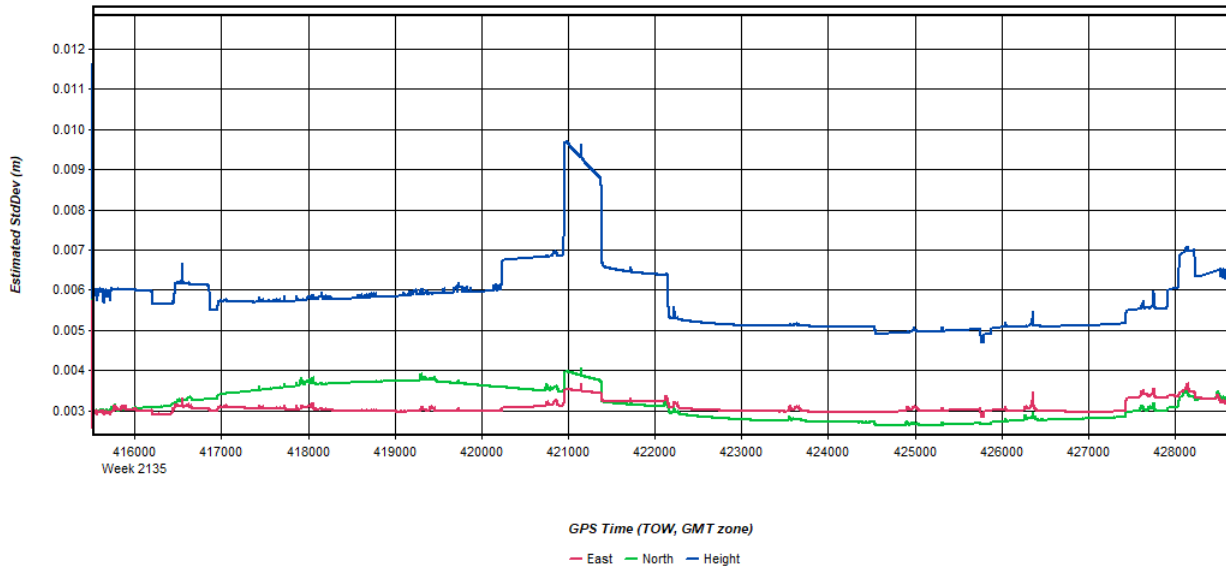
Process: 20201210192415_4 by Unknown on 12/18/2020 at 17:56:12

Figure 4: 20201210192415_4 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



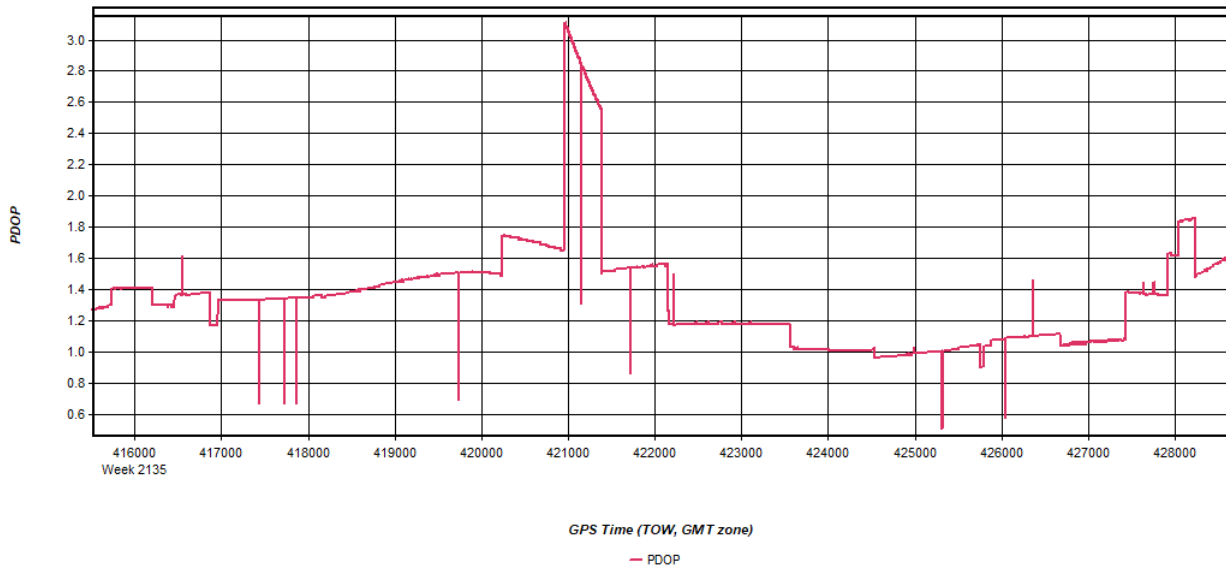
Process: 20201210192415_4 by Unknown on 12/18/2020 at 17:56:12

Figure 5: 20201210192415_4 [Smoothed TC Combined] - Estimated Position Accuracy Plot



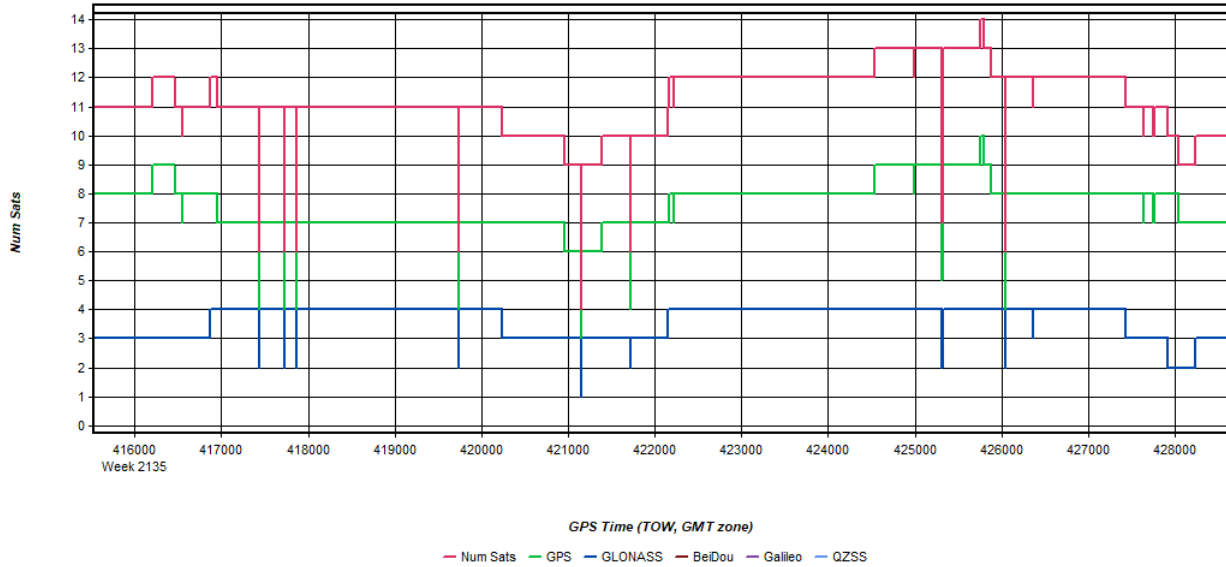
Process 20201210192415_4 by Unknown on 12/18/2020 at 17:56:12

Figure 6: 20201210192415_4 [Smoothed TC Combined] - PDOP Plot



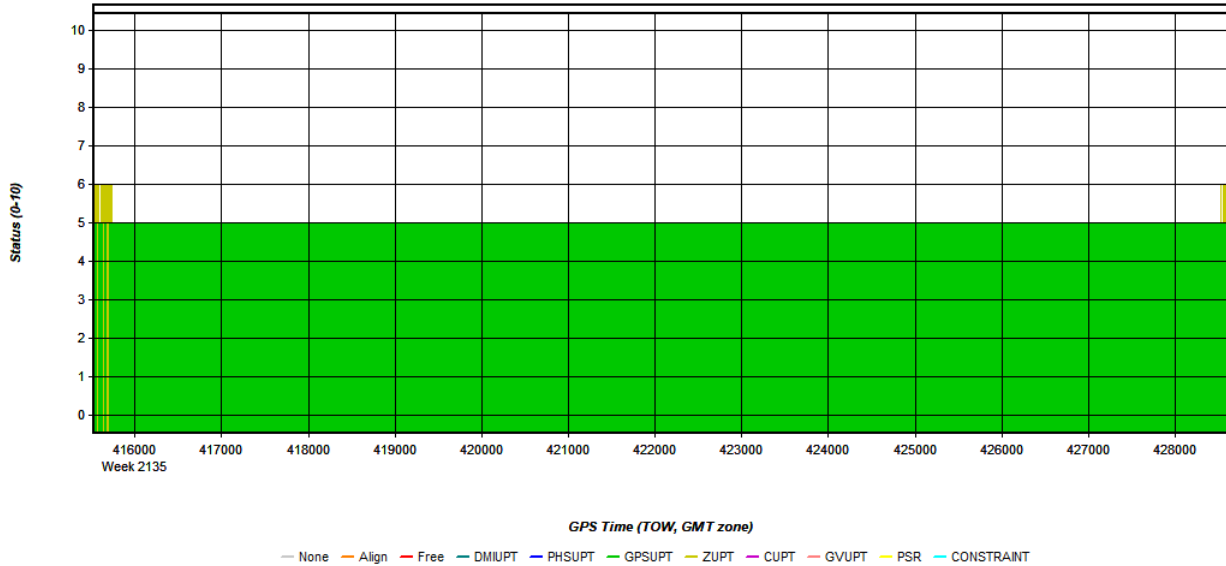
Process 20201210192415_4 by Unknown on 12/18/2020 at 17:56:12

Figure 7: 20201210192415_4 [Smoothed TC Combined] - Number of Satellites Line Plot



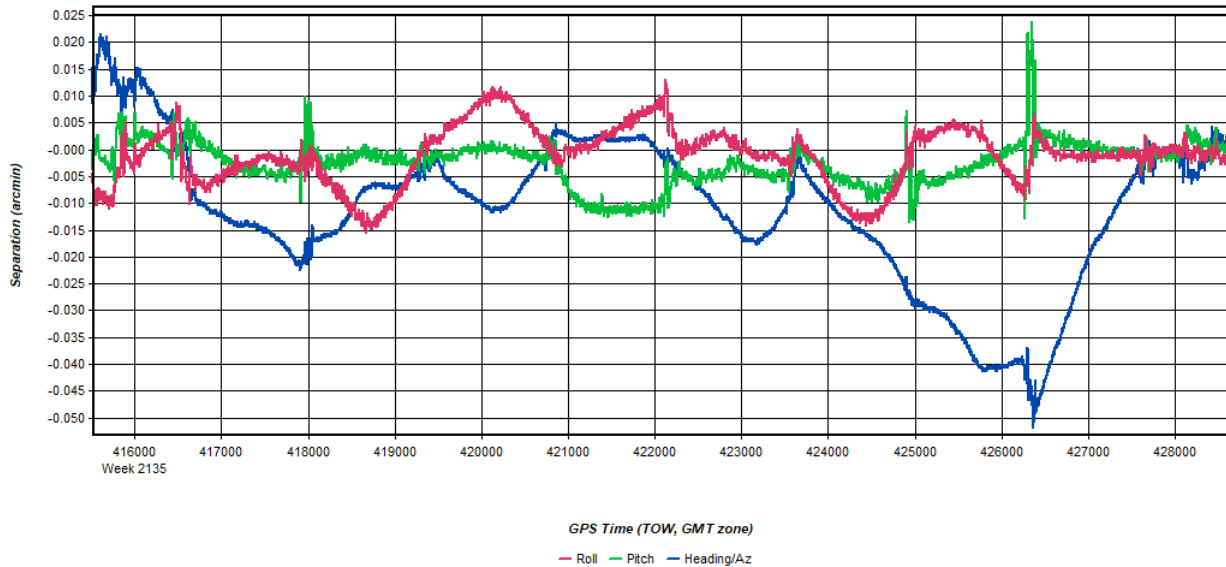
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 8: 20201210192415_4 [Smoothed TC Combined] - Status flag for IMU processing



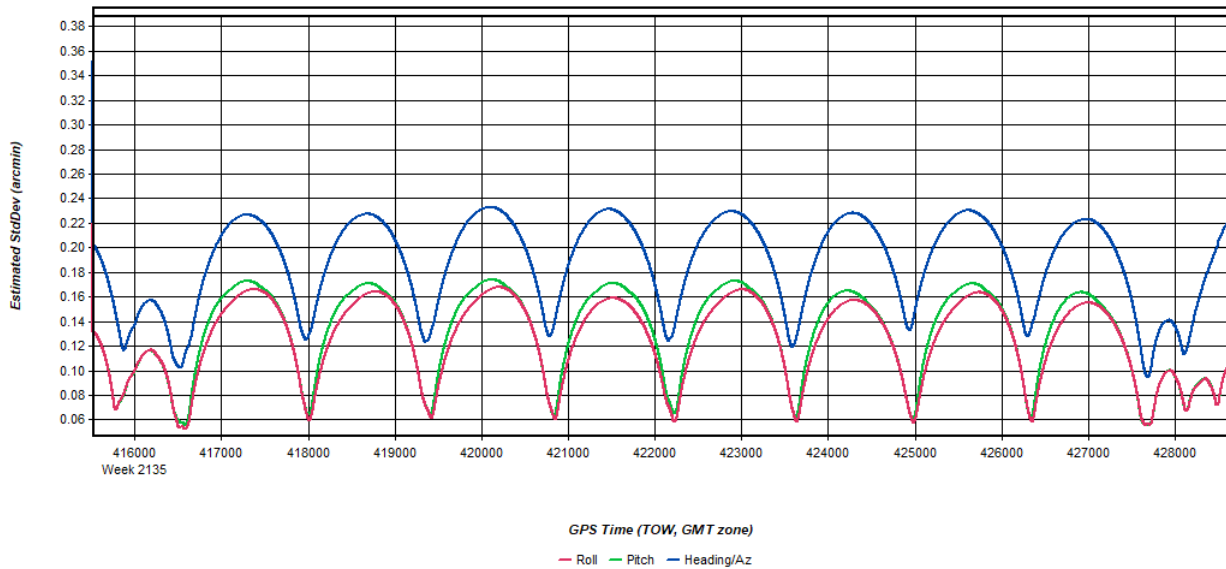
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 9: 20201210192415_4 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



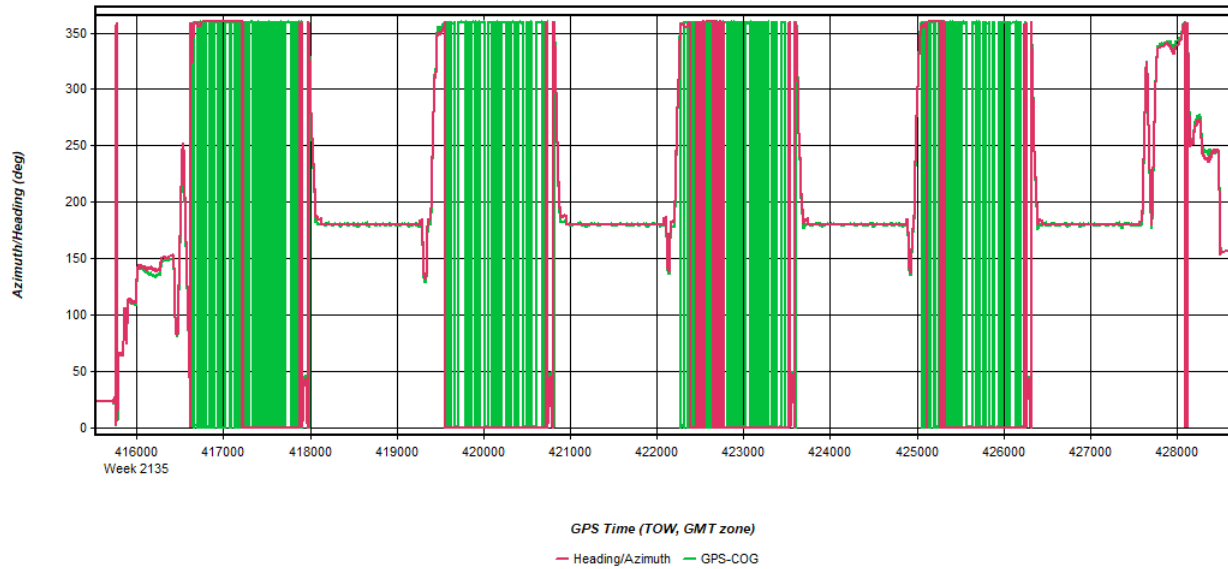
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 10: 20201210192415_4 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



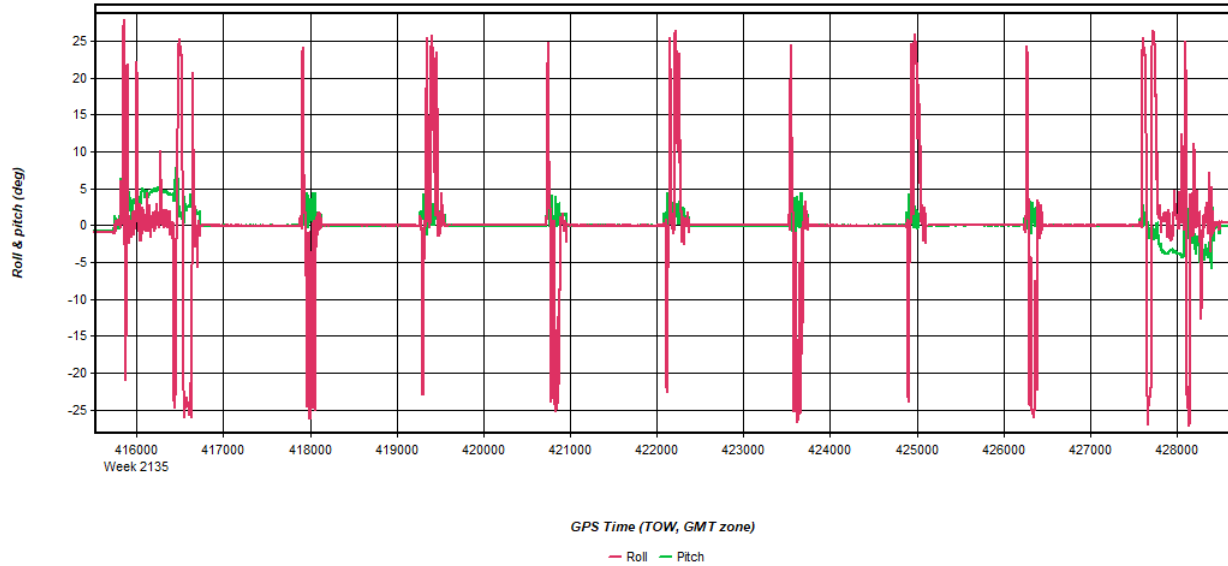
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 11: 20201210192415_4 [Smoothed TC Combined] - Azimuth Plot



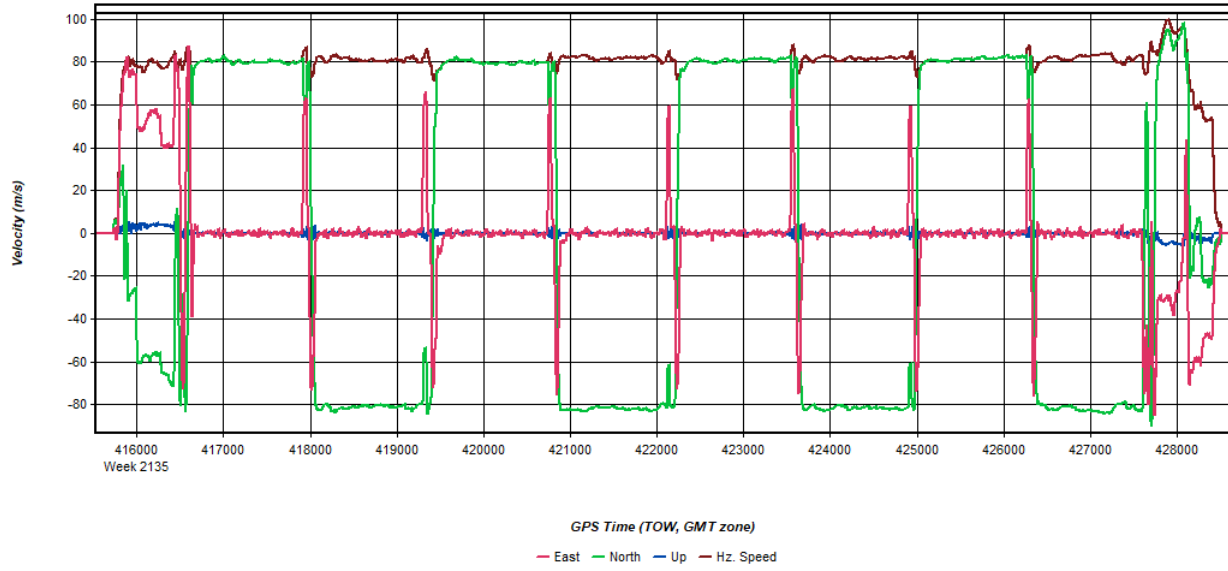
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 12: 20201210192415_4 [Smoothed TC Combined] - Roll & Pitch Plot



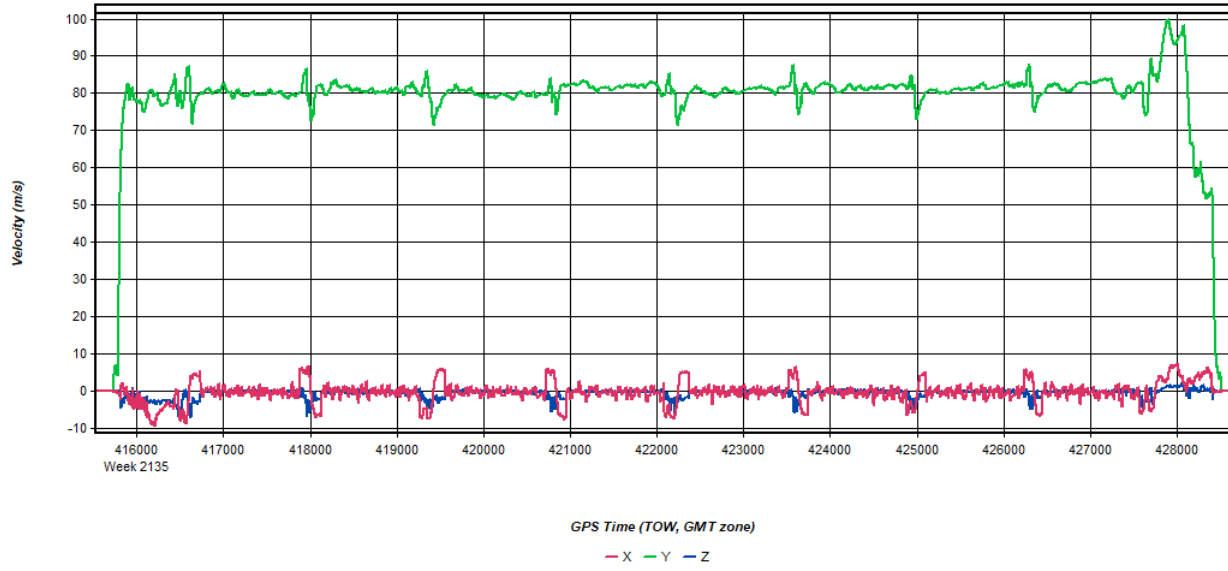
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 13: 20201210192415_4 [Smoothed TC Combined] - Velocity Profile Plot



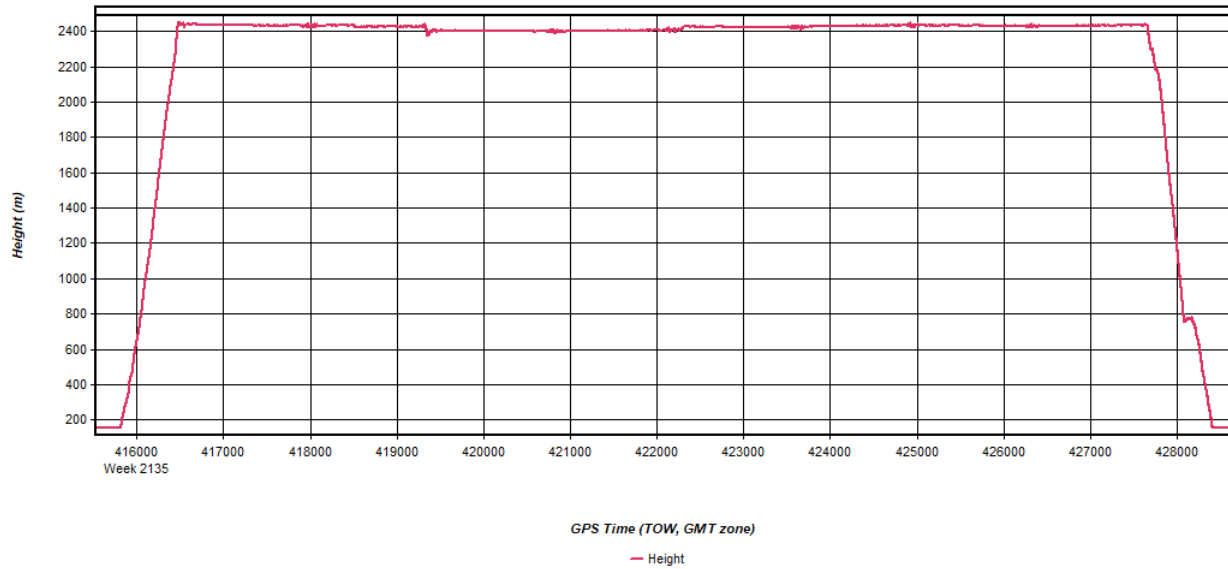
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 14: 20201210192415_4 [Smoothed TC Combined] - Body Frame Velocity Plot



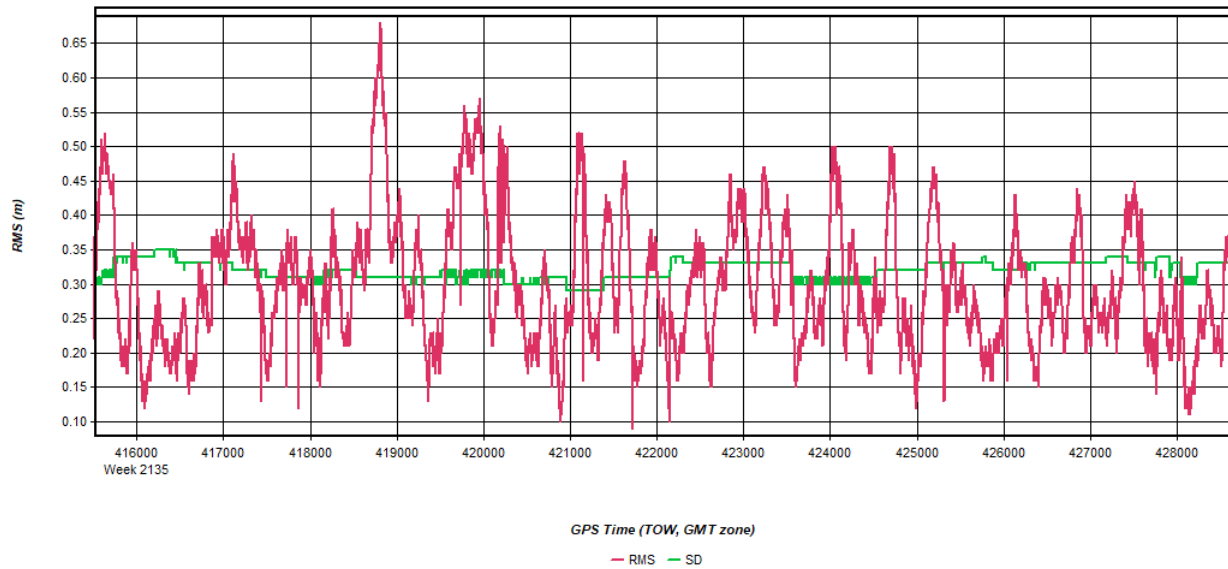
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 15: 20201210192415_4 [Smoothed TC Combined] - Height Profile Plot



Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 16: 20201210192415_4 [Smoothed TC Combined] - C/A Code Residual RMS Plot



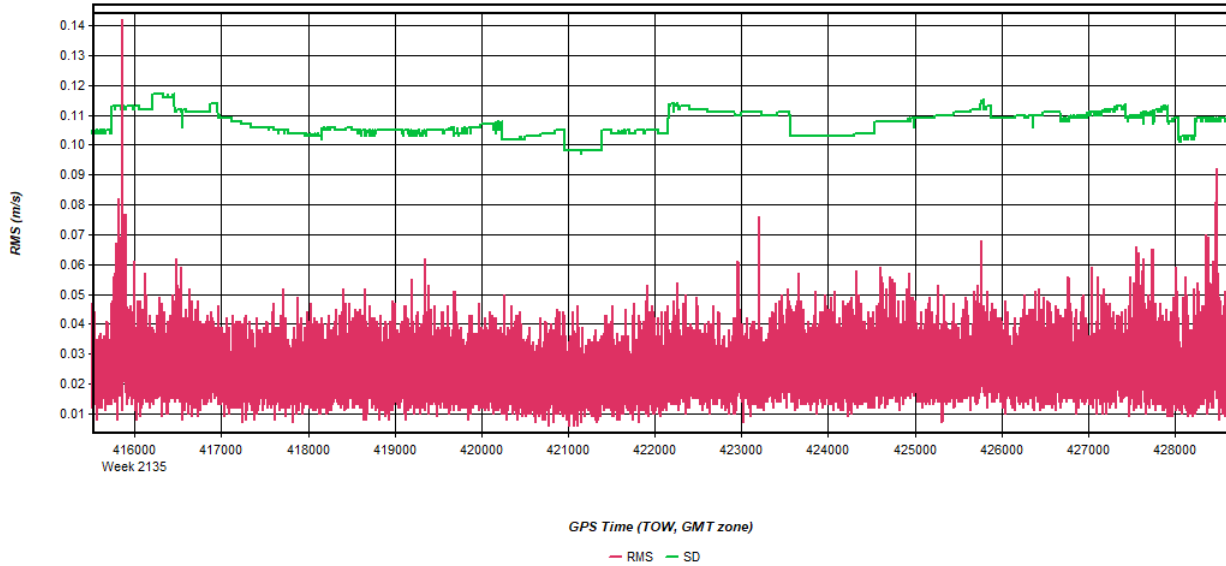
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 17: 20201210192415_4 [Smoothed TC Combined] - Carrier Residual RMS Plot



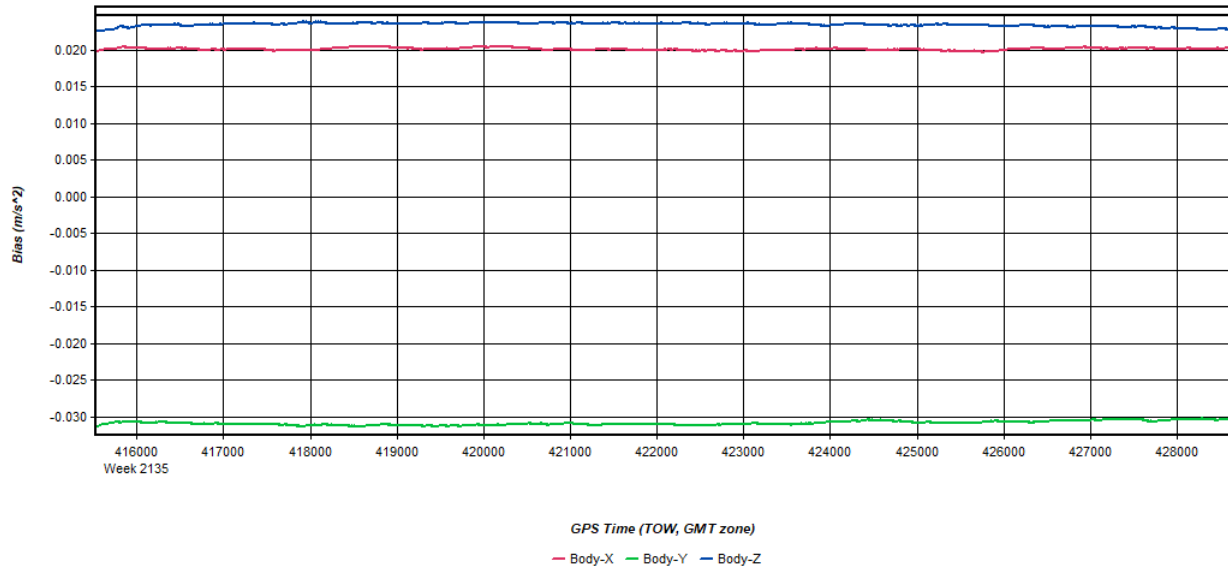
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 18: 20201210192415_4 [Smoothed TC Combined] - Doppler Residual RMS Plot



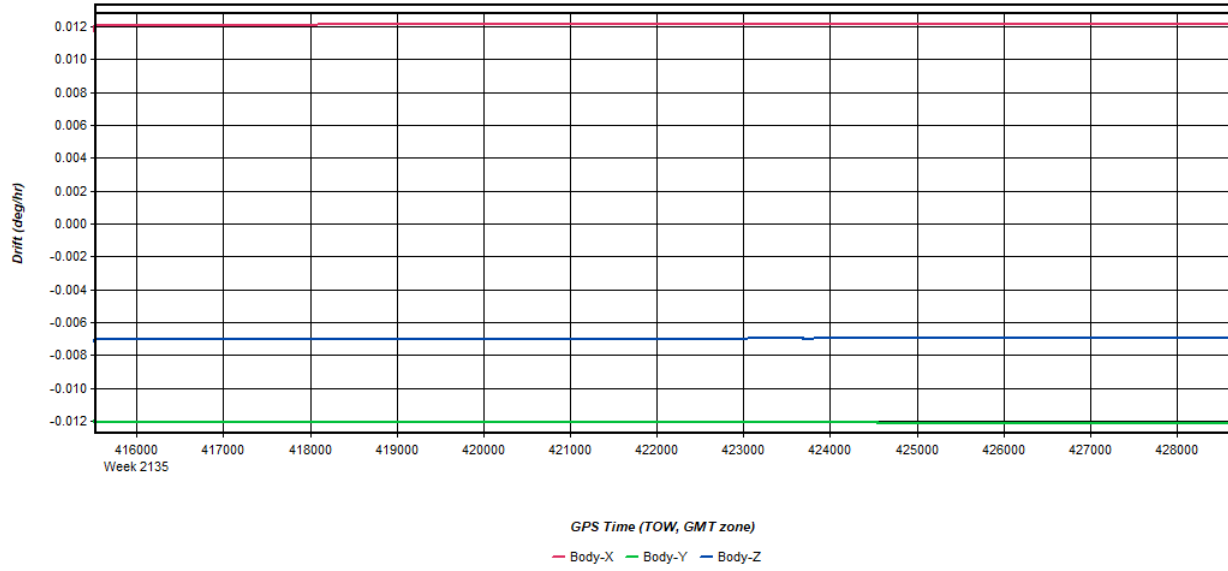
Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 19: 20201210192415_4 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Figure 20: 20201210192415_4 [Smoothed TC Combined] - Gyro Drift Plot

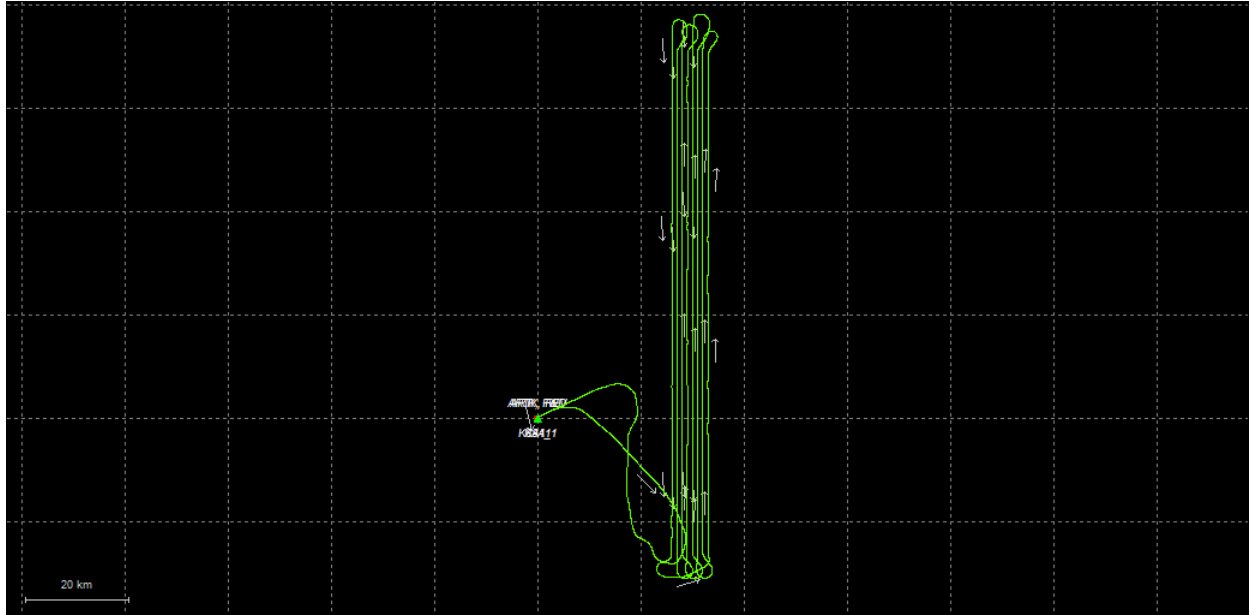


Process	20201210192415_4	by Unknown	on 12/18/2020	at 17:56:12
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Output Results for 20201211140400_5

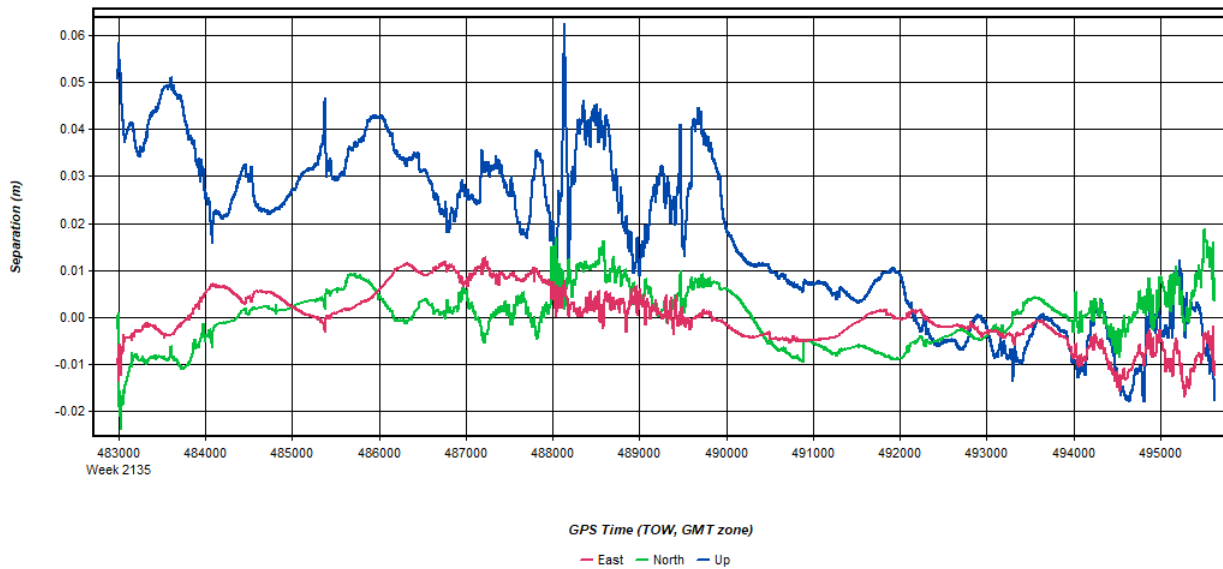
Inertial Explorer Version 8.90.2124
12/19/2020

Figure 1: Smoothed TC Combined - Map



Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 2: 20201211140400_5 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 3: 20201211140400_5 [Smoothed TC Combined] - Float or Fixed Ambiguity

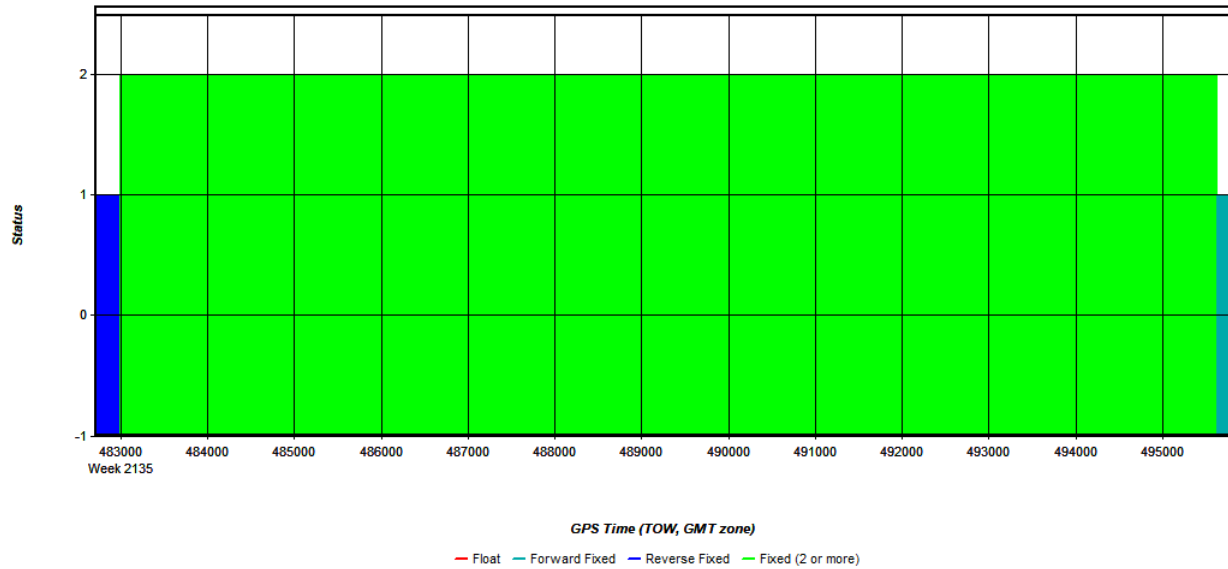


Figure 4: 20201211140400_5 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

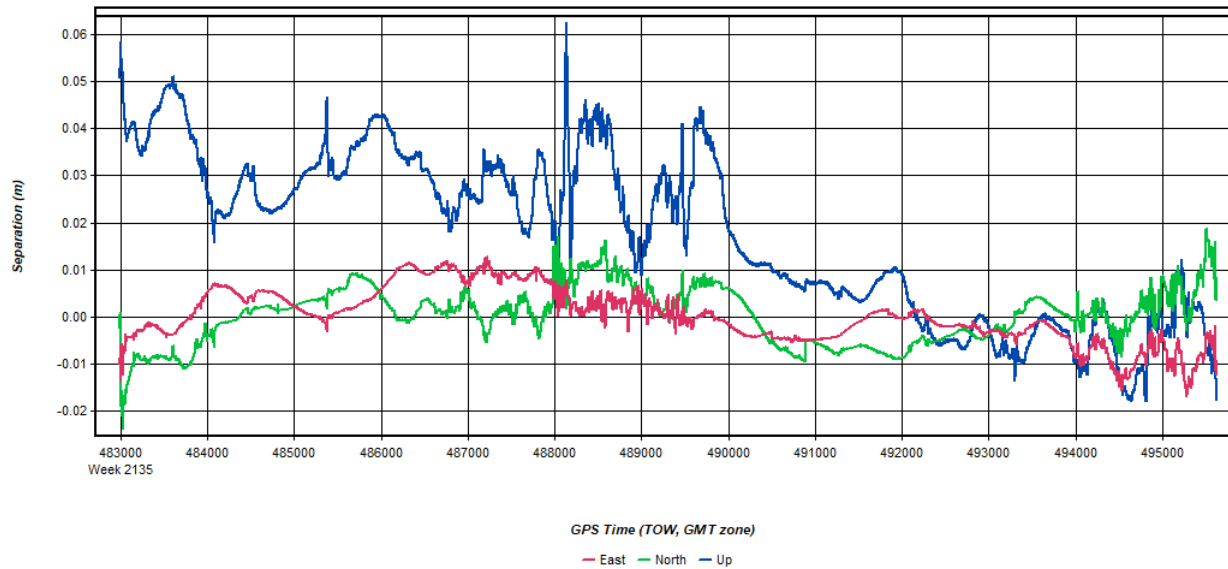
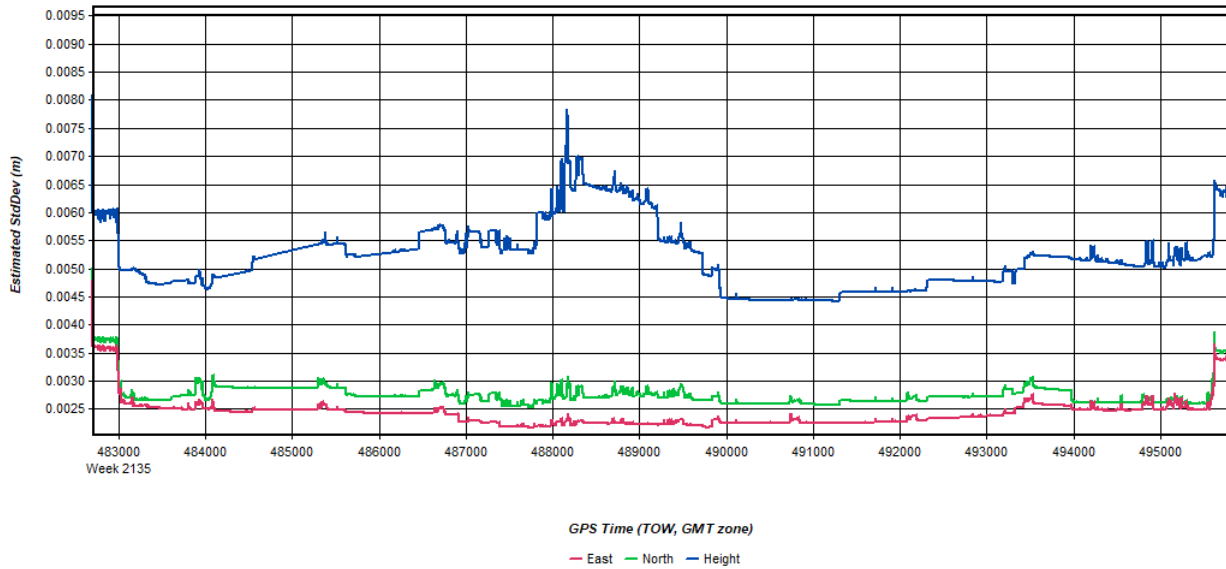
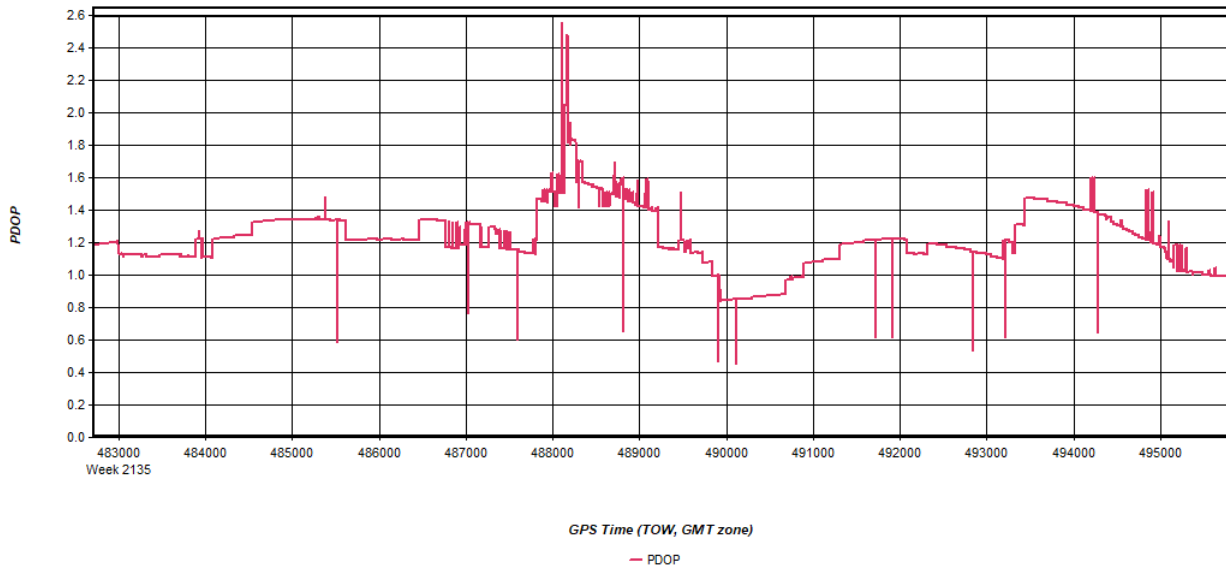


Figure 5: 20201211140400_5 [Smoothed TC Combined] - Estimated Position Accuracy Plot



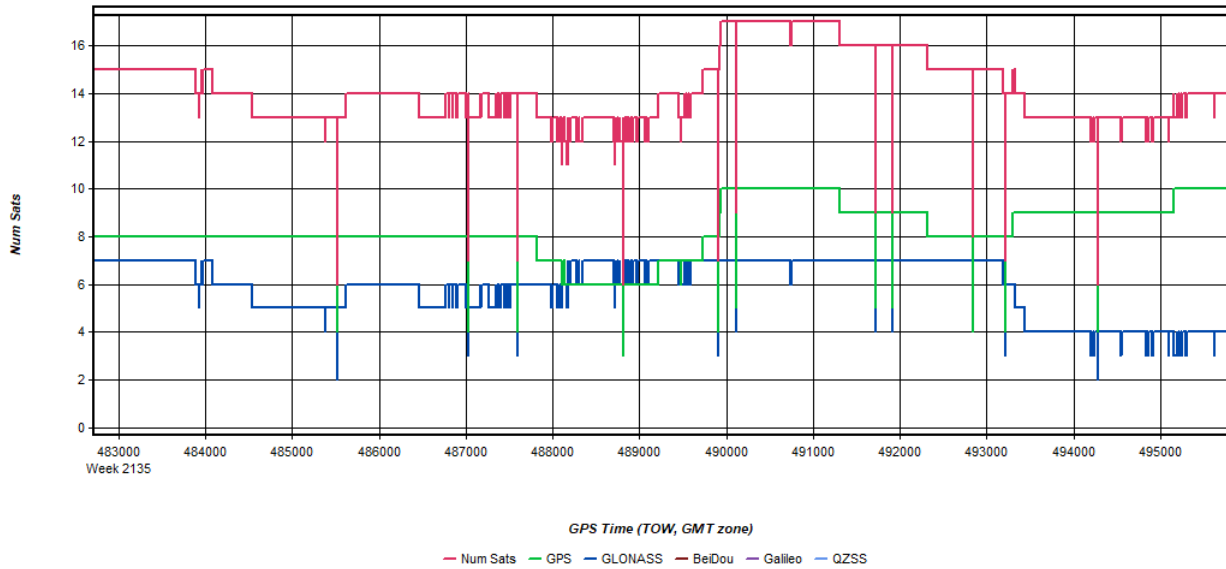
Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 6: 20201211140400_5 [Smoothed TC Combined] - PDOP Plot



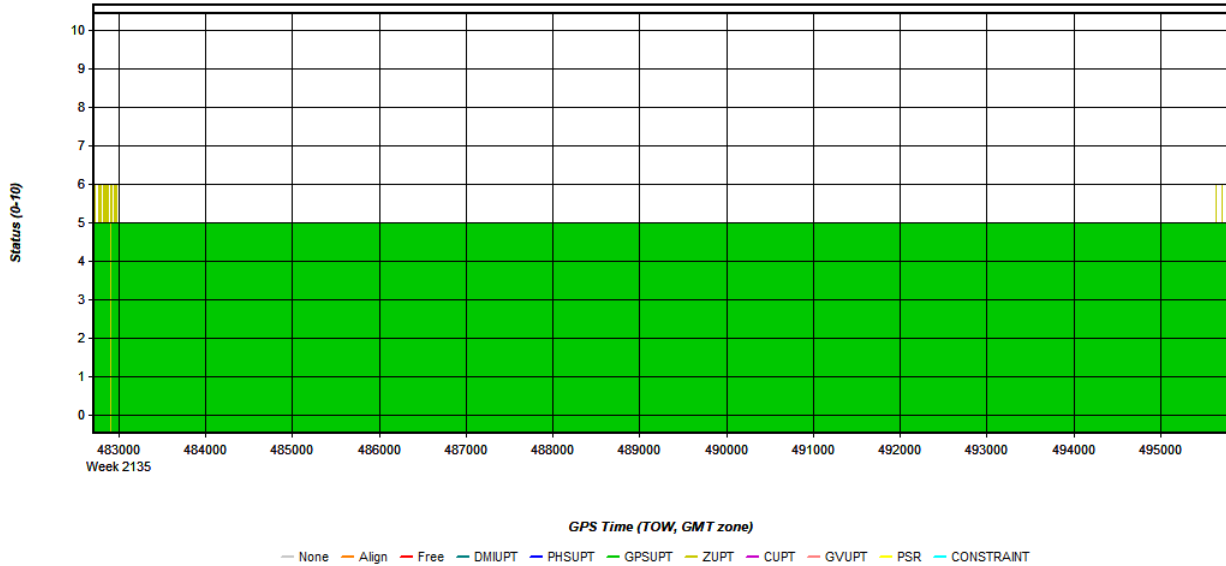
Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 7: 20201211140400_5 [Smoothed TC Combined] - Number of Satellites Line Plot



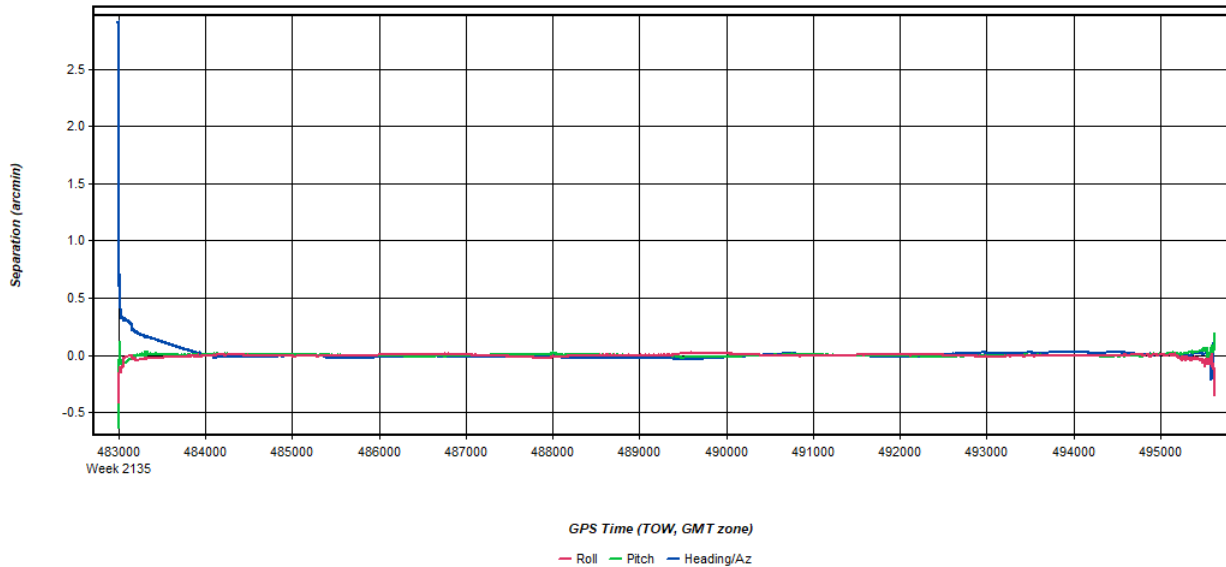
Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 8: 20201211140400_5 [Smoothed TC Combined] - Status flag for IMU processing



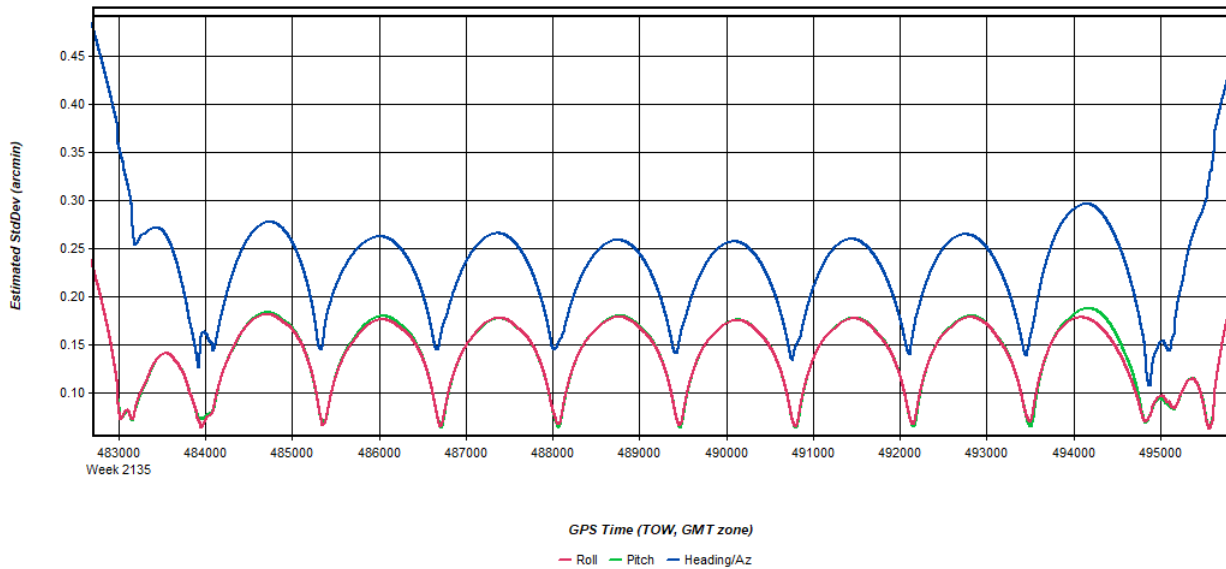
Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 9: 20201211140400_5 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



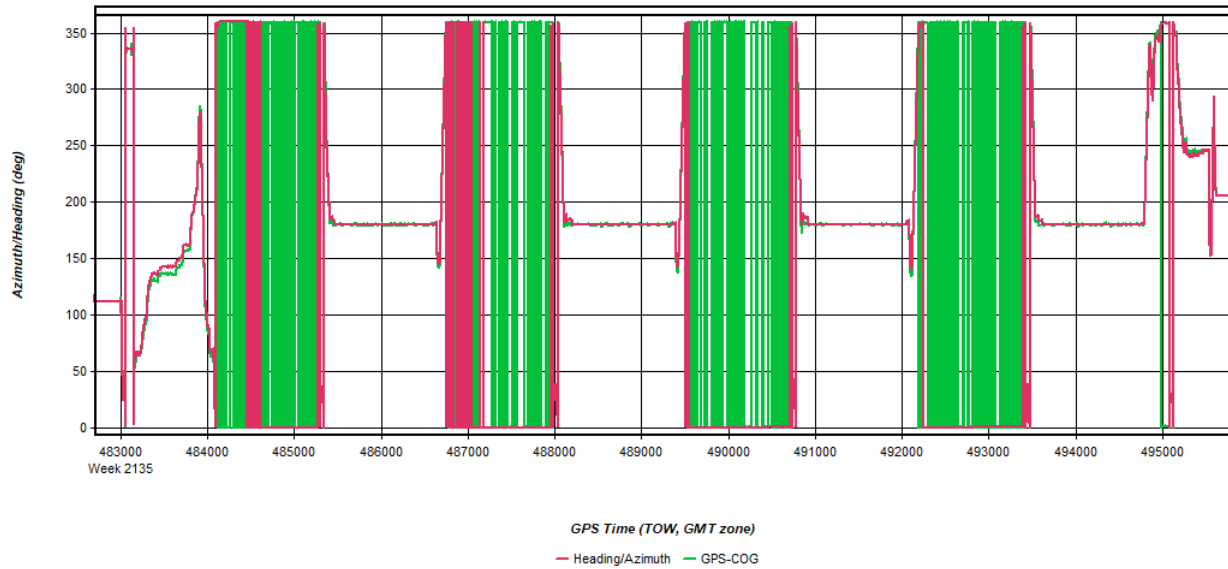
Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 10: 20201211140400_5 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



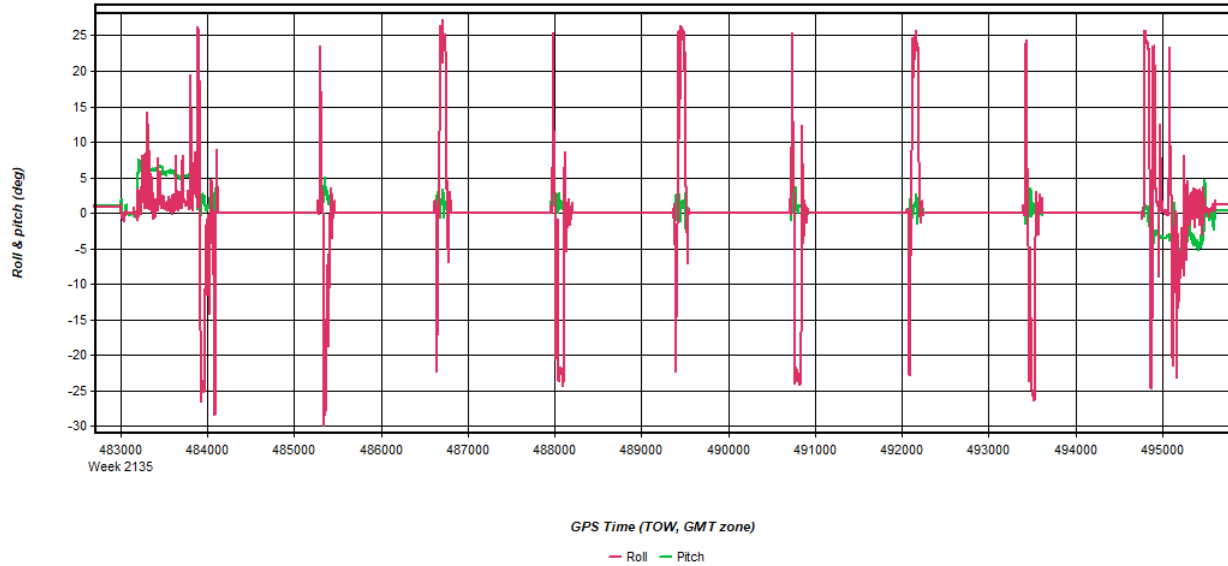
Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 11: 20201211140400_5 [Smoothed TC Combined] - Azimuth Plot



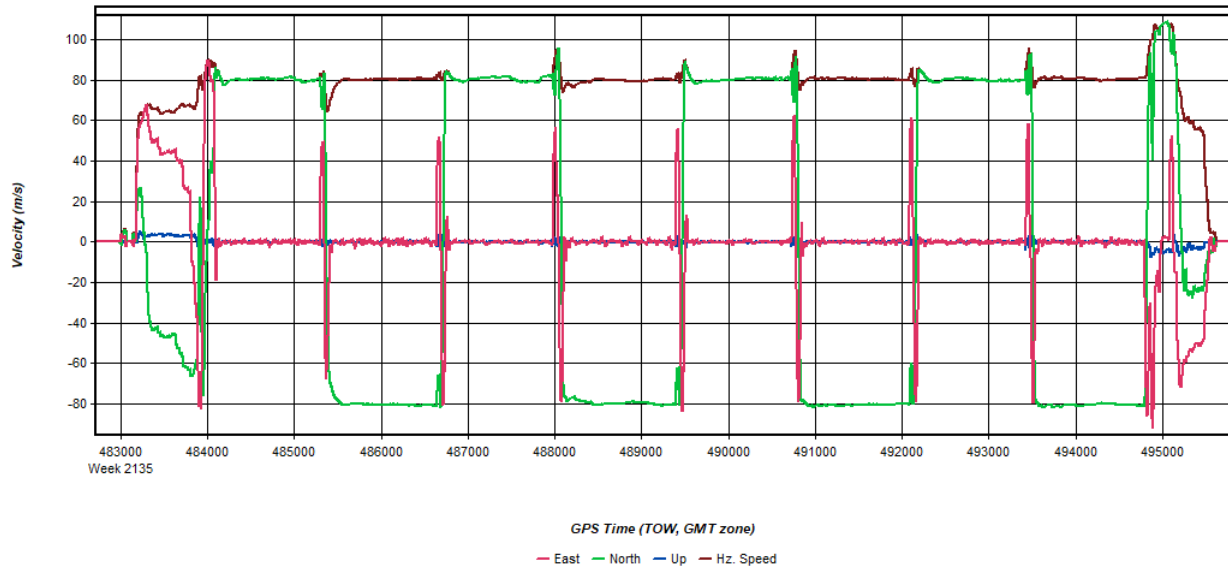
Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 12: 20201211140400_5 [Smoothed TC Combined] - Roll & Pitch Plot



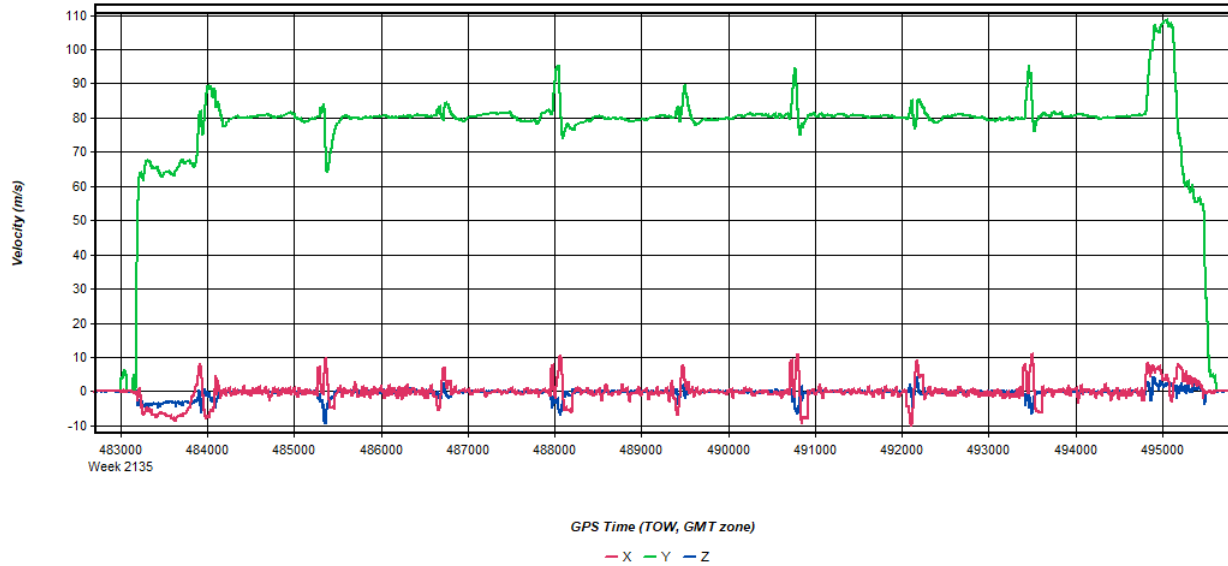
Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 13: 20201211140400_5 [Smoothed TC Combined] - Velocity Profile Plot



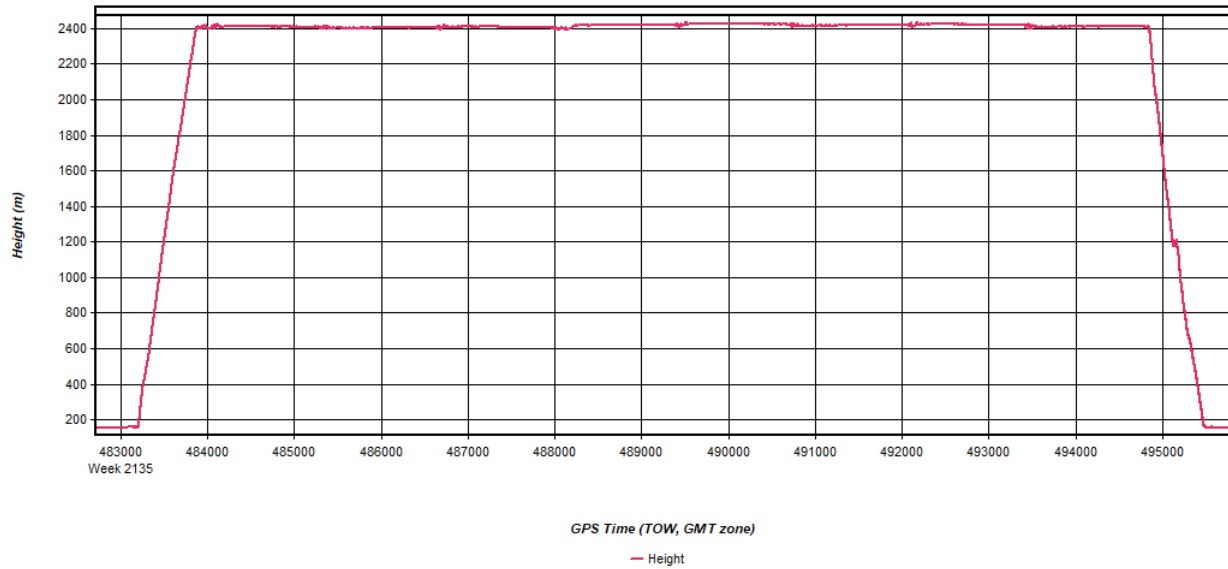
Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 14: 20201211140400_5 [Smoothed TC Combined] - Body Frame Velocity Plot



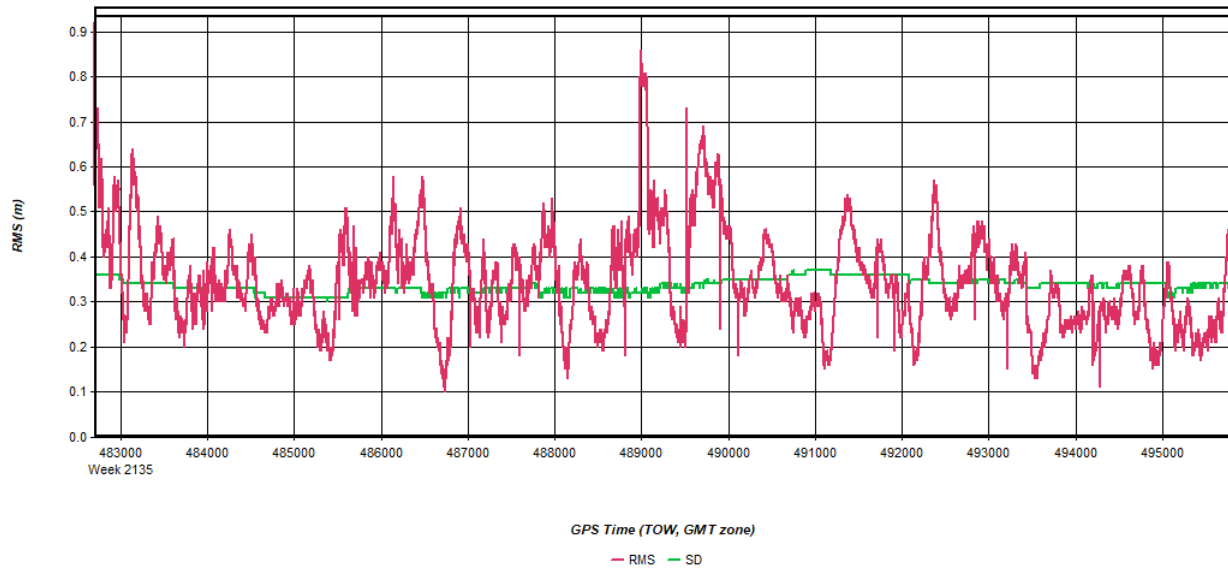
Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 15: 20201211140400_5 [Smoothed TC Combined] - Height Profile Plot



Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 16: 20201211140400_5 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 17: 20201211140400_5 [Smoothed TC Combined] - Carrier Residual RMS Plot

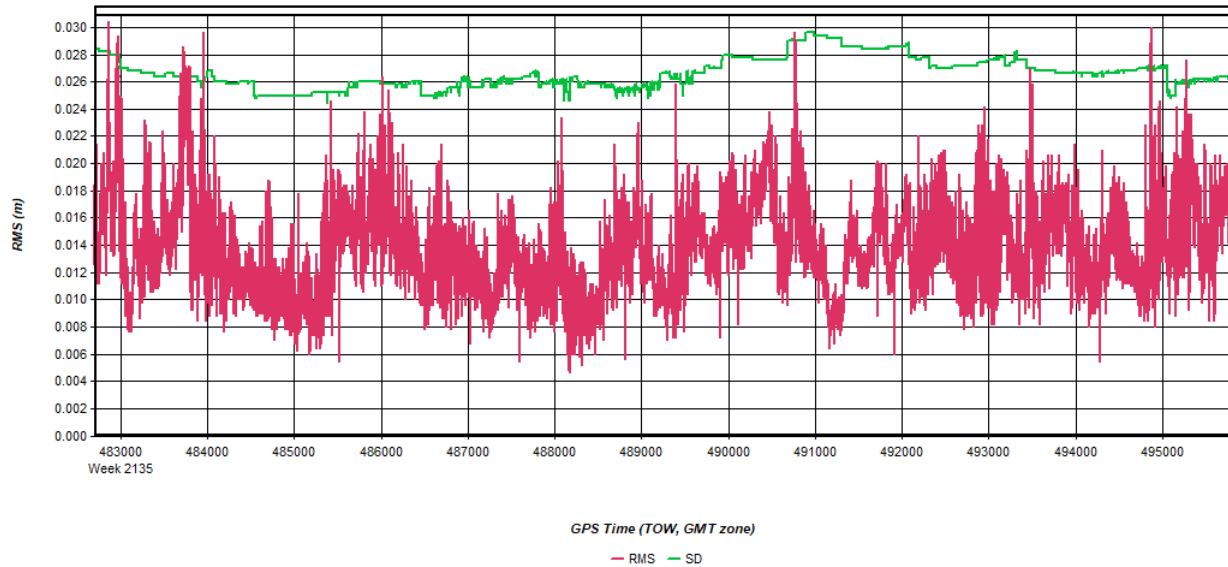


Figure 18: 20201211140400_5 [Smoothed TC Combined] - Doppler Residual RMS Plot

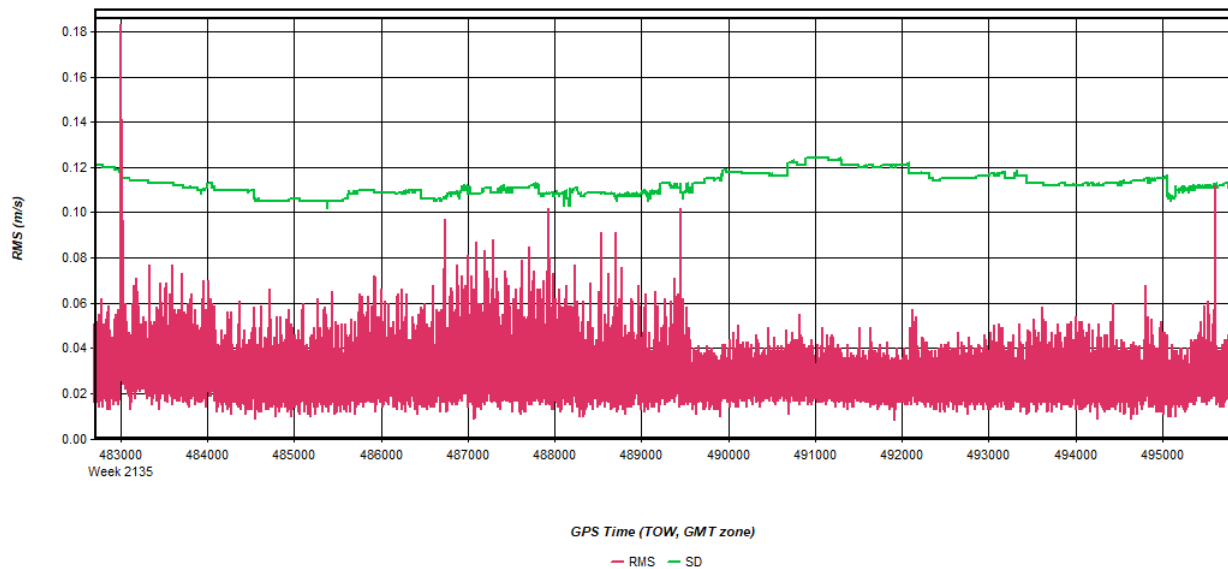
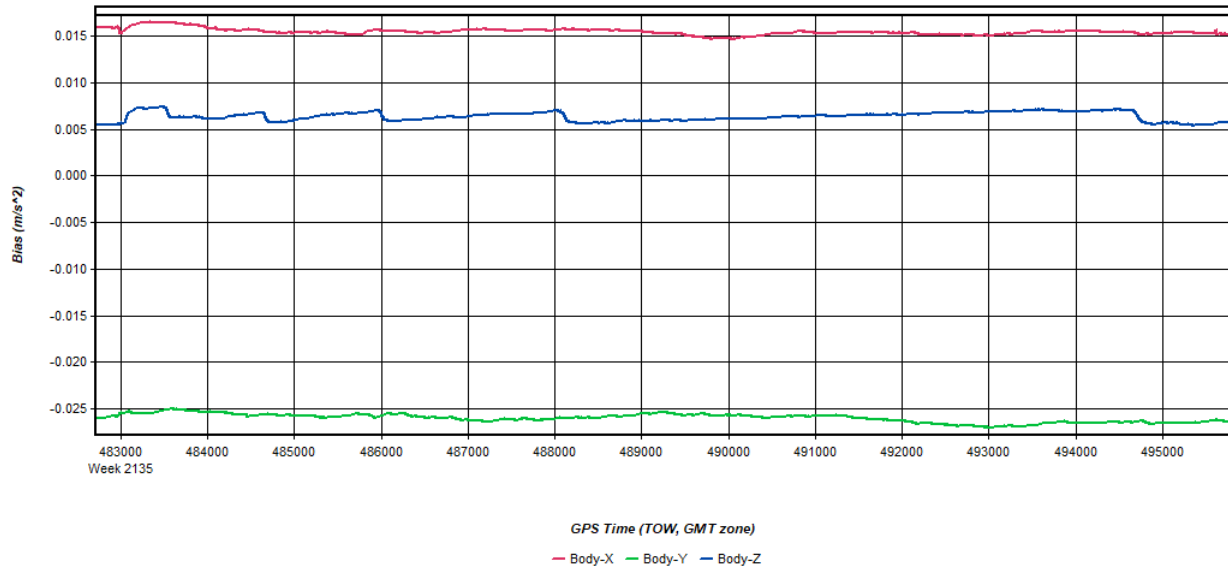
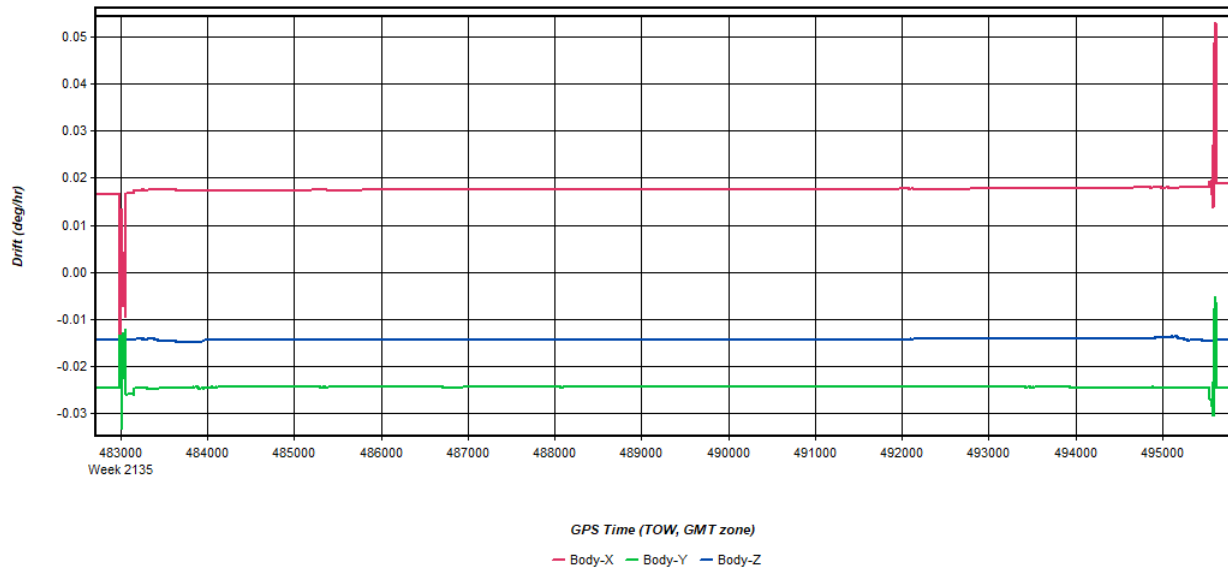


Figure 19: 20201211140400_5 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Figure 20: 20201211140400_5 [Smoothed TC Combined] - Gyro Drift Plot

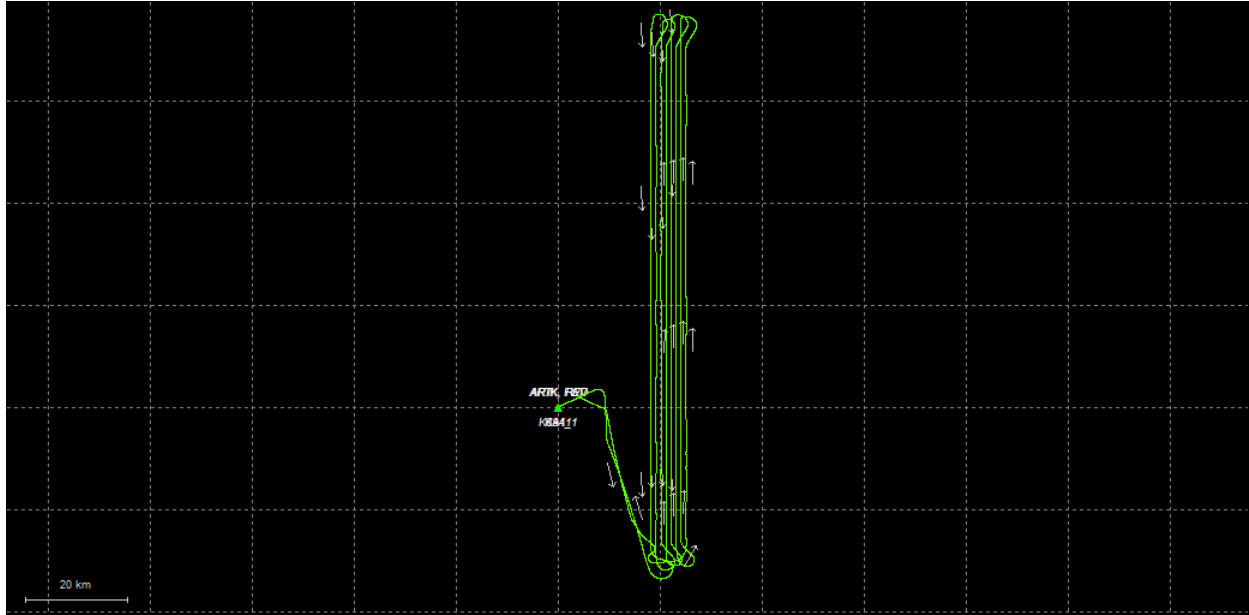


Process	20201211140400_5	by Unknown	on 12/19/2020	at 12:39:07
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Output Results for 20201211180949_6

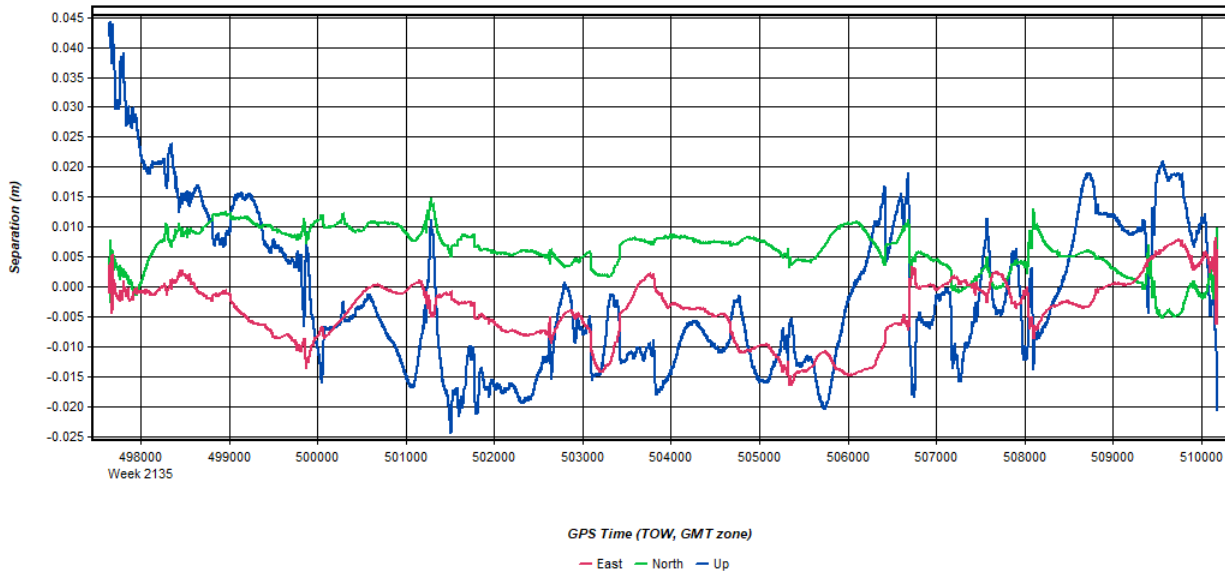
Inertial Explorer Version 8.90.2124
12/23/2020

Figure 1: Smoothed TC Combined - Map



Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 2: 20201211180949_6 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 3: 20201211180949_6 [Smoothed TC Combined] - Float or Fixed Ambiguity

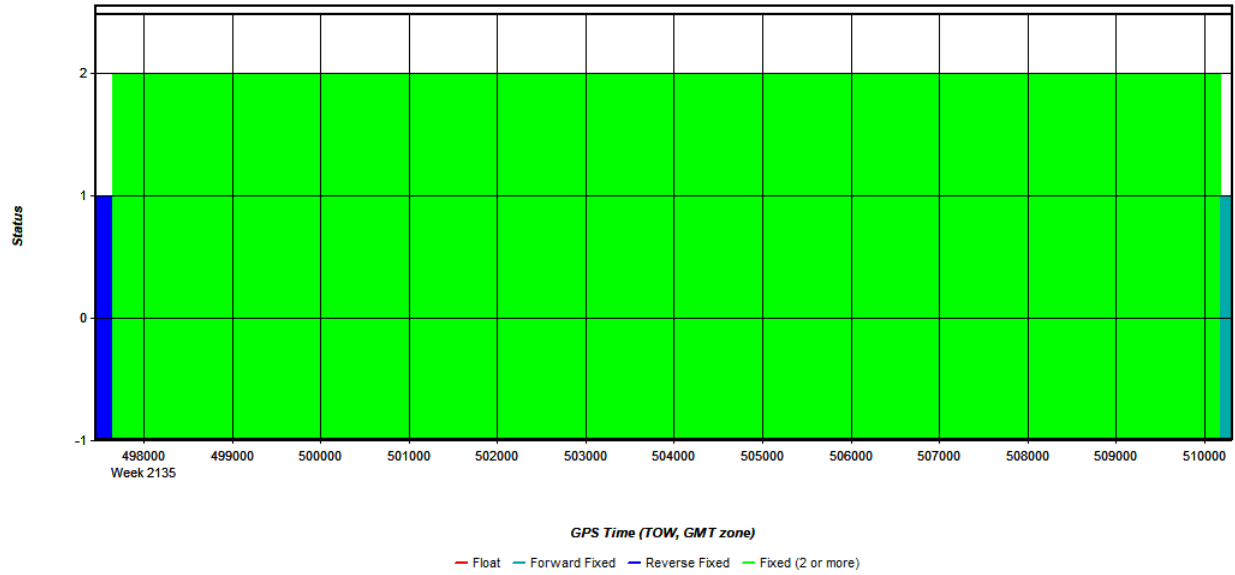


Figure 4: 20201211180949_6 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

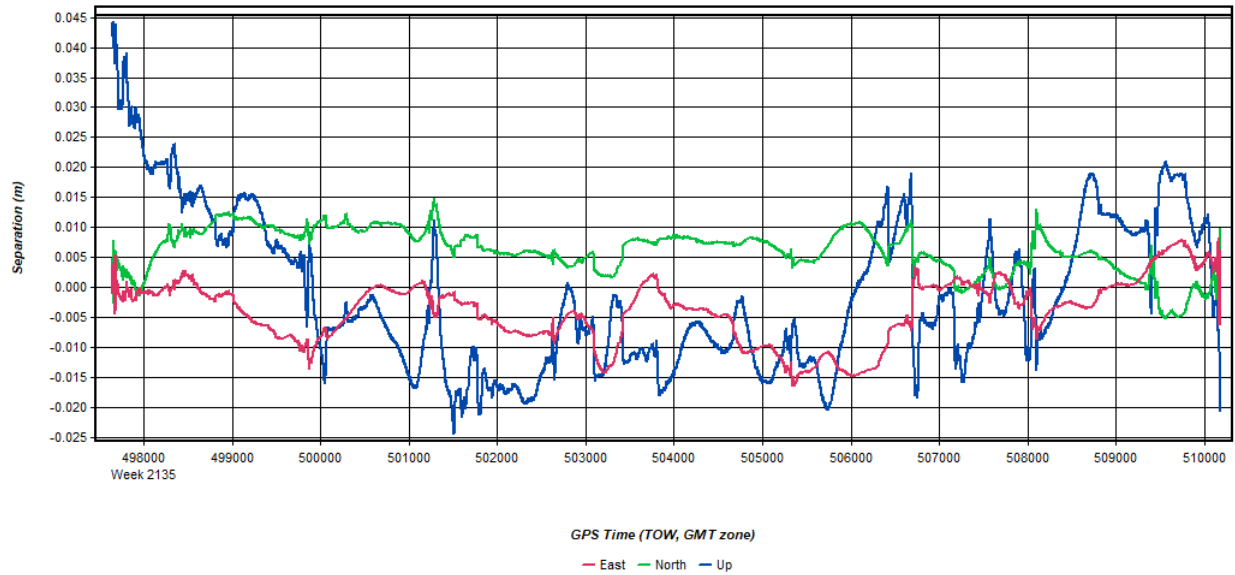
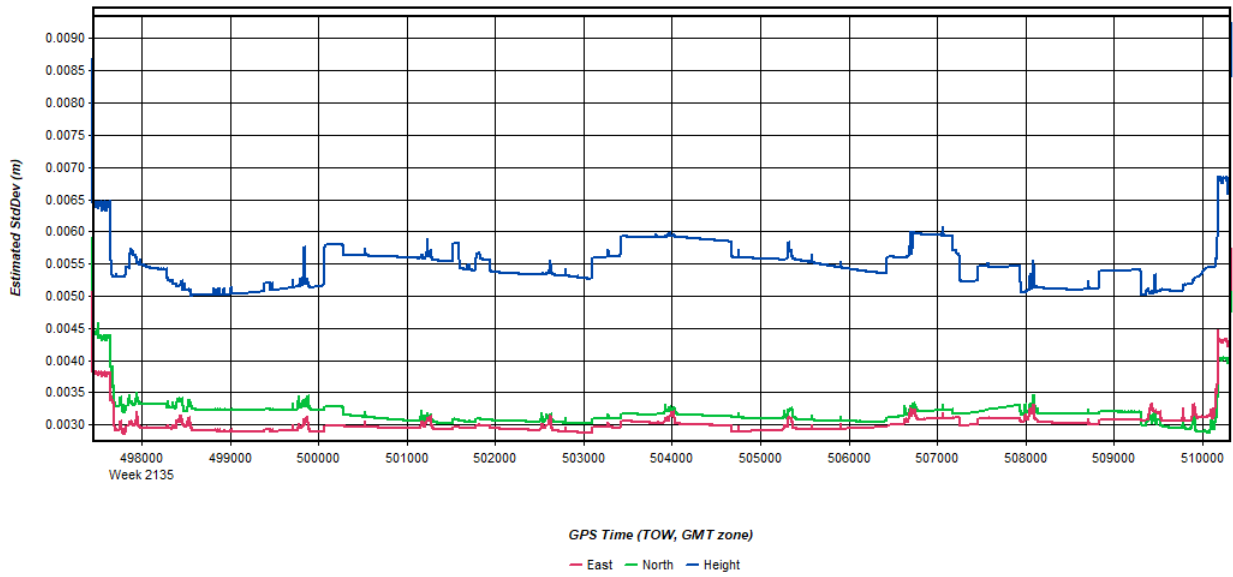


Figure 5: 20201211180949_6 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 6: 20201211180949_6 [Smoothed TC Combined] - PDOP Plot



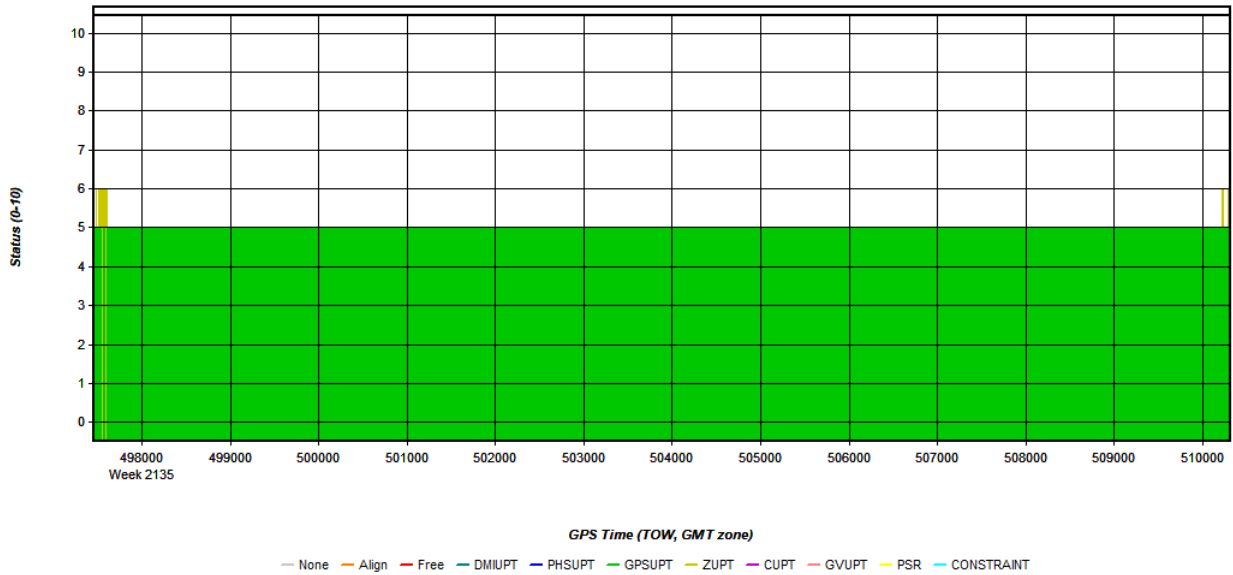
Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 7: 20201211180949_6 [Smoothed TC Combined] - Number of Satellites Line Plot



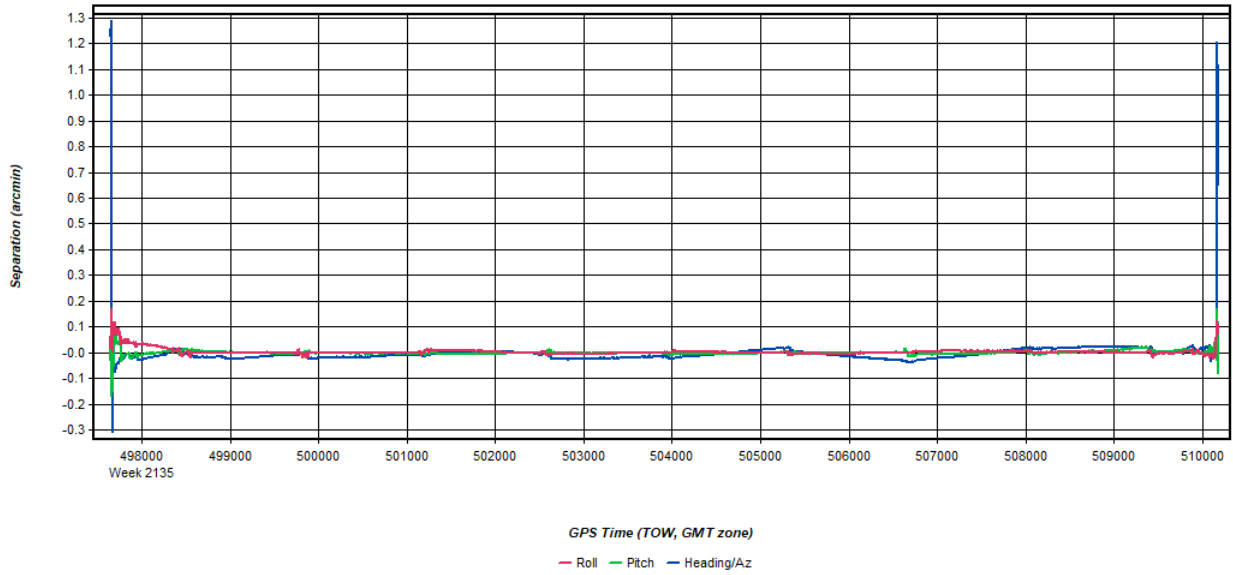
Process 20201211180949_6 by Unknown on 12/23/2020 at 16:41:29

Figure 8: 20201211180949_6 [Smoothed TC Combined] - Status flag for IMU processing



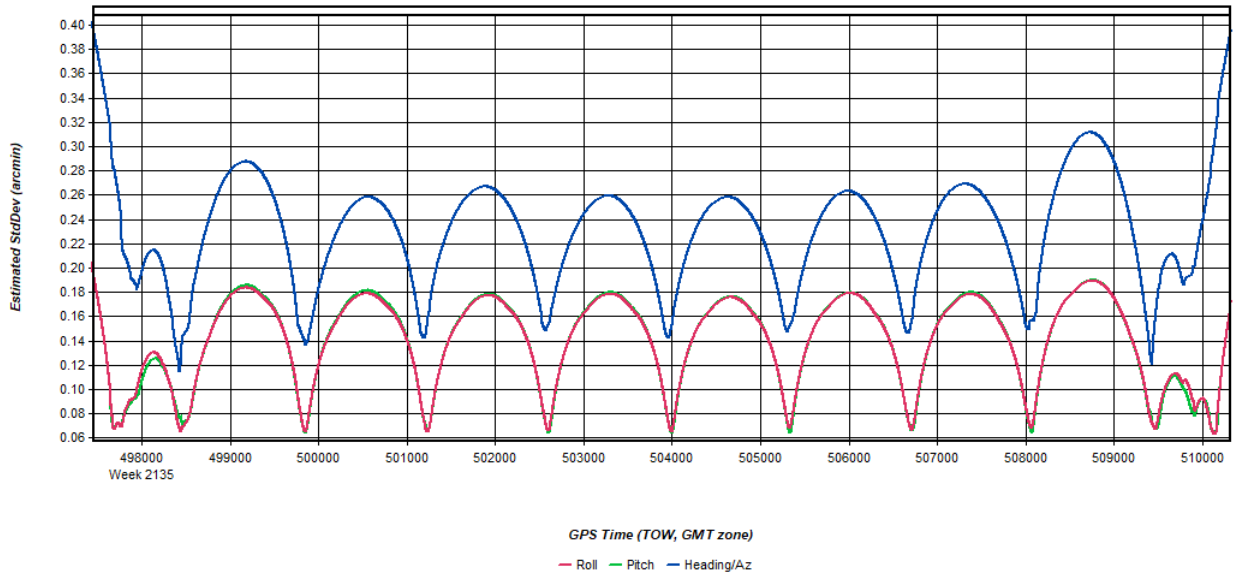
Process 20201211180949_6 by Unknown on 12/23/2020 at 16:41:29

Figure 9: 20201211180949_6 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



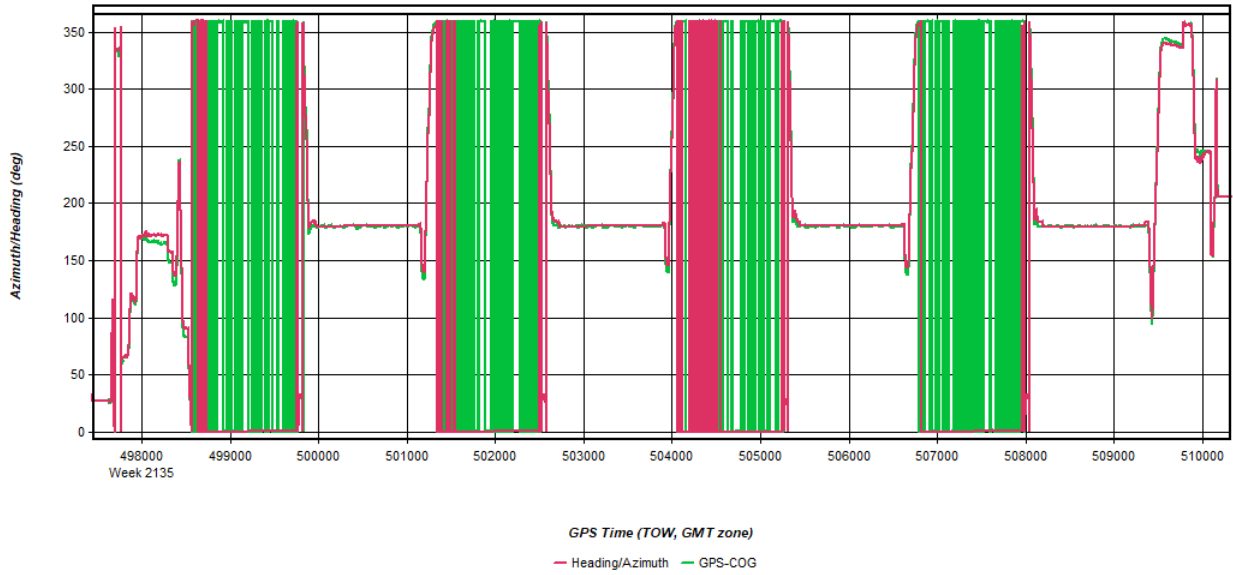
Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 10: 20201211180949_6 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



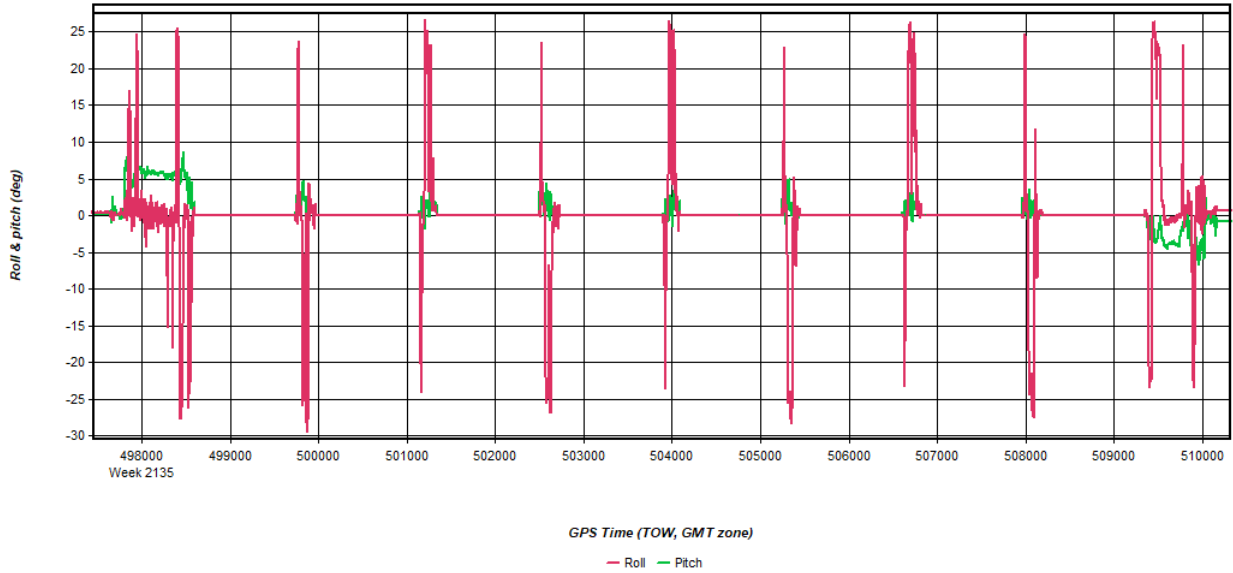
Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 11: 20201211180949_6 [Smoothed TC Combined] - Azimuth Plot



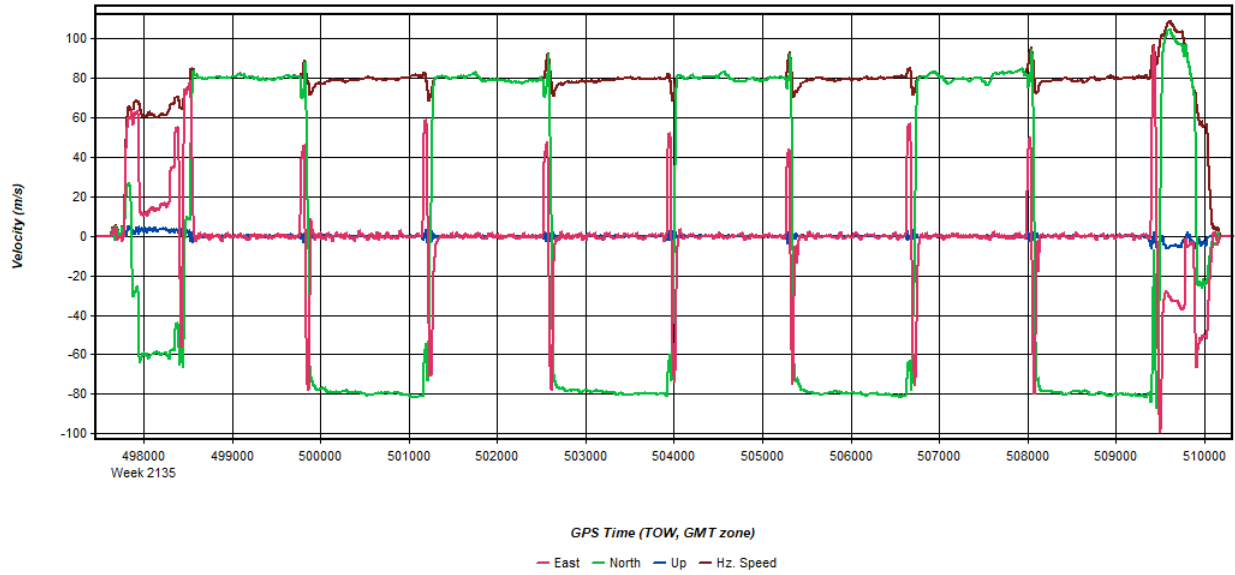
Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 12: 20201211180949_6 [Smoothed TC Combined] - Roll & Pitch Plot



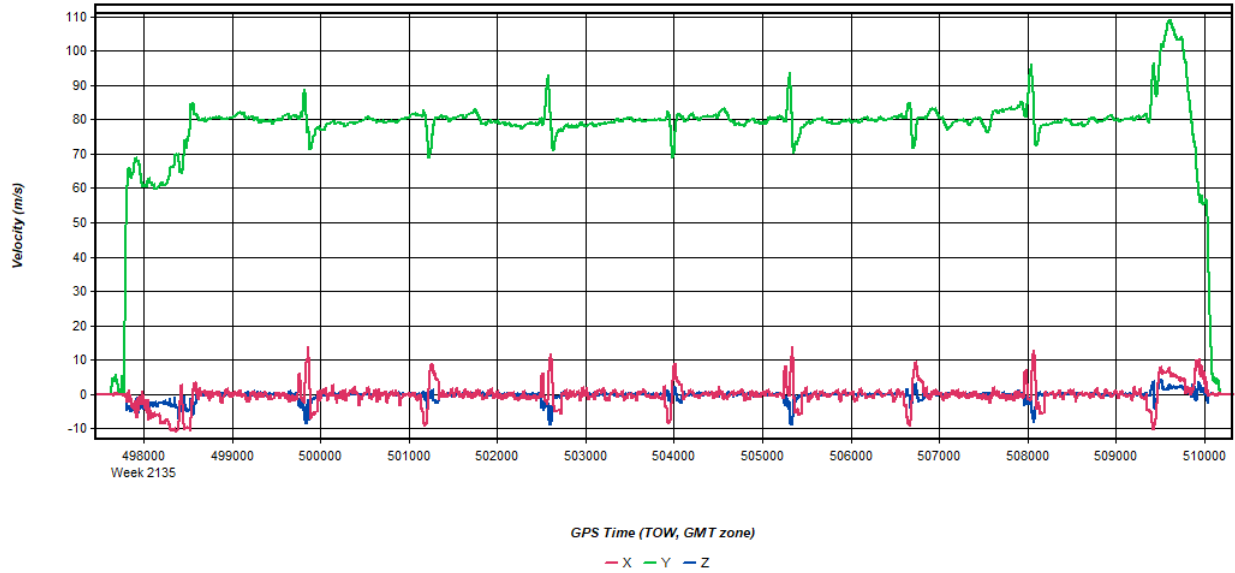
Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 13: 20201211180949_6 [Smoothed TC Combined] - Velocity Profile Plot



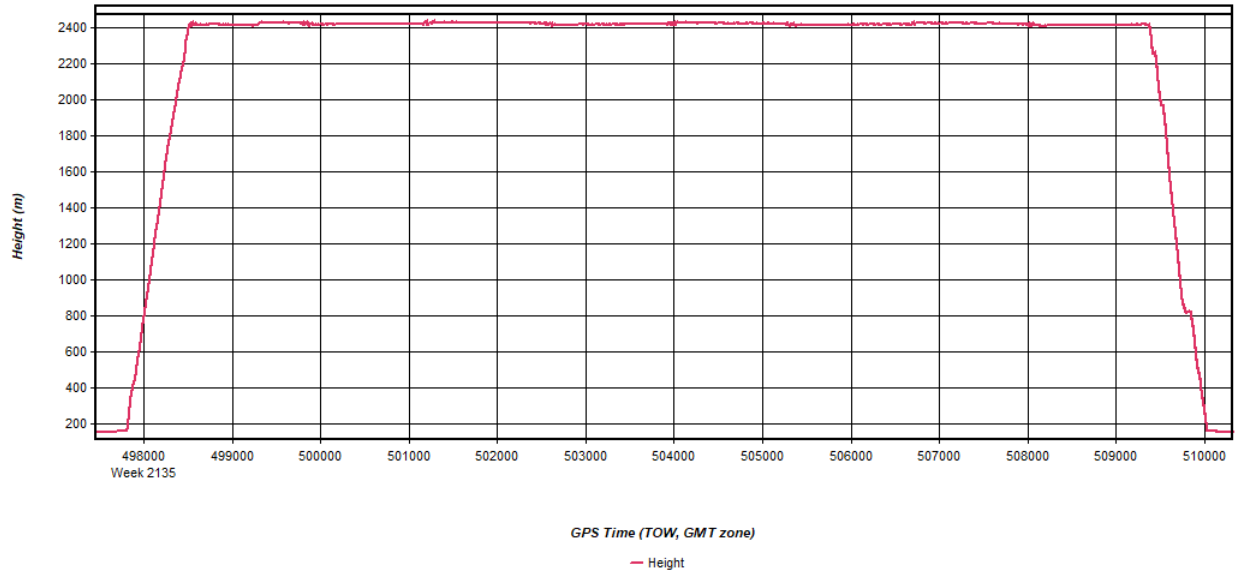
Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 14: 20201211180949_6 [Smoothed TC Combined] - Body Frame Velocity Plot



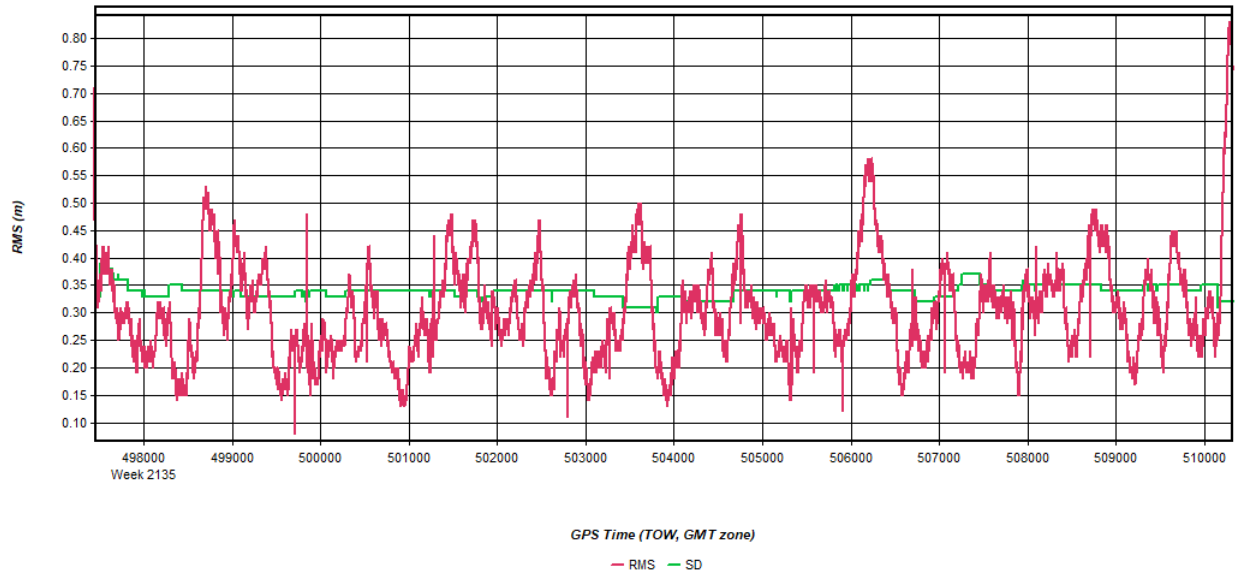
Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 15: 20201211180949_6 [Smoothed TC Combined] - Height Profile Plot



Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 16: 20201211180949_6 [Smoothed TC Combined] - C/A Code Residual RMS Plot



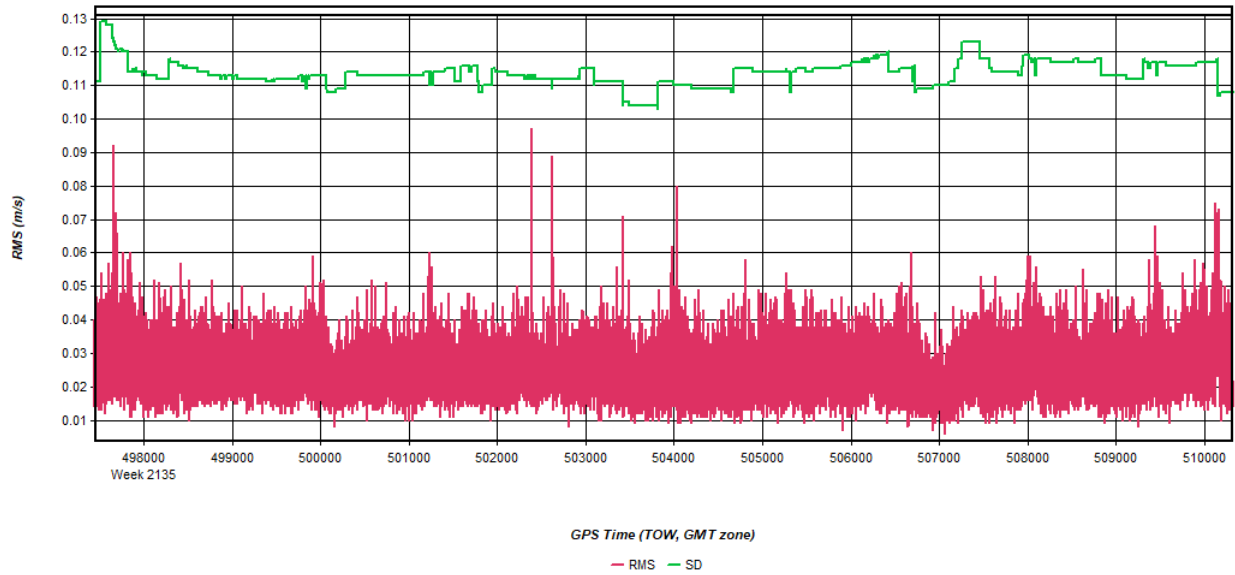
Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 17: 20201211180949_6 [Smoothed TC Combined] - Carrier Residual RMS Plot



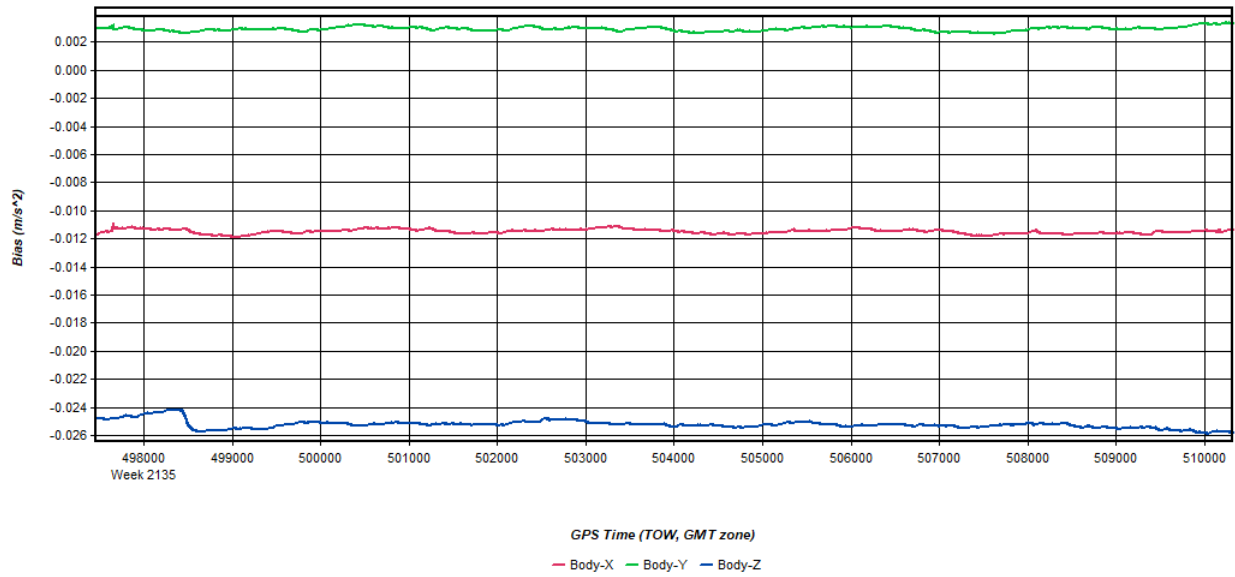
Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 18: 20201211180949_6 [Smoothed TC Combined] - Doppler Residual RMS Plot



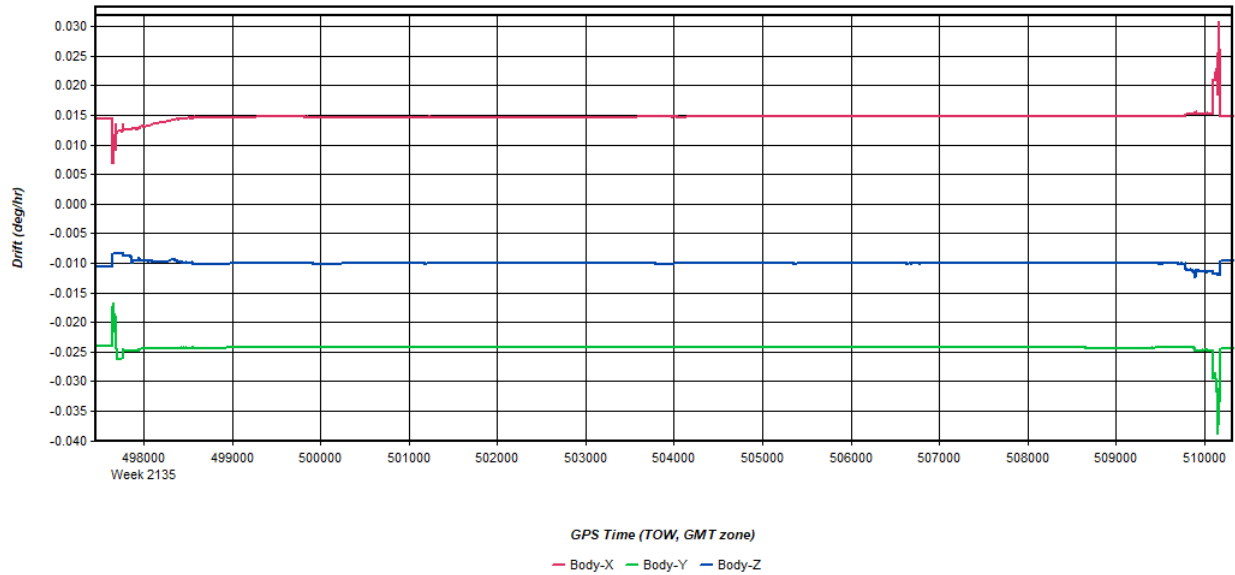
Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 19: 20201211180949_6 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Figure 20: 20201211180949_6 [Smoothed TC Combined] - Gyro Drift Plot

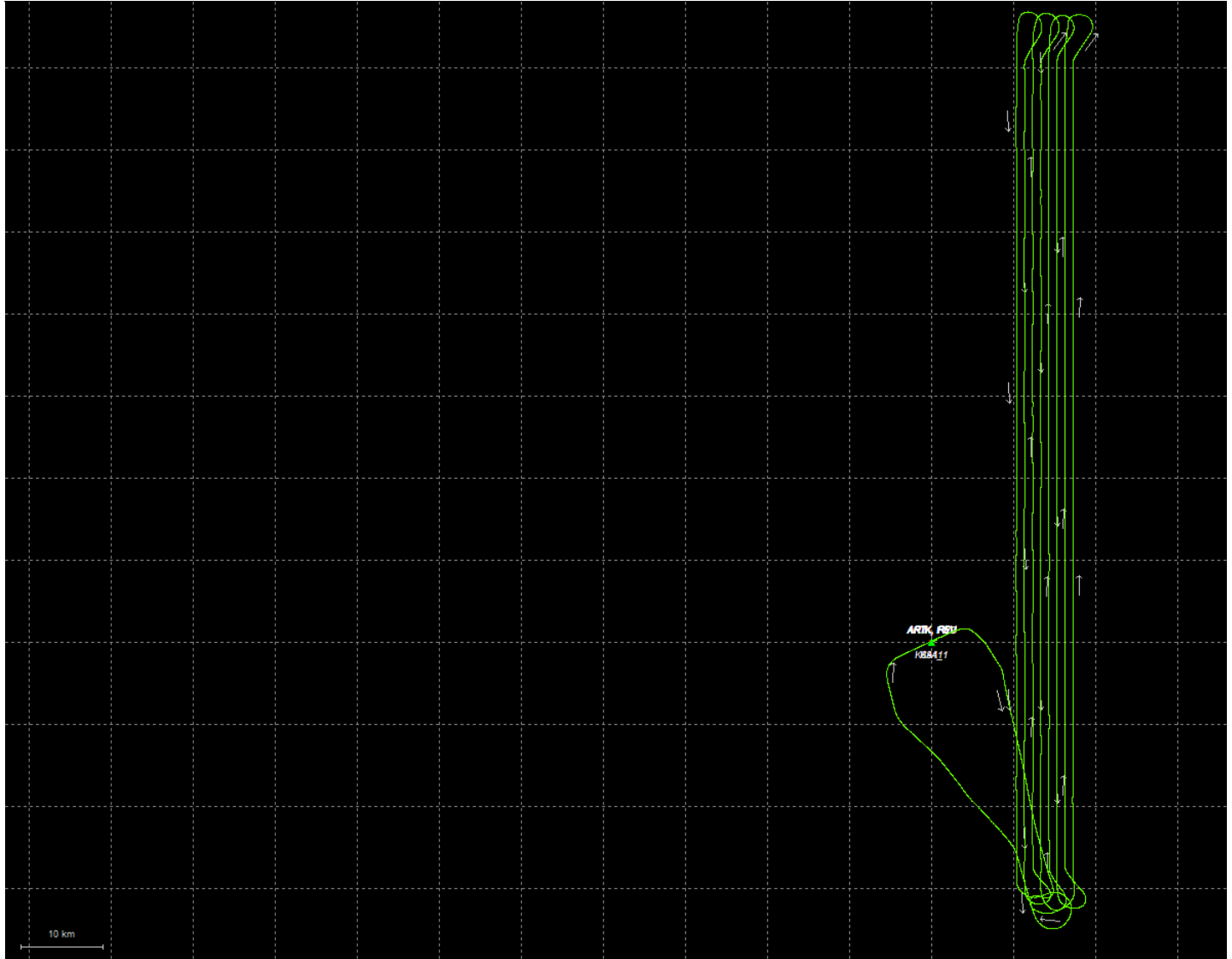


Process	20201211180949_6	by Unknown	on 12/23/2020	at 16:41:29
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Output Results for 20201213182805_7

Inertial Explorer Version 8.90.2124
12/20/2021

Figure 1: Smoothed TC Combined - Map



Process	20201213182805_7	by Unknown	on 12/19/2020	at 15:23:04
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Figure 2: 20201213182805_7 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot

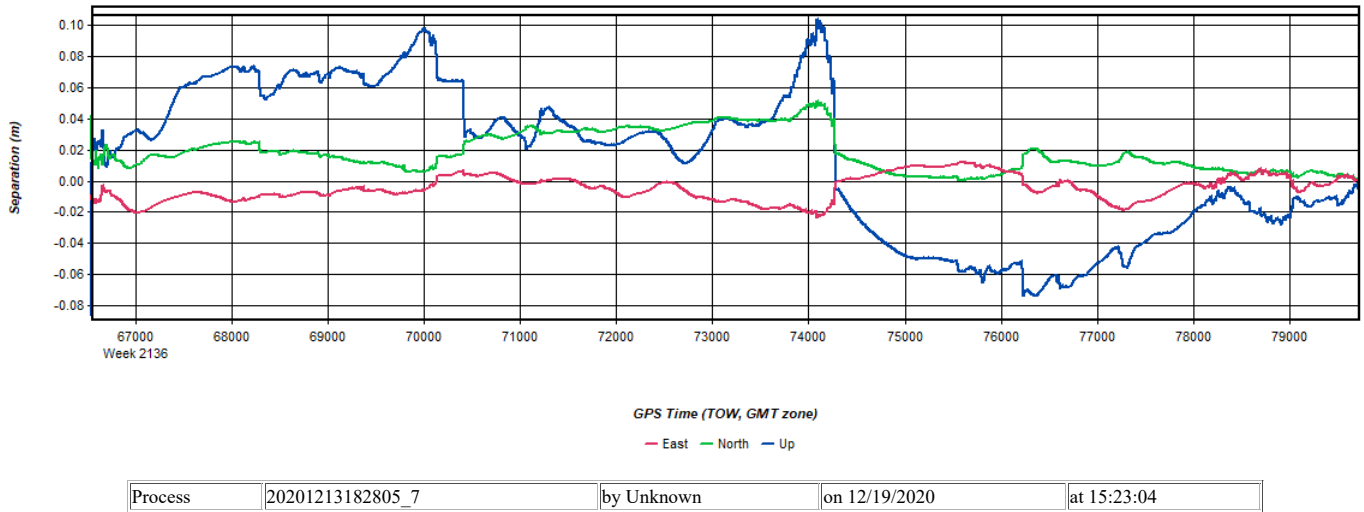


Figure 3: 20201213182805_7 [Smoothed TC Combined] - Float or Fixed Ambiguity

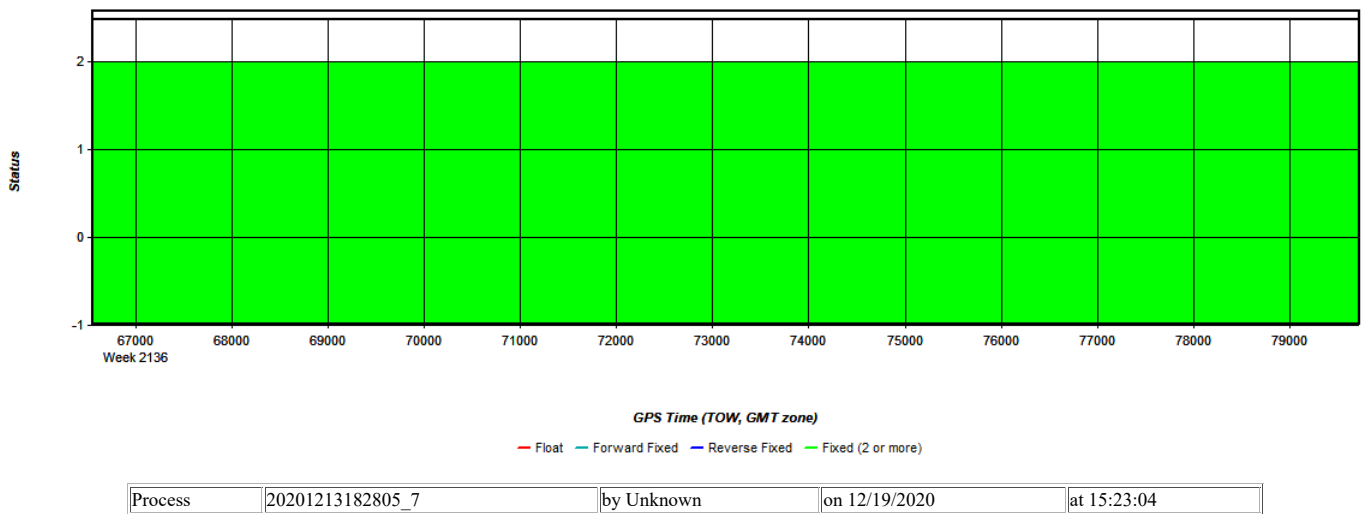


Figure 4: 20201213182805_7 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

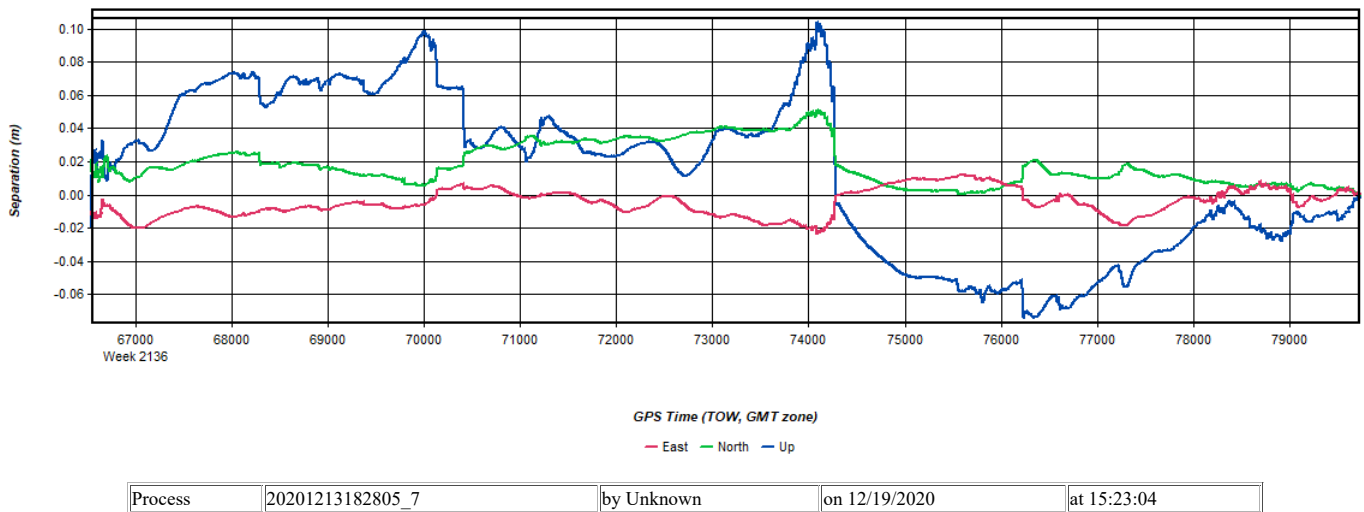


Figure 5: 20201213182805_7 [Smoothed TC Combined] - Estimated Position Accuracy Plot

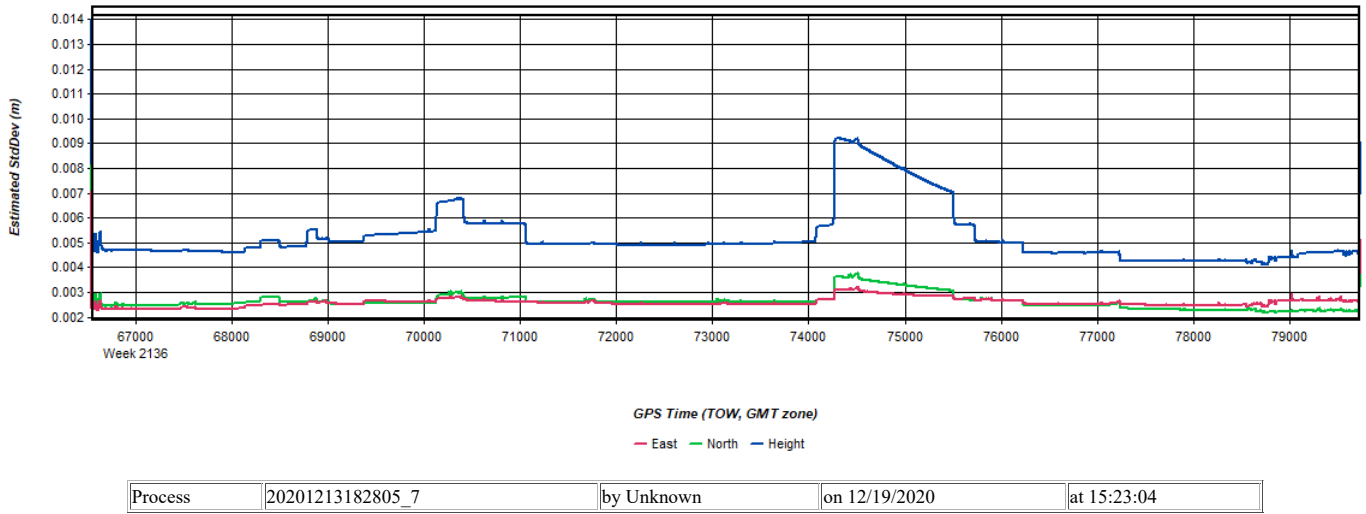


Figure 6: 20201213182805_7 [Smoothed TC Combined] - PDOP Plot

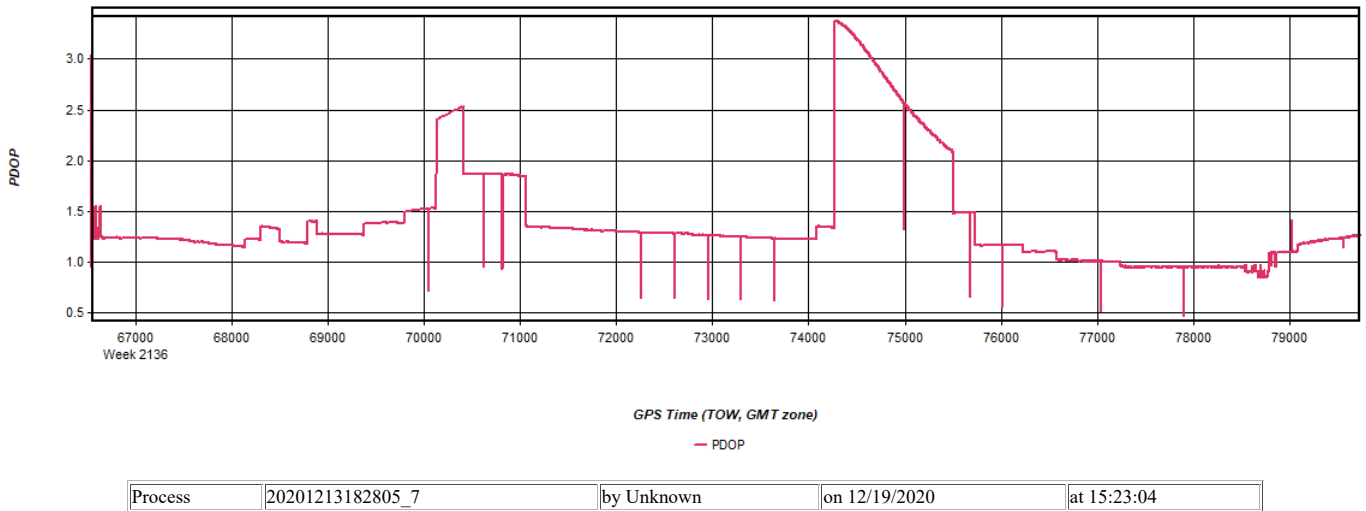


Figure 7: 20201213182805_7 [Smoothed TC Combined] - Number of Satellites Line Plot

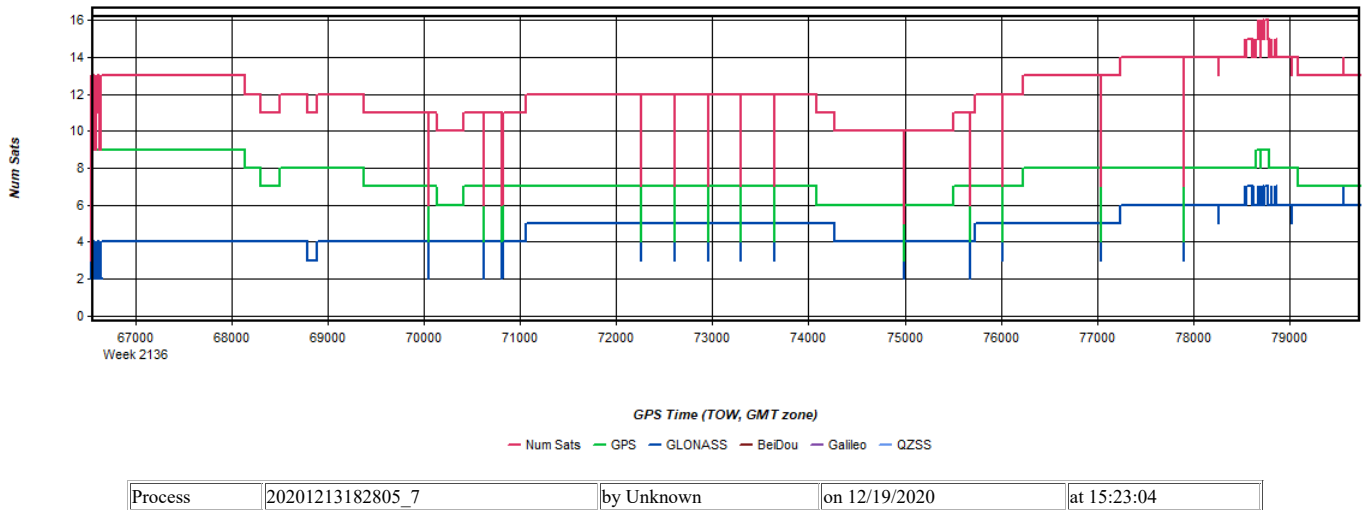


Figure 8: 20201213182805_7 [Smoothed TC Combined] - Status flag for IMU processing

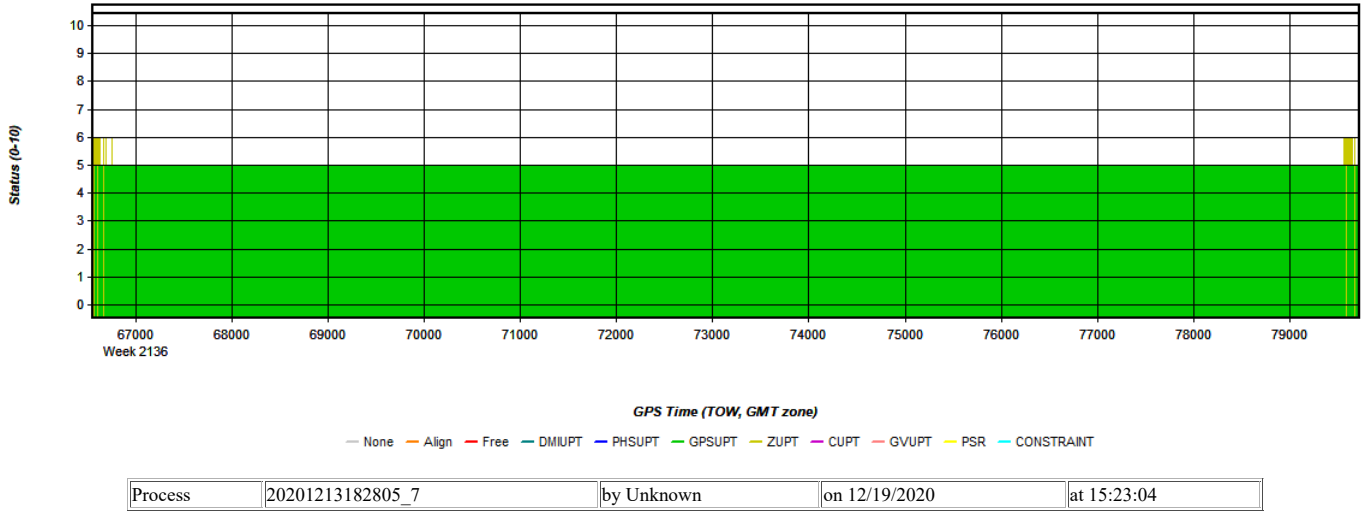


Figure 9: 20201213182805_7 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

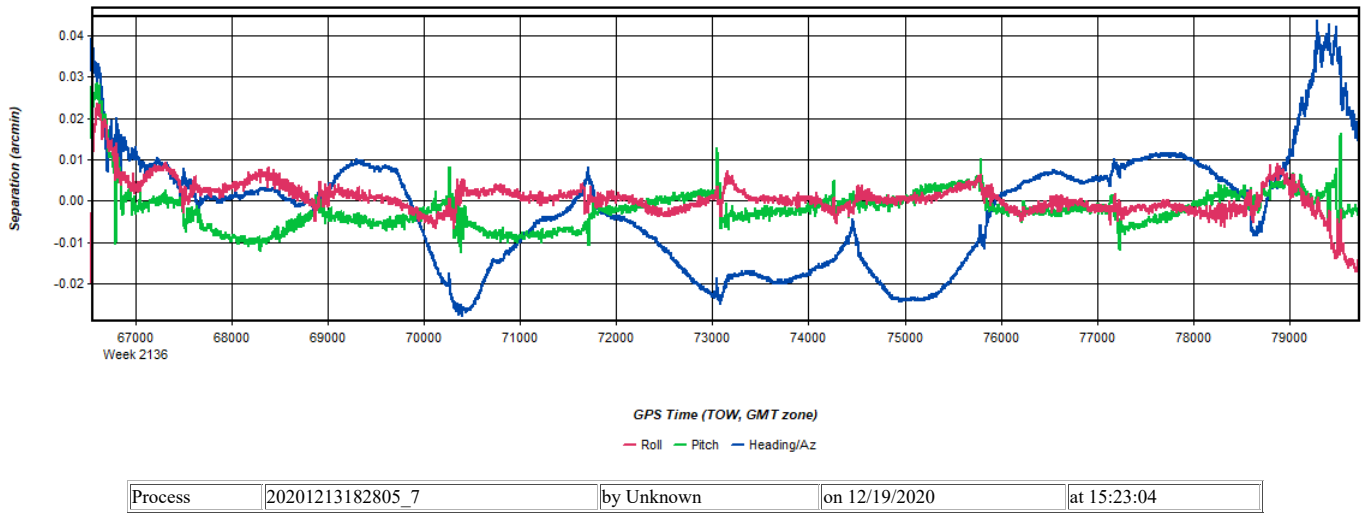


Figure 10: 20201213182805_7 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

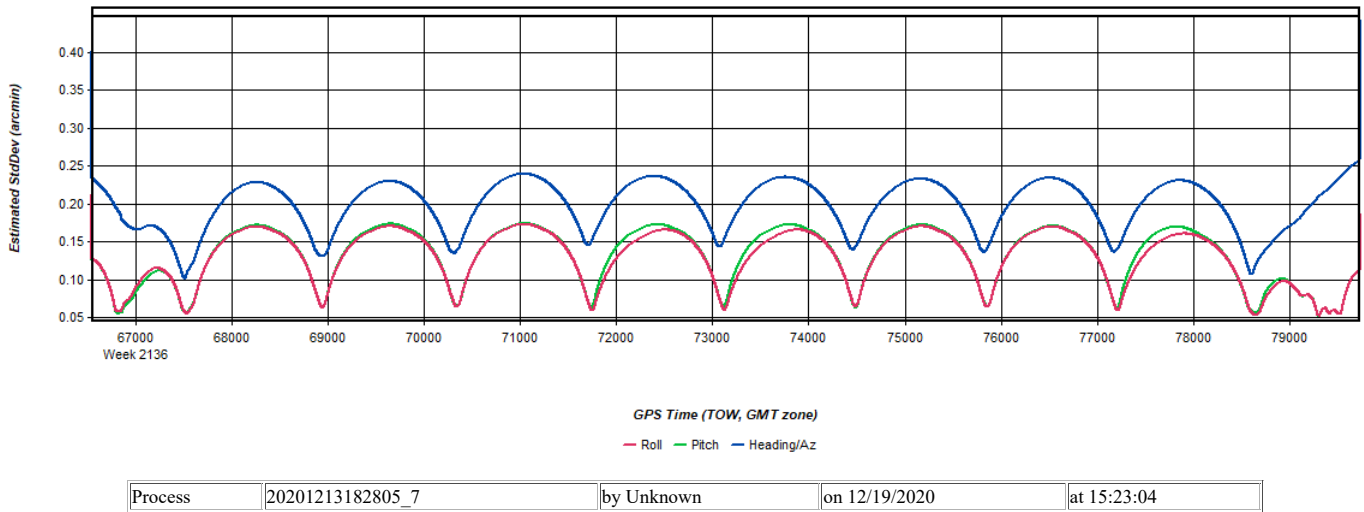


Figure 11: 20201213182805_7 [Smoothed TC Combined] - Azimuth Plot

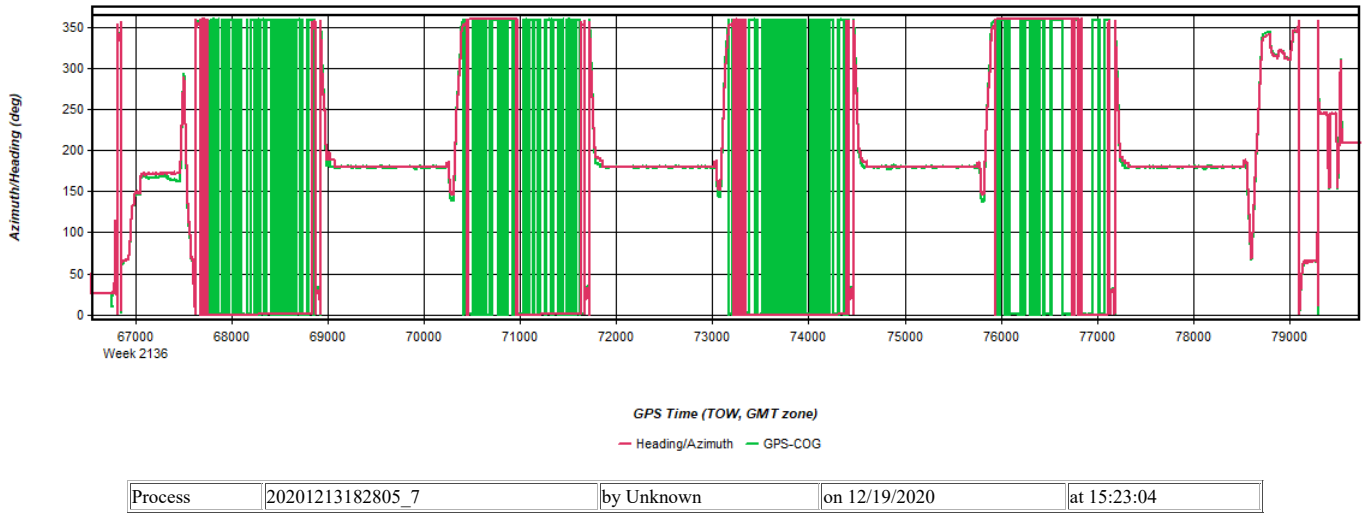


Figure 12: 20201213182805_7 [Smoothed TC Combined] - Roll & Pitch Plot

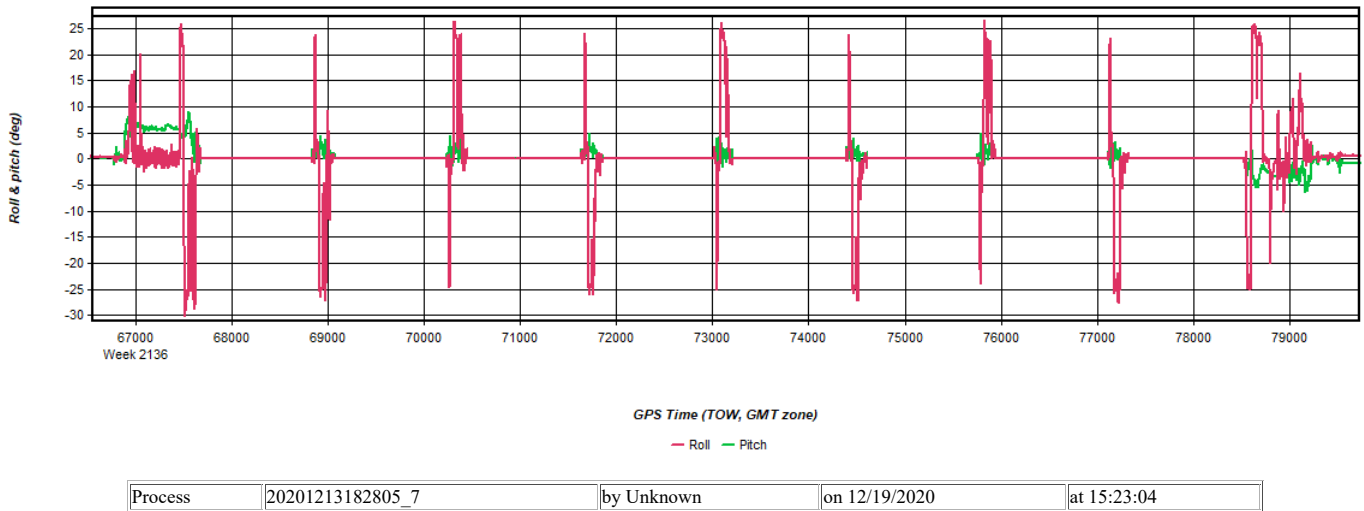


Figure 13: 20201213182805_7 [Smoothed TC Combined] - Velocity Profile Plot

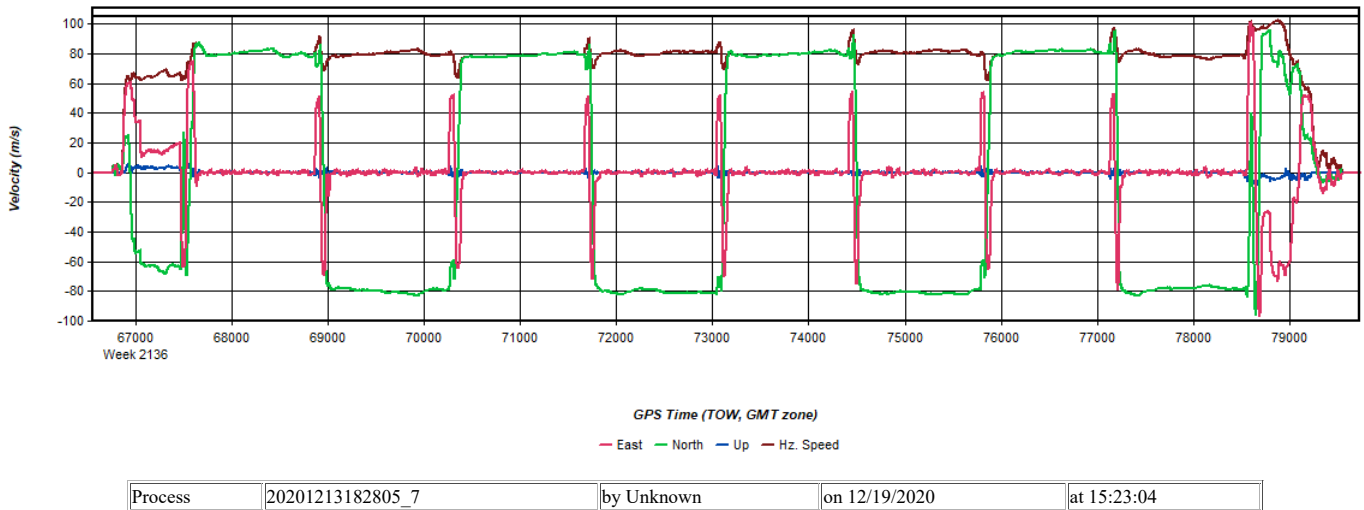


Figure 14: 20201213182805_7 [Smoothed TC Combined] - Body Frame Velocity Plot

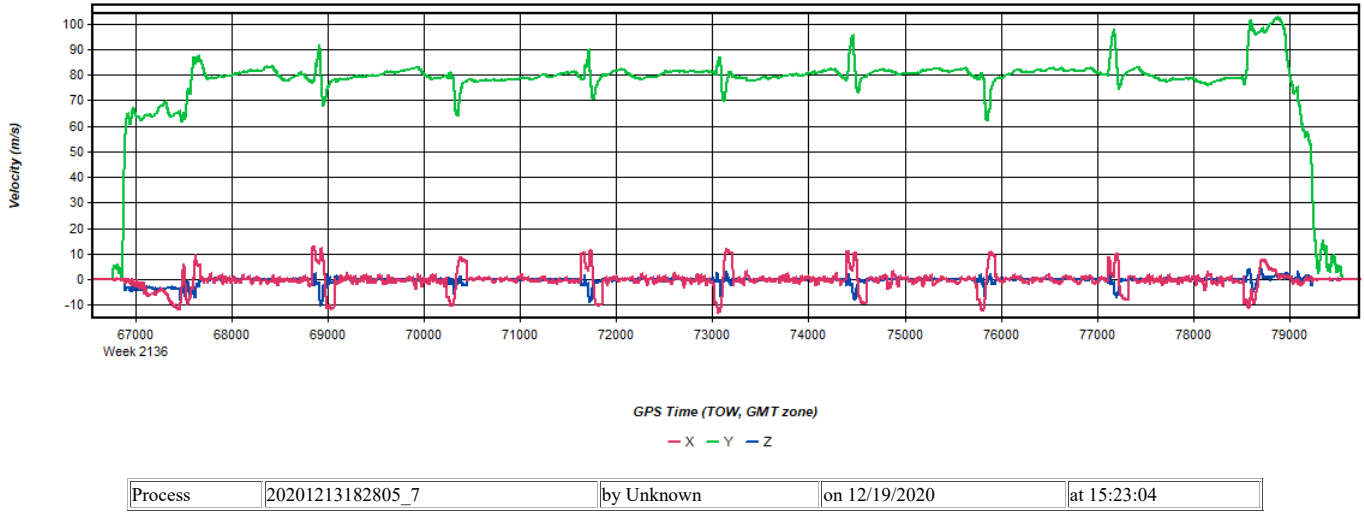


Figure 15: 20201213182805_7 [Smoothed TC Combined] - Height Profile Plot

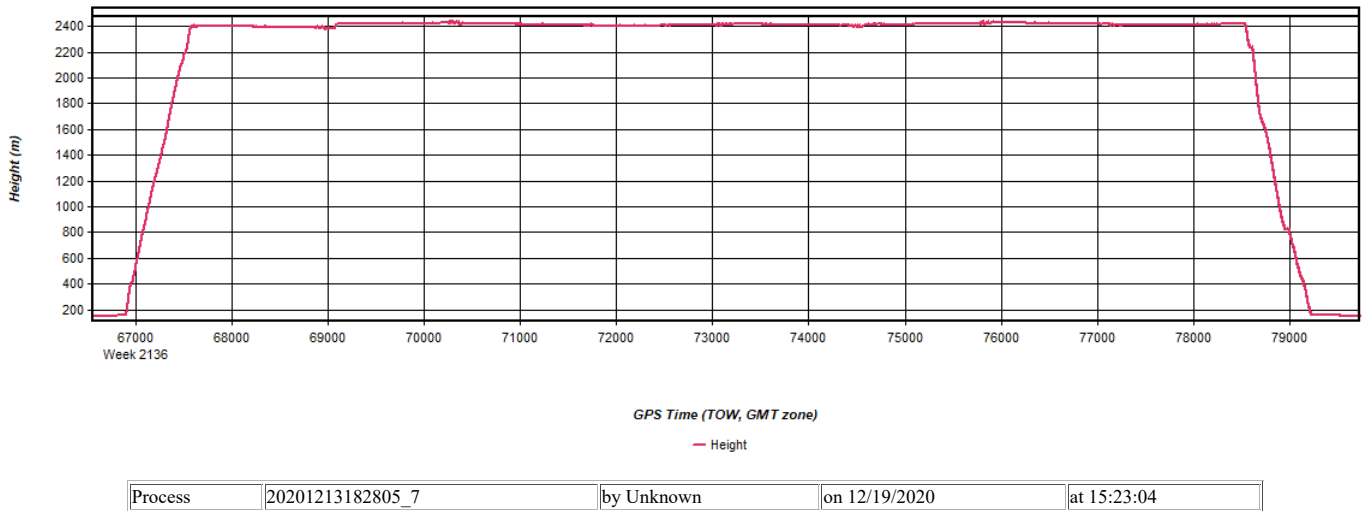


Figure 16: 20201213182805_7 [Smoothed TC Combined] - C/A Code Residual RMS Plot

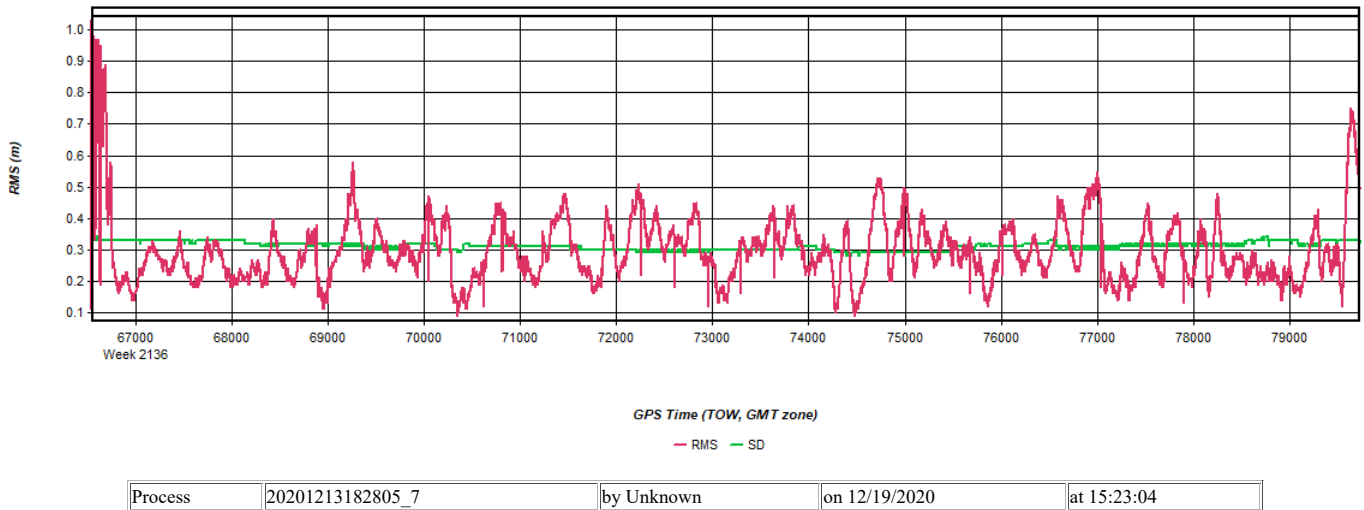


Figure 17: 20201213182805_7 [Smoothed TC Combined] - Carrier Residual RMS Plot

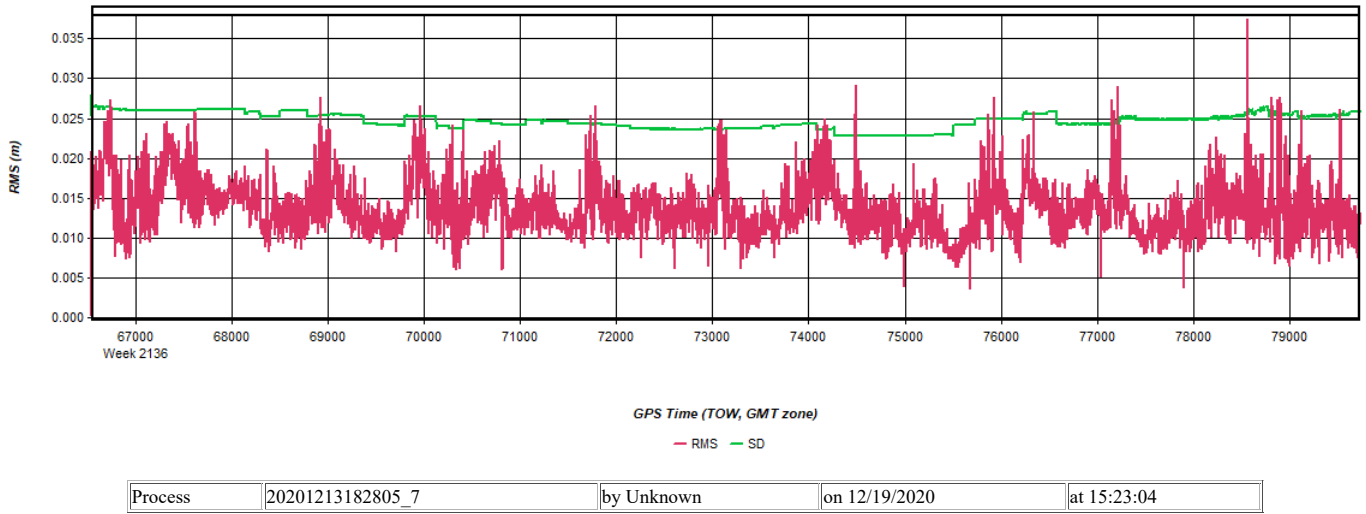


Figure 18: 20201213182805_7 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

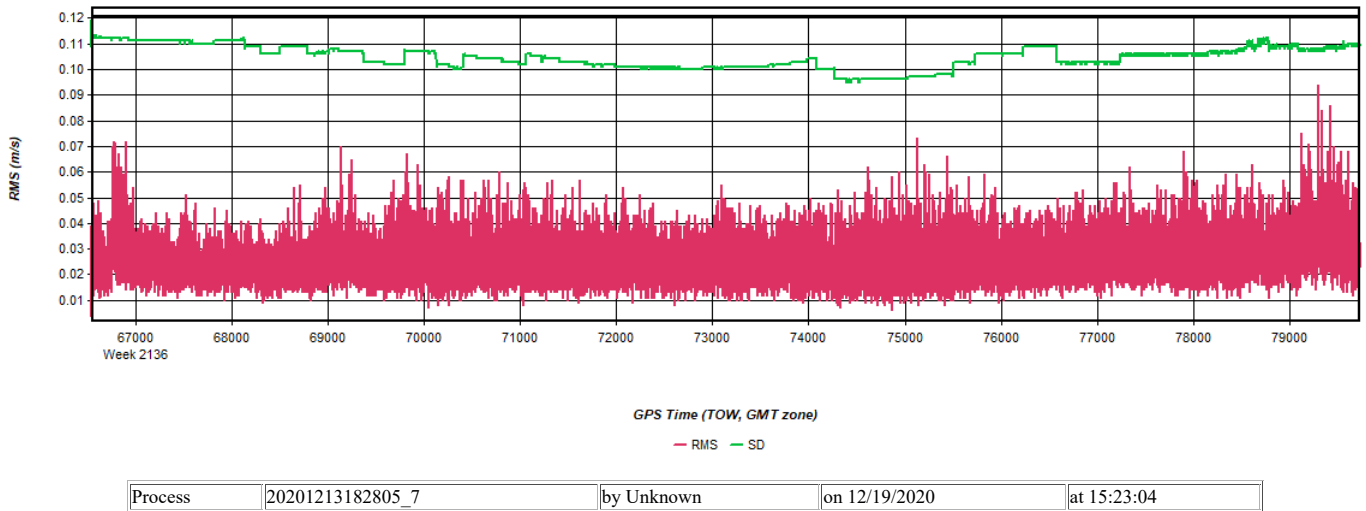


Figure 19: 20201213182805_7 [Smoothed TC Combined] - Accelerometer Bias Plot

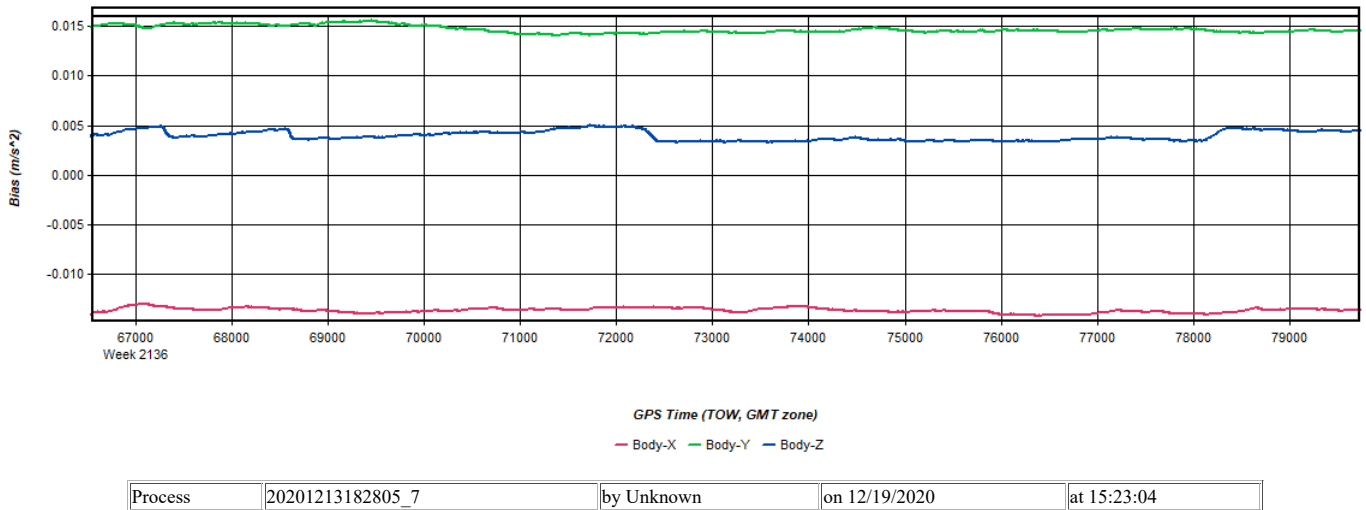
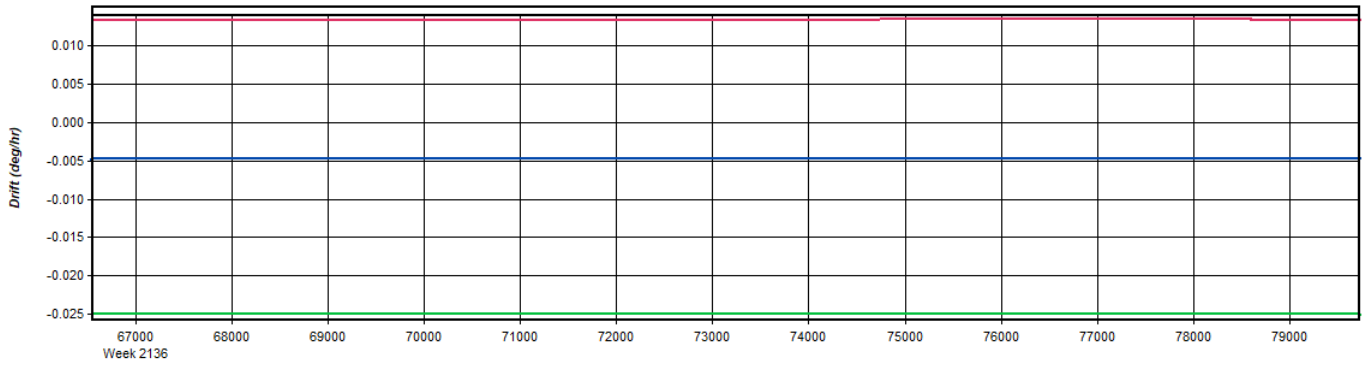


Figure 20: 20201213182805_7 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

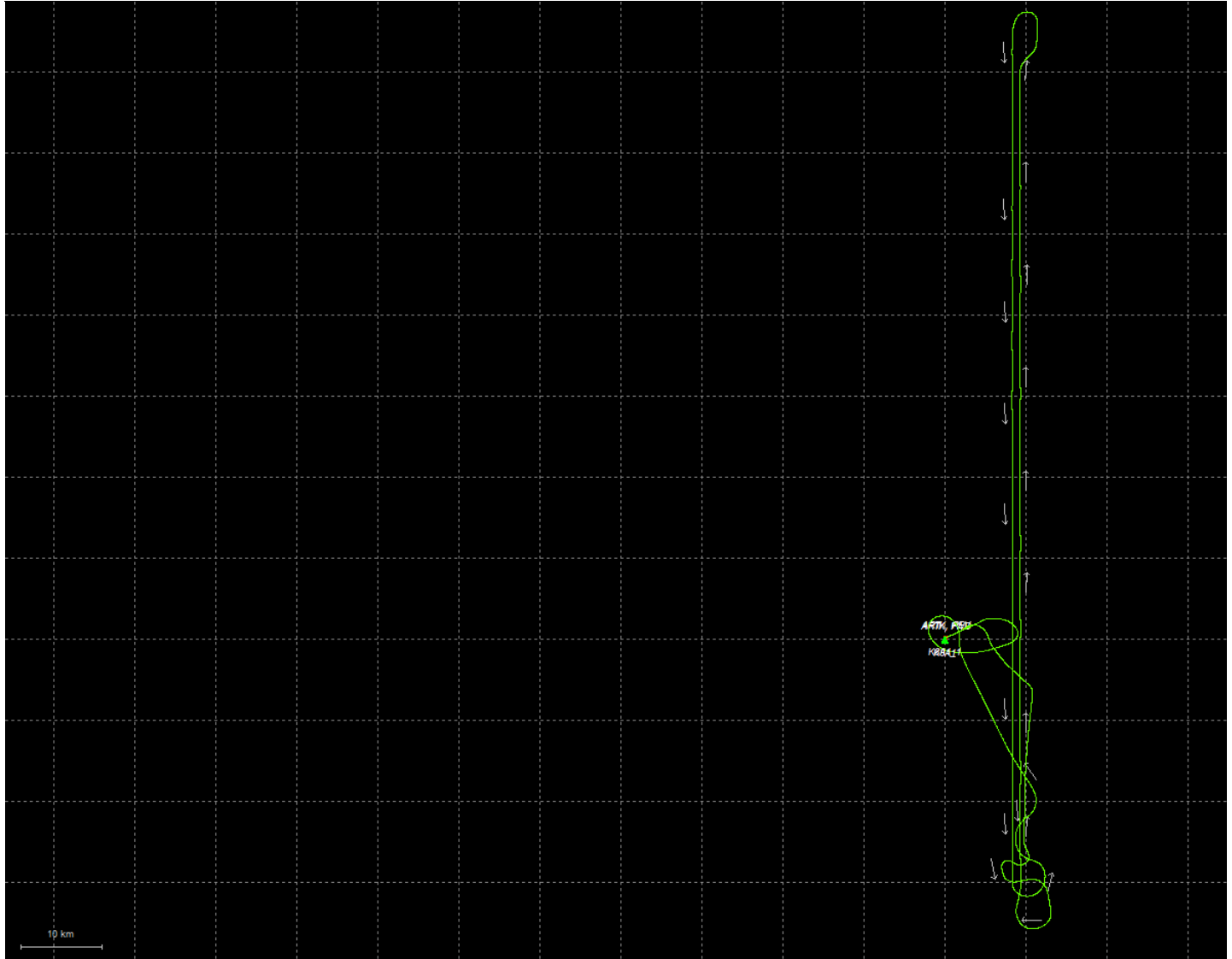
— Body-X — Body-Y — Body-Z

Process	20201213182805_7	by Unknown	on 12/19/2020	at 15:23:04
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Output Results for 20201213222903_8

Inertial Explorer Version 8.90.2124
12/20/2021

Figure 1: Smoothed TC Combined - Map



Process	20201213222903_8	by Unknown	on 12/19/2020	at 14:06:37
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Figure 2: 20201213222903_8 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot

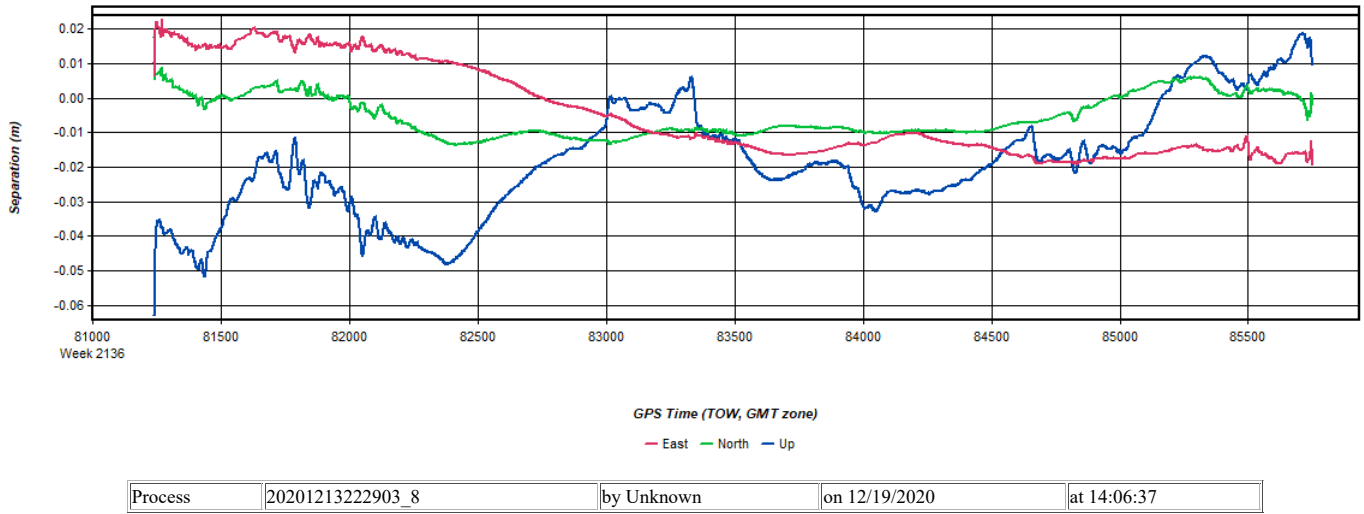


Figure 3: 20201213222903_8 [Smoothed TC Combined] - Float or Fixed Ambiguity

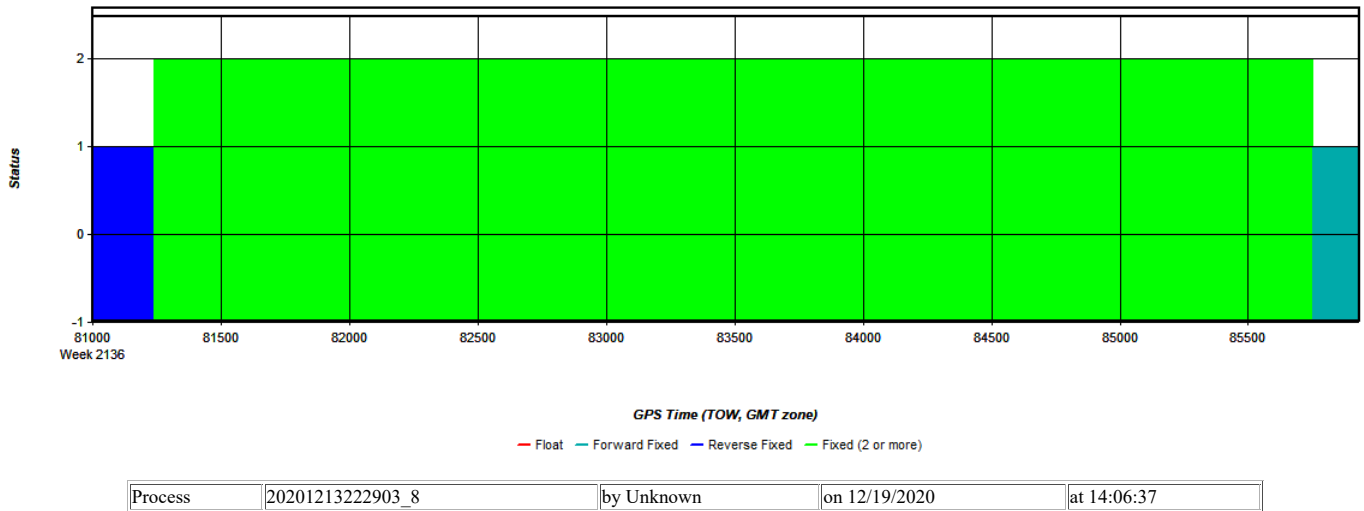


Figure 4: 20201213222903_8 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

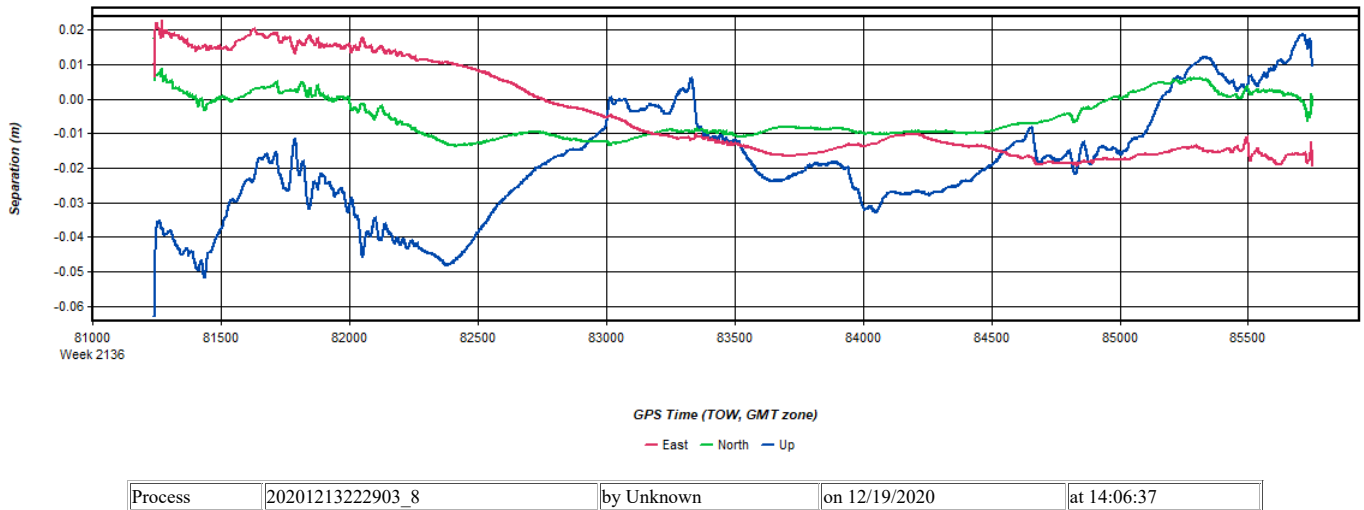


Figure 5: 20201213222903_8 [Smoothed TC Combined] - Estimated Position Accuracy Plot

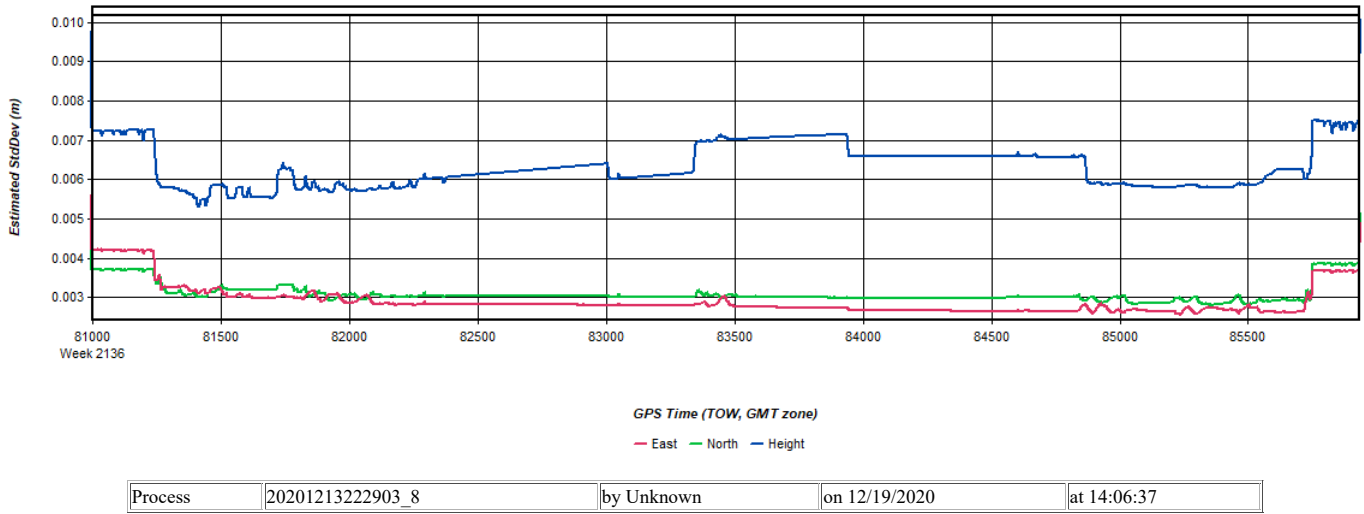


Figure 6: 20201213222903_8 [Smoothed TC Combined] - PDOP Plot

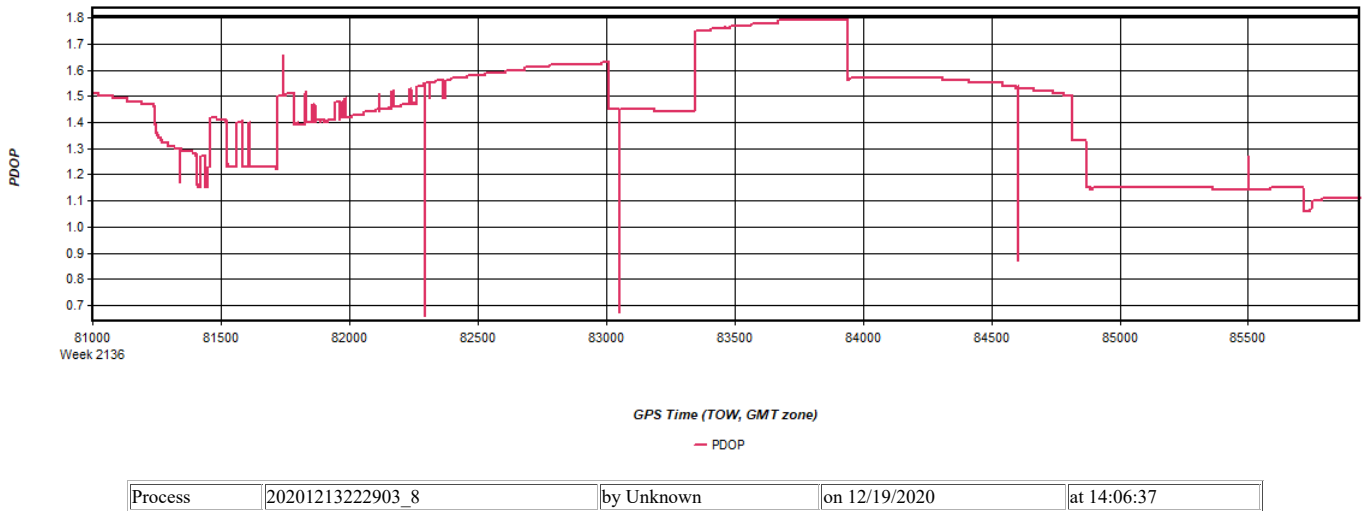


Figure 7: 20201213222903_8 [Smoothed TC Combined] - Number of Satellites Line Plot

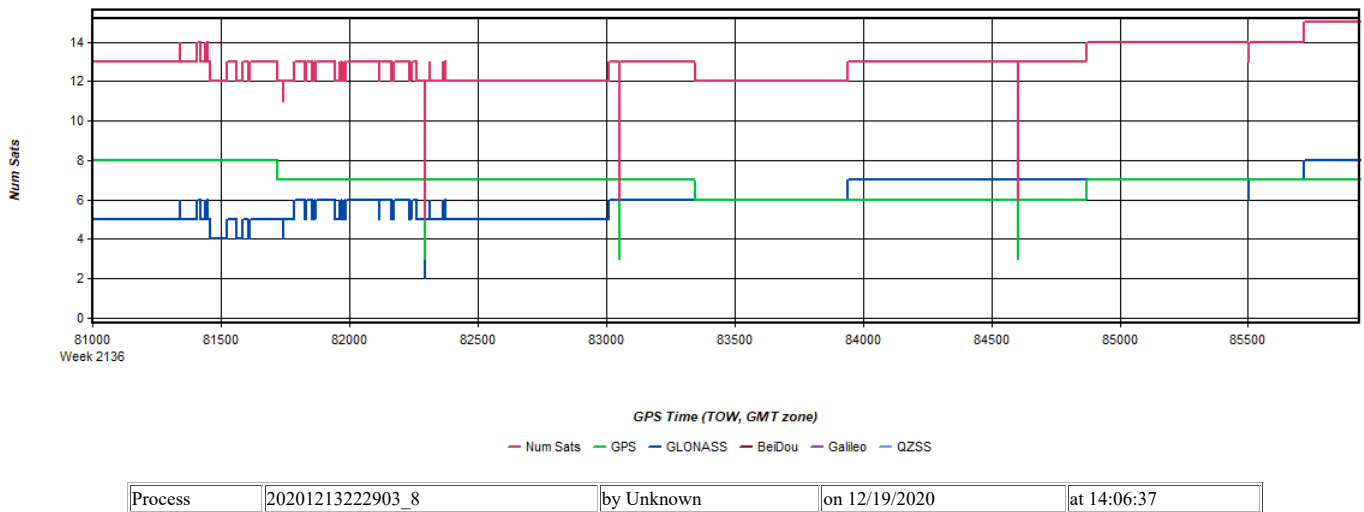


Figure 8: 20201213222903_8 [Smoothed TC Combined] - Status flag for IMU processing

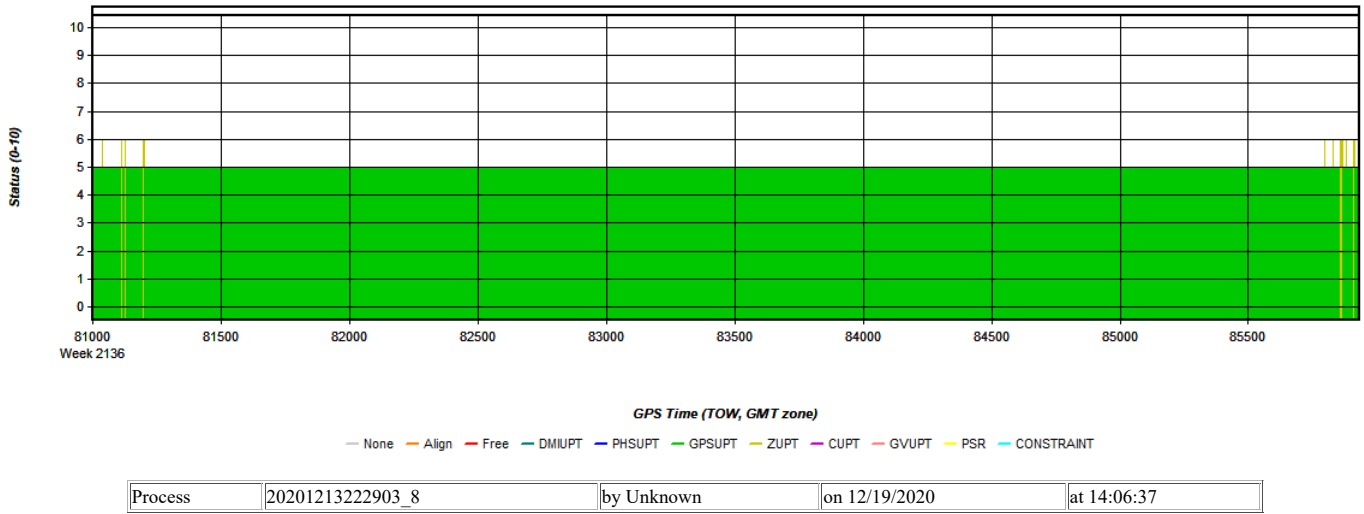


Figure 9: 20201213222903_8 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

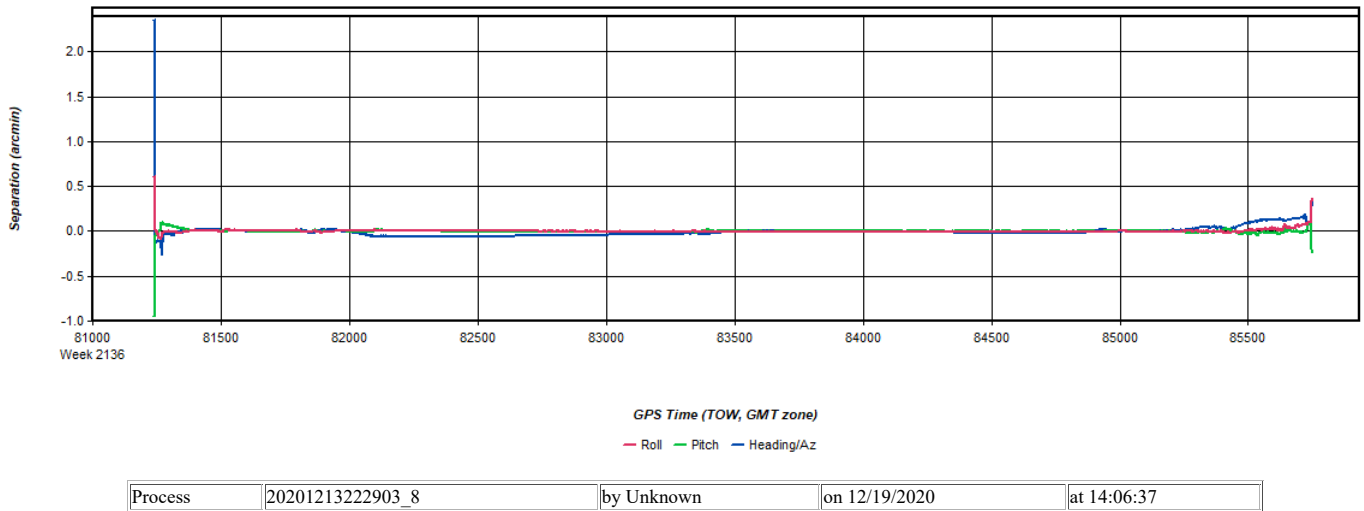


Figure 10: 20201213222903_8 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Figure 11: 20201213222903_8 [Smoothed TC Combined] - Azimuth Plot

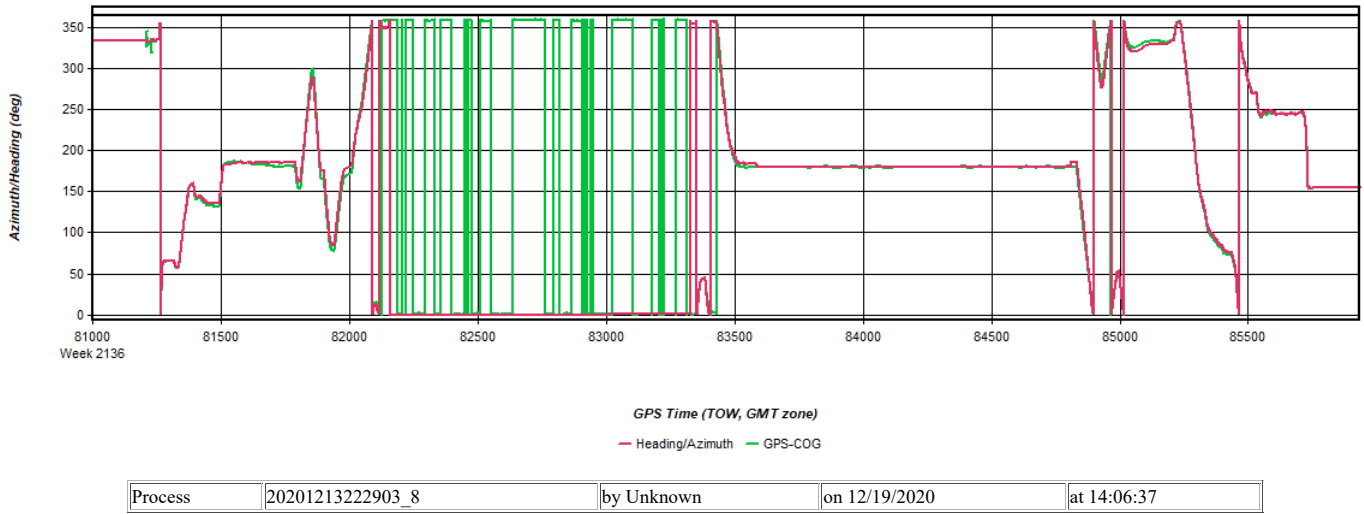


Figure 12: 20201213222903_8 [Smoothed TC Combined] - Roll & Pitch Plot

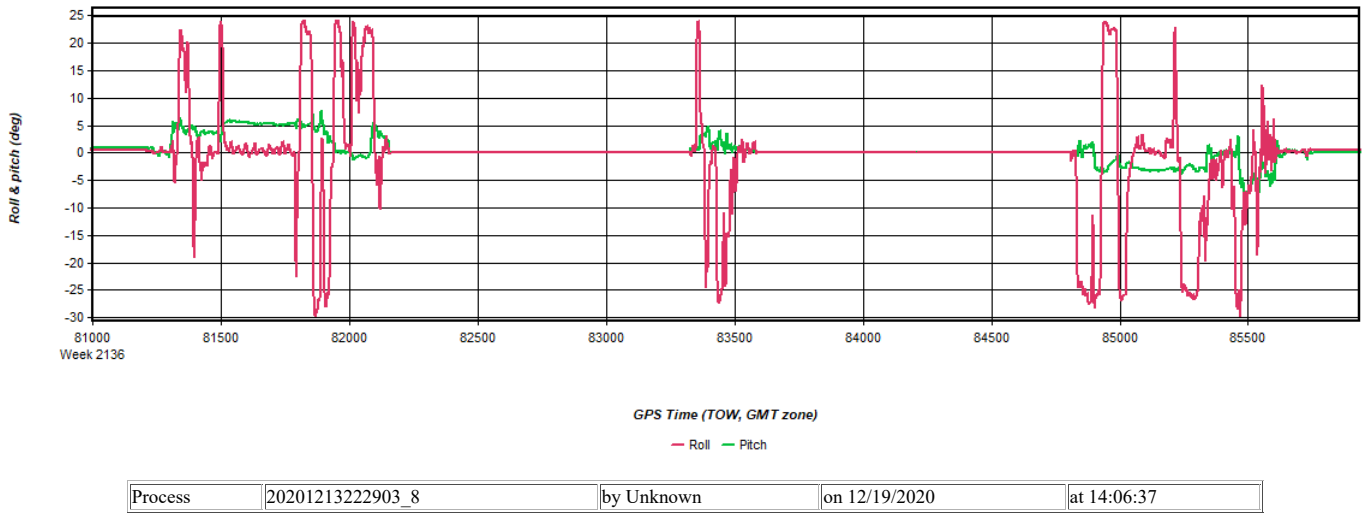


Figure 13: 20201213222903_8 [Smoothed TC Combined] - Velocity Profile Plot

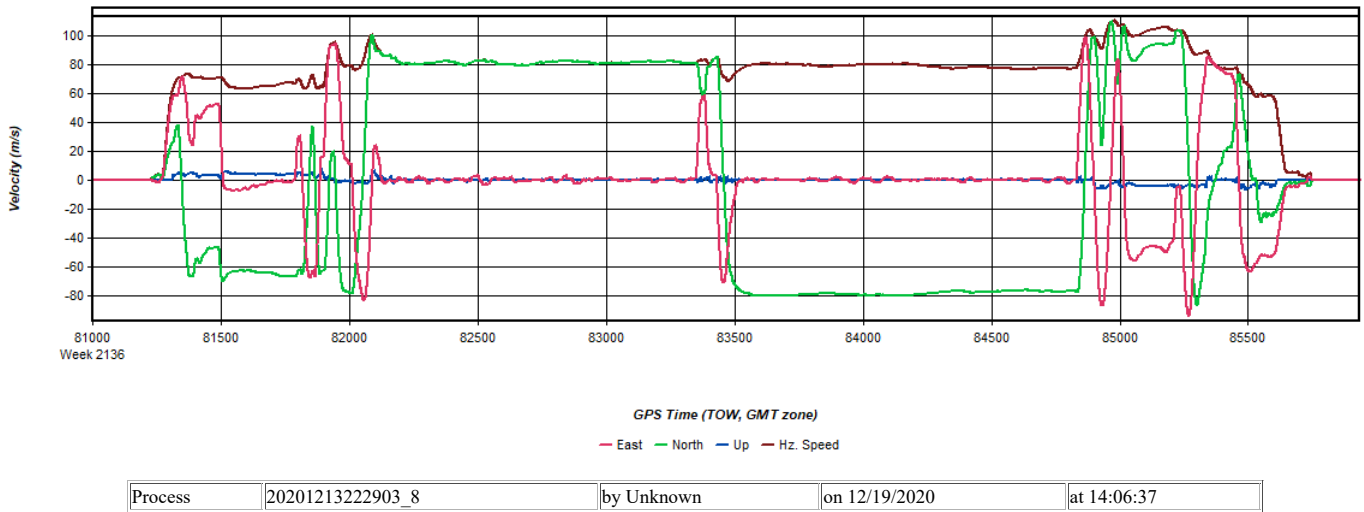


Figure 14: 20201213222903_8 [Smoothed TC Combined] - Body Frame Velocity Plot

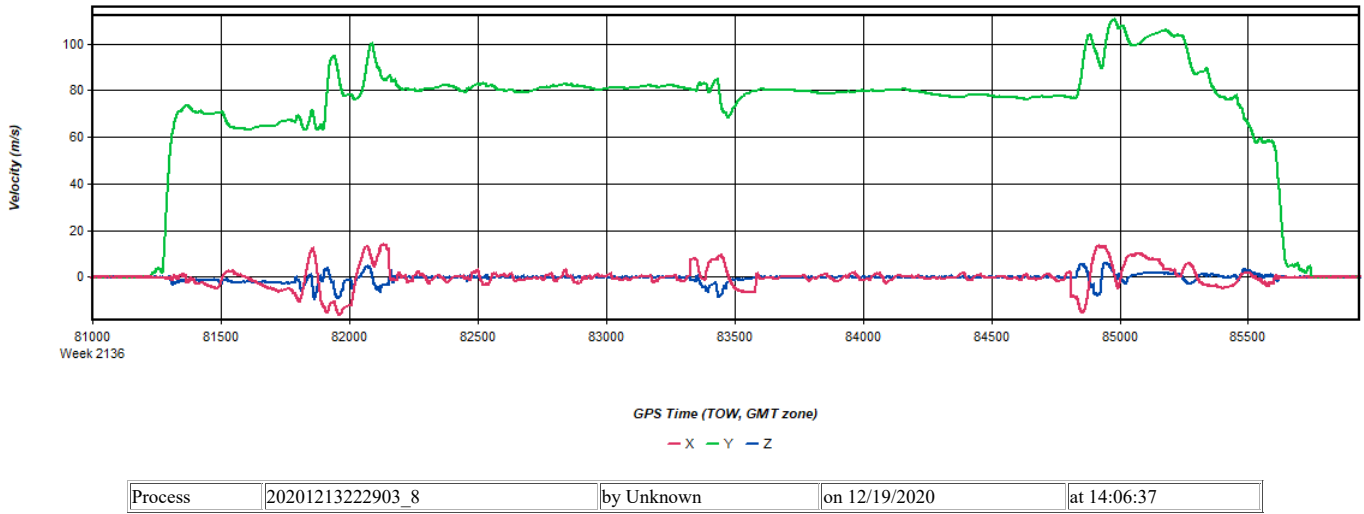


Figure 15: 20201213222903_8 [Smoothed TC Combined] - Height Profile Plot

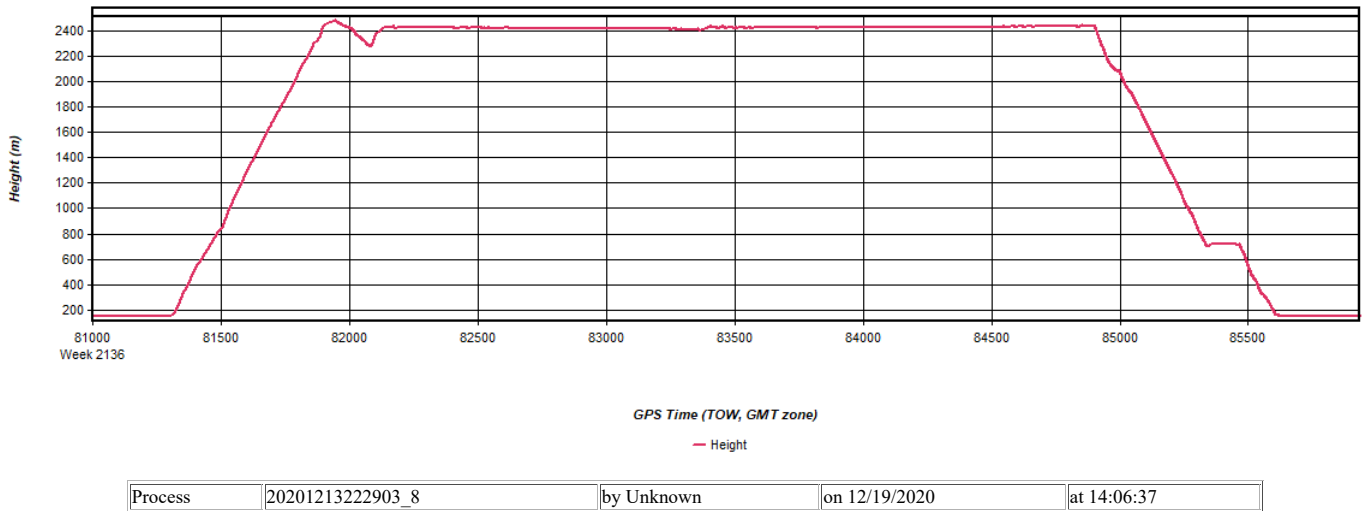


Figure 16: 20201213222903_8 [Smoothed TC Combined] - C/A Code Residual RMS Plot

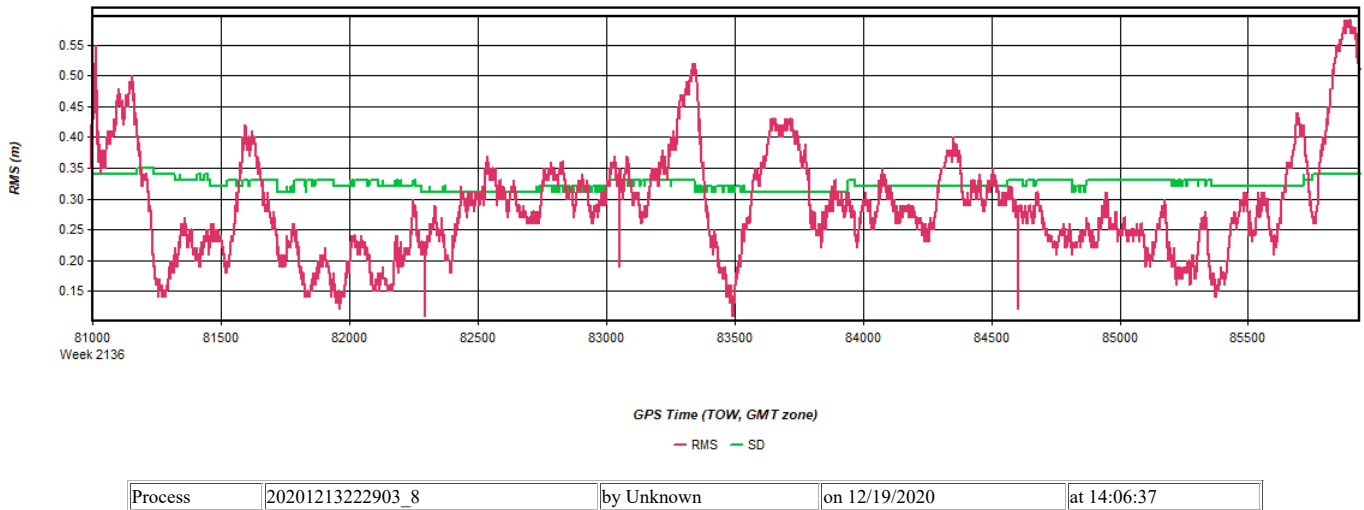


Figure 17: 20201213222903_8 [Smoothed TC Combined] - Carrier Residual RMS Plot

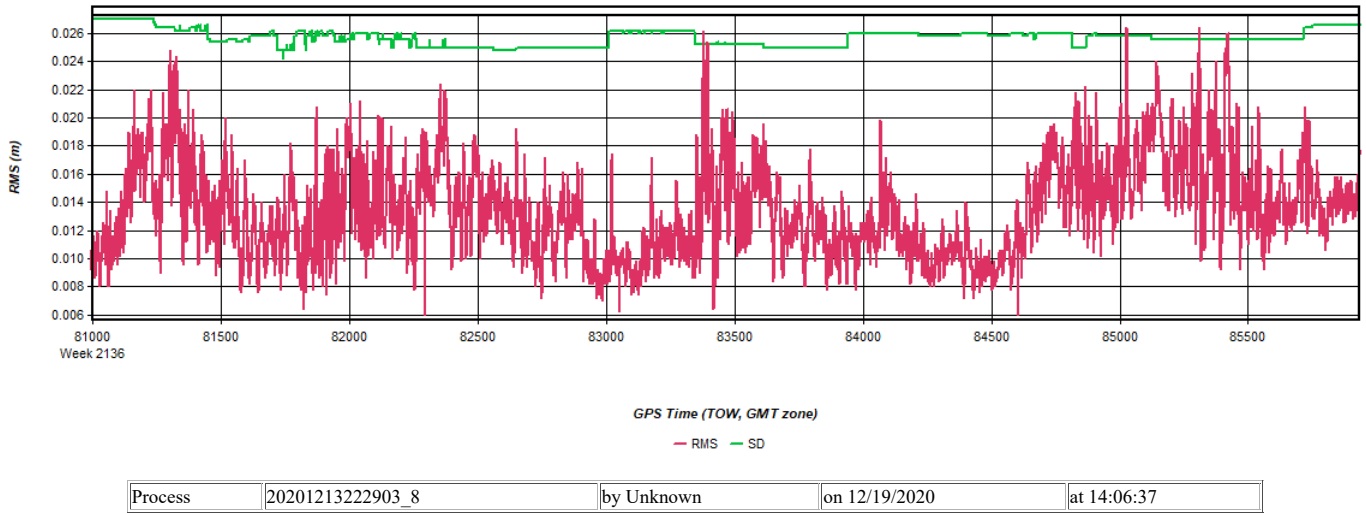


Figure 18: 20201213222903_8 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

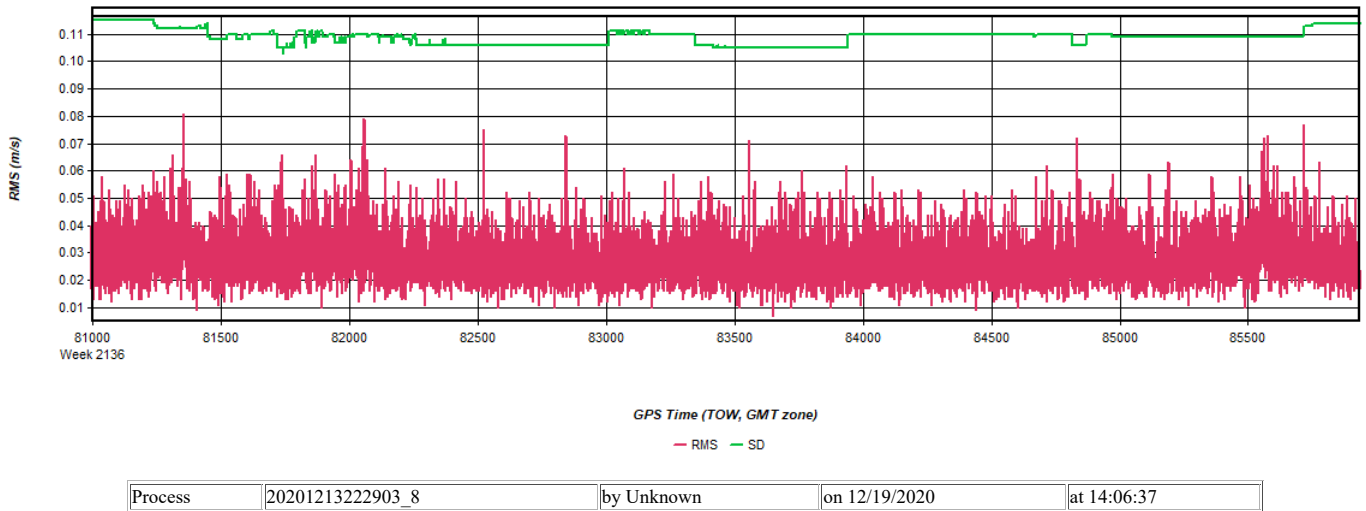


Figure 19: 20201213222903_8 [Smoothed TC Combined] - Accelerometer Bias Plot

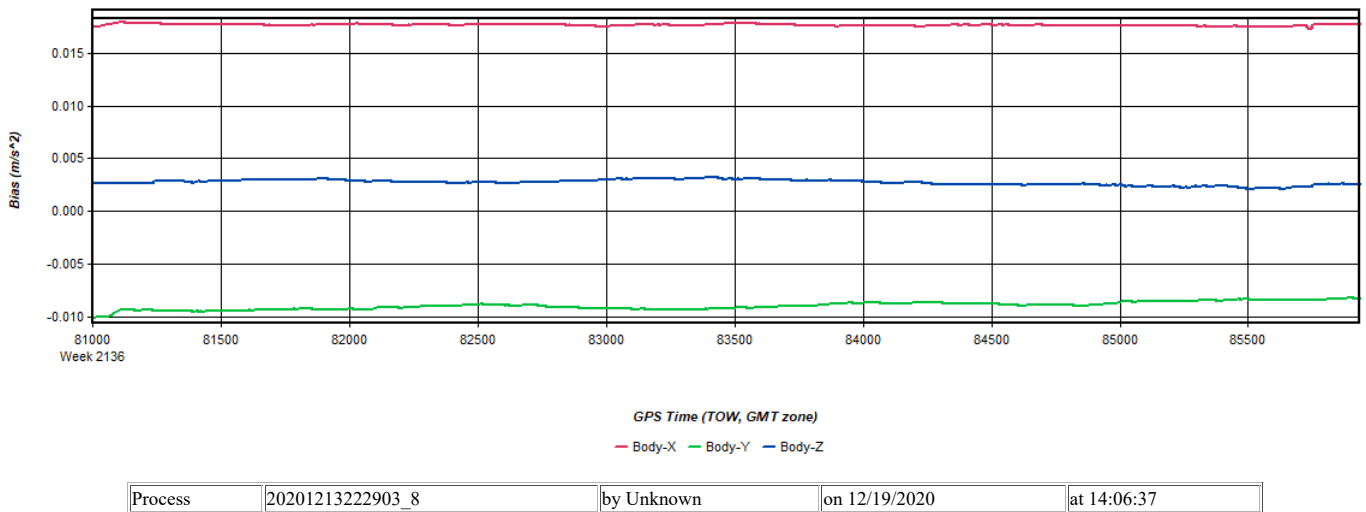
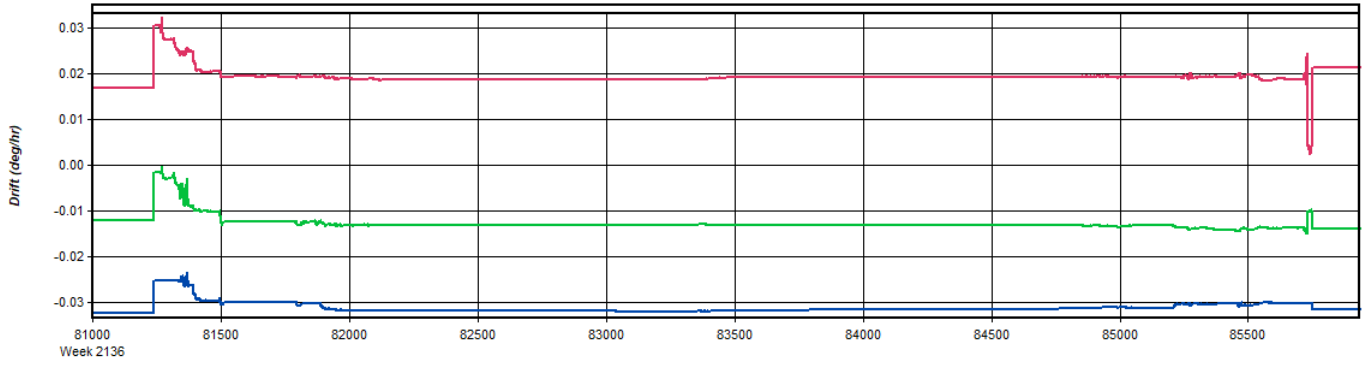


Figure 20: 20201213222903_8 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

— Body-X — Body-Y — Body-Z

Process	20201213222903_8	by Unknown	on 12/19/2020	at 14:06:37
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Output Results for 20201218144803_9

Inertial Explorer Version 8.90.2124
12/20/2021

Figure 1: Smoothed TC Combined - Map



Process	20201218144803_9	by Unknown	on 12/23/2020	at 20:21:42
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Figure 2: 20201218144803_9 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot

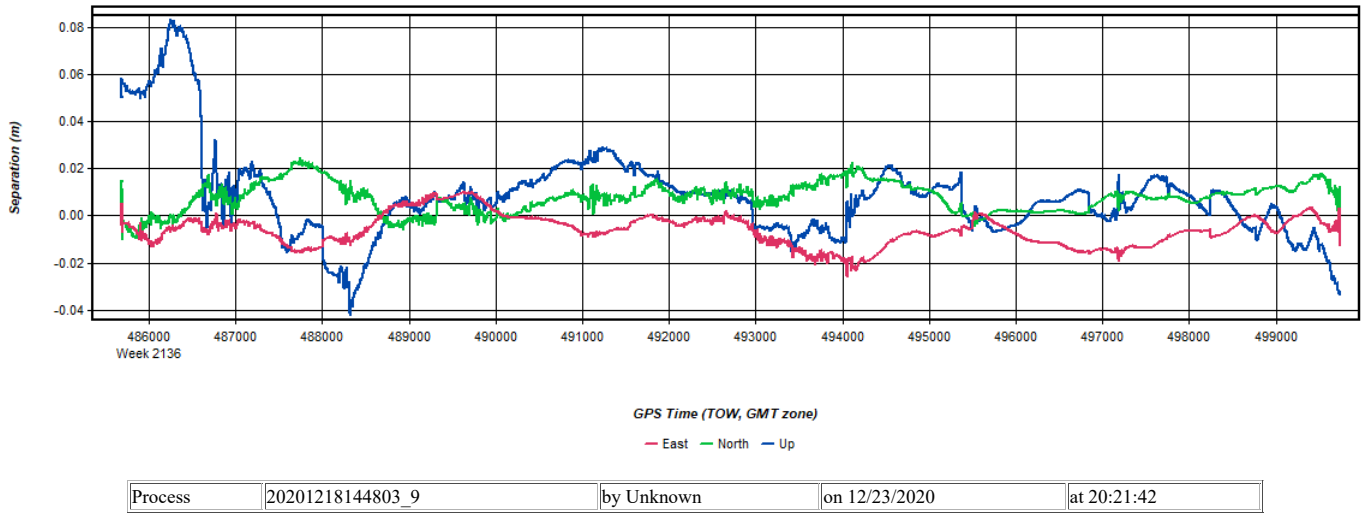


Figure 3: 20201218144803_9 [Smoothed TC Combined] - Float or Fixed Ambiguity

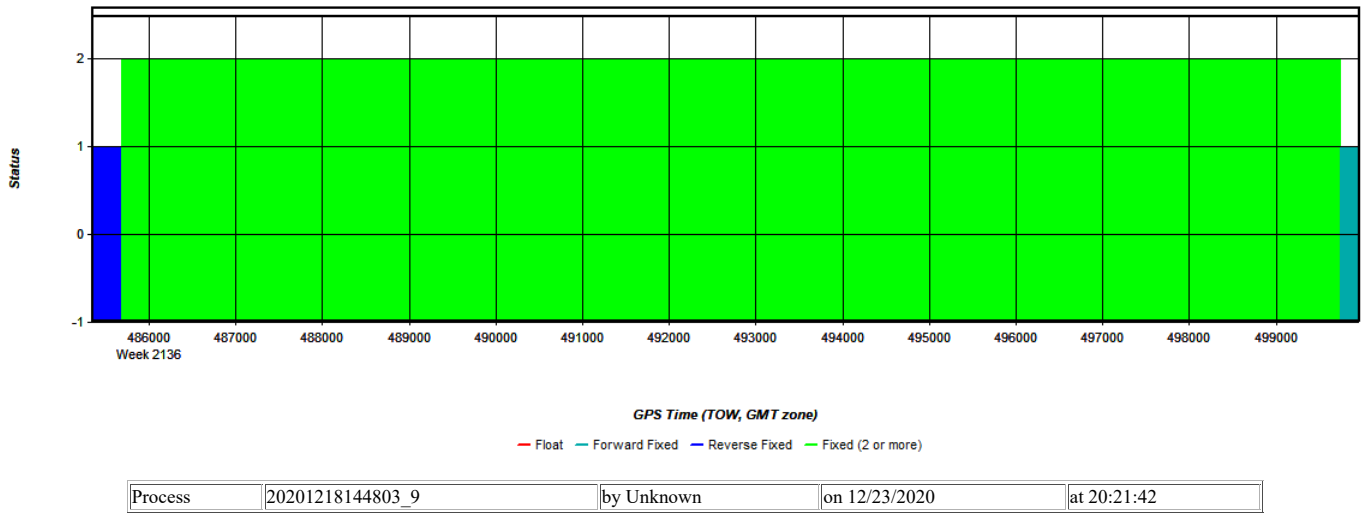


Figure 4: 20201218144803_9 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

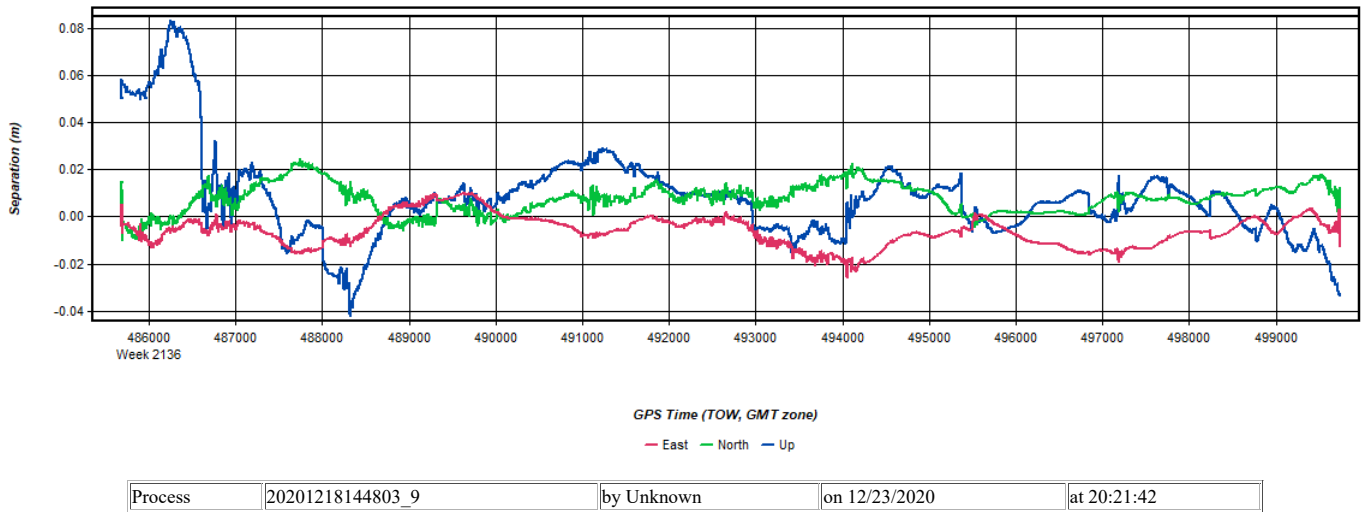


Figure 5: 20201218144803_9 [Smoothed TC Combined] - Estimated Position Accuracy Plot

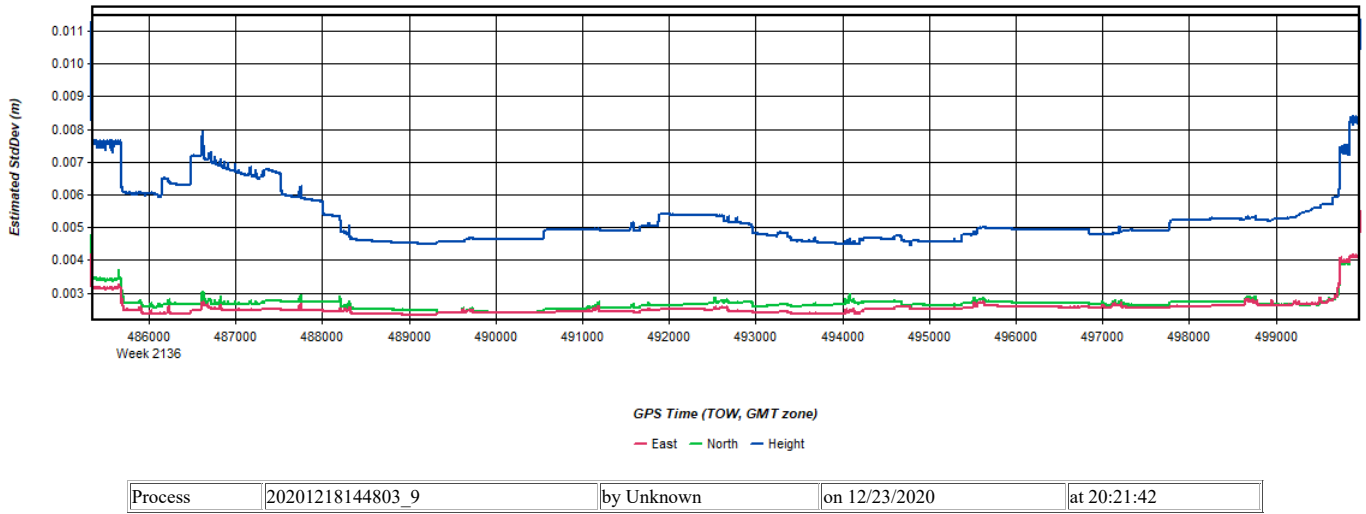


Figure 6: 20201218144803_9 [Smoothed TC Combined] - PDOP Plot

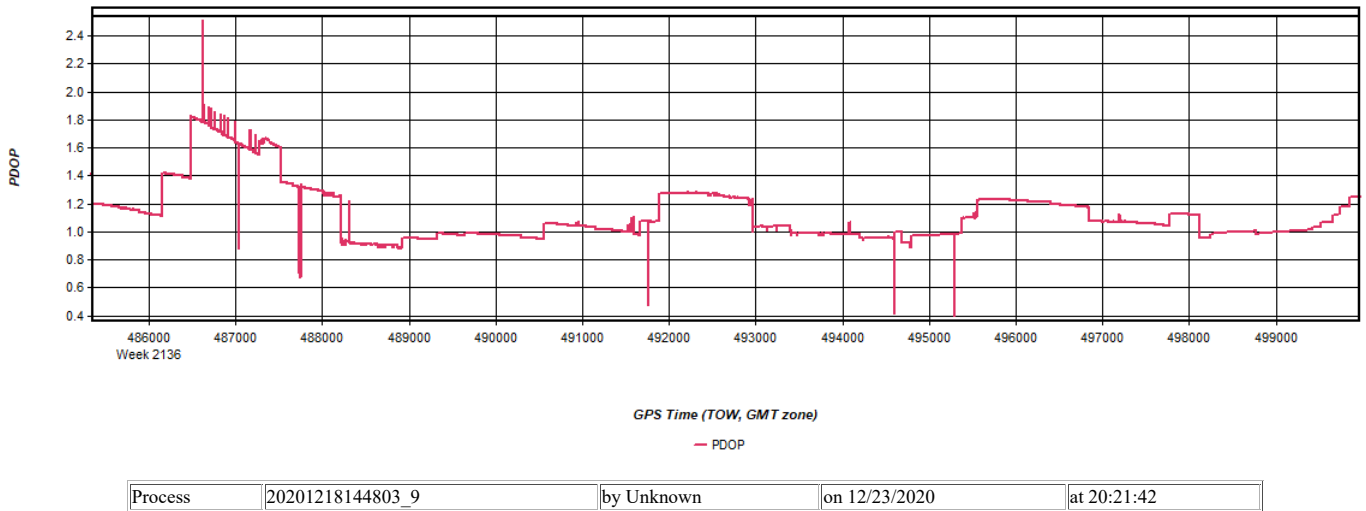


Figure 7: 20201218144803_9 [Smoothed TC Combined] - Number of Satellites Line Plot

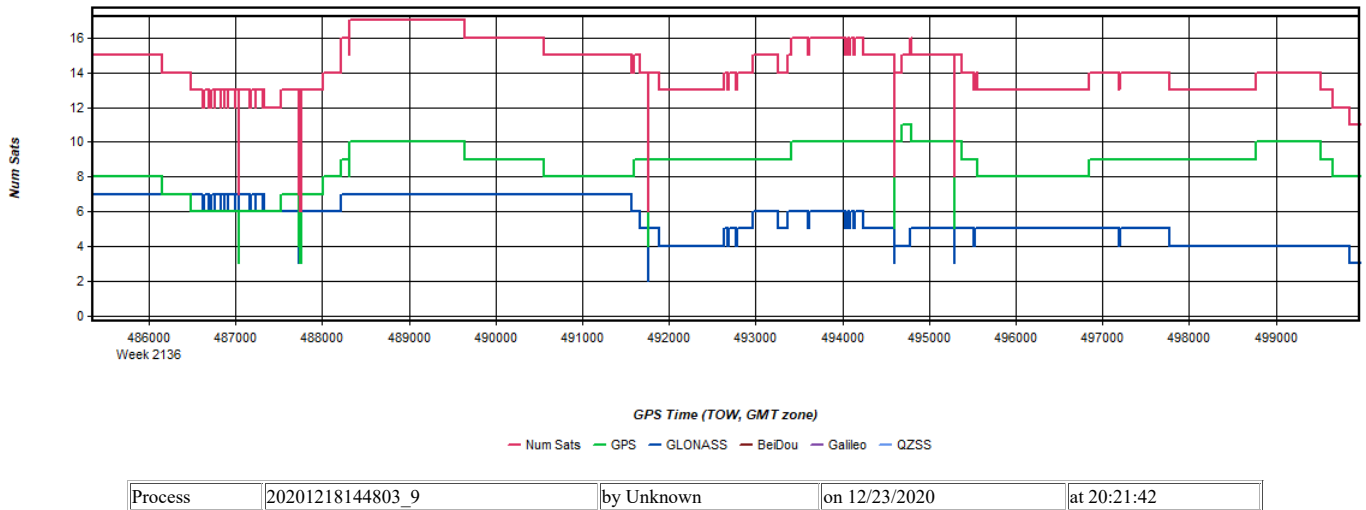


Figure 8: 20201218144803_9 [Smoothed TC Combined] - Status flag for IMU processing

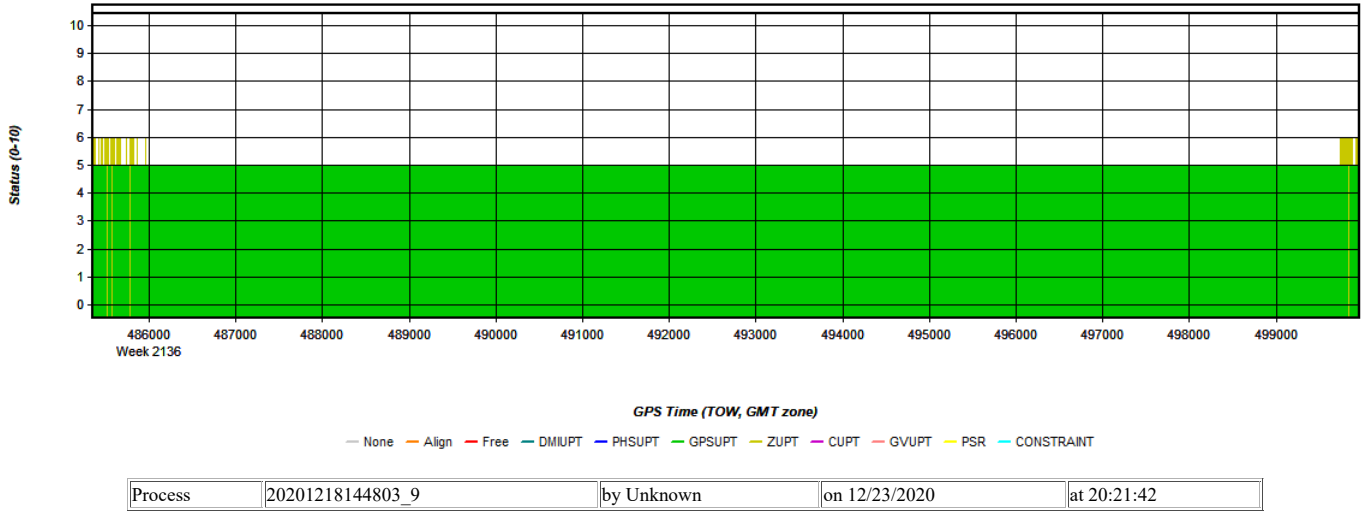


Figure 9: 20201218144803_9 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

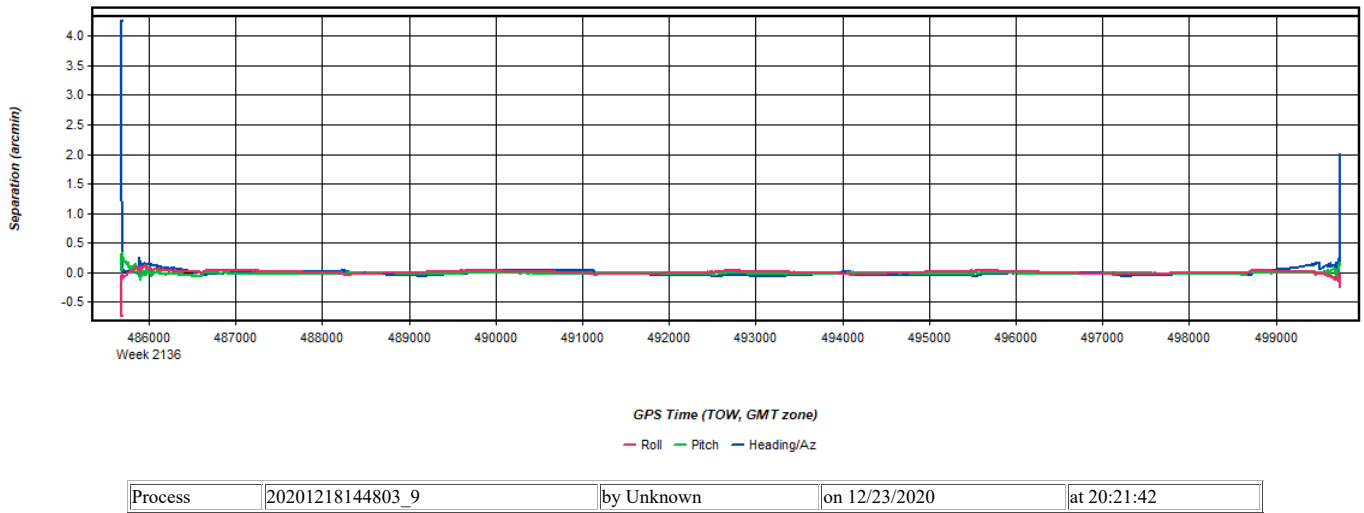


Figure 10: 20201218144803_9 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

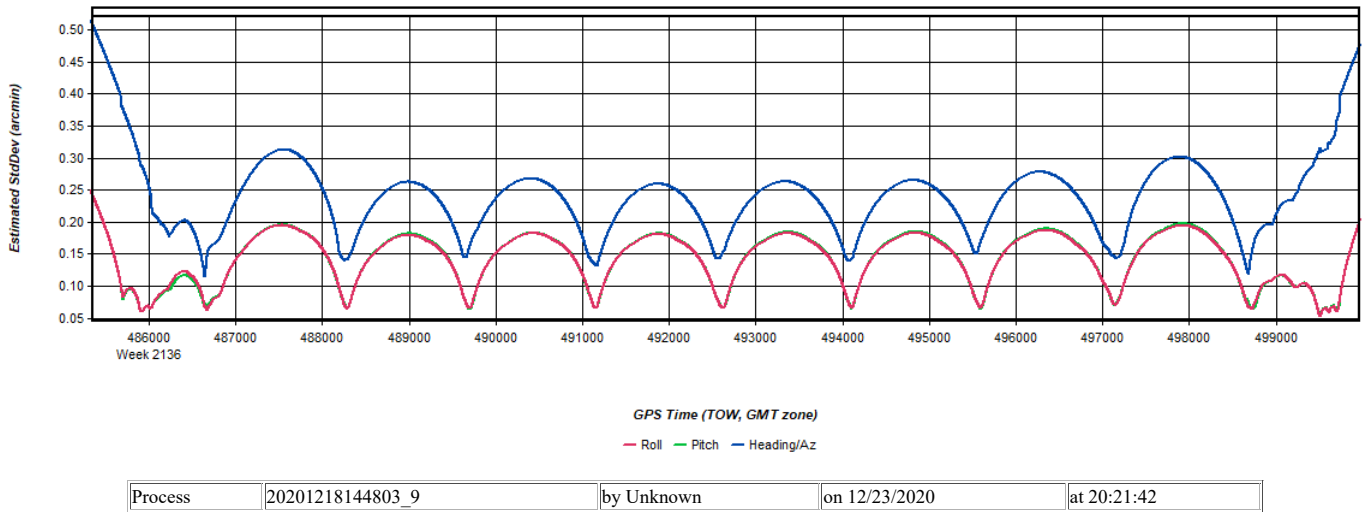


Figure 11: 20201218144803_9 [Smoothed TC Combined] - Azimuth Plot



Figure 12: 20201218144803_9 [Smoothed TC Combined] - Roll & Pitch Plot

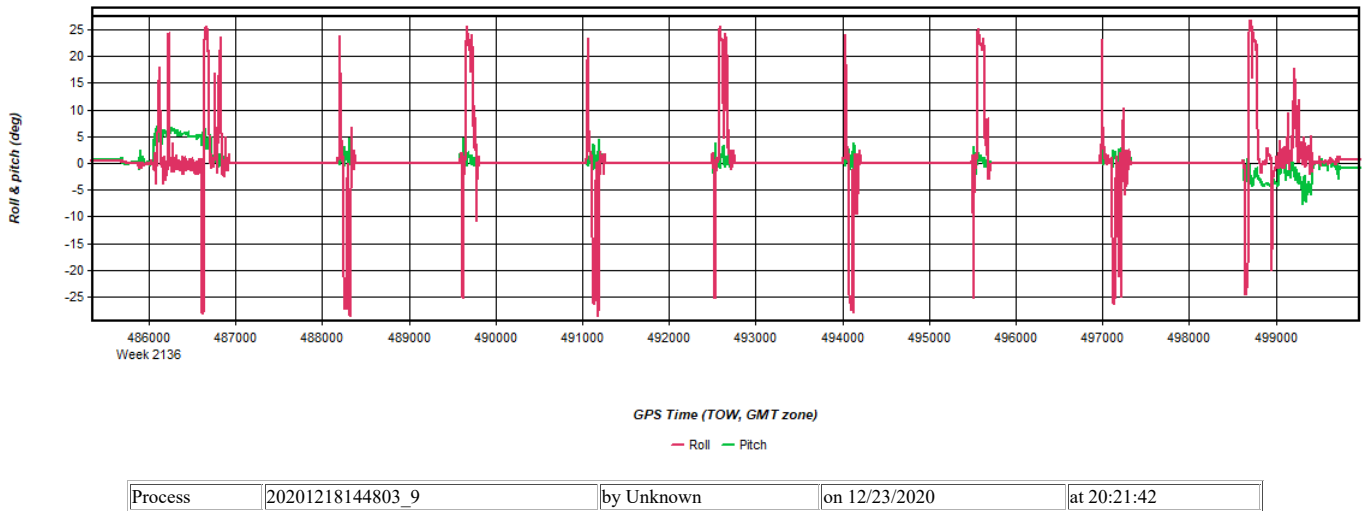


Figure 13: 20201218144803_9 [Smoothed TC Combined] - Velocity Profile Plot

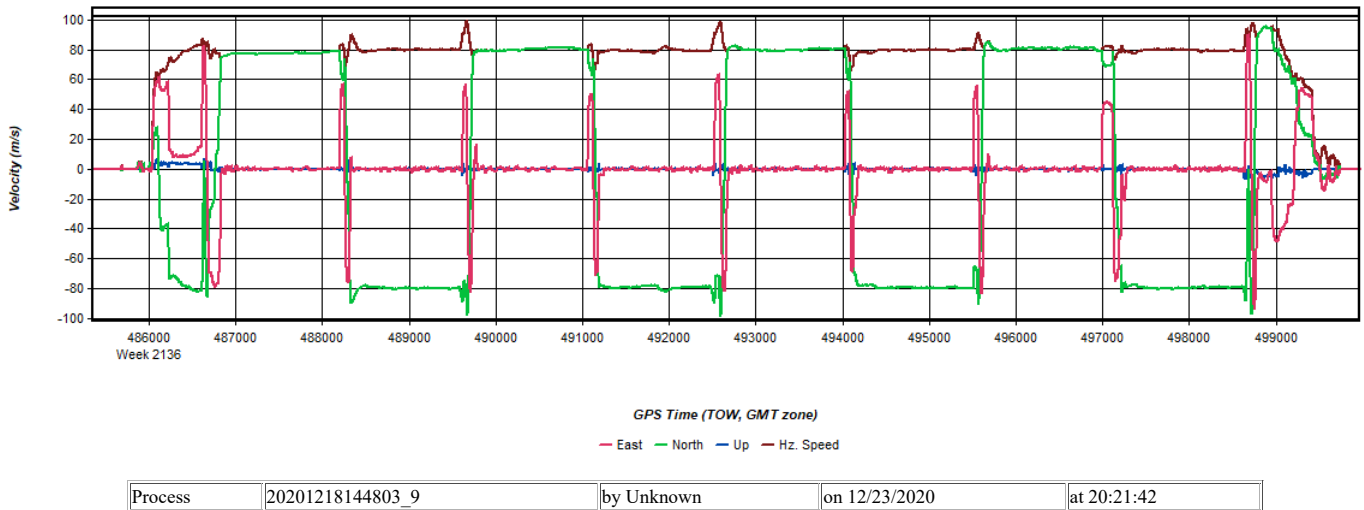


Figure 14: 20201218144803_9 [Smoothed TC Combined] - Body Frame Velocity Plot

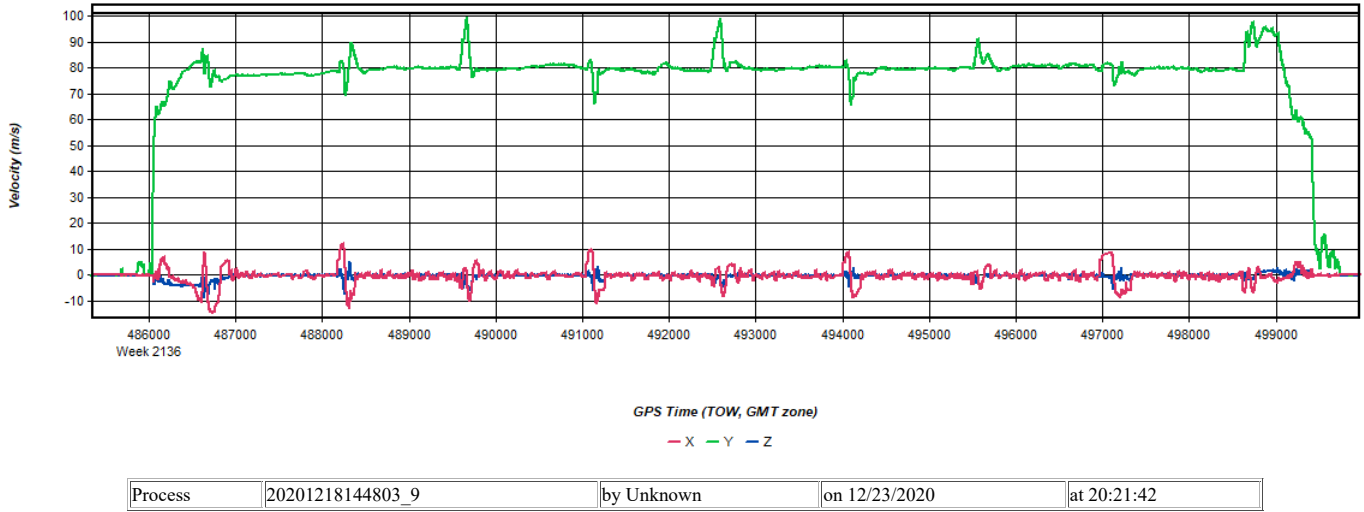


Figure 15: 20201218144803_9 [Smoothed TC Combined] - Height Profile Plot

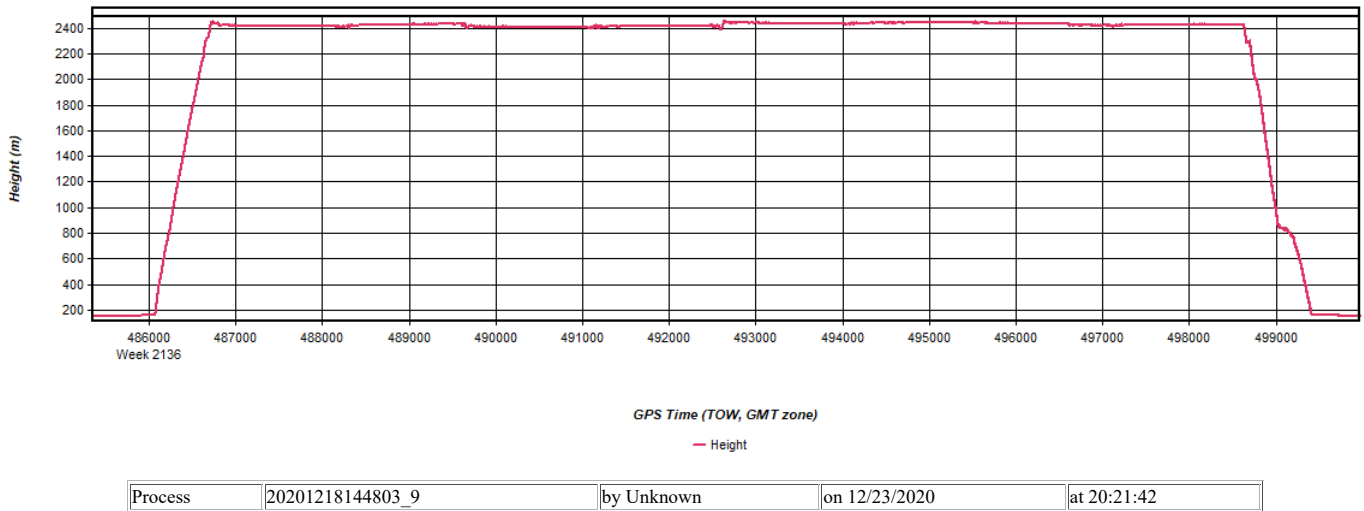


Figure 16: 20201218144803_9 [Smoothed TC Combined] - C/A Code Residual RMS Plot

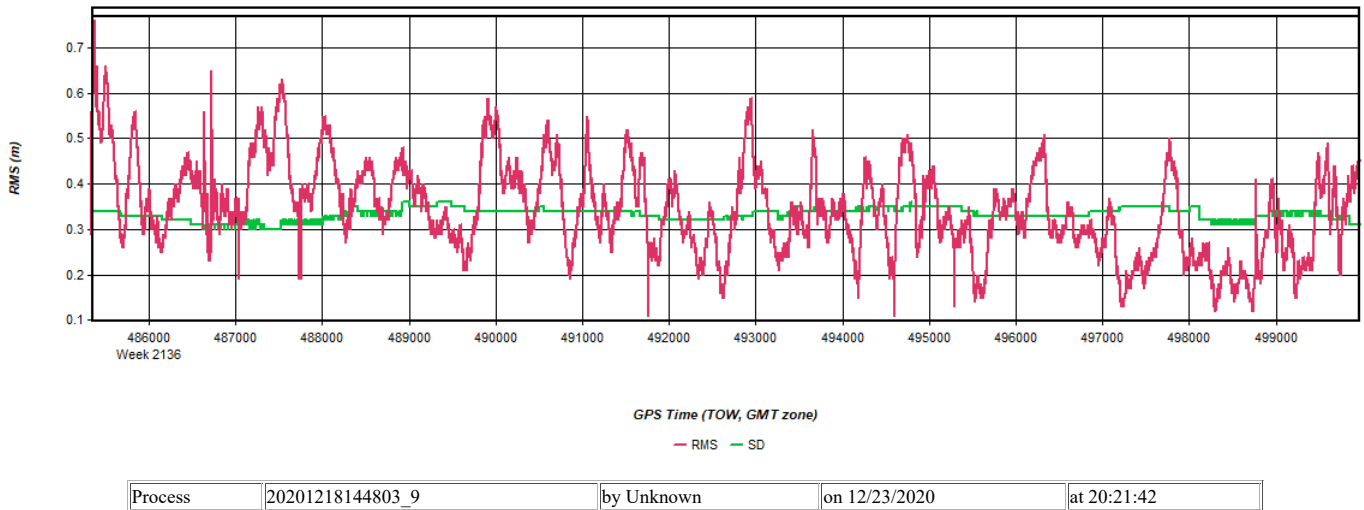


Figure 17: 20201218144803_9 [Smoothed TC Combined] - Carrier Residual RMS Plot

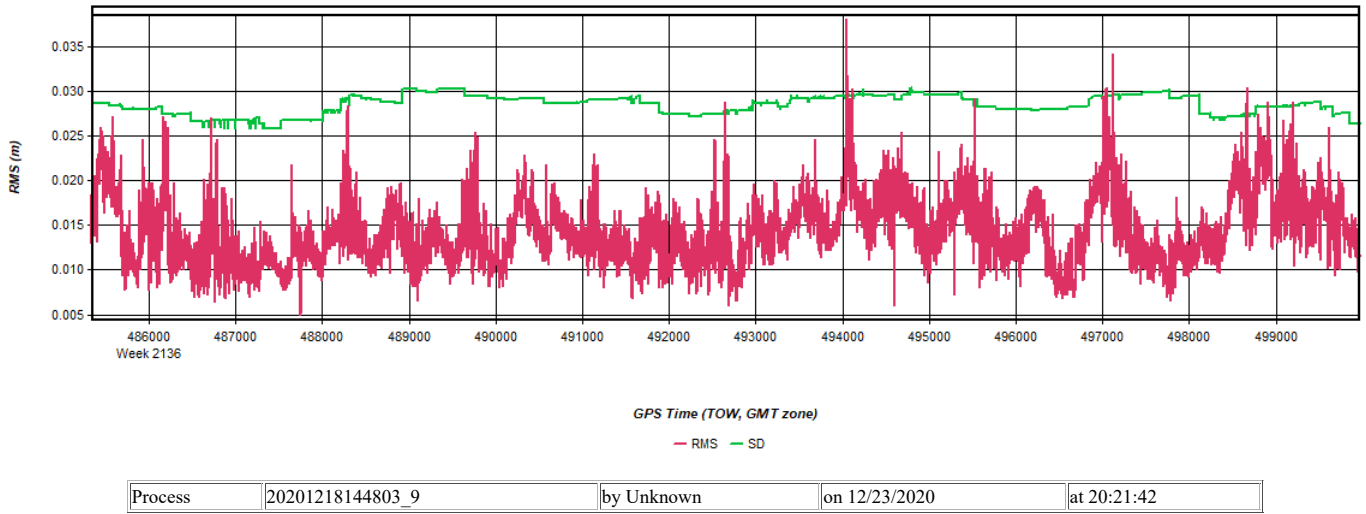


Figure 18: 20201218144803_9 [Smoothed TC Combined] - L1 Doppler Residual RMS Plot

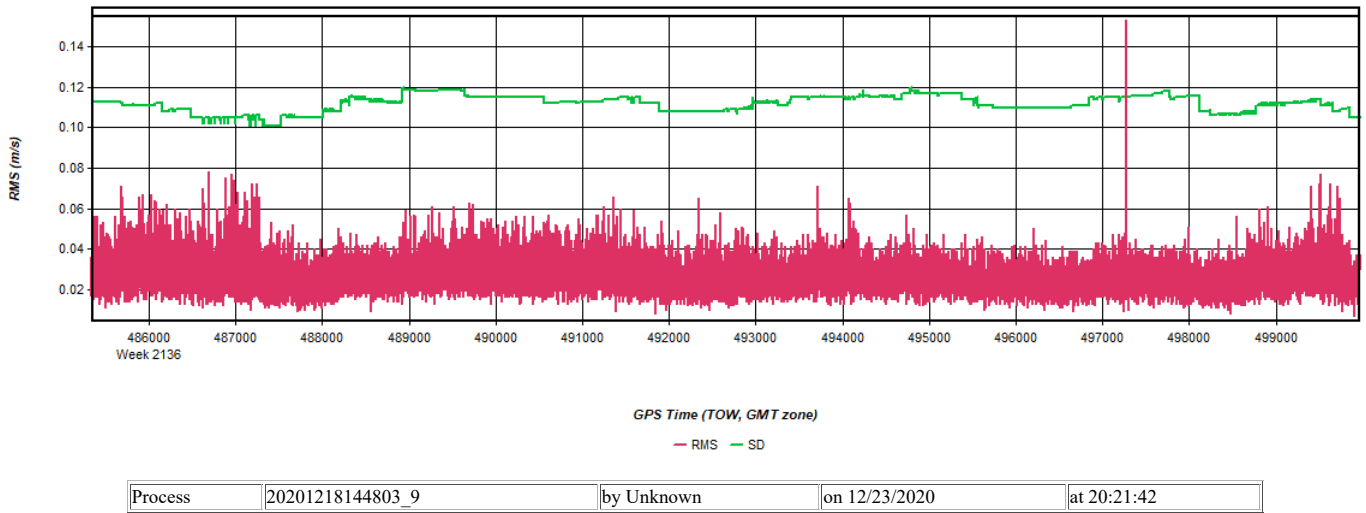


Figure 19: 20201218144803_9 [Smoothed TC Combined] - Accelerometer Bias Plot

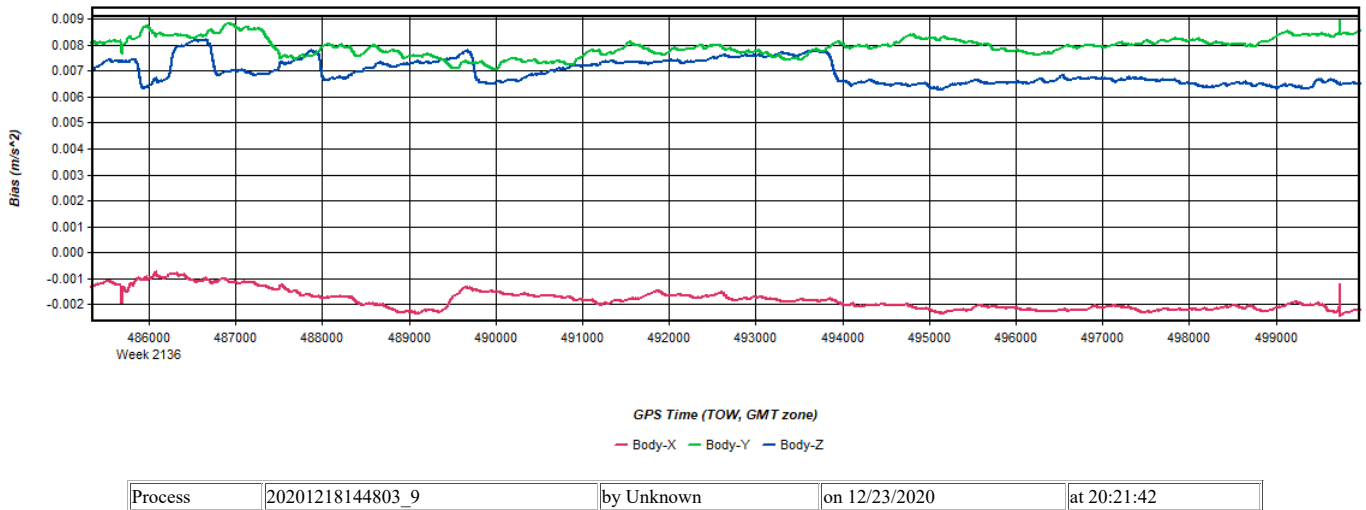
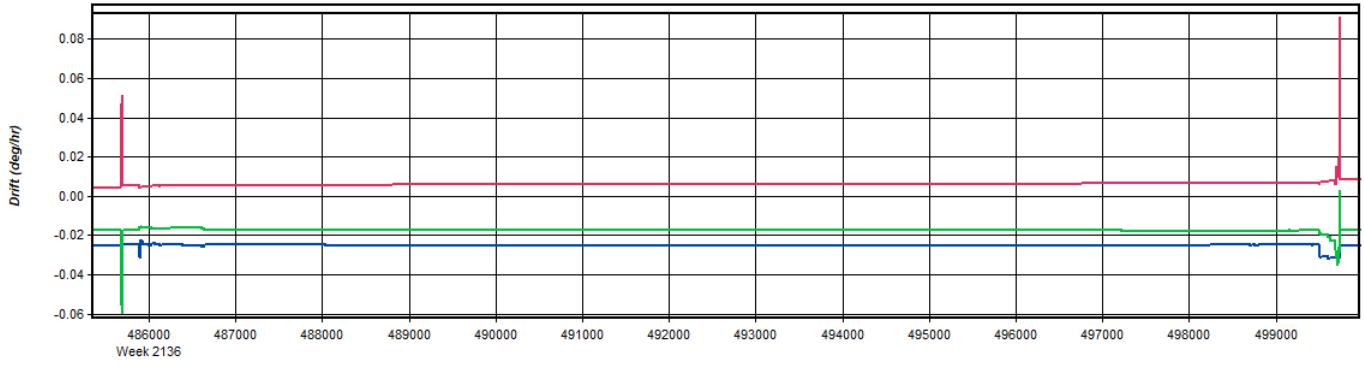


Figure 20: 20201218144803_9 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

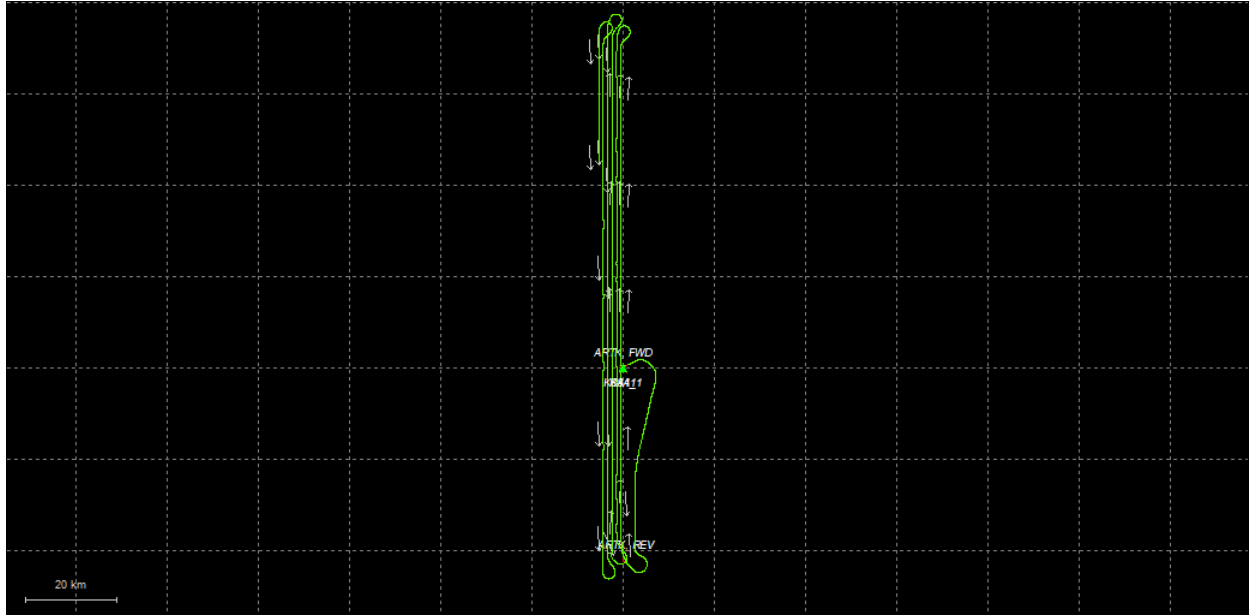
— Body-X — Body-Y — Body-Z

Process	20201218144803_9	by Unknown	on 12/23/2020	at 20:21:42
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Output Results for 20201218191848_10

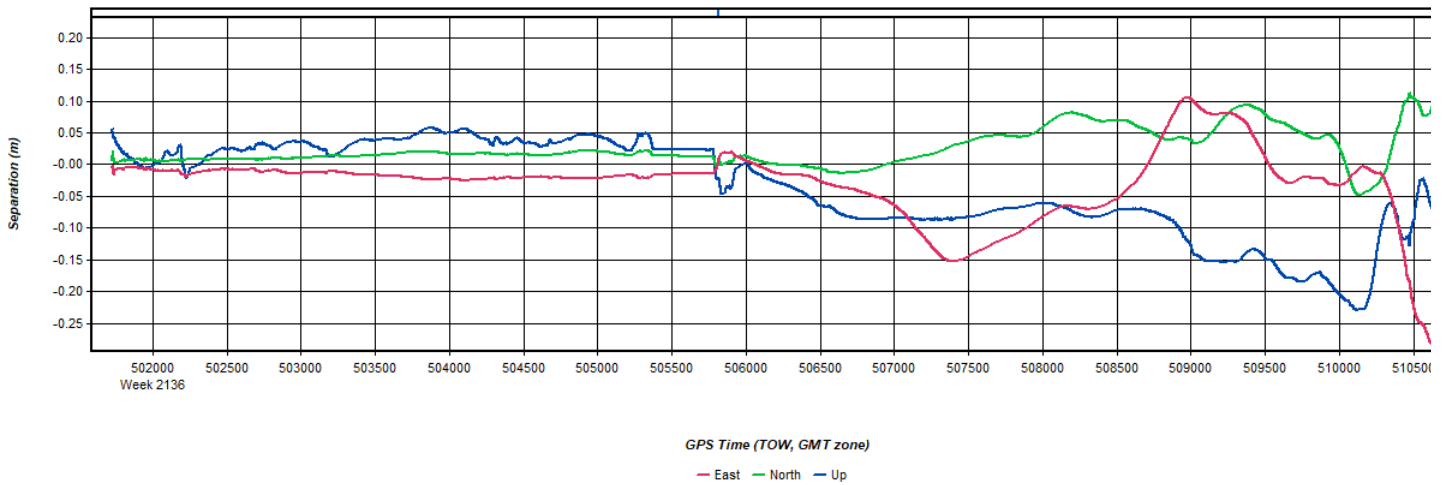
Inertial Explorer Version 8.90.2124
12/23/2020

Figure 1: Smoothed TC Combined - Map



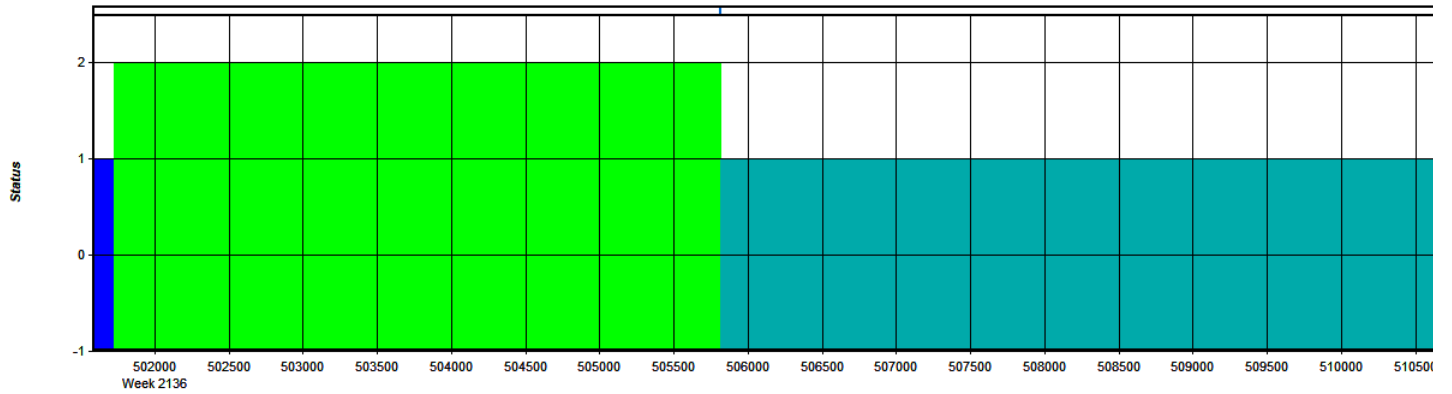
Process	20201218191848_10	by Unknown	on 12/23/2020	at 21:17:51
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Figure 2: 20201218191848_10 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



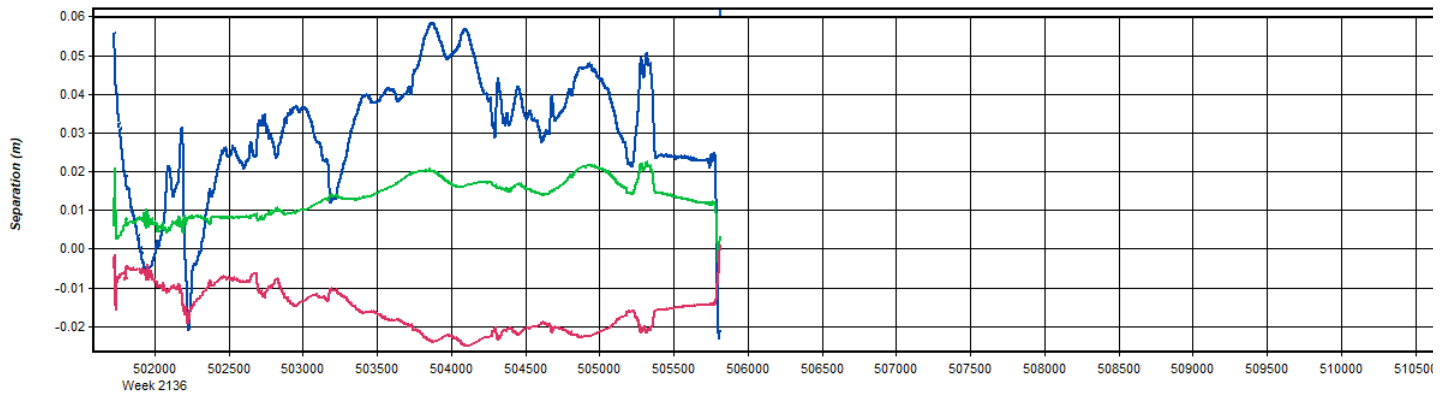
Process	20201218191848_10	by Unknown	on 12/23/2020	at 21:17:51
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Figure 3: 20201218191848_10 [Smoothed TC Combined] - Float or Fixed Ambiguity



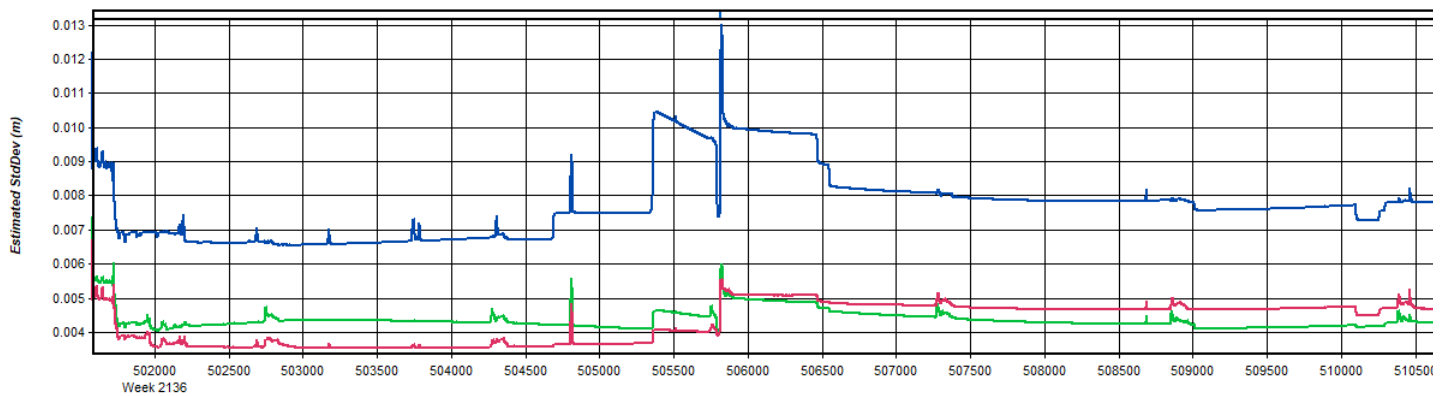
Process 20201218191848_10 by Unknown on 12/23/2020 at 21:17:51

Figure 4: 20201218191848_10 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



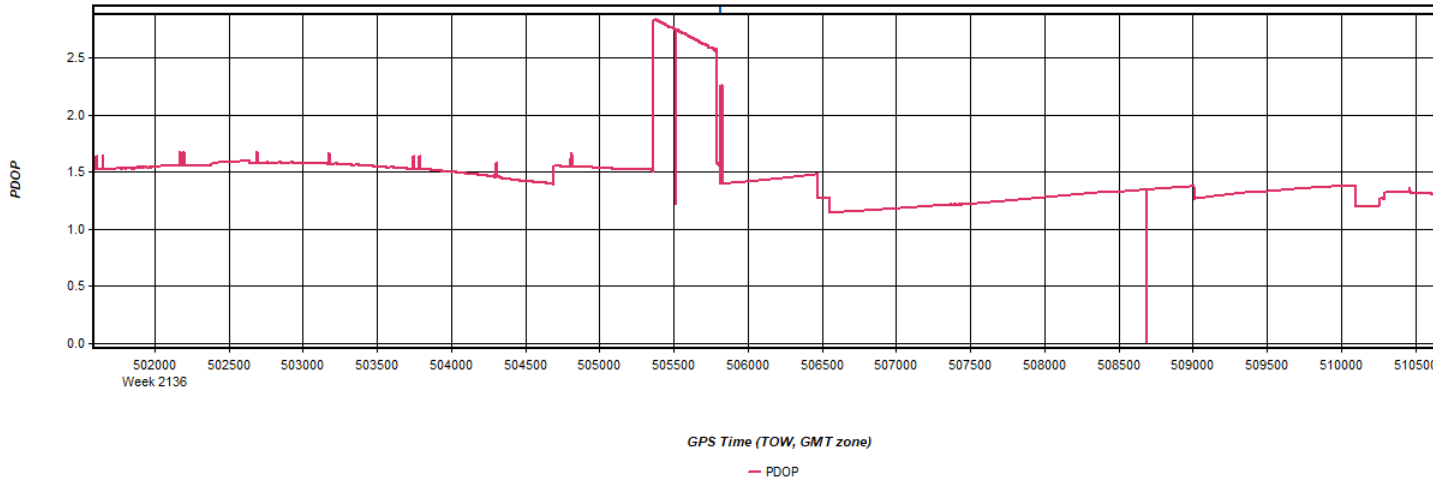
Process 20201218191848_10 by Unknown on 12/23/2020 at 21:17:51

Figure 5: 20201218191848_10 [Smoothed TC Combined] - Estimated Position Accuracy Plot



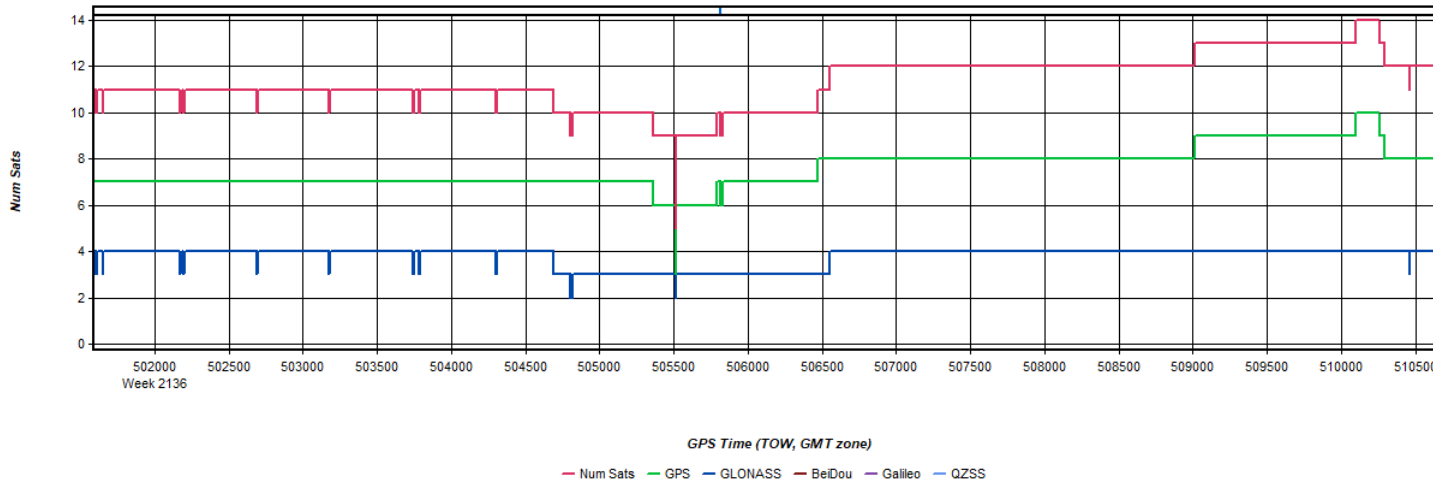
Process 20201218191848_10 by Unknown on 12/23/2020 at 21:17:51

Figure 6: 20201218191848_10 [Smoothed TC Combined] - PDOP Plot



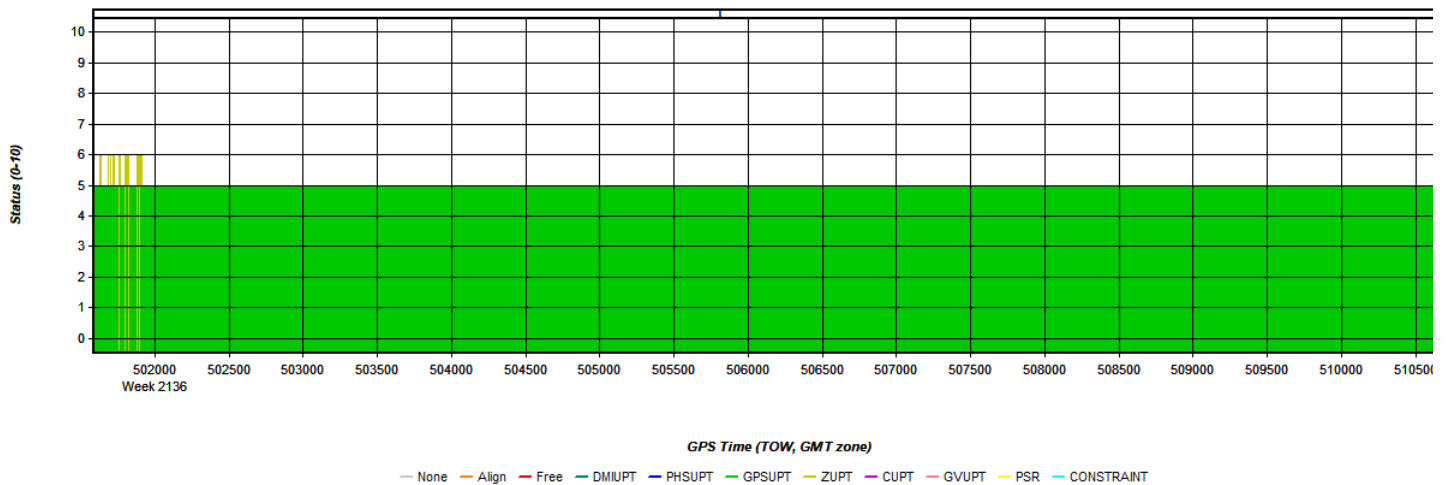
Process 20201218191848_10 by Unknown on 12/23/2020 at 21:17:51

Figure 7: 20201218191848_10 [Smoothed TC Combined] - Number of Satellites Line Plot



Process 20201218191848_10 by Unknown on 12/23/2020 at 21:17:51

Figure 8: 20201218191848_10 [Smoothed TC Combined] - Status flag for IMU processing



Process 20201218191848_10 by Unknown on 12/23/2020 at 21:17:51

Figure 9: 20201218191848_10 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

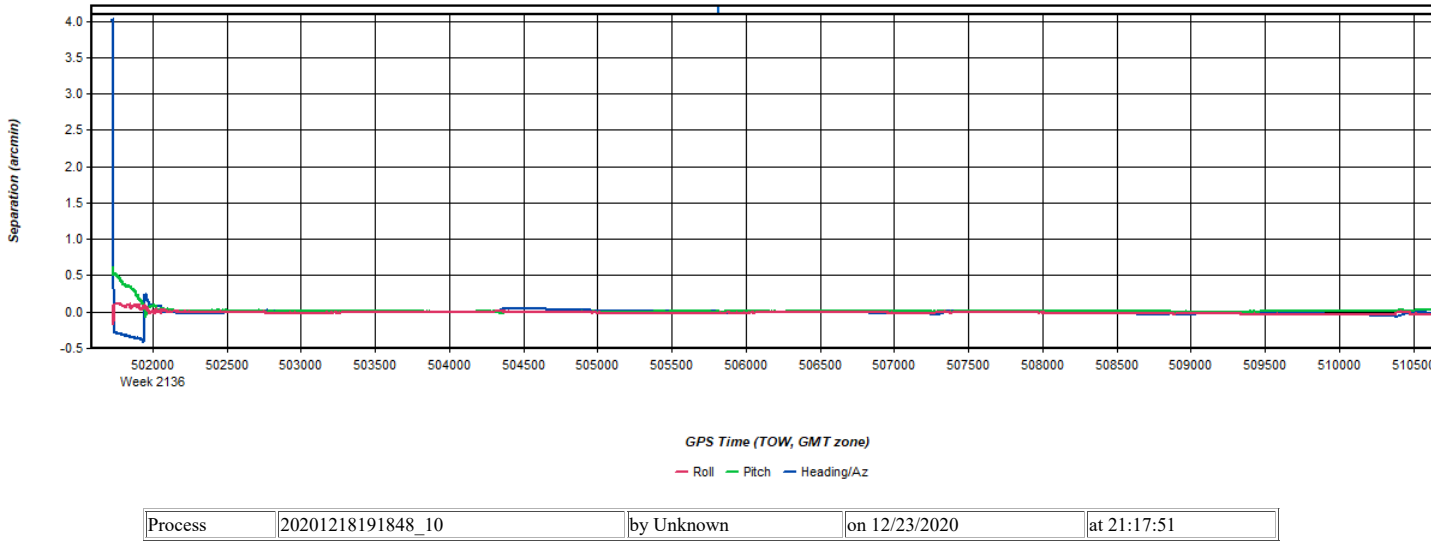


Figure 10: 20201218191848_10 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

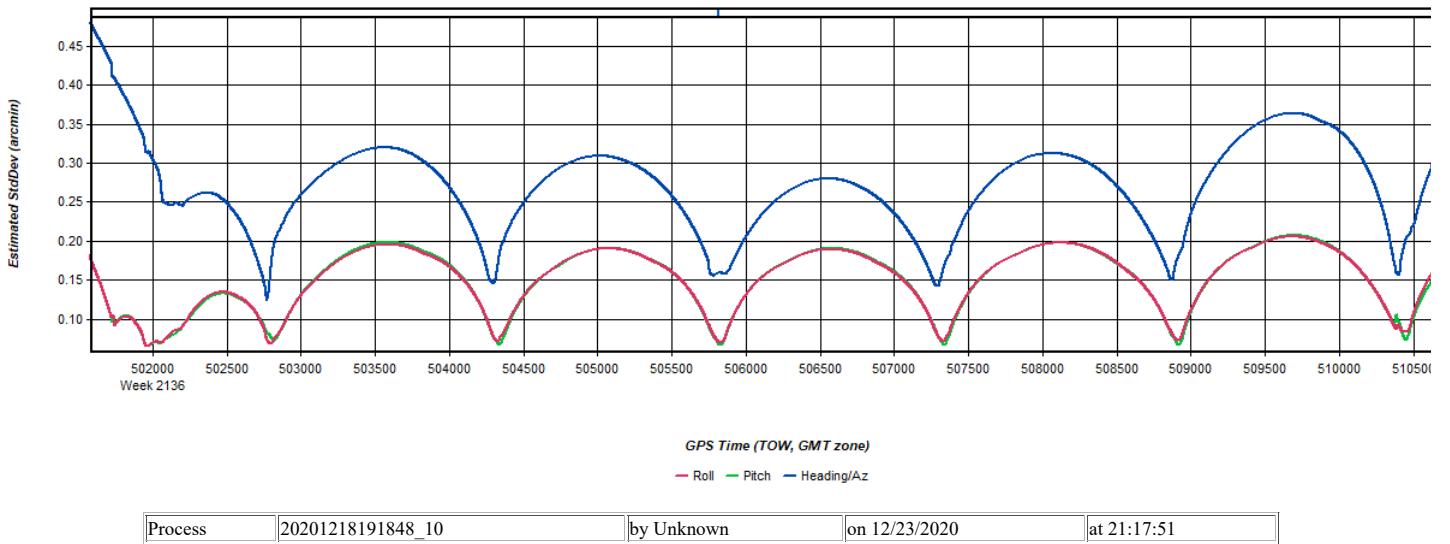


Figure 11: 20201218191848_10 [Smoothed TC Combined] - Azimuth Plot



Figure 12: 20201218191848_10 [Smoothed TC Combined] - Roll & Pitch Plot

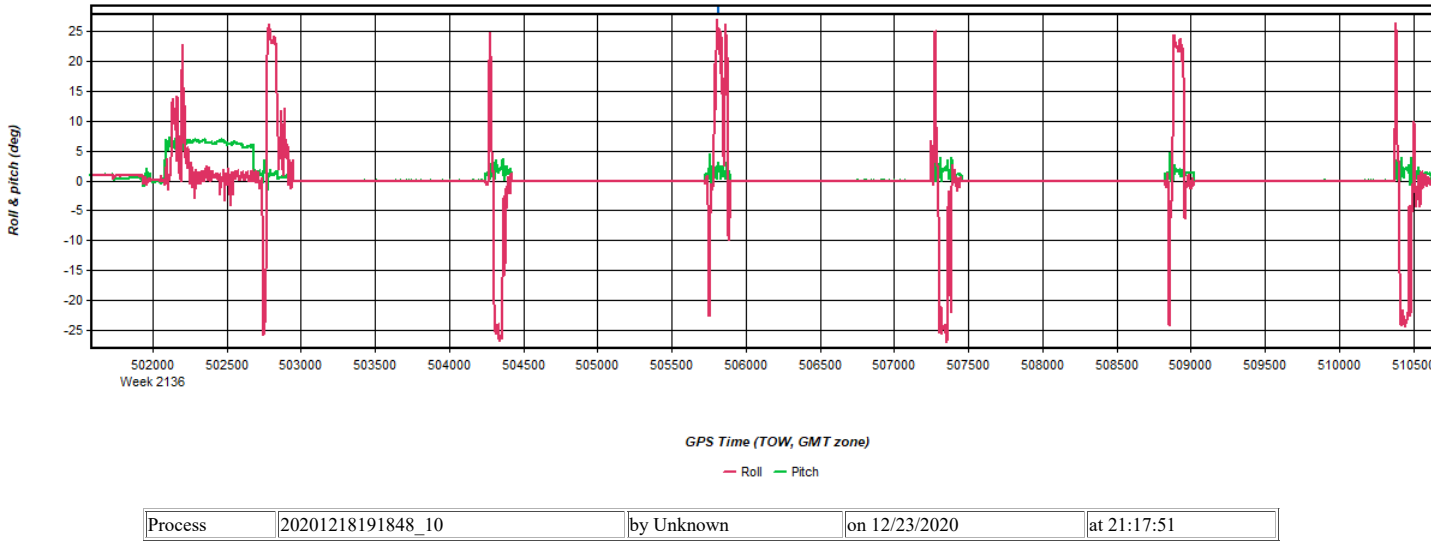


Figure 13: 20201218191848_10 [Smoothed TC Combined] - Velocity Profile Plot

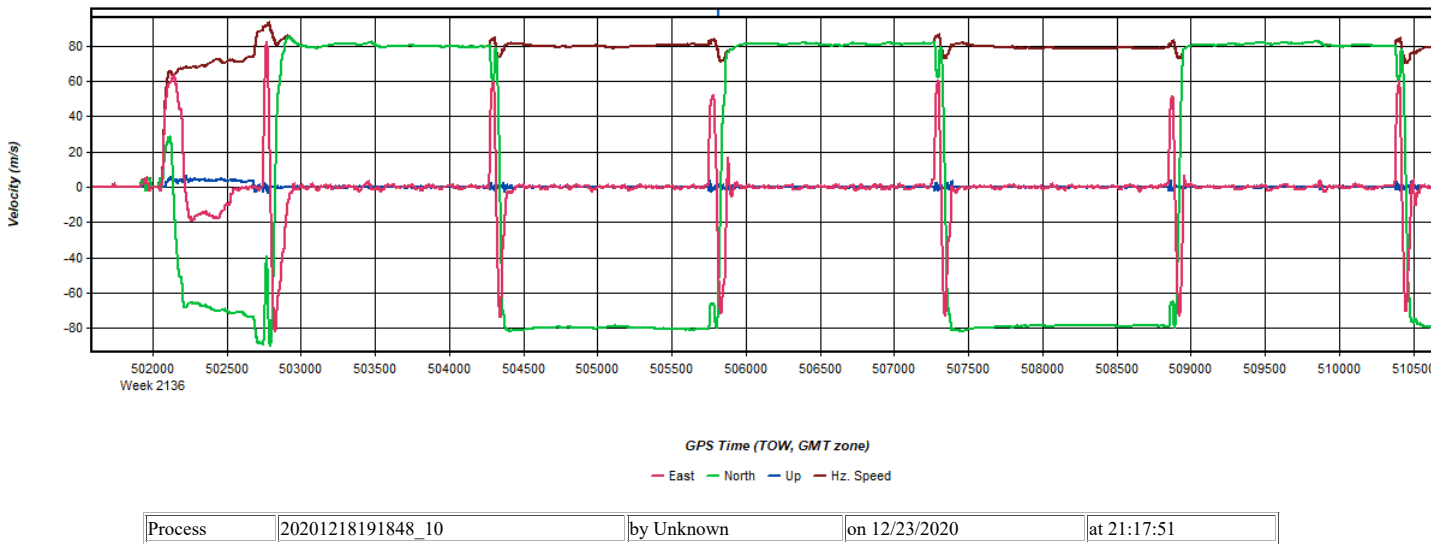


Figure 14: 20201218191848_10 [Smoothed TC Combined] - Body Frame Velocity Plot

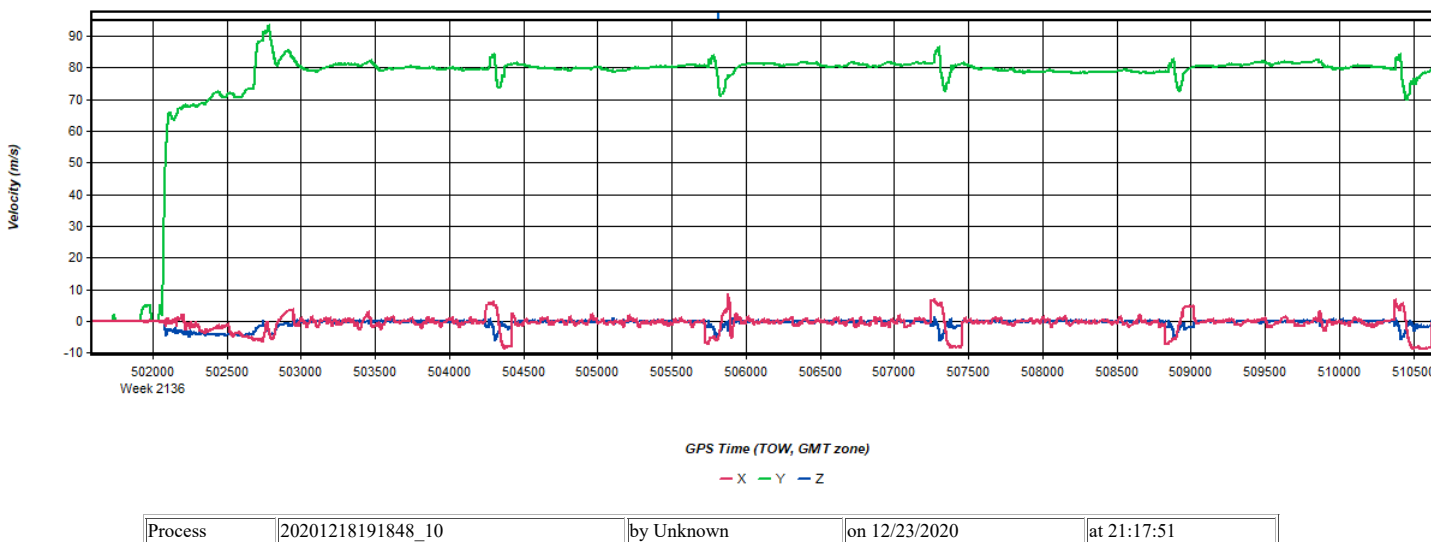
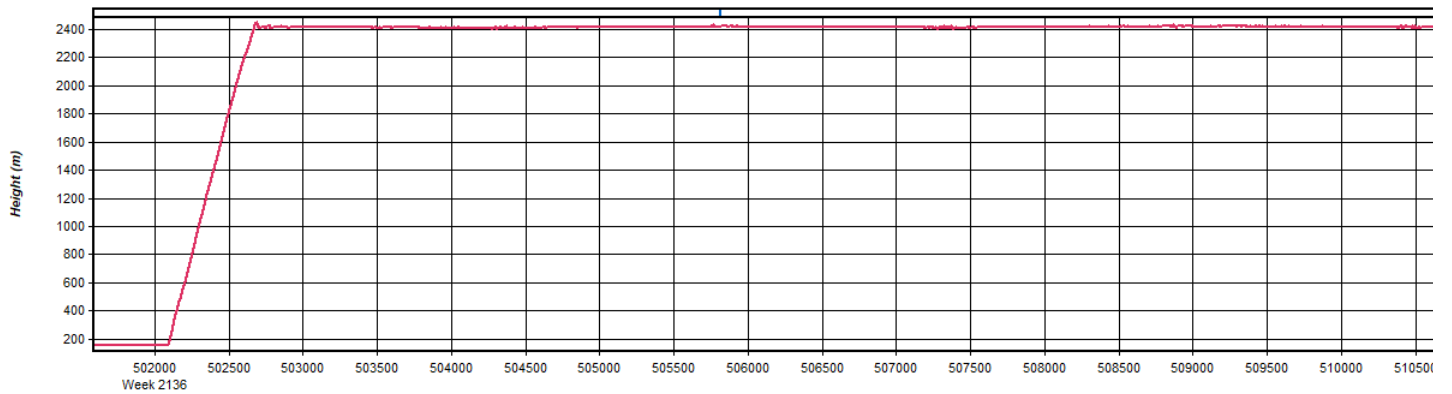
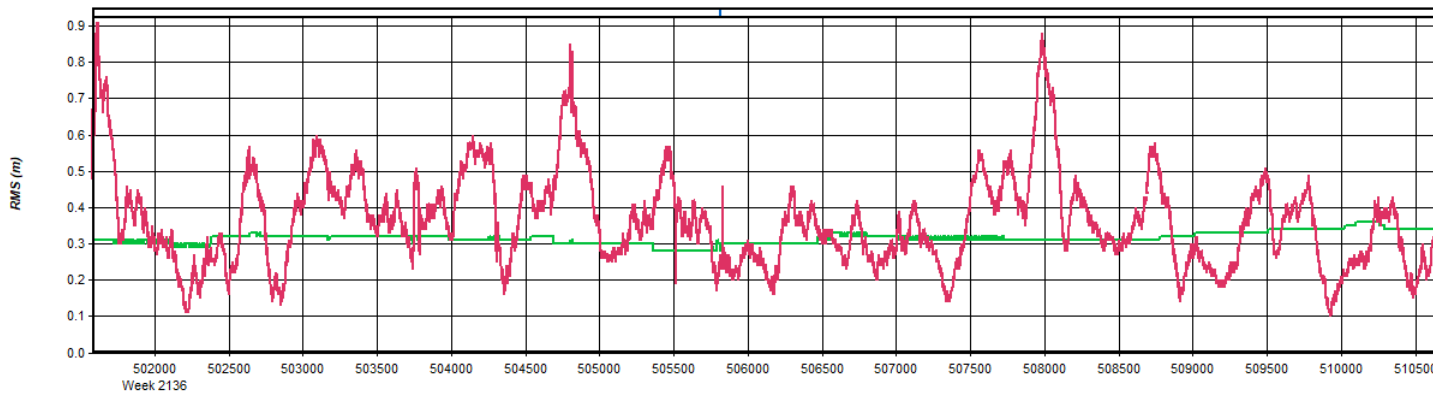


Figure 15: 20201218191848_10 [Smoothed TC Combined] - Height Profile Plot



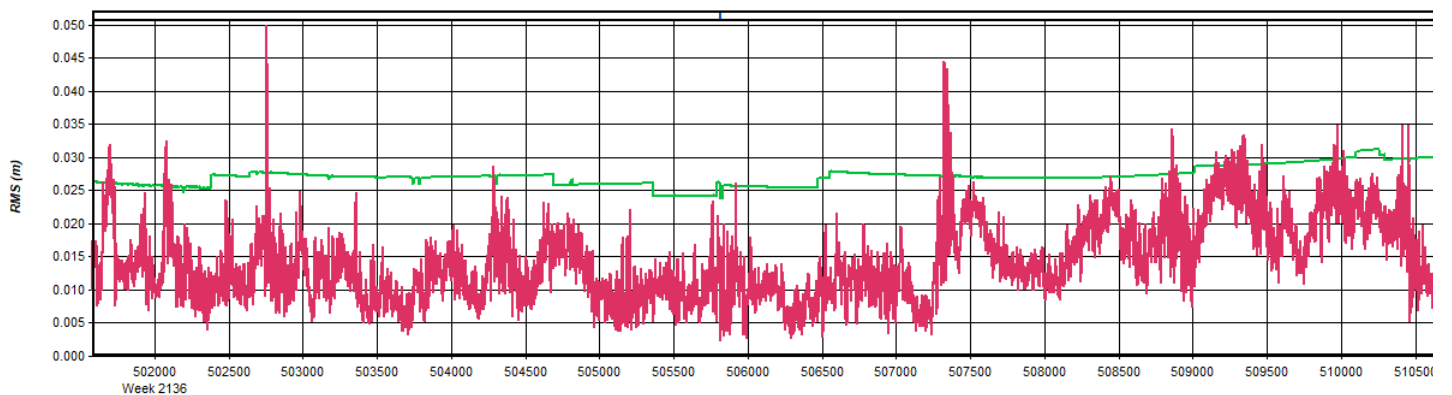
Process	20201218191848_10	by Unknown	on 12/23/2020	at 21:17:51
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Figure 16: 20201218191848_10 [Smoothed TC Combined] - C/A Code Residual RMS Plot



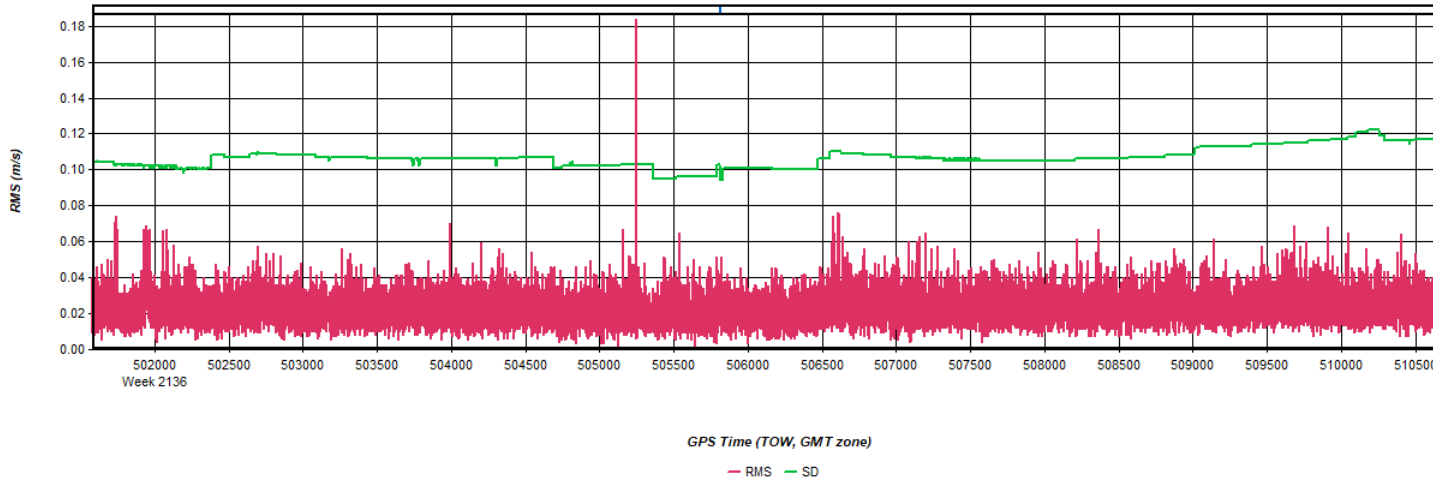
Process	20201218191848_10	by Unknown	on 12/23/2020	at 21:17:51
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Figure 17: 20201218191848_10 [Smoothed TC Combined] - Carrier Residual RMS Plot



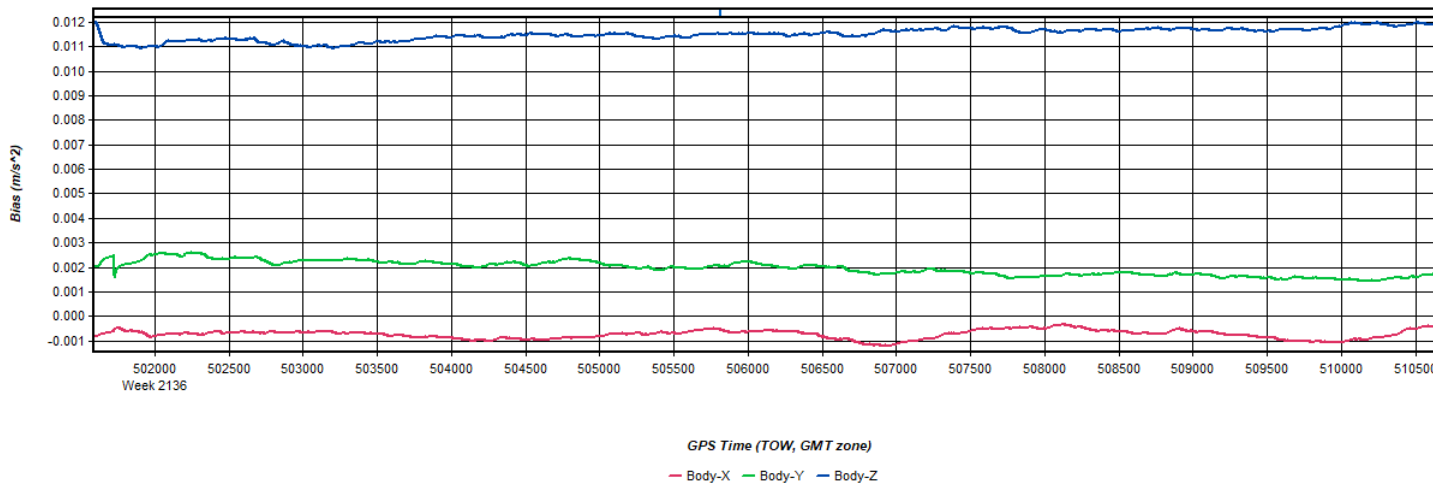
Process	20201218191848_10	by Unknown	on 12/23/2020	at 21:17:51
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Figure 18: 20201218191848_10 [Smoothed TC Combined] - Doppler Residual RMS Plot



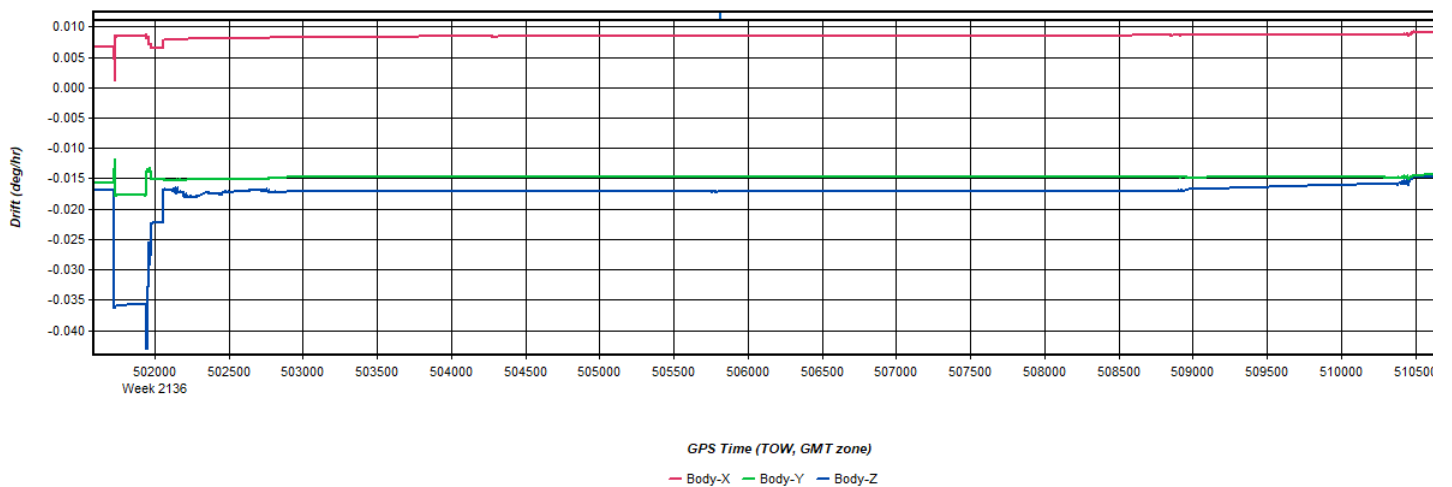
Process	20201218191848_10	by Unknown	on 12/23/2020	at 21:17:51
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Figure 19: 20201218191848_10 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20201218191848_10	by Unknown	on 12/23/2020	at 21:17:51
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Figure 20: 20201218191848_10 [Smoothed TC Combined] - Gyro Drift Plot

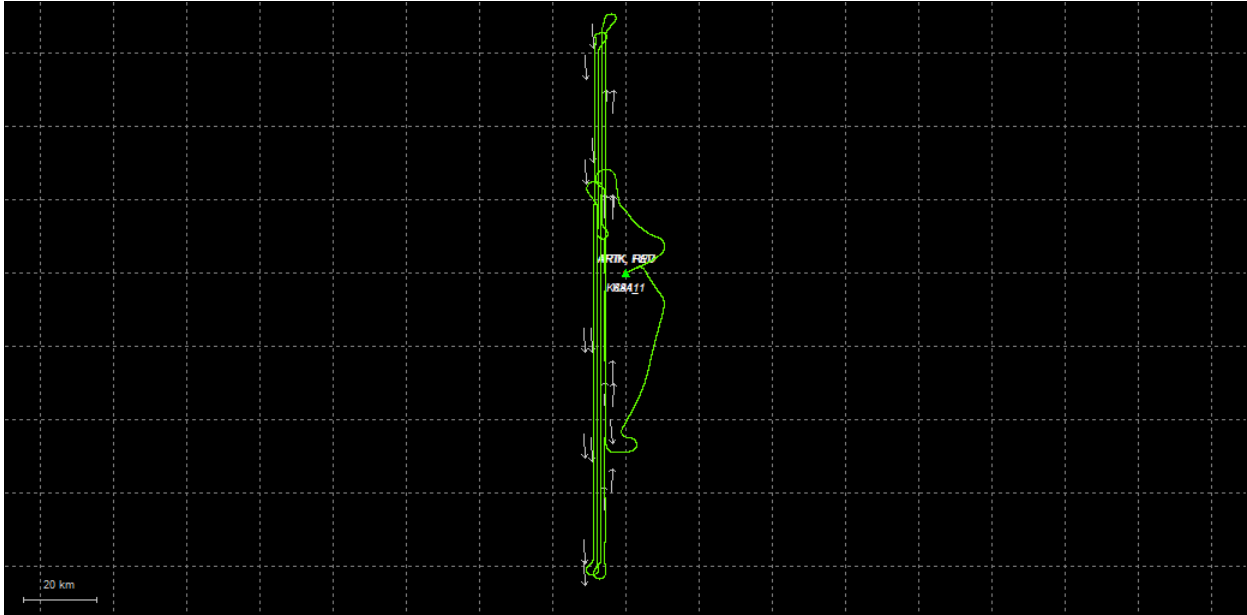


Process	20201218191848_10	by Unknown	on 12/23/2020	at 21:17:51
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Output Results for 20201219143448_11

Inertial Explorer Version 8.90.2124
12/23/2020

Figure 1: Smoothed TC Combined - Map



Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 2: 20201219143448_11 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 3: 20201219143448_11 [Smoothed TC Combined] - Float or Fixed Ambiguity

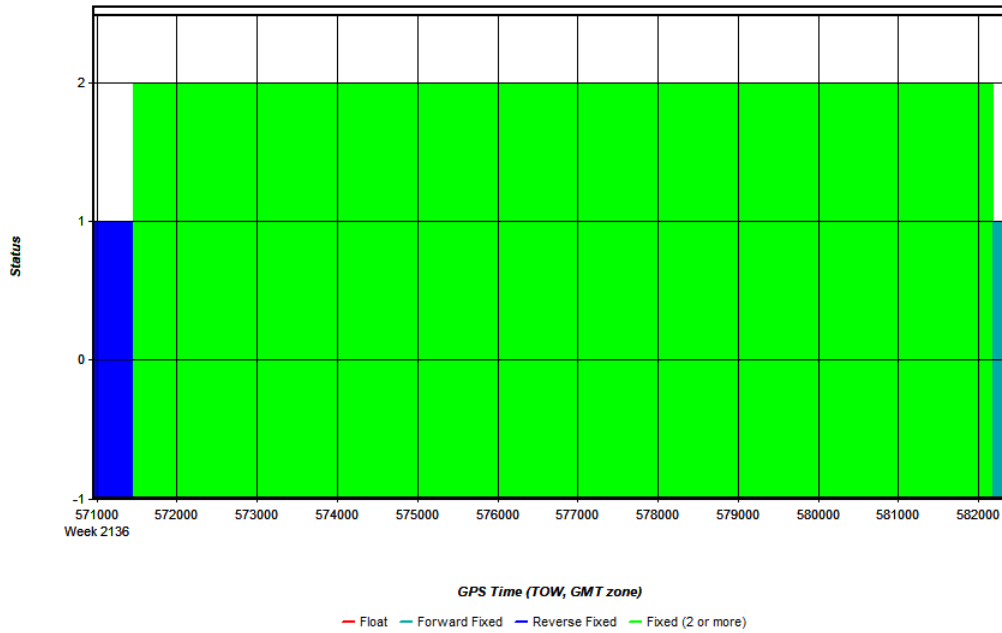


Figure 4: 20201219143448_11 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

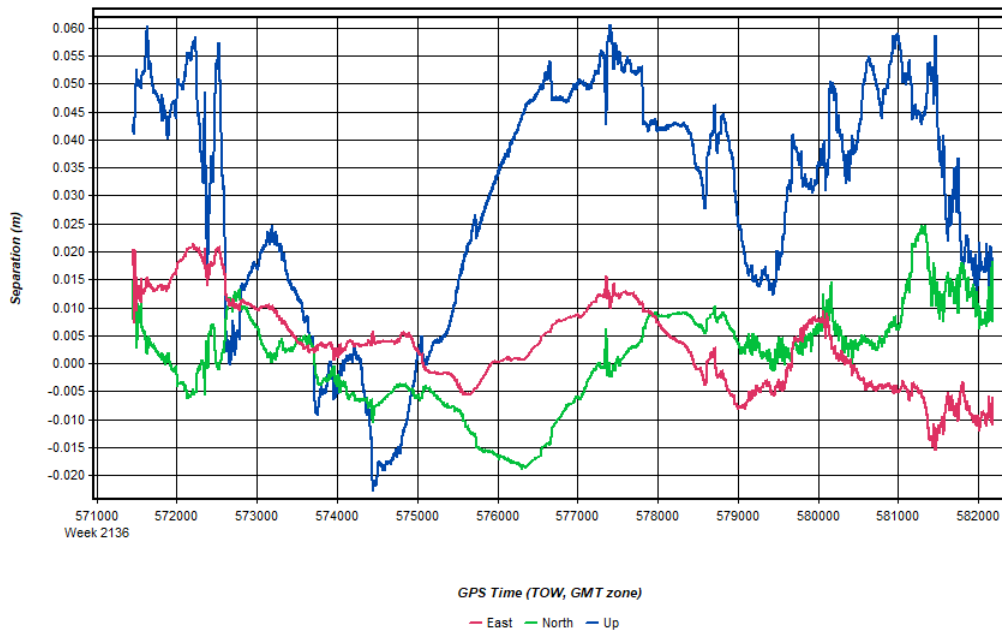
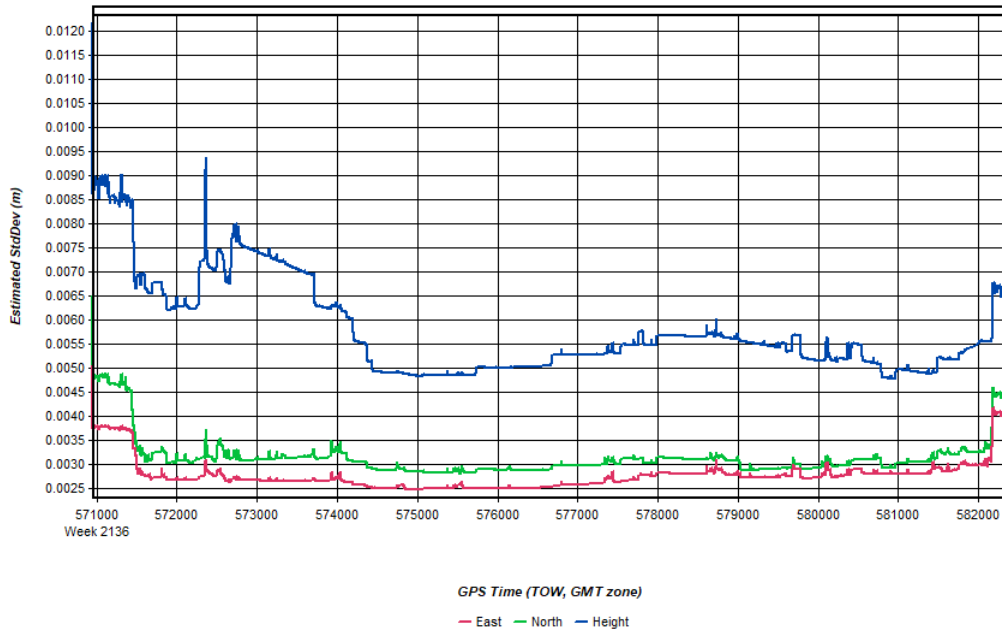
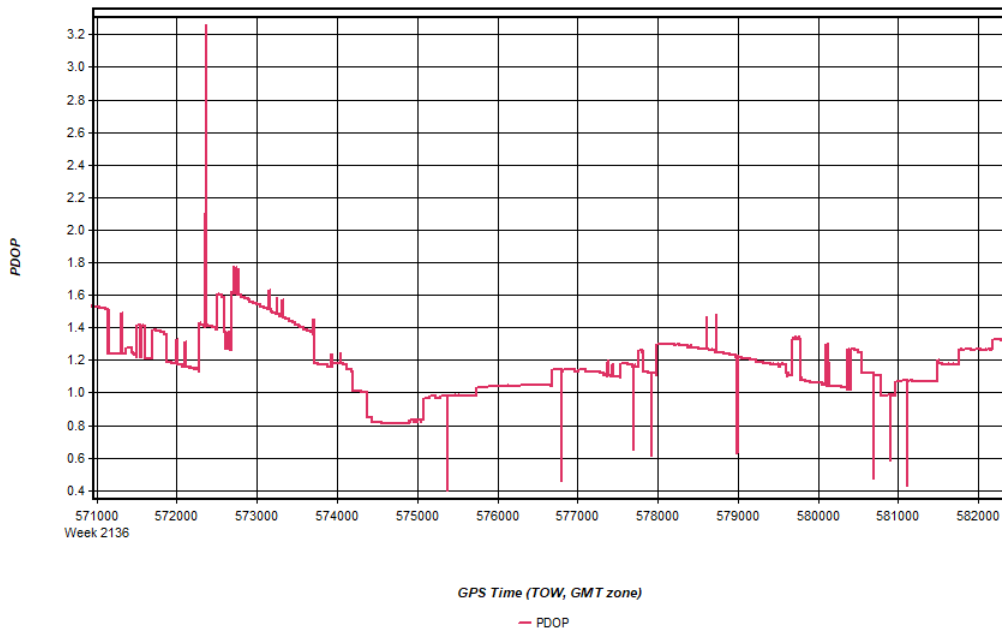


Figure 5: 20201219143448_11 [Smoothed TC Combined] - Estimated Position Accuracy Plot



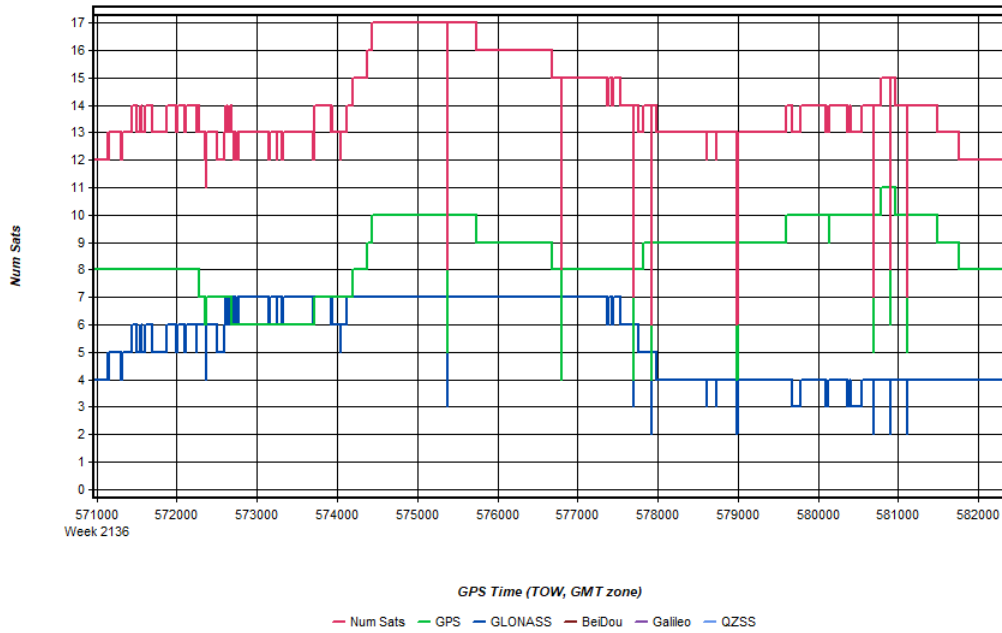
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 6: 20201219143448_11 [Smoothed TC Combined] - PDOP Plot



Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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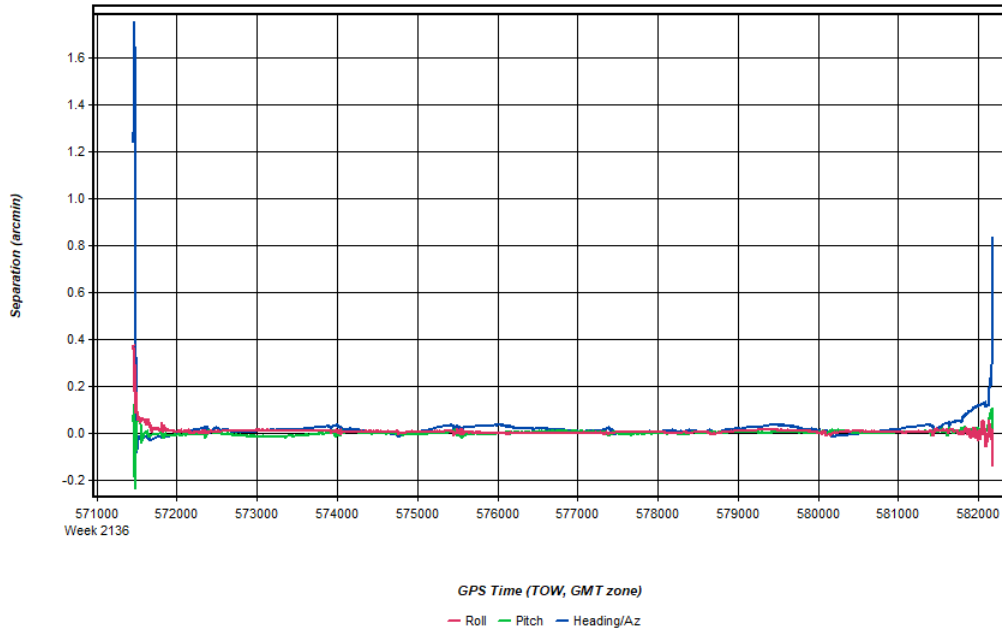
Figure 7: 20201219143448_11 [Smoothed TC Combined] - Number of Satellites Line Plot



Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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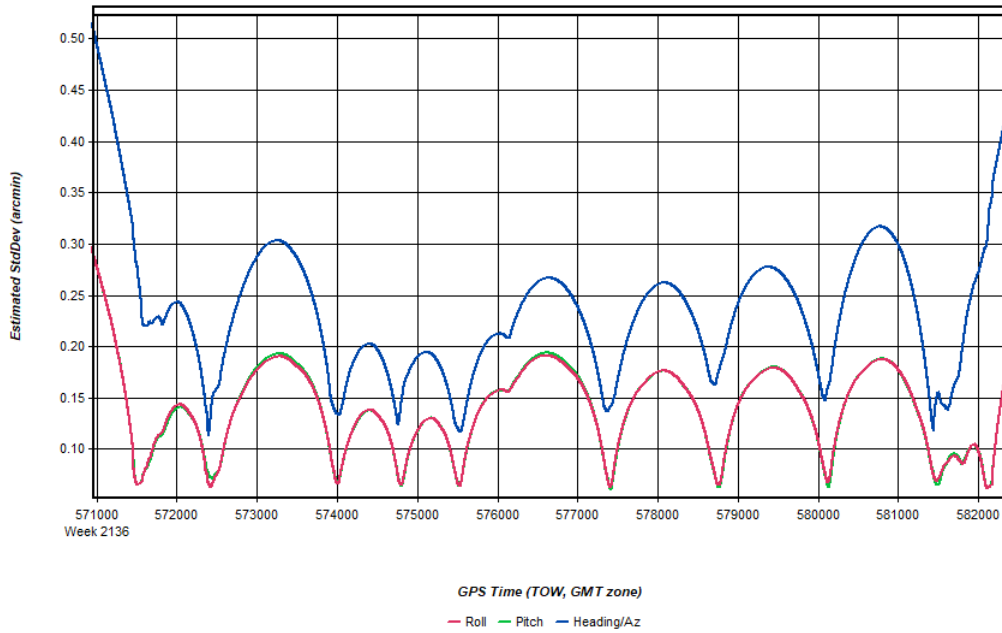
Object 20201219143448_11 [Smoothed TC Combined] - Status flag for IMU processing failed--NULL bitmap handle

Figure 8: 20201219143448_11 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



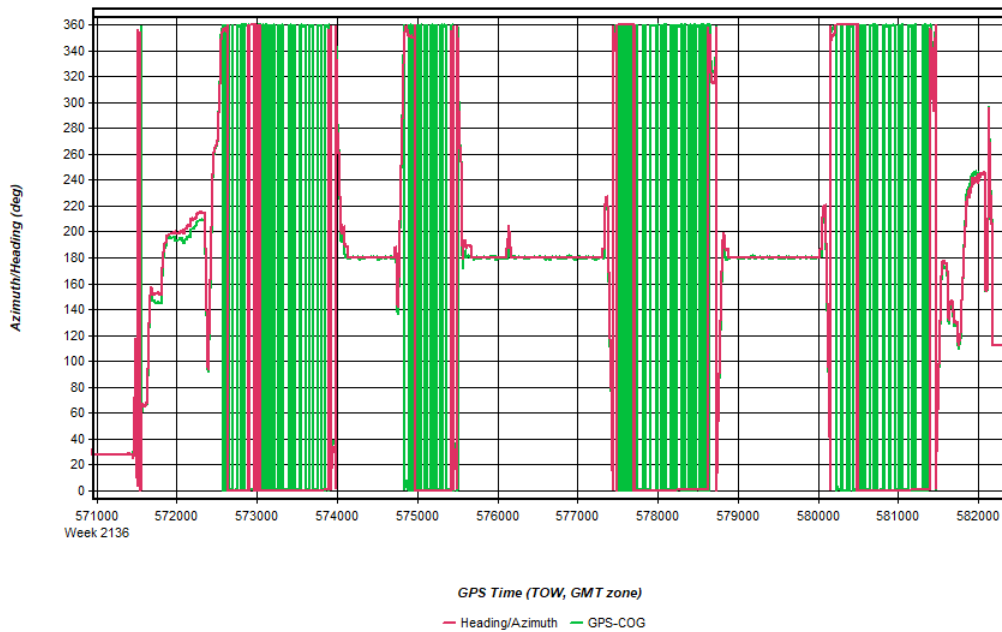
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 9: 20201219143448_11 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



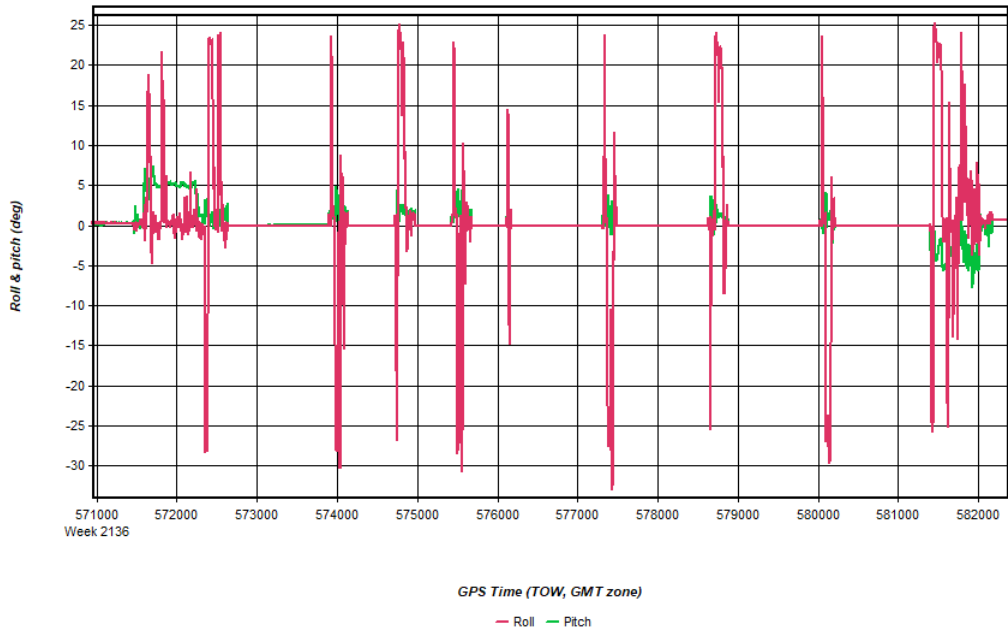
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 10: 20201219143448_11 [Smoothed TC Combined] - Azimuth Plot



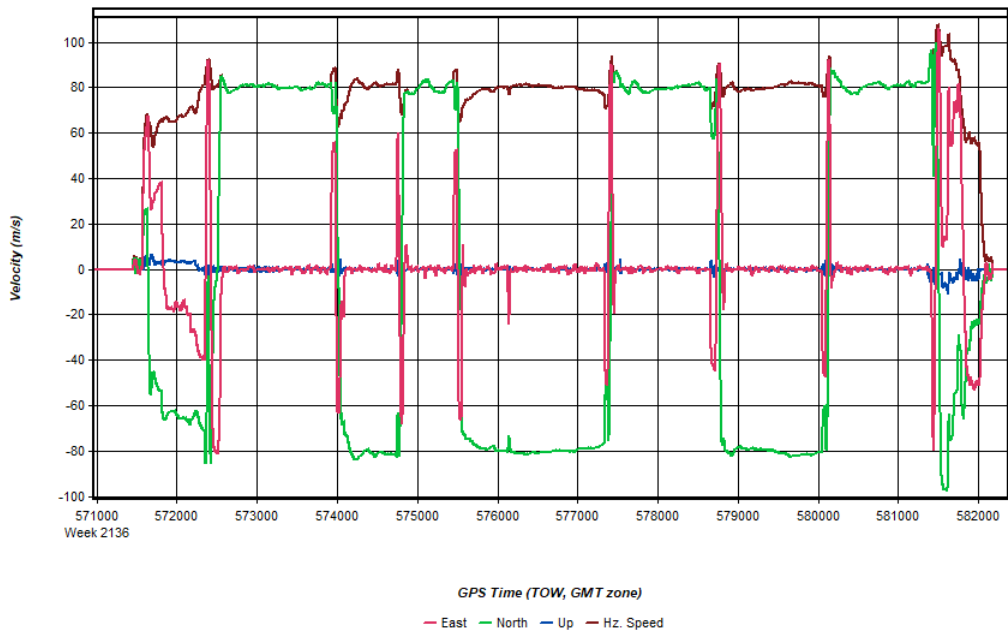
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 11: 20201219143448_11 [Smoothed TC Combined] - Roll & Pitch Plot



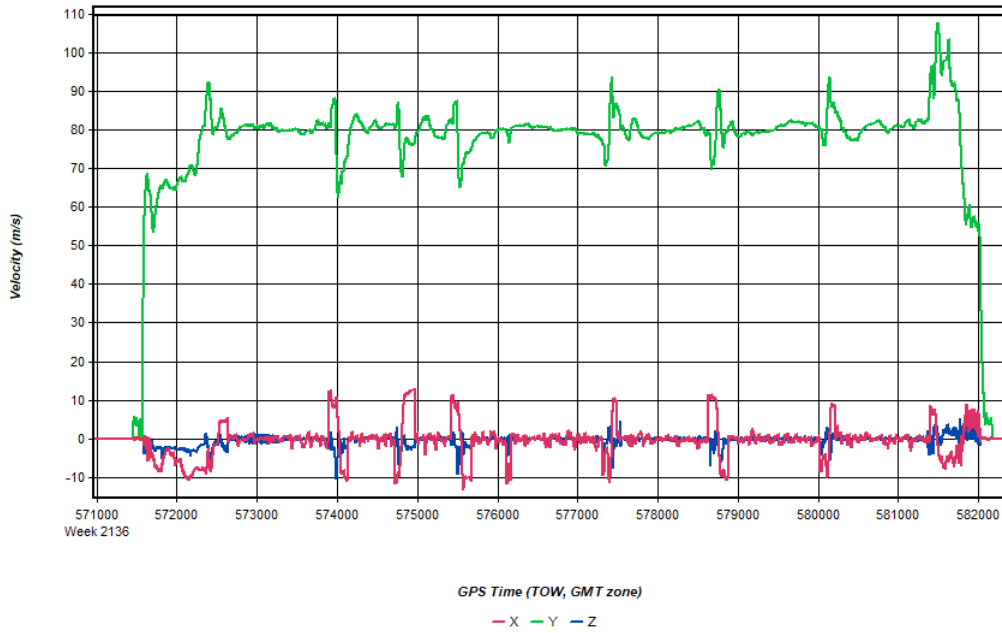
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 12: 20201219143448_11 [Smoothed TC Combined] - Velocity Profile Plot



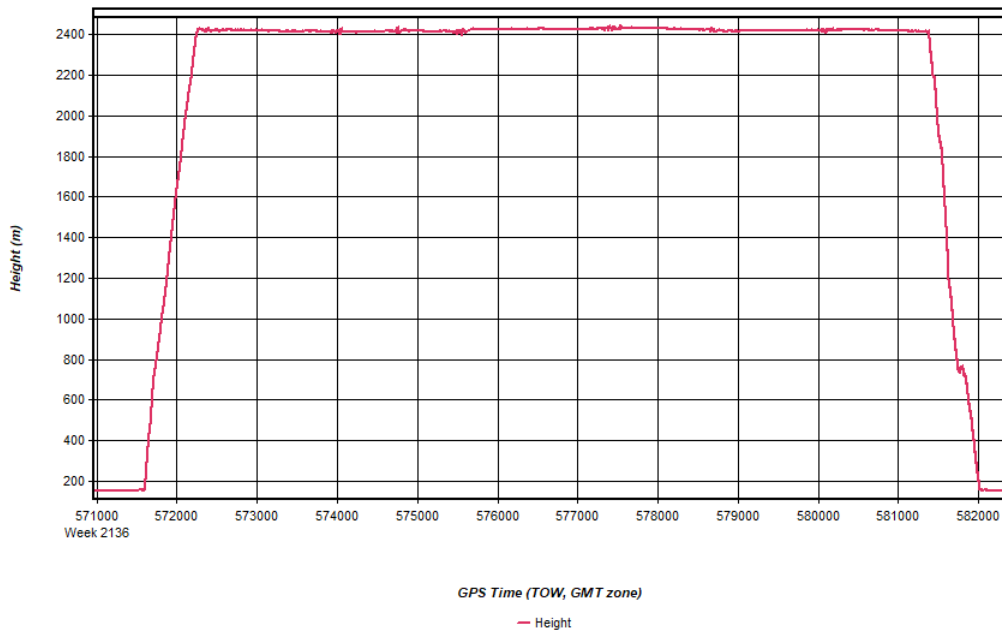
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 13: 20201219143448_11 [Smoothed TC Combined] - Body Frame Velocity Plot



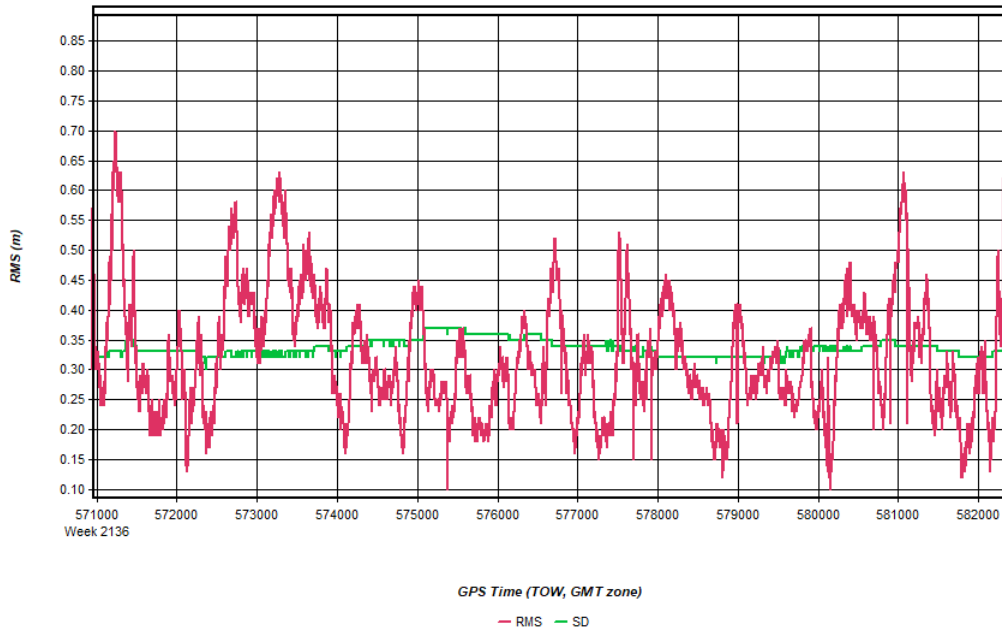
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 14: 20201219143448_11 [Smoothed TC Combined] - Height Profile Plot



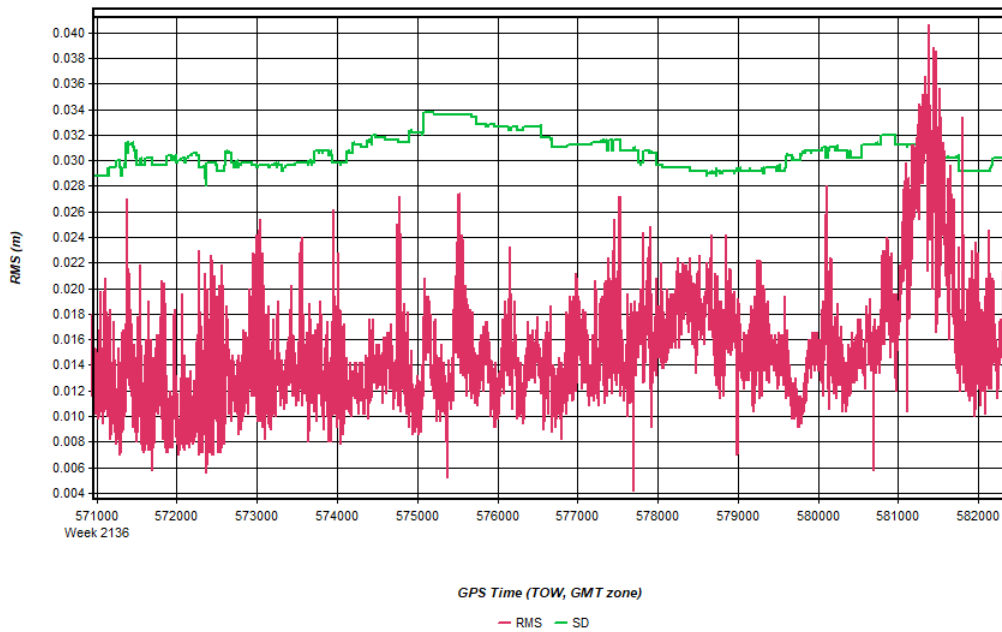
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 15: 20201219143448_11 [Smoothed TC Combined] - C/A Code Residual RMS Plot



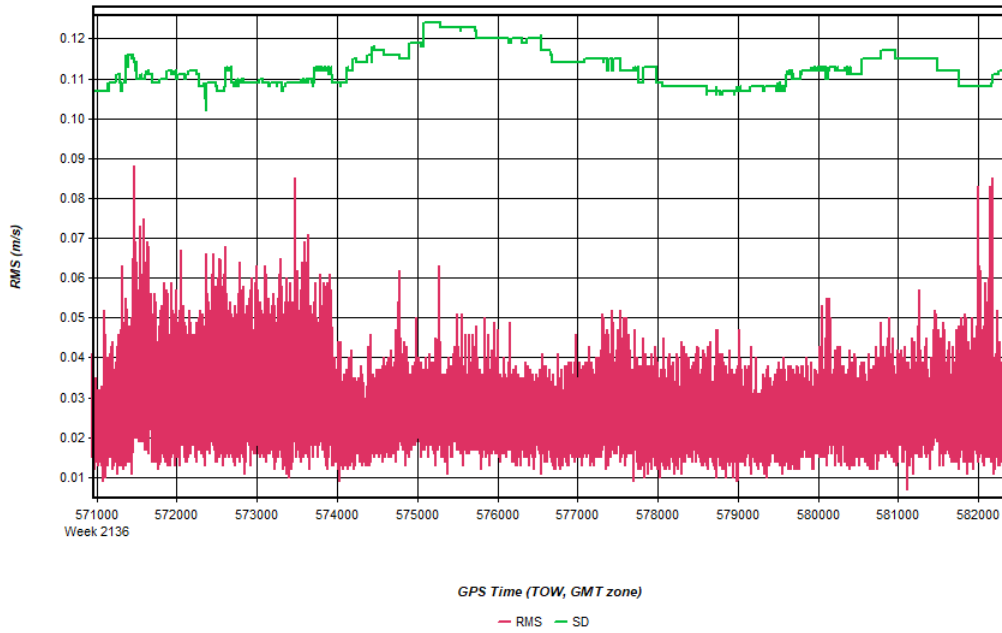
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 16: 20201219143448_11 [Smoothed TC Combined] - Carrier Residual RMS Plot



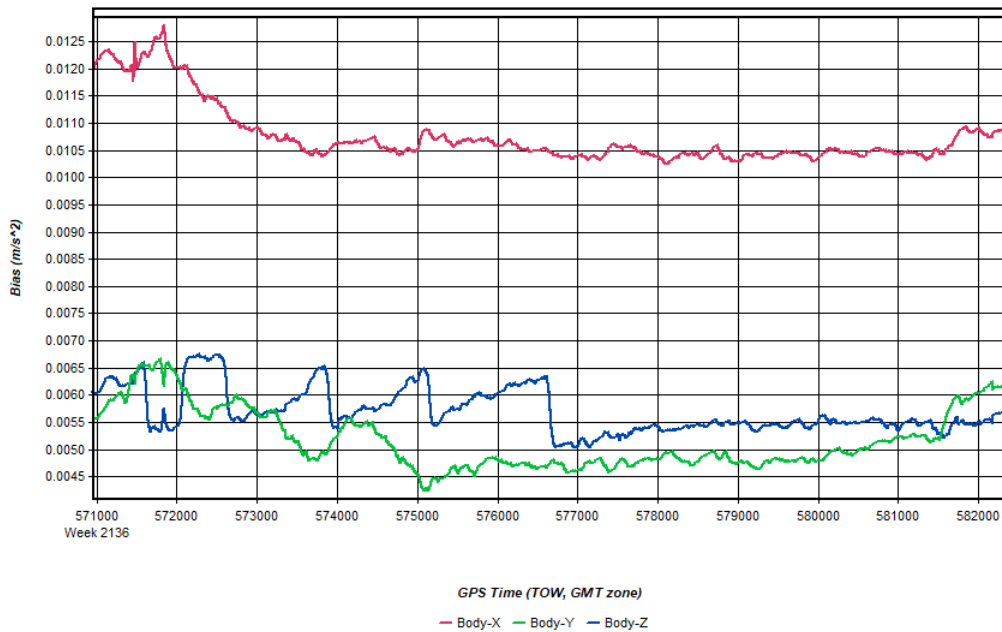
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 17: 20201219143448_11 [Smoothed TC Combined] - Doppler Residual RMS Plot



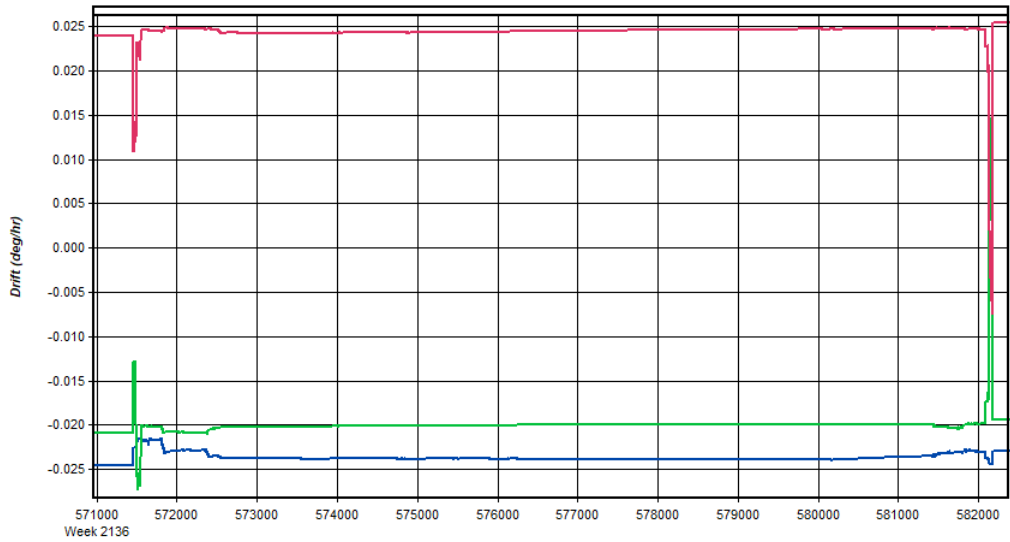
Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 18: 20201219143448_11 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Figure 19: 20201219143448_11 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

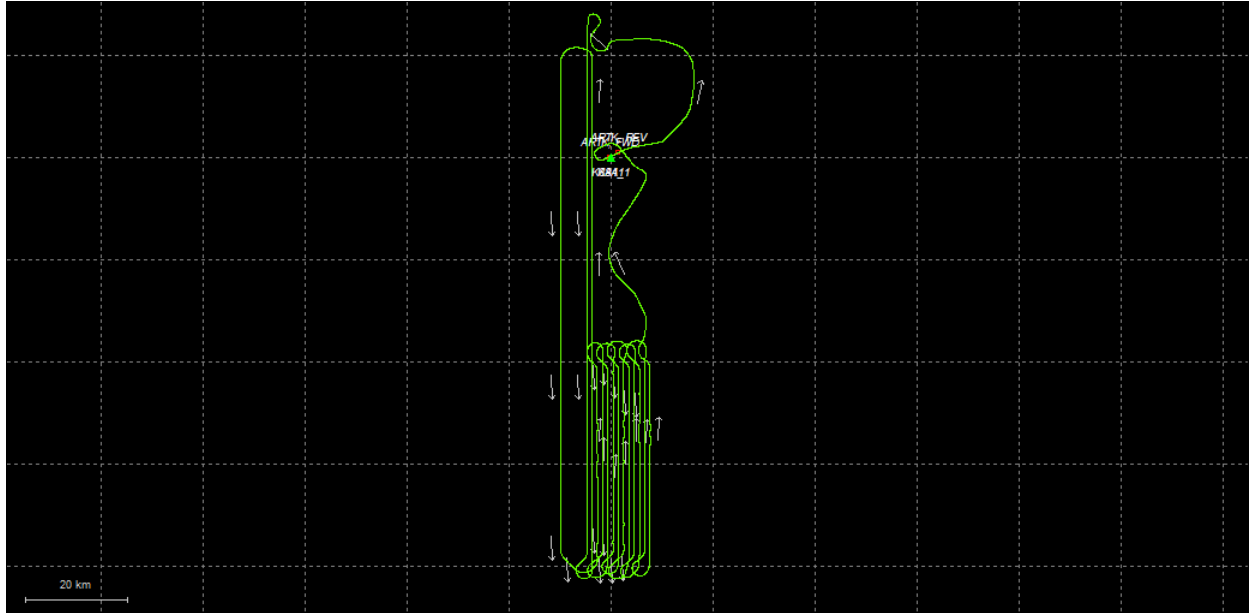
— Body-X — Body-Y — Body-Z

Process	20201219143448_11	by Unknown	on 12/23/2020	at 21:53:39
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Output Results for 20201219180753_12

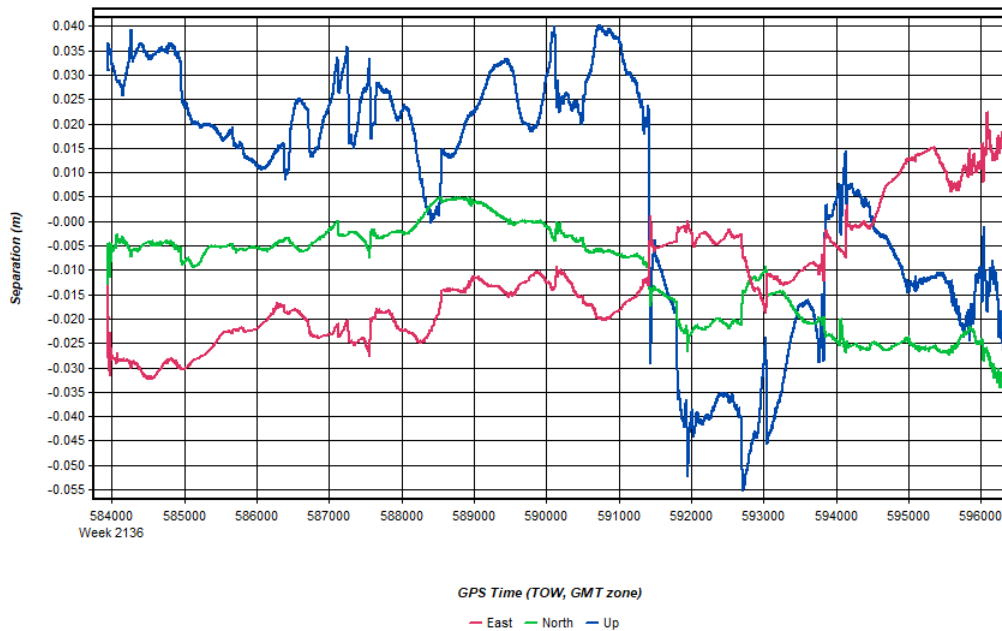
Inertial Explorer Version 8.90.2124
12/24/2020

Figure 1: Smoothed TC Combined - Map



Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 2: 20201219180753_12 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 3: 20201219180753_12 [Smoothed TC Combined] - Float or Fixed Ambiguity

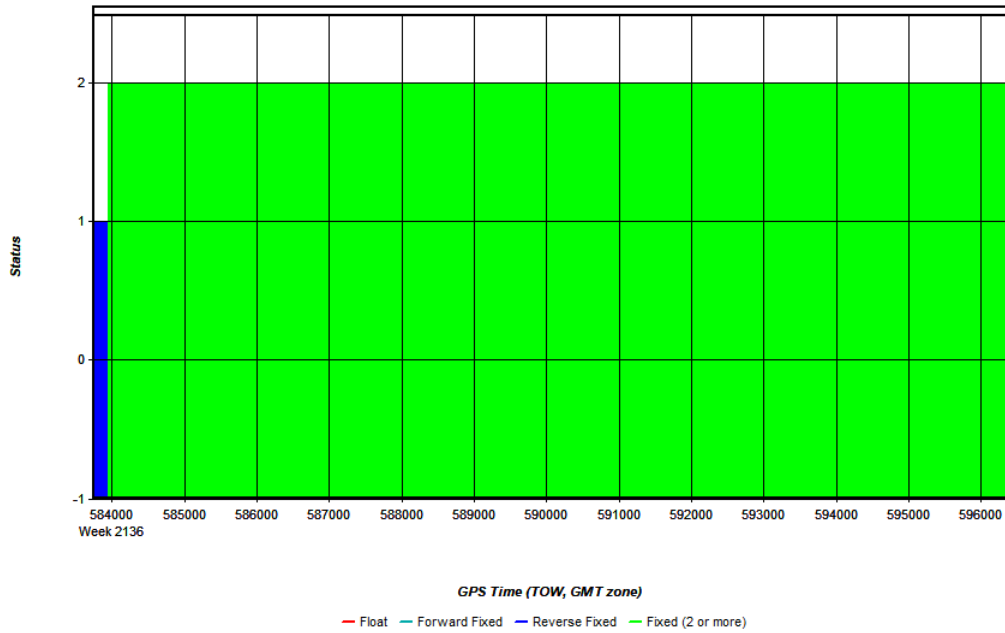


Figure 4: 20201219180753_12 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

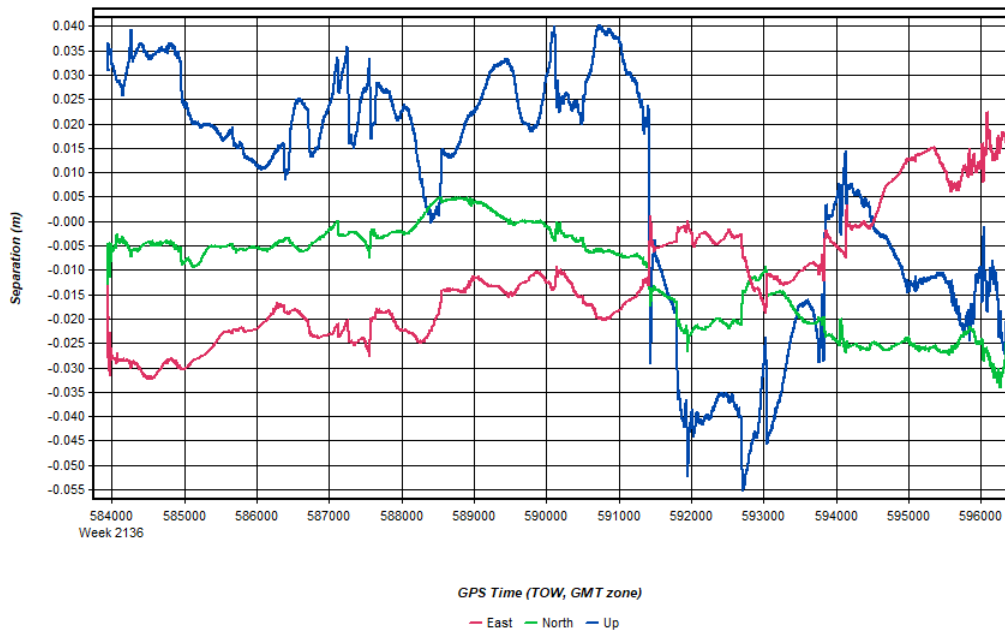
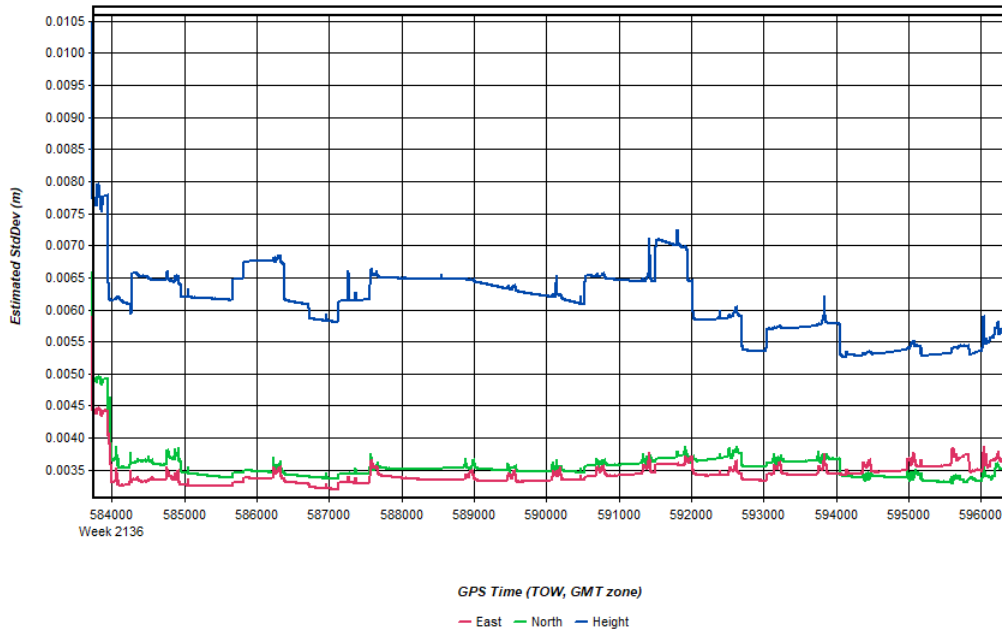
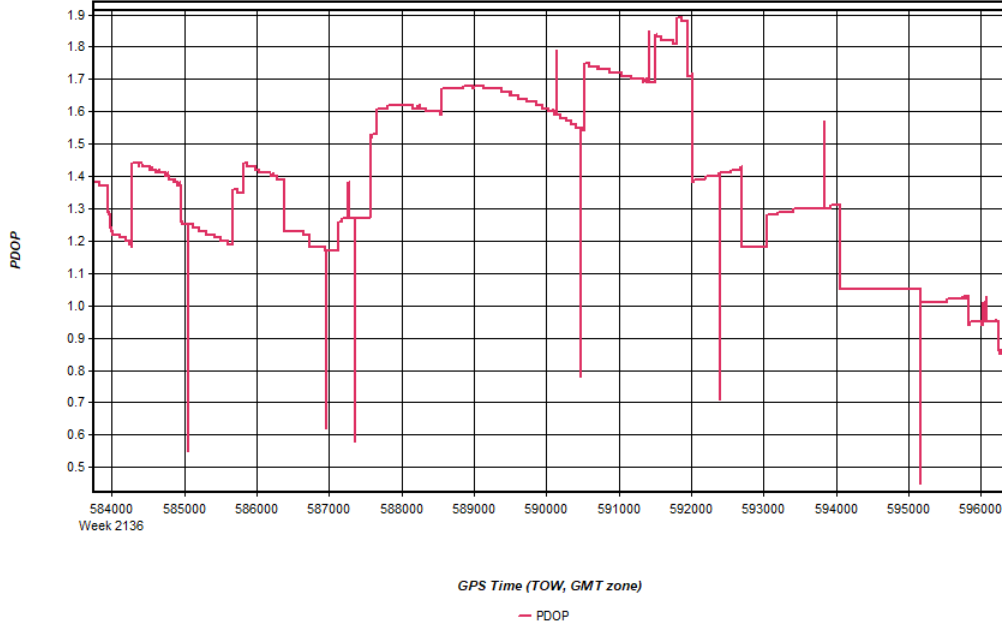


Figure 5: 20201219180753_12 [Smoothed TC Combined] - Estimated Position Accuracy Plot



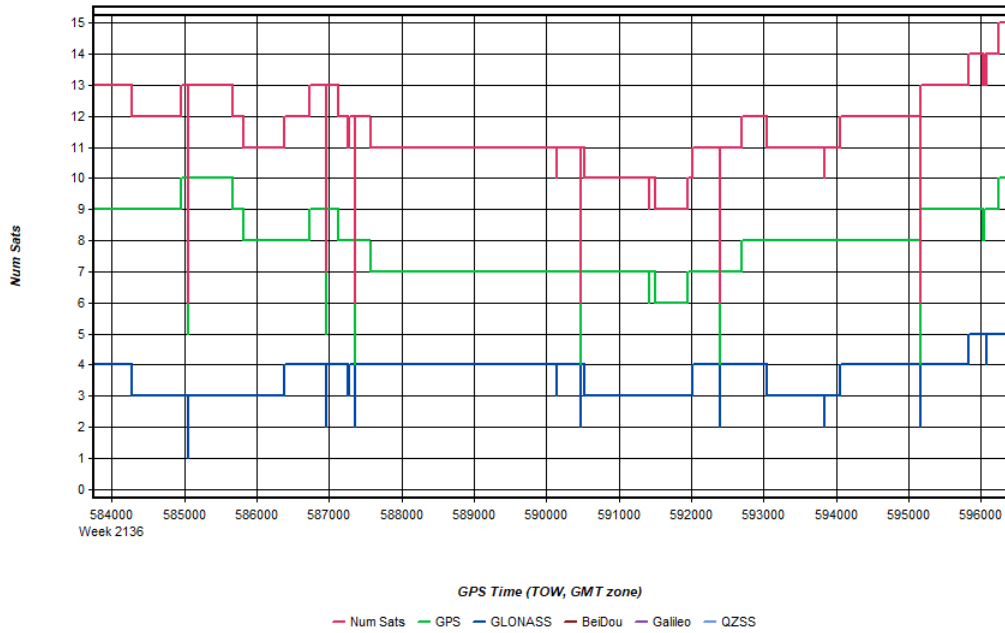
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 6: 20201219180753_12 [Smoothed TC Combined] - PDOP Plot



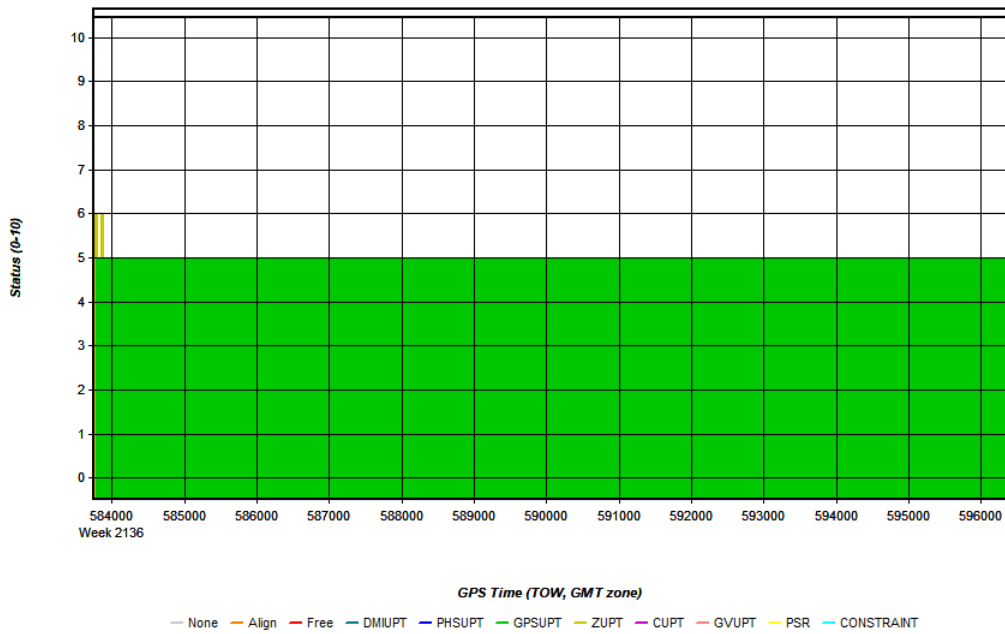
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 7: 20201219180753_12 [Smoothed TC Combined] - Number of Satellites Line Plot



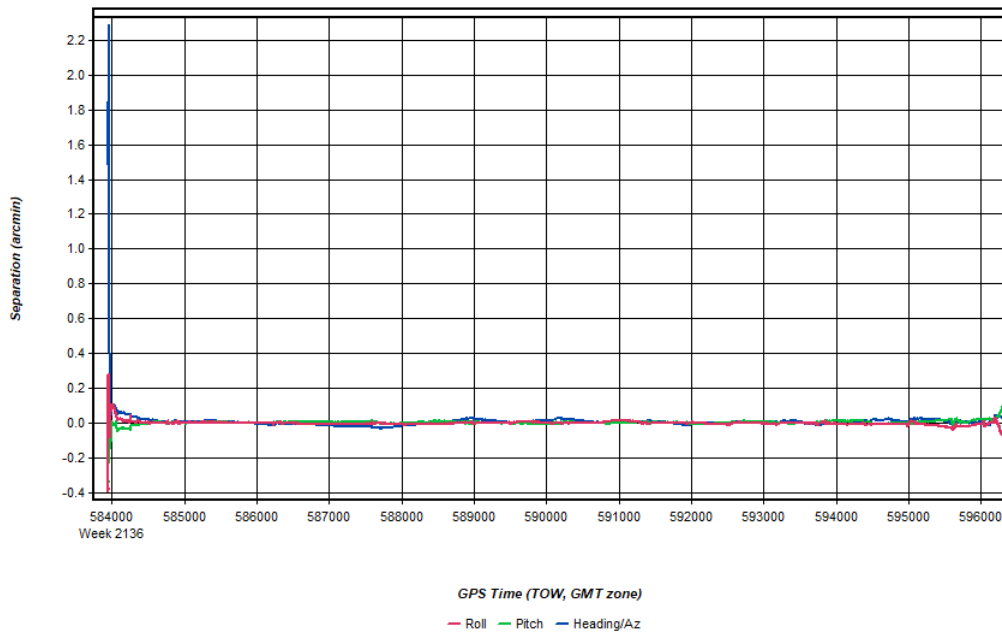
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 8: 20201219180753_12 [Smoothed TC Combined] - Status flag for IMU processing



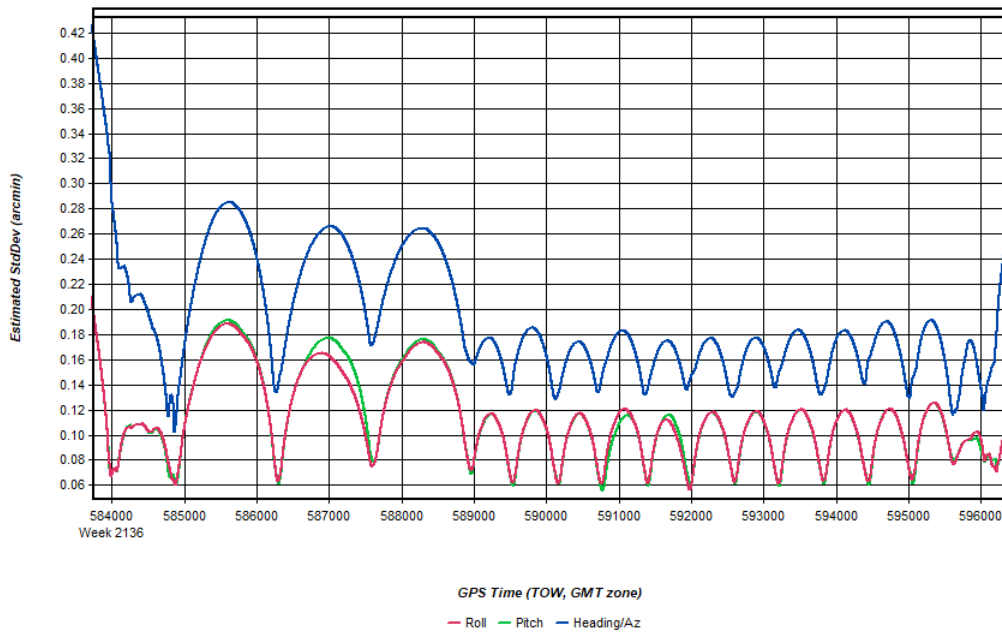
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 9: 20201219180753_12 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 10: 20201219180753_12 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



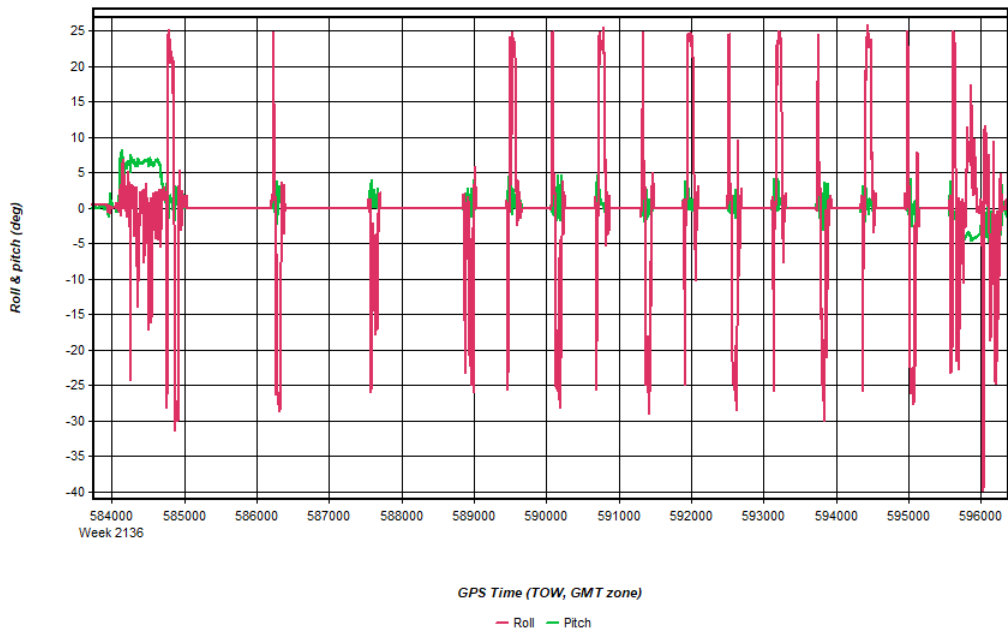
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 11: 20201219180753_12 [Smoothed TC Combined] - Azimuth Plot



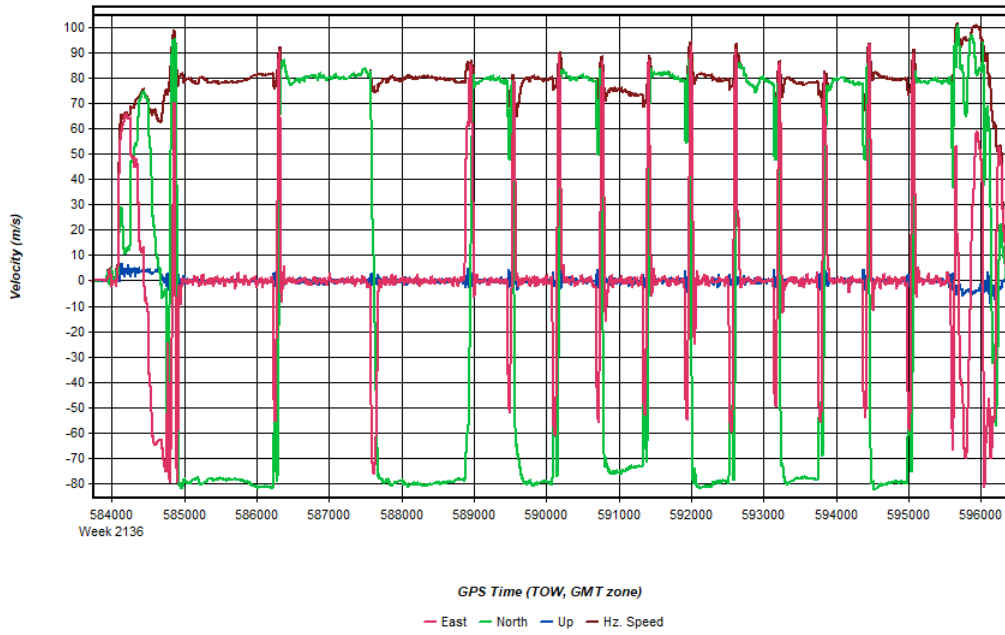
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 12: 20201219180753_12 [Smoothed TC Combined] - Roll & Pitch Plot



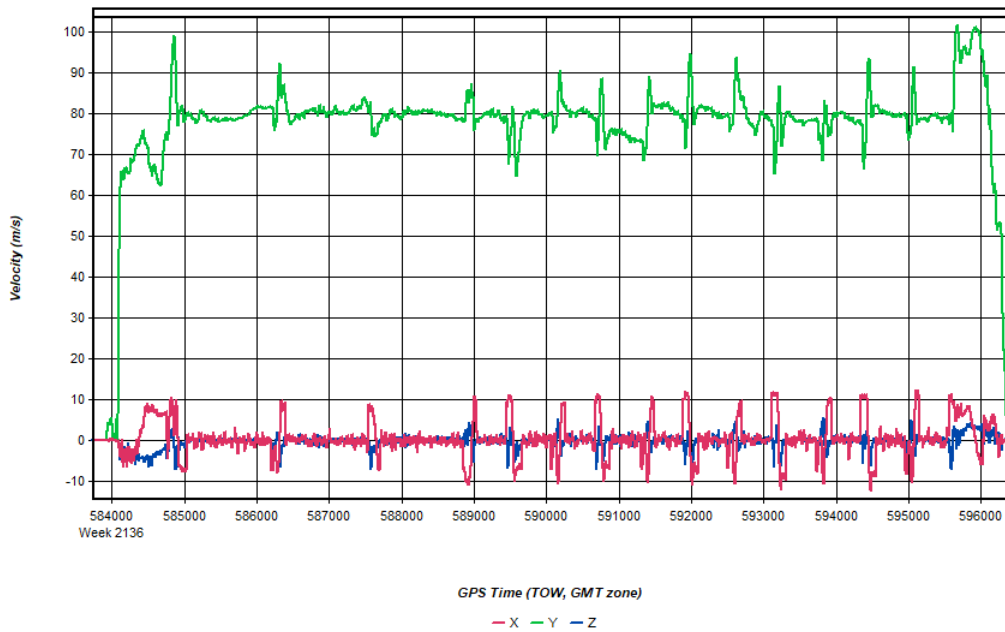
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 13: 20201219180753_12 [Smoothed TC Combined] - Velocity Profile Plot



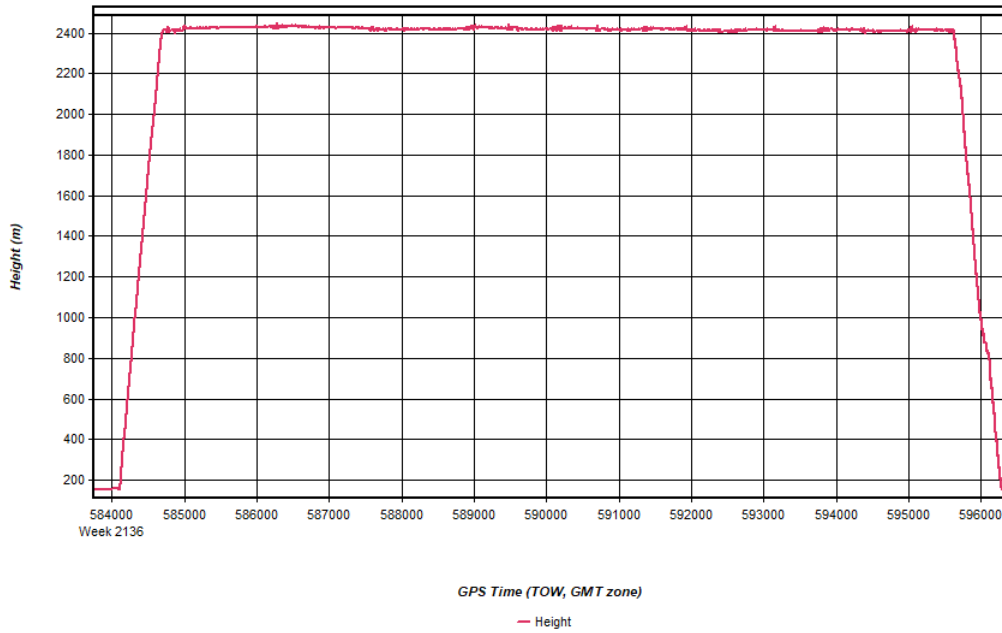
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 14: 20201219180753_12 [Smoothed TC Combined] - Body Frame Velocity Plot



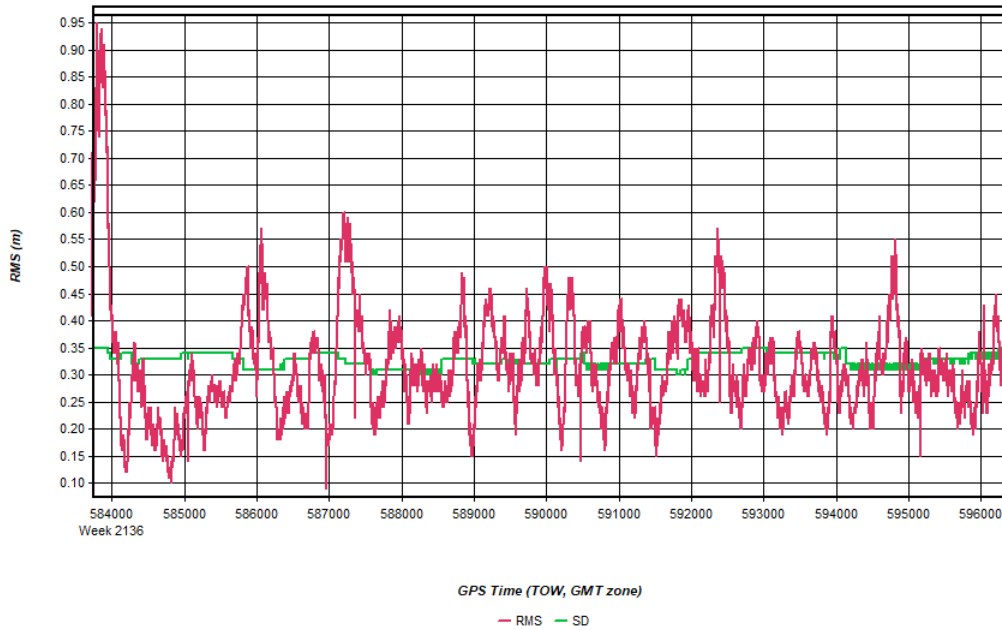
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 15: 20201219180753_12 [Smoothed TC Combined] - Height Profile Plot



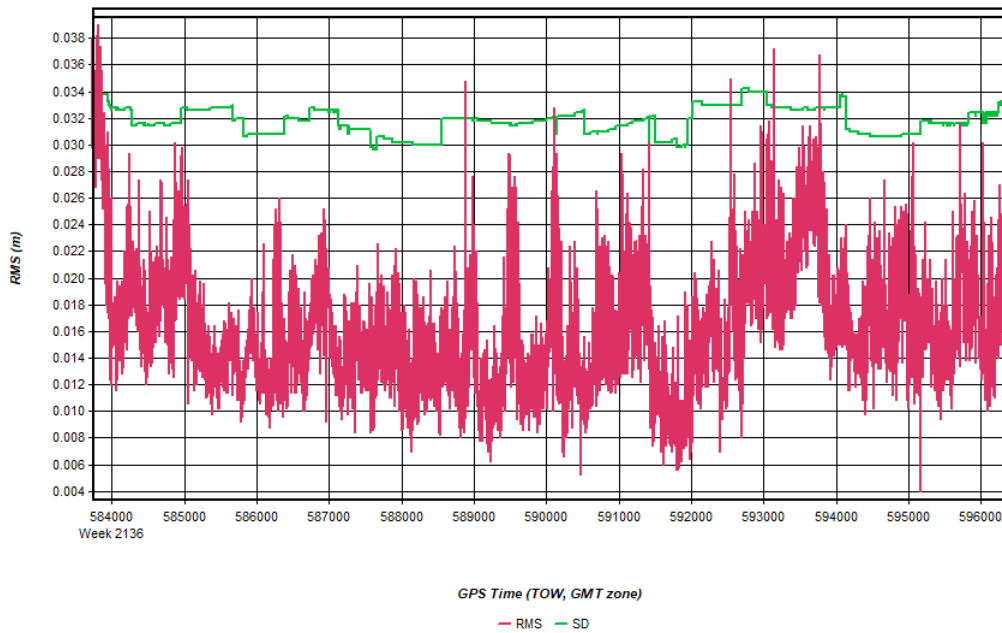
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 16: 20201219180753_12 [Smoothed TC Combined] - C/A Code Residual RMS Plot



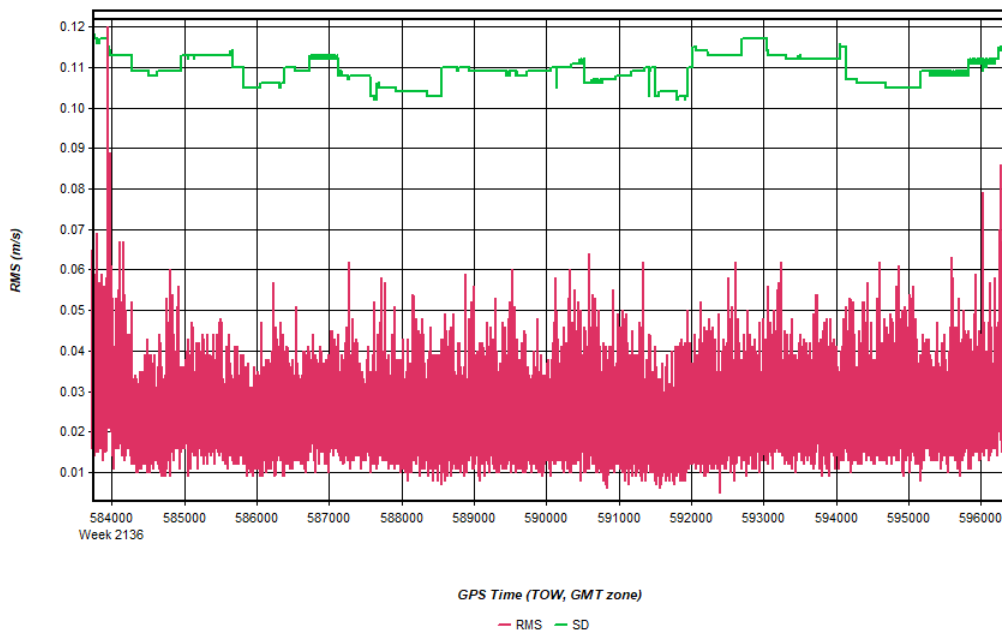
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 17: 20201219180753_12 [Smoothed TC Combined] - Carrier Residual RMS Plot



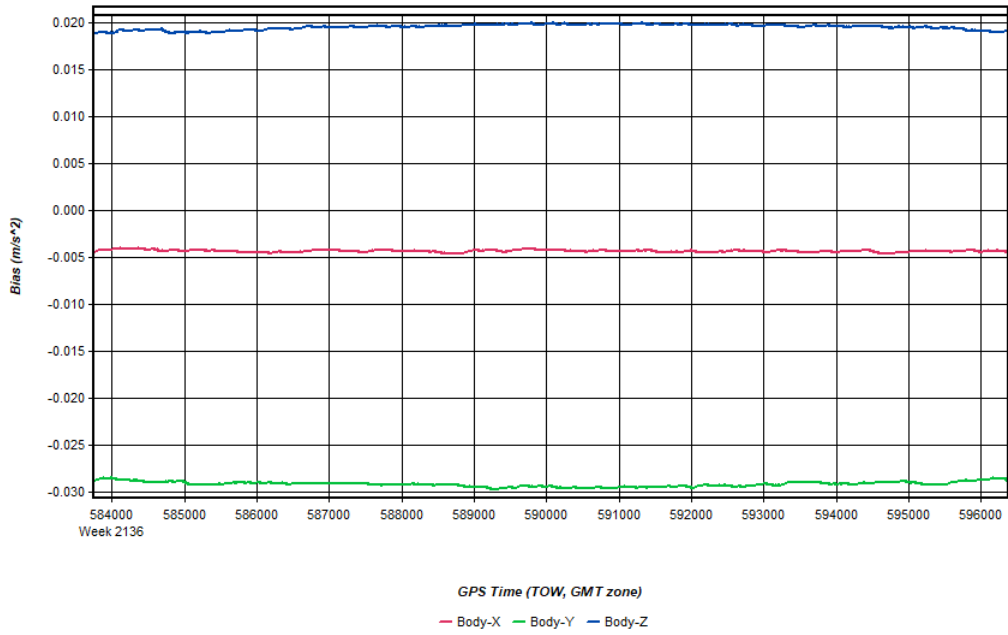
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 18: 20201219180753_12 [Smoothed TC Combined] - Doppler Residual RMS Plot



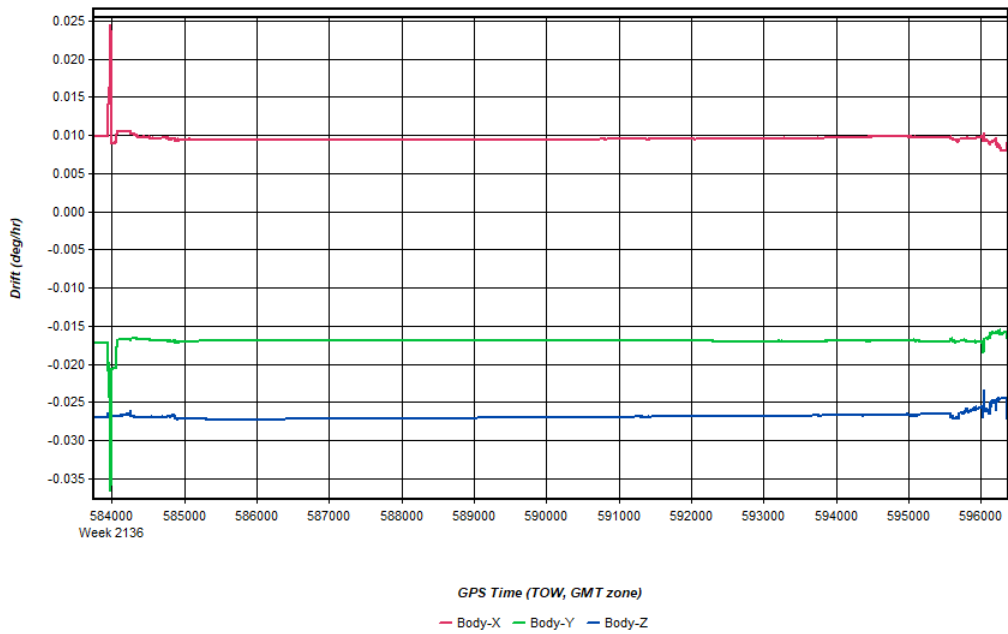
Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 19: 20201219180753_12 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Figure 20: 20201219180753_12 [Smoothed TC Combined] - Gyro Drift Plot

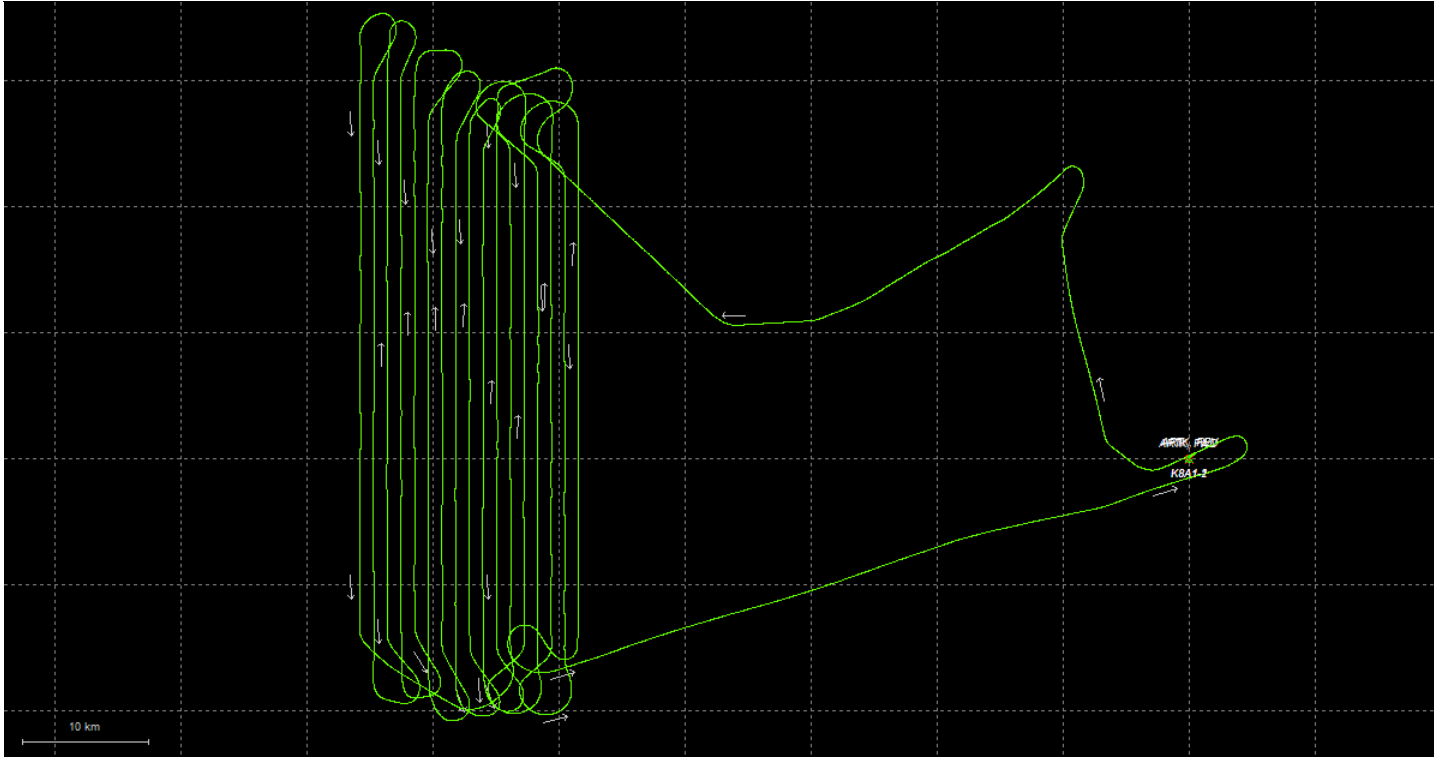


Process	20201219180753_12	by Unknown	on 12/23/2020	at 22:34:37
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Output Results for 20210114151834_13

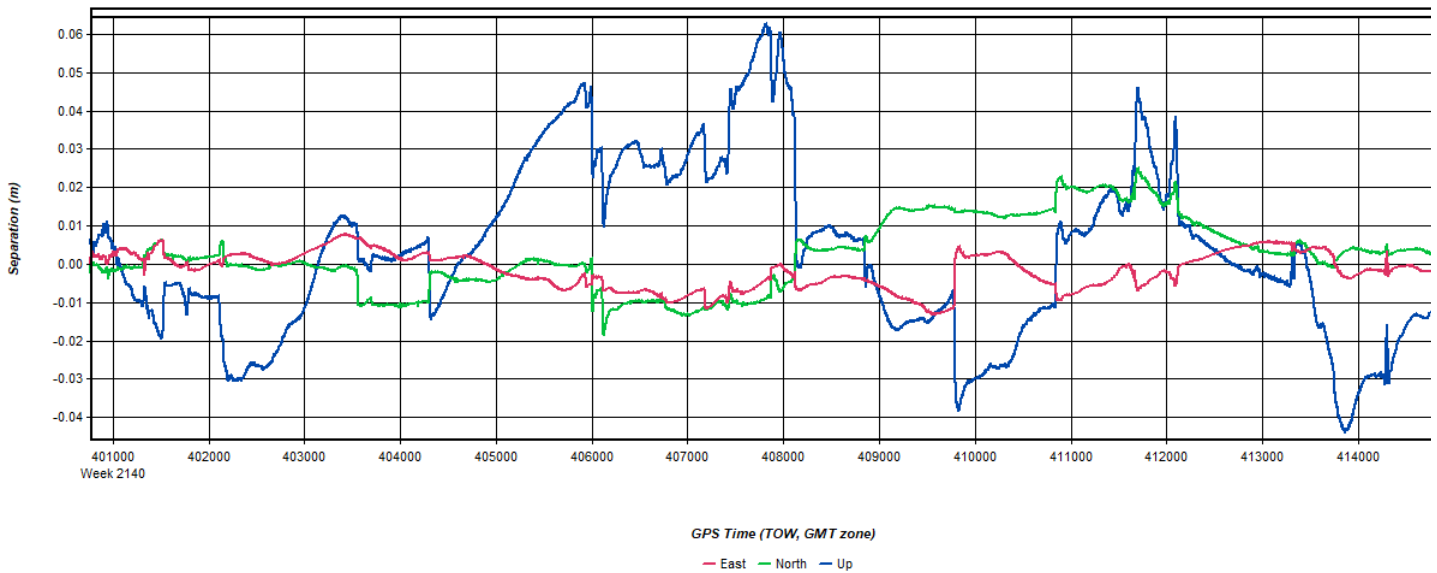
Inertial Explorer Version 8.90.2124
01/20/2021

Figure 1: Smoothed TC Combined - Map



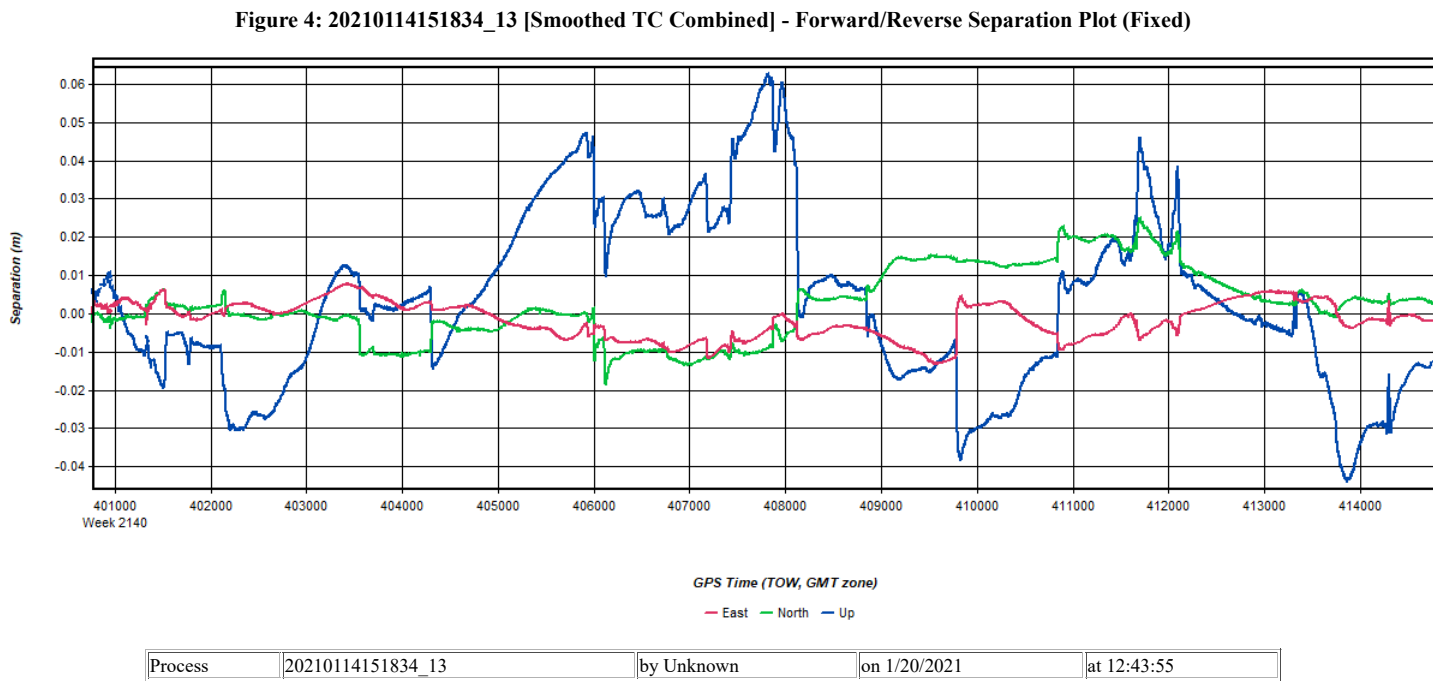
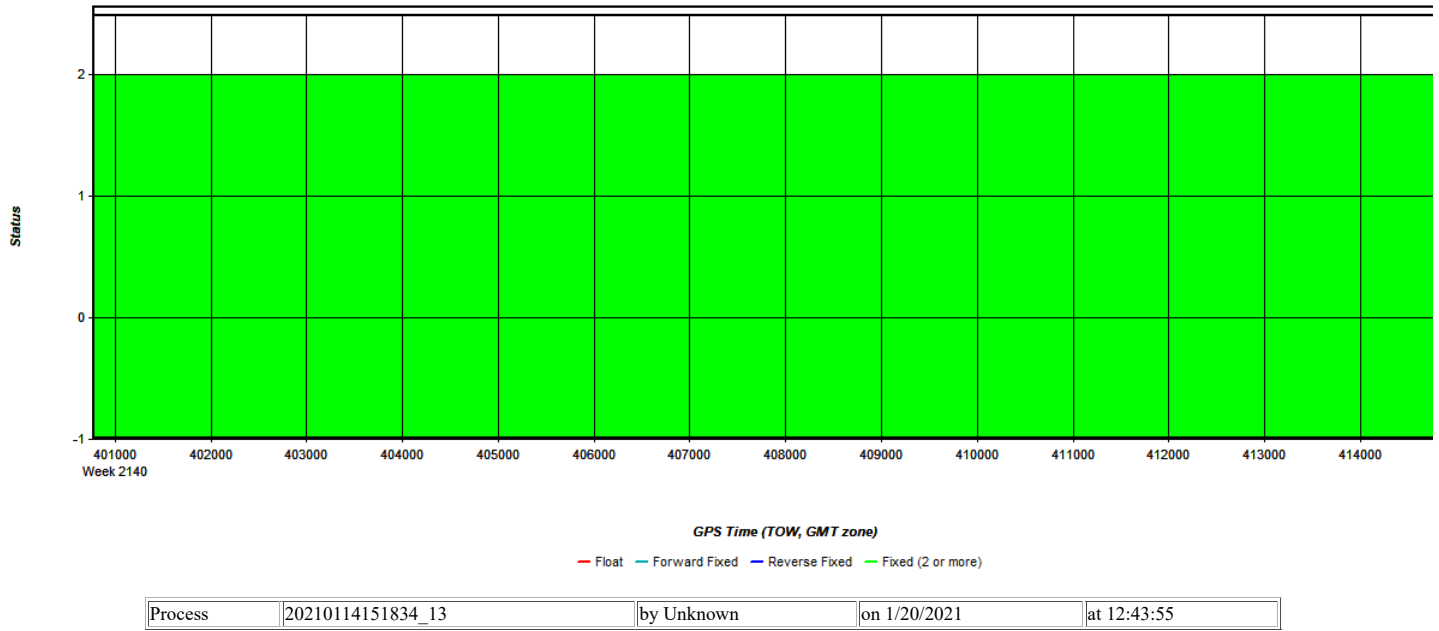
Process	20210114151834_13	by Unknown	on 1/20/2021	at 12:43:55
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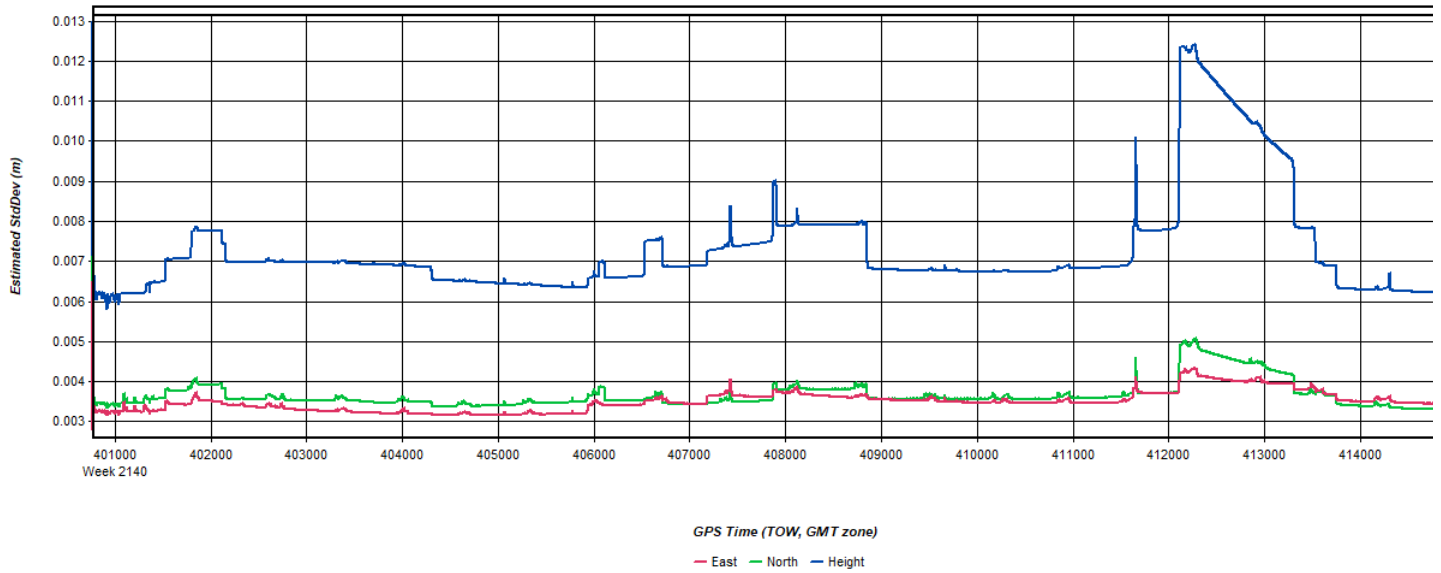
Figure 2: 20210114151834_13 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210114151834_13	by Unknown	on 1/20/2021	at 12:43:55
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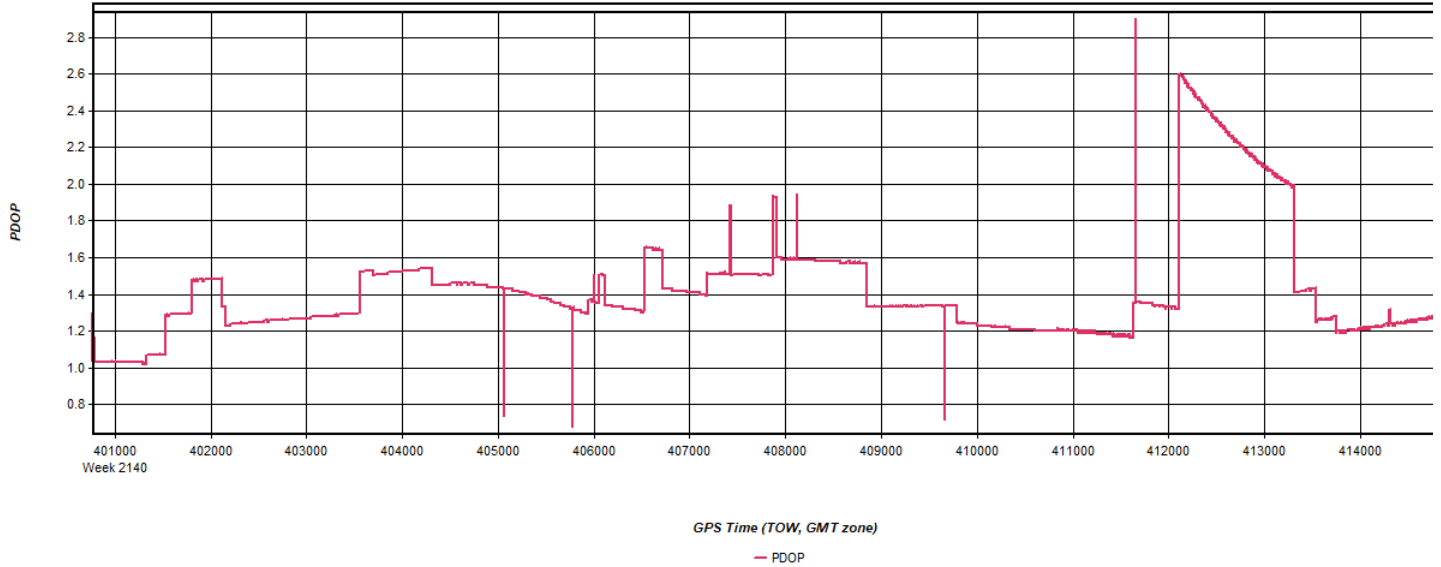
Figure 3: 20210114151834_13 [Smoothed TC Combined] - Float or Fixed Ambiguity





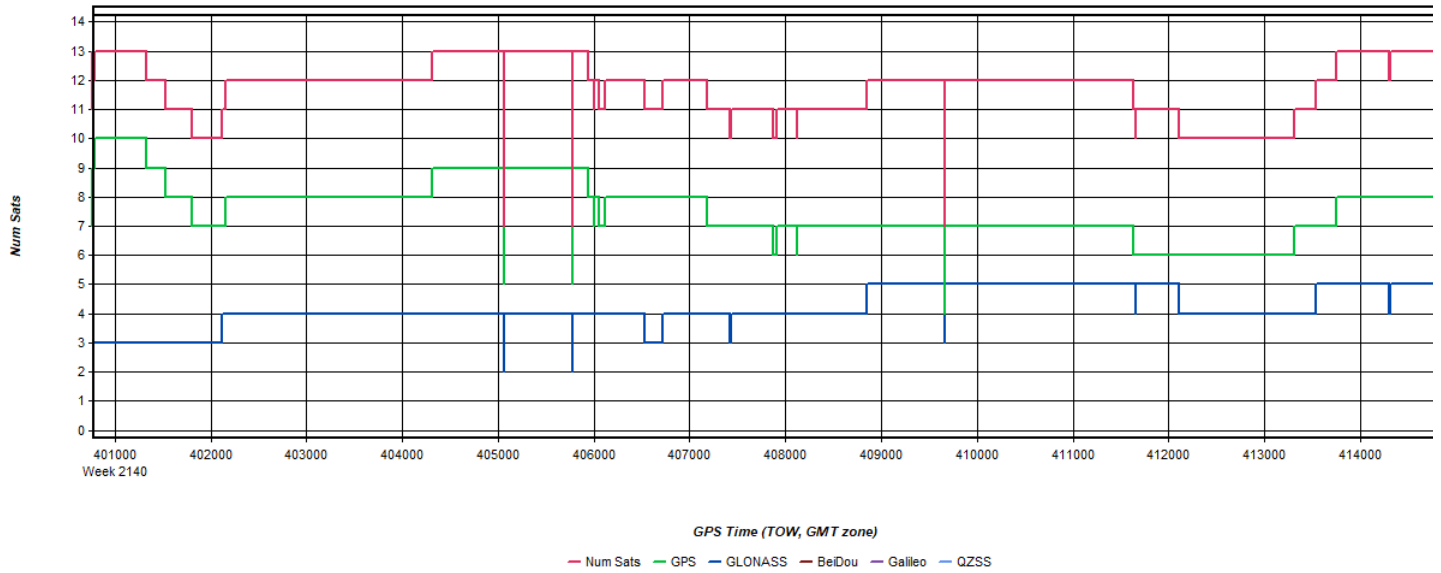
Process 20210114151834_13 by Unknown on 1/20/2021 at 12:43:55

Figure 6: 20210114151834_13 [Smoothed TC Combined] - PDOP Plot



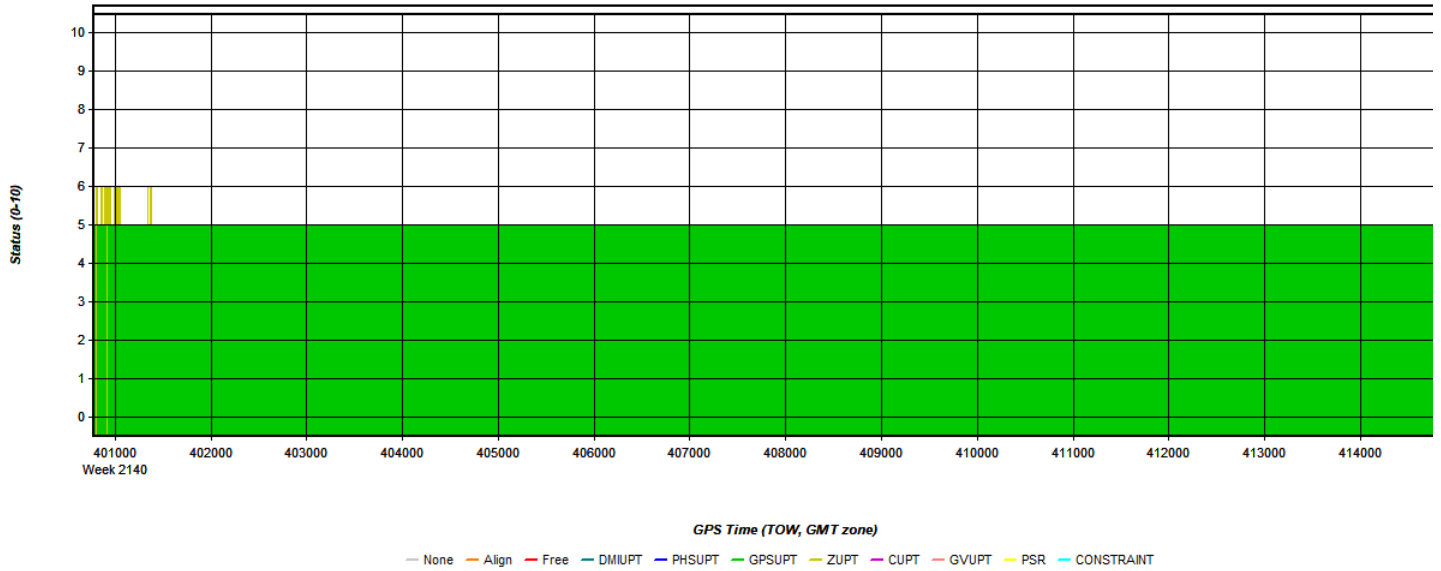
Process 20210114151834_13 by Unknown on 1/20/2021 at 12:43:55

Figure 7: 20210114151834_13 [Smoothed TC Combined] - Number of Satellites Line Plot



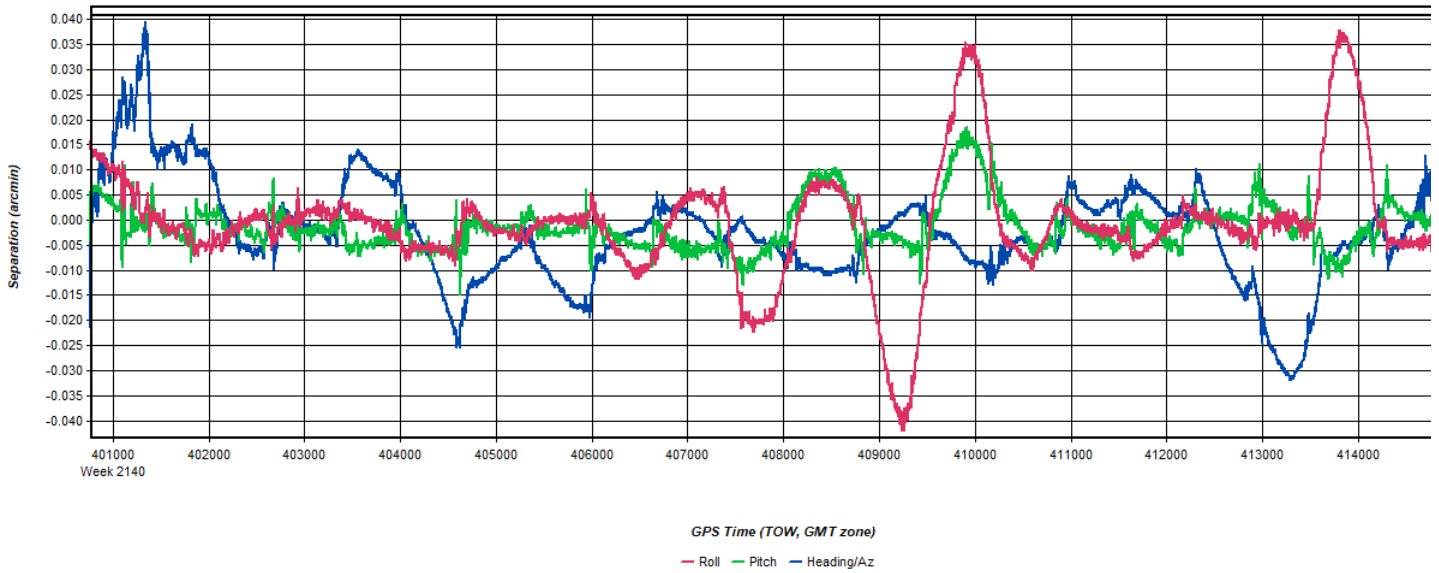
Process 20210114151834_13 by Unknown on 1/20/2021 at 12:43:55

Figure 8: 20210114151834_13 [Smoothed TC Combined] - Status flag for IMU processing



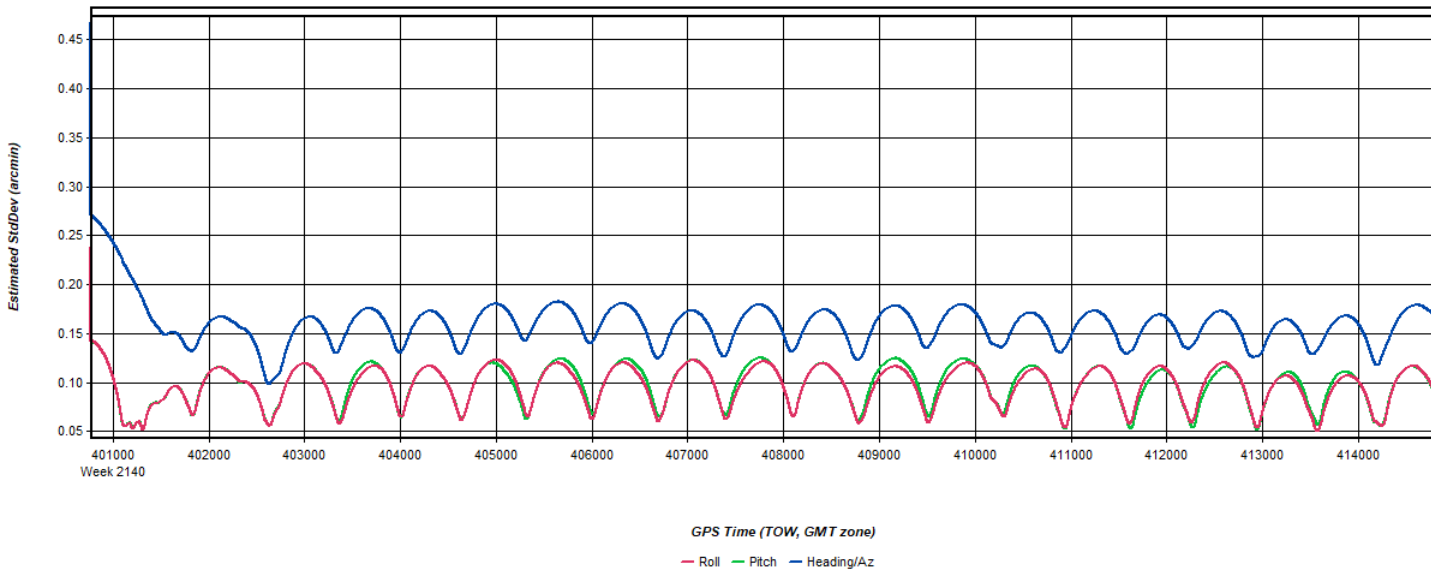
Process 20210114151834_13 by Unknown on 1/20/2021 at 12:43:55

Figure 9: 20210114151834_13 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



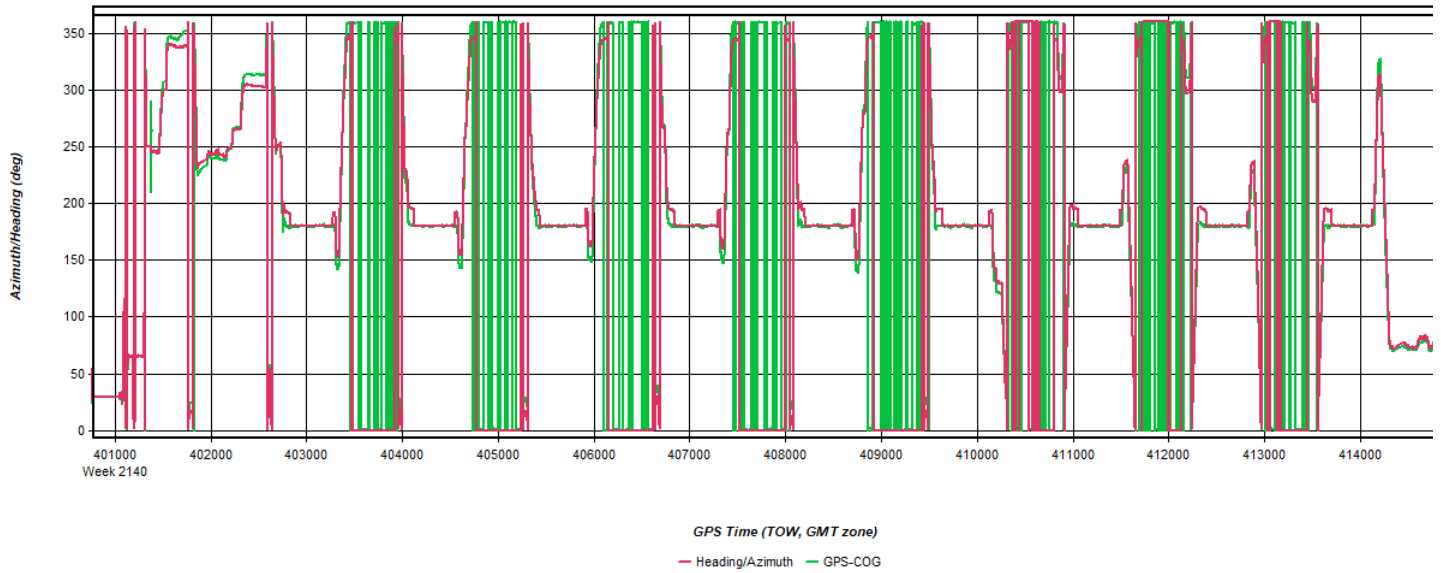
Process 20210114151834_13 by Unknown on 1/20/2021 at 12:43:55

Figure 10: 20210114151834_13 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



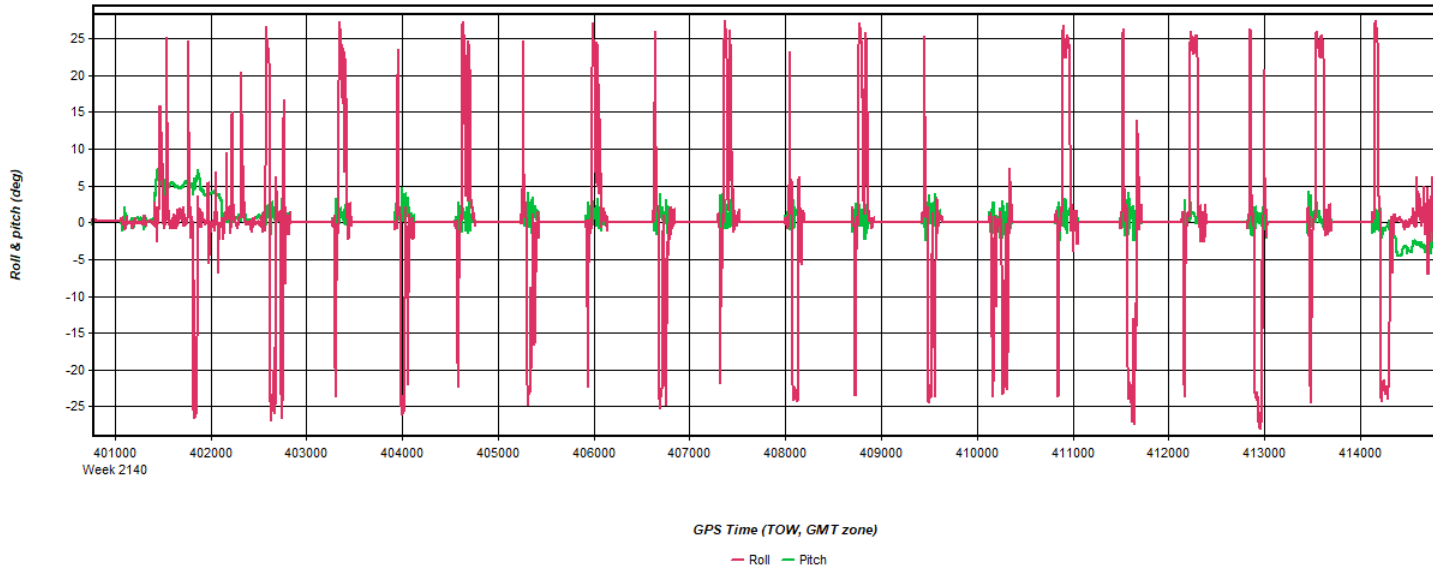
Process 20210114151834_13 by Unknown on 1/20/2021 at 12:43:55

Figure 11: 20210114151834_13 [Smoothed TC Combined] - Azimuth Plot



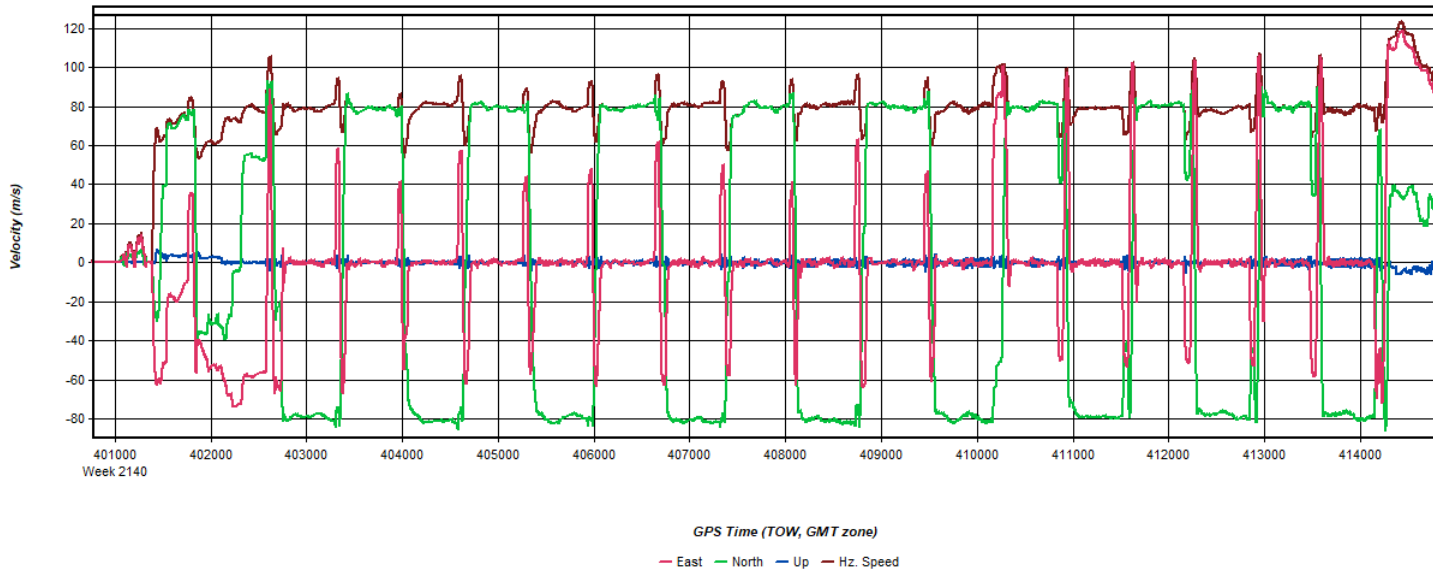
Process	20210114151834_13	by Unknown	on 1/20/2021	at 12:43:55
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Figure 12: 20210114151834_13 [Smoothed TC Combined] - Roll & Pitch Plot



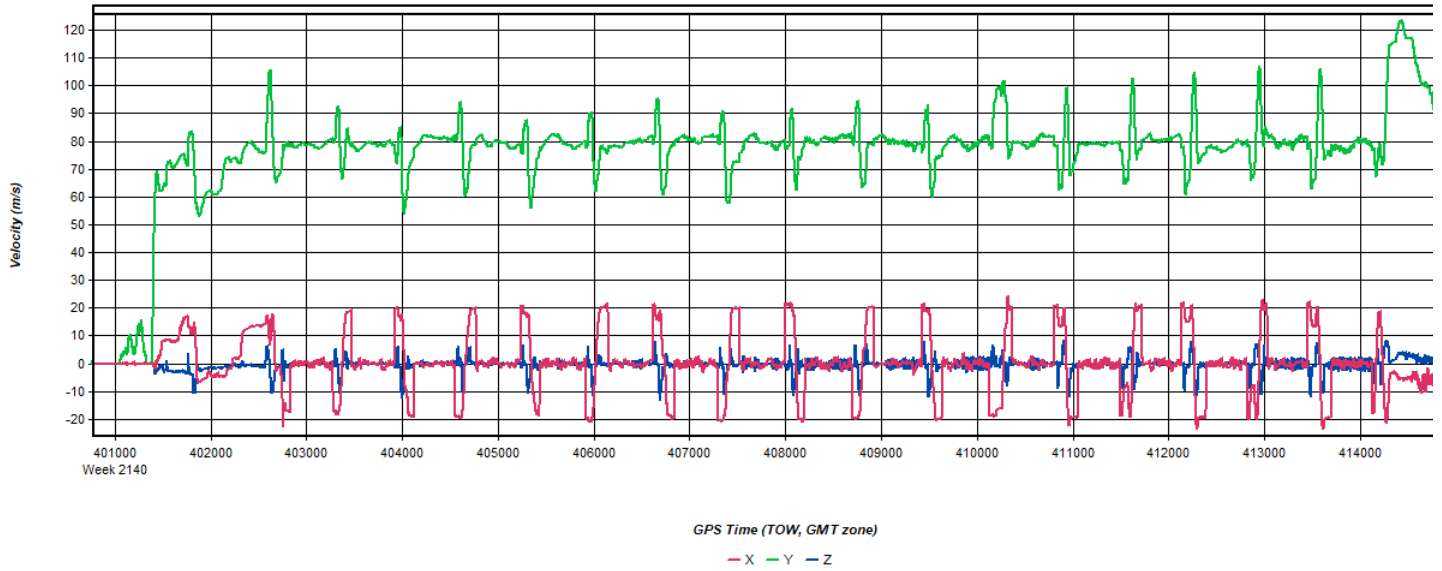
Process	20210114151834_13	by Unknown	on 1/20/2021	at 12:43:55
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Figure 13: 20210114151834_13 [Smoothed TC Combined] - Velocity Profile Plot



Process	20210114151834_13	by Unknown	on 1/20/2021	at 12:43:55
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Figure 14: 20210114151834_13 [Smoothed TC Combined] - Body Frame Velocity Plot



Process	20210114151834_13	by Unknown	on 1/20/2021	at 12:43:55
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Figure 15: 20210114151834_13 [Smoothed TC Combined] - Height Profile Plot

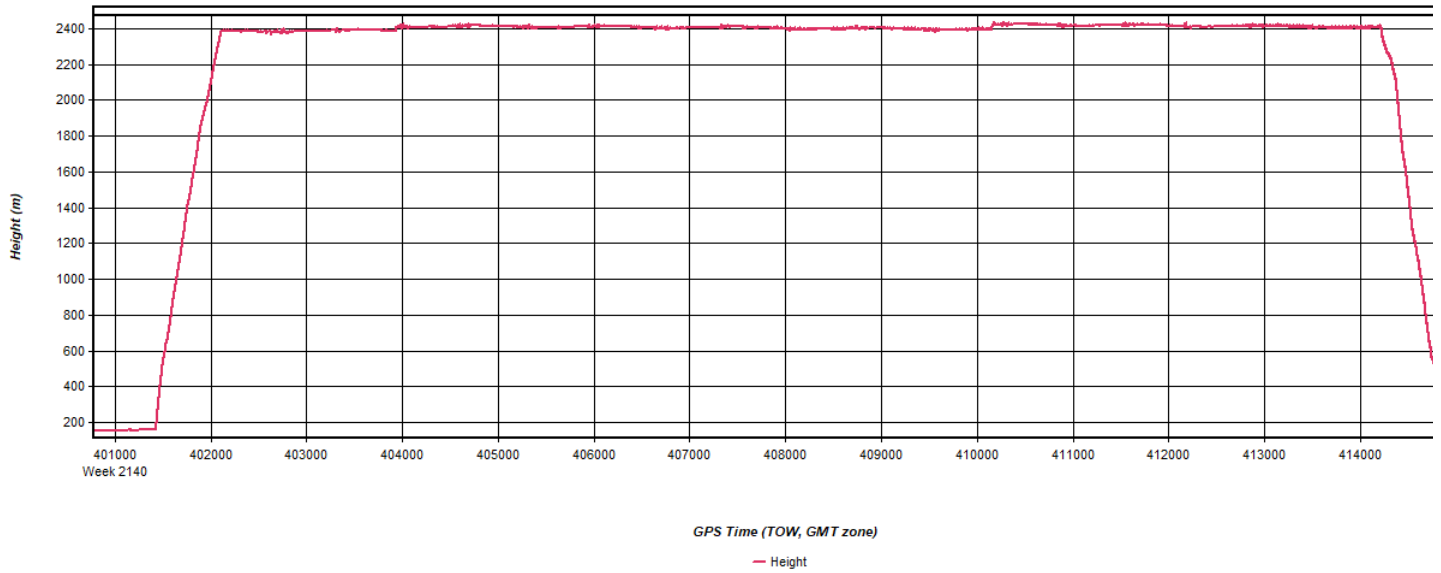


Figure 16: 20210114151834_13 [Smoothed TC Combined] - C/A Code Residual RMS Plot

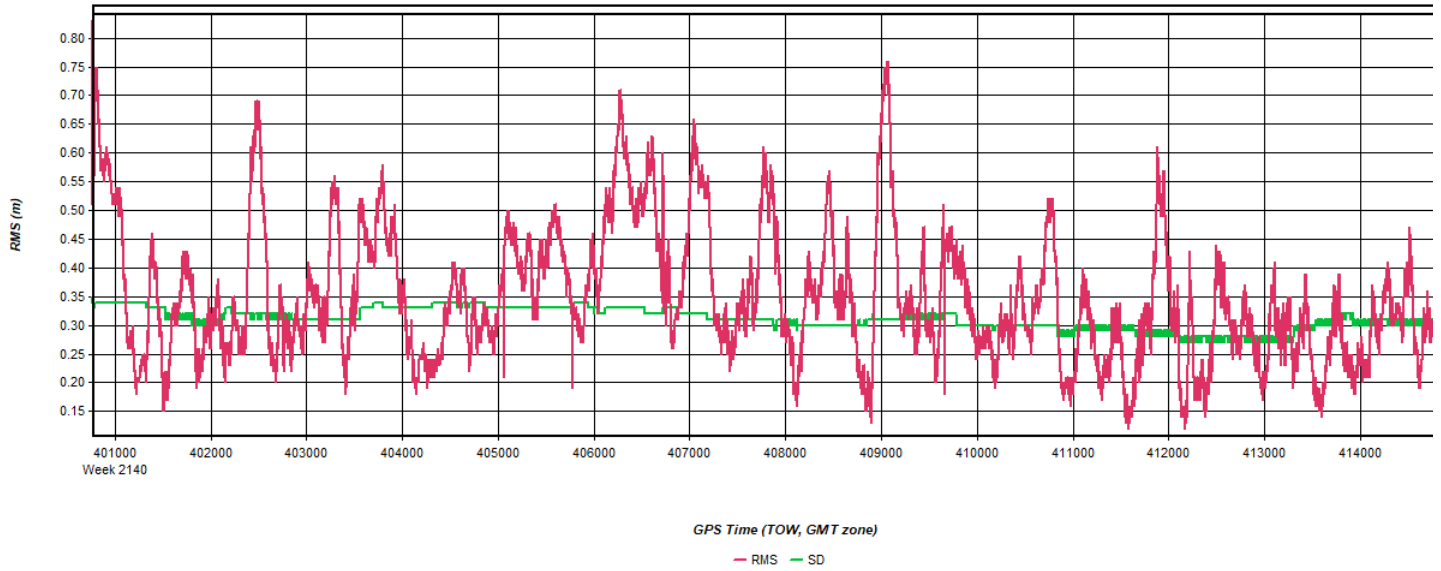


Figure 17: 20210114151834_13 [Smoothed TC Combined] - Carrier Residual RMS Plot

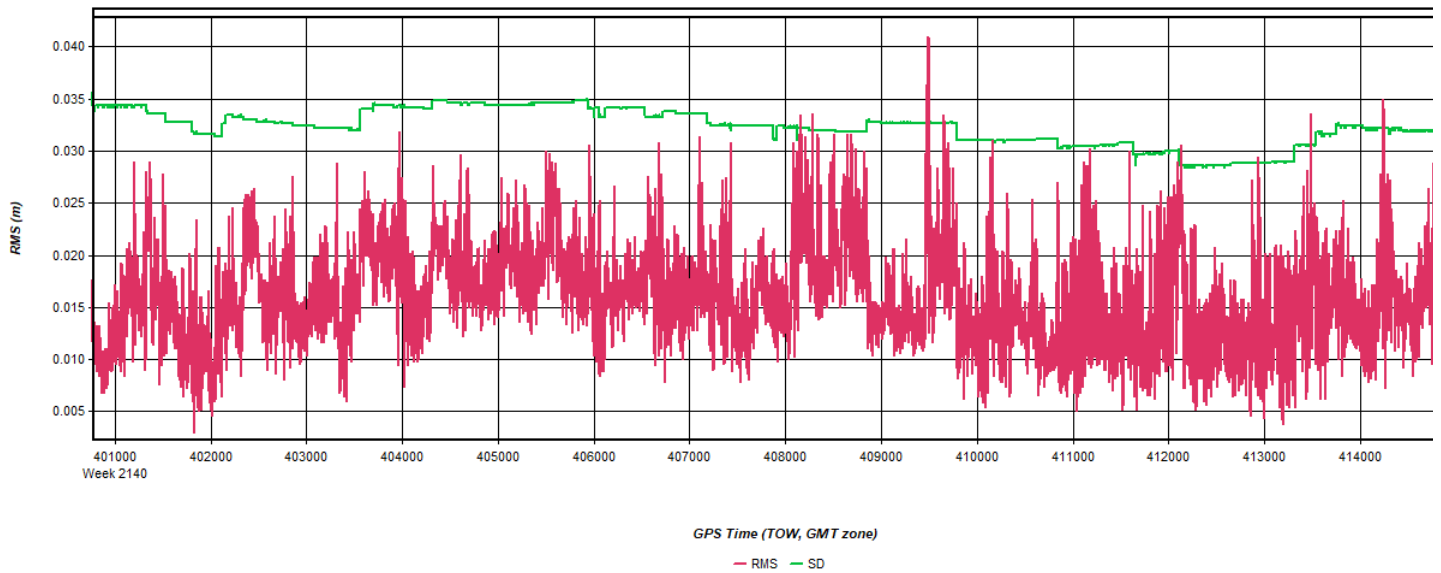


Figure 18: 20210114151834_13 [Smoothed TC Combined] - Doppler Residual RMS Plot

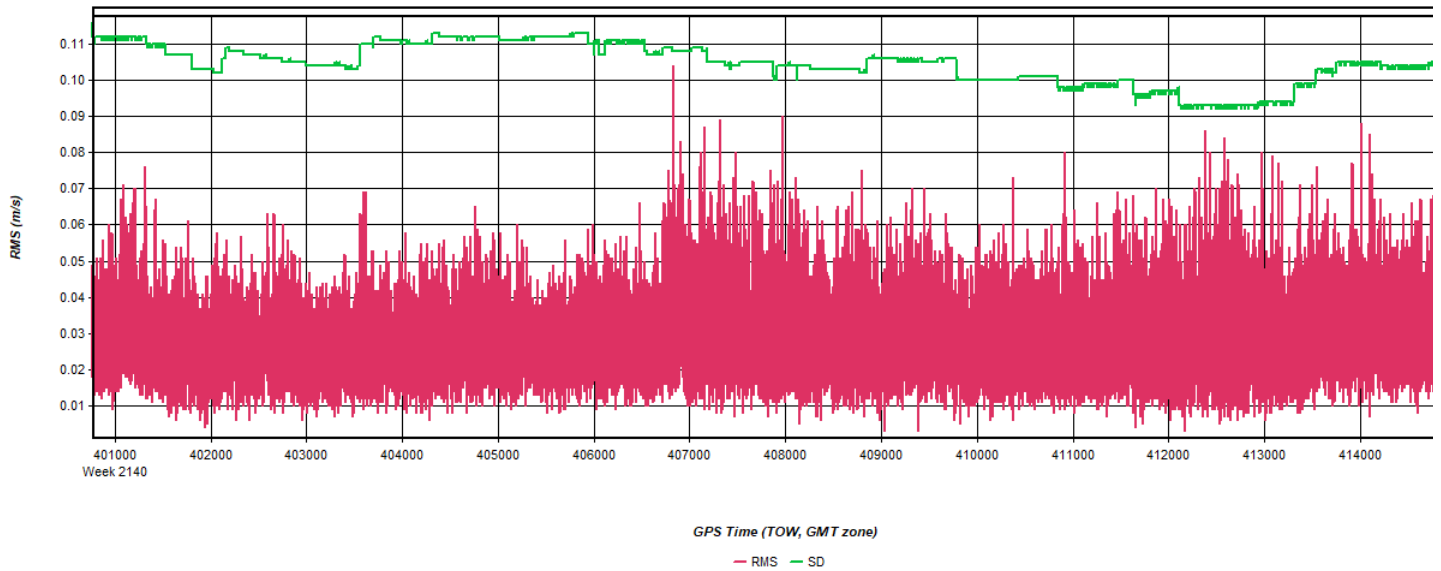
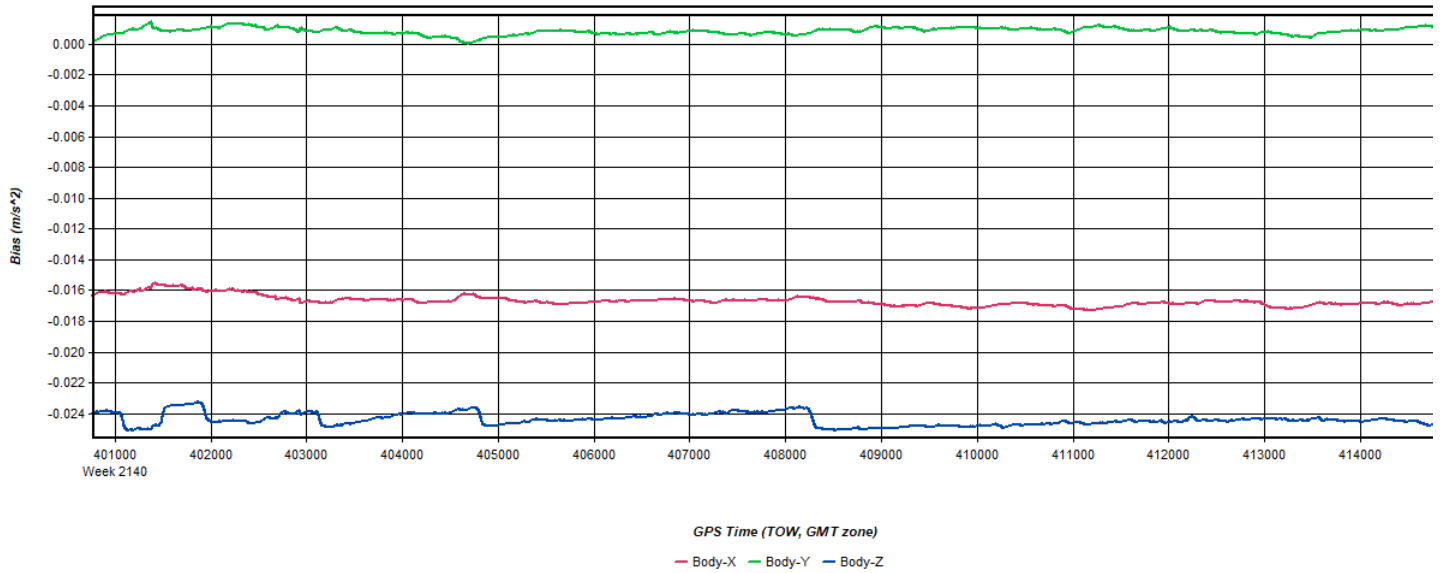
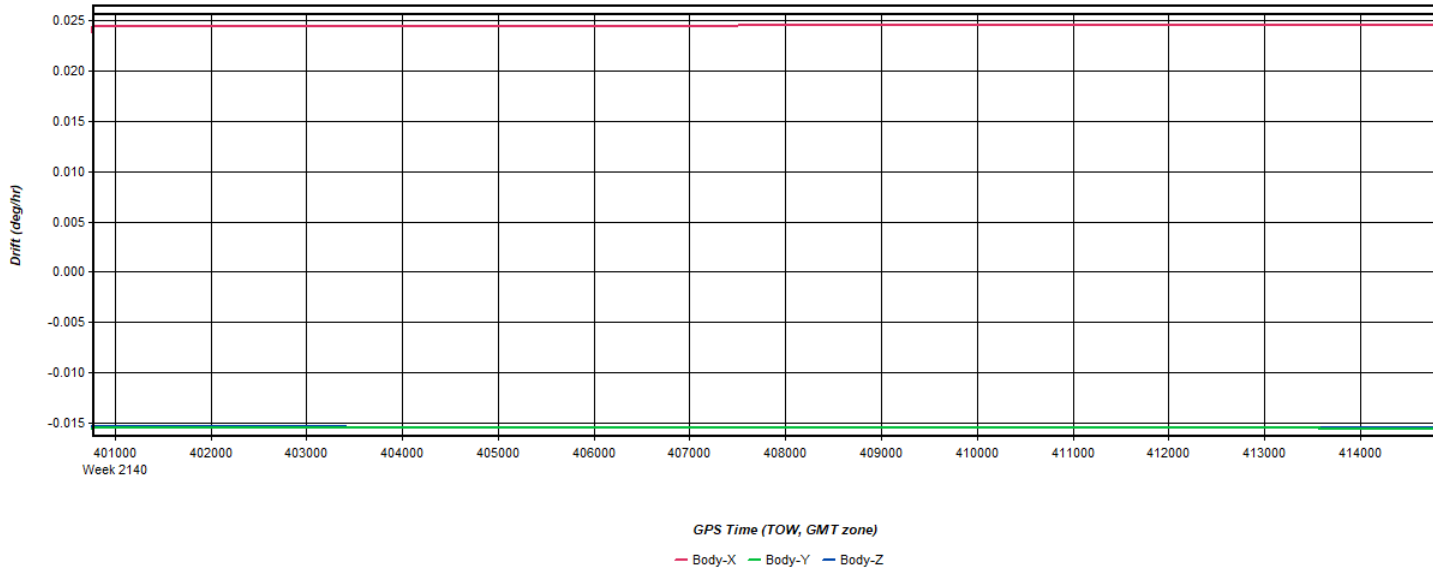


Figure 19: 20210114151834_13 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210114151834_13	by Unknown	on 1/20/2021	at 12:43:55
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Figure 20: 20210114151834_13 [Smoothed TC Combined] - Gyro Drift Plot

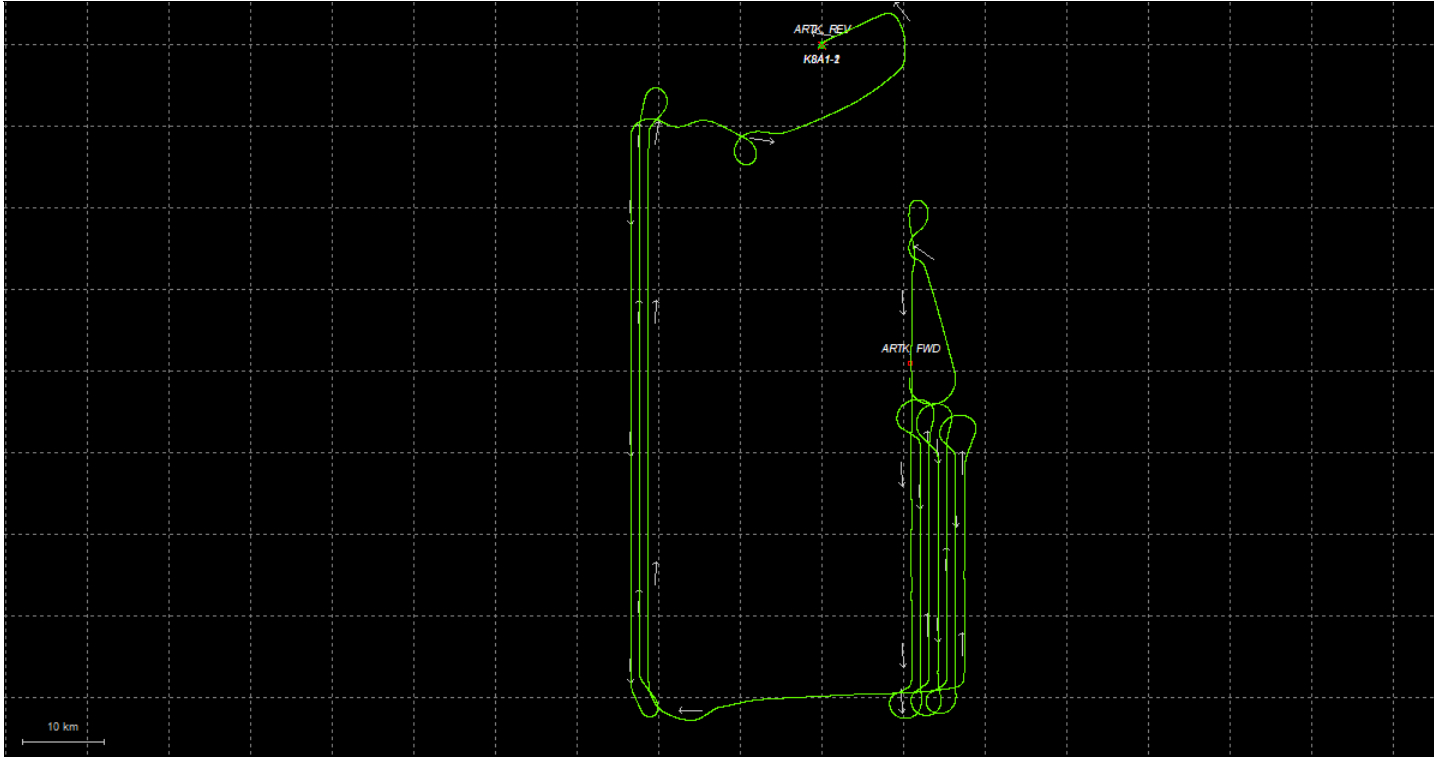


Process	20210114151834_13	by Unknown	on 1/20/2021	at 12:43:55
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Output Results for 20210114200818_14

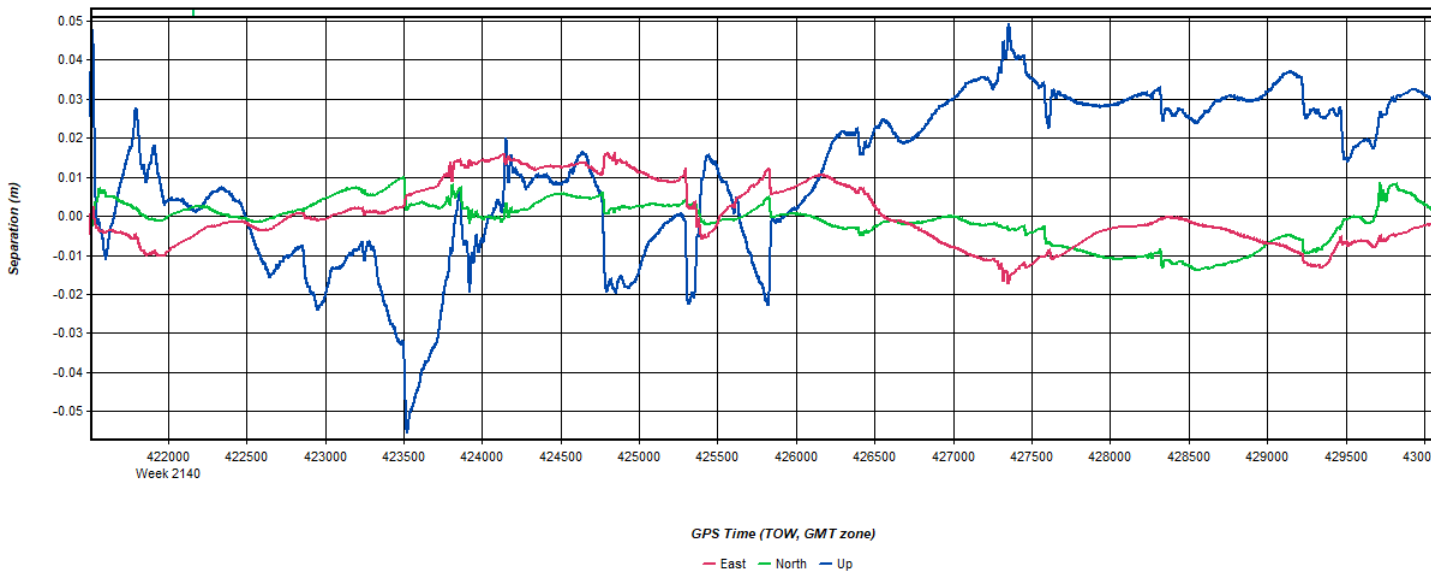
Inertial Explorer Version 8.90.2124
01/20/2021

Figure 1: Smoothed TC Combined - Map



Process	20210114200818_14	by Unknown	on 1/20/2021	at 15:06:07
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Figure 2: 20210114200818_14 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210114200818_14	by Unknown	on 1/20/2021	at 15:06:07
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Figure 3: 20210114200818_14 [Smoothed TC Combined] - Float or Fixed Ambiguity

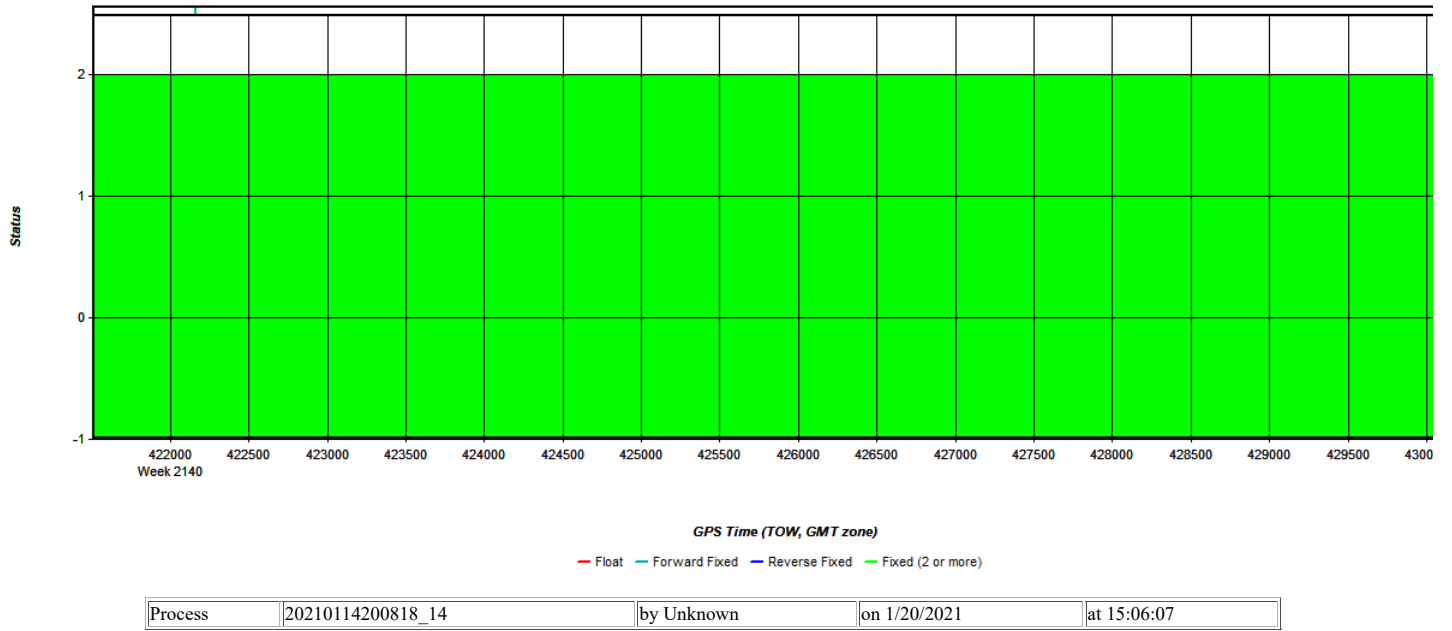


Figure 4: 20210114200818_14 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

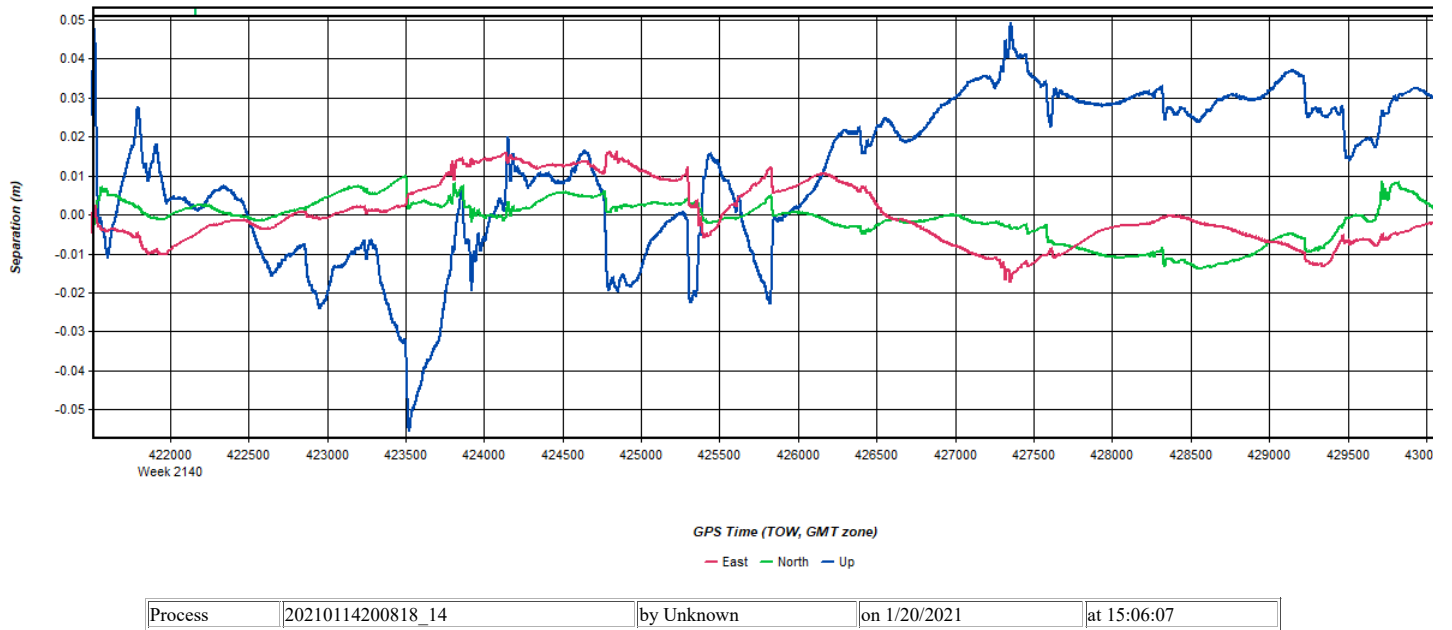
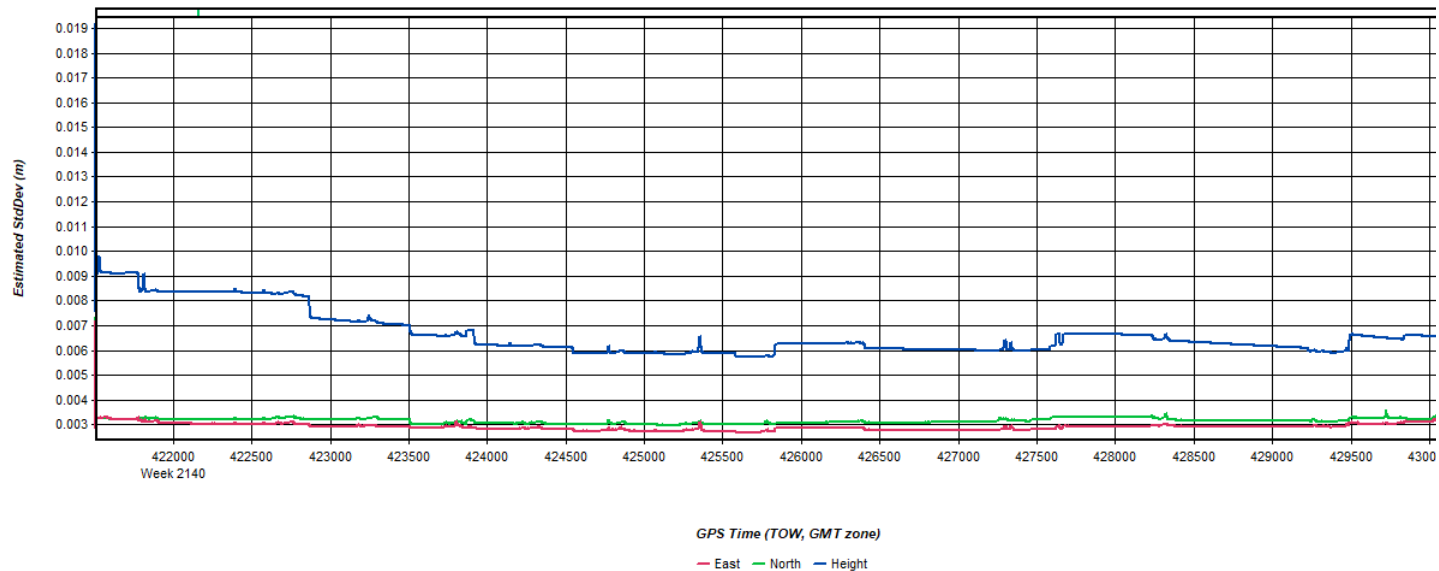
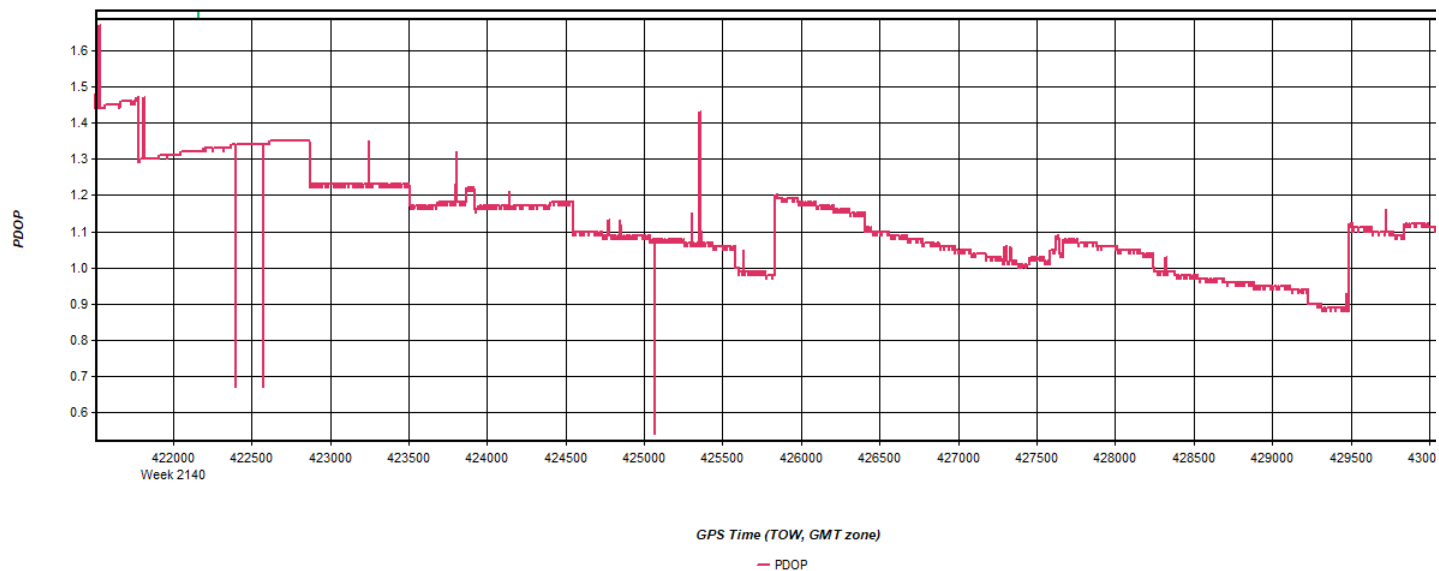


Figure 5: 20210114200818_14 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process 20210114200818_14 by Unknown on 1/20/2021 at 15:06:07

Figure 6: 20210114200818_14 [Smoothed TC Combined] - PDOP Plot



Process 20210114200818_14 by Unknown on 1/20/2021 at 15:06:07

Figure 7: 20210114200818_14 [Smoothed TC Combined] - Number of Satellites Line Plot

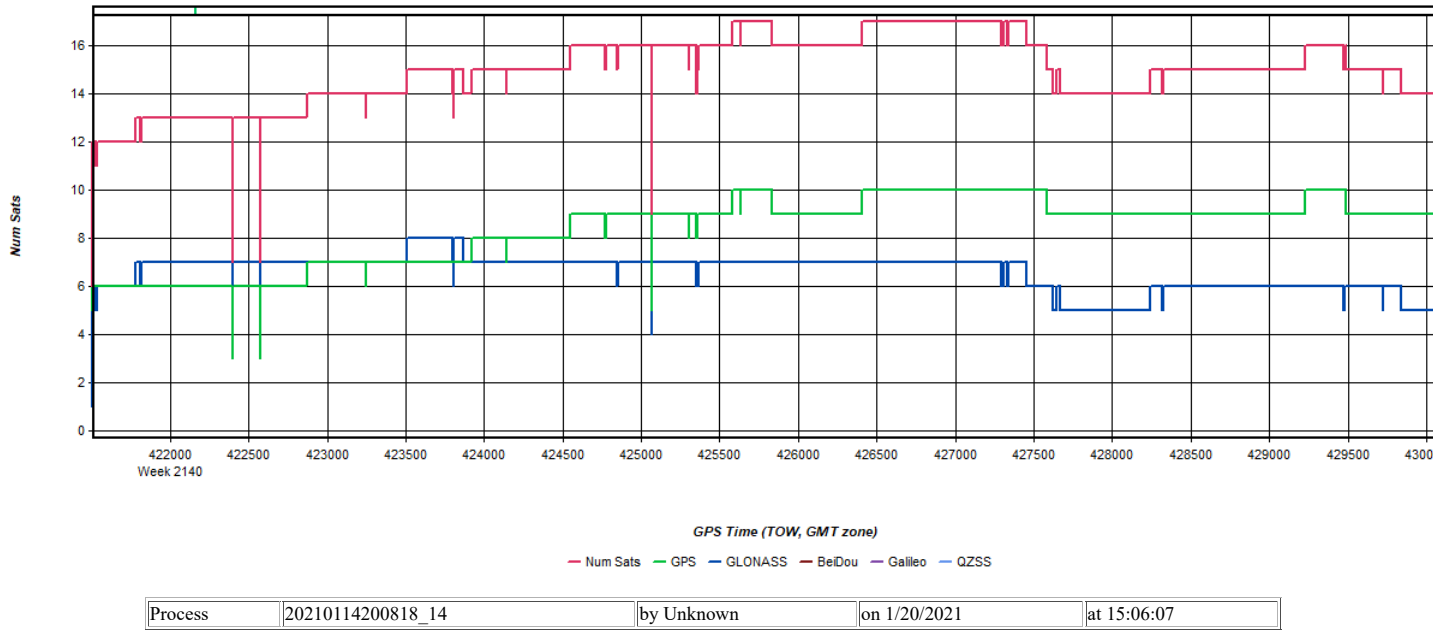


Figure 8: 20210114200818_14 [Smoothed TC Combined] - Status flag for IMU processing

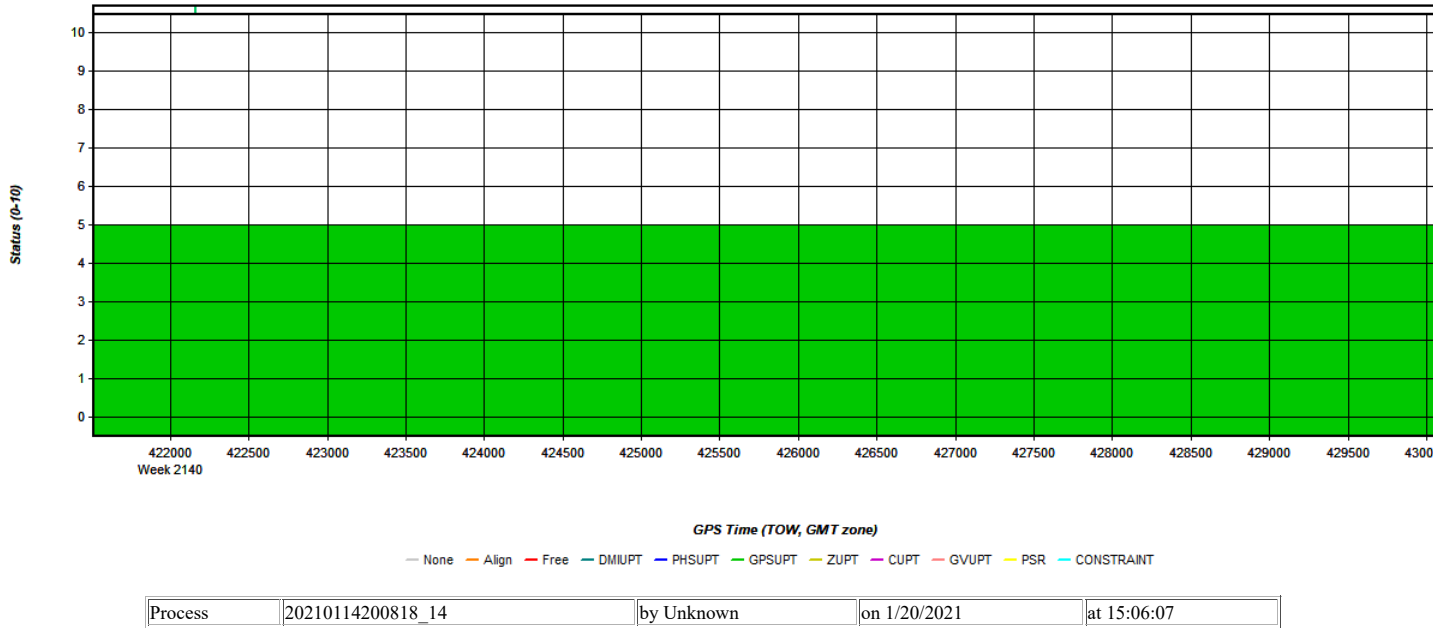
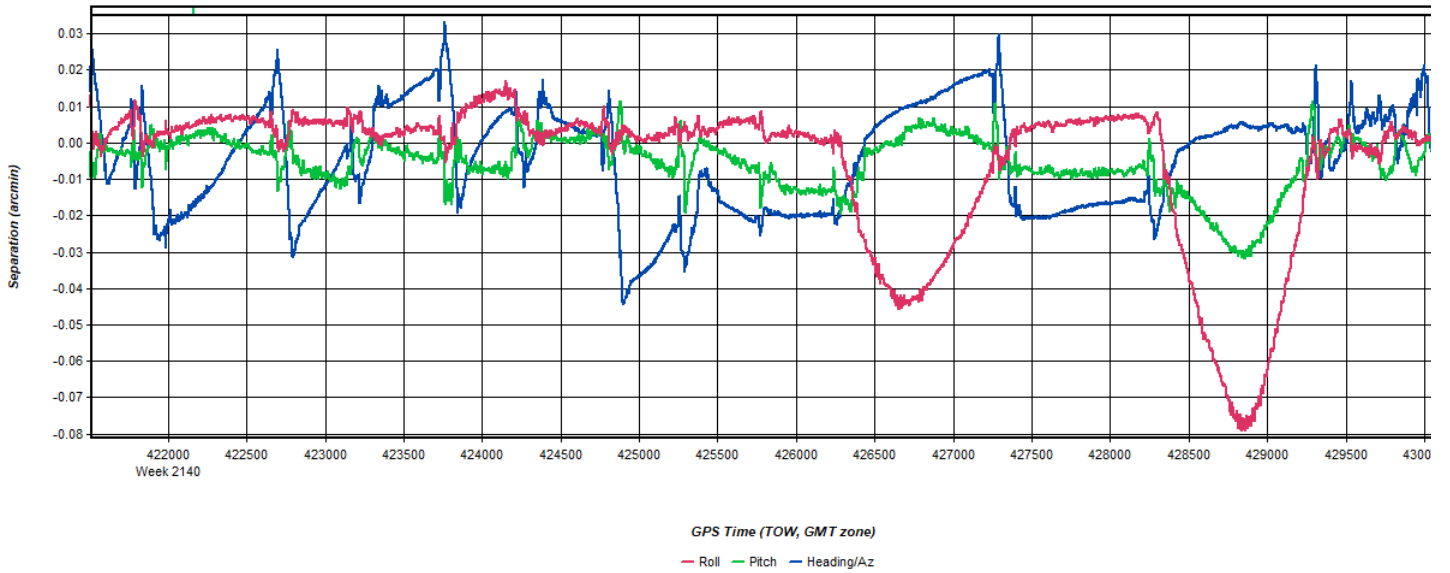
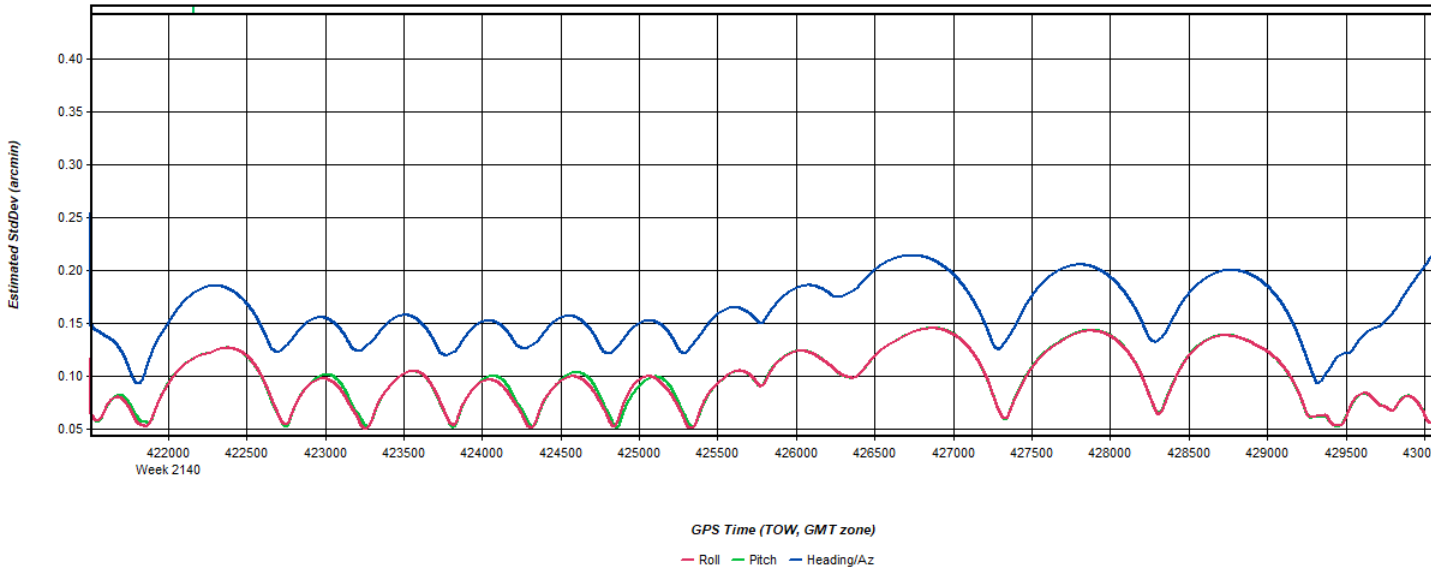


Figure 9: 20210114200818_14 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



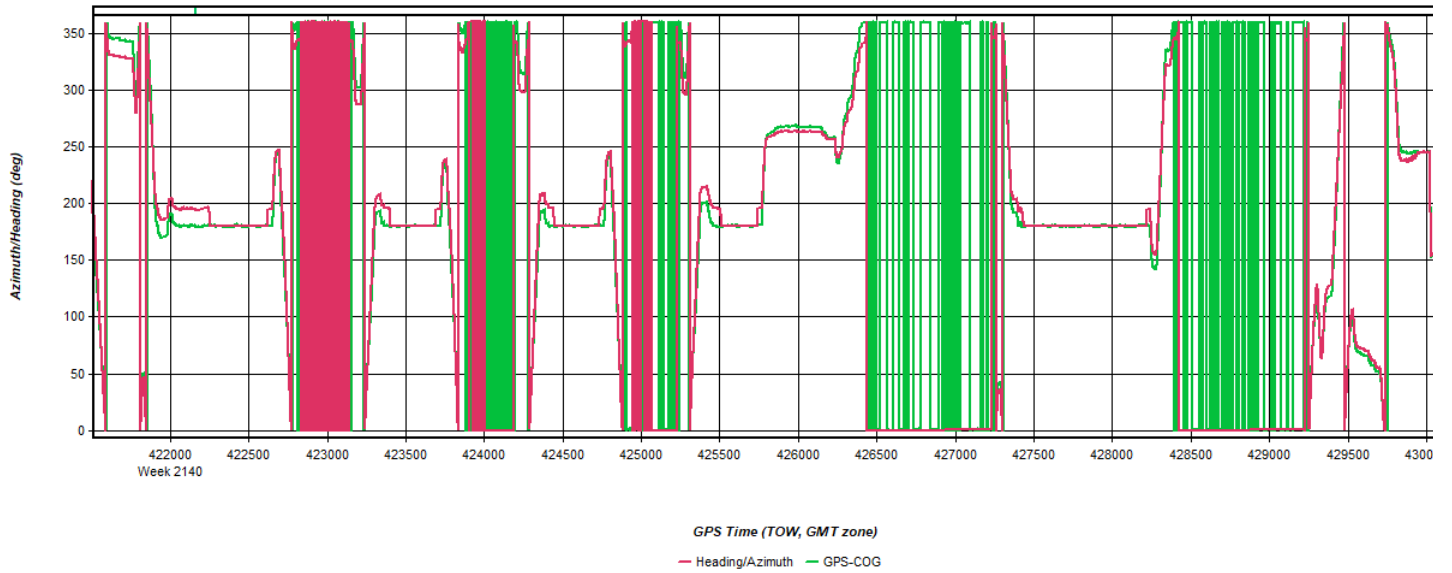
Process 20210114200818_14 by Unknown on 1/20/2021 at 15:06:07

Figure 10: 20210114200818_14 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process 20210114200818_14 by Unknown on 1/20/2021 at 15:06:07

Figure 11: 20210114200818_14 [Smoothed TC Combined] - Azimuth Plot



Process	20210114200818_14	by Unknown	on 1/20/2021	at 15:06:07
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Figure 12: 20210114200818_14 [Smoothed TC Combined] - Roll & Pitch Plot



Process	20210114200818_14	by Unknown	on 1/20/2021	at 15:06:07
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Figure 13: 20210114200818_14 [Smoothed TC Combined] - Velocity Profile Plot

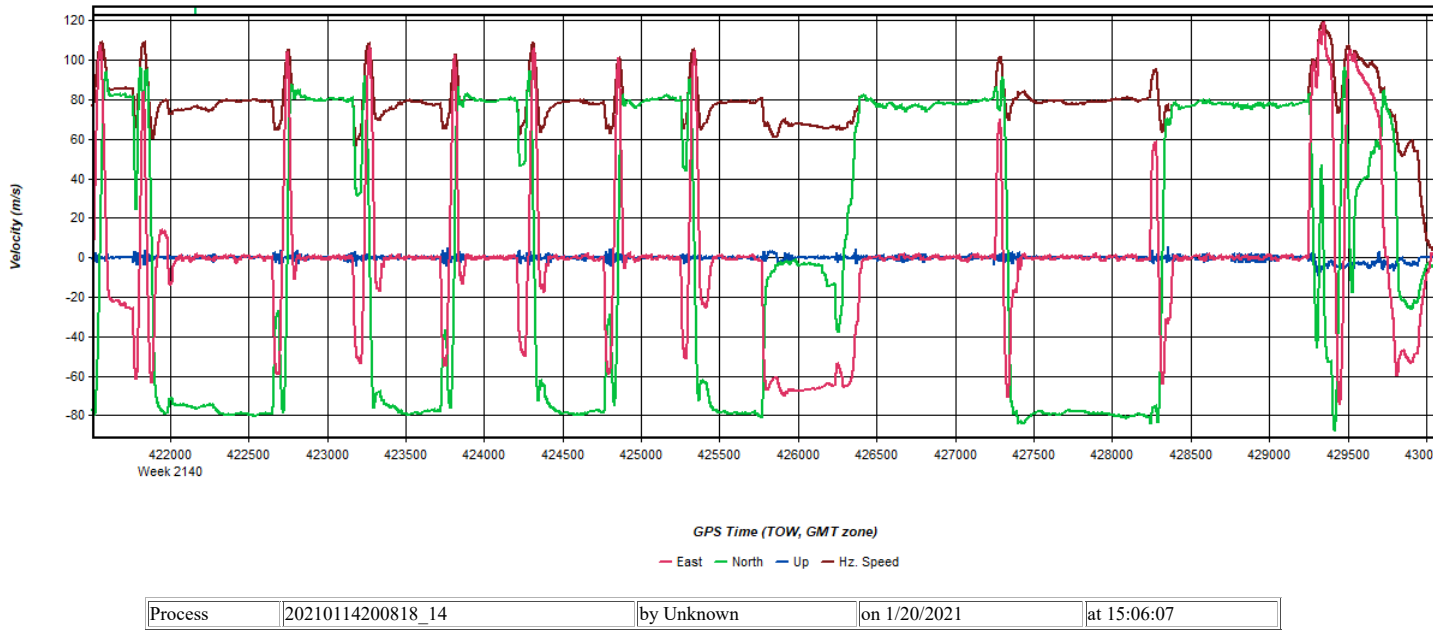


Figure 14: 20210114200818_14 [Smoothed TC Combined] - Body Frame Velocity Plot

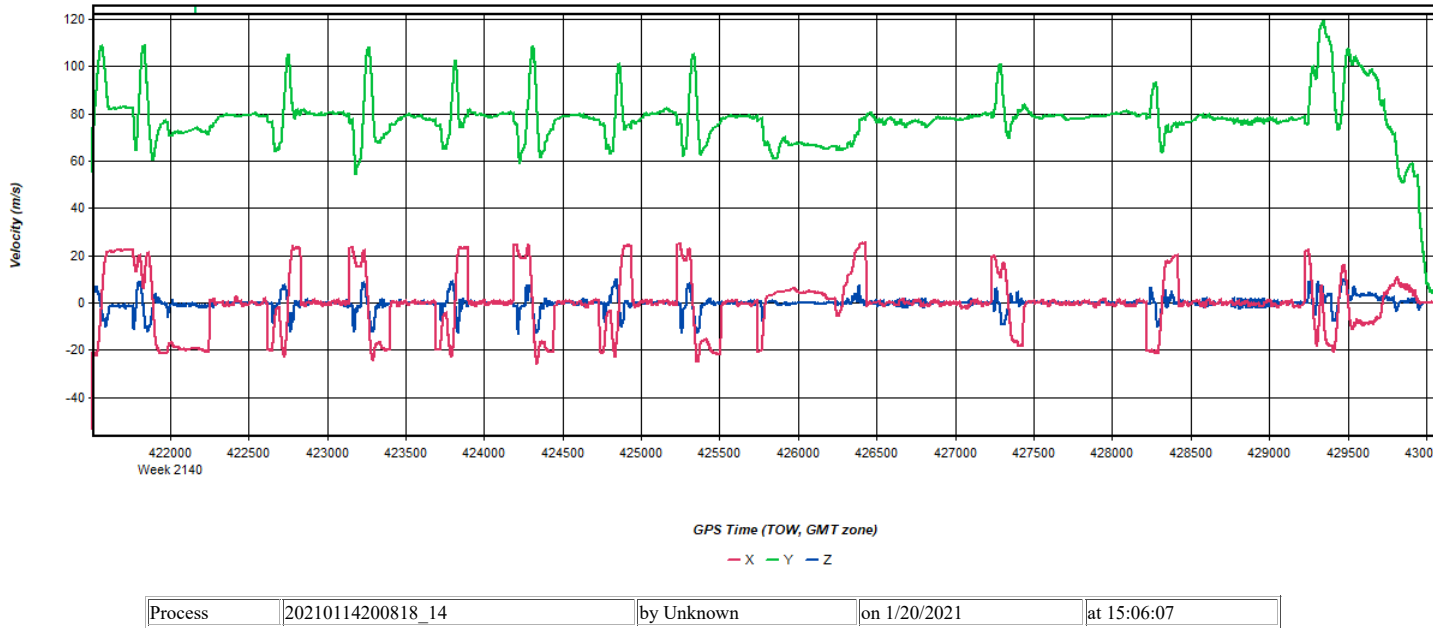
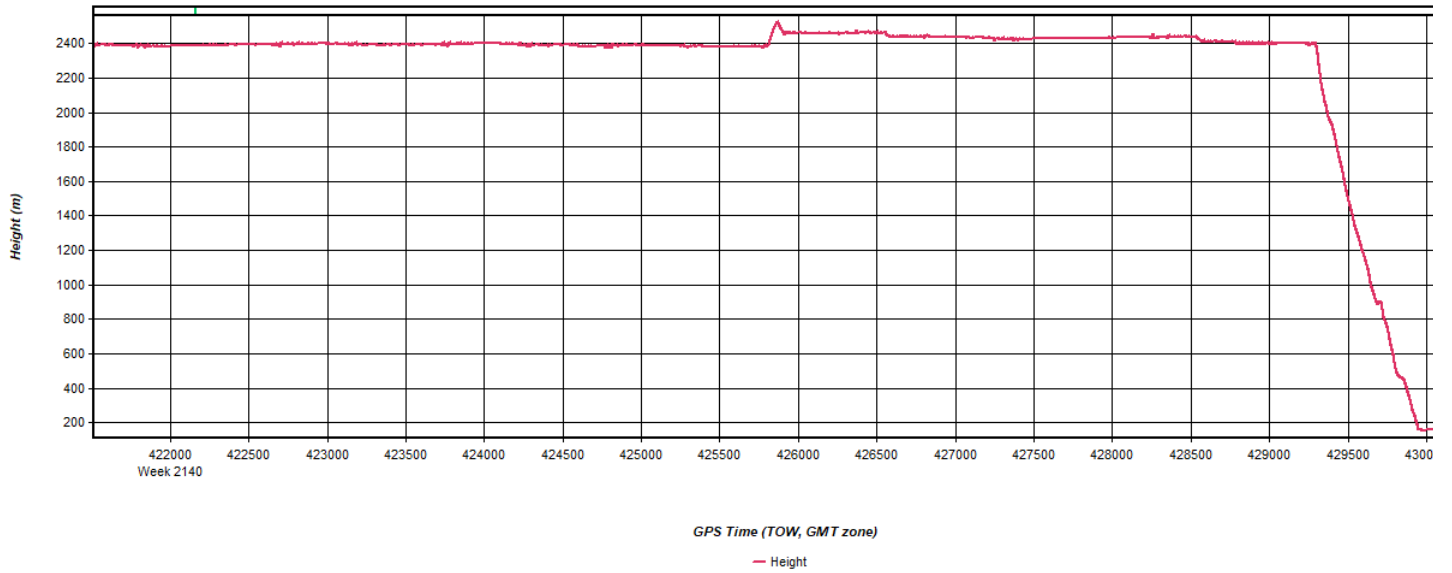
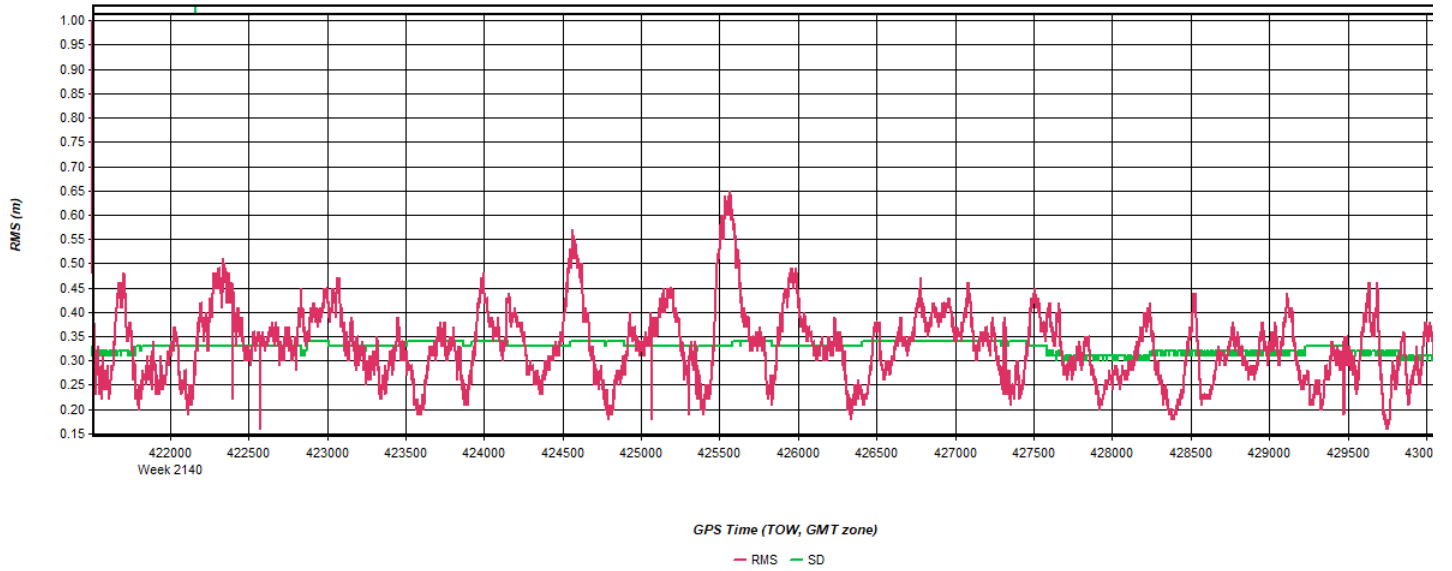


Figure 15: 20210114200818_14 [Smoothed TC Combined] - Height Profile Plot



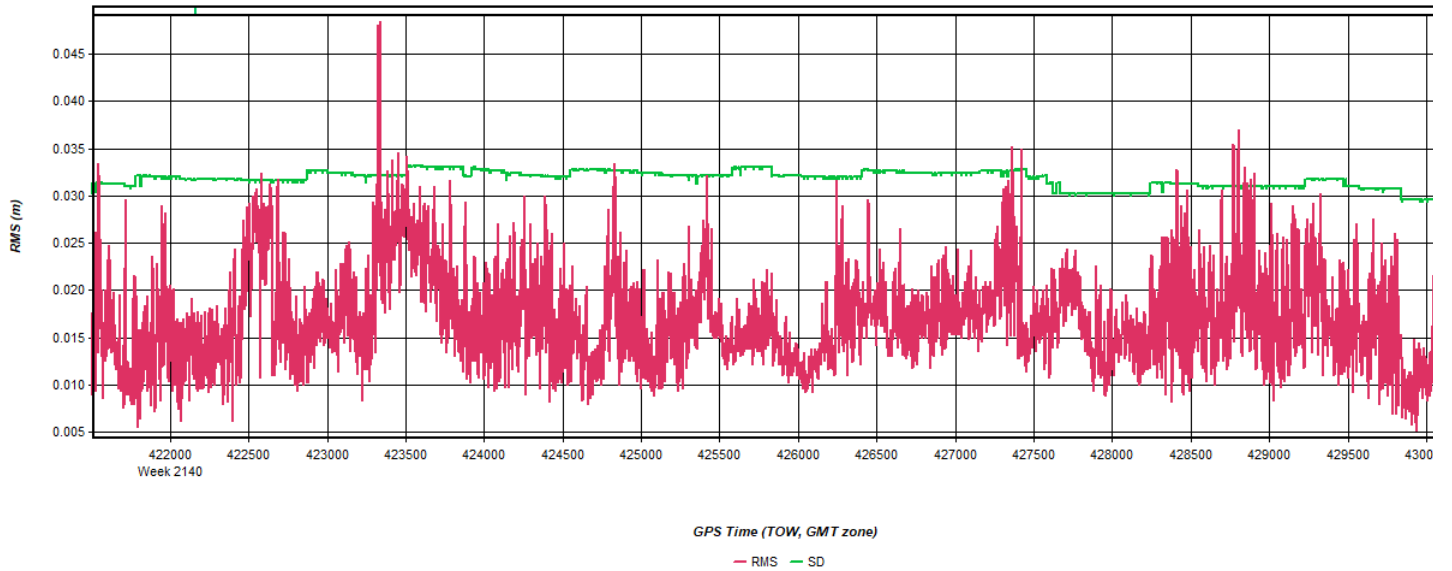
Process 20210114200818_14 by Unknown on 1/20/2021 at 15:06:07

Figure 16: 20210114200818_14 [Smoothed TC Combined] - C/A Code Residual RMS Plot



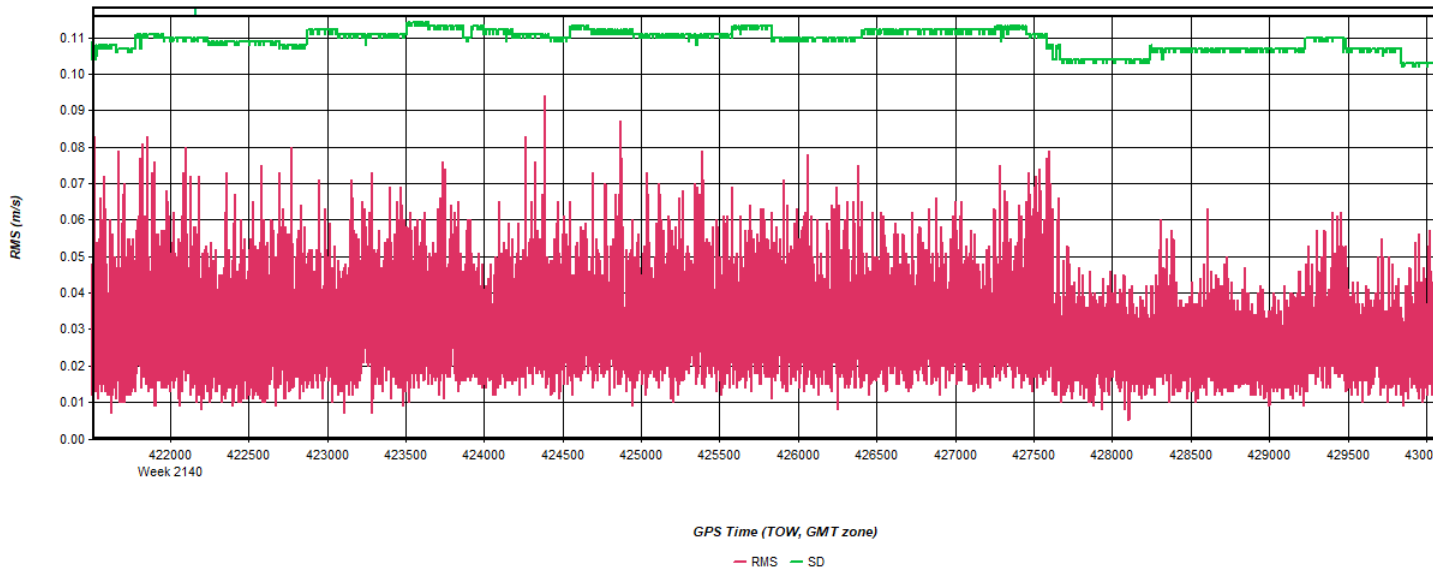
Process 20210114200818_14 by Unknown on 1/20/2021 at 15:06:07

Figure 17: 20210114200818_14 [Smoothed TC Combined] - Carrier Residual RMS Plot



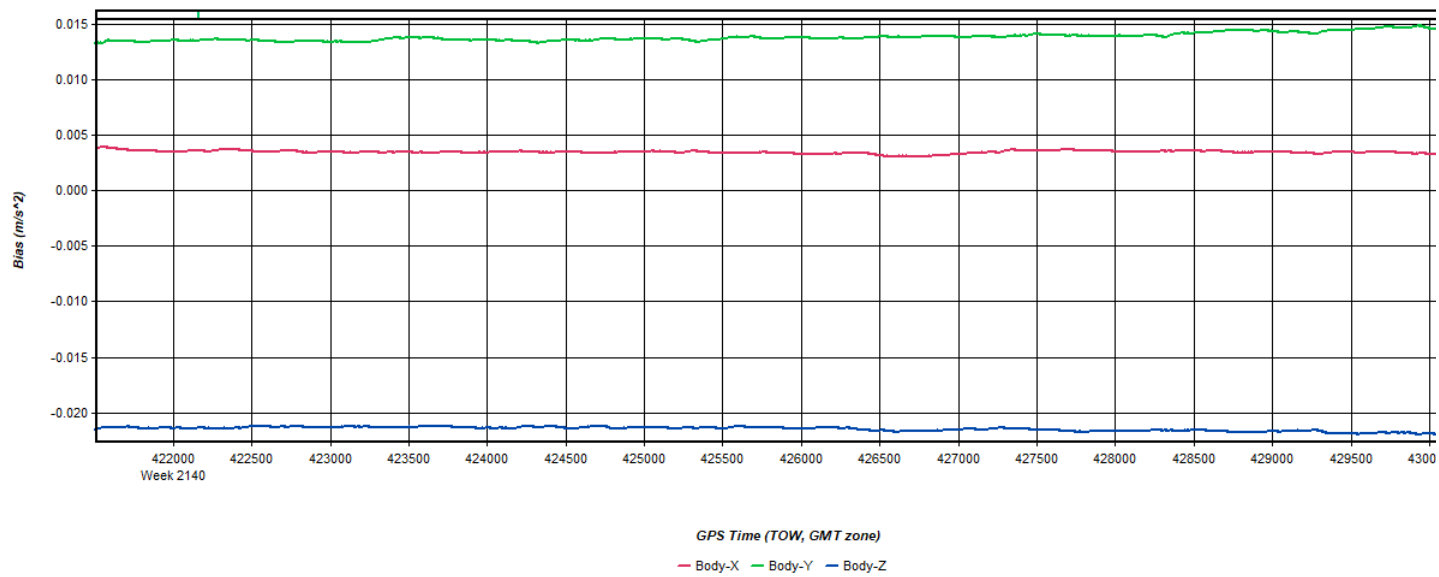
Process	20210114200818_14	by Unknown	on 1/20/2021	at 15:06:07
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Figure 18: 20210114200818_14 [Smoothed TC Combined] - Doppler Residual RMS Plot



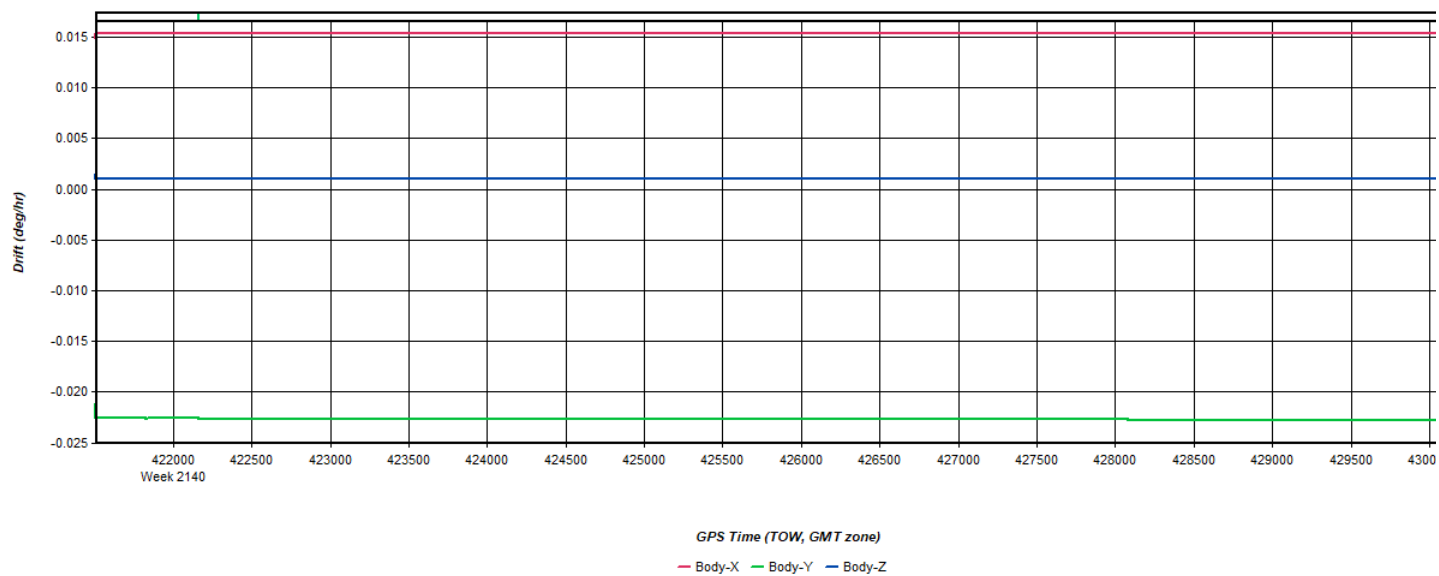
Process	20210114200818_14	by Unknown	on 1/20/2021	at 15:06:07
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Figure 19: 20210114200818_14 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210114200818_14	by Unknown	on 1/20/2021	at 15:06:07
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Figure 20: 20210114200818_14 [Smoothed TC Combined] - Gyro Drift Plot

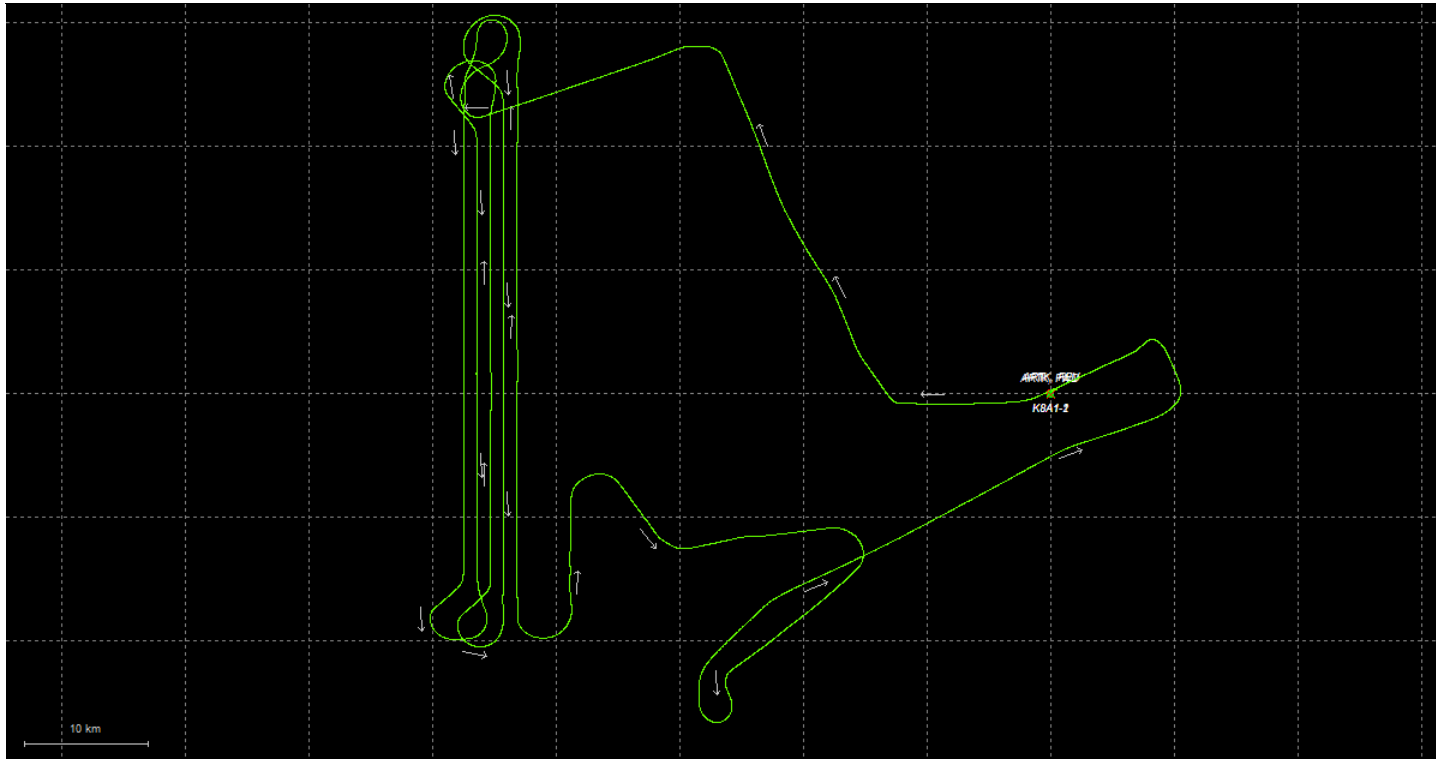


Process	20210114200818_14	by Unknown	on 1/20/2021	at 15:06:07
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Output Results for 20210115150152_15

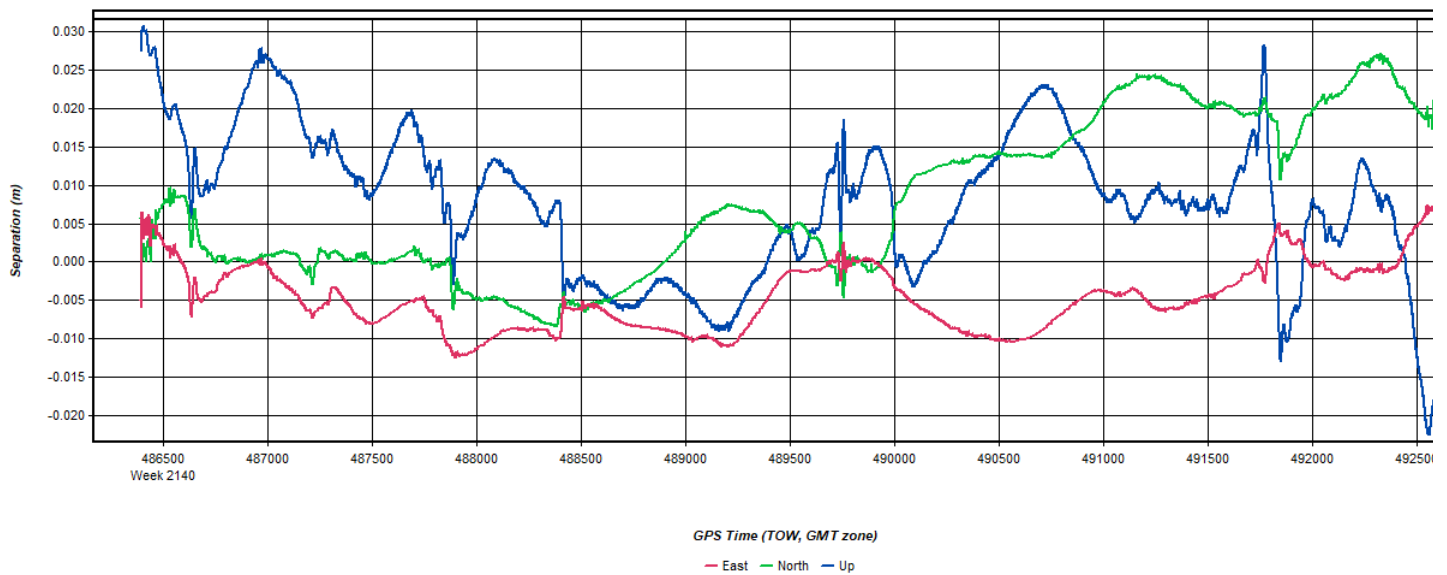
Inertial Explorer Version 8.90.2124
01/20/2021

Figure 1: Smoothed TC Combined - Map



Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 2: 20210115150152_15 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 3: 20210115150152_15 [Smoothed TC Combined] - Float or Fixed Ambiguity

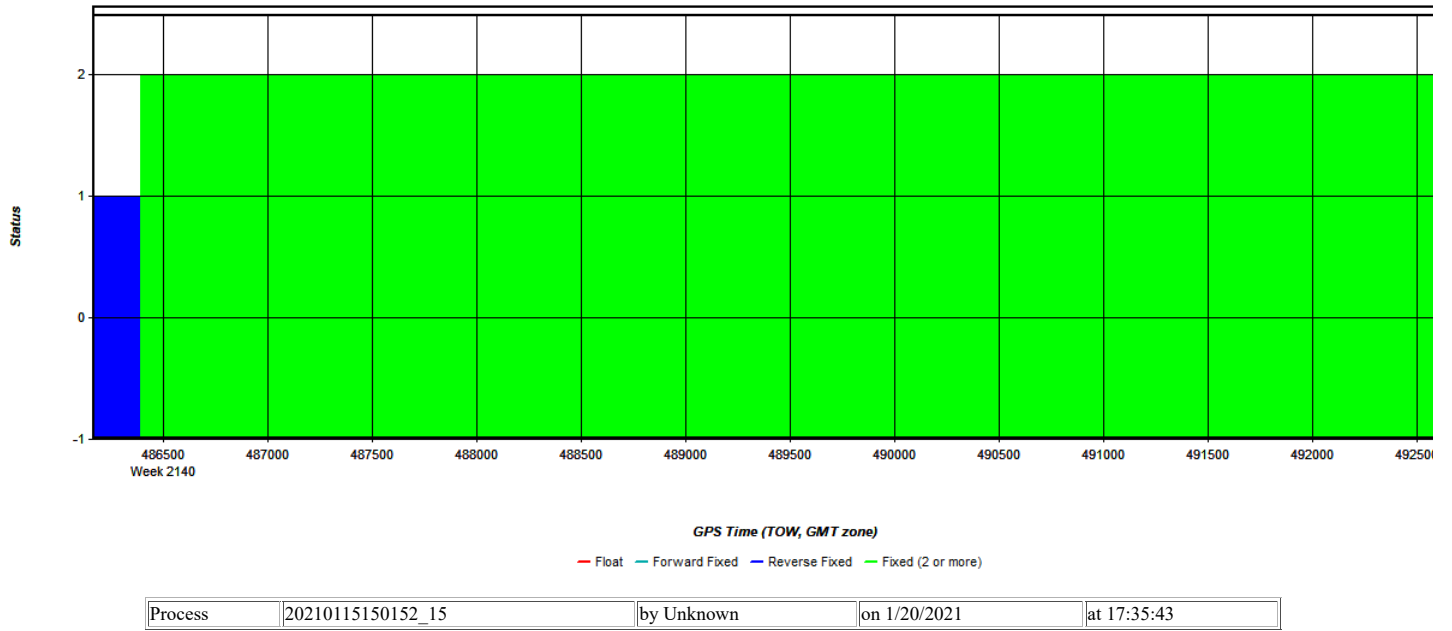


Figure 4: 20210115150152_15 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

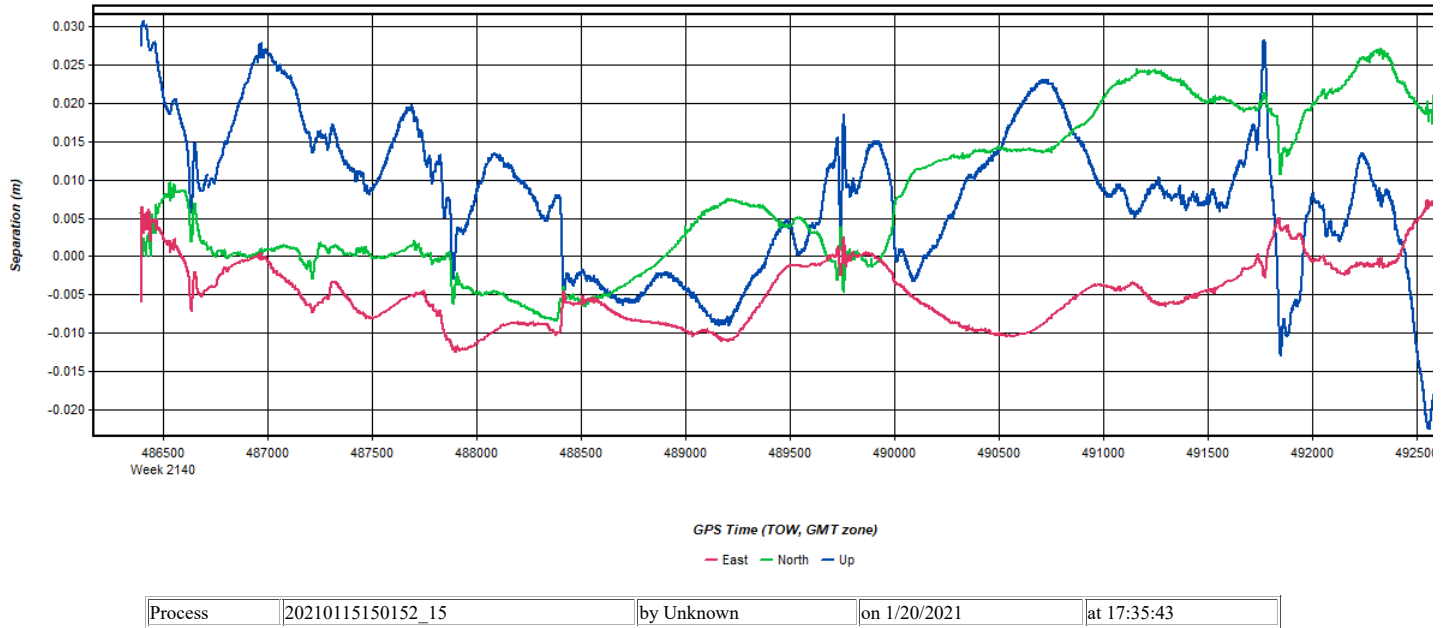
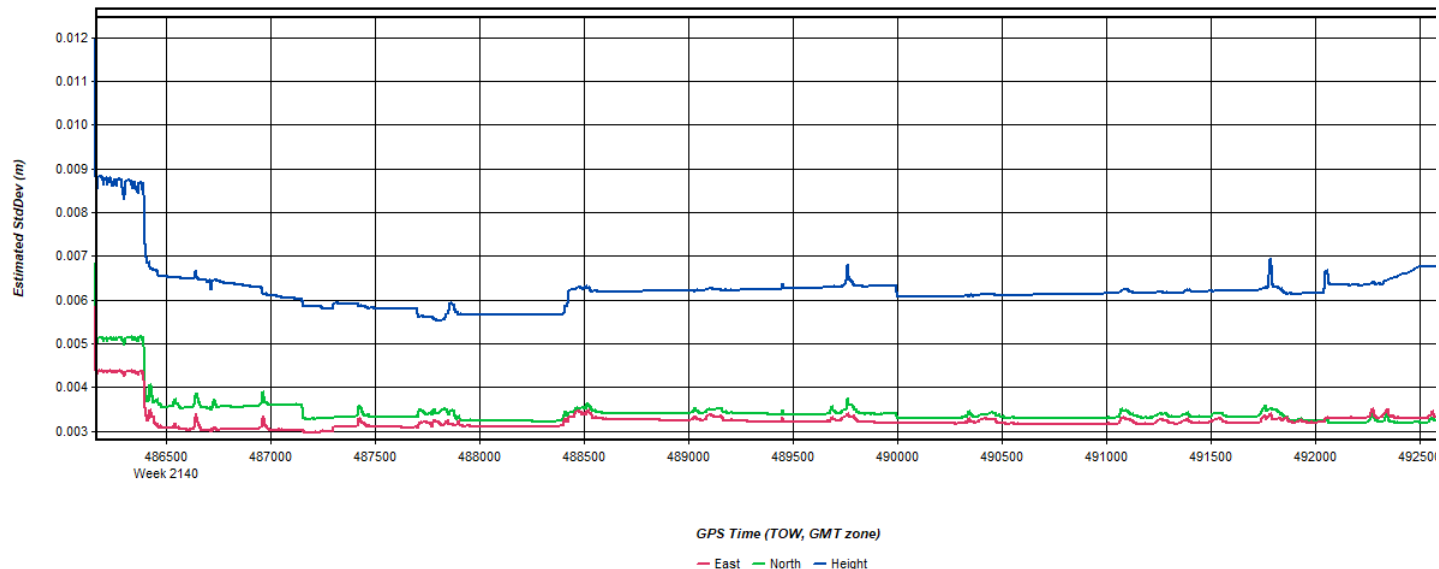
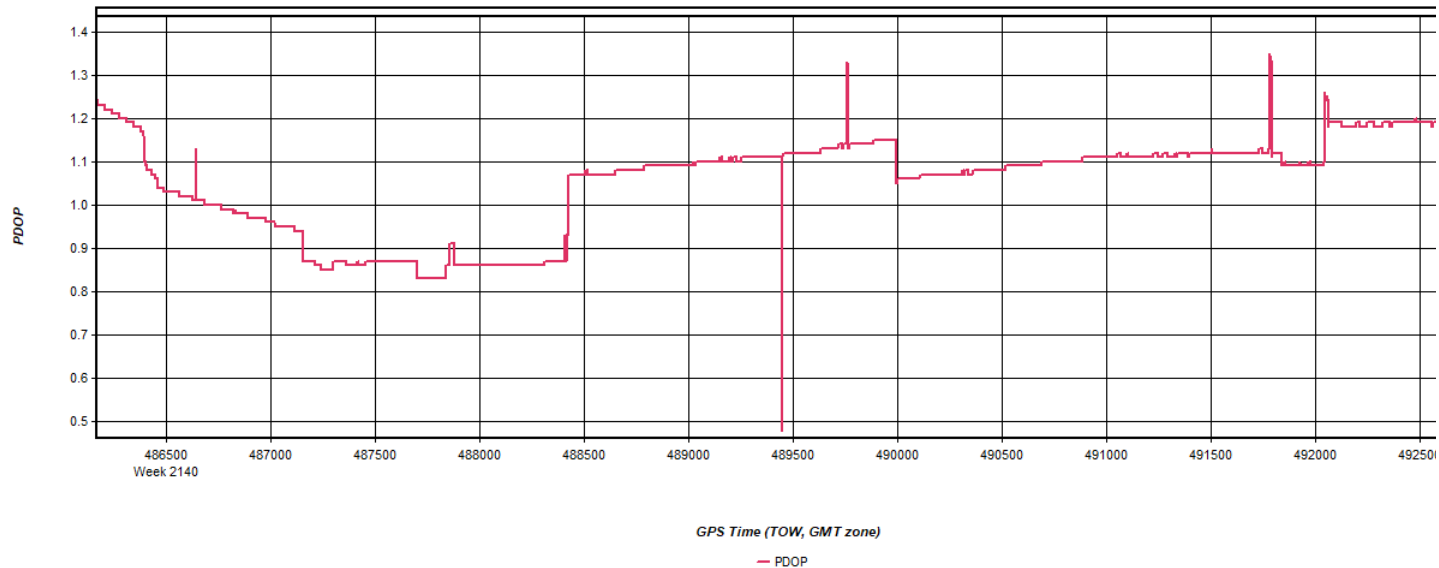


Figure 5: 20210115150152_15 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 6: 20210115150152_15 [Smoothed TC Combined] - PDOP Plot



Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 7: 20210115150152_15 [Smoothed TC Combined] - Number of Satellites Line Plot

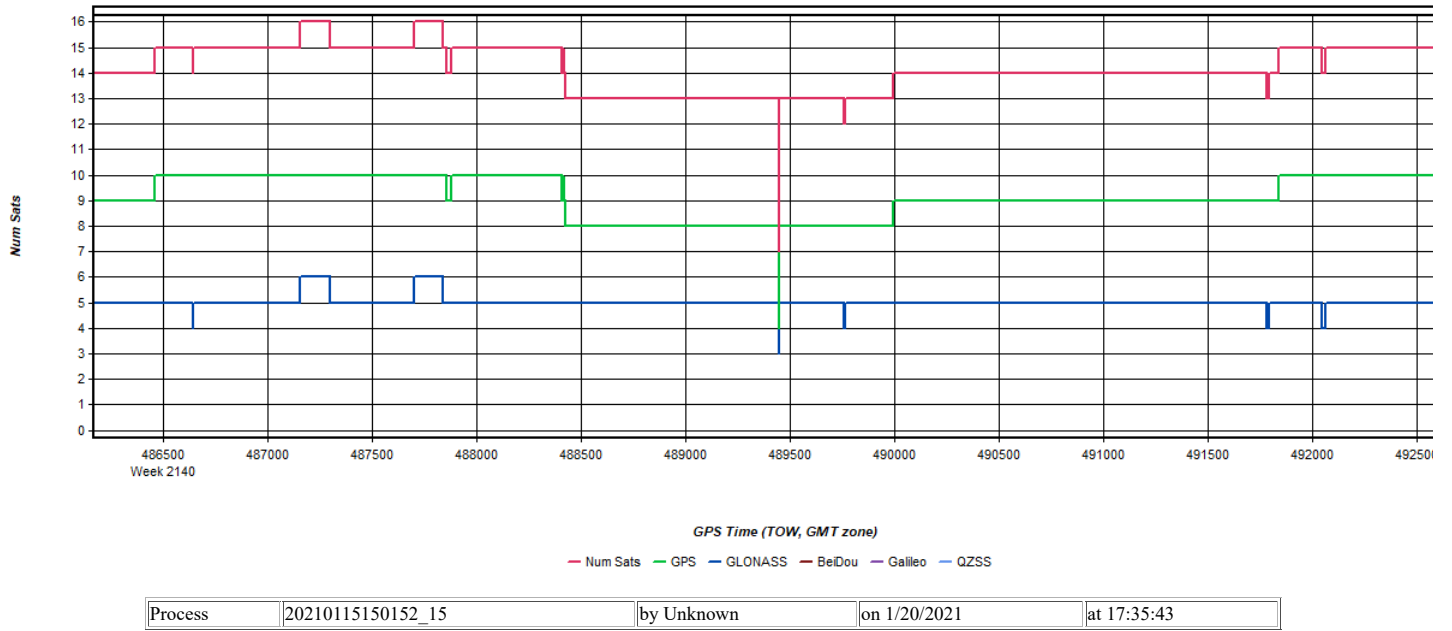


Figure 8: 20210115150152_15 [Smoothed TC Combined] - Status flag for IMU processing

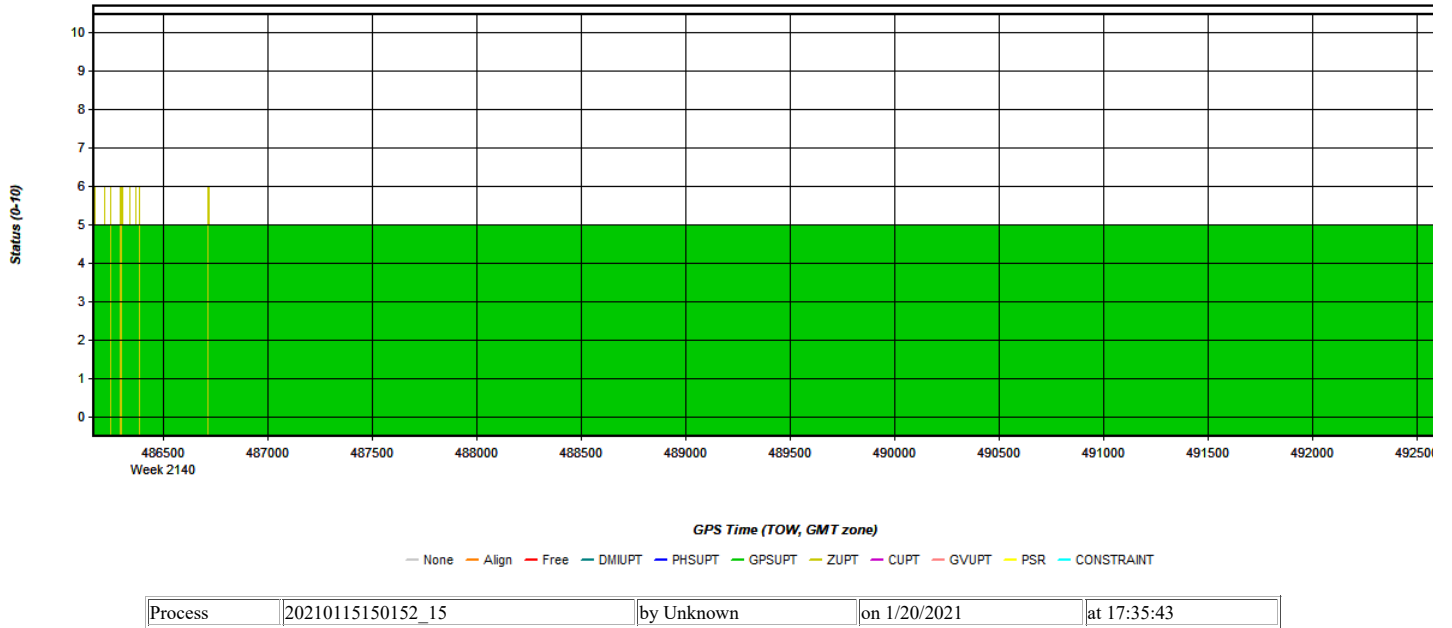
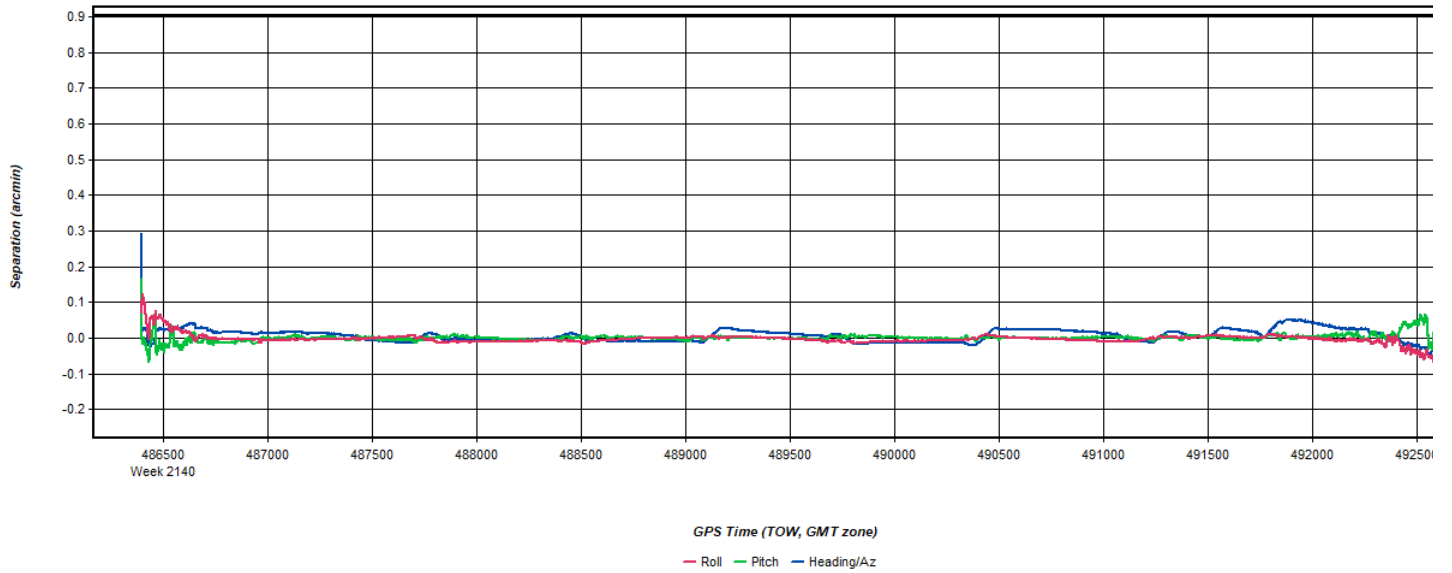
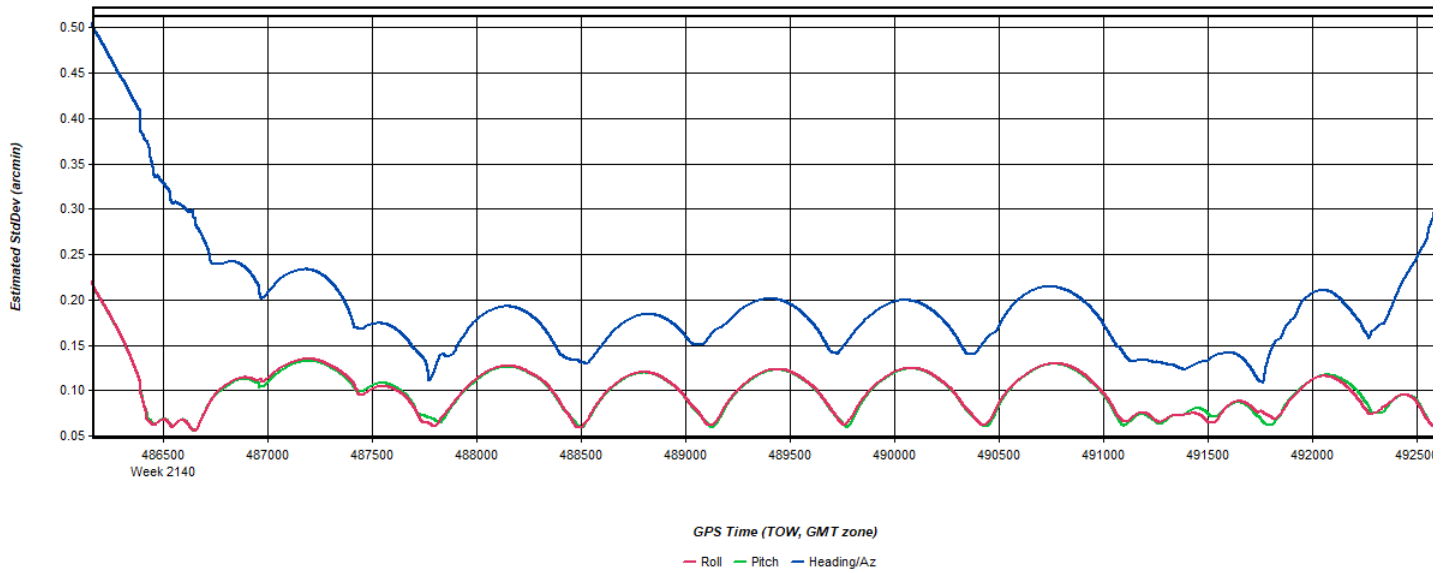


Figure 9: 20210115150152_15 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



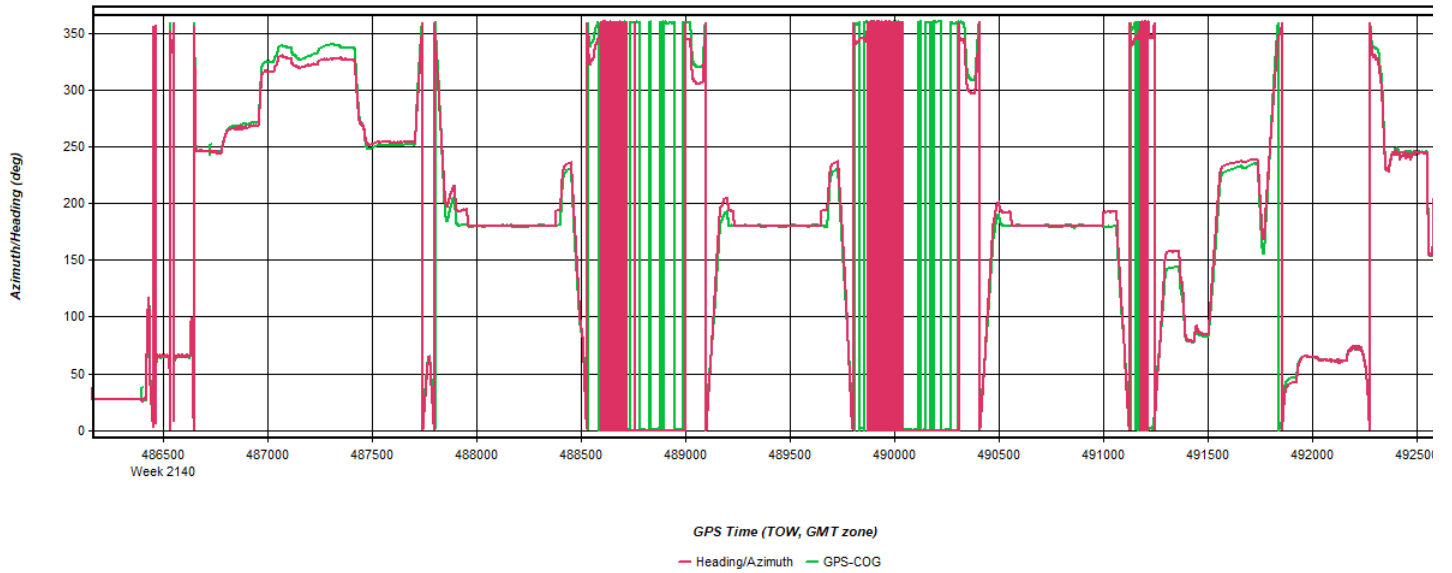
Process 20210115150152_15 by Unknown on 1/20/2021 at 17:35:43

Figure 10: 20210115150152_15 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



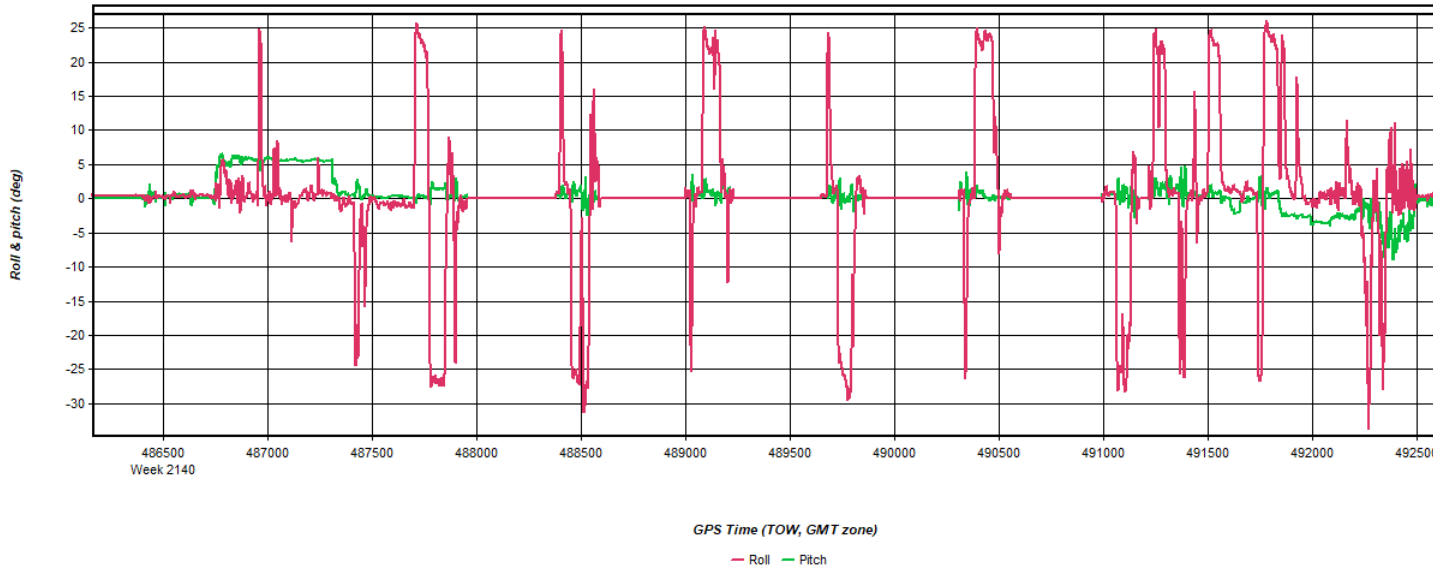
Process 20210115150152_15 by Unknown on 1/20/2021 at 17:35:43

Figure 11: 20210115150152_15 [Smoothed TC Combined] - Azimuth Plot



Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 12: 20210115150152_15 [Smoothed TC Combined] - Roll & Pitch Plot



Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 13: 20210115150152_15 [Smoothed TC Combined] - Velocity Profile Plot

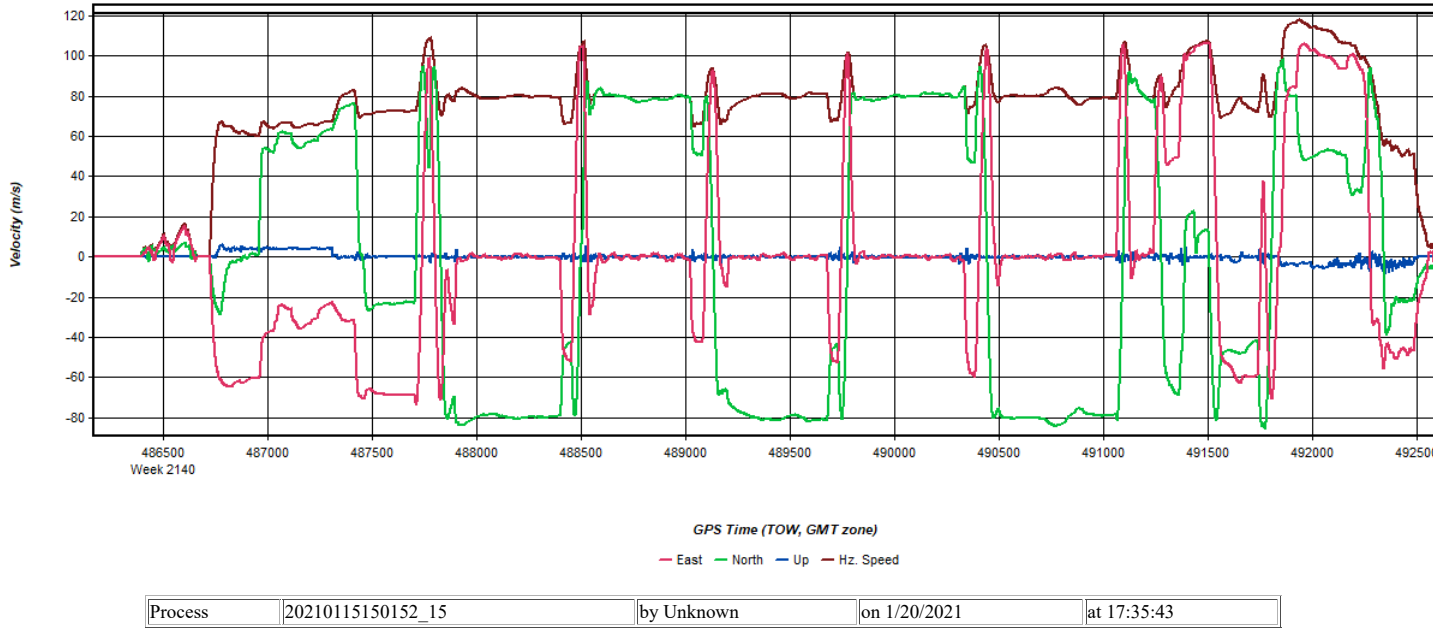


Figure 14: 20210115150152_15 [Smoothed TC Combined] - Body Frame Velocity Plot

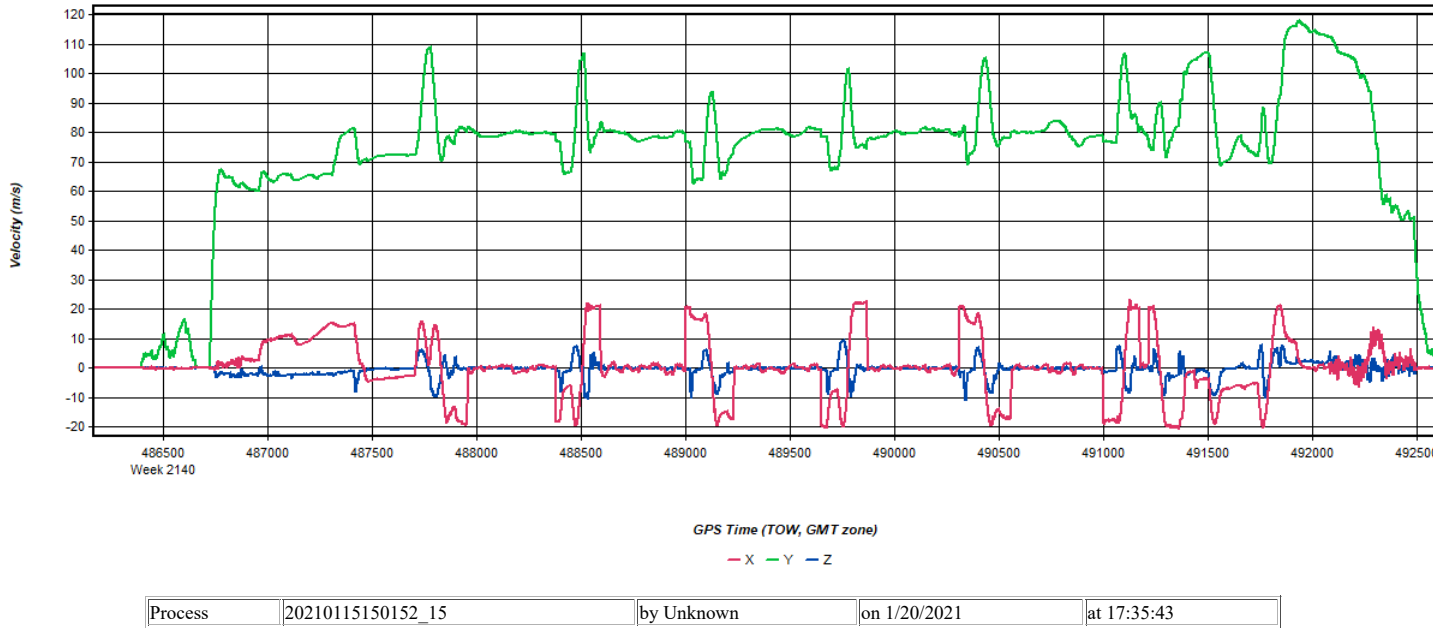
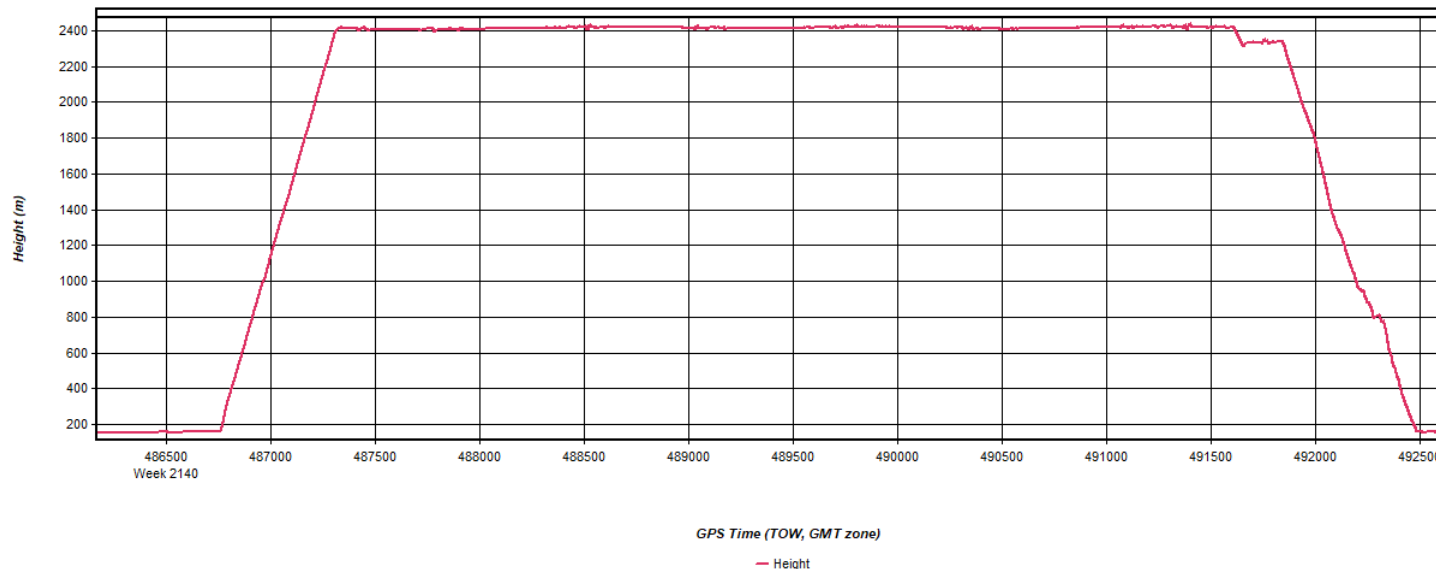
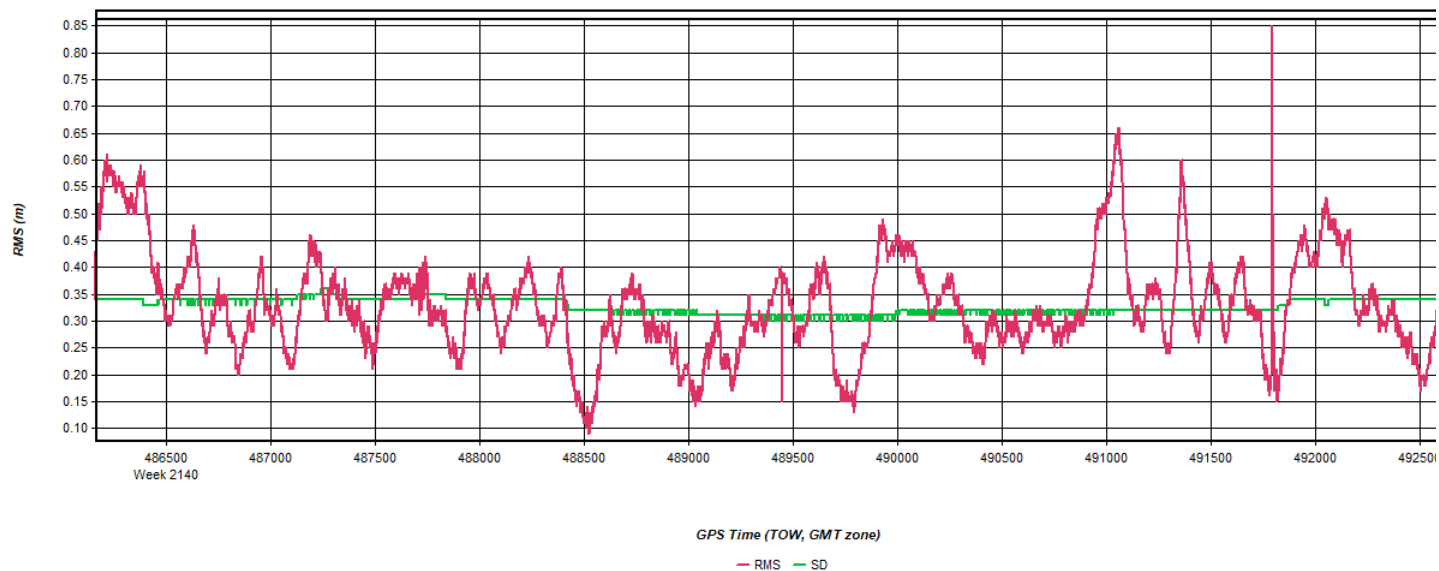


Figure 15: 20210115150152_15 [Smoothed TC Combined] - Height Profile Plot



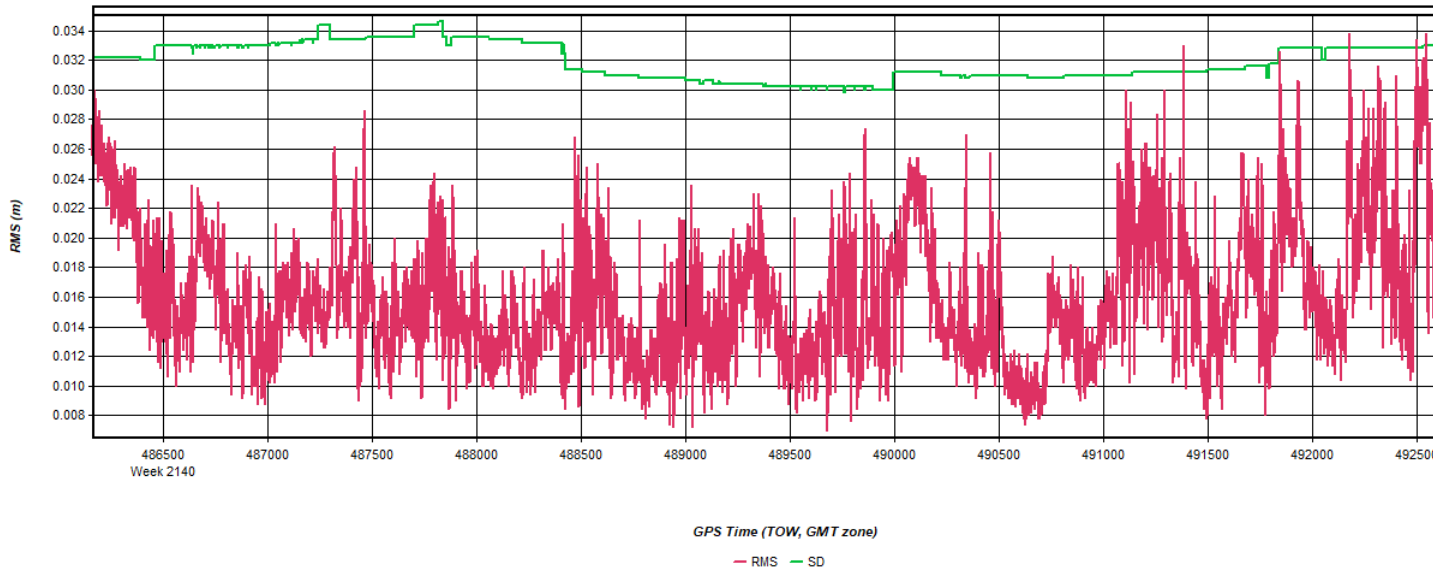
Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 16: 20210115150152_15 [Smoothed TC Combined] - C/A Code Residual RMS Plot



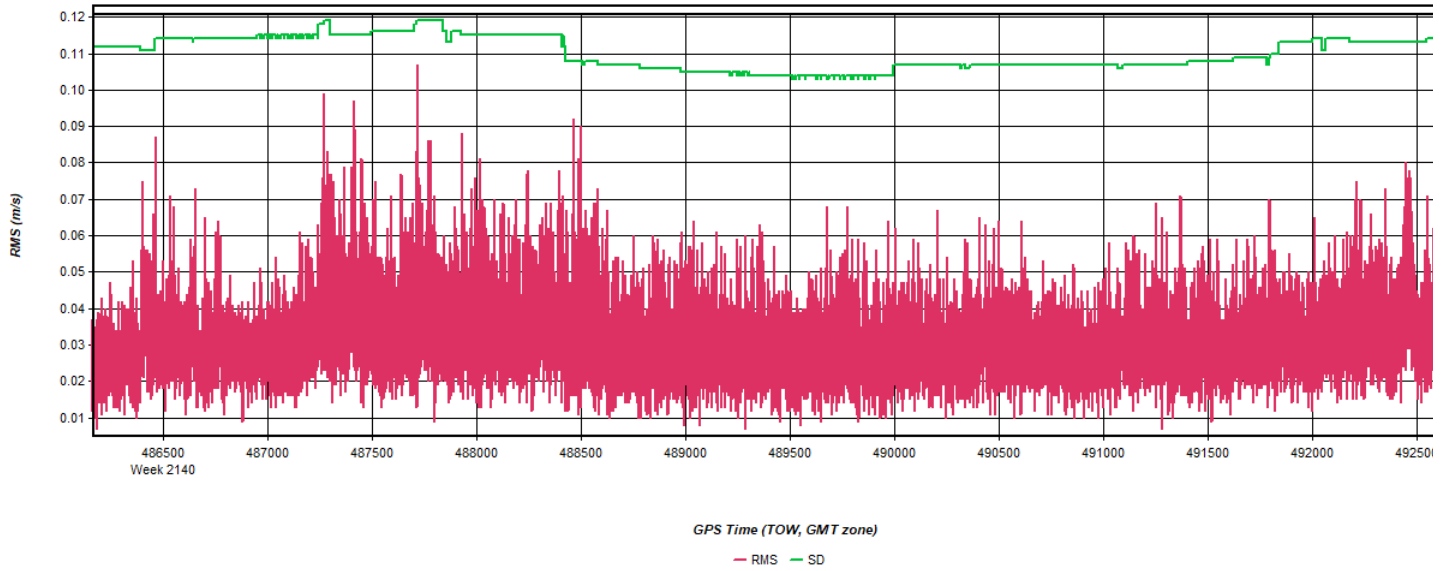
Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 17: 20210115150152_15 [Smoothed TC Combined] - Carrier Residual RMS Plot



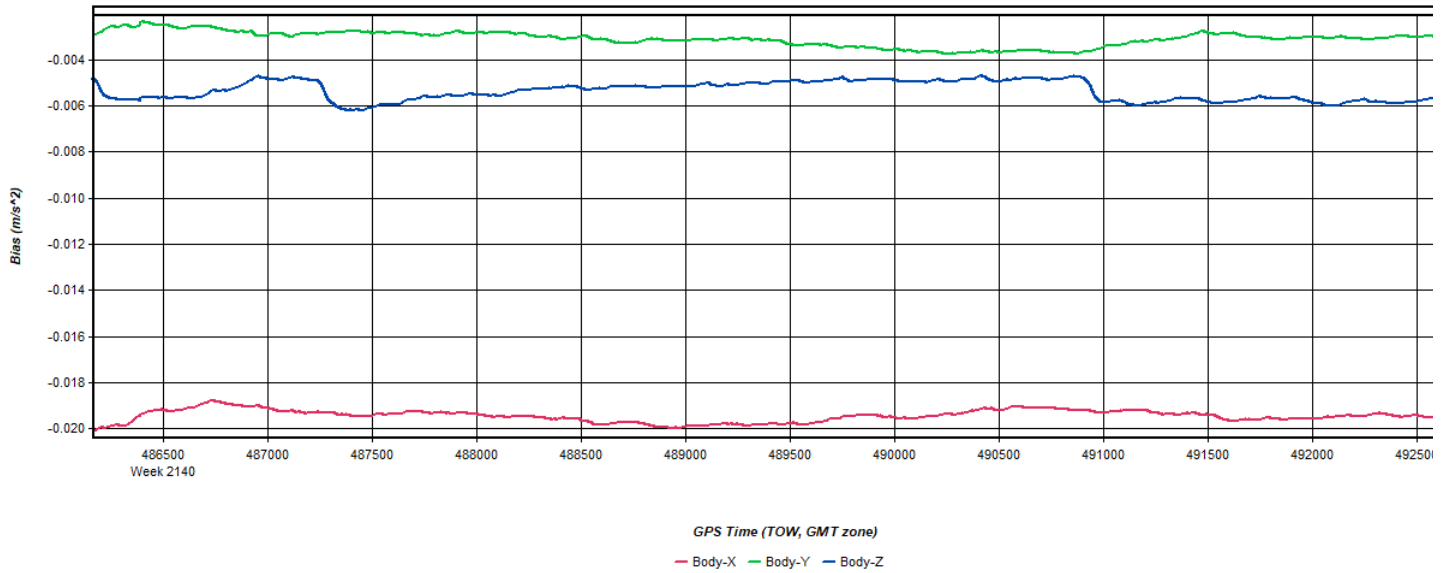
Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 18: 20210115150152_15 [Smoothed TC Combined] - Doppler Residual RMS Plot



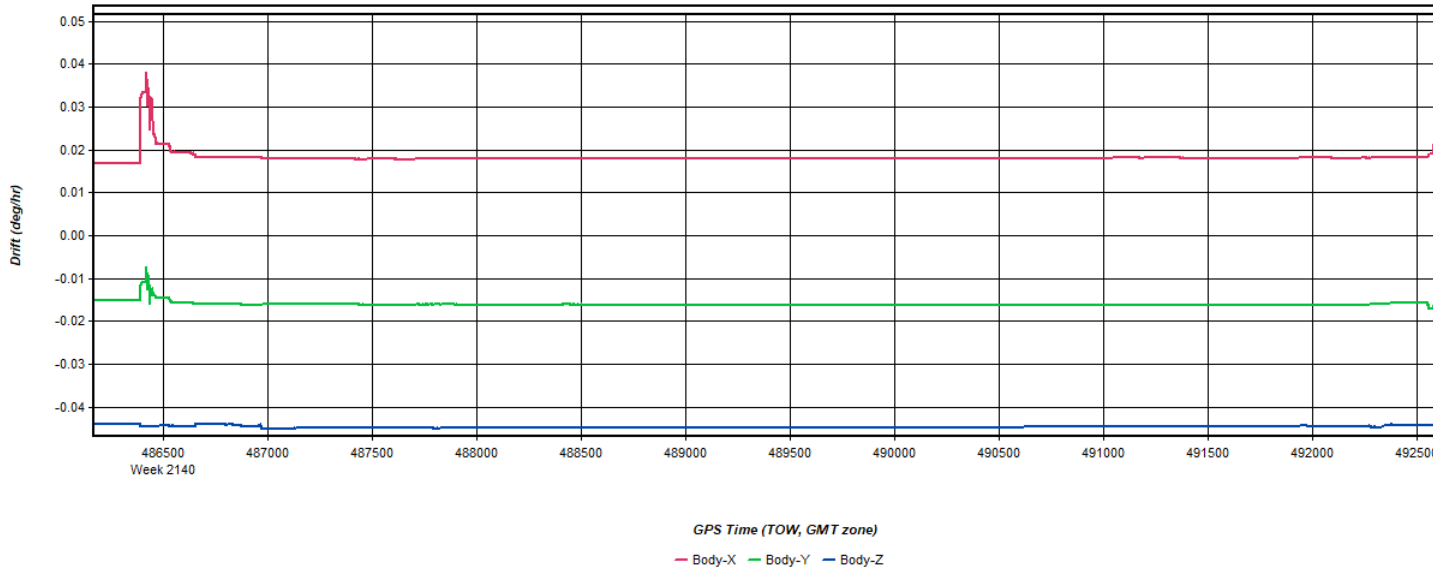
Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 19: 20210115150152_15 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Figure 20: 20210115150152_15 [Smoothed TC Combined] - Gyro Drift Plot

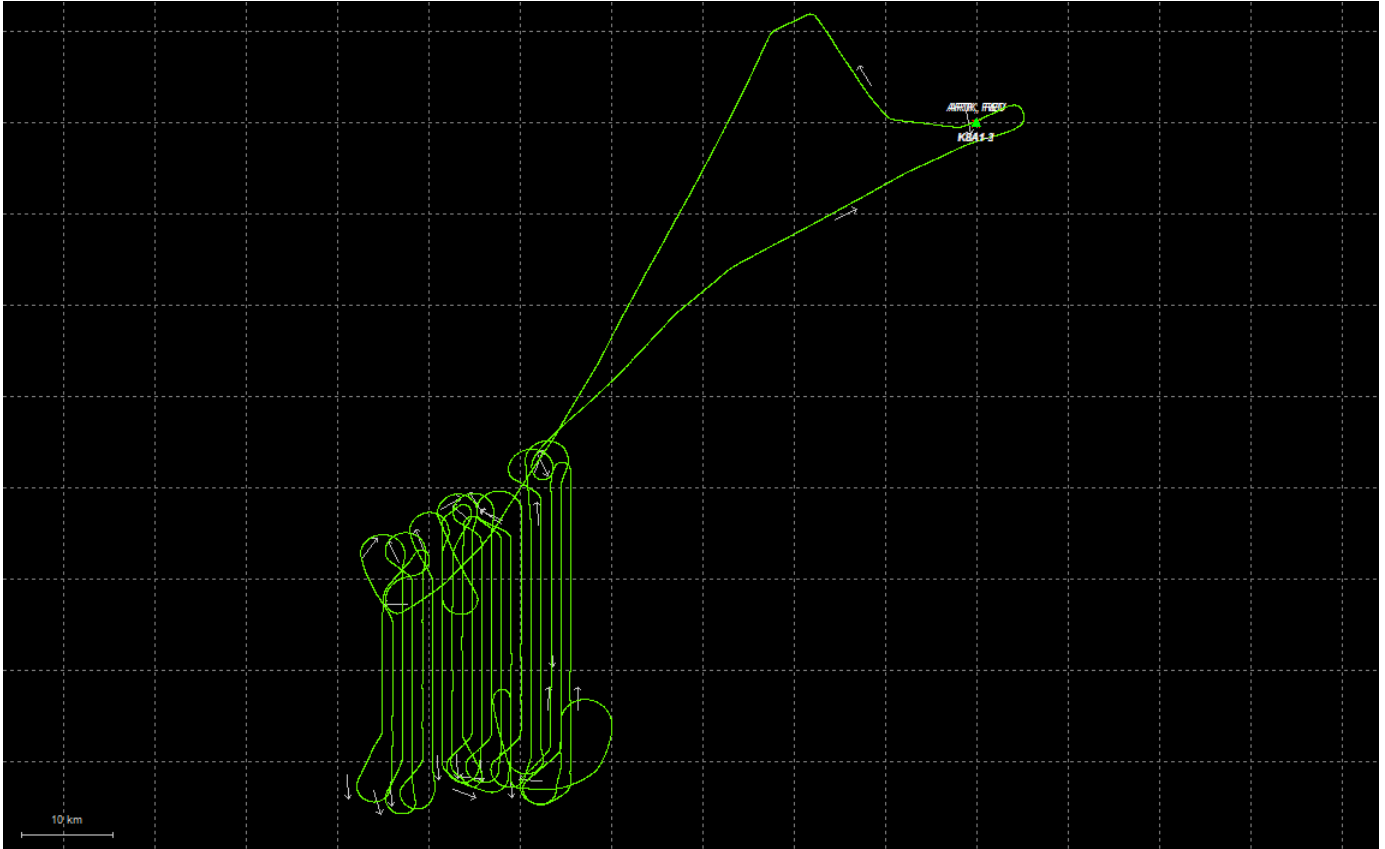


Process	20210115150152_15	by Unknown	on 1/20/2021	at 17:35:43
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Output Results for 20210117153931_16

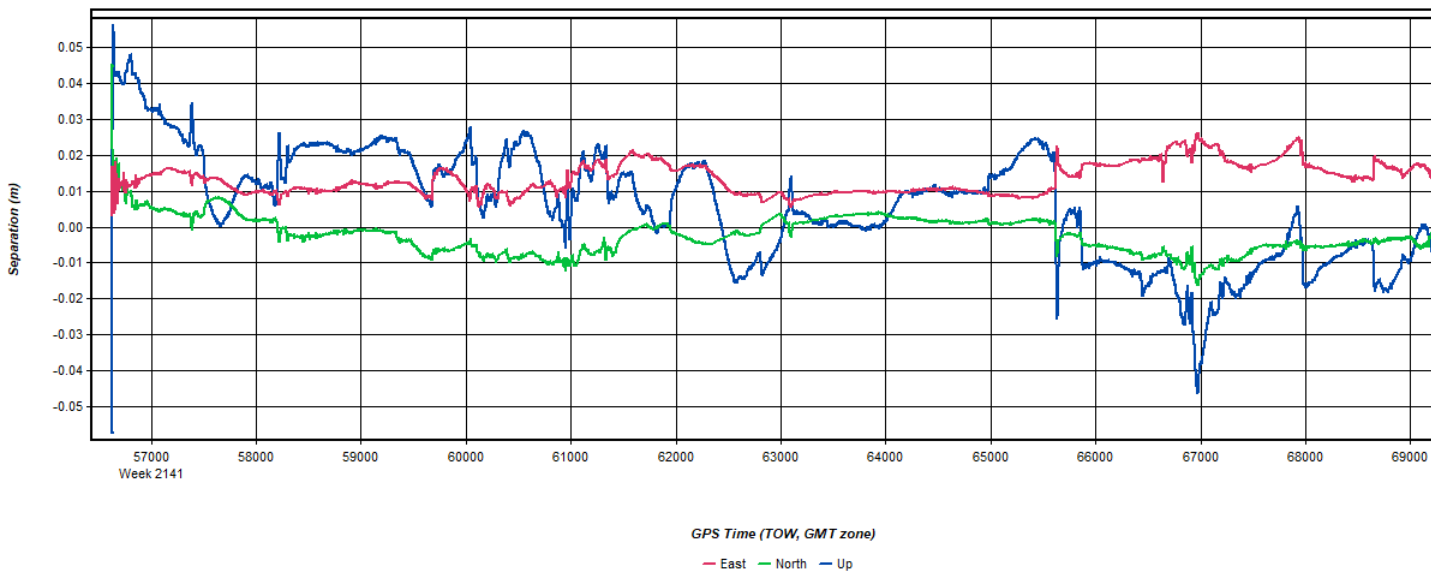
Inertial Explorer Version 8.90.2124
01/21/2021

Figure 1: Smoothed TC Combined - Map



Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 2: 20210117153931_16 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 3: 20210117153931_16 [Smoothed TC Combined] - Float or Fixed Ambiguity

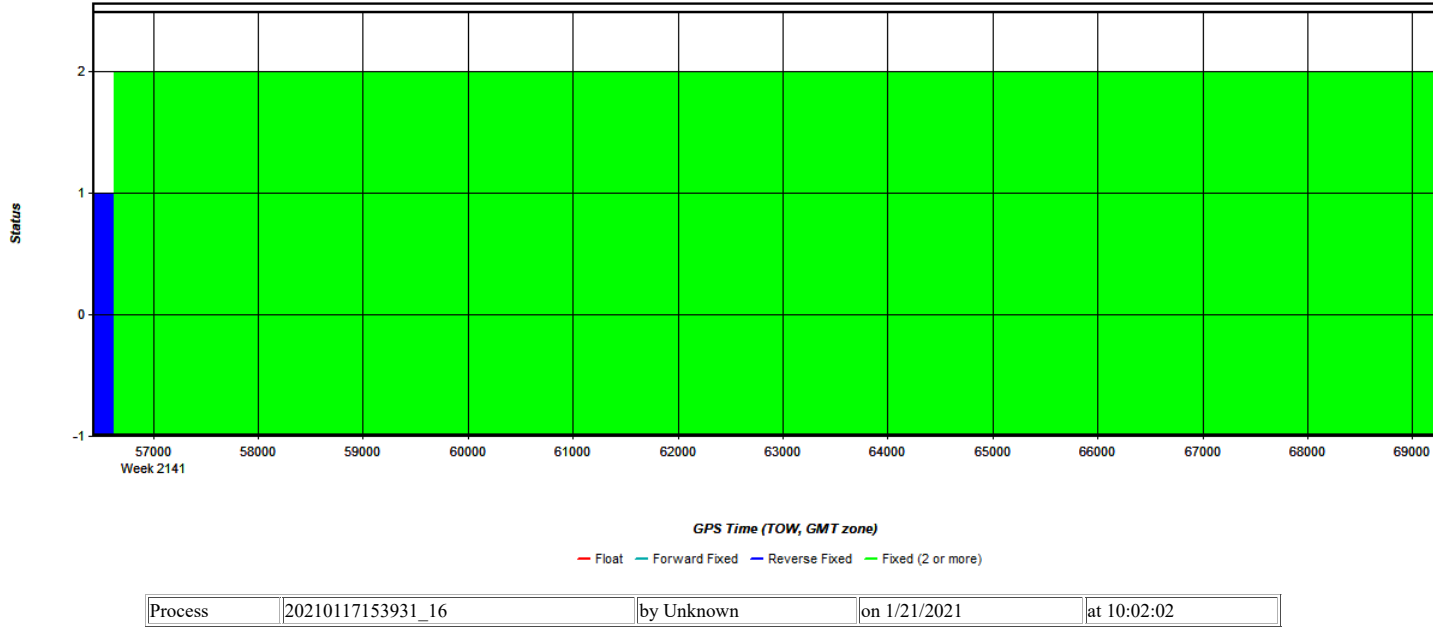


Figure 4: 20210117153931_16 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

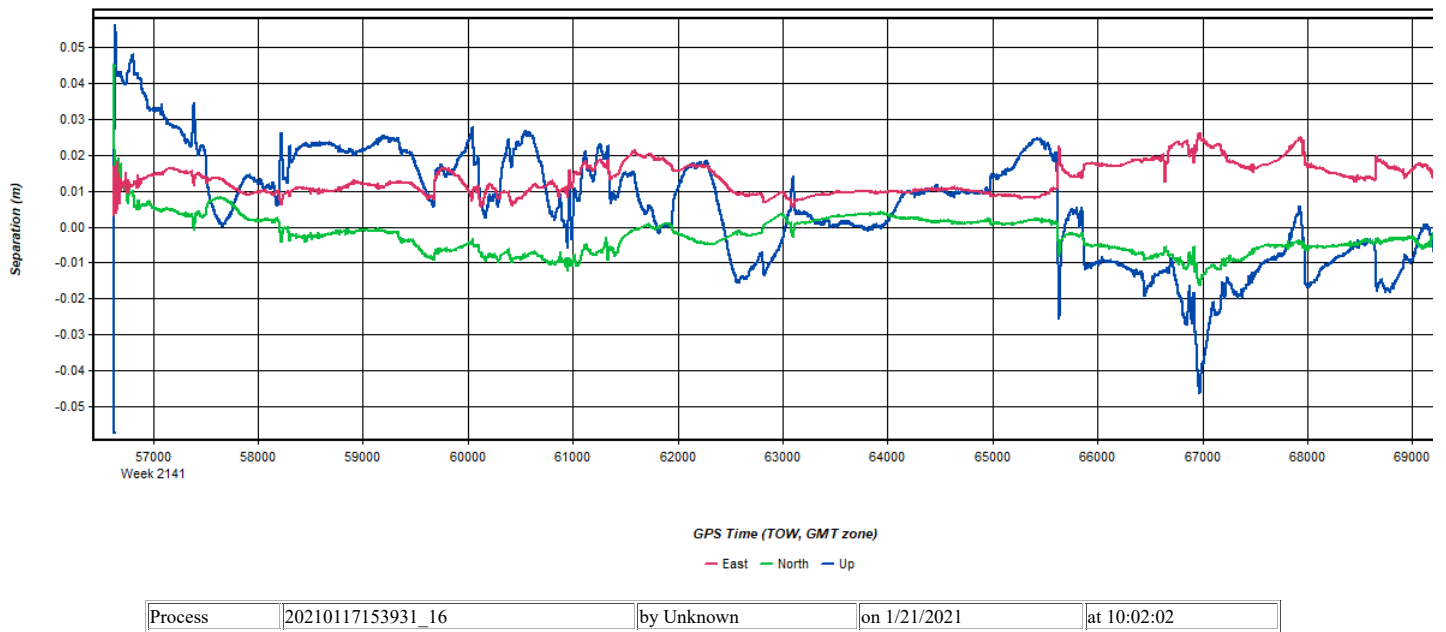
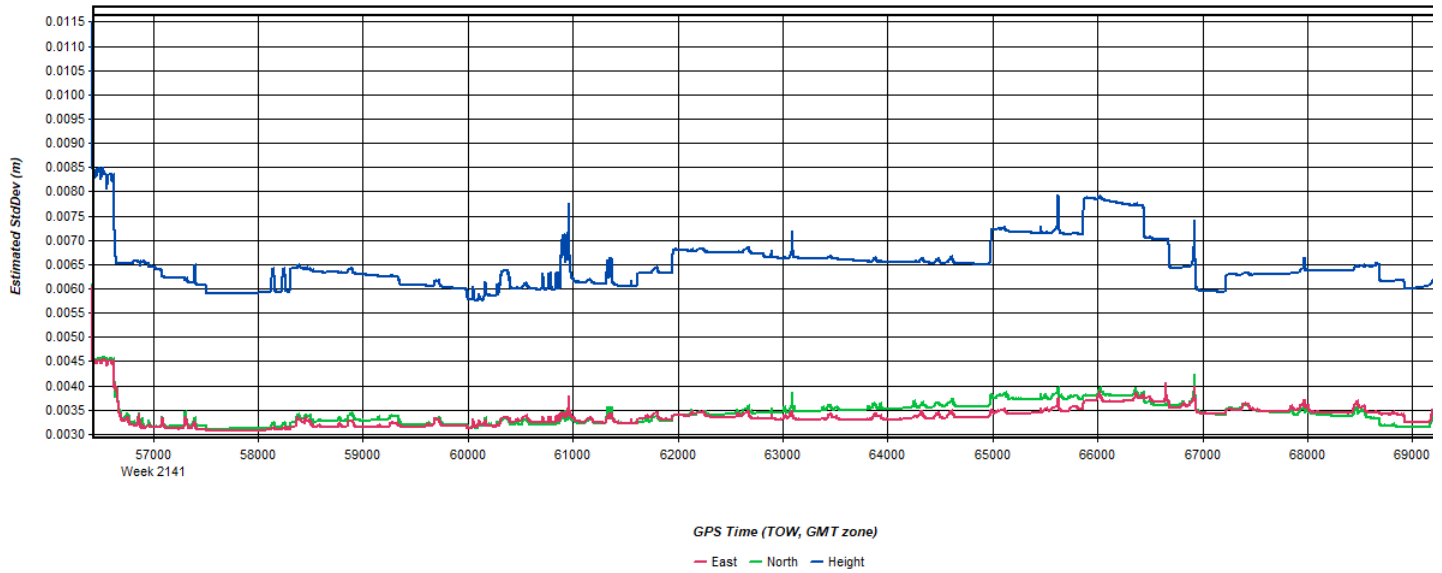
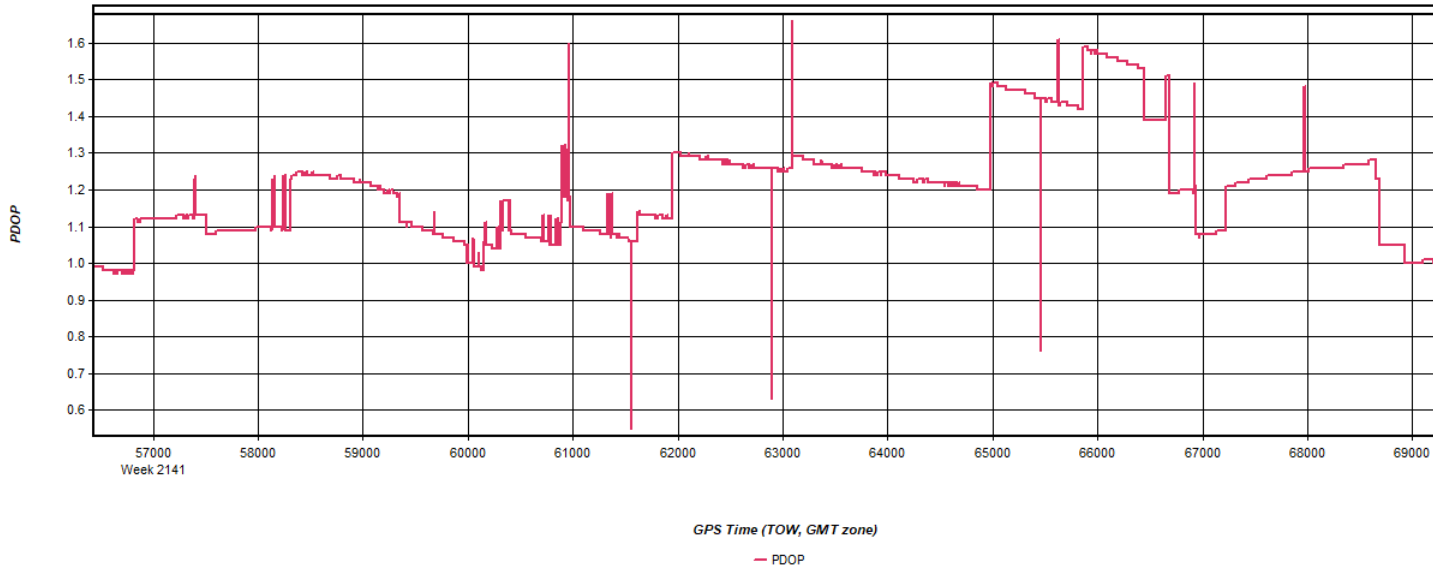


Figure 5: 20210117153931_16 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 6: 20210117153931_16 [Smoothed TC Combined] - PDOP Plot



Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 7: 20210117153931_16 [Smoothed TC Combined] - Number of Satellites Line Plot

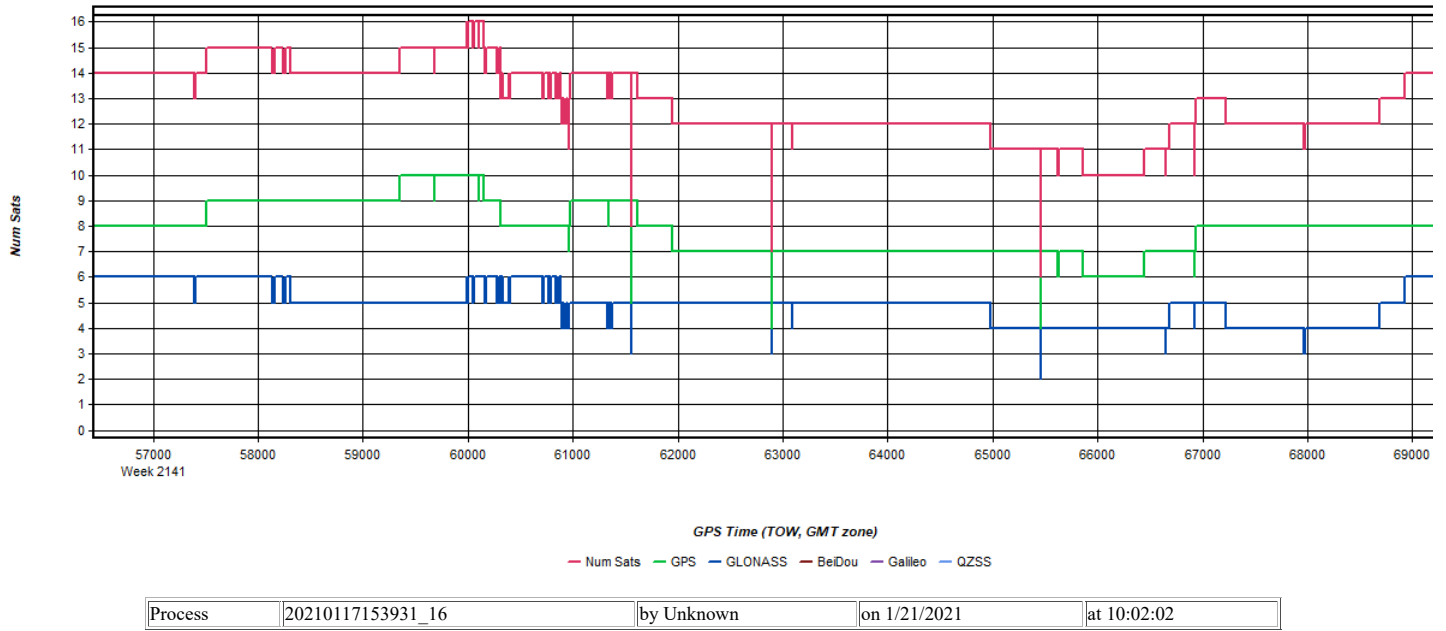


Figure 8: 20210117153931_16 [Smoothed TC Combined] - Status flag for IMU processing

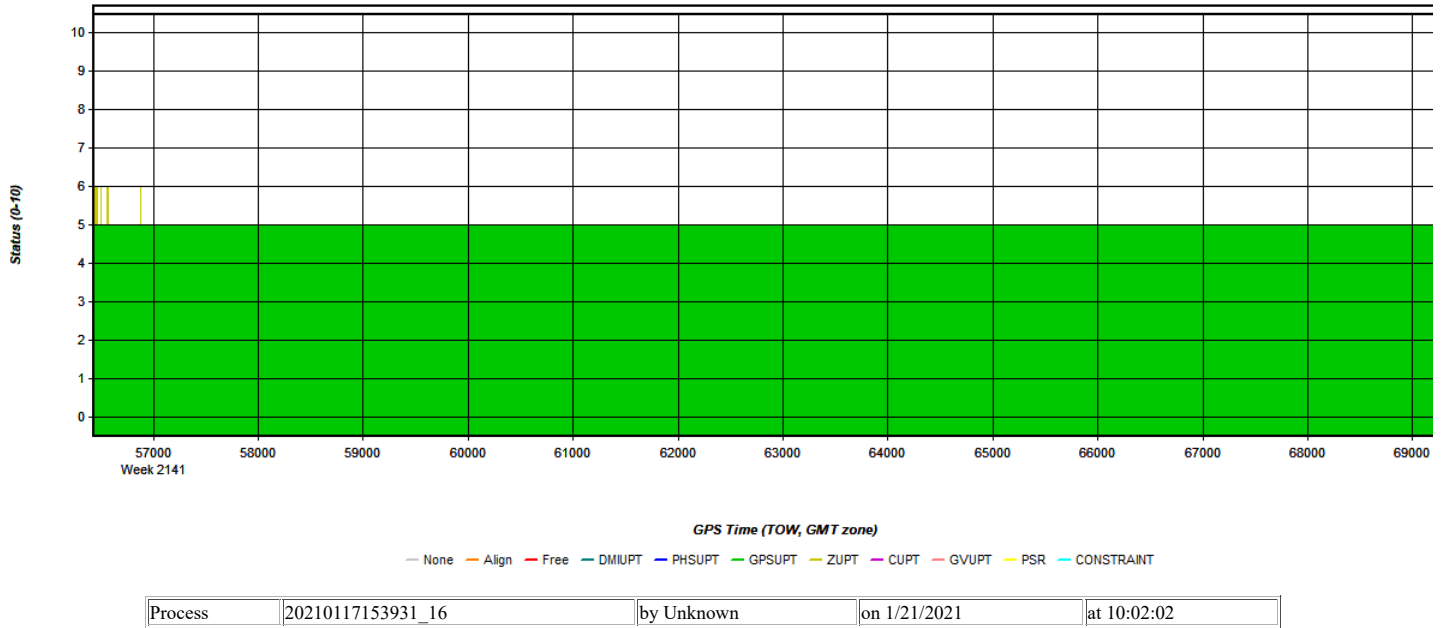


Figure 9: 20210117153931_16 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

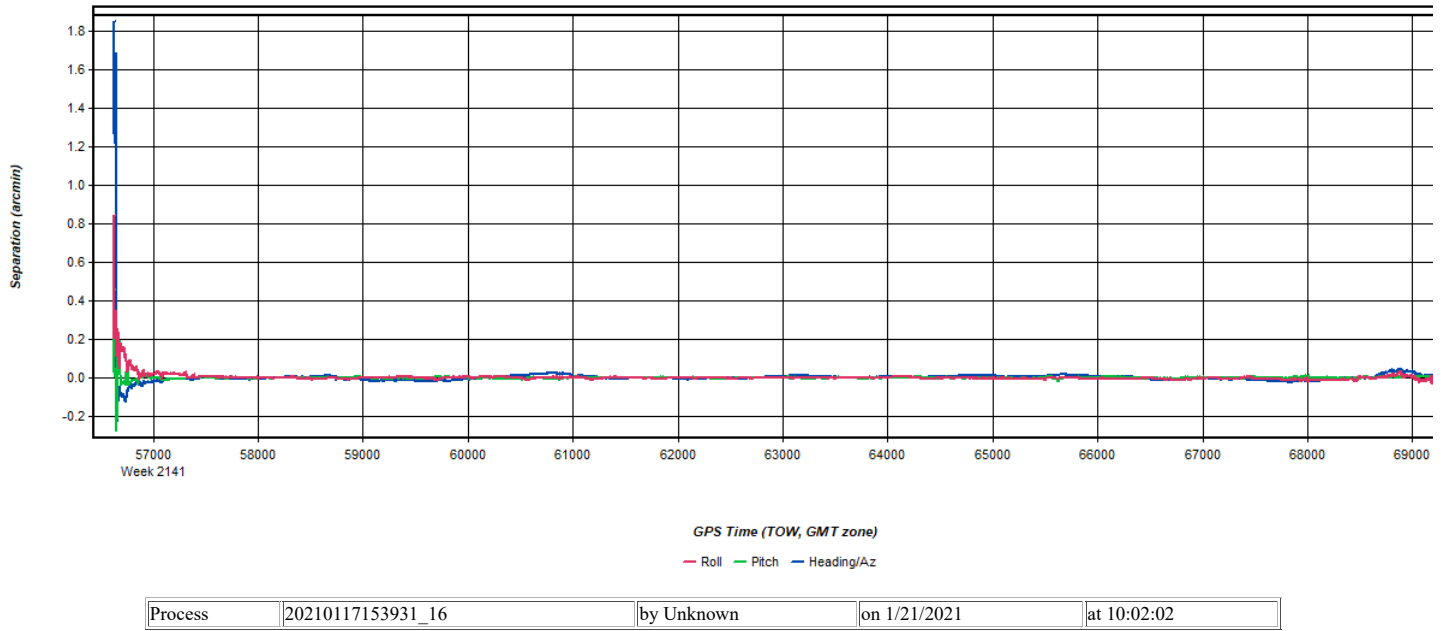


Figure 10: 20210117153931_16 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

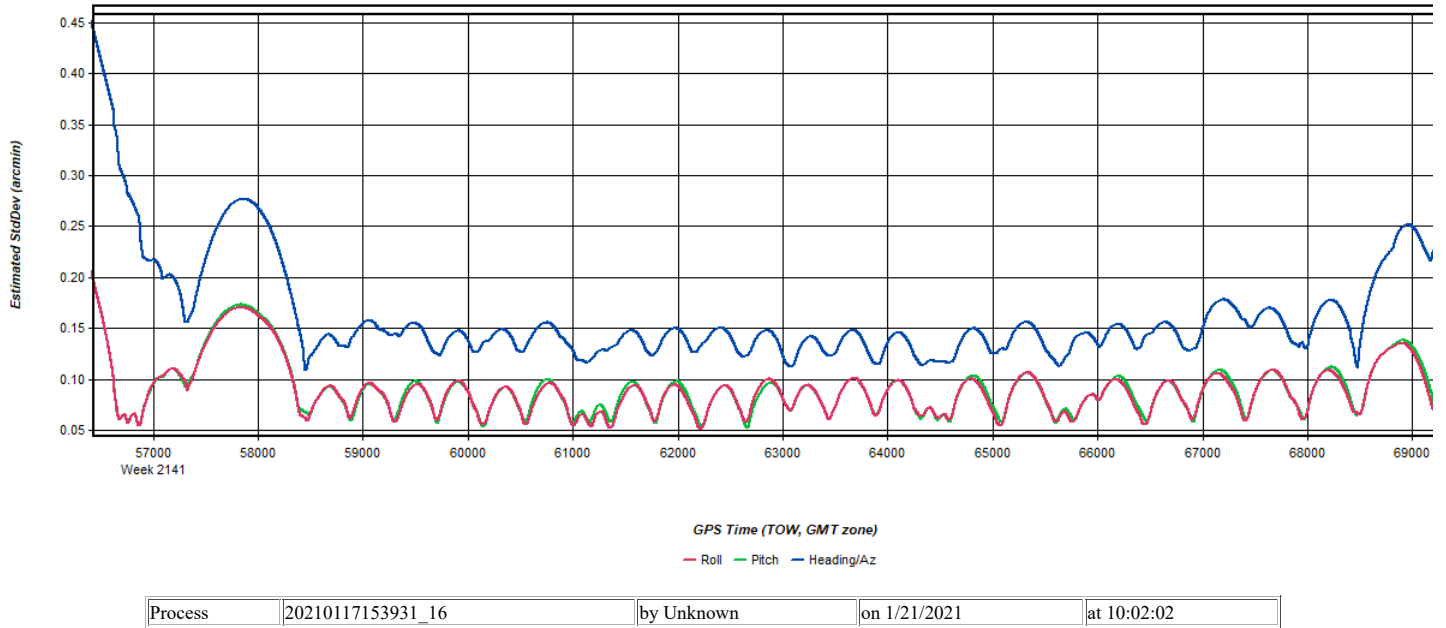
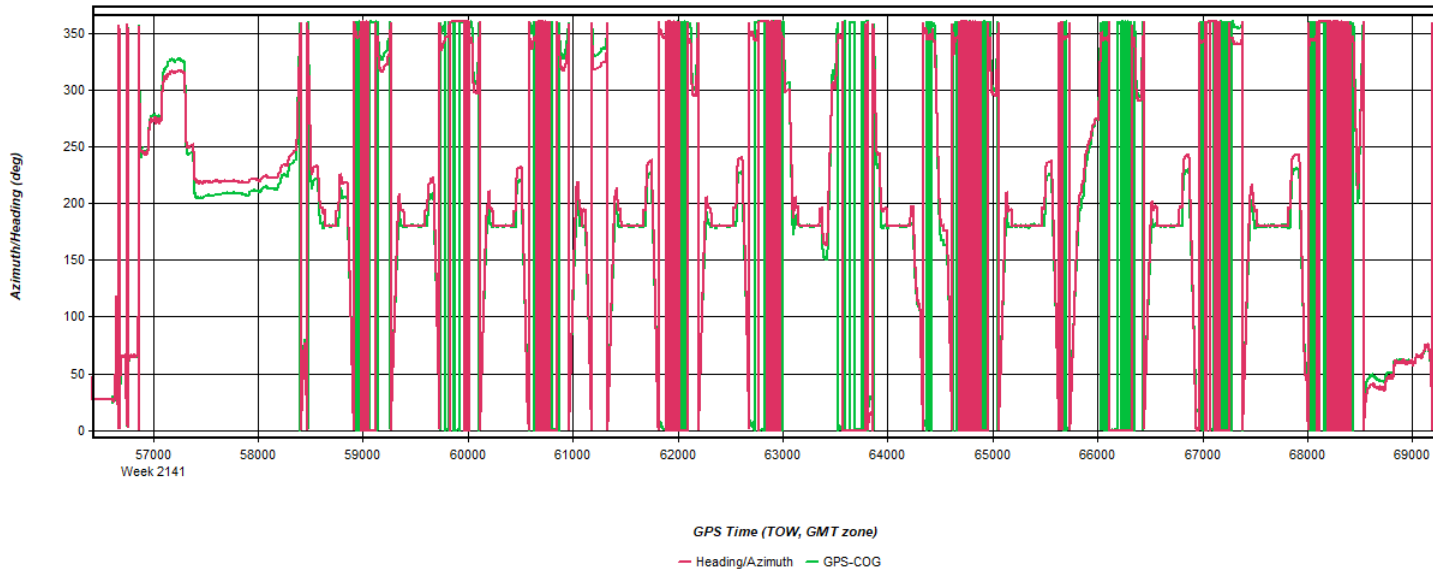
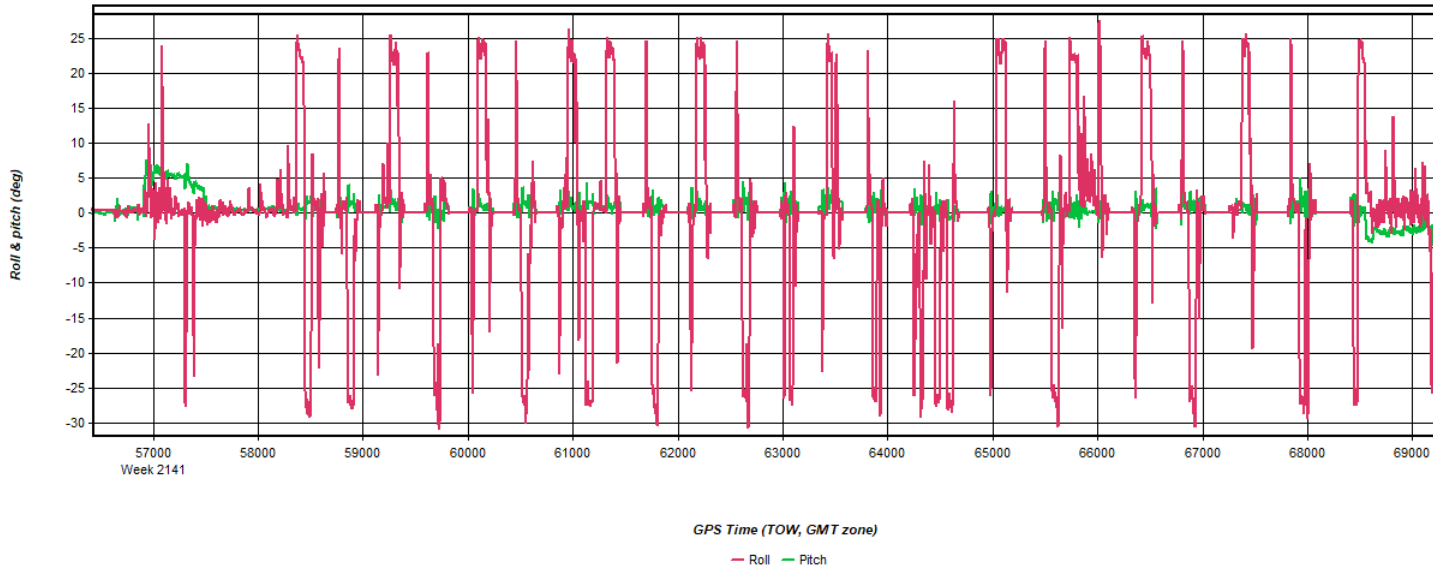


Figure 11: 20210117153931_16 [Smoothed TC Combined] - Azimuth Plot



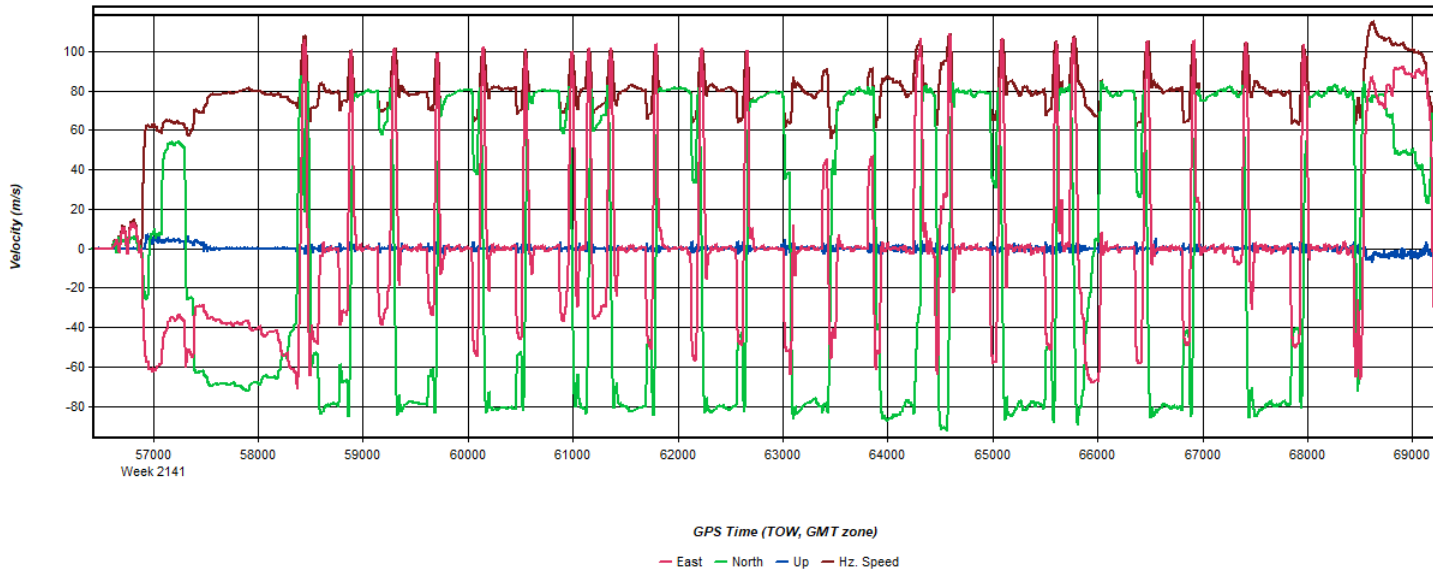
Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 12: 20210117153931_16 [Smoothed TC Combined] - Roll & Pitch Plot



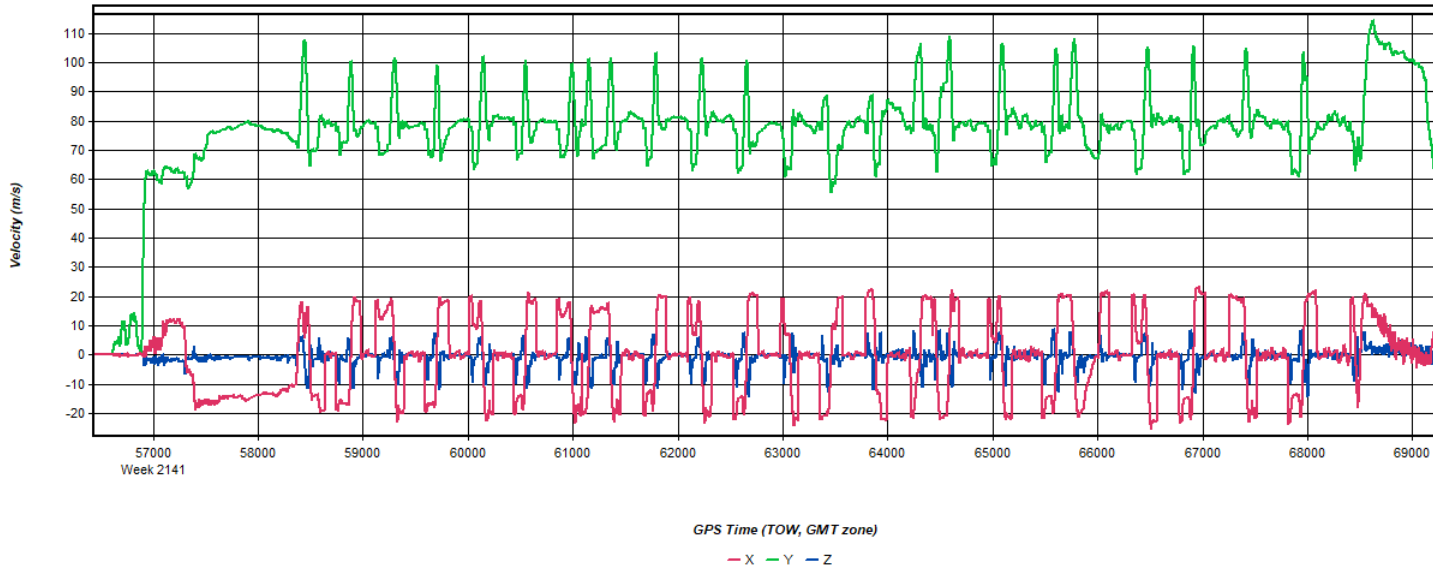
Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 13: 20210117153931_16 [Smoothed TC Combined] - Velocity Profile Plot



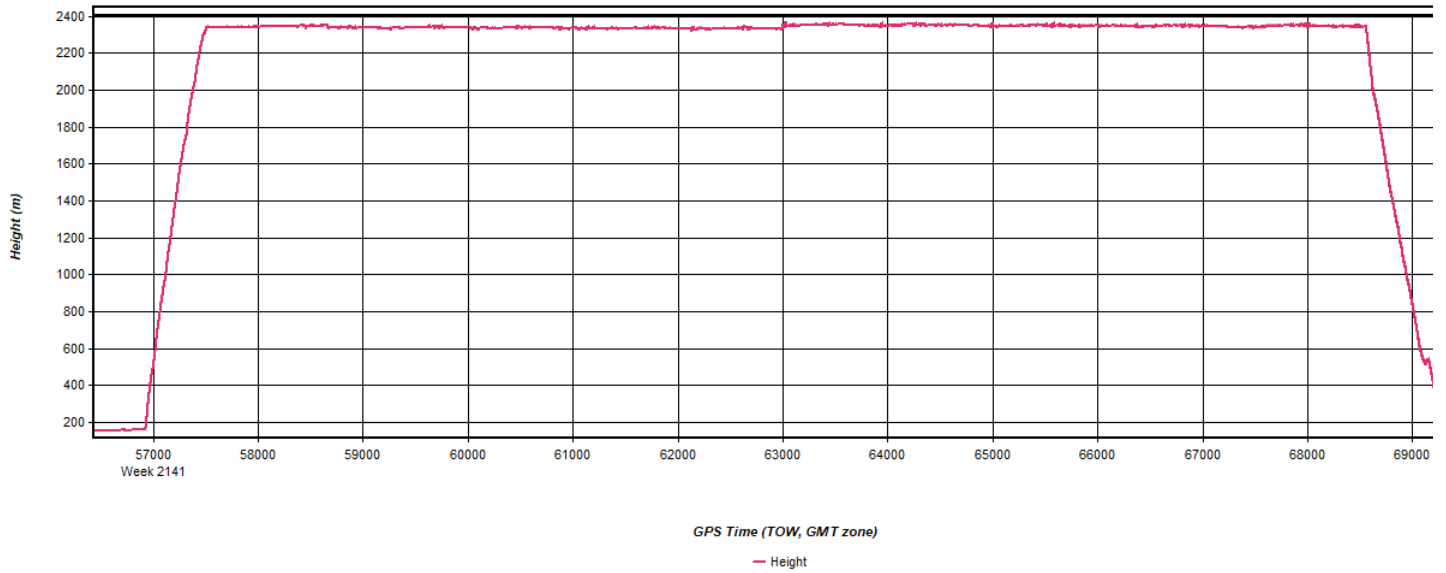
Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 14: 20210117153931_16 [Smoothed TC Combined] - Body Frame Velocity Plot



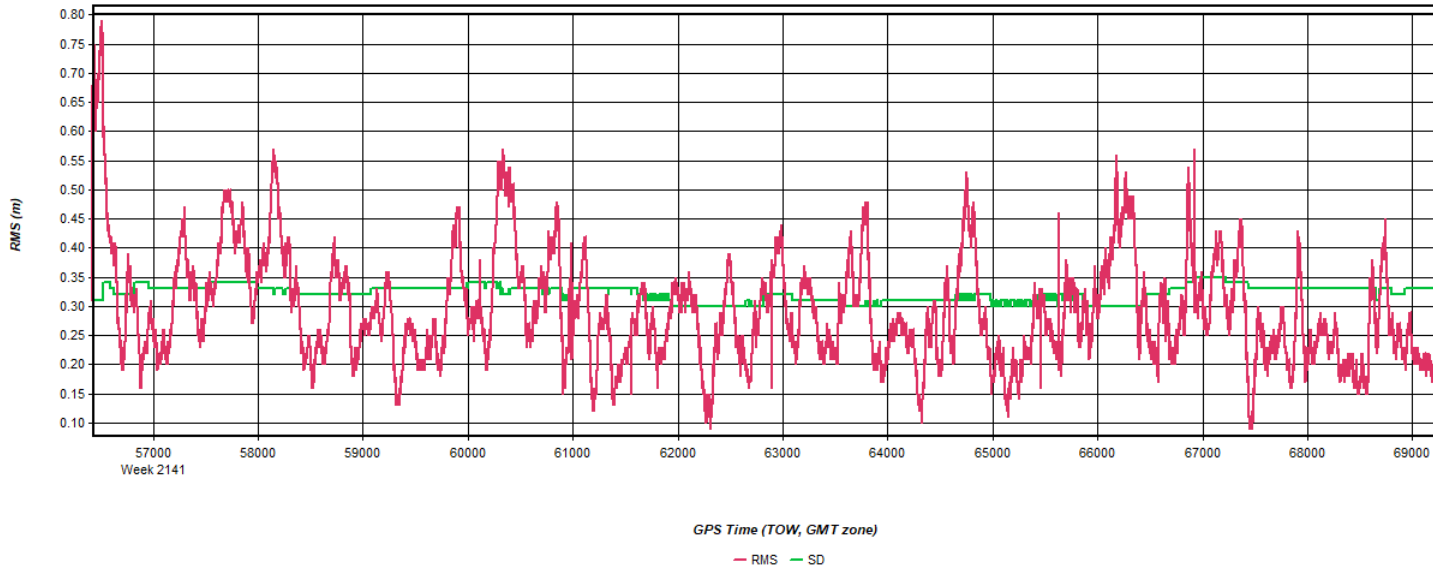
Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 15: 20210117153931_16 [Smoothed TC Combined] - Height Profile Plot



Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 16: 20210117153931_16 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 17: 20210117153931_16 [Smoothed TC Combined] - Carrier Residual RMS Plot

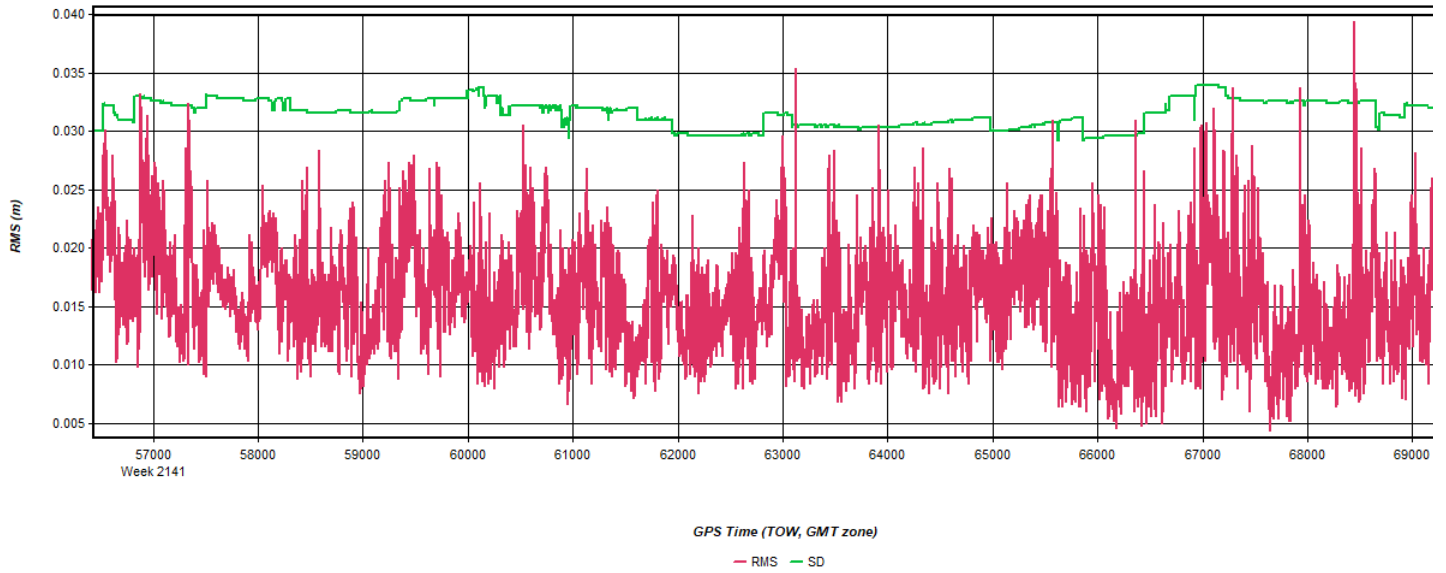


Figure 18: 20210117153931_16 [Smoothed TC Combined] - Doppler Residual RMS Plot

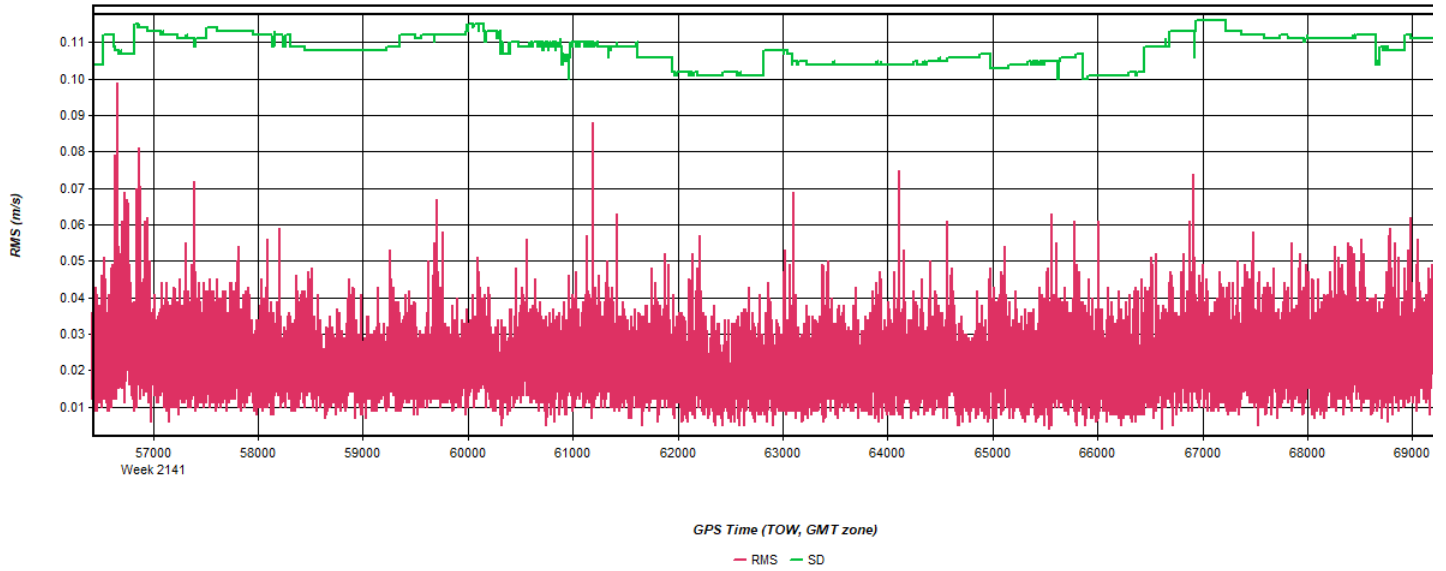
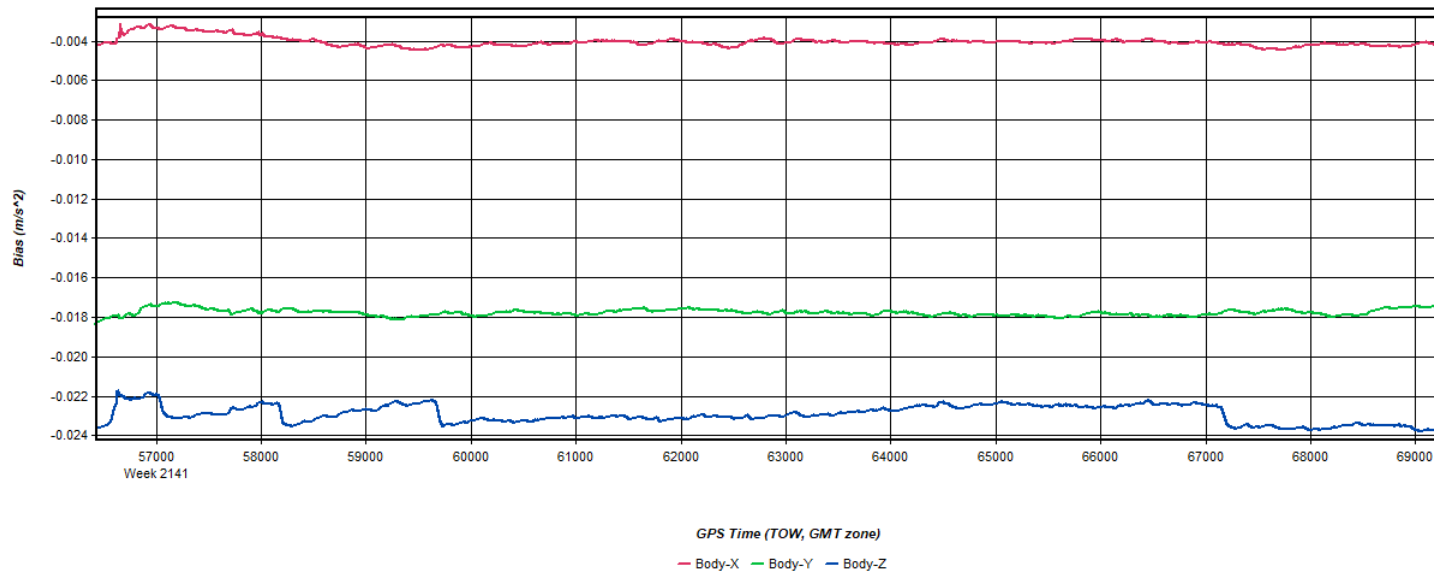
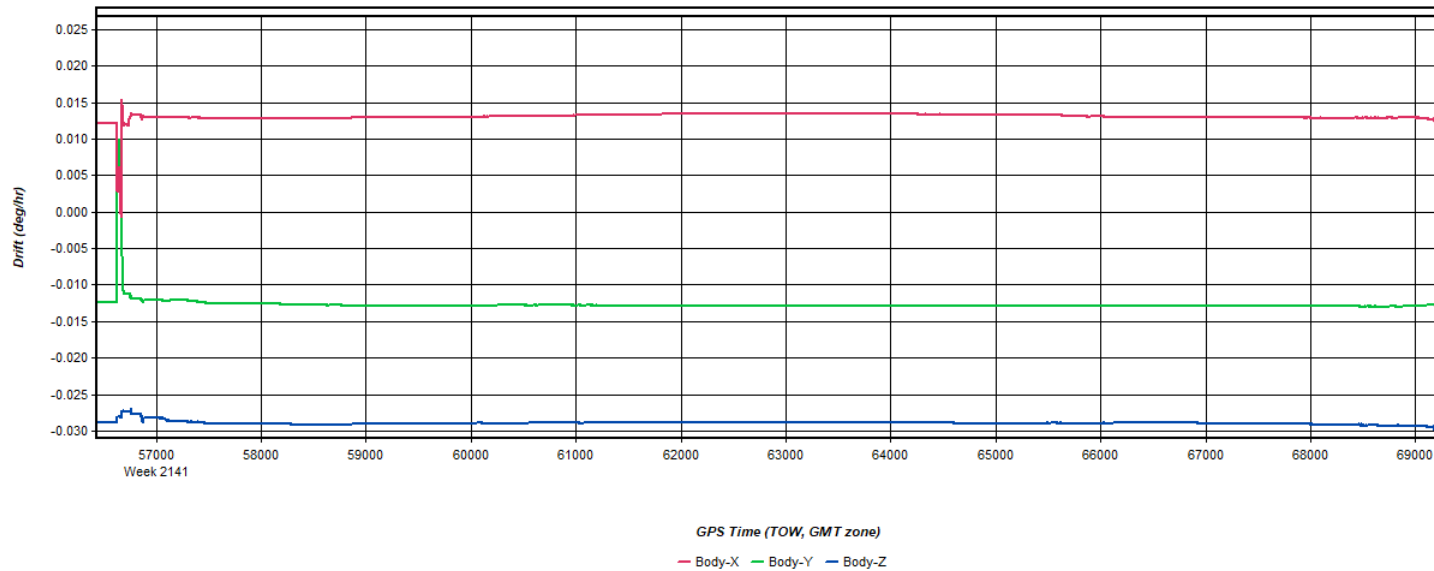


Figure 19: 20210117153931_16 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Figure 20: 20210117153931_16 [Smoothed TC Combined] - Gyro Drift Plot

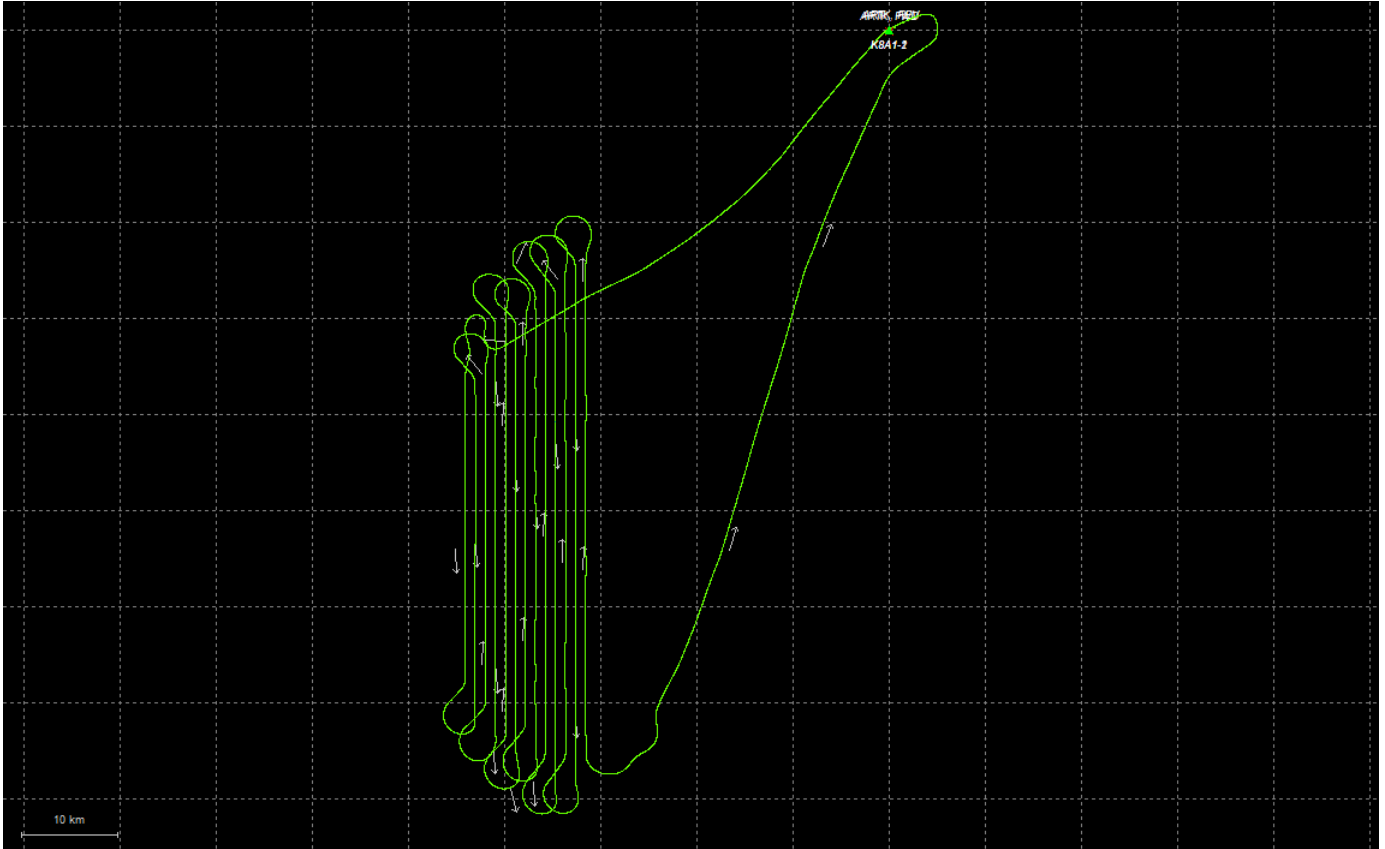


Process	20210117153931_16	by Unknown	on 1/21/2021	at 10:02:02
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Output Results for 20210118145035_17

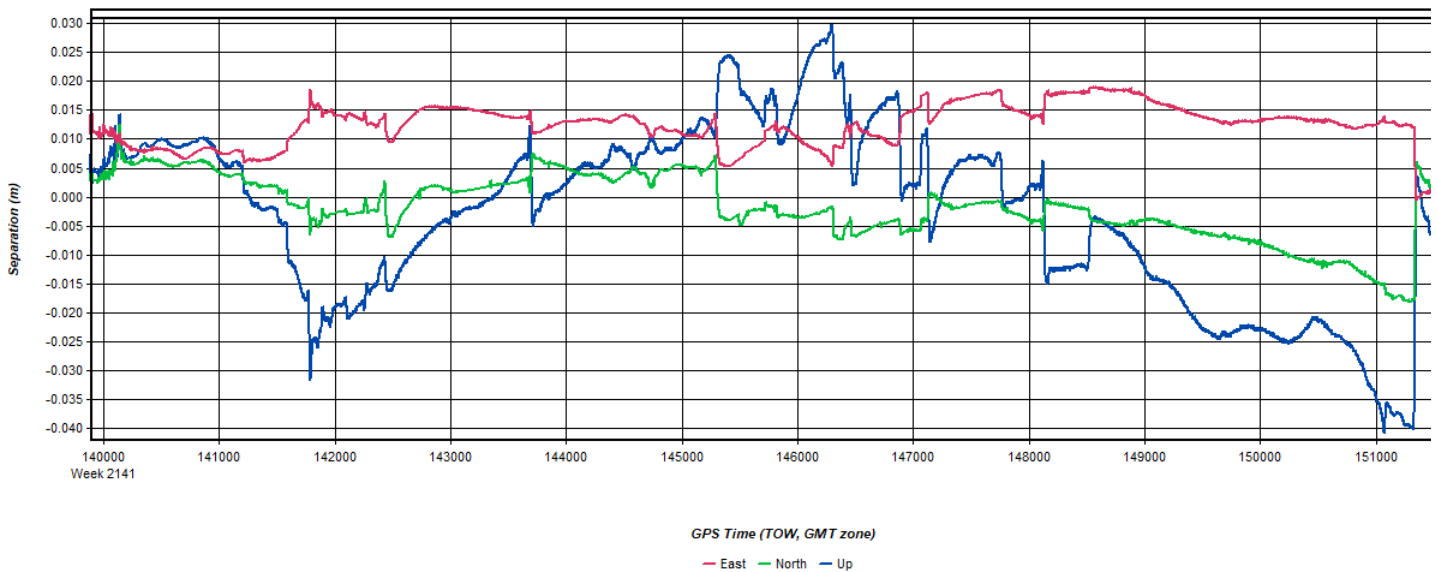
Inertial Explorer Version 8.90.2124
01/21/2021

Figure 1: Smoothed TC Combined - Map



Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 2: 20210118145035_17 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 3: 20210118145035_17 [Smoothed TC Combined] - Float or Fixed Ambiguity

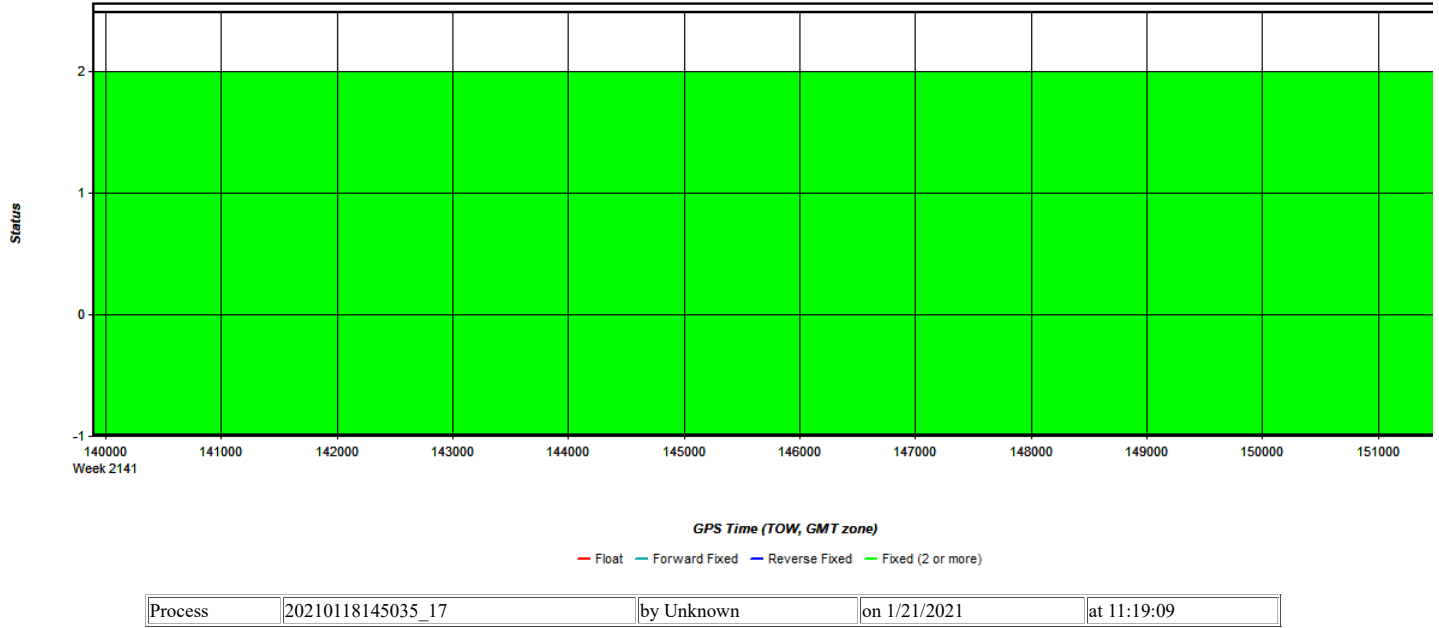


Figure 4: 20210118145035_17 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

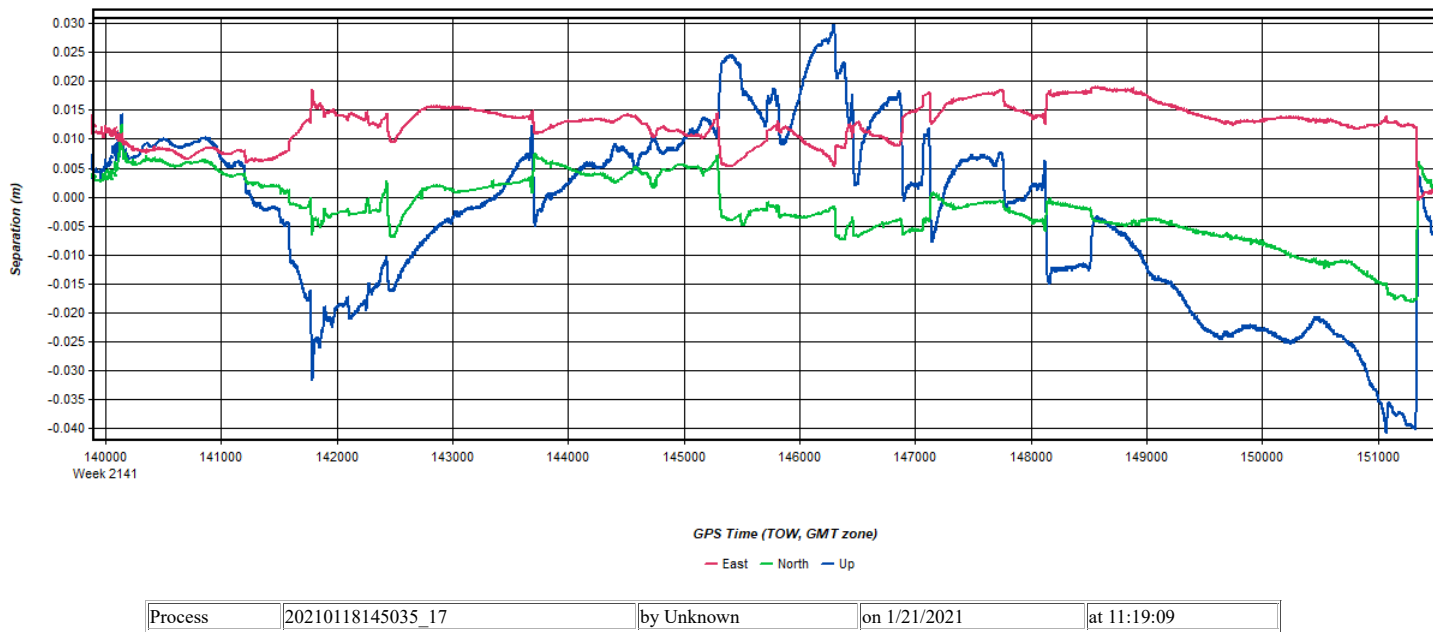
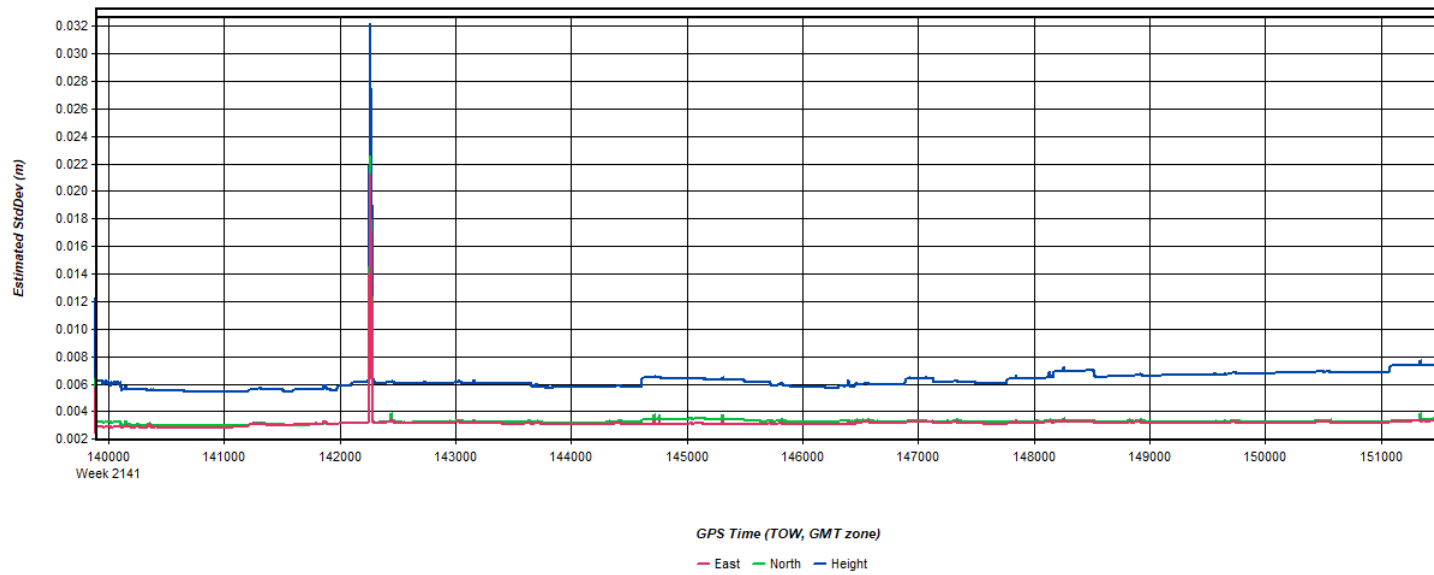
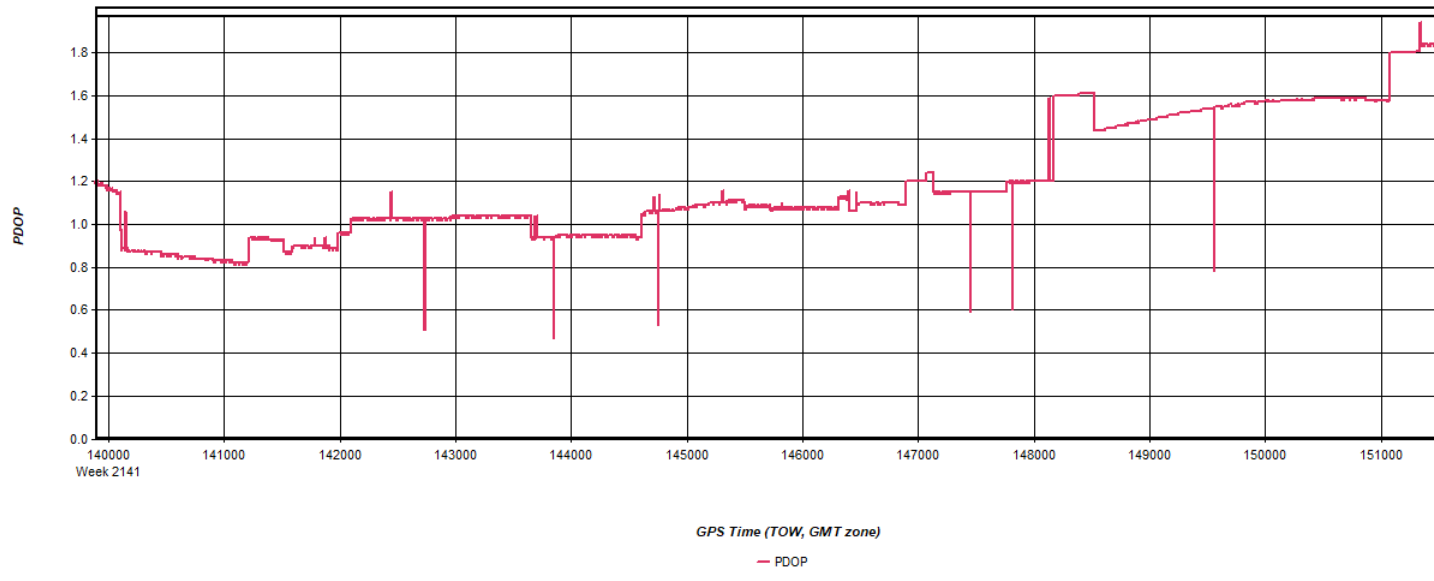


Figure 5: 20210118145035_17 [Smoothed TC Combined] - Estimated Position Accuracy Plot



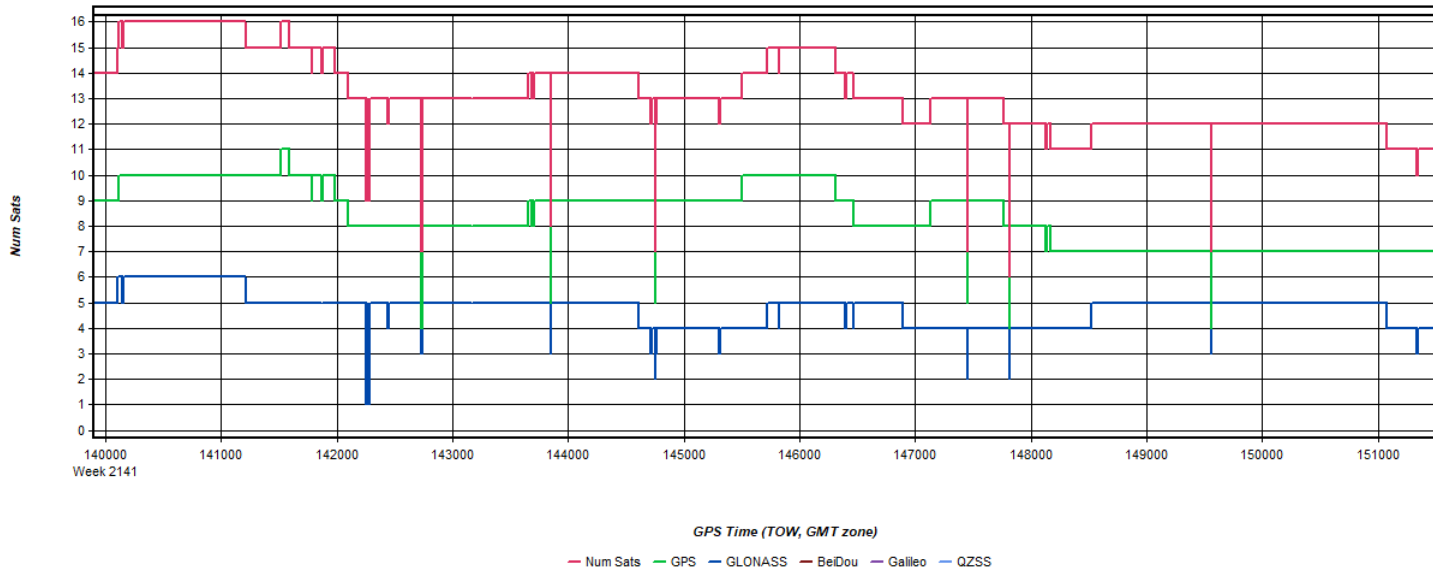
Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 6: 20210118145035_17 [Smoothed TC Combined] - PDOP Plot



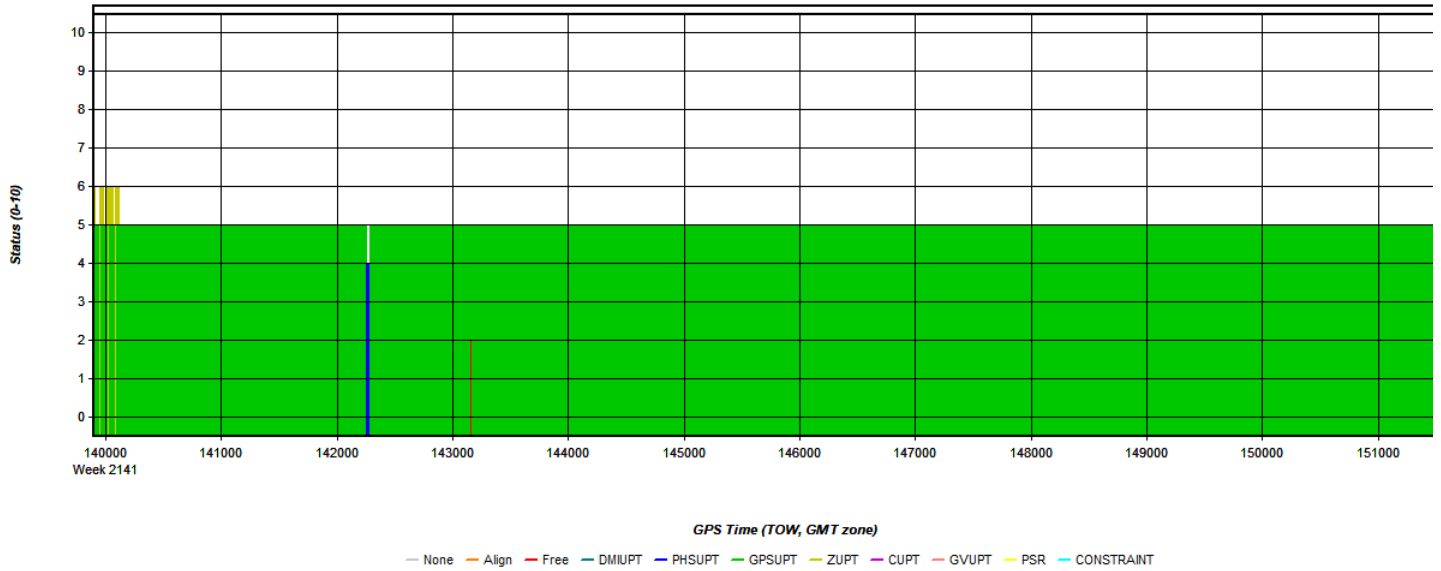
Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 7: 20210118145035_17 [Smoothed TC Combined] - Number of Satellites Line Plot



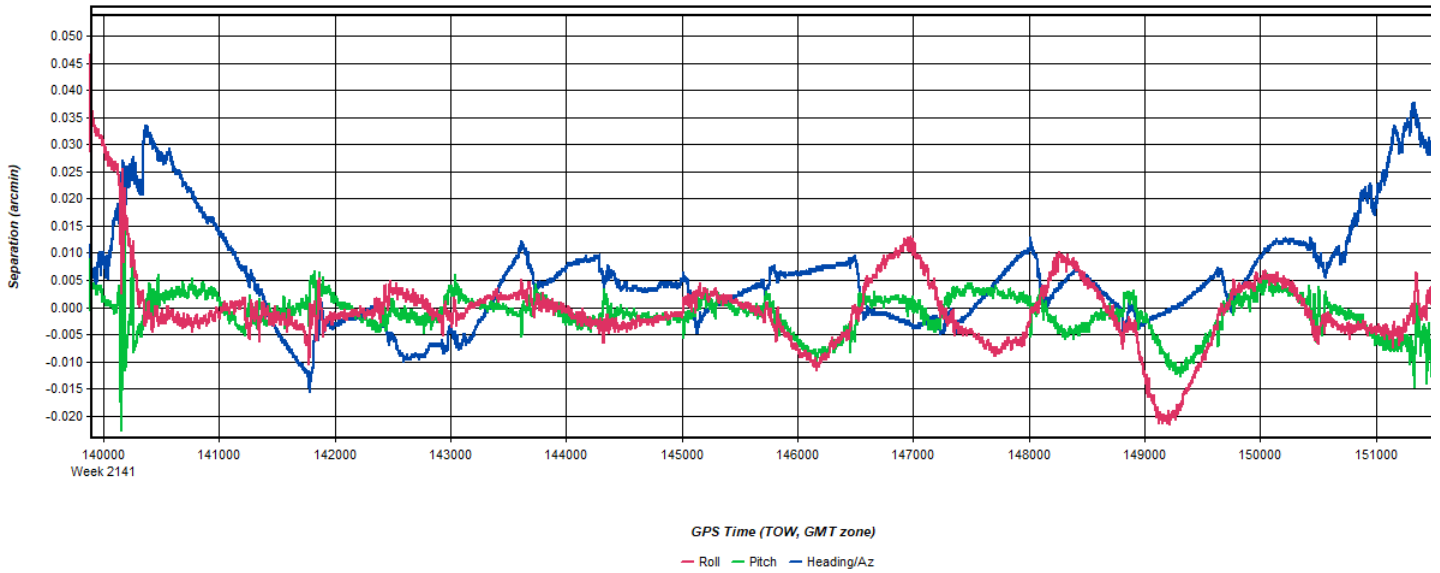
Process 20210118145035_17 by Unknown on 1/21/2021 at 11:19:09

Figure 8: 20210118145035_17 [Smoothed TC Combined] - Status flag for IMU processing



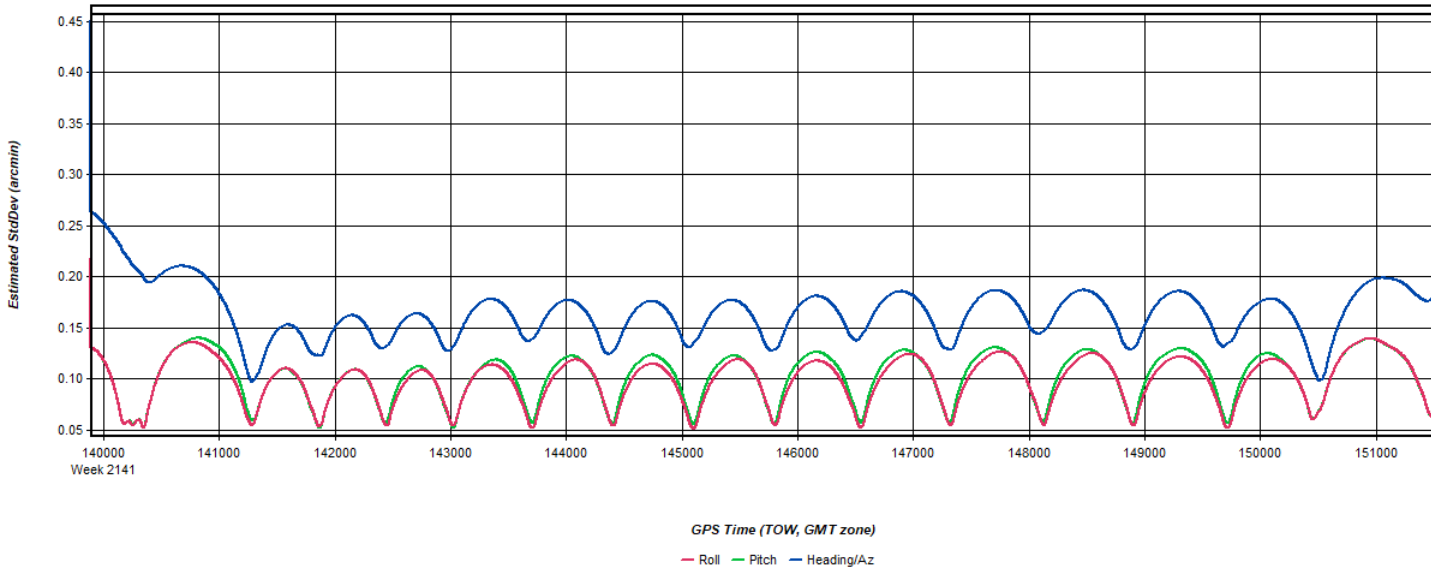
Process 20210118145035_17 by Unknown on 1/21/2021 at 11:19:09

Figure 9: 20210118145035_17 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



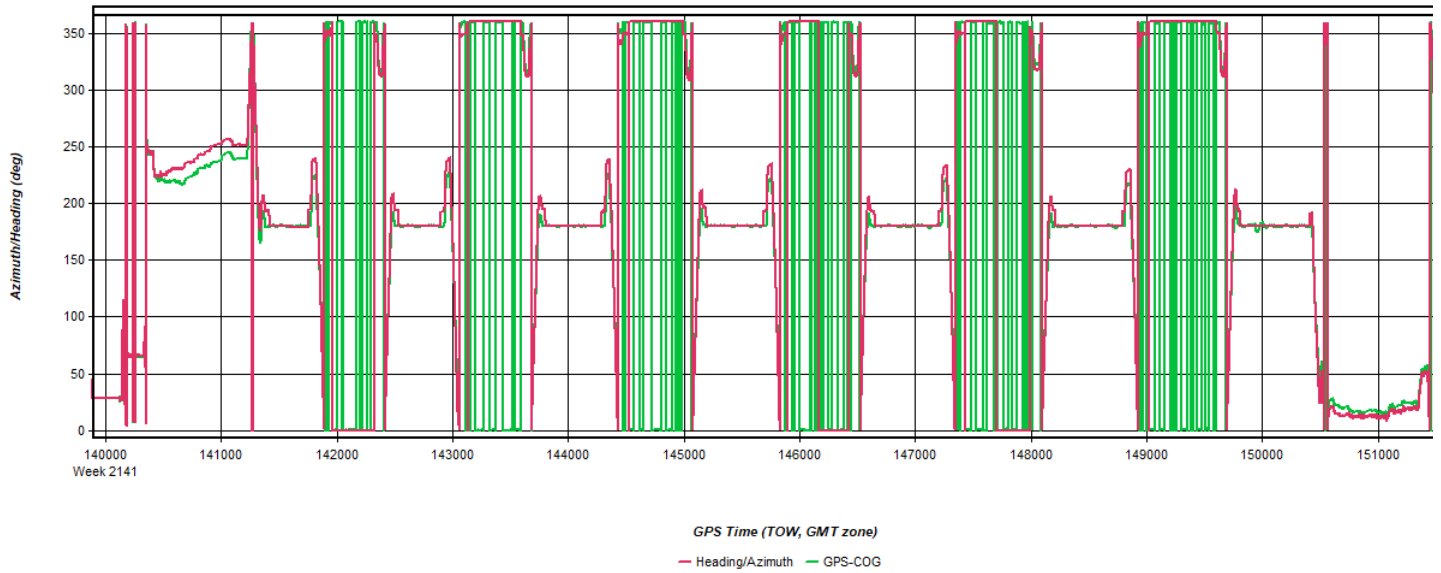
Process 20210118145035_17 by Unknown on 1/21/2021 at 11:19:09

Figure 10: 20210118145035_17 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



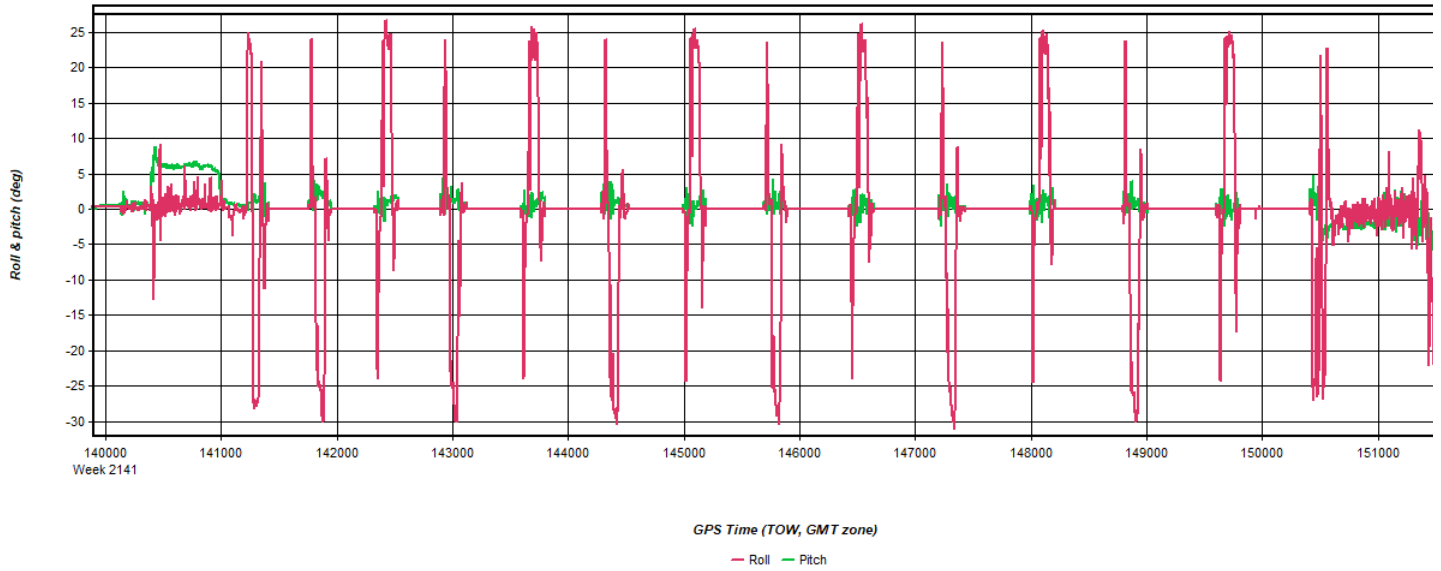
Process 20210118145035_17 by Unknown on 1/21/2021 at 11:19:09

Figure 11: 20210118145035_17 [Smoothed TC Combined] - Azimuth Plot



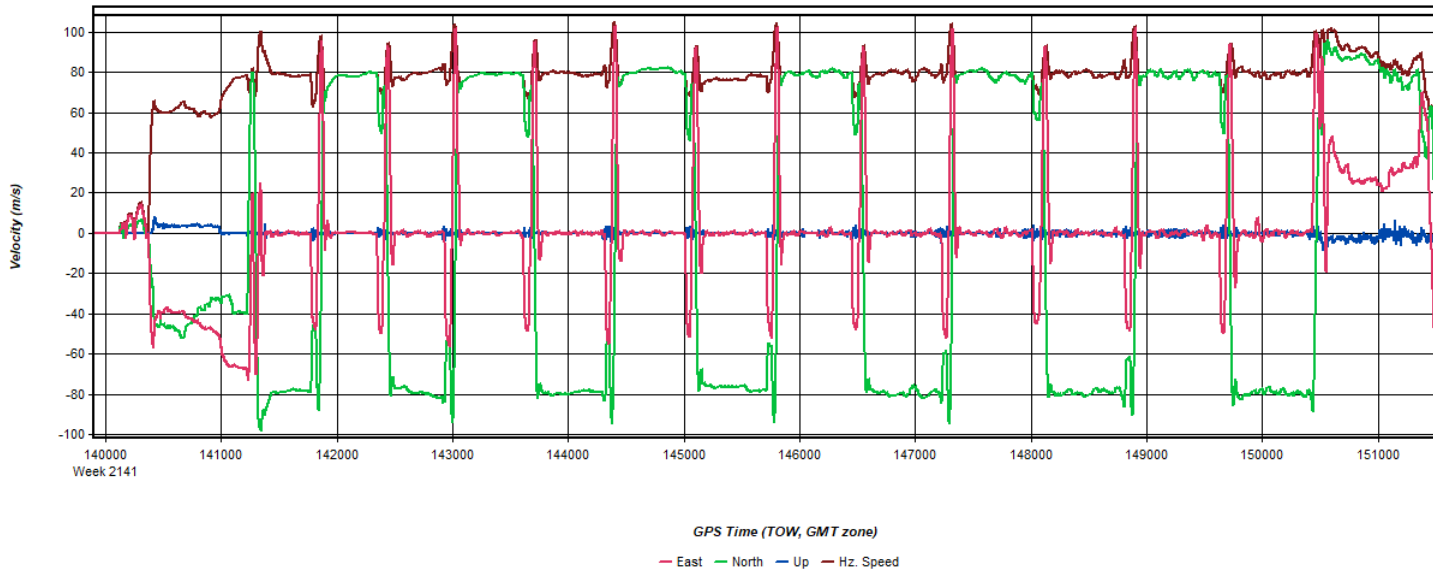
Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 12: 20210118145035_17 [Smoothed TC Combined] - Roll & Pitch Plot



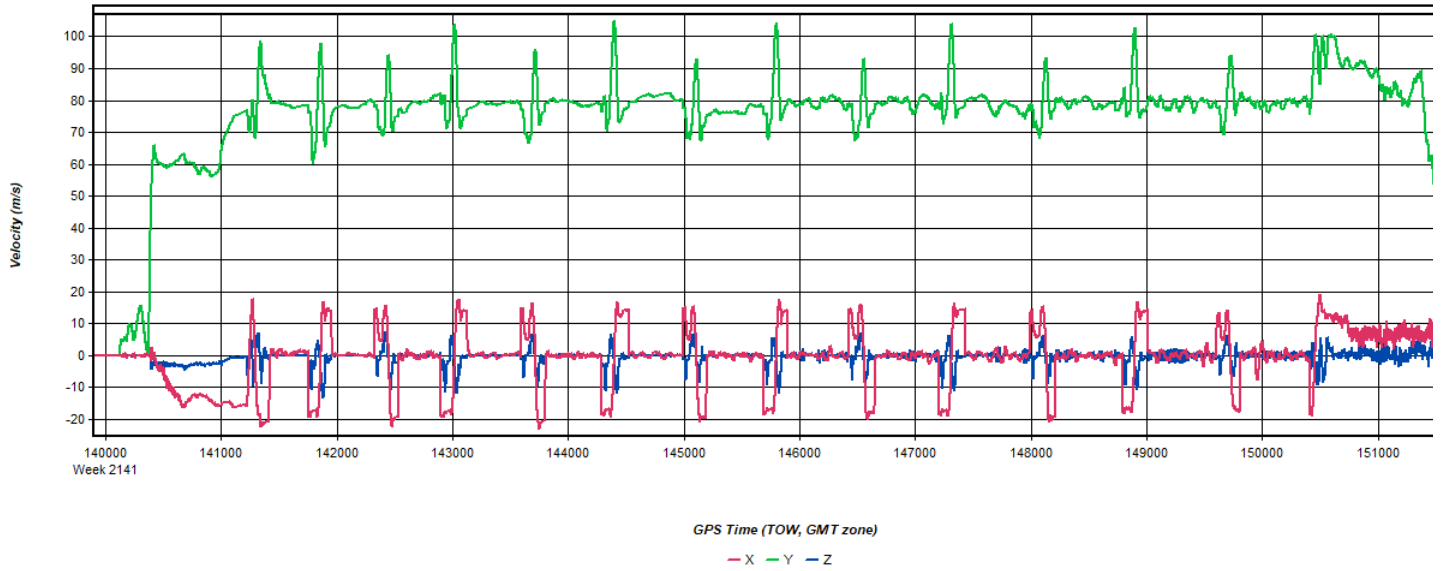
Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 13: 20210118145035_17 [Smoothed TC Combined] - Velocity Profile Plot



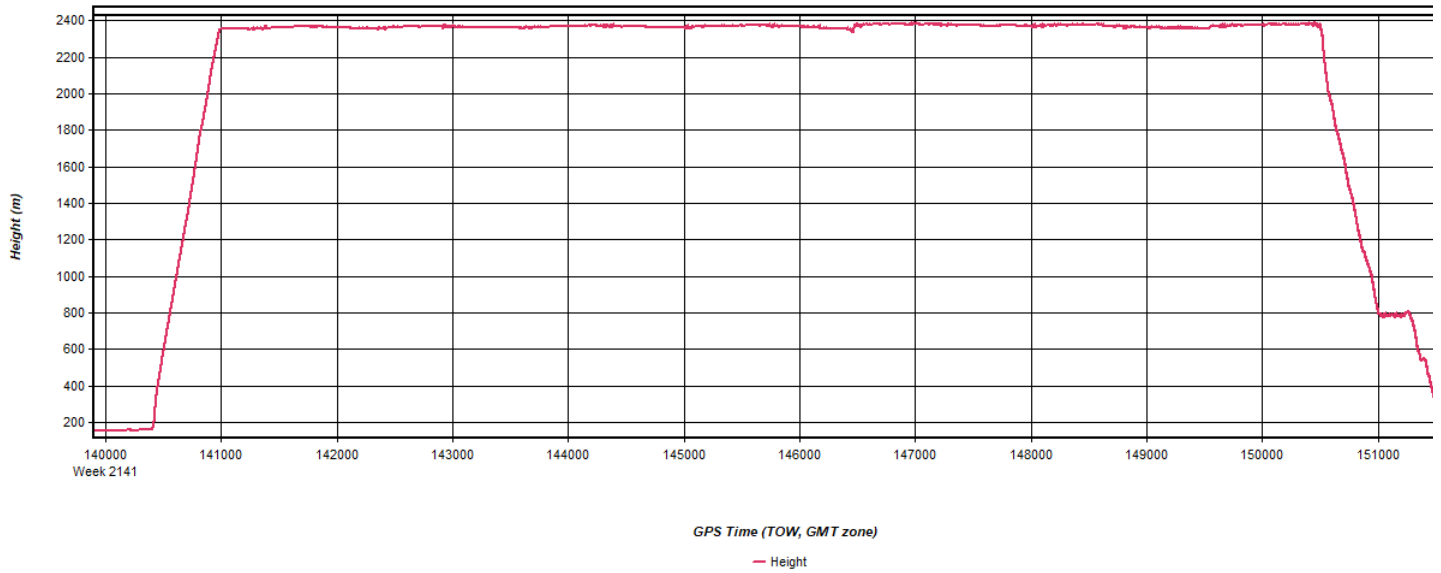
Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 14: 20210118145035_17 [Smoothed TC Combined] - Body Frame Velocity Plot



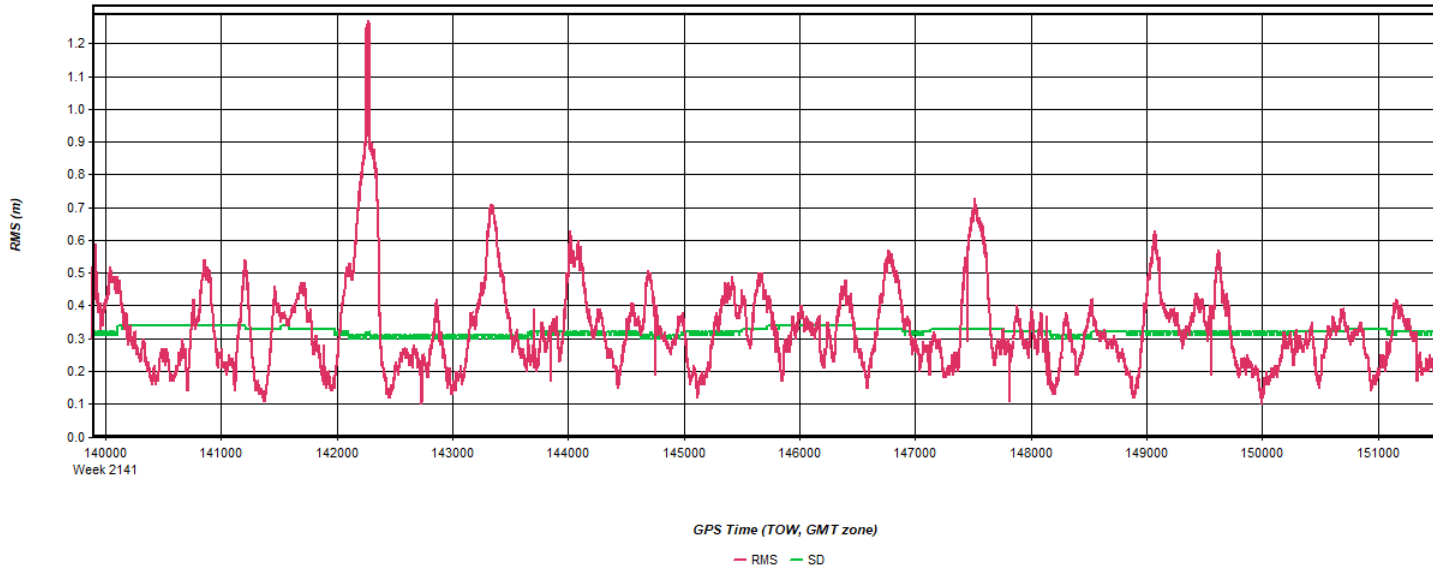
Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 15: 20210118145035_17 [Smoothed TC Combined] - Height Profile Plot



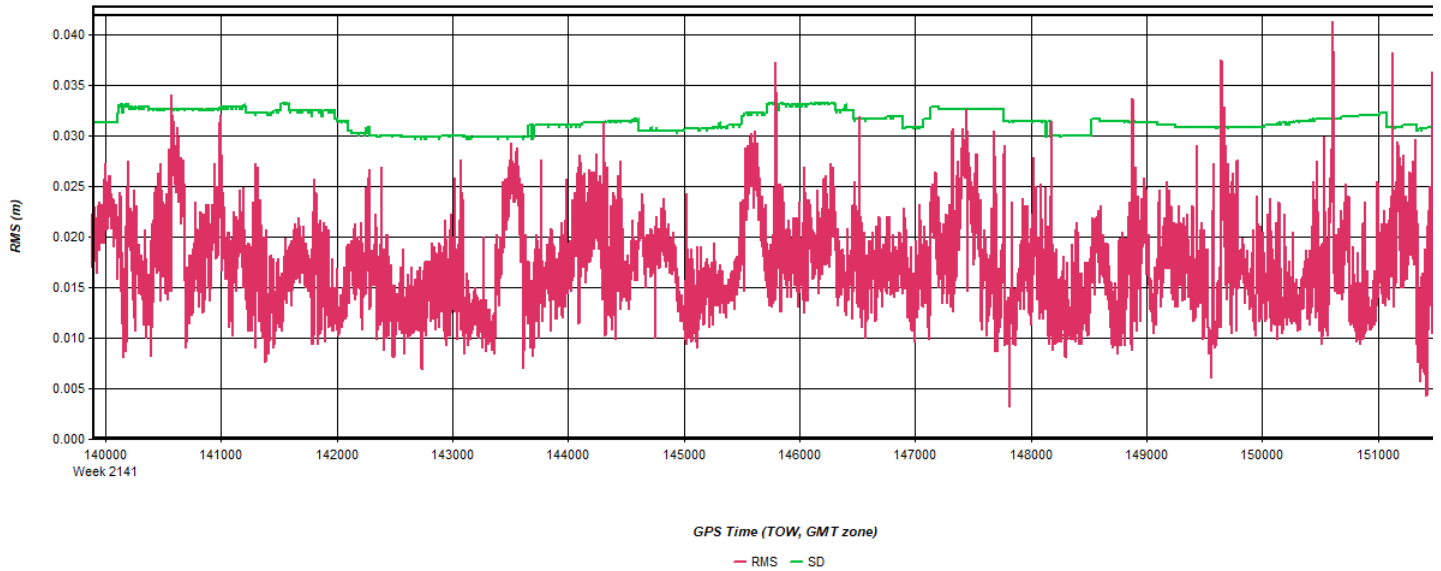
Process 20210118145035_17 by Unknown on 1/21/2021 at 11:19:09

Figure 16: 20210118145035_17 [Smoothed TC Combined] - C/A Code Residual RMS Plot



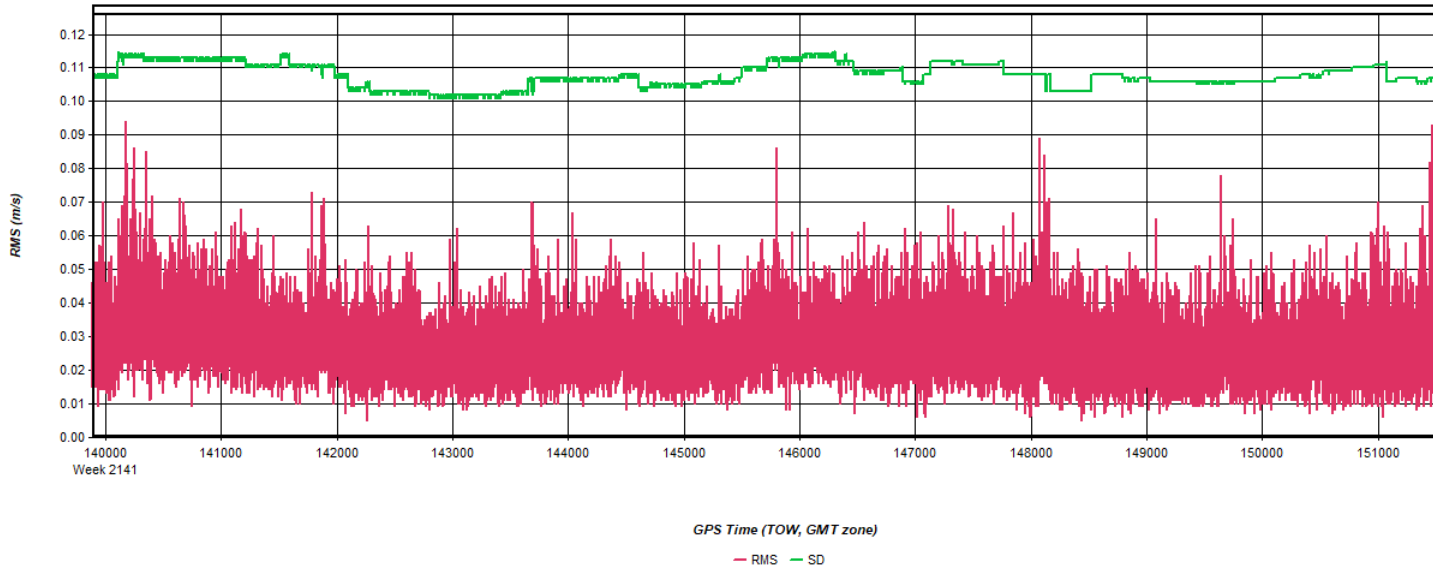
Process 20210118145035_17 by Unknown on 1/21/2021 at 11:19:09

Figure 17: 20210118145035_17 [Smoothed TC Combined] - Carrier Residual RMS Plot



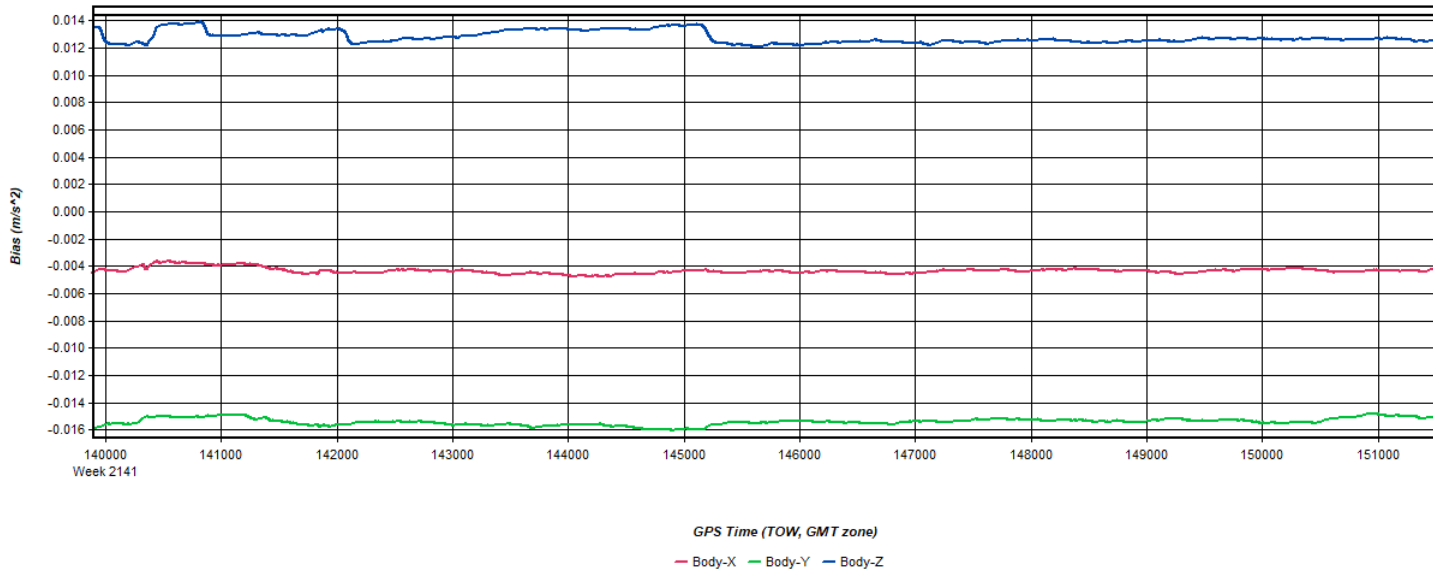
Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 18: 20210118145035_17 [Smoothed TC Combined] - Doppler Residual RMS Plot



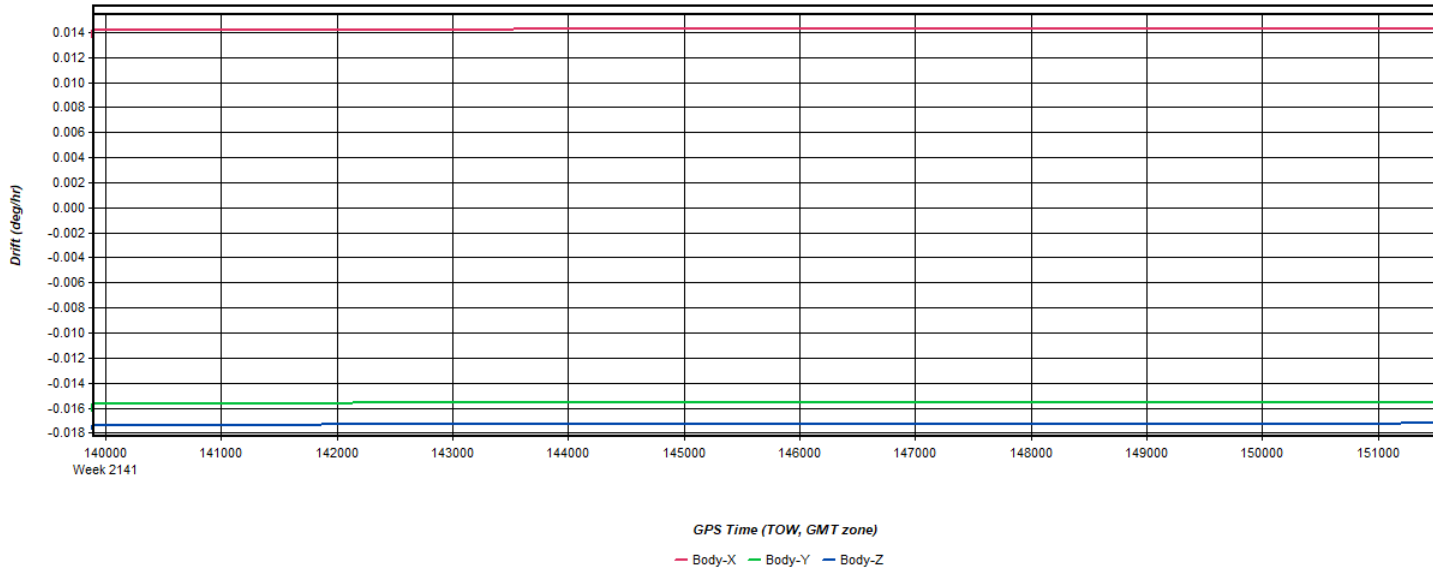
Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 19: 20210118145035_17 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Figure 20: 20210118145035_17 [Smoothed TC Combined] - Gyro Drift Plot

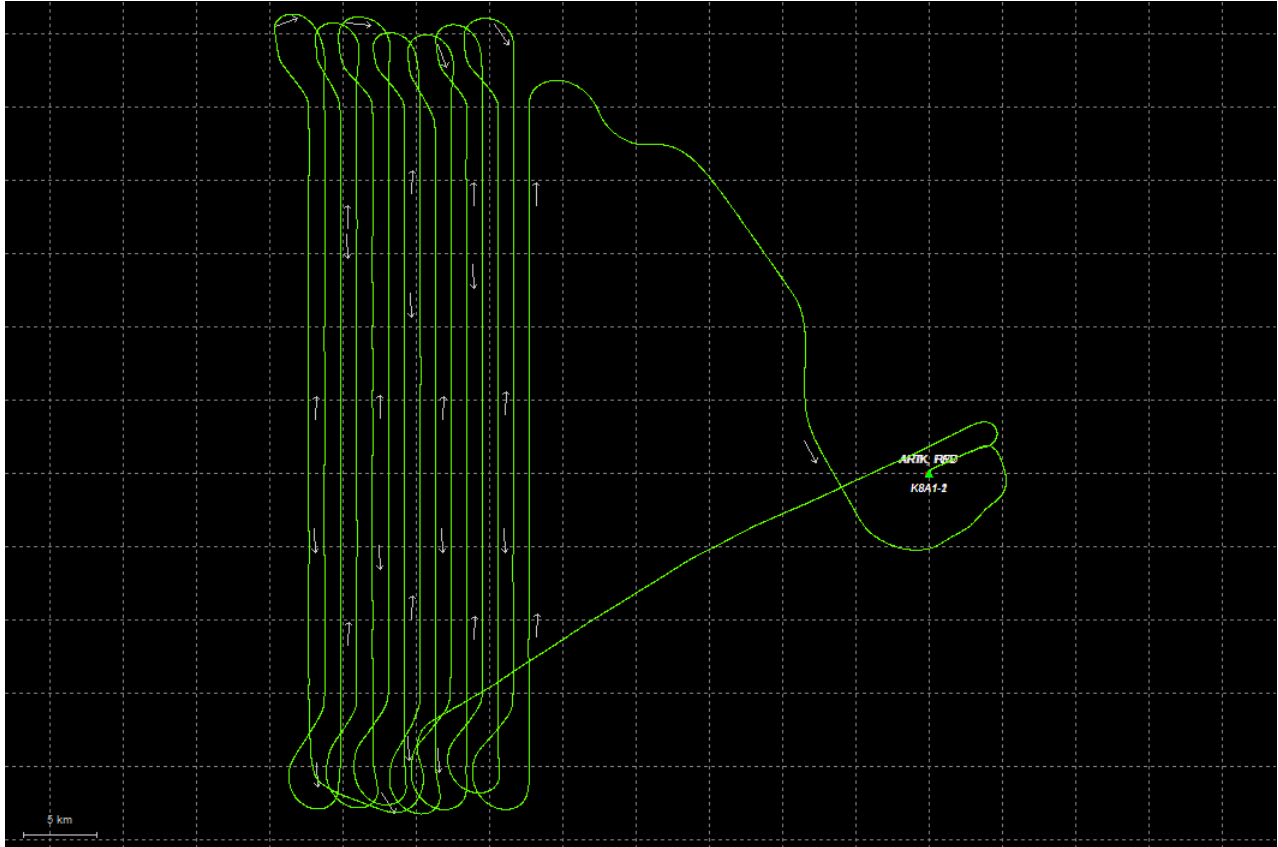


Process	20210118145035_17	by Unknown	on 1/21/2021	at 11:19:09
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Output Results for 20210202204400_18

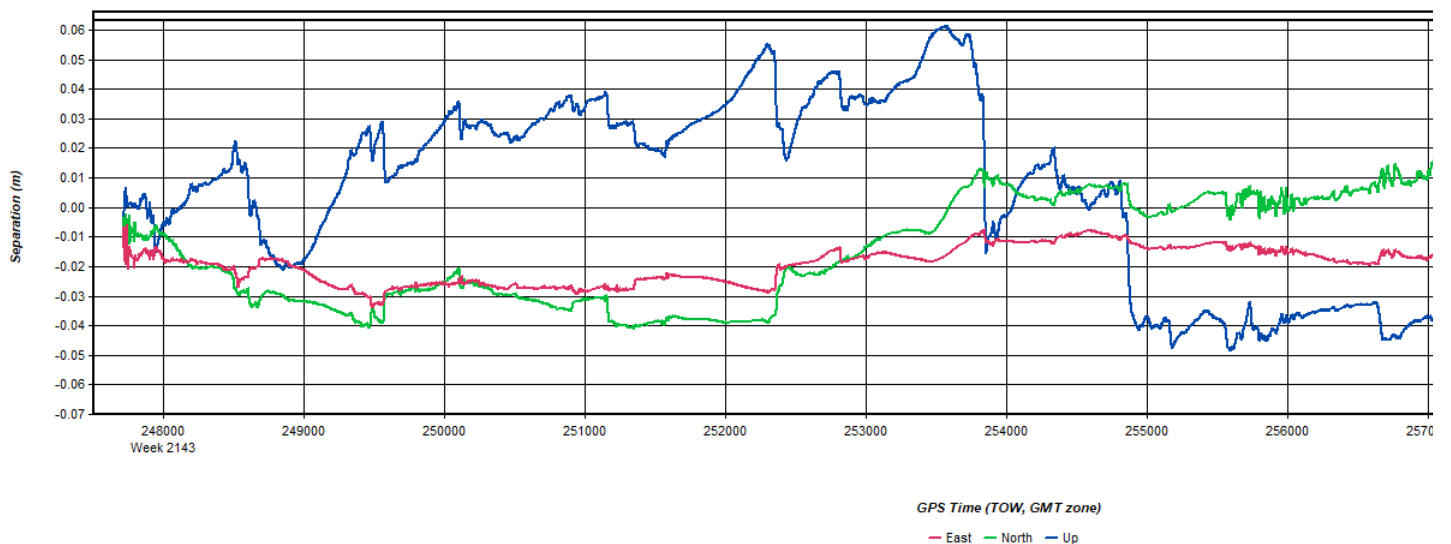
Inertial Explorer Version 8.90.2124
02/06/2021

Figure 1: Smoothed TC Combined - Map



Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 2: 20210202204400_18 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 3: 20210202204400_18 [Smoothed TC Combined] - Float or Fixed Ambiguity

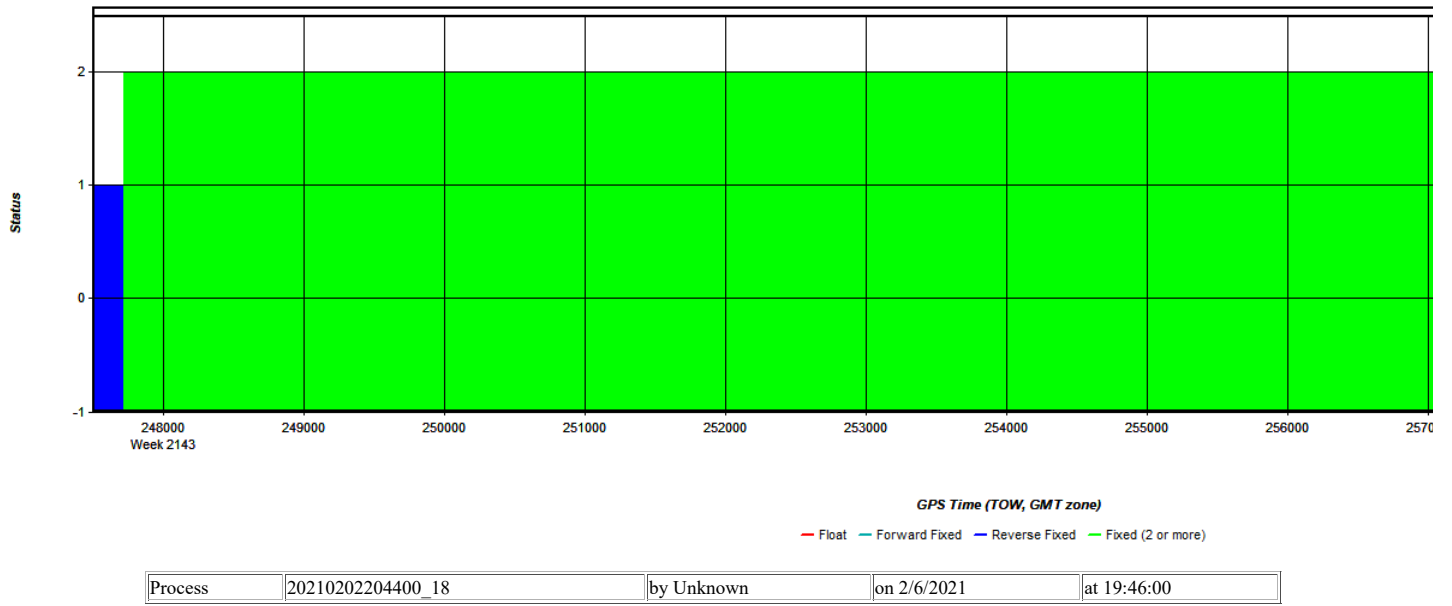
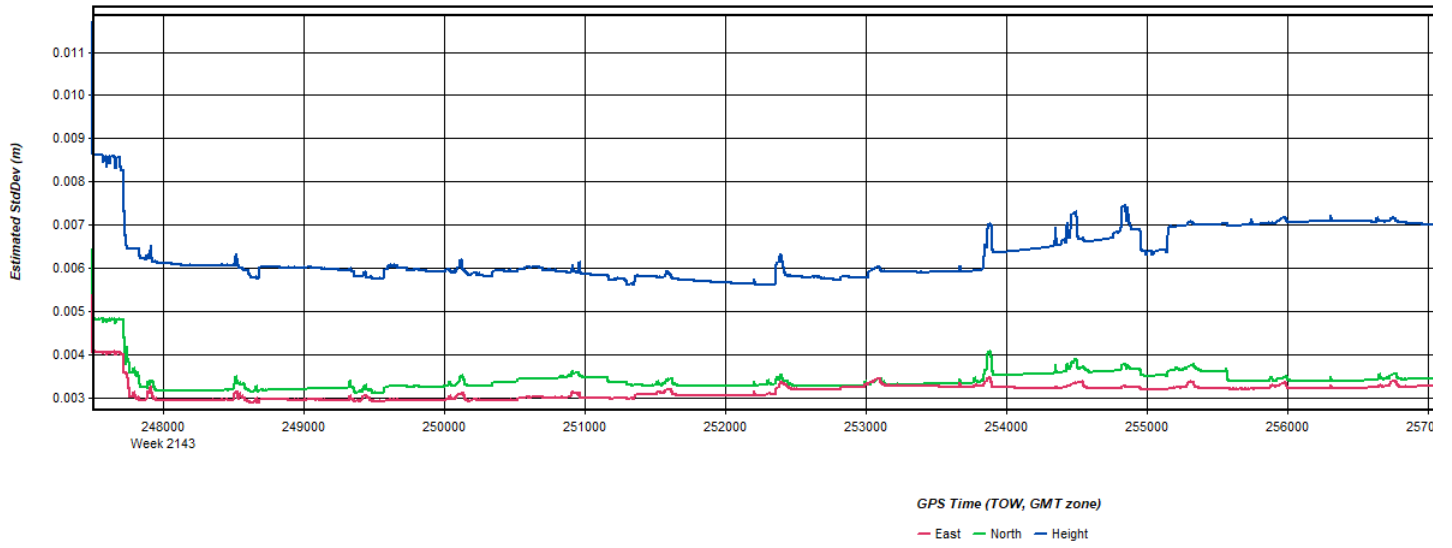


Figure 4: 20210202204400_18 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

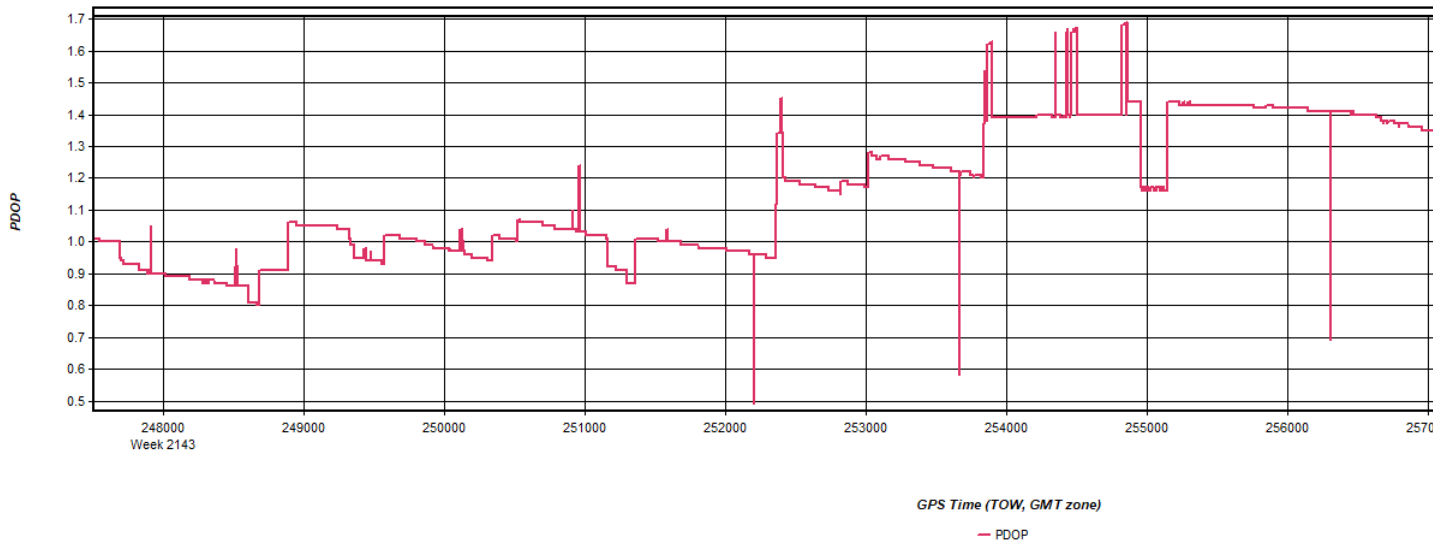


Figure 5: 20210202204400_18 [Smoothed TC Combined] - Estimated Position Accuracy Plot



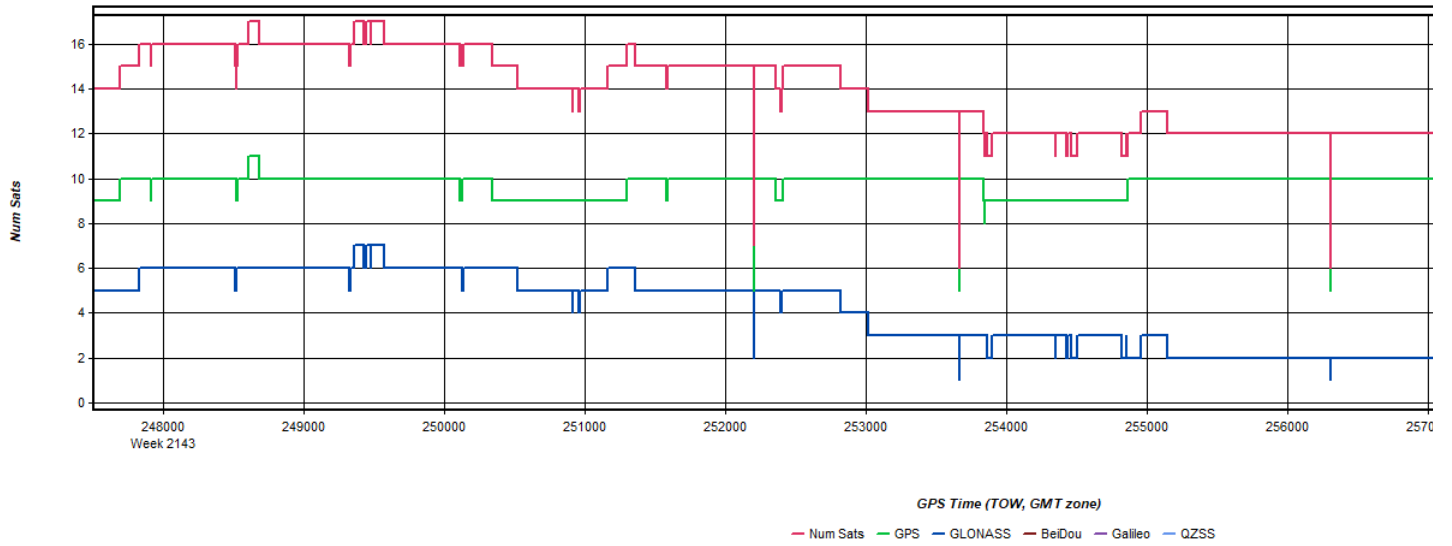
Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 6: 20210202204400_18 [Smoothed TC Combined] - PDOP Plot



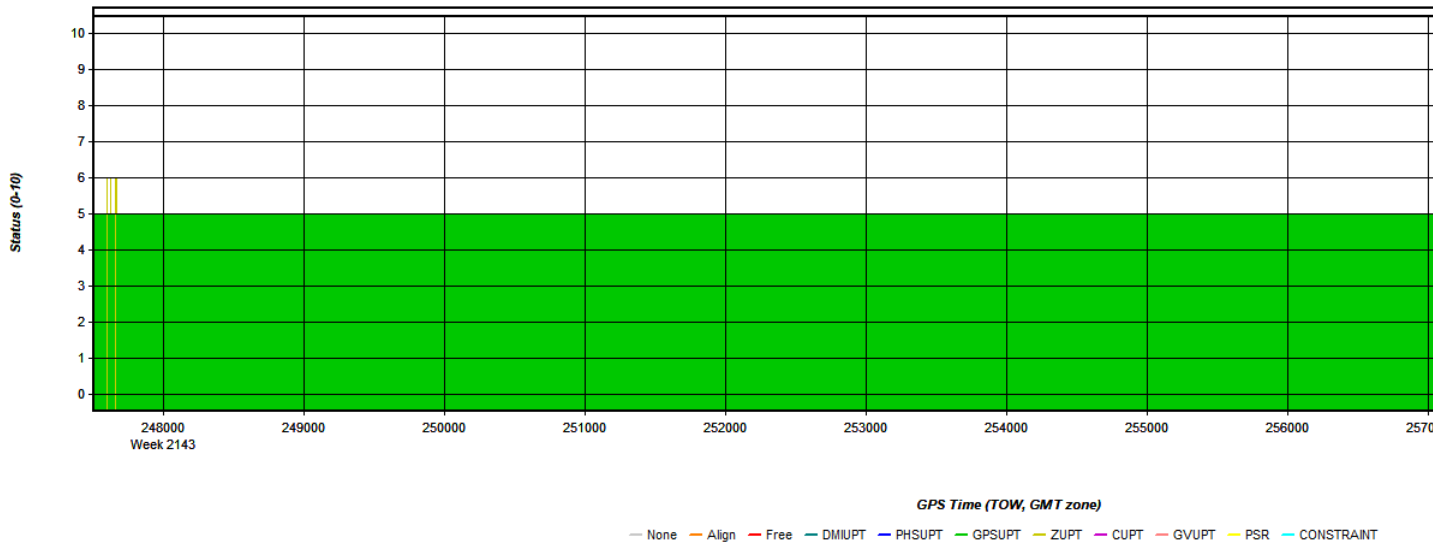
Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 7: 20210202204400_18 [Smoothed TC Combined] - Number of Satellites Line Plot



Process 20210202204400_18 by Unknown on 2/6/2021 at 19:46:00

Figure 8: 20210202204400_18 [Smoothed TC Combined] - Status flag for IMU processing



Process 20210202204400_18 by Unknown on 2/6/2021 at 19:46:00

Figure 9: 20210202204400_18 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

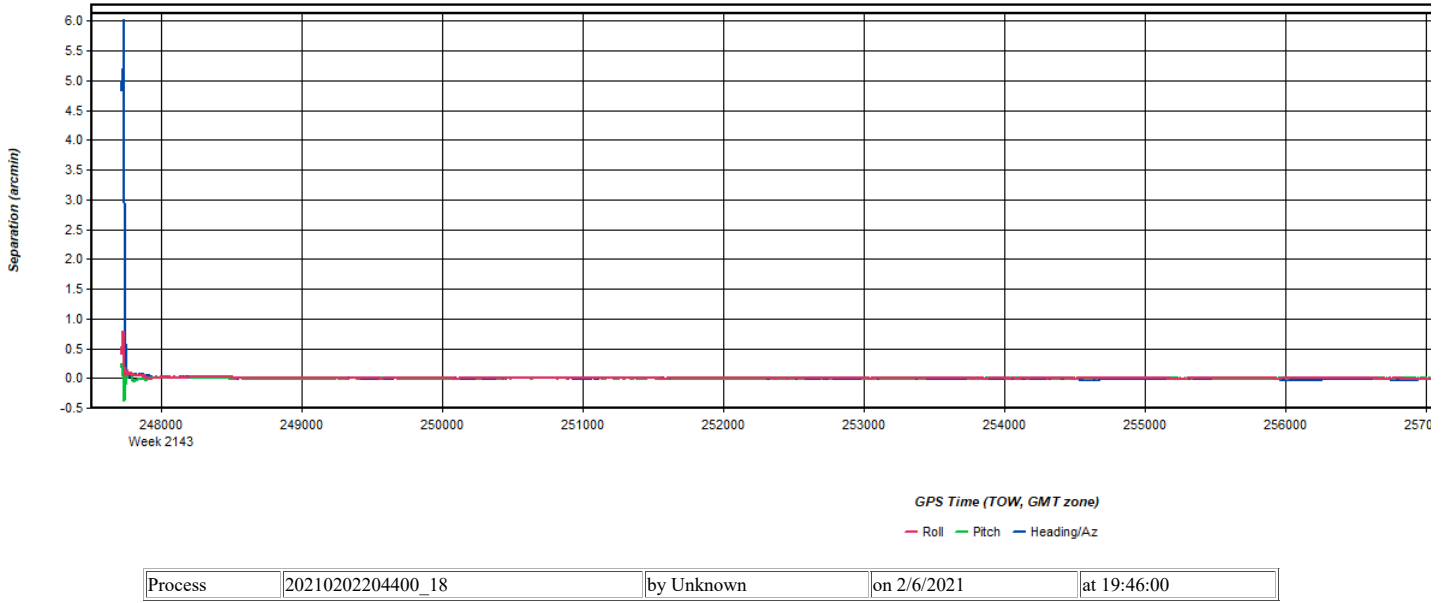


Figure 10: 20210202204400_18 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

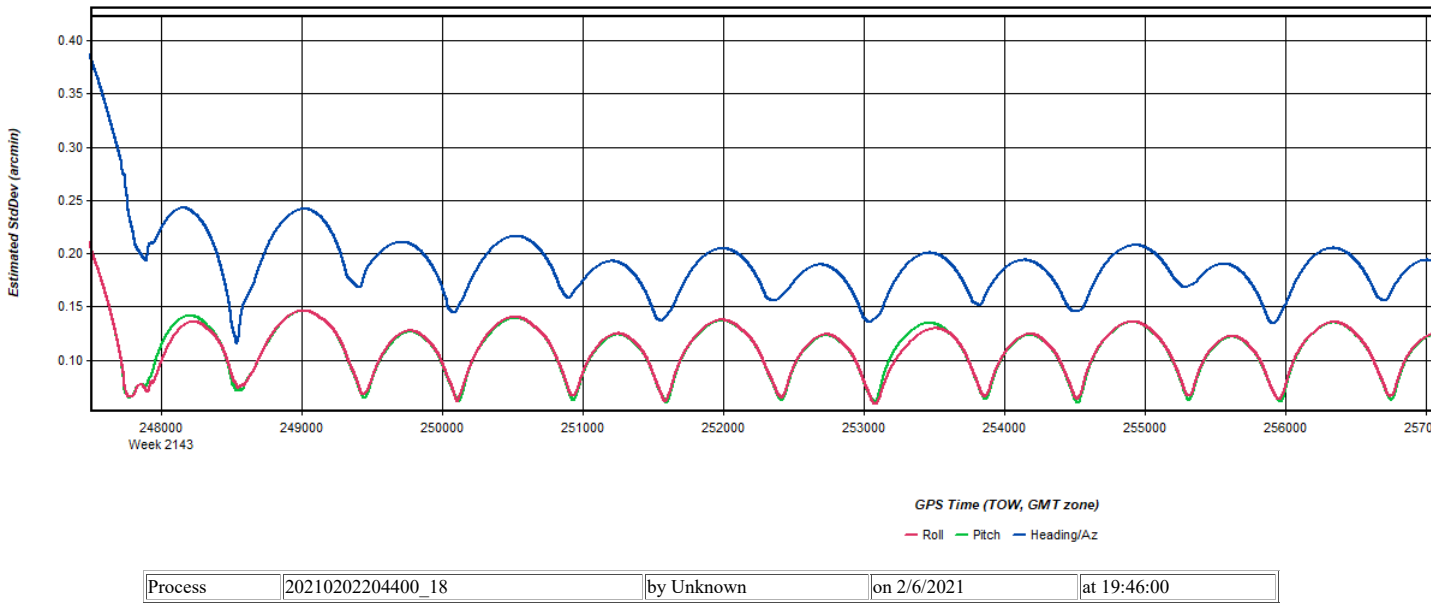
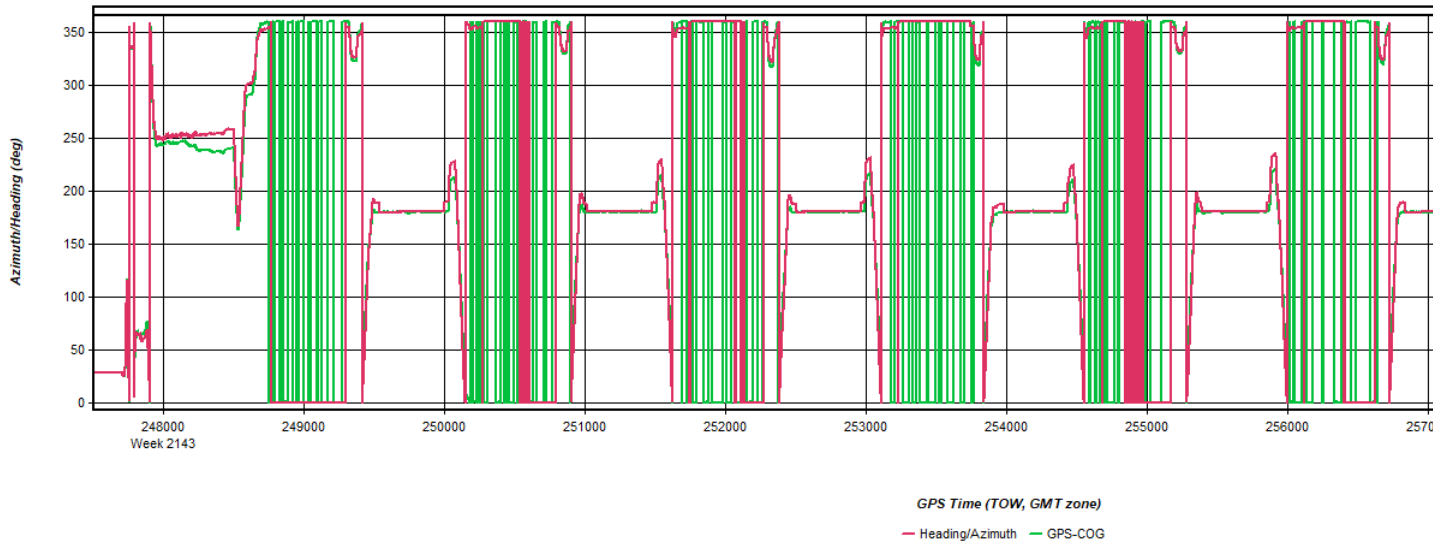


Figure 11: 20210202204400_18 [Smoothed TC Combined] - Azimuth Plot



Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 12: 20210202204400_18 [Smoothed TC Combined] - Roll & Pitch Plot



Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 13: 20210202204400_18 [Smoothed TC Combined] - Velocity Profile Plot

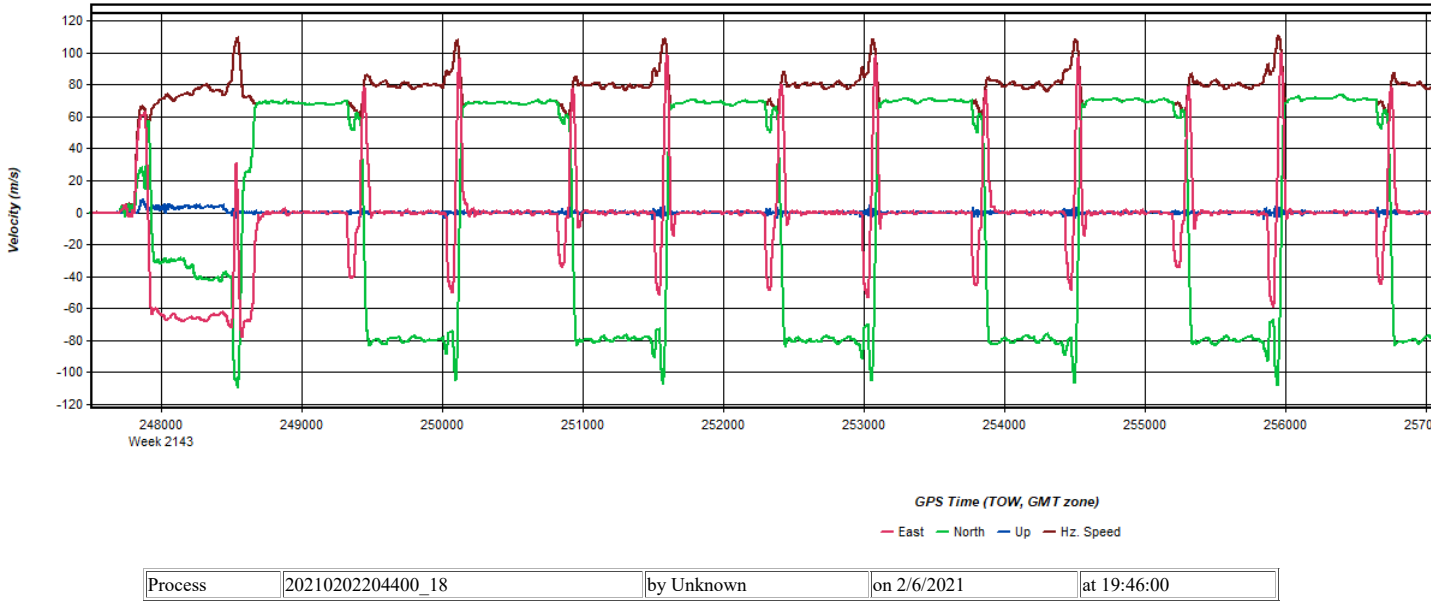
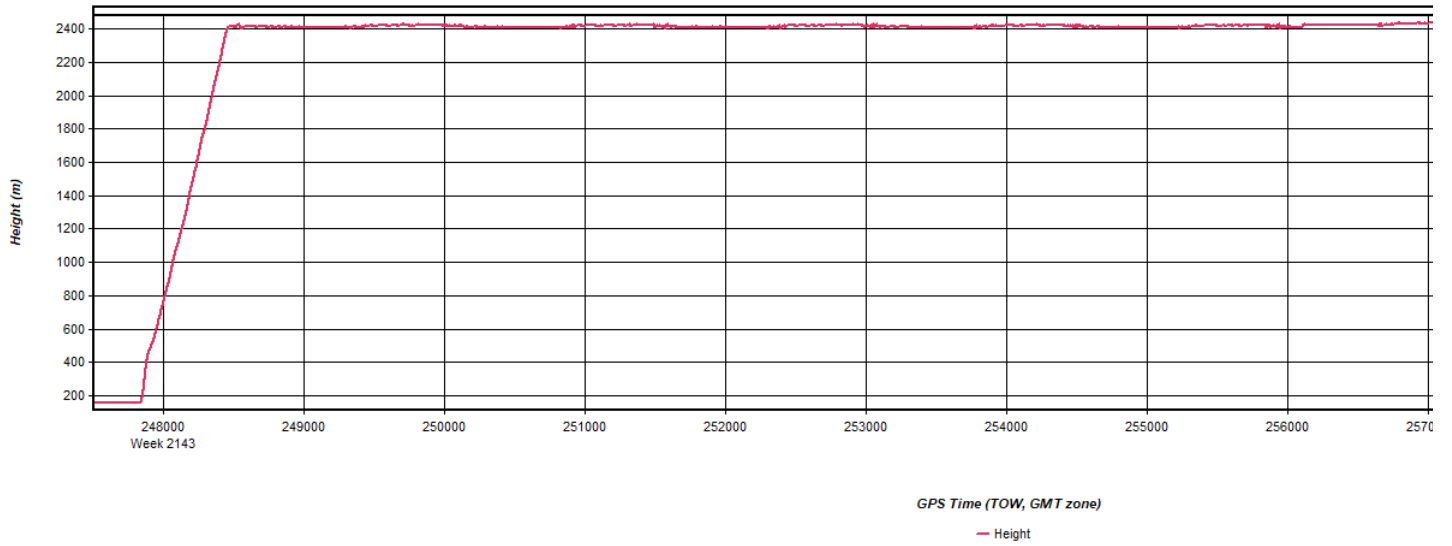


Figure 14: 20210202204400_18 [Smoothed TC Combined] - Body Frame Velocity Plot

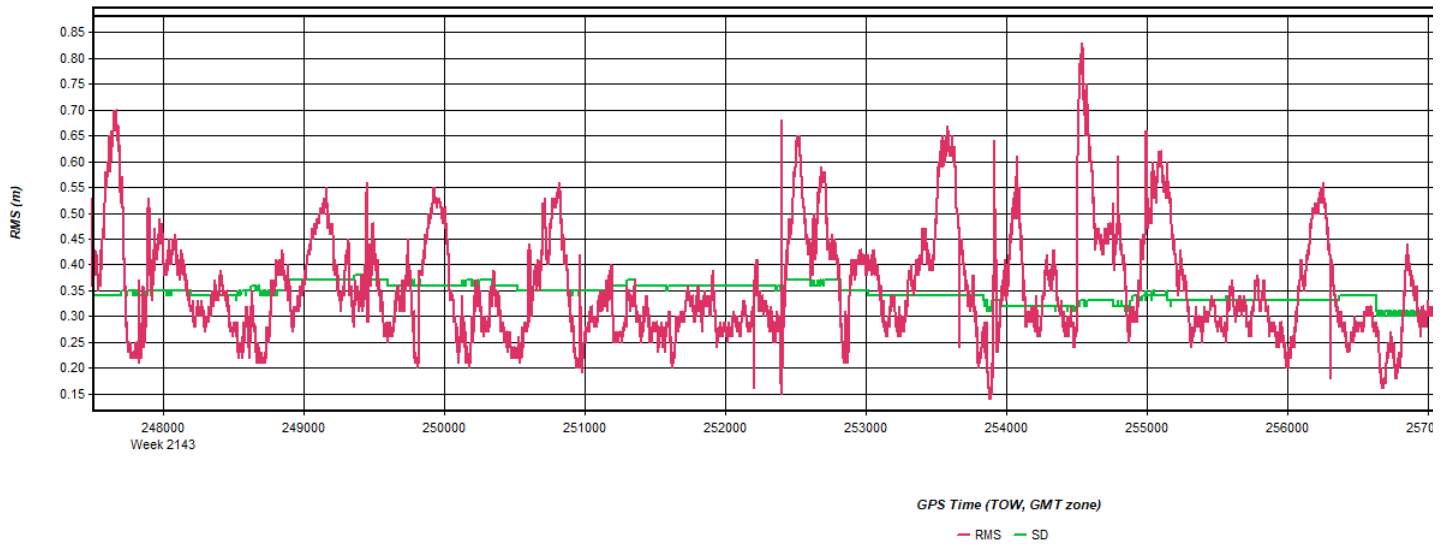


Figure 15: 20210202204400_18 [Smoothed TC Combined] - Height Profile Plot



Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 16: 20210202204400_18 [Smoothed TC Combined] - C/A Code Residual RMS Plot



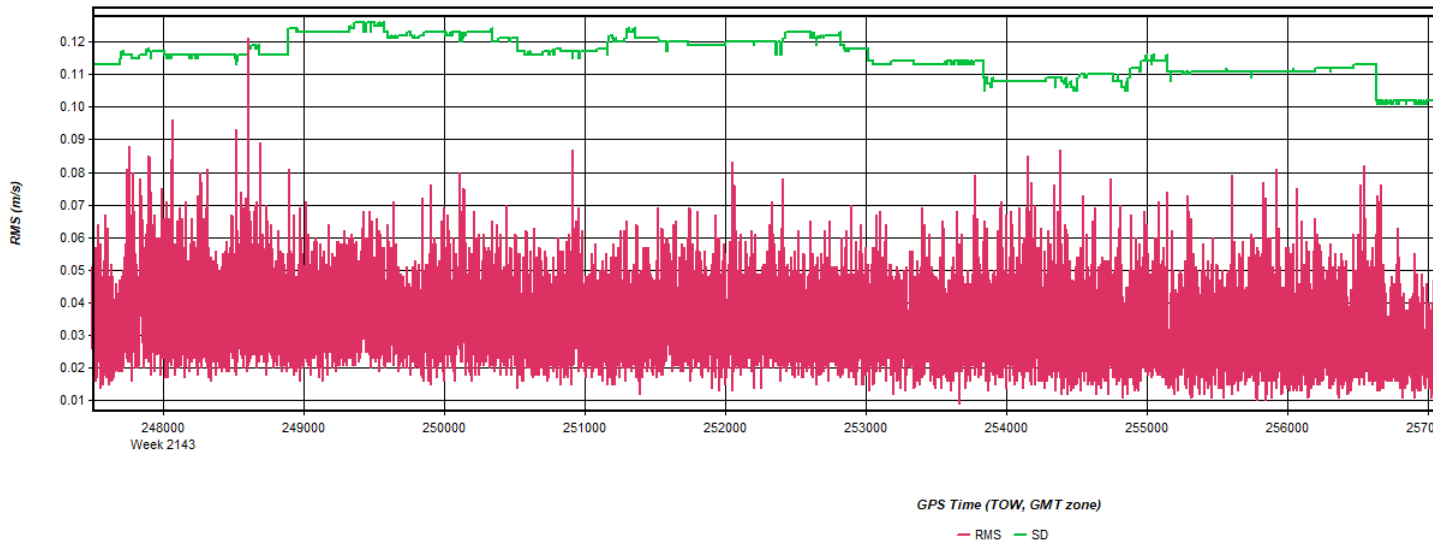
Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 17: 20210202204400_18 [Smoothed TC Combined] - Carrier Residual RMS Plot



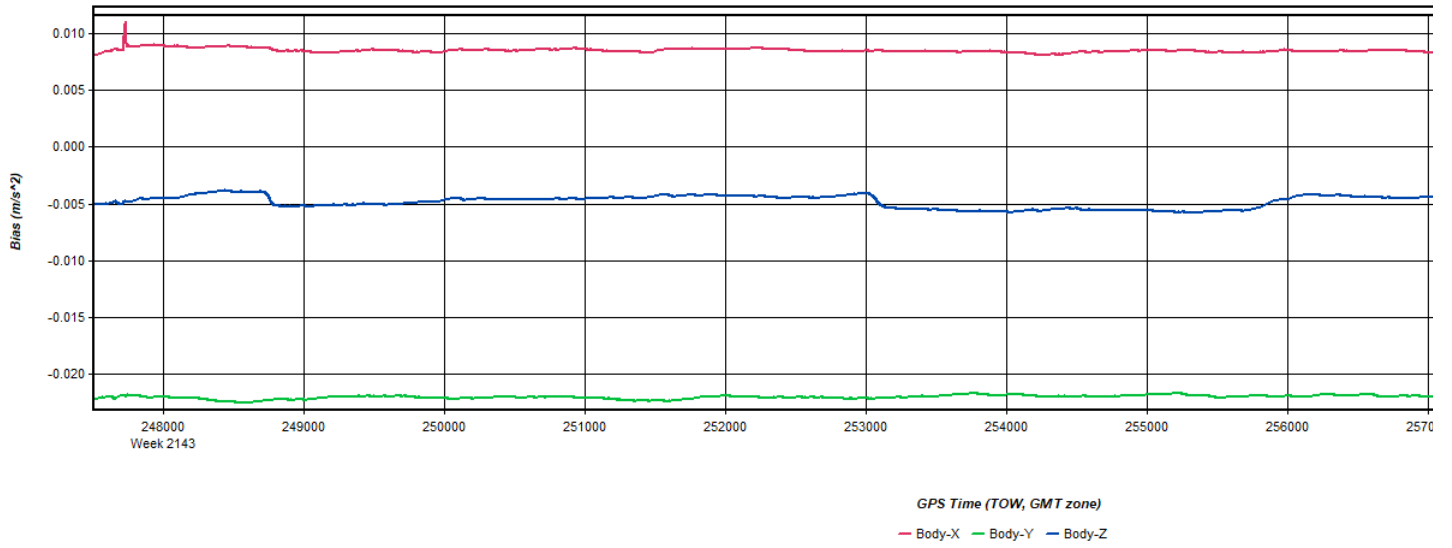
Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 18: 20210202204400_18 [Smoothed TC Combined] - Doppler Residual RMS Plot



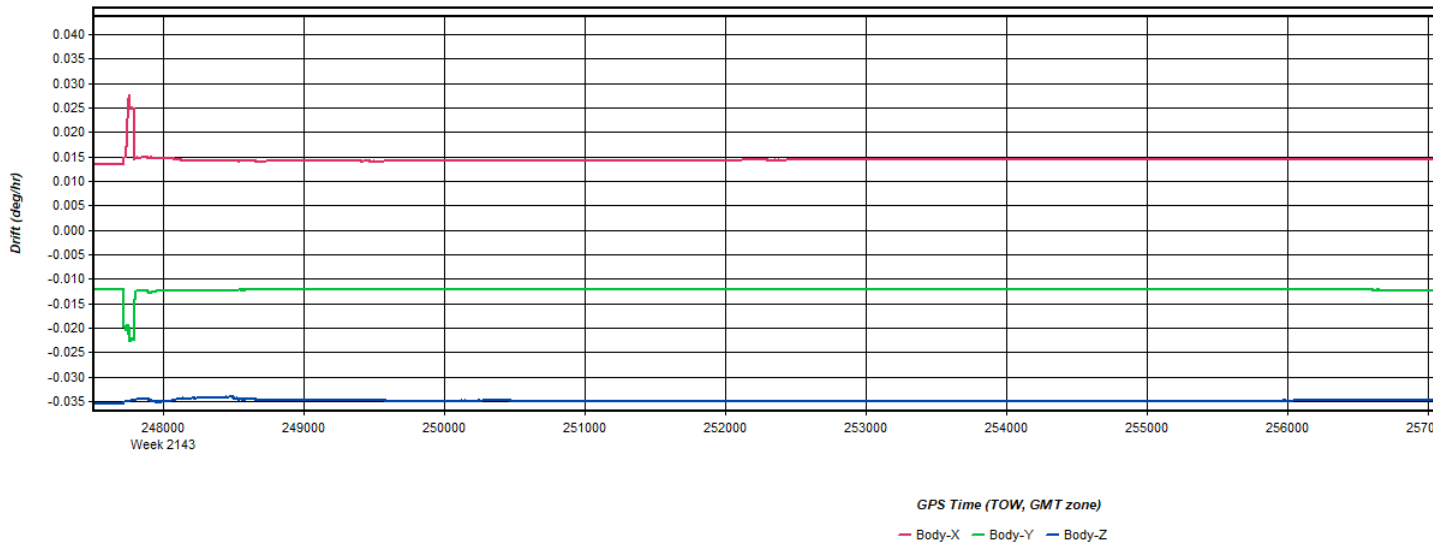
Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 19: 20210202204400_18 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Figure 20: 20210202204400_18 [Smoothed TC Combined] - Gyro Drift Plot

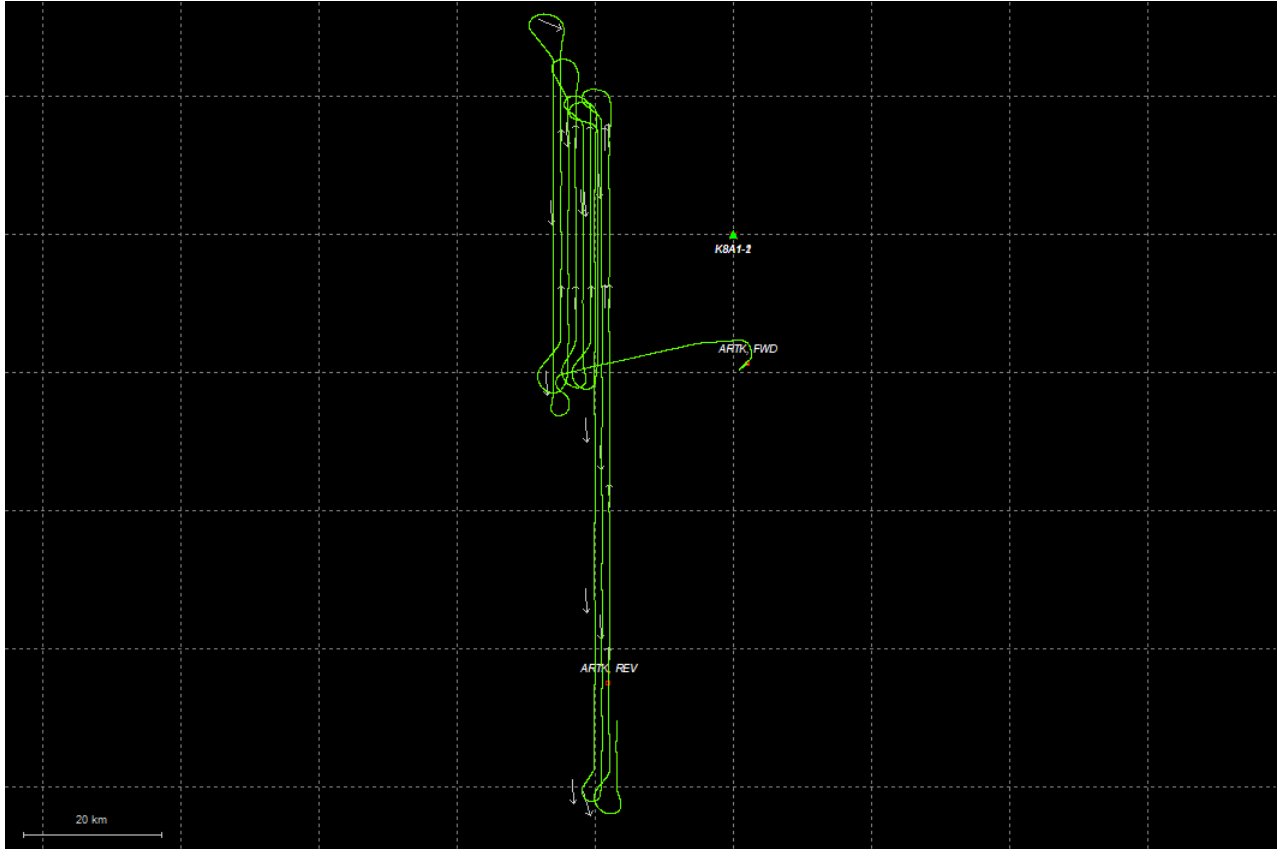


Process	20210202204400_18	by Unknown	on 2/6/2021	at 19:46:00
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Output Results for 20210203135448_19_1

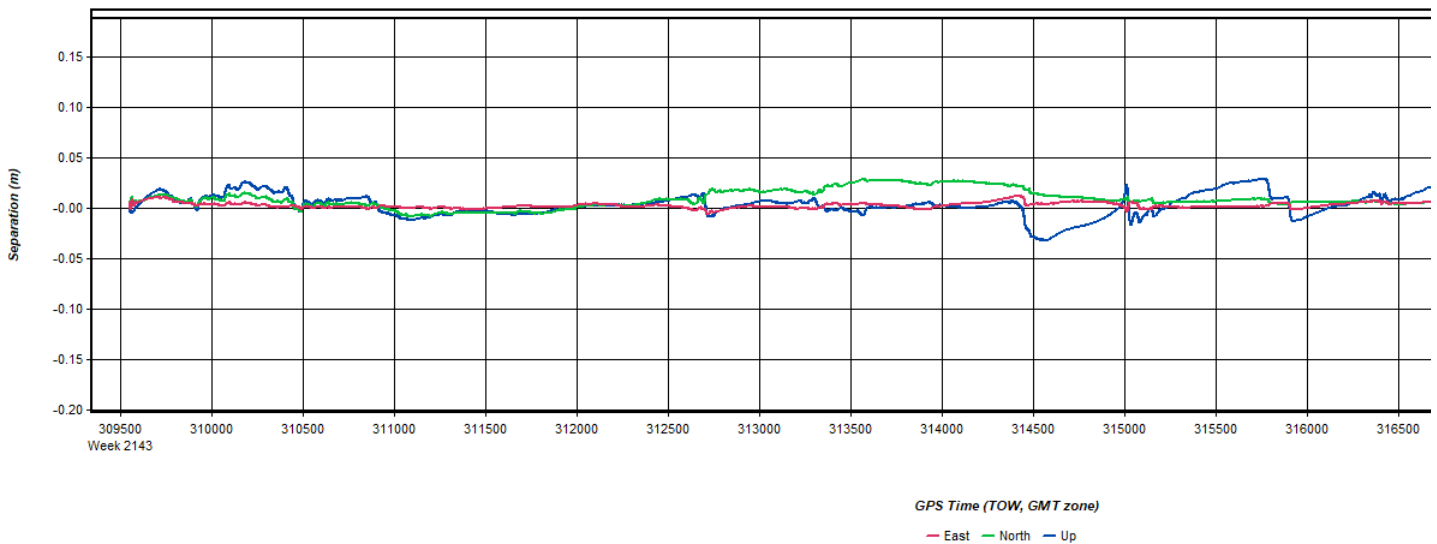
Inertial Explorer Version 8.90.2124
02/06/2021

Figure 1: Smoothed TC Combined - Map



Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 2: 20210203135448_19_1 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 3: 20210203135448_19_1 [Smoothed TC Combined] - Float or Fixed Ambiguity

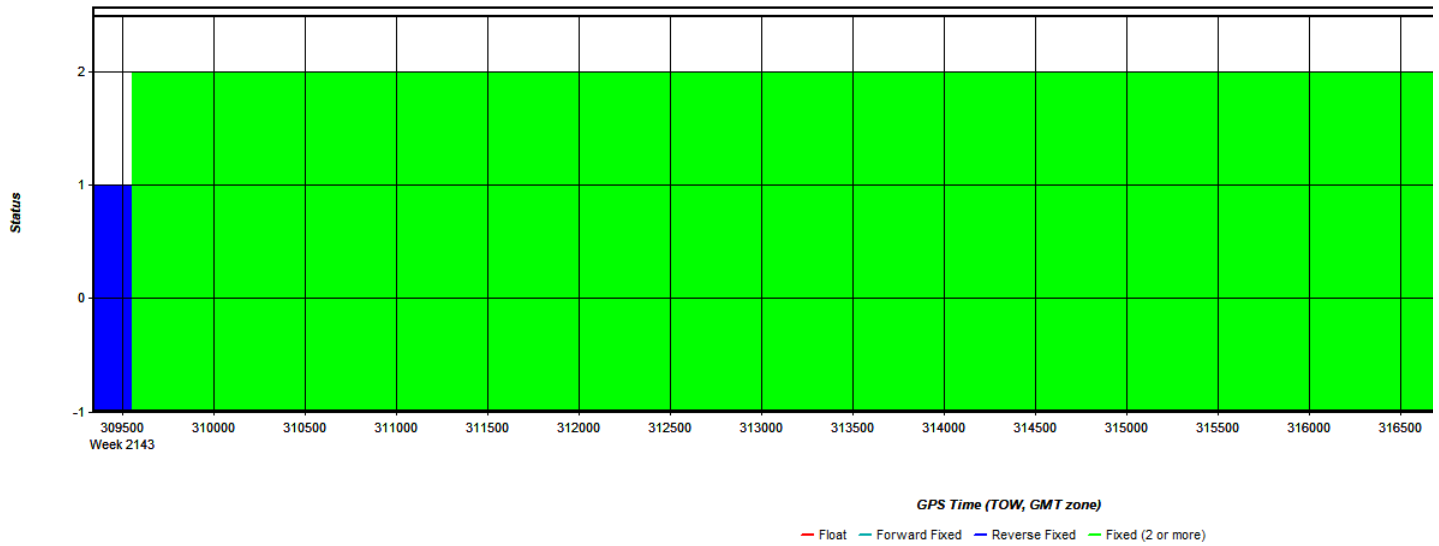


Figure 4: 20210203135448_19_1 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

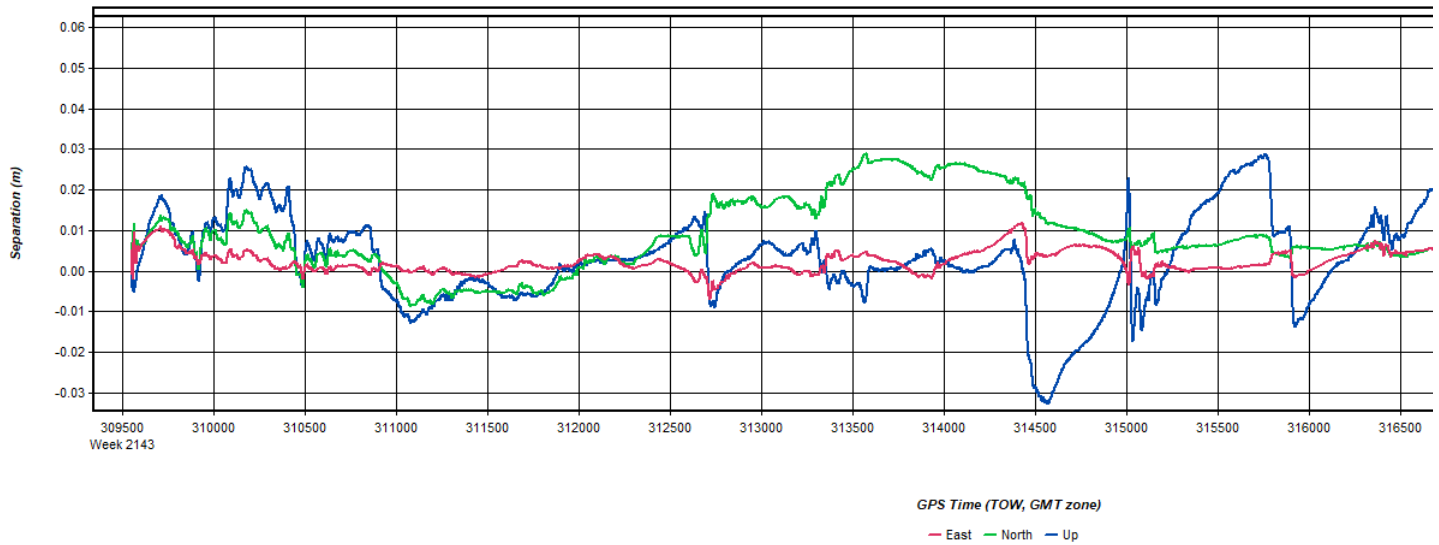
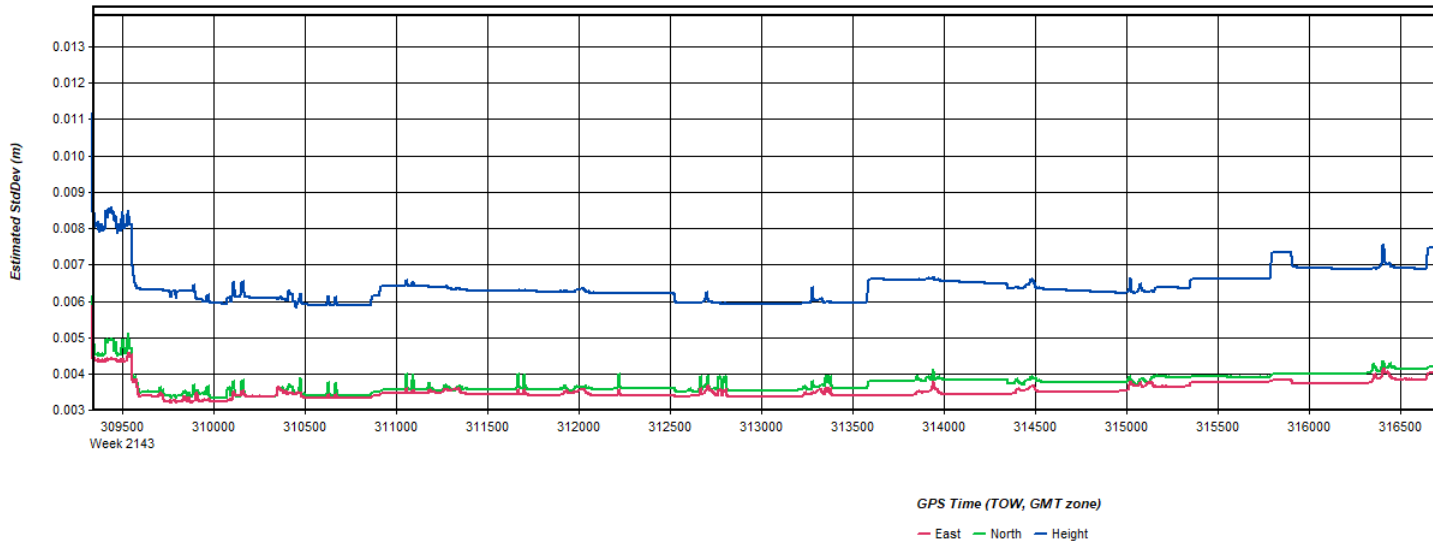
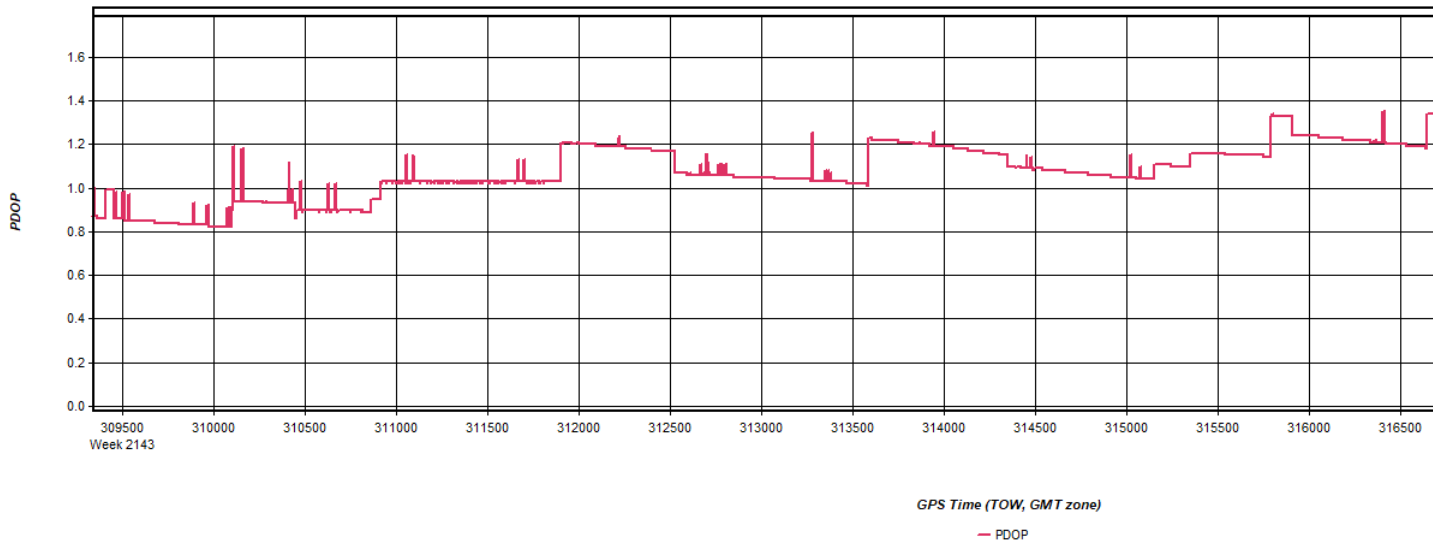


Figure 5: 20210203135448_19_1 [Smoothed TC Combined] - Estimated Position Accuracy Plot



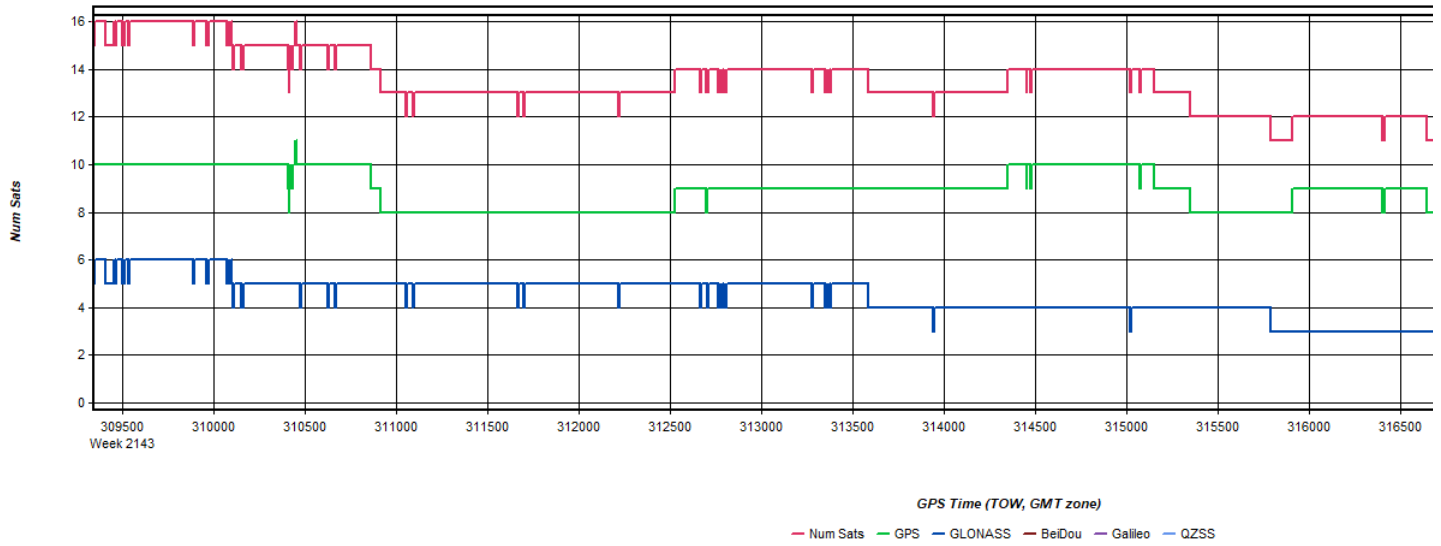
Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 6: 20210203135448_19_1 [Smoothed TC Combined] - PDOP Plot



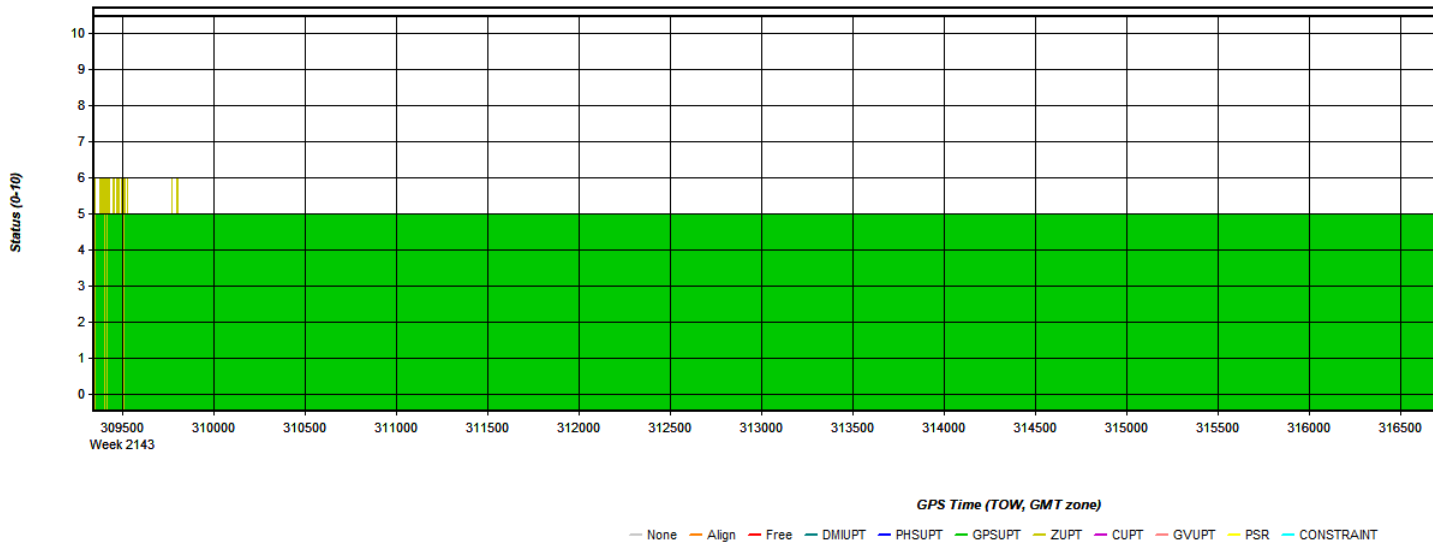
Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 7: 20210203135448_19_1 [Smoothed TC Combined] - Number of Satellites Line Plot



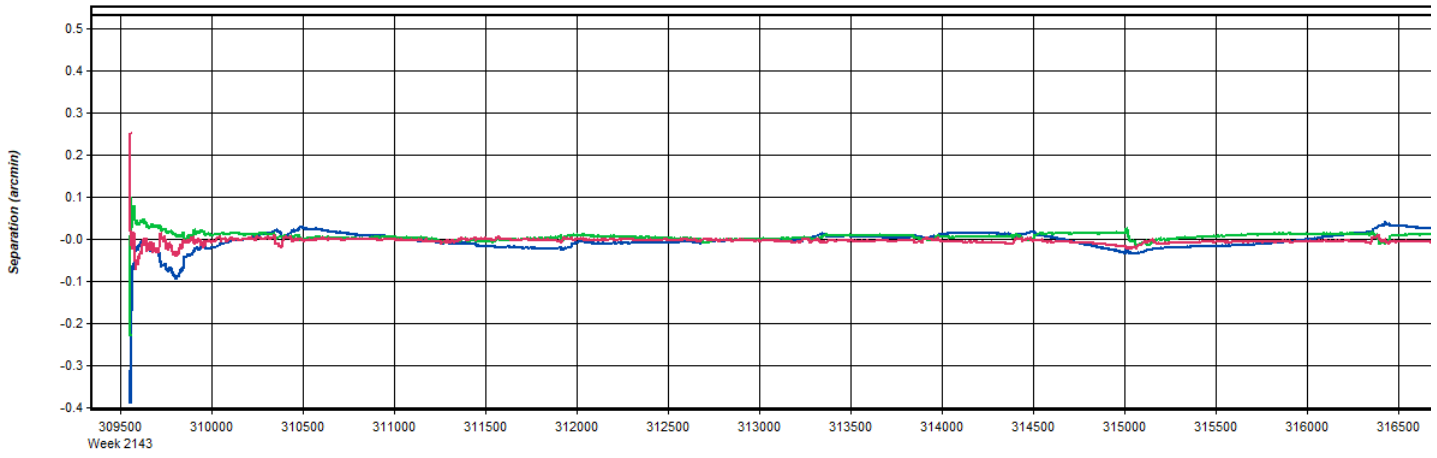
Process 20210203135448_19_1 by Unknown on 2/6/2021 at 20:29:10

Figure 8: 20210203135448_19_1 [Smoothed TC Combined] - Status flag for IMU processing



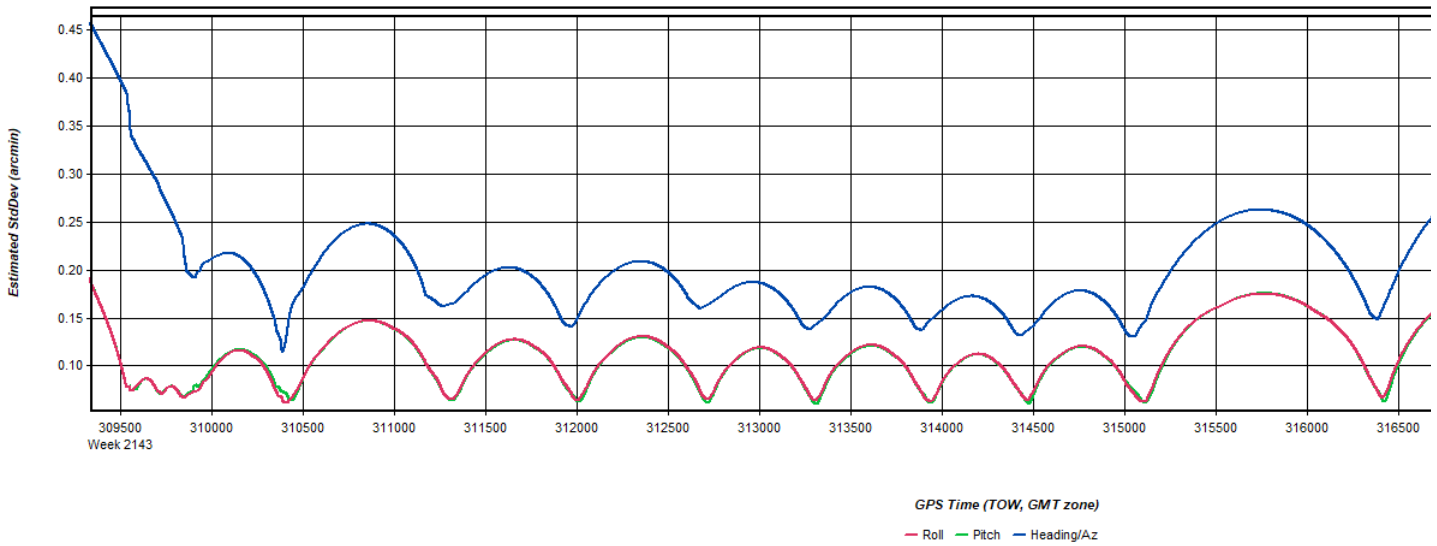
Process 20210203135448_19_1 by Unknown on 2/6/2021 at 20:29:10

Figure 9: 20210203135448_19_1 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



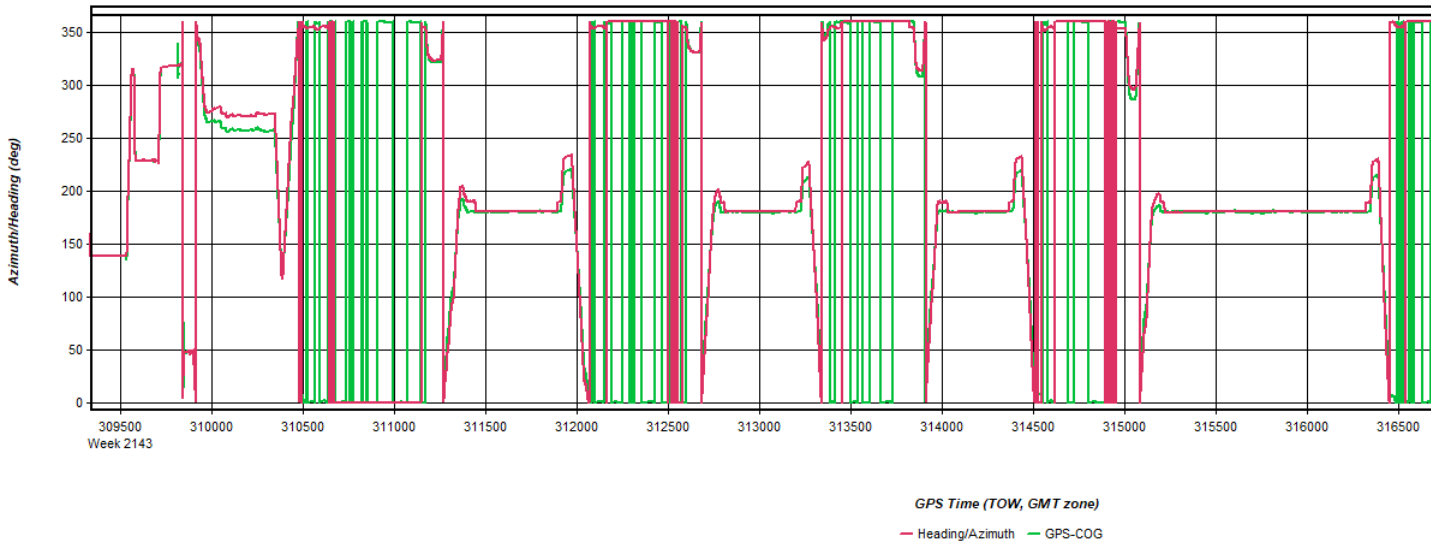
Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 10: 20210203135448_19_1 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



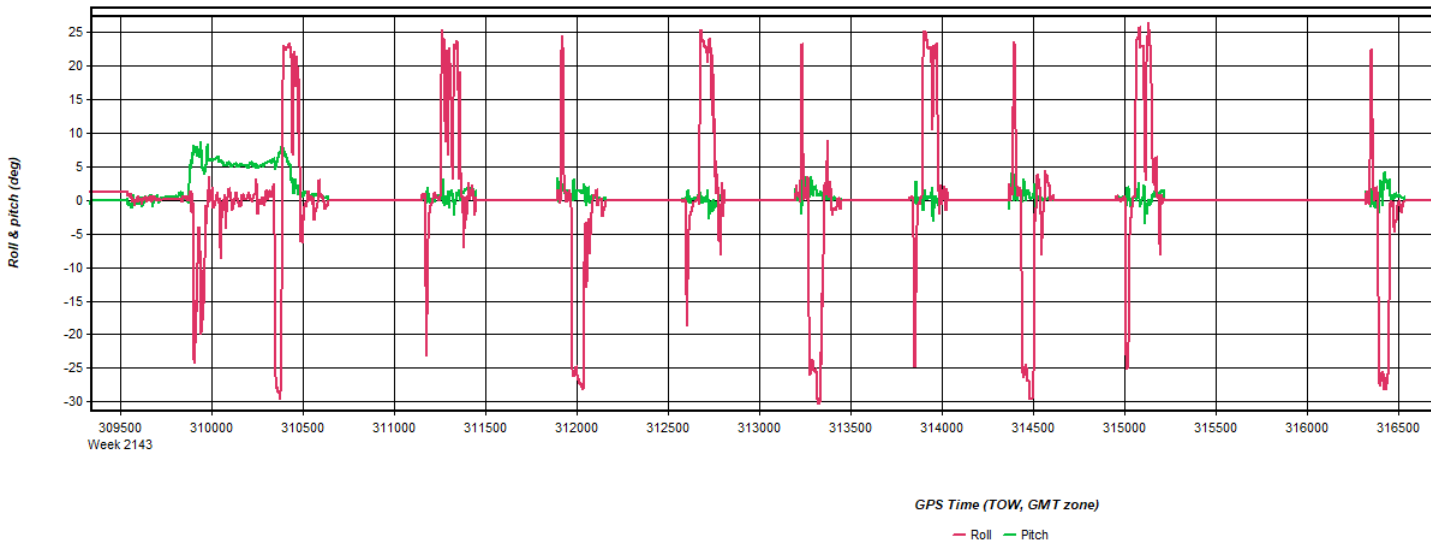
Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 11: 20210203135448_19_1 [Smoothed TC Combined] - Azimuth Plot



Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 12: 20210203135448_19_1 [Smoothed TC Combined] - Roll & Pitch Plot



Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 13: 20210203135448_19_1 [Smoothed TC Combined] - Velocity Profile Plot



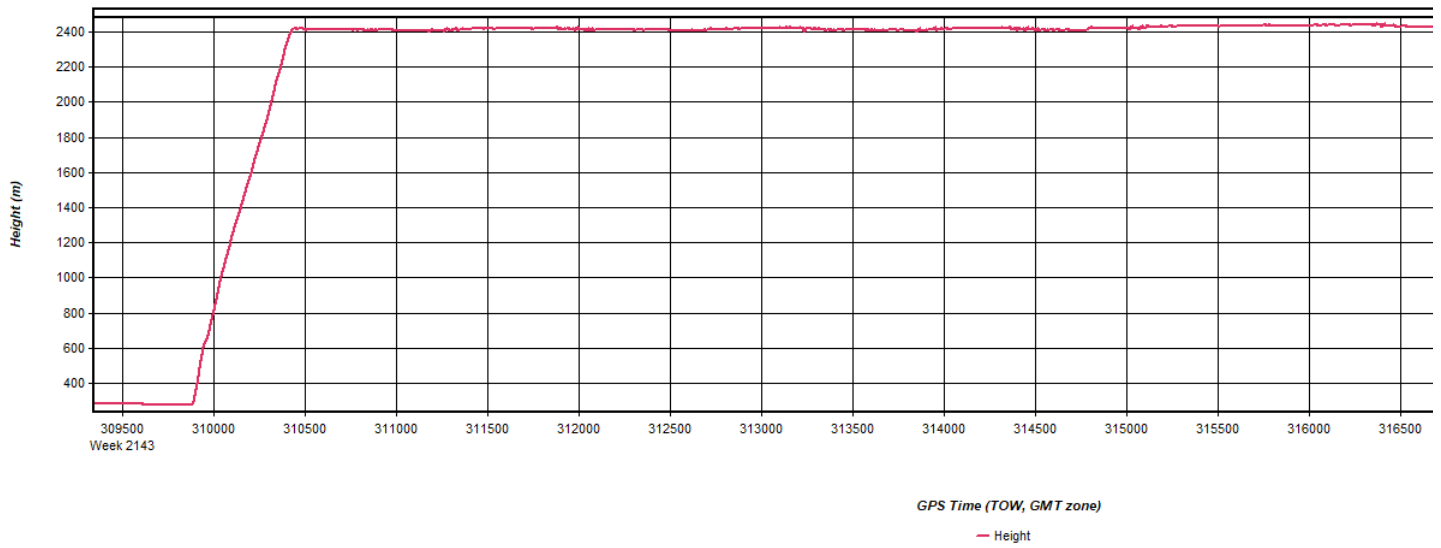
Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 14: 20210203135448_19_1 [Smoothed TC Combined] - Body Frame Velocity Plot



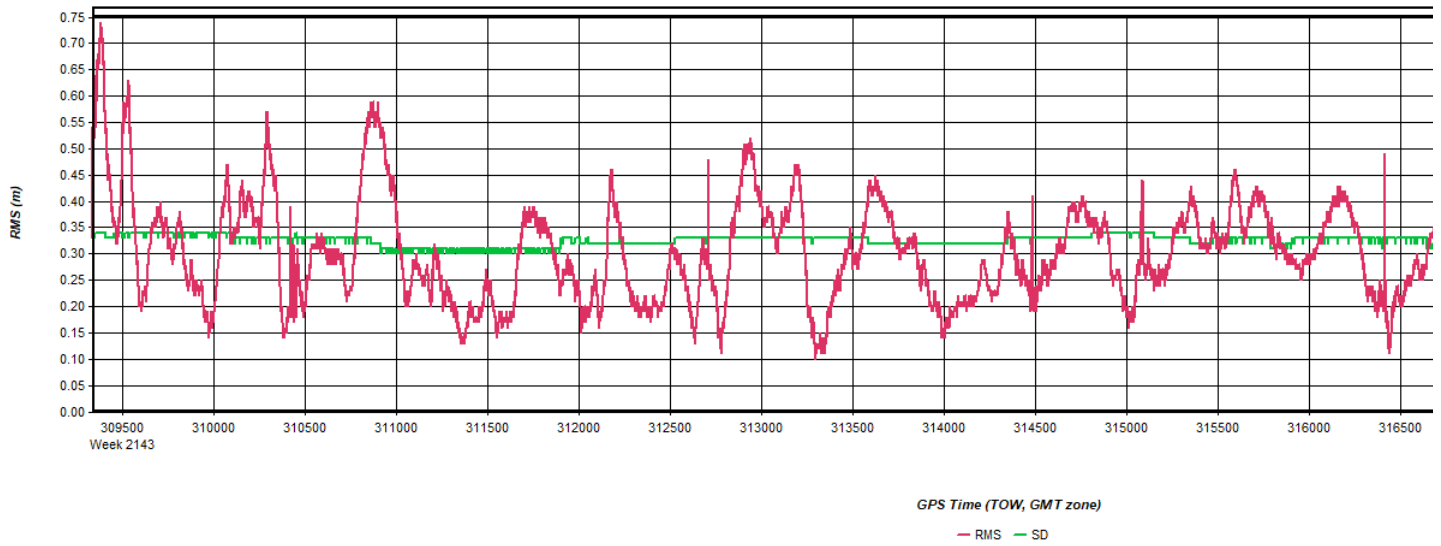
Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 15: 20210203135448_19_1 [Smoothed TC Combined] - Height Profile Plot



Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 16: 20210203135448_19_1 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 17: 20210203135448_19_1 [Smoothed TC Combined] - Carrier Residual RMS Plot

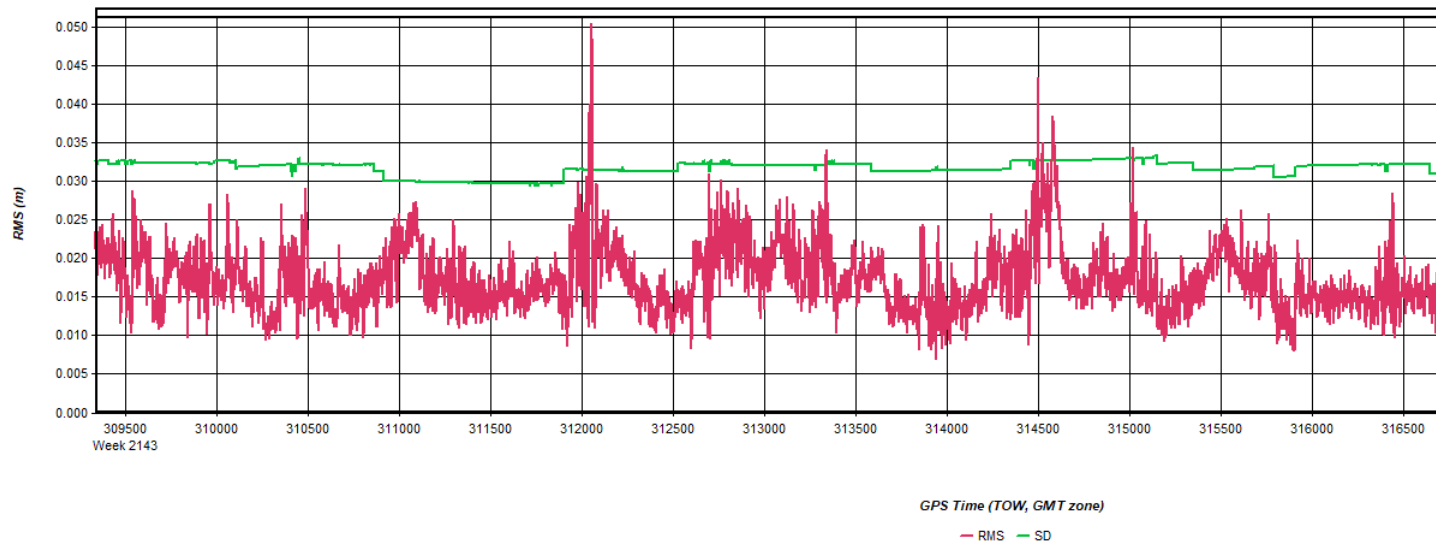


Figure 18: 20210203135448_19_1 [Smoothed TC Combined] - Doppler Residual RMS Plot

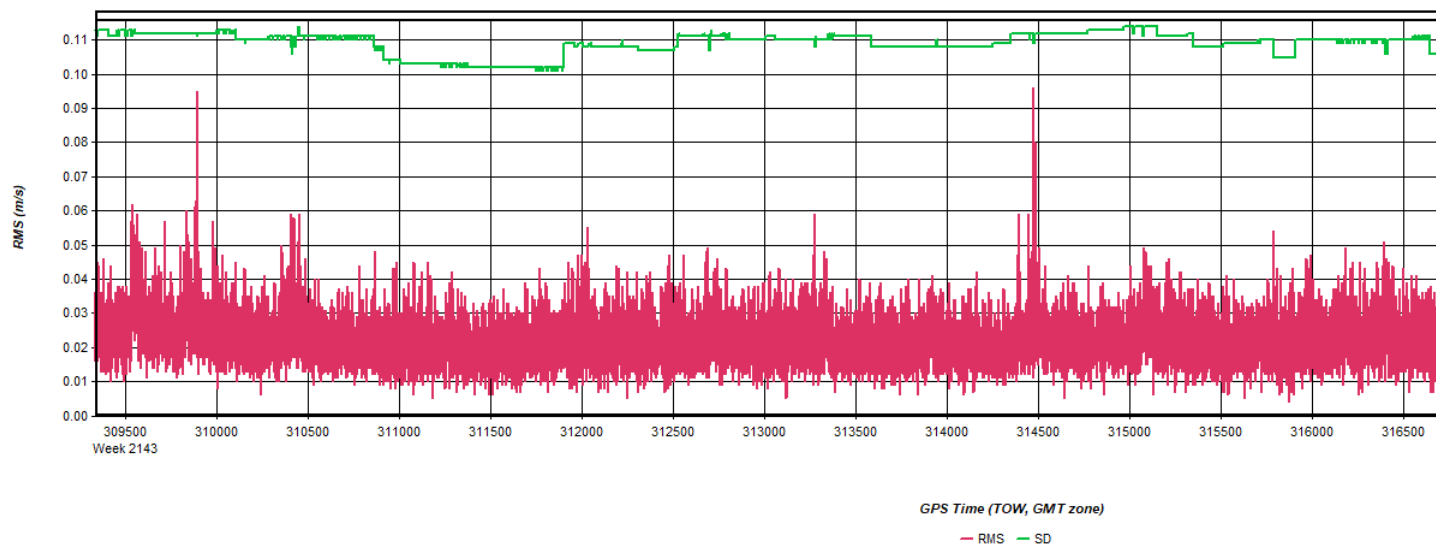
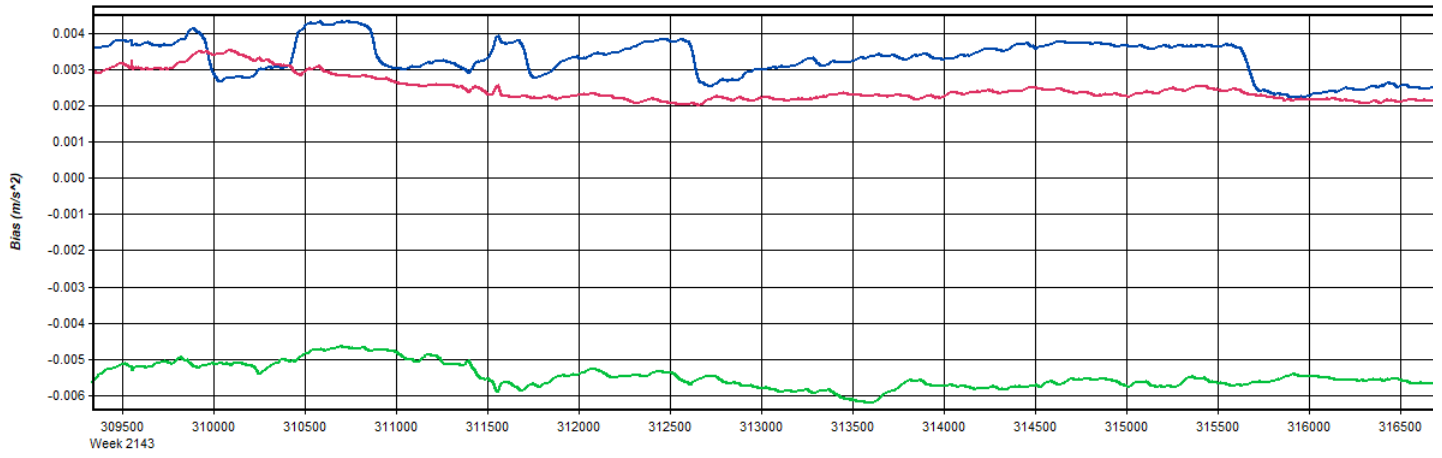


Figure 19: 20210203135448_19_1 [Smoothed TC Combined] - Accelerometer Bias Plot

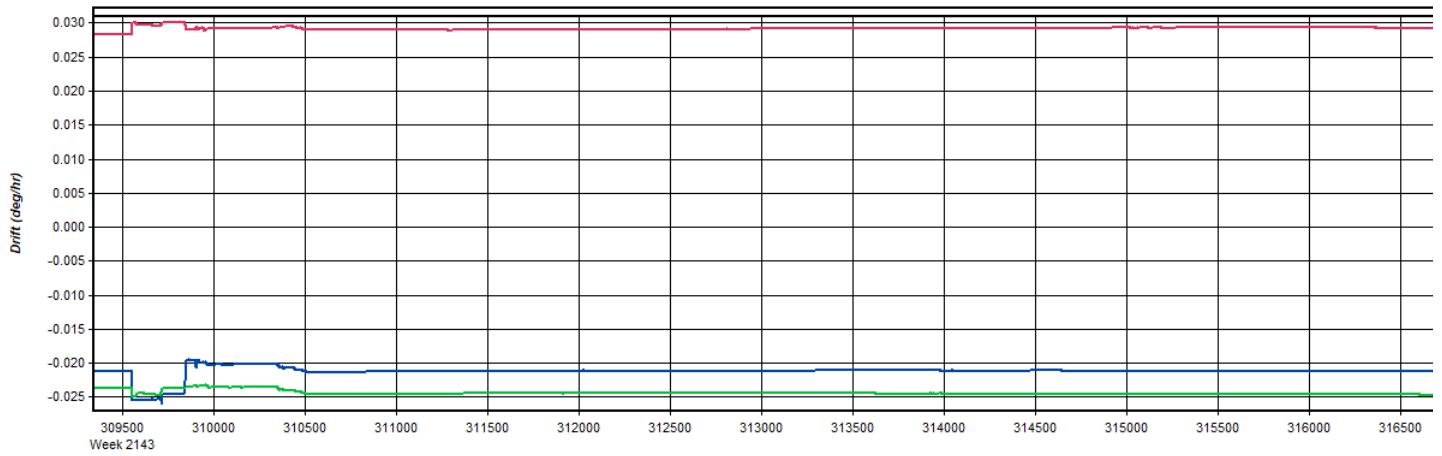


GPS Time (TOW, GMT zone)

— Body-X — Body-Y — Body-Z

Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Figure 20: 20210203135448_19_1 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

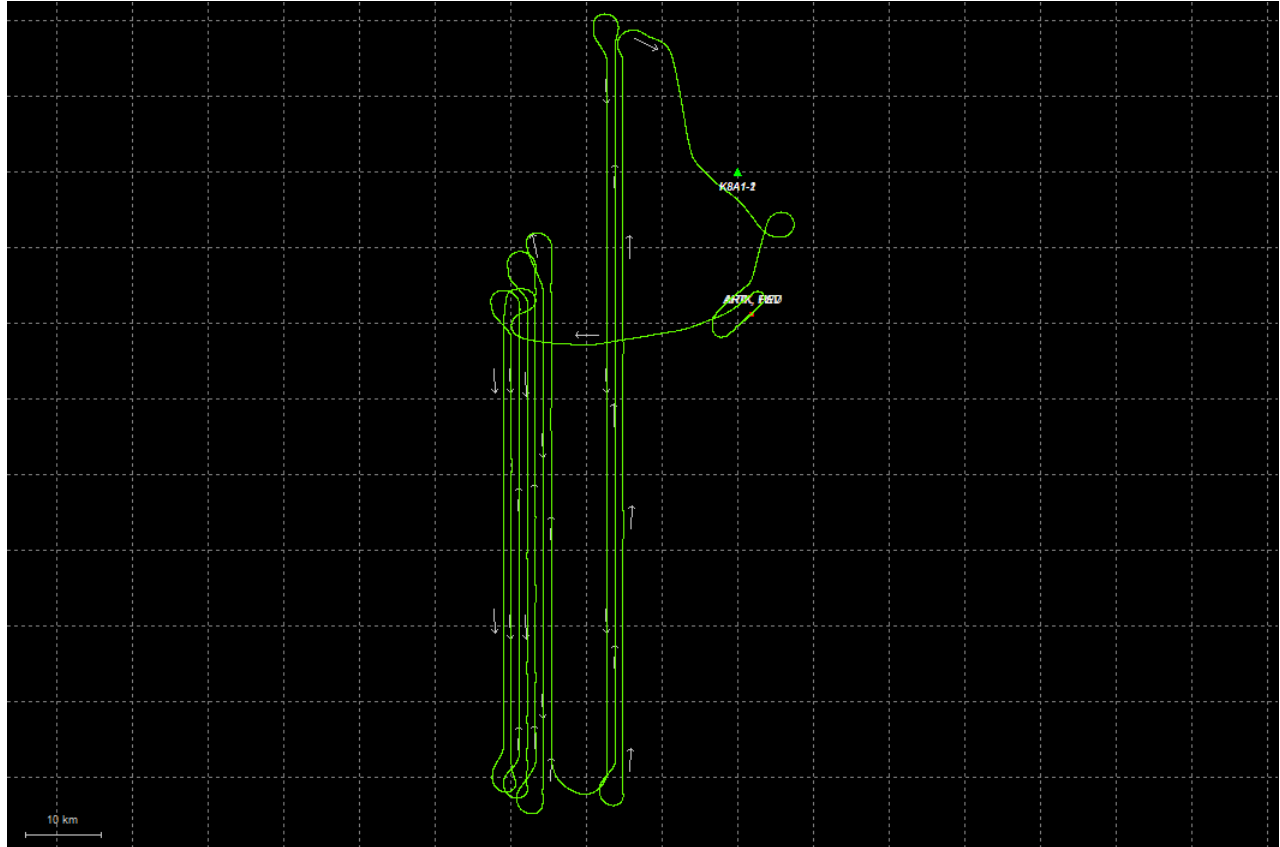
— Body-X — Body-Y — Body-Z

Process	20210203135448_19_1	by Unknown	on 2/6/2021	at 20:29:10
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Output Results for 20210203180842_20

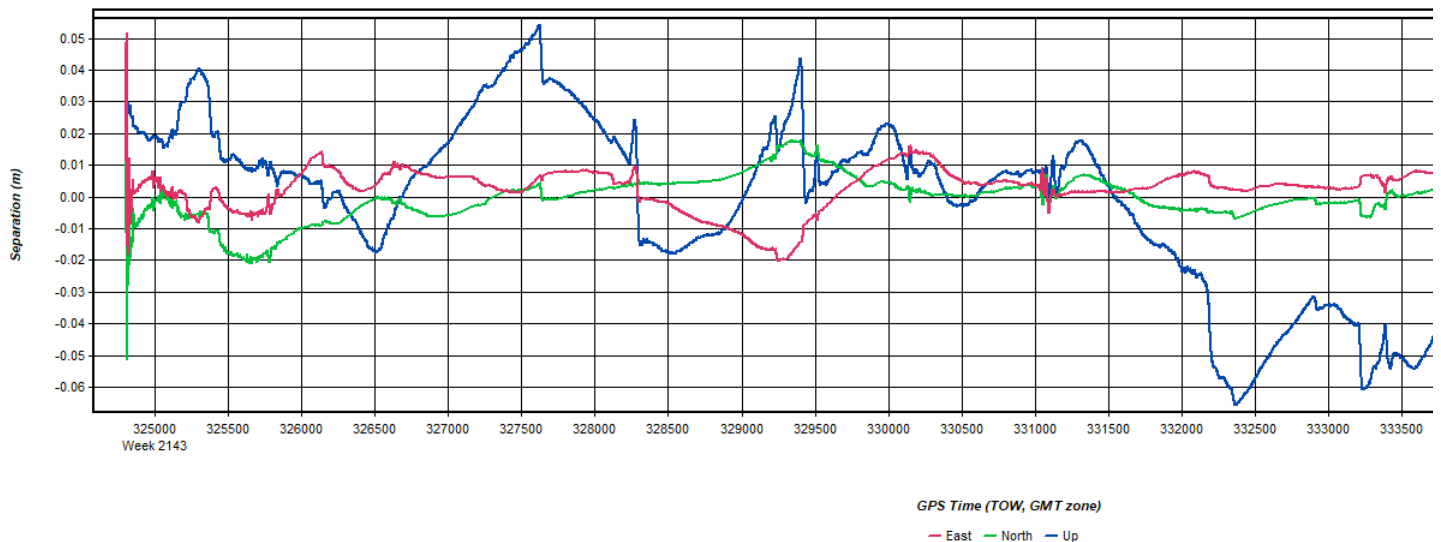
Inertial Explorer Version 8.90.2124
02/07/2021

Figure 1: Smoothed TC Combined - Map



Process	20210203180842_20	by Unknown	on 2/7/2021	at 16:47:12
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Figure 2: 20210203180842_20 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210203180842_20	by Unknown	on 2/7/2021	at 16:47:12
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Figure 3: 20210203180842_20 [Smoothed TC Combined] - Float or Fixed Ambiguity

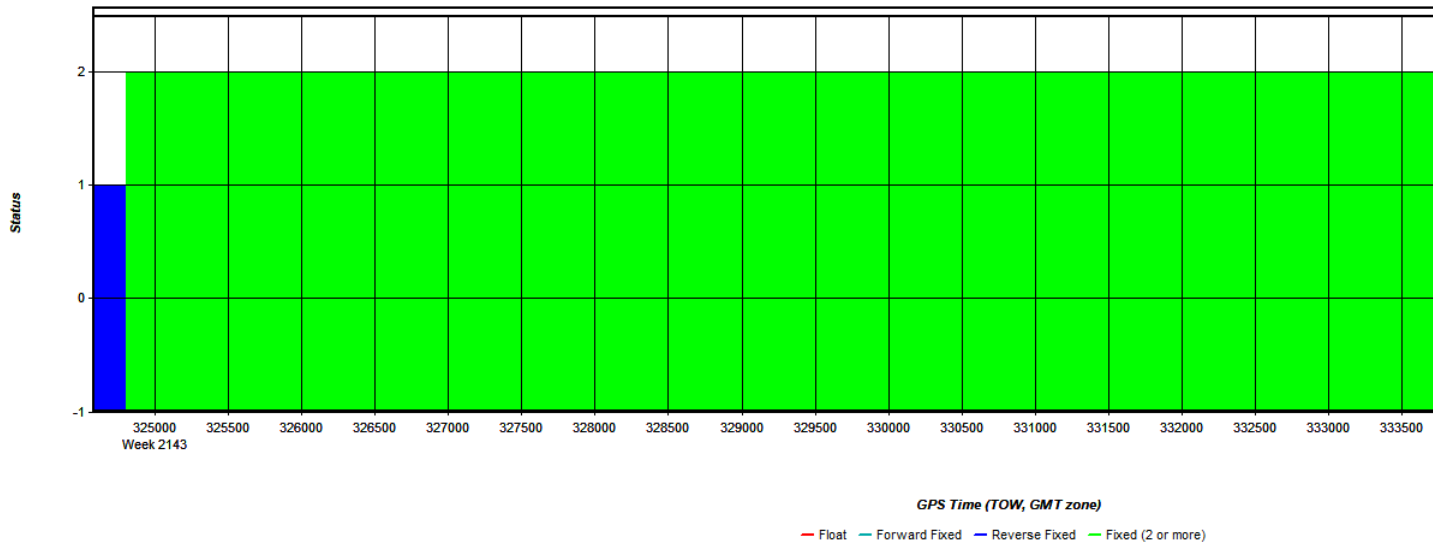


Figure 4: 20210203180842_20 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

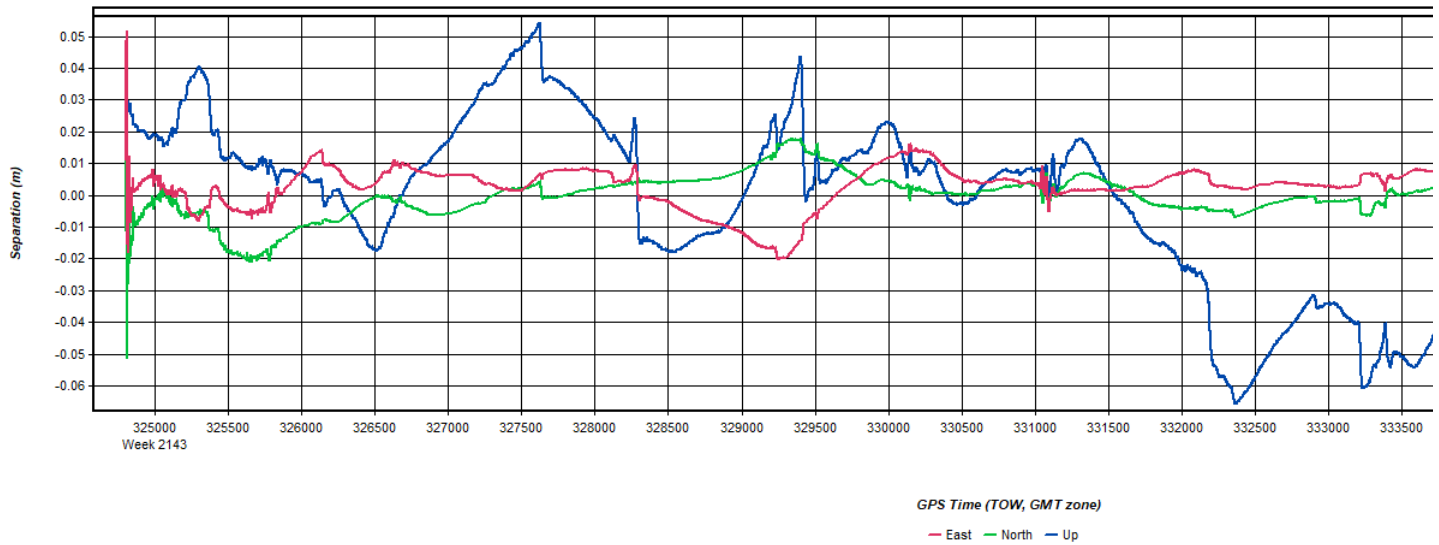
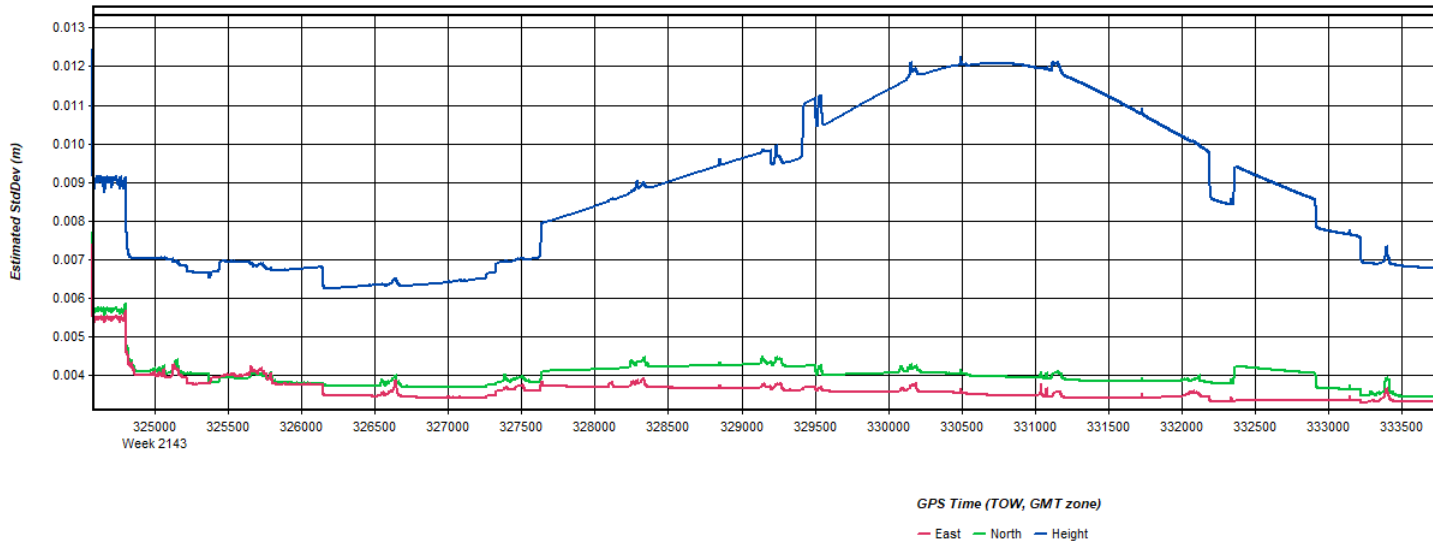
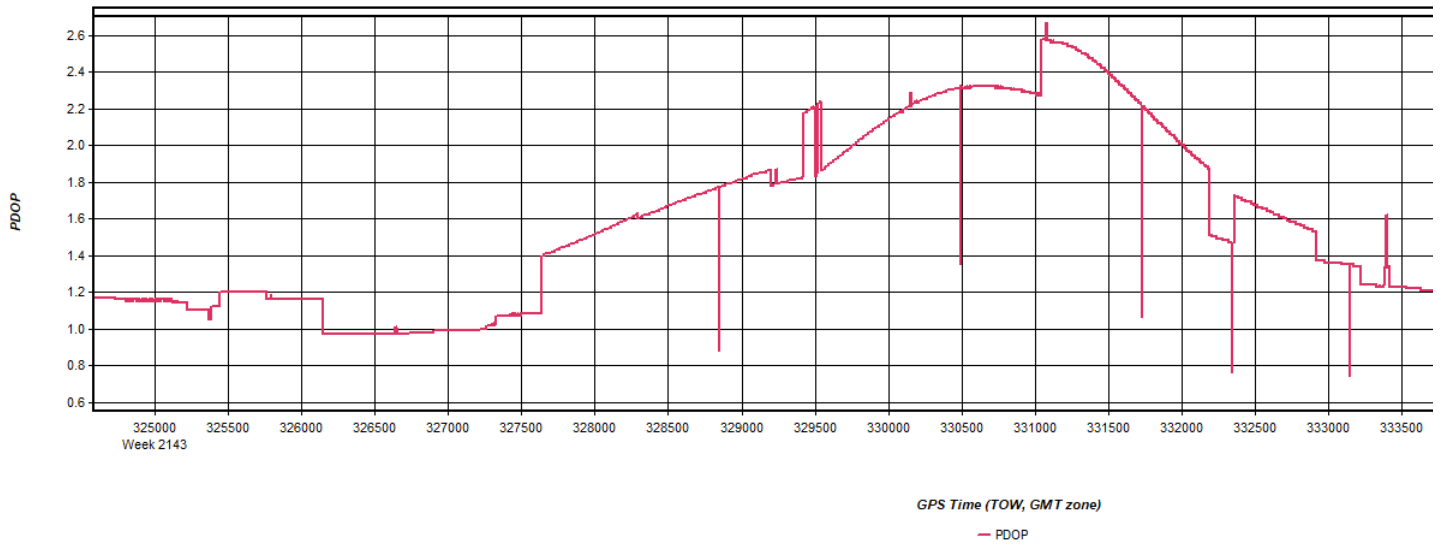


Figure 5: 20210203180842_20 [Smoothed TC Combined] - Estimated Position Accuracy Plot



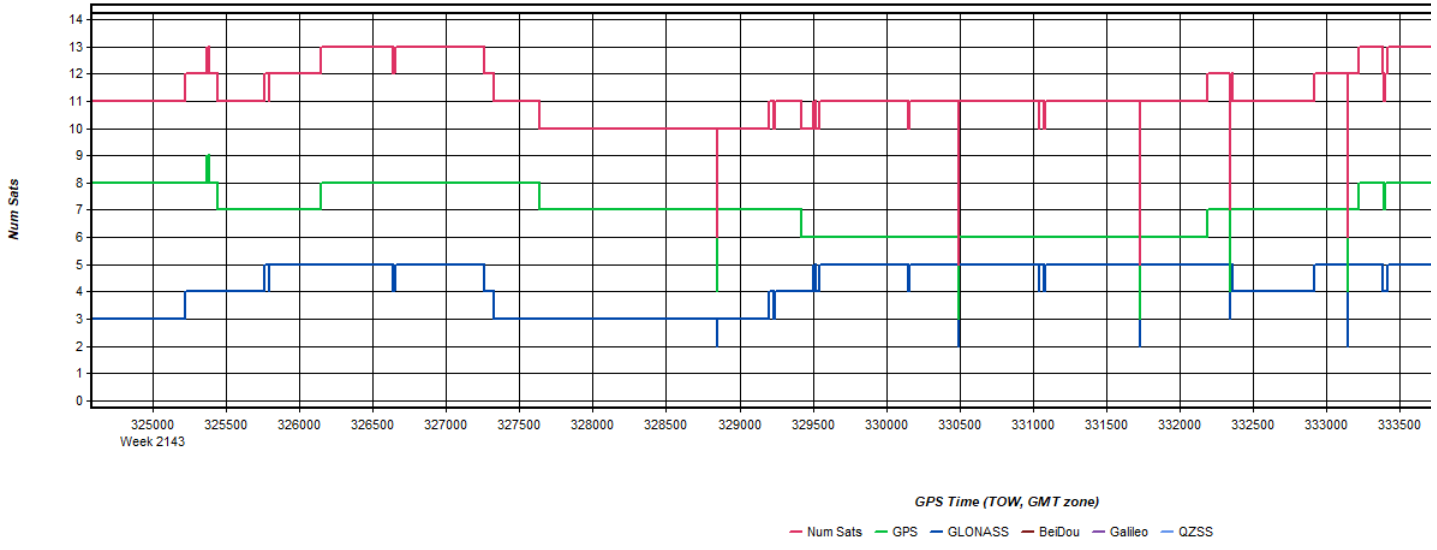
Process 20210203180842_20 by Unknown on 2/7/2021 at 16:47:12

Figure 6: 20210203180842_20 [Smoothed TC Combined] - PDOP Plot



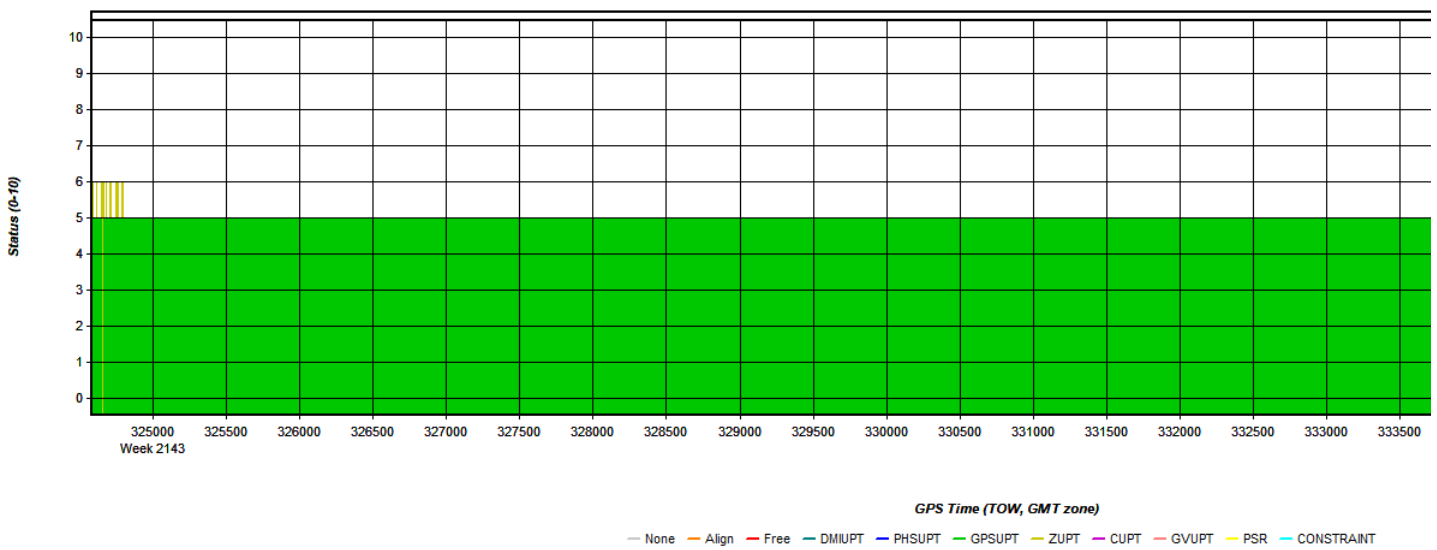
Process 20210203180842_20 by Unknown on 2/7/2021 at 16:47:12

Figure 7: 20210203180842_20 [Smoothed TC Combined] - Number of Satellites Line Plot



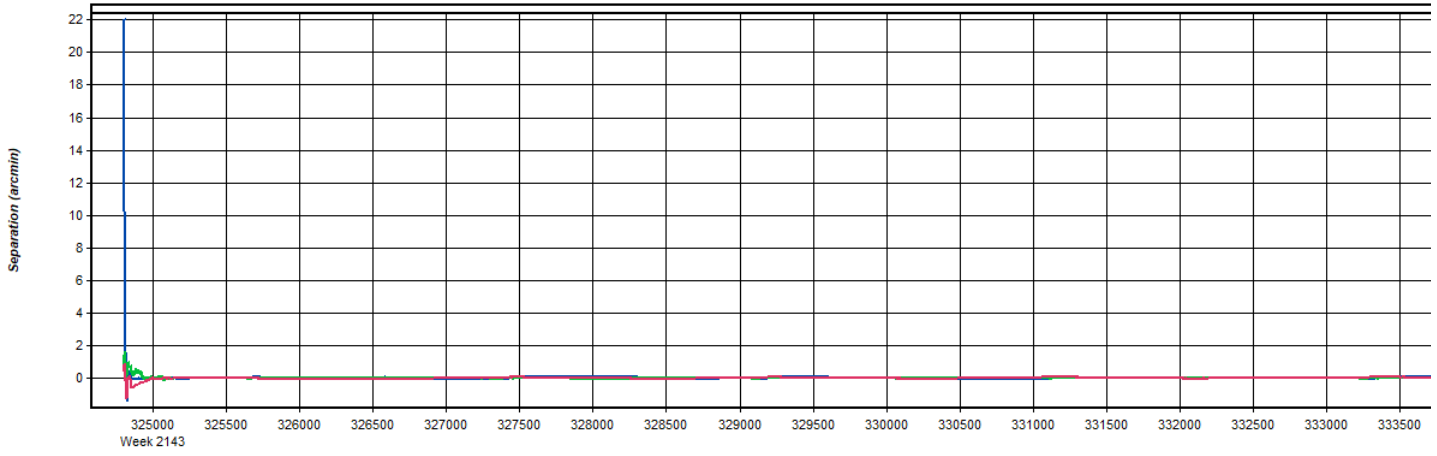
Process 20210203180842_20 by Unknown on 2/7/2021 at 16:47:12

Figure 8: 20210203180842_20 [Smoothed TC Combined] - Status flag for IMU processing



Process 20210203180842_20 by Unknown on 2/7/2021 at 16:47:12

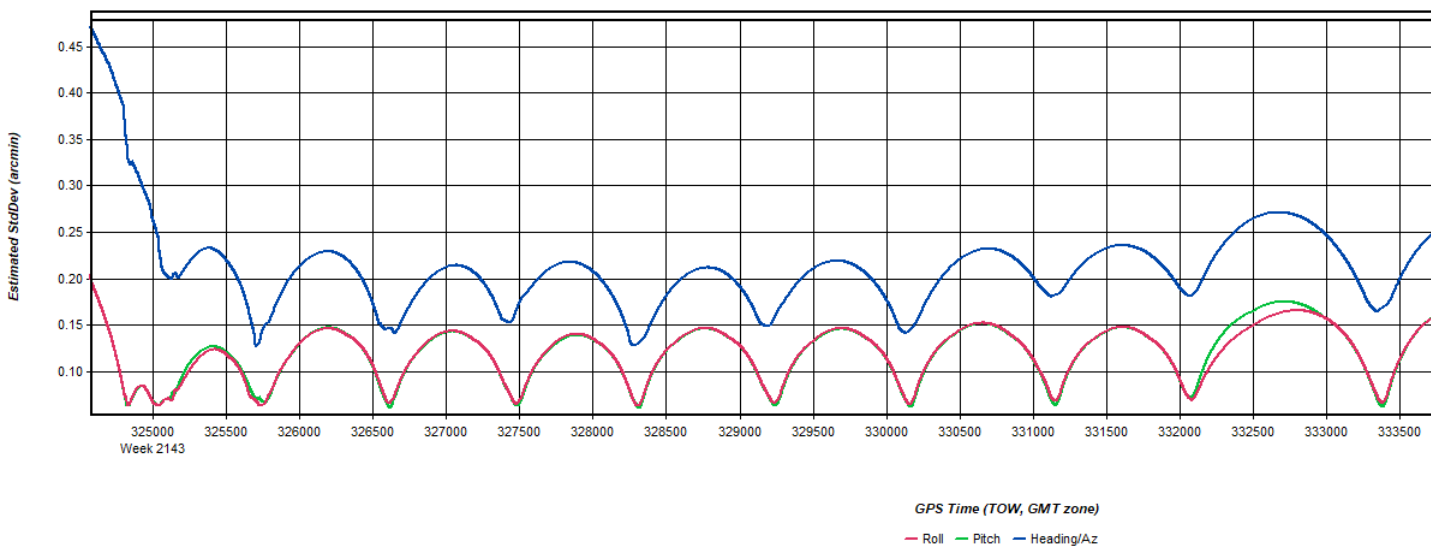
Figure 9: 20210203180842_20 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



GPS Time (TOW, GMT zone)
 - Roll - Pitch - Heading/Az

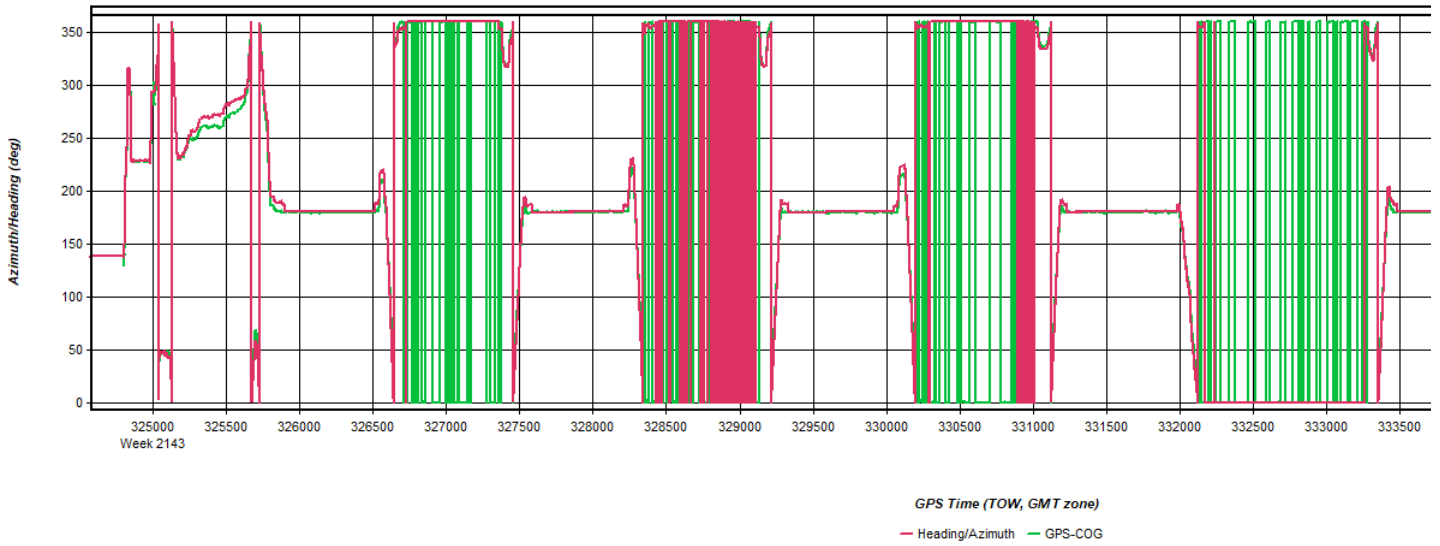
Process	20210203180842_20	by Unknown	on 2/7/2021	at 16:47:12
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Figure 10: 20210203180842_20 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20210203180842_20	by Unknown	on 2/7/2021	at 16:47:12
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Figure 11: 20210203180842_20 [Smoothed TC Combined] - Azimuth Plot



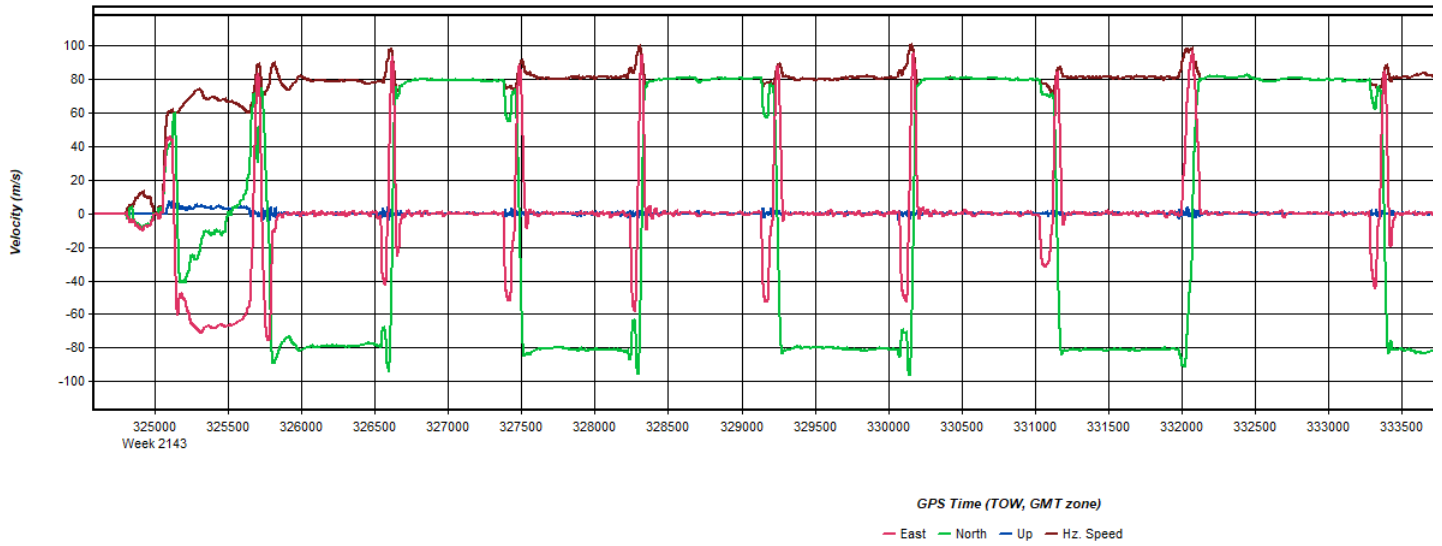
Process	20210203180842_20	by Unknown	on 2/7/2021	at 16:47:12
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Figure 12: 20210203180842_20 [Smoothed TC Combined] - Roll & Pitch Plot



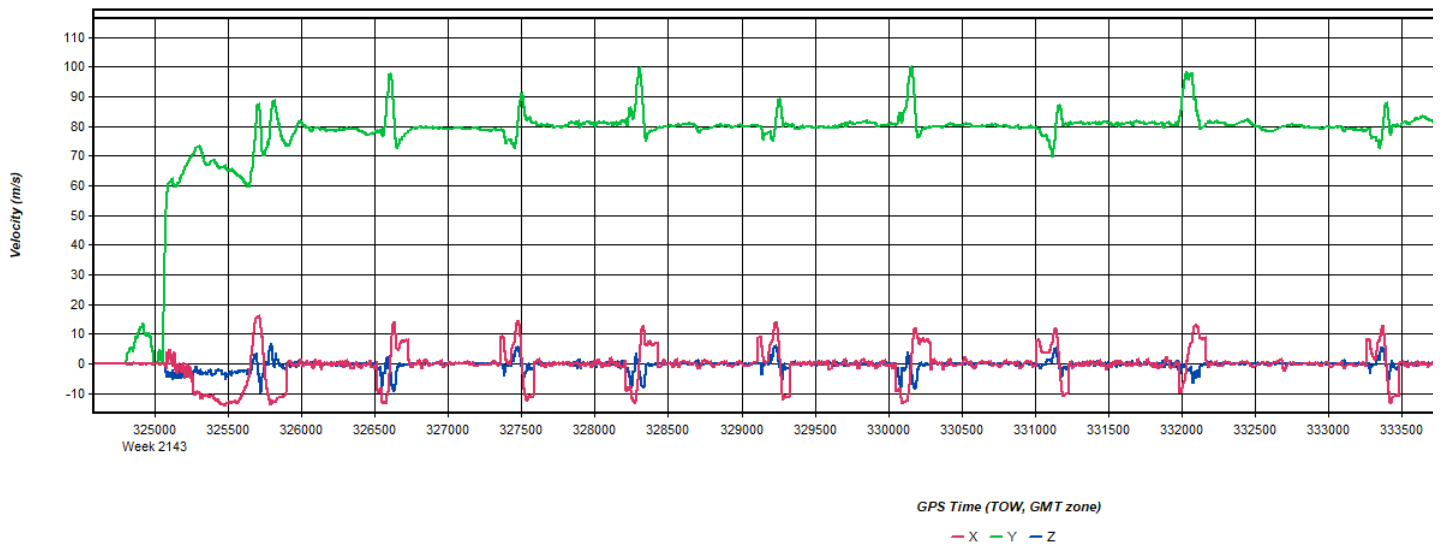
Process	20210203180842_20	by Unknown	on 2/7/2021	at 16:47:12
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Figure 13: 20210203180842_20 [Smoothed TC Combined] - Velocity Profile Plot



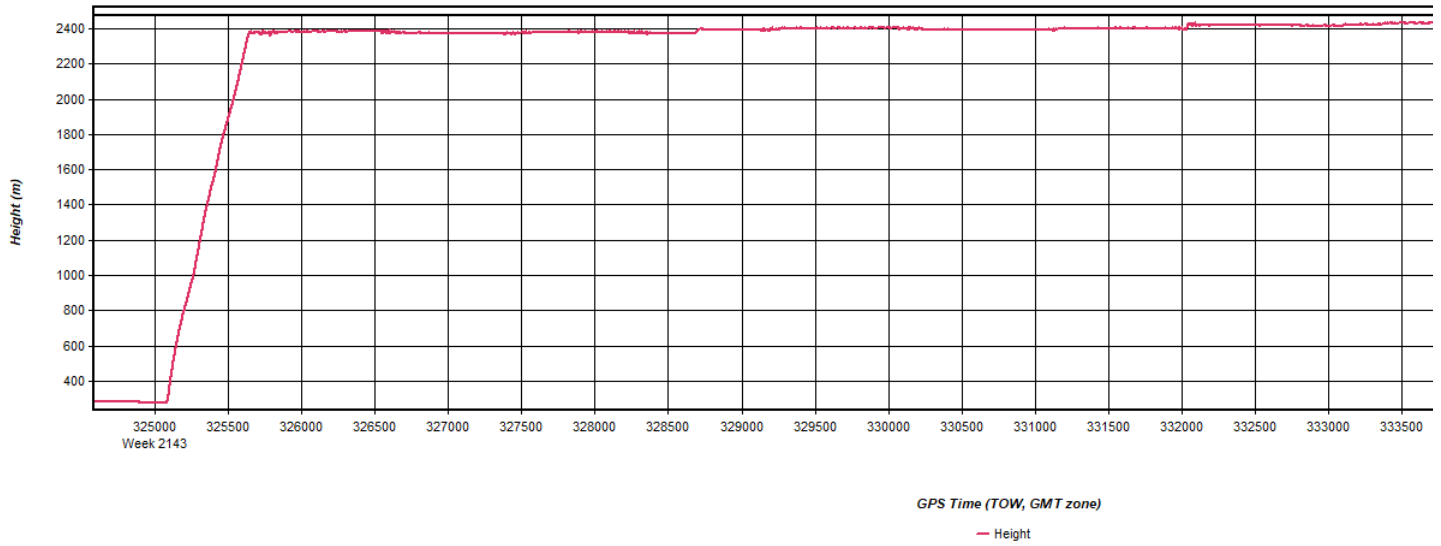
Process	20210203180842_20	by Unknown	on 2/7/2021	at 16:47:12
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Figure 14: 20210203180842_20 [Smoothed TC Combined] - Body Frame Velocity Plot



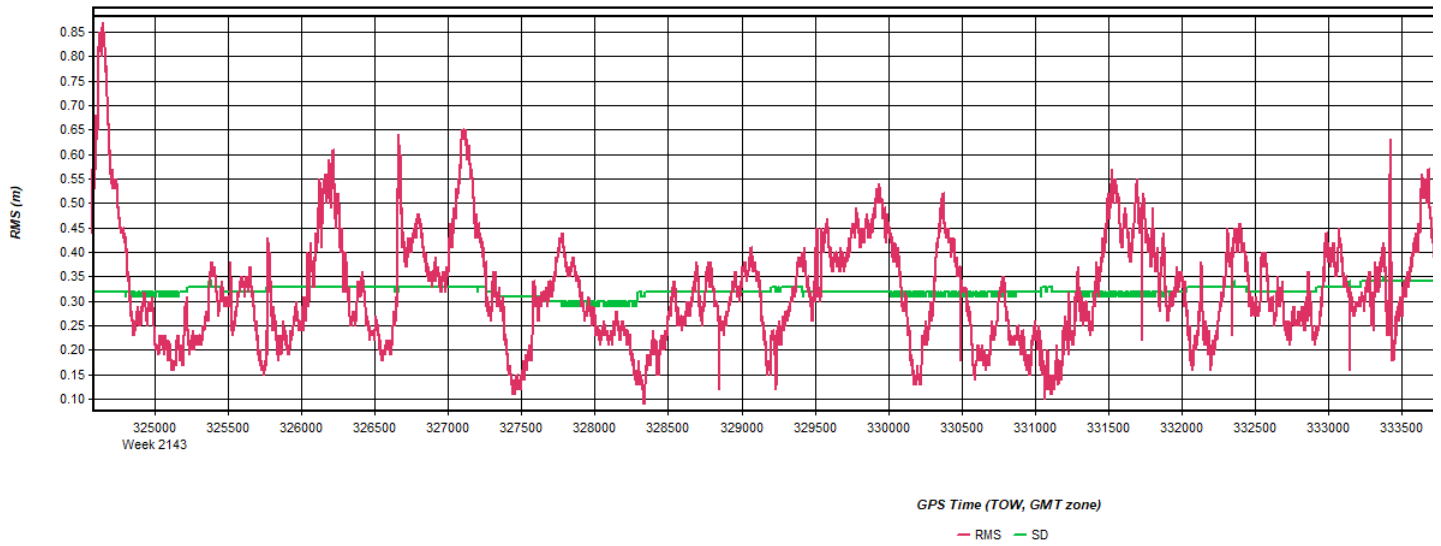
Process	20210203180842_20	by Unknown	on 2/7/2021	at 16:47:12
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Figure 15: 20210203180842_20 [Smoothed TC Combined] - Height Profile Plot



Process	20210203180842_20	by Unknown	on 2/7/2021	at 16:47:12
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Figure 16: 20210203180842_20 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20210203180842_20	by Unknown	on 2/7/2021	at 16:47:12
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Figure 17: 20210203180842_20 [Smoothed TC Combined] - Carrier Residual RMS Plot

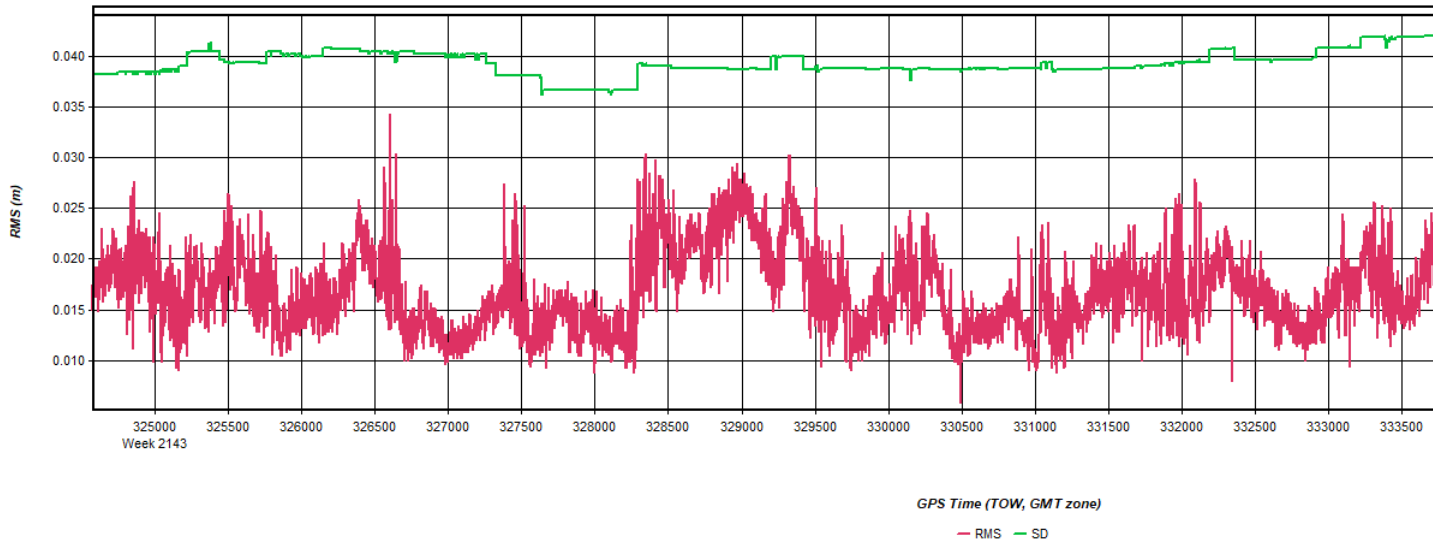


Figure 18: 20210203180842_20 [Smoothed TC Combined] - Doppler Residual RMS Plot

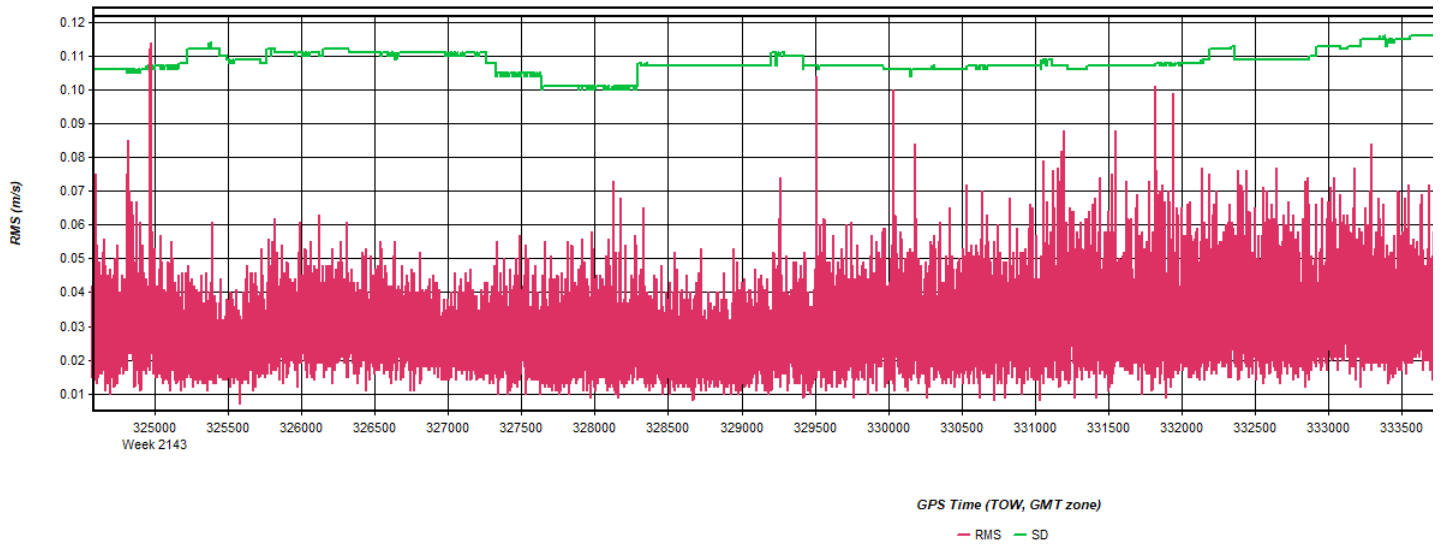
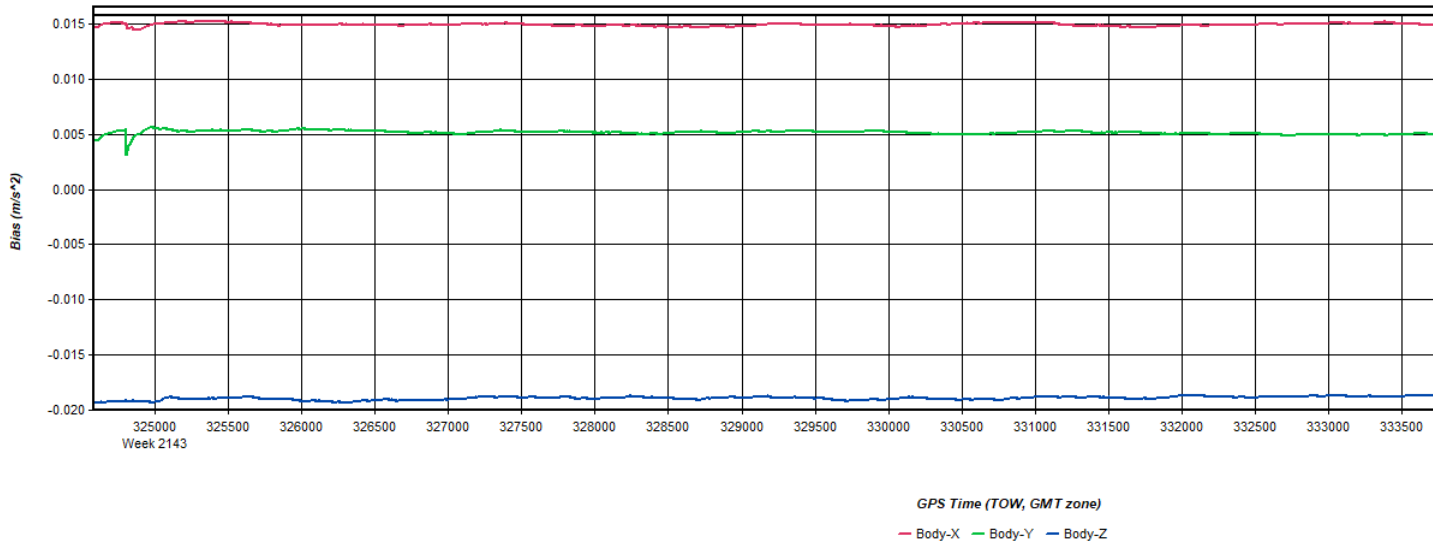
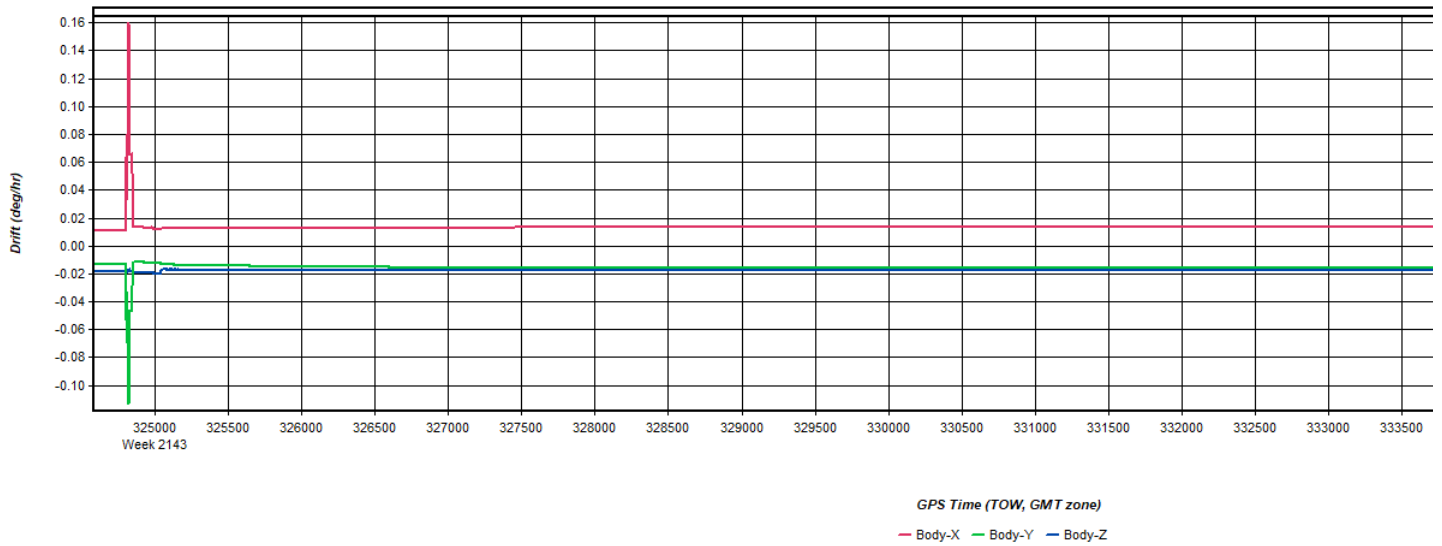


Figure 19: 20210203180842_20 [Smoothed TC Combined] - Accelerometer Bias Plot



Process 20210203180842_20 by Unknown on 2/7/2021 at 16:47:12

Figure 20: 20210203180842_20 [Smoothed TC Combined] - Gyro Drift Plot

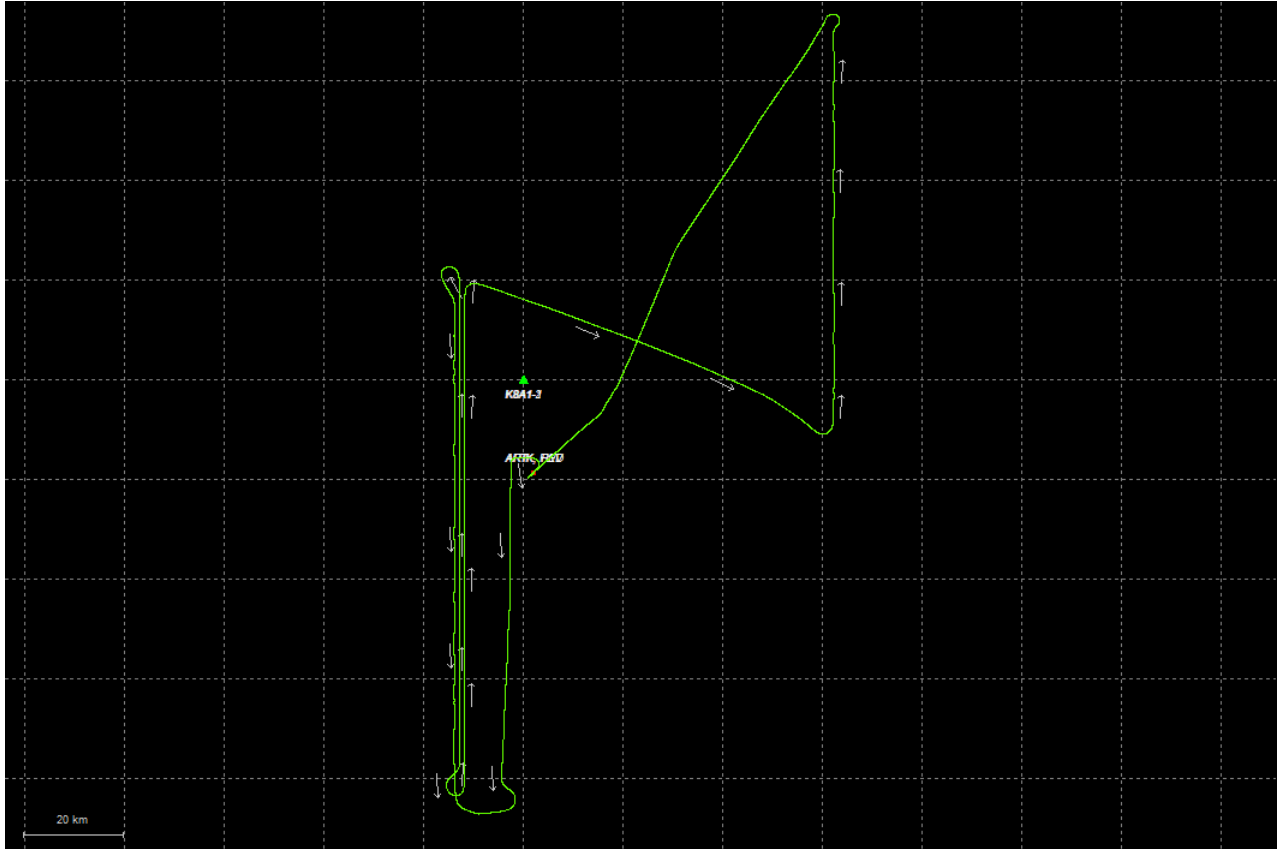


Process 20210203180842_20 by Unknown on 2/7/2021 at 16:47:12

Output Results for 20210203220335_21

Inertial Explorer Version 8.90.2124
02/06/2021

Figure 1: Smoothed TC Combined - Map



Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 2: 20210203220335_21 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot

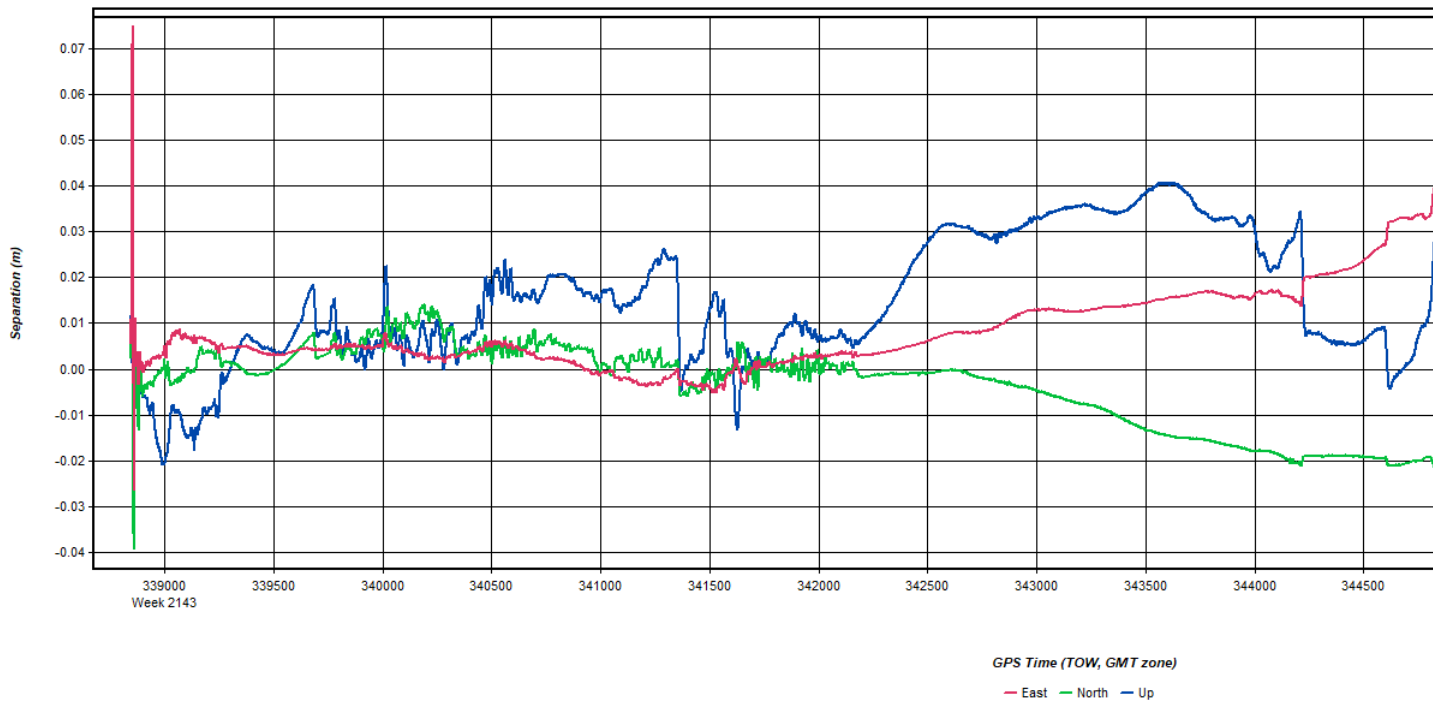


Figure 3: 20210203220335_21 [Smoothed TC Combined] - Float or Fixed Ambiguity

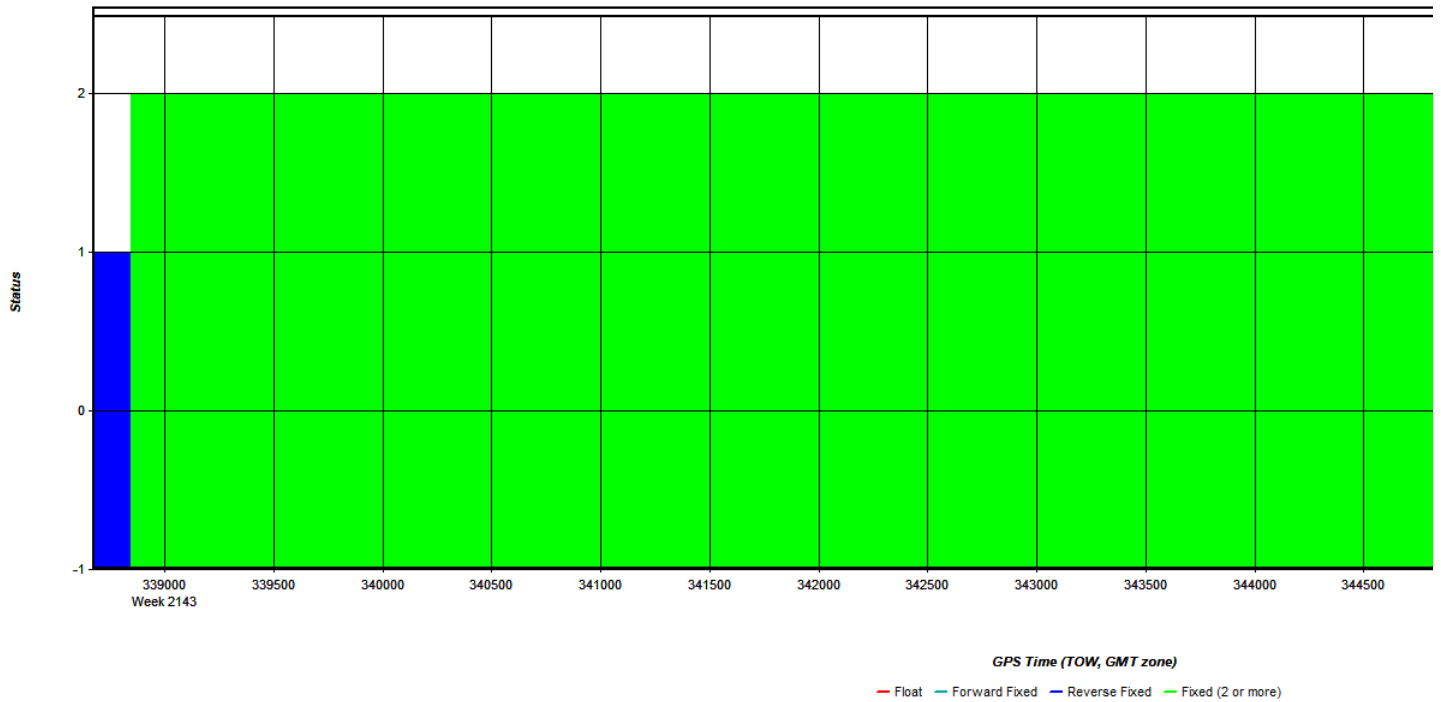
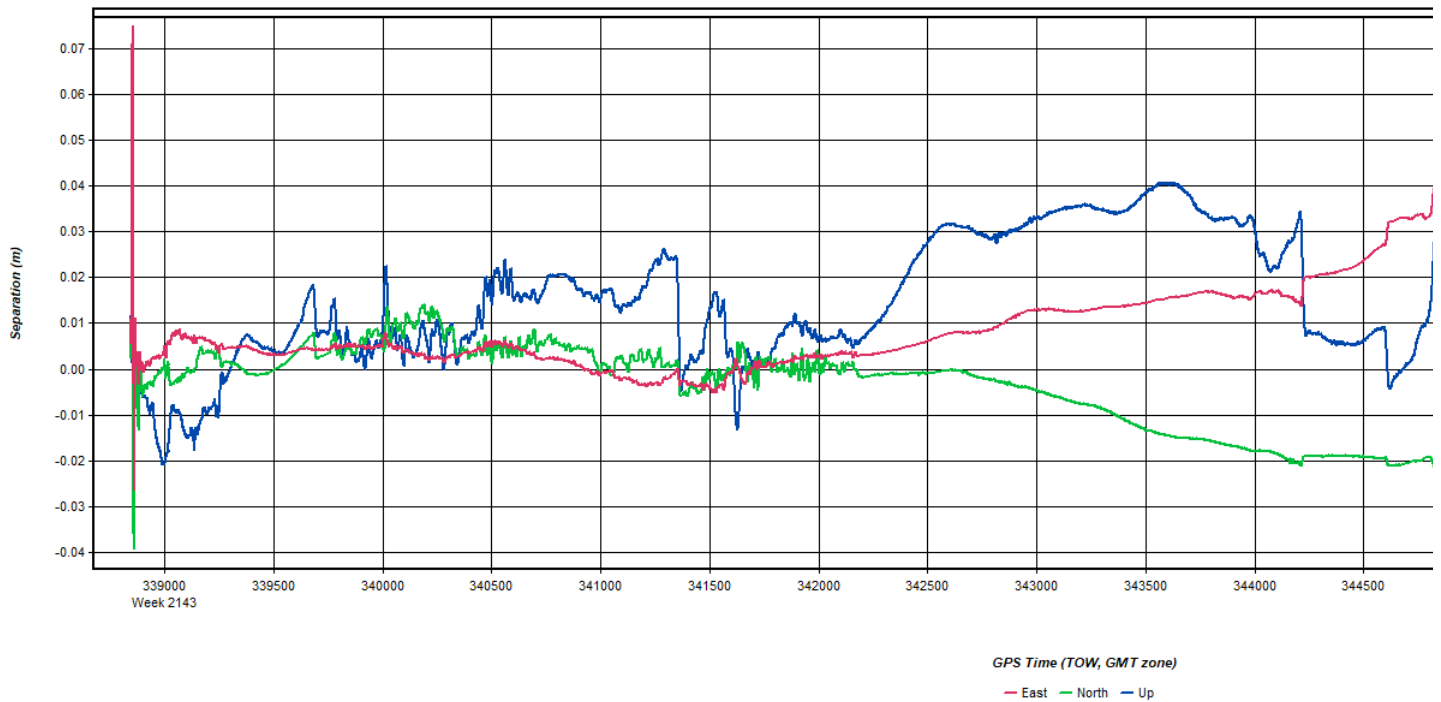
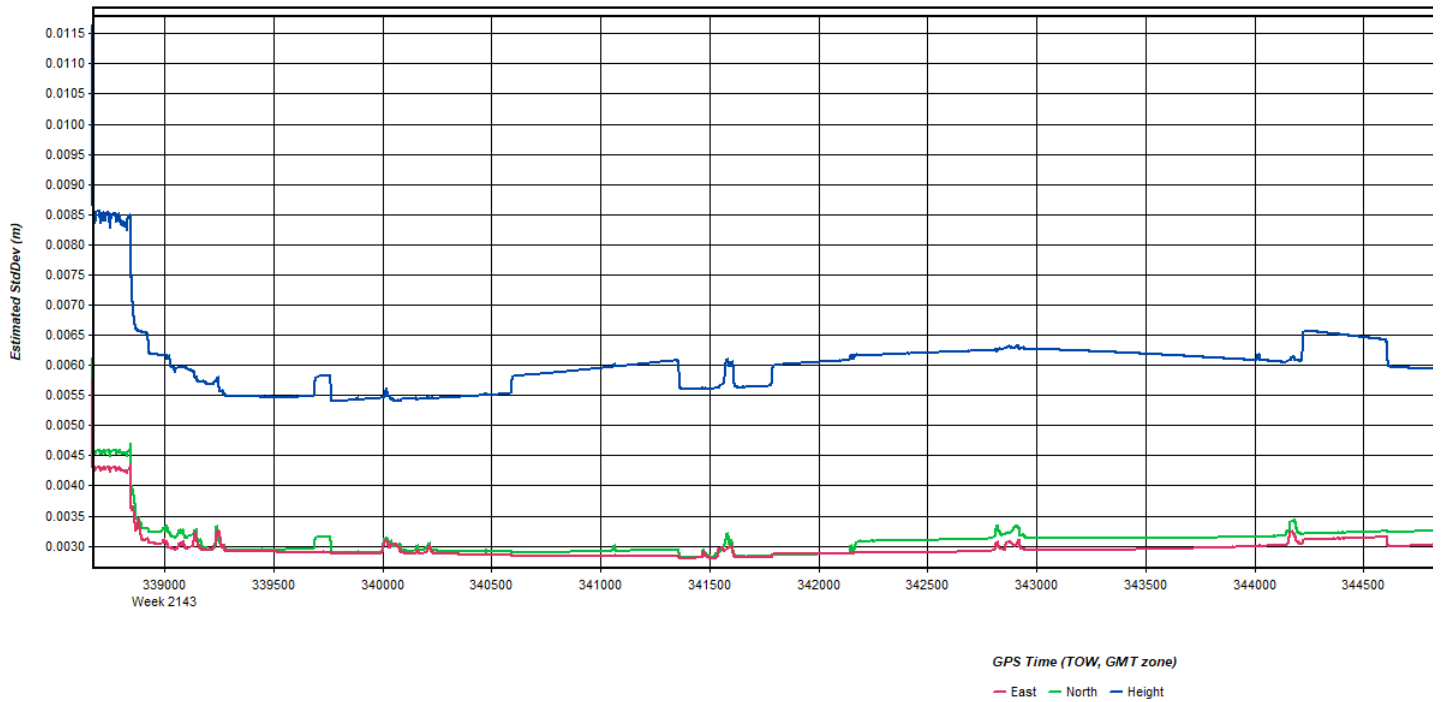


Figure 4: 20210203220335_21 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



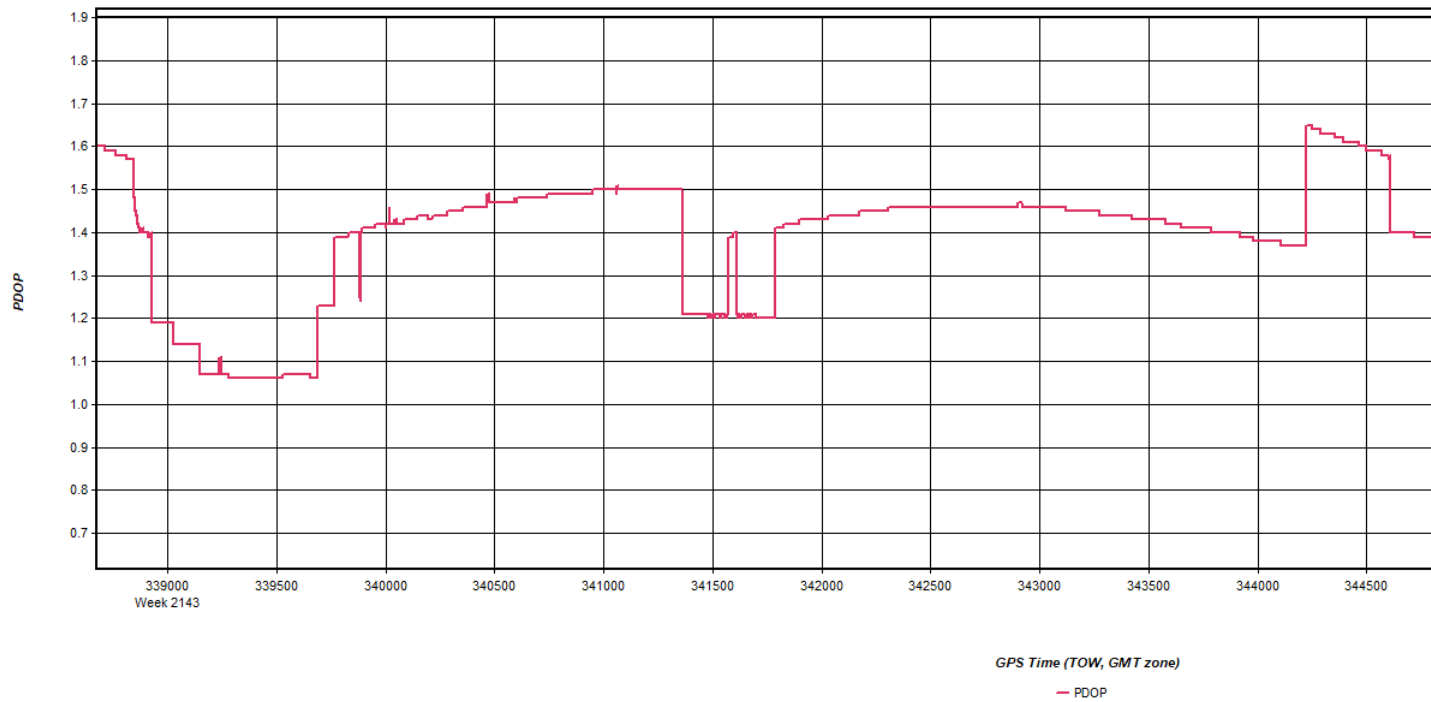
Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 5: 20210203220335_21 [Smoothed TC Combined] - Estimated Position Accuracy Plot



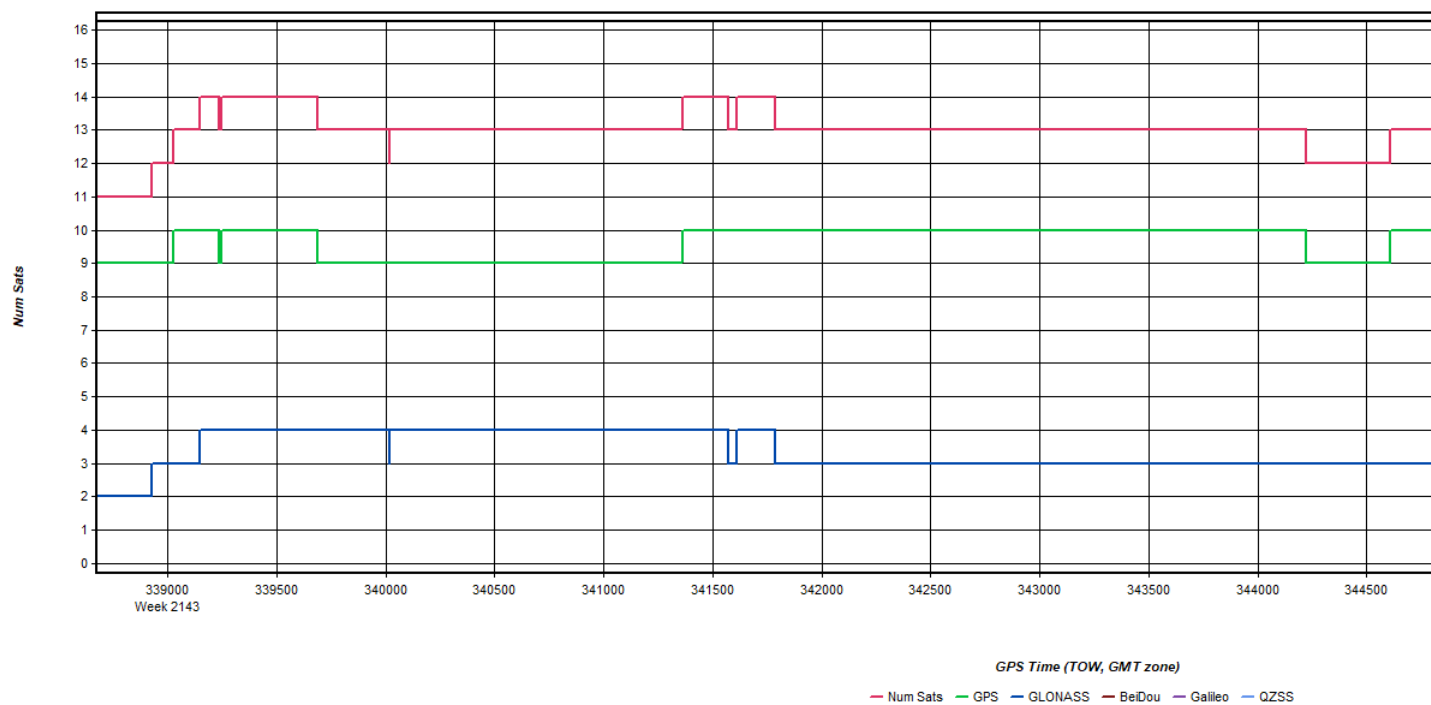
Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 6: 20210203220335_21 [Smoothed TC Combined] - PDOP Plot



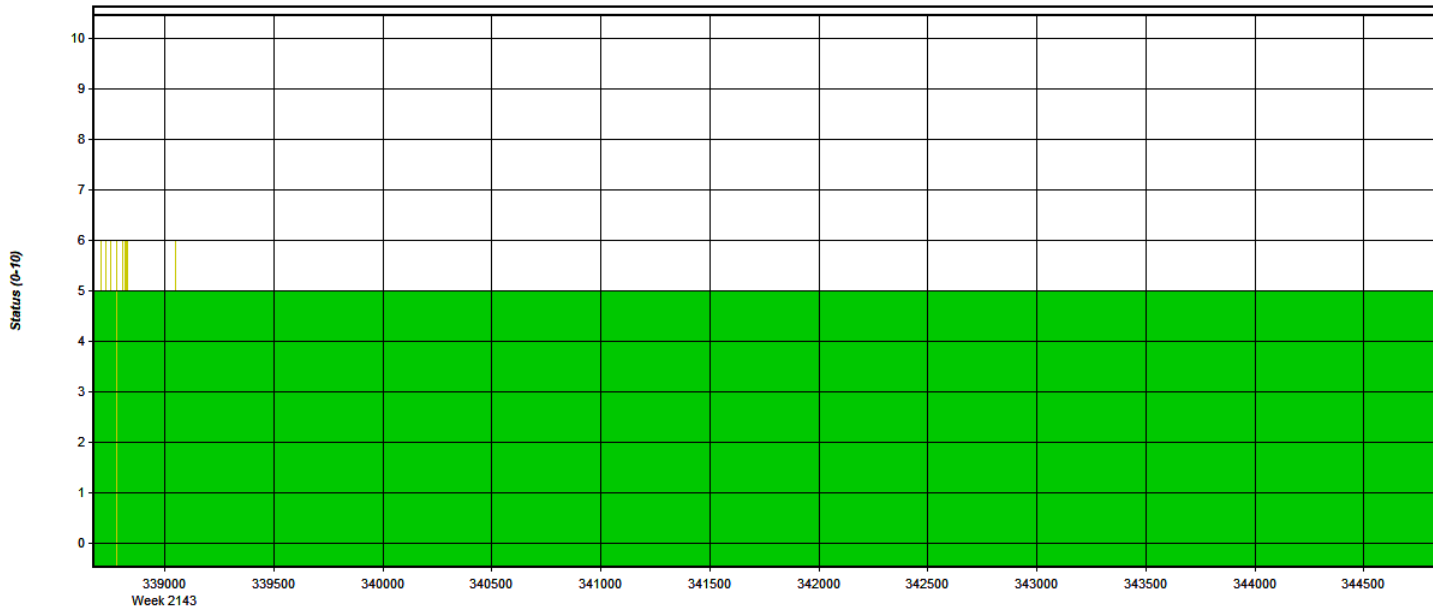
Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 7: 20210203220335_21 [Smoothed TC Combined] - Number of Satellites Line Plot



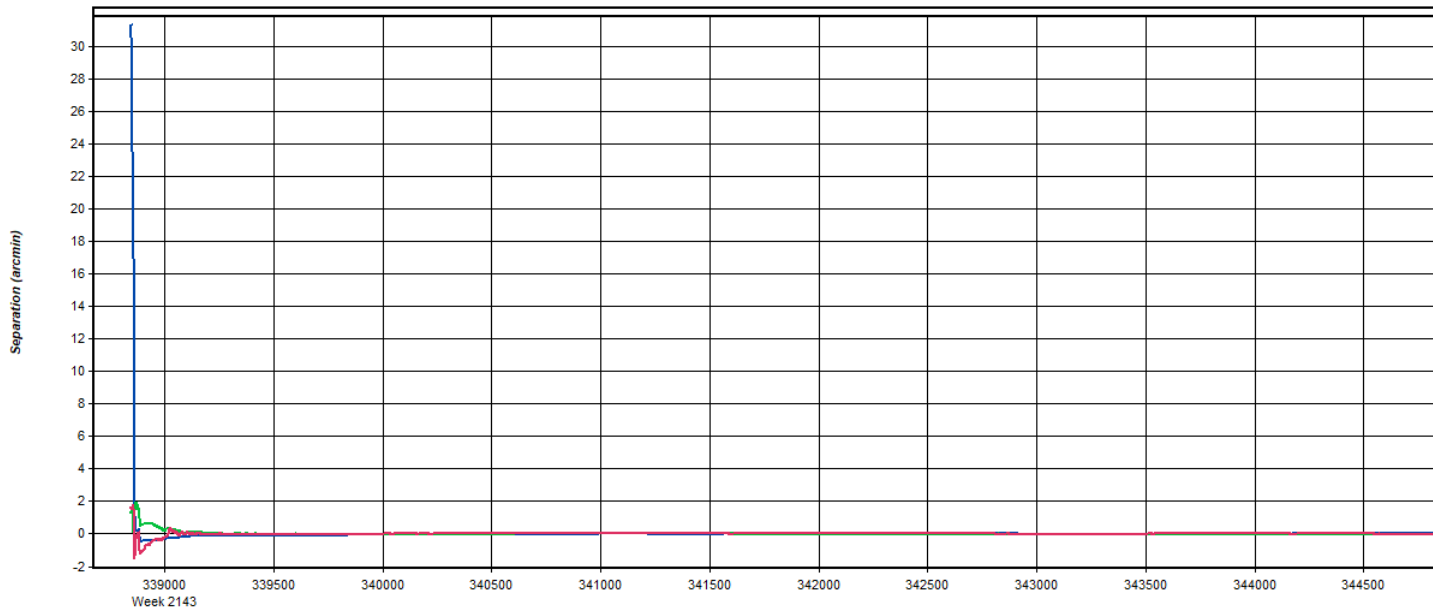
Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 8: 20210203220335_21 [Smoothed TC Combined] - Status flag for IMU processing



Process: 20210203220335_21 by Unknown on 2/6/2021 at 16:18:18

Figure 9: 20210203220335_21 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



Process: 20210203220335_21 by Unknown on 2/6/2021 at 16:18:18

Figure 10: 20210203220335_21 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

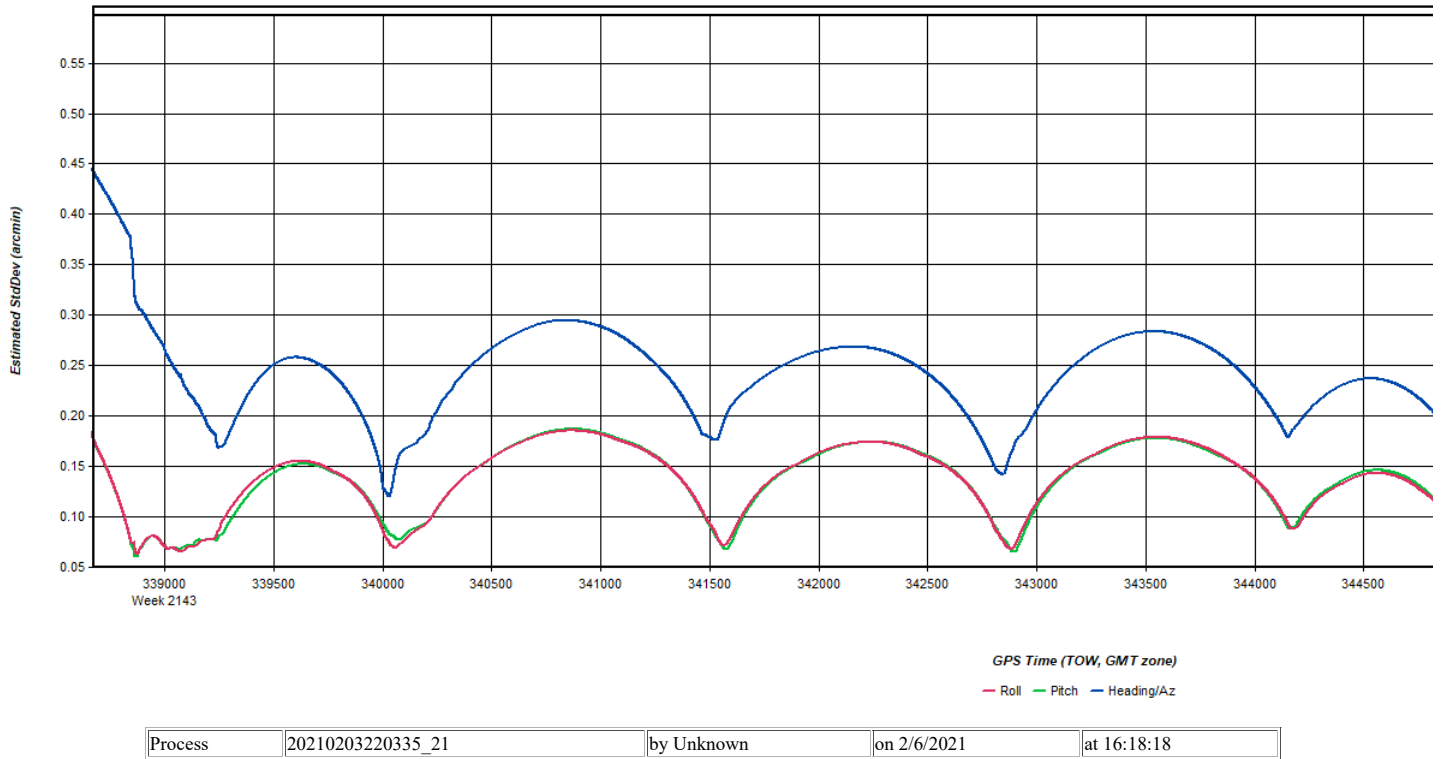


Figure 11: 20210203220335_21 [Smoothed TC Combined] - Azimuth Plot

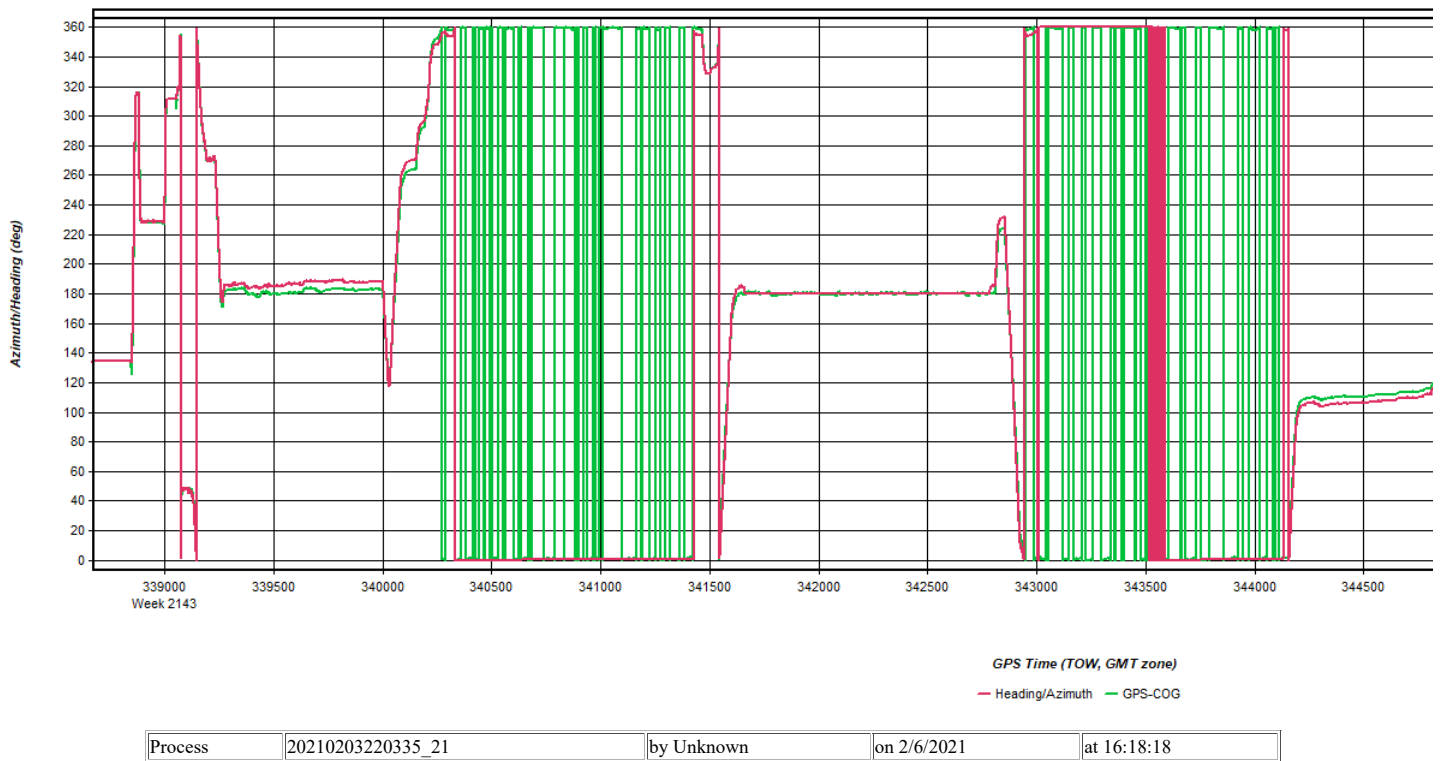
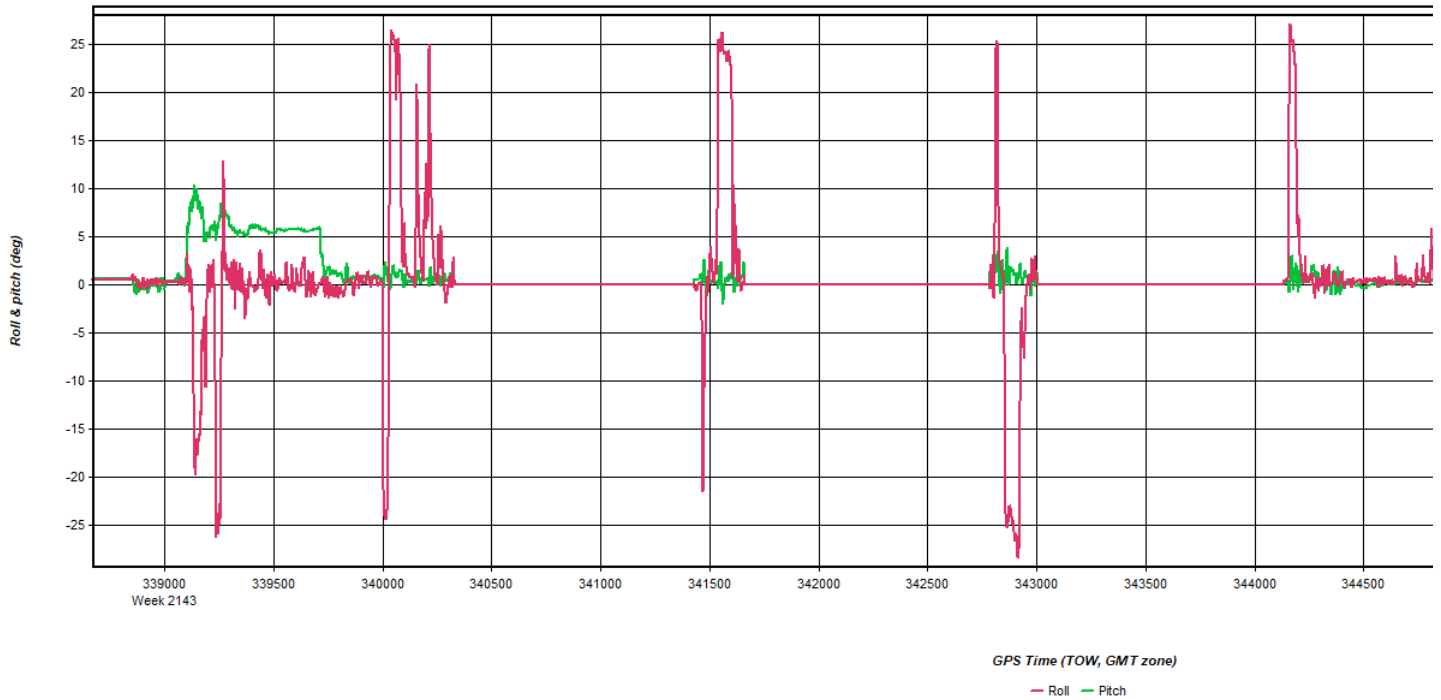
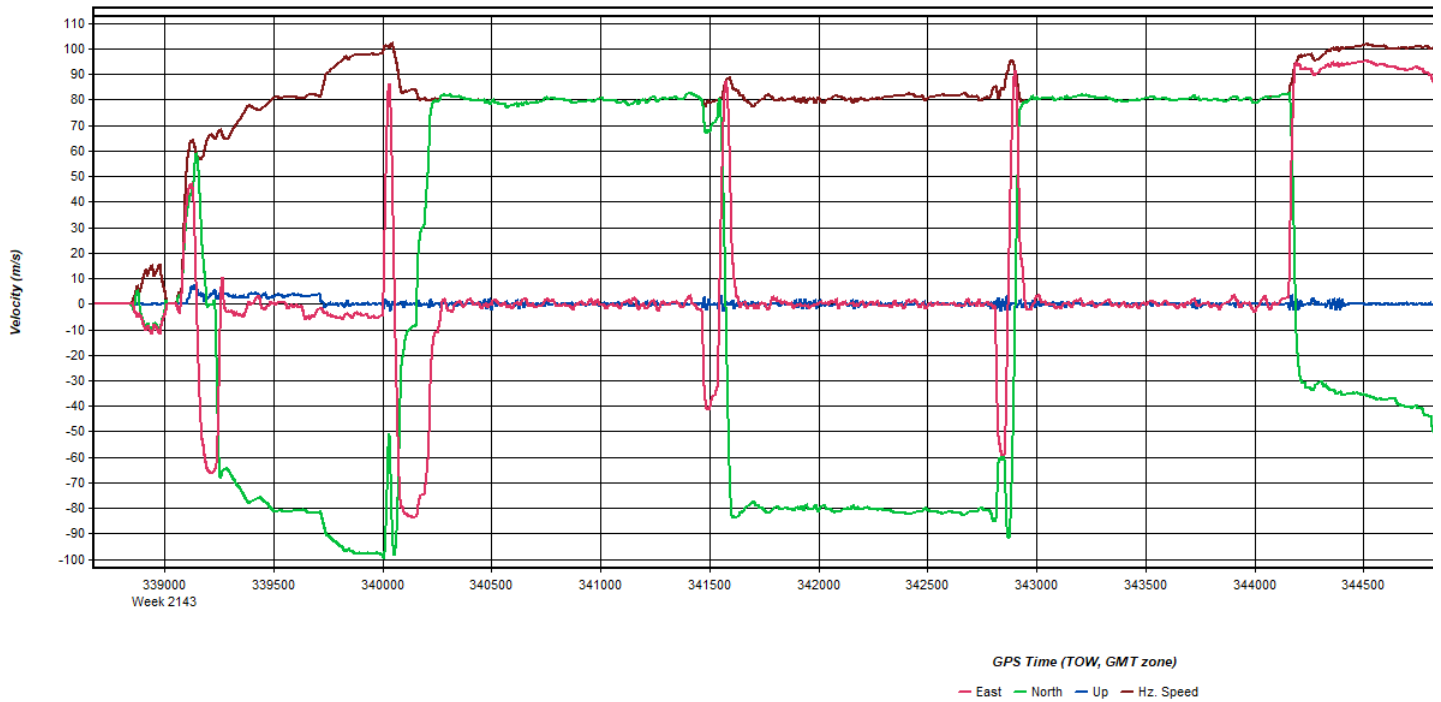


Figure 12: 20210203220335_21 [Smoothed TC Combined] - Roll & Pitch Plot



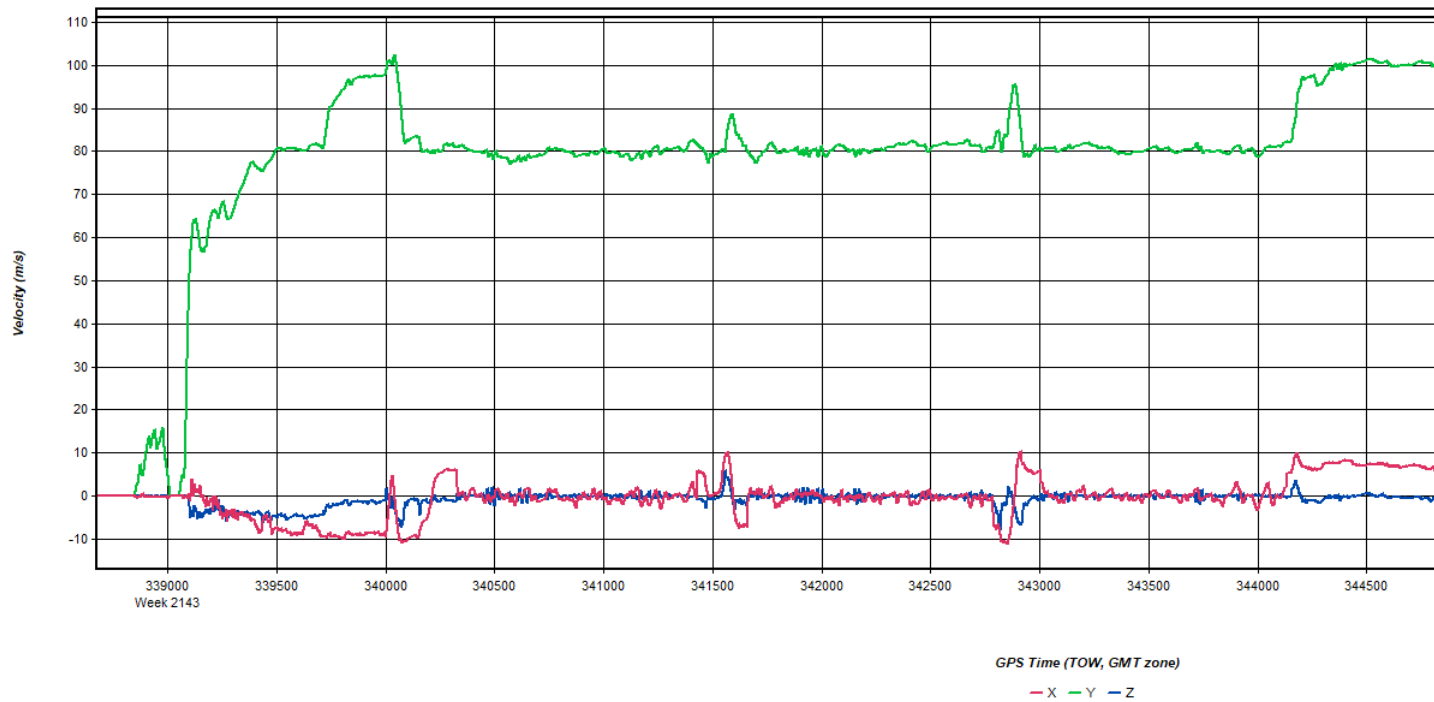
Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 13: 20210203220335_21 [Smoothed TC Combined] - Velocity Profile Plot



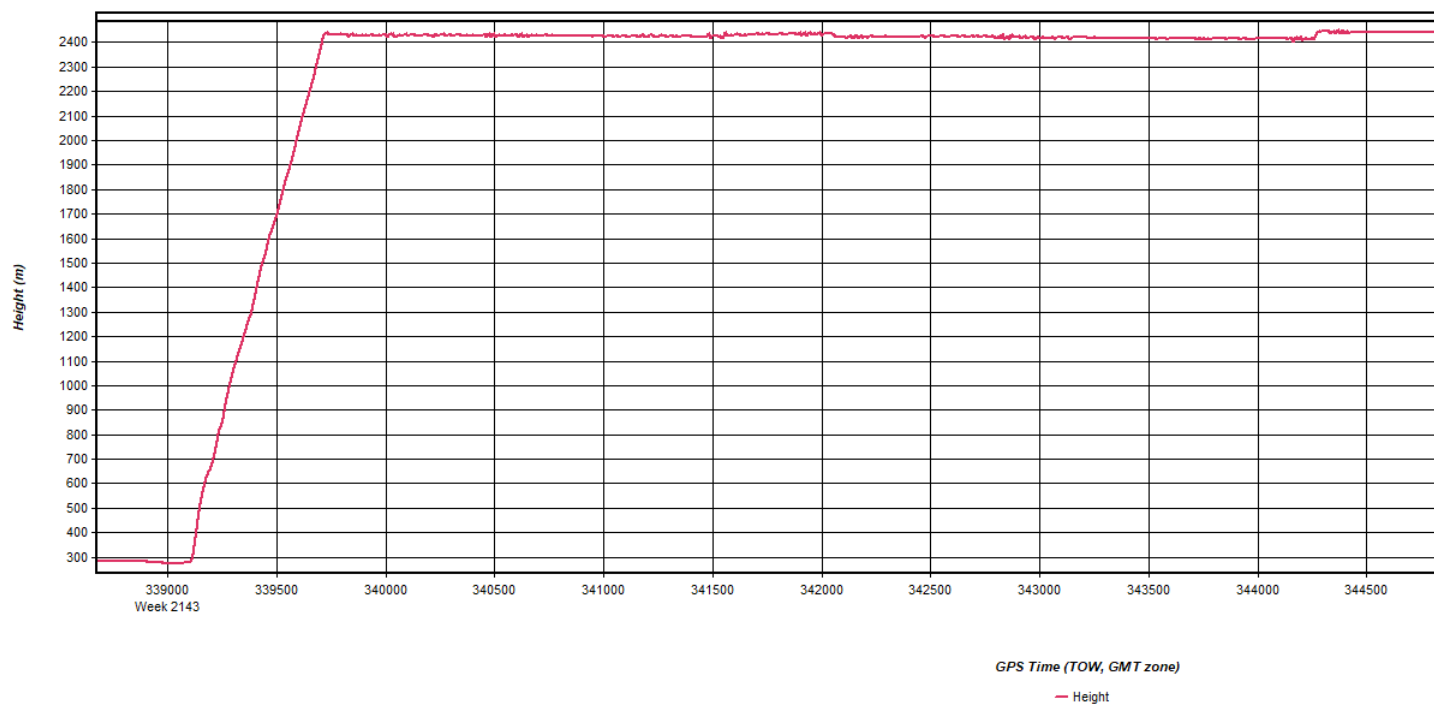
Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 14: 20210203220335_21 [Smoothed TC Combined] - Body Frame Velocity Plot



Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 15: 20210203220335_21 [Smoothed TC Combined] - Height Profile Plot



Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 16: 20210203220335_21 [Smoothed TC Combined] - C/A Code Residual RMS Plot

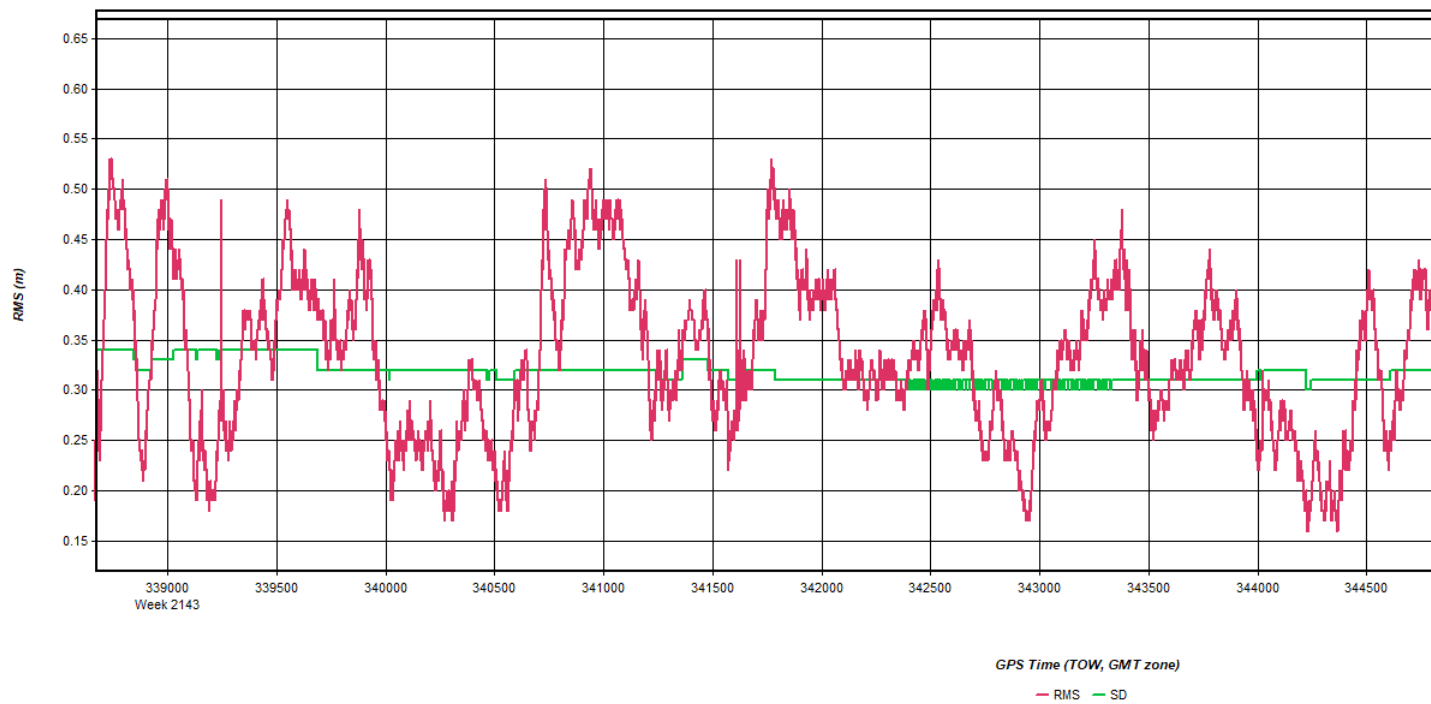


Figure 17: 20210203220335_21 [Smoothed TC Combined] - Carrier Residual RMS Plot

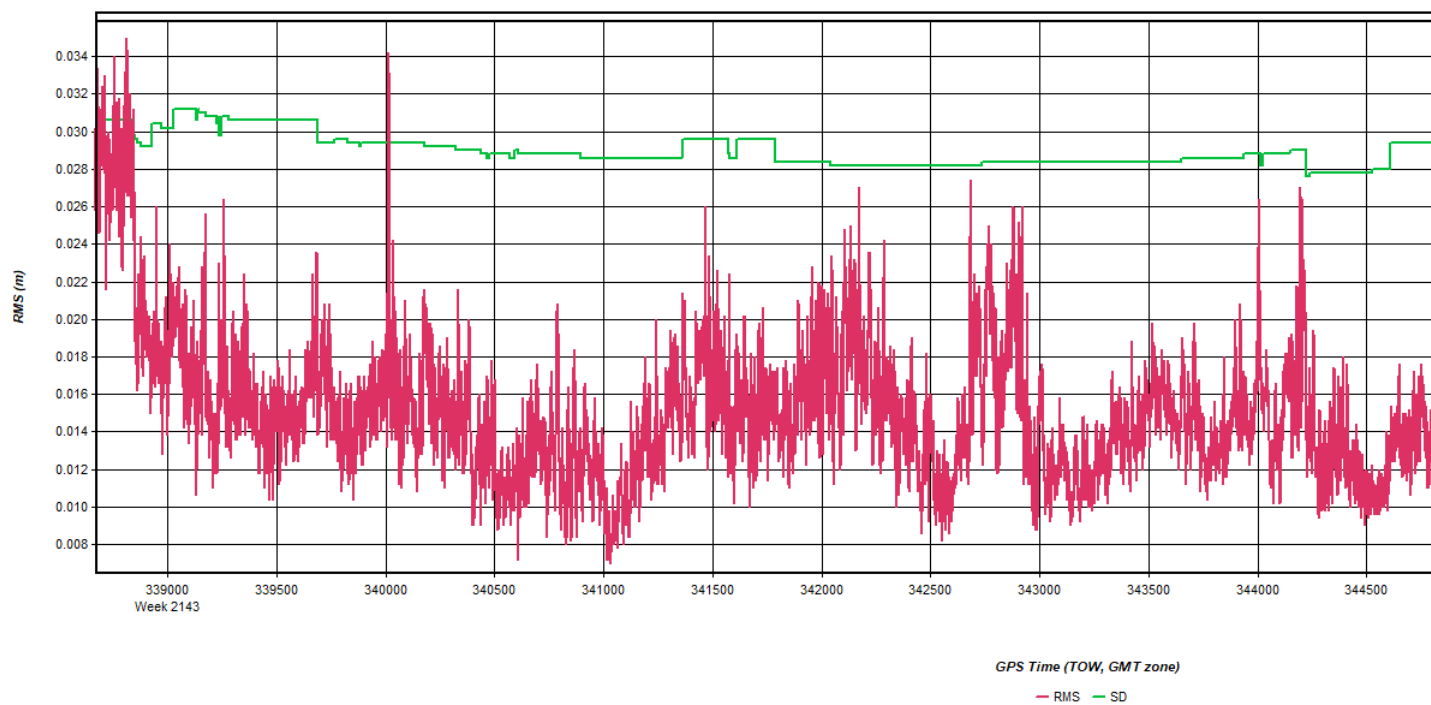
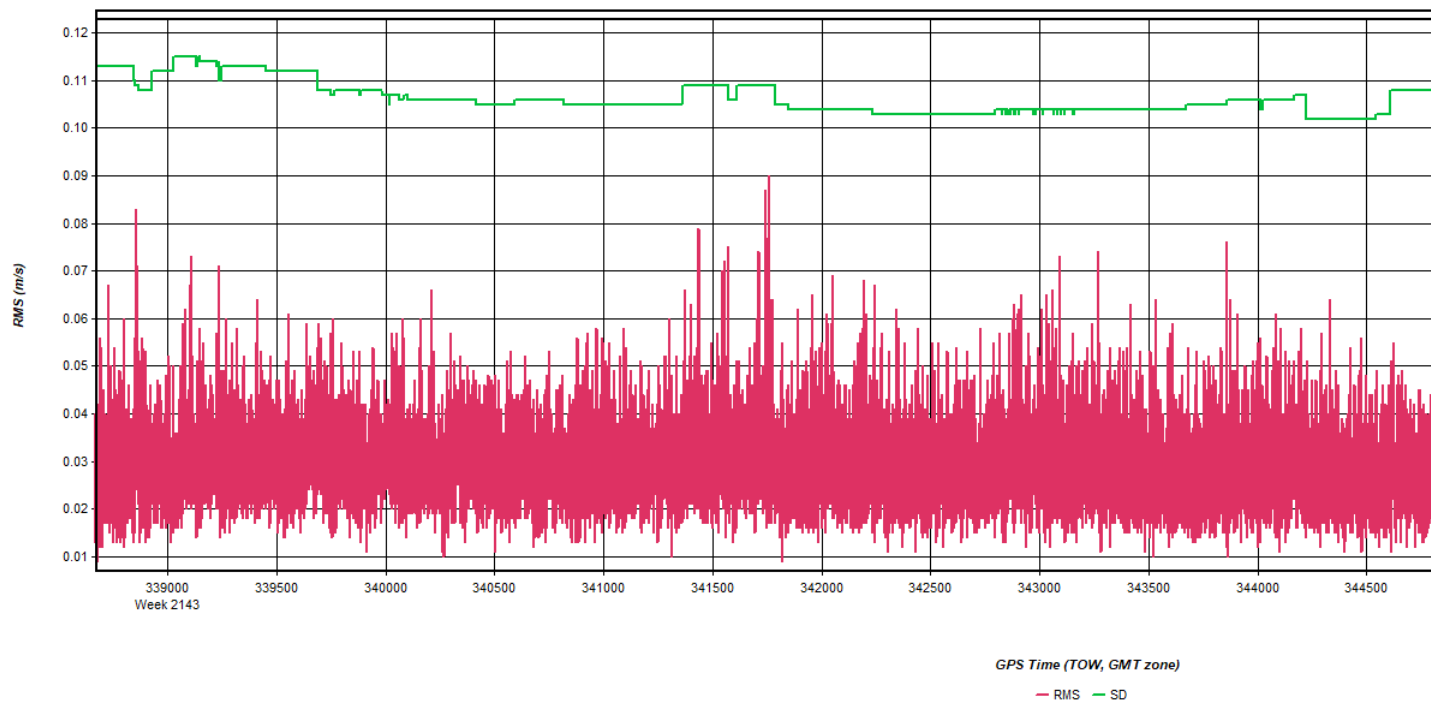
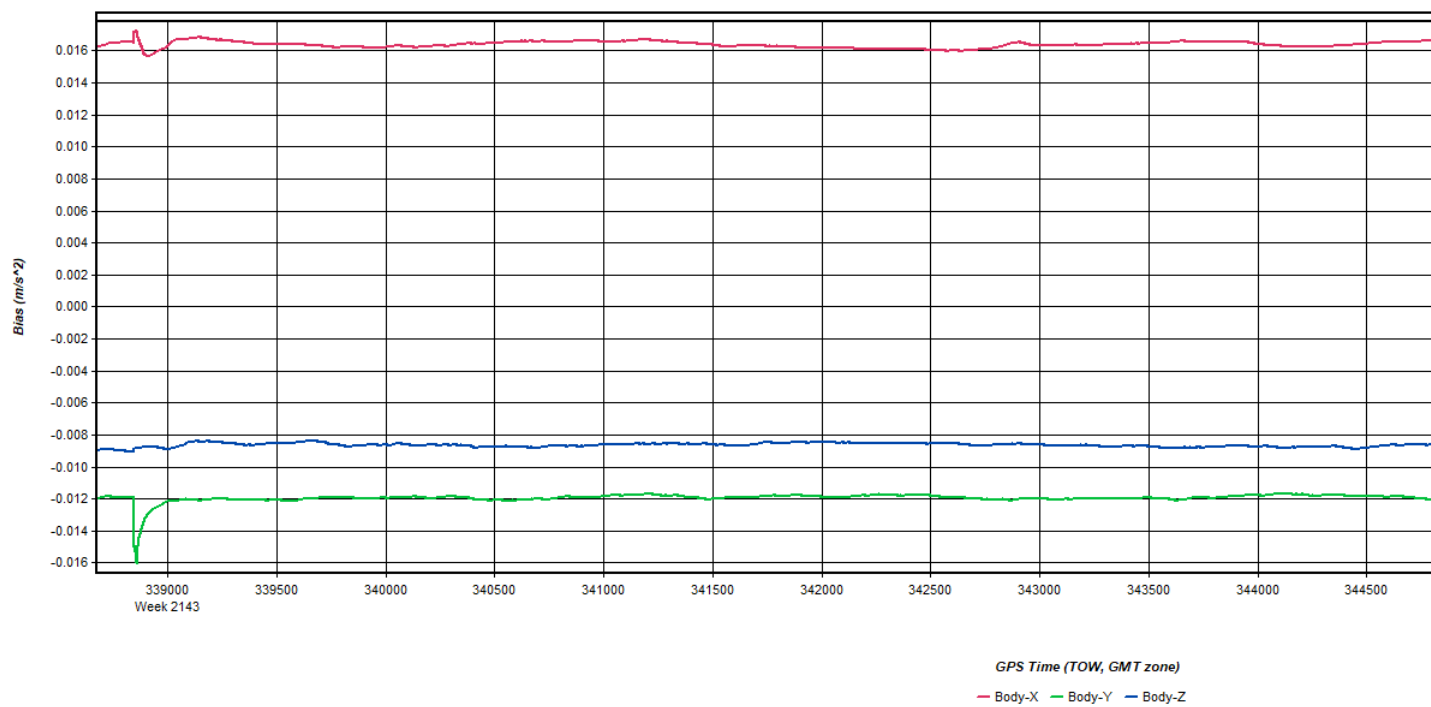


Figure 18: 20210203220335_21 [Smoothed TC Combined] - Doppler Residual RMS Plot



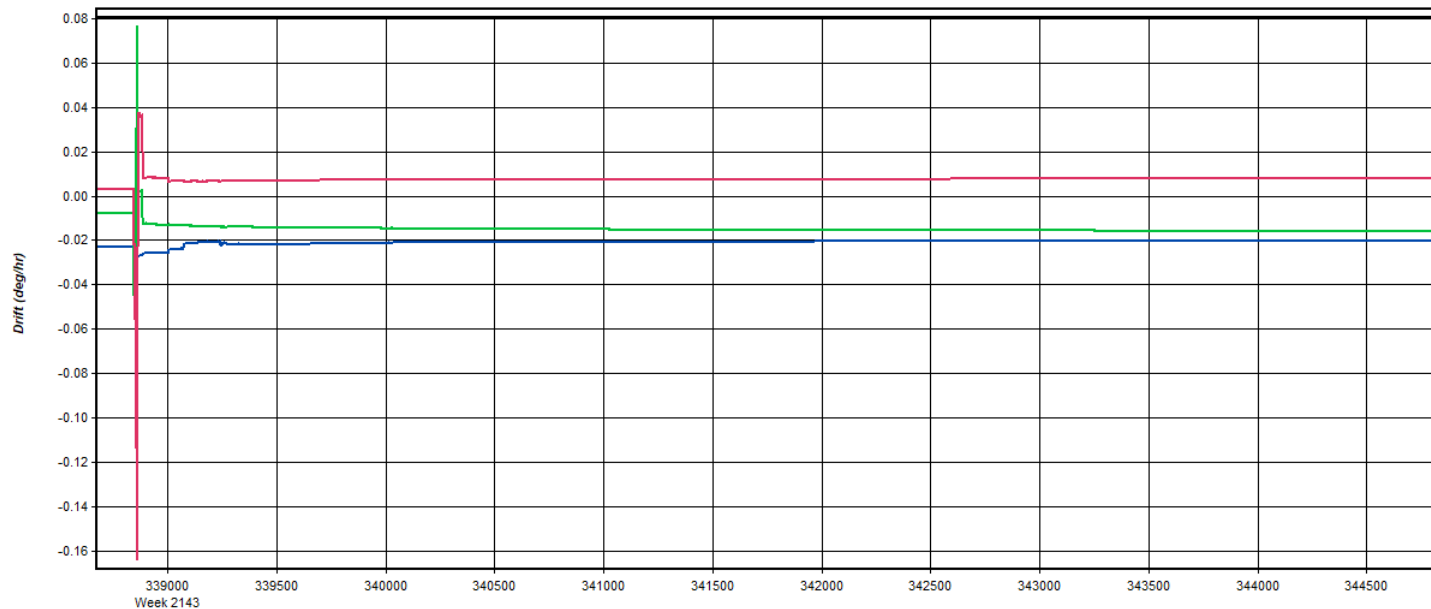
Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 19: 20210203220335_21 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Figure 20: 20210203220335_21 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

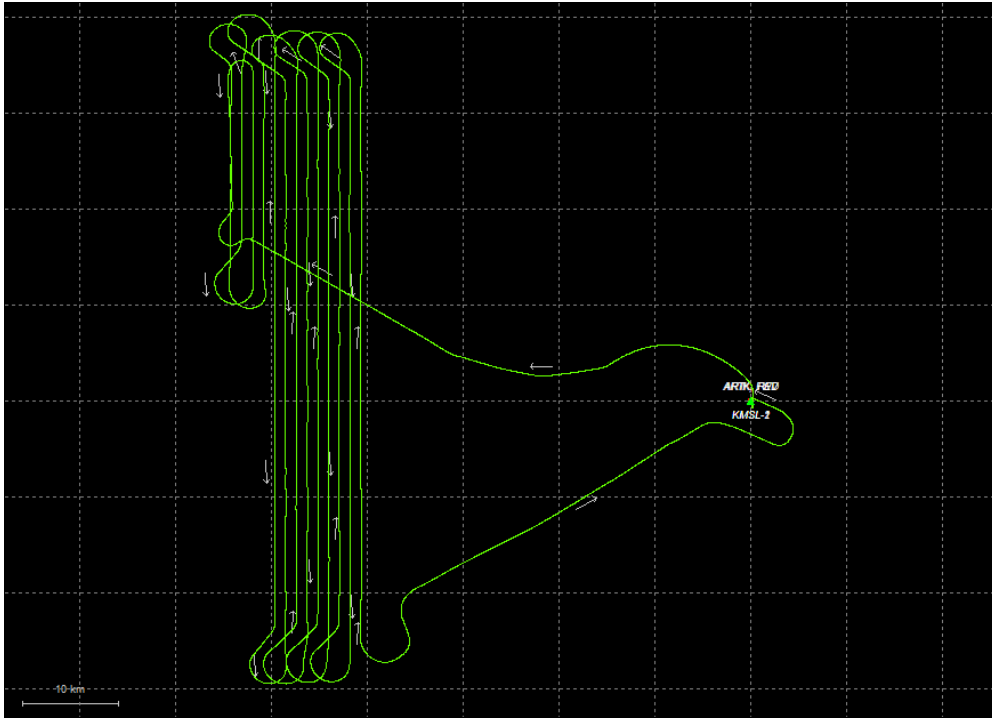
Body-X Body-Y Body-Z

Process	20210203220335_21	by Unknown	on 2/6/2021	at 16:18:18
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Output Results for 20210205162555_22

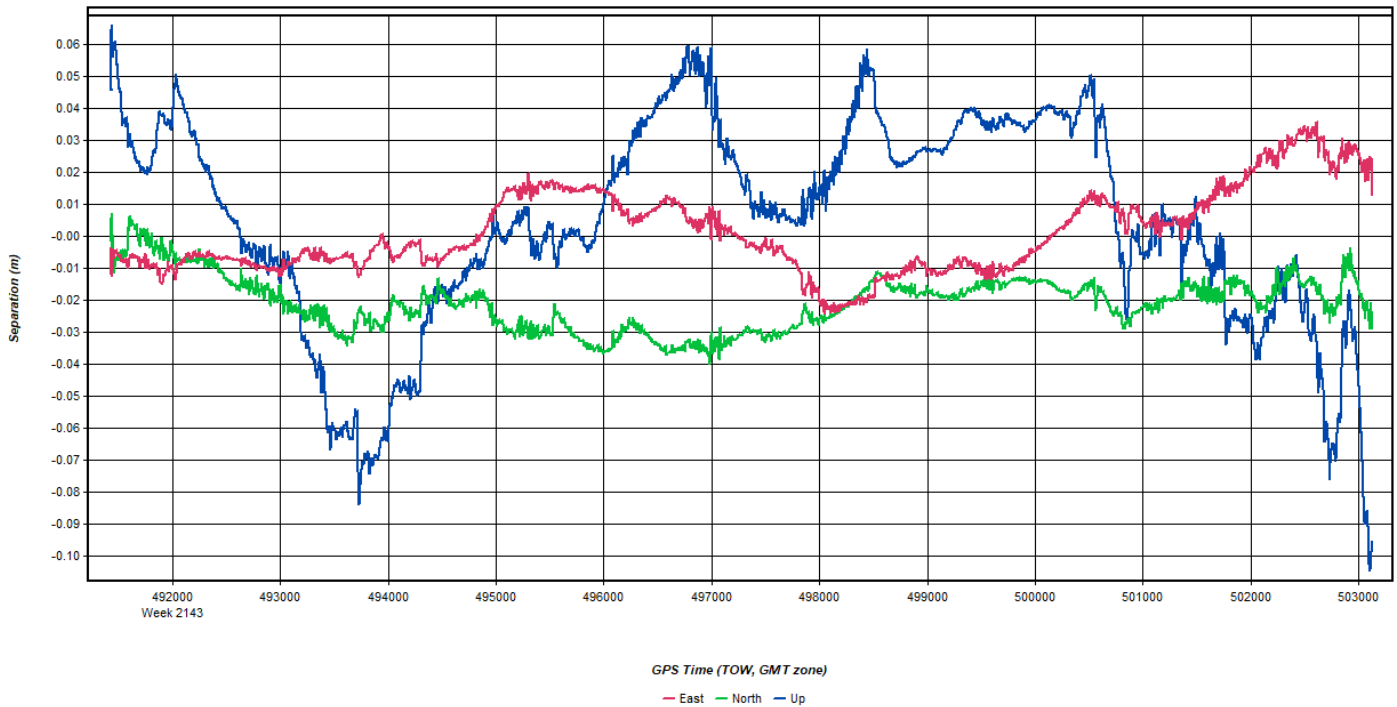
Inertial Explorer Version 8.90.2124
02/11/2021

Figure 1: Smoothed TC Combined - Map



Process	20210205162555_22	by Unknown	on 2/11/2021	at 13:08:29
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Figure 2: 20210205162555_22 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210205162555_22	by Unknown	on 2/11/2021	at 13:08:29
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Figure 3: 20210205162555_22 [Smoothed TC Combined] - Float or Fixed Ambiguity

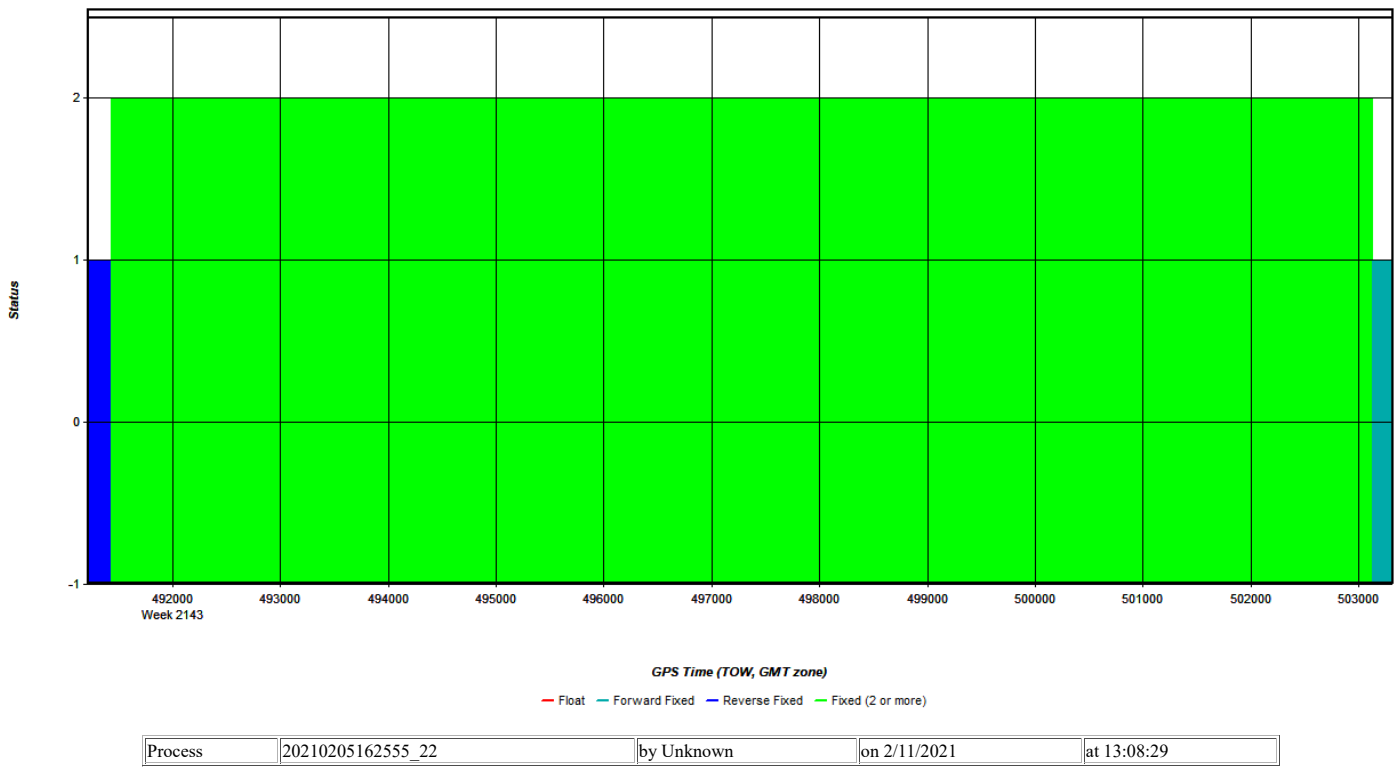


Figure 4: 20210205162555_22 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



Figure 5: 20210205162555_22 [Smoothed TC Combined] - Estimated Position Accuracy Plot

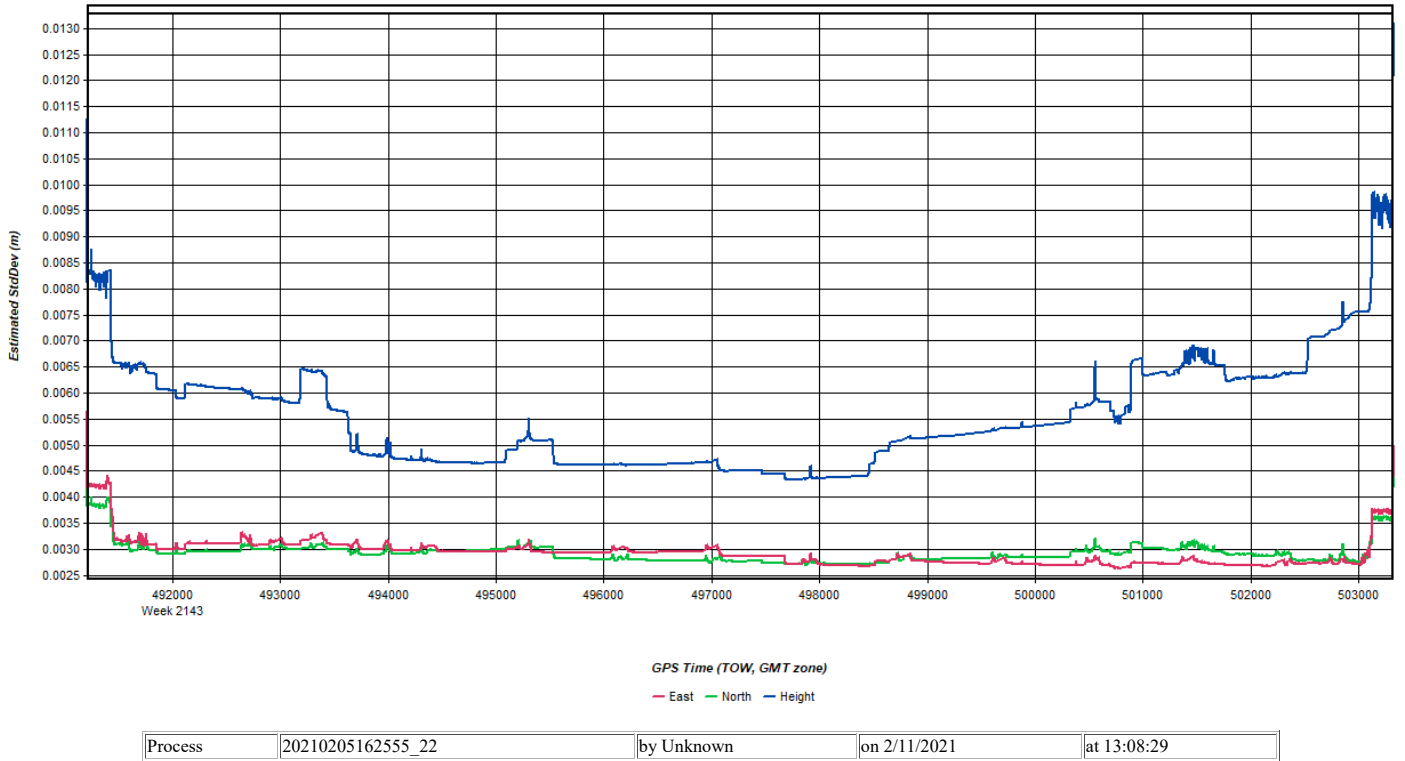


Figure 6: 20210205162555_22 [Smoothed TC Combined] - PDOP Plot



Figure 7: 20210205162555_22 [Smoothed TC Combined] - Number of Satellites Line Plot

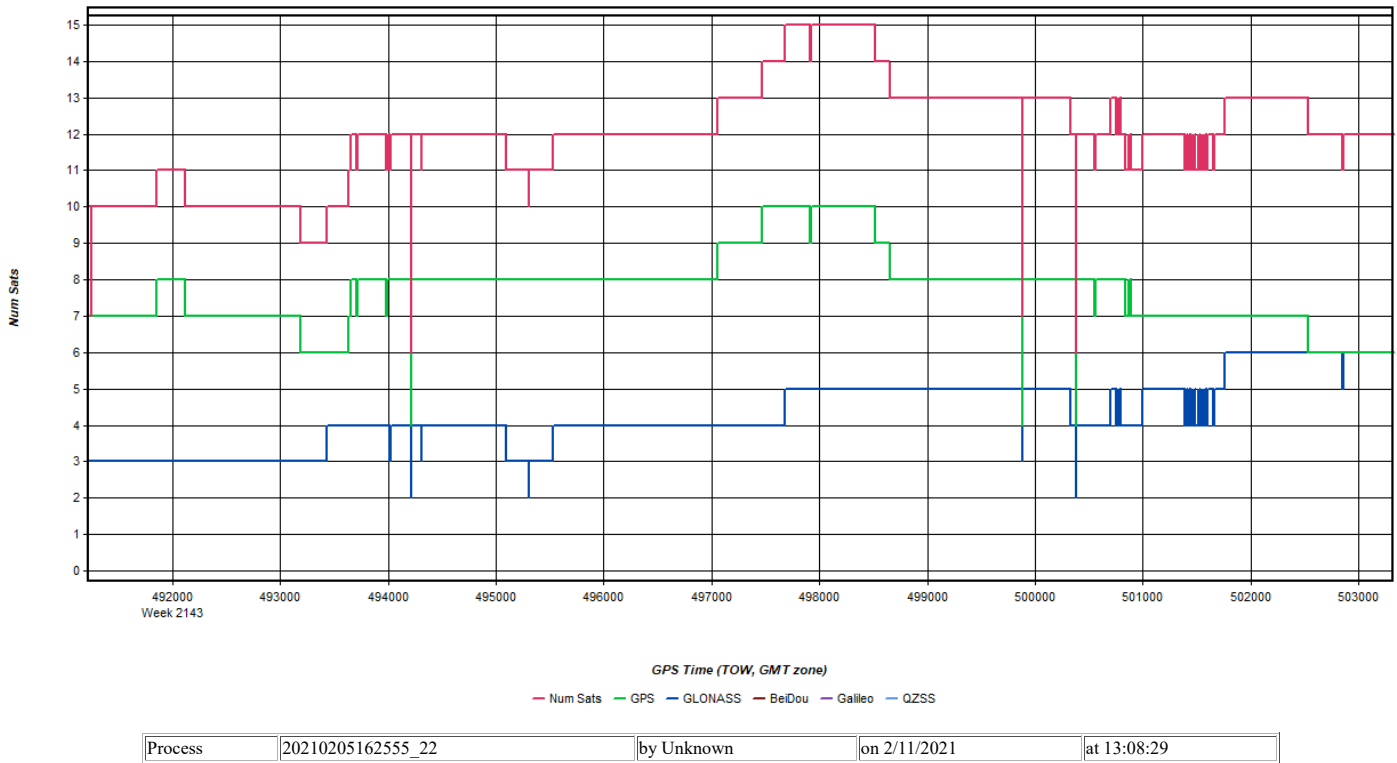


Figure 8: 20210205162555_22 [Smoothed TC Combined] - Status flag for IMU processing

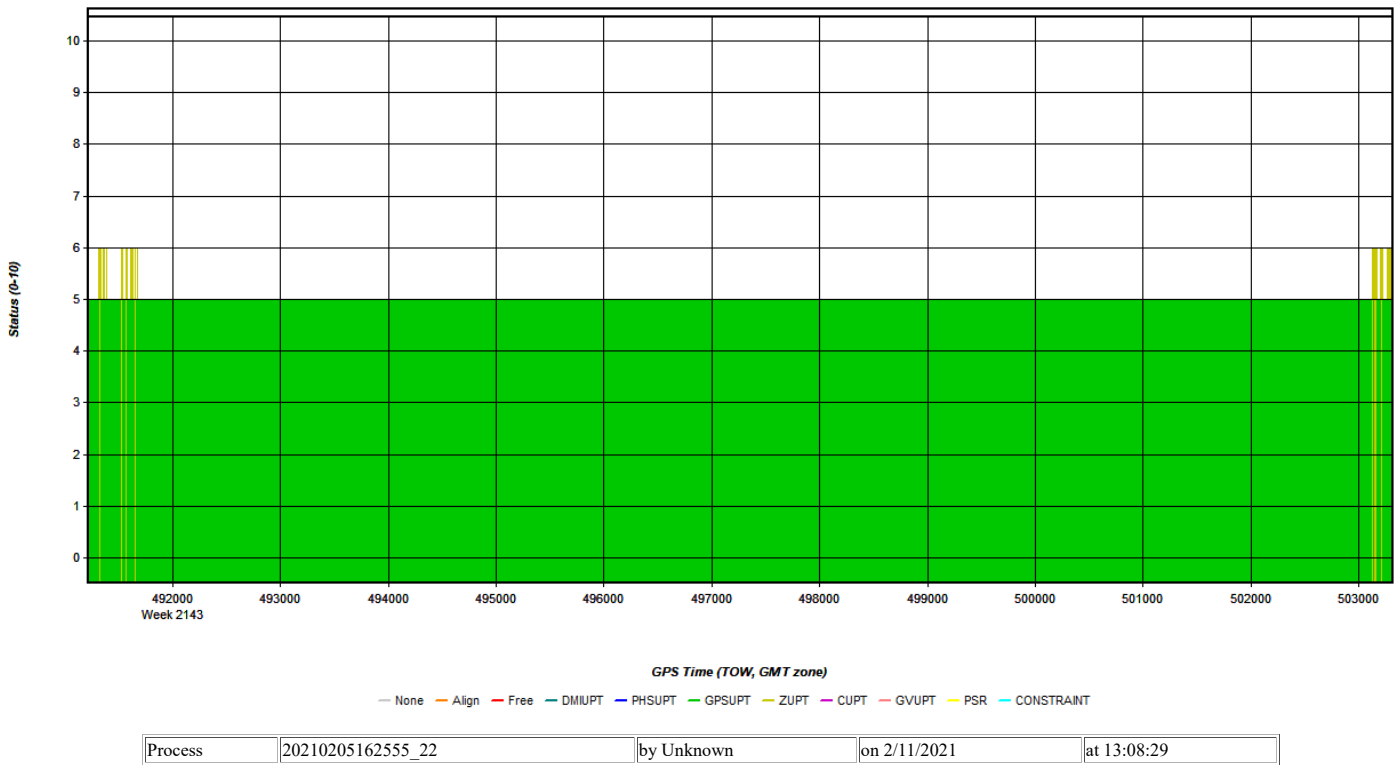


Figure 9: 20210205162555_22 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

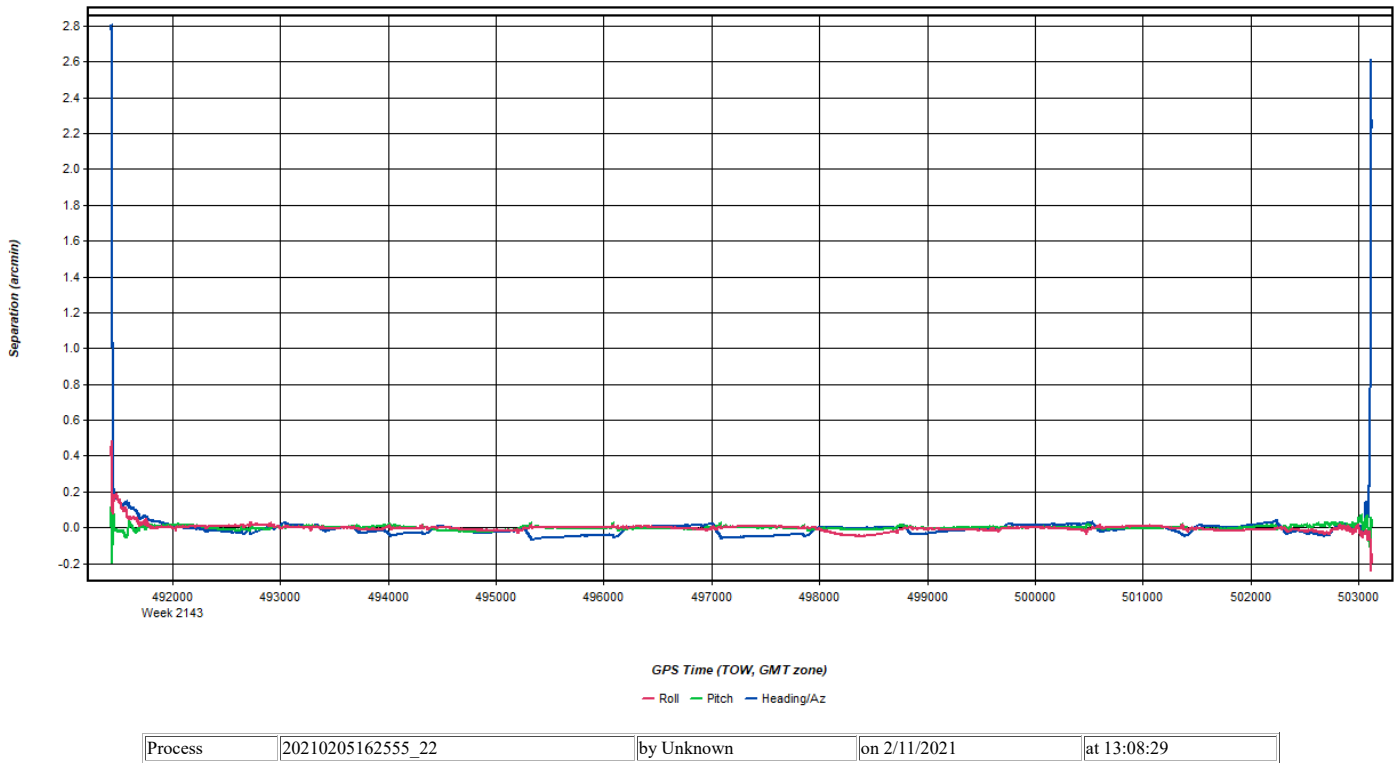


Figure 10: 20210205162555_22 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

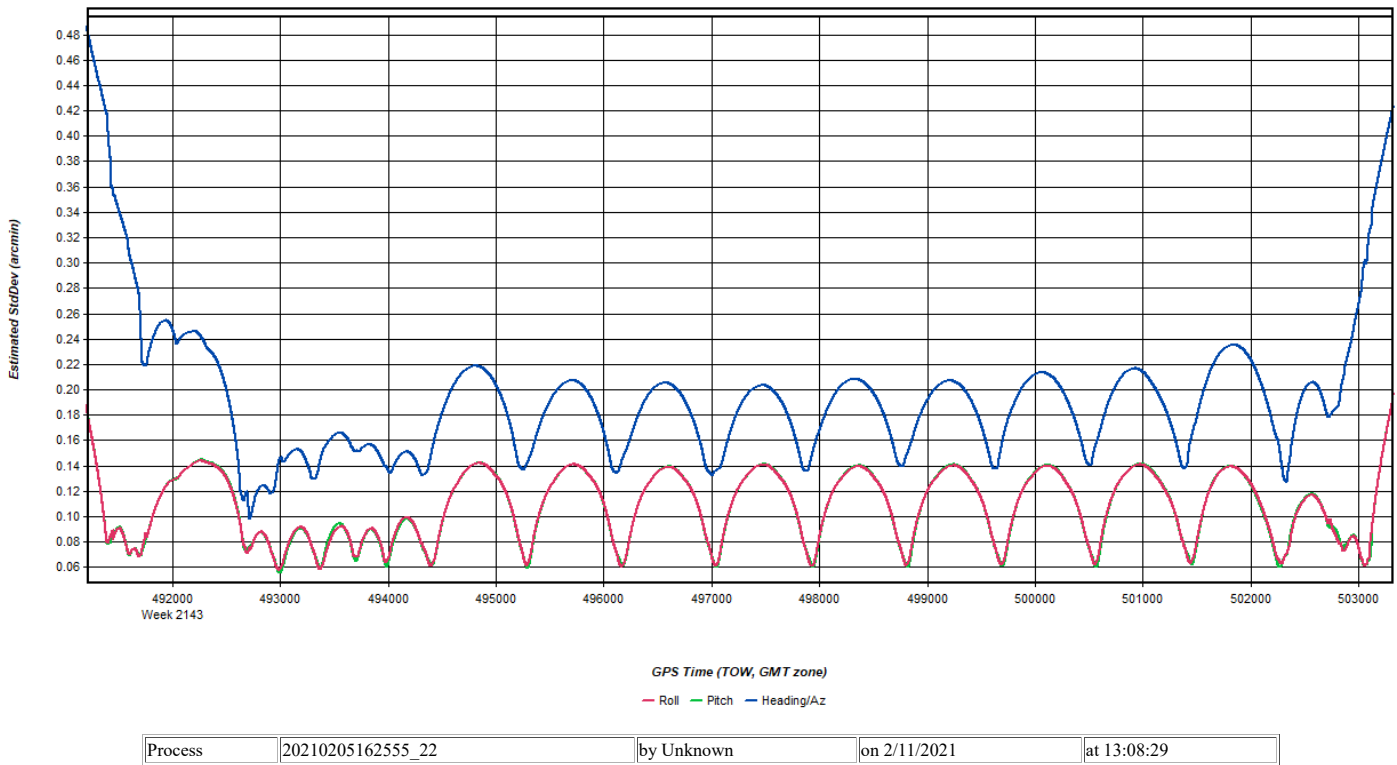


Figure 11: 20210205162555_22 [Smoothed TC Combined] - Azimuth Plot

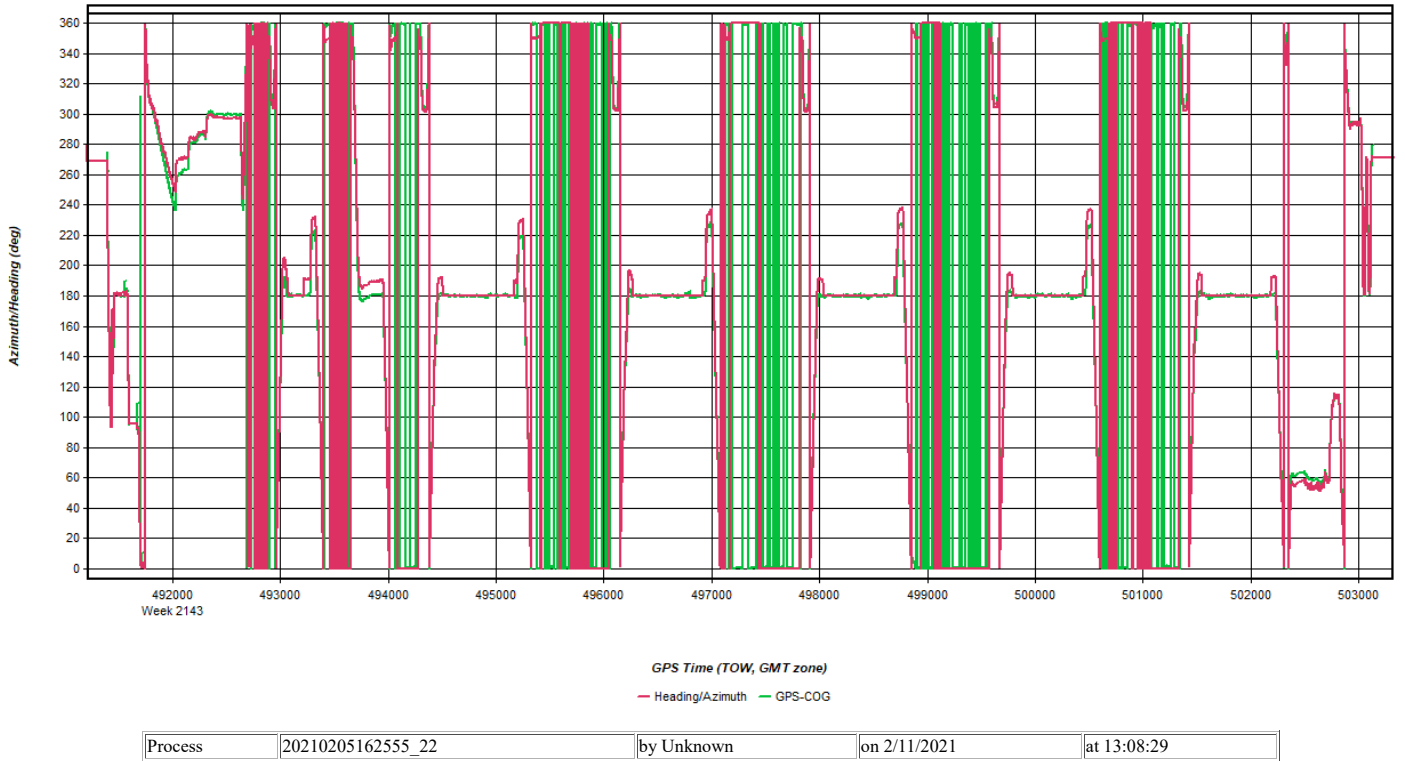


Figure 12: 20210205162555_22 [Smoothed TC Combined] - Roll & Pitch Plot

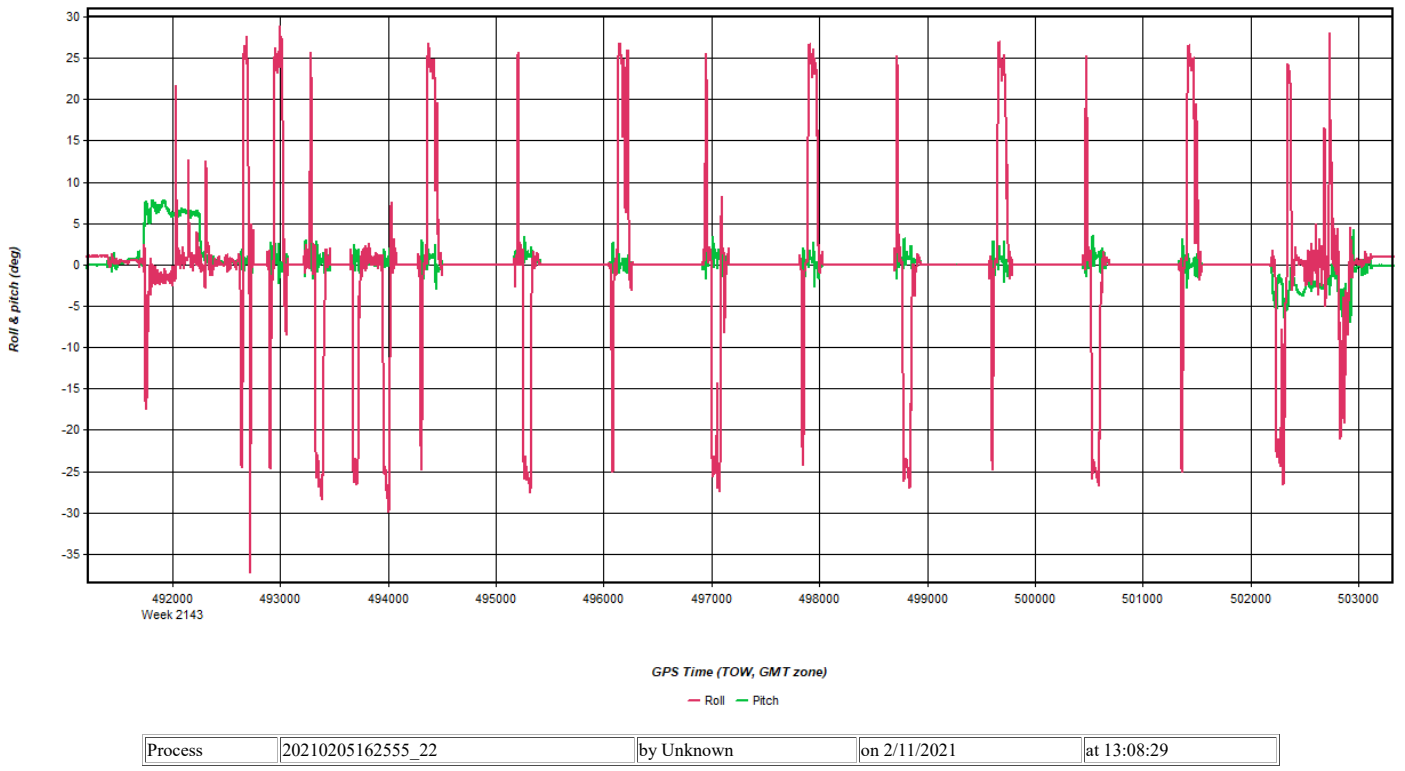


Figure 13: 20210205162555_22 [Smoothed TC Combined] - Velocity Profile Plot

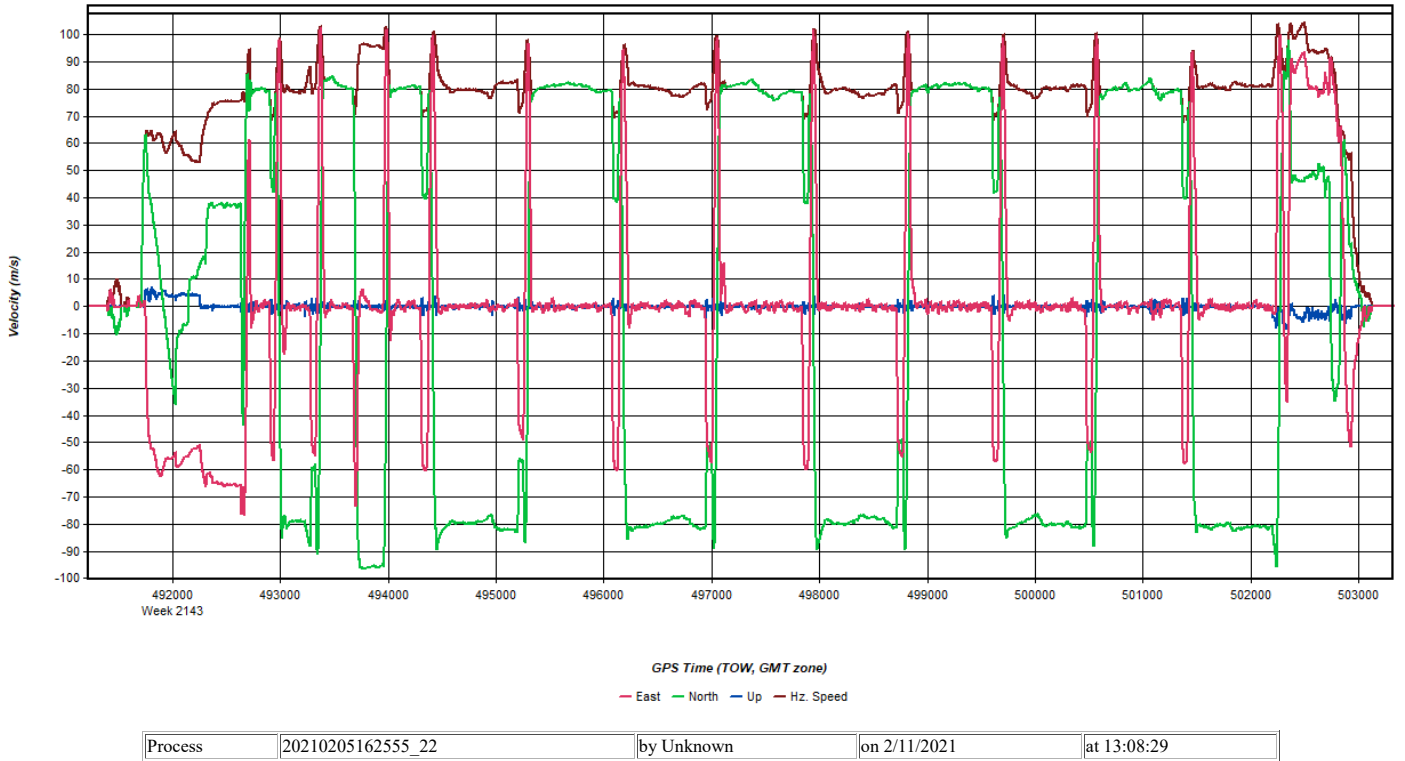


Figure 14: 20210205162555_22 [Smoothed TC Combined] - Body Frame Velocity Plot

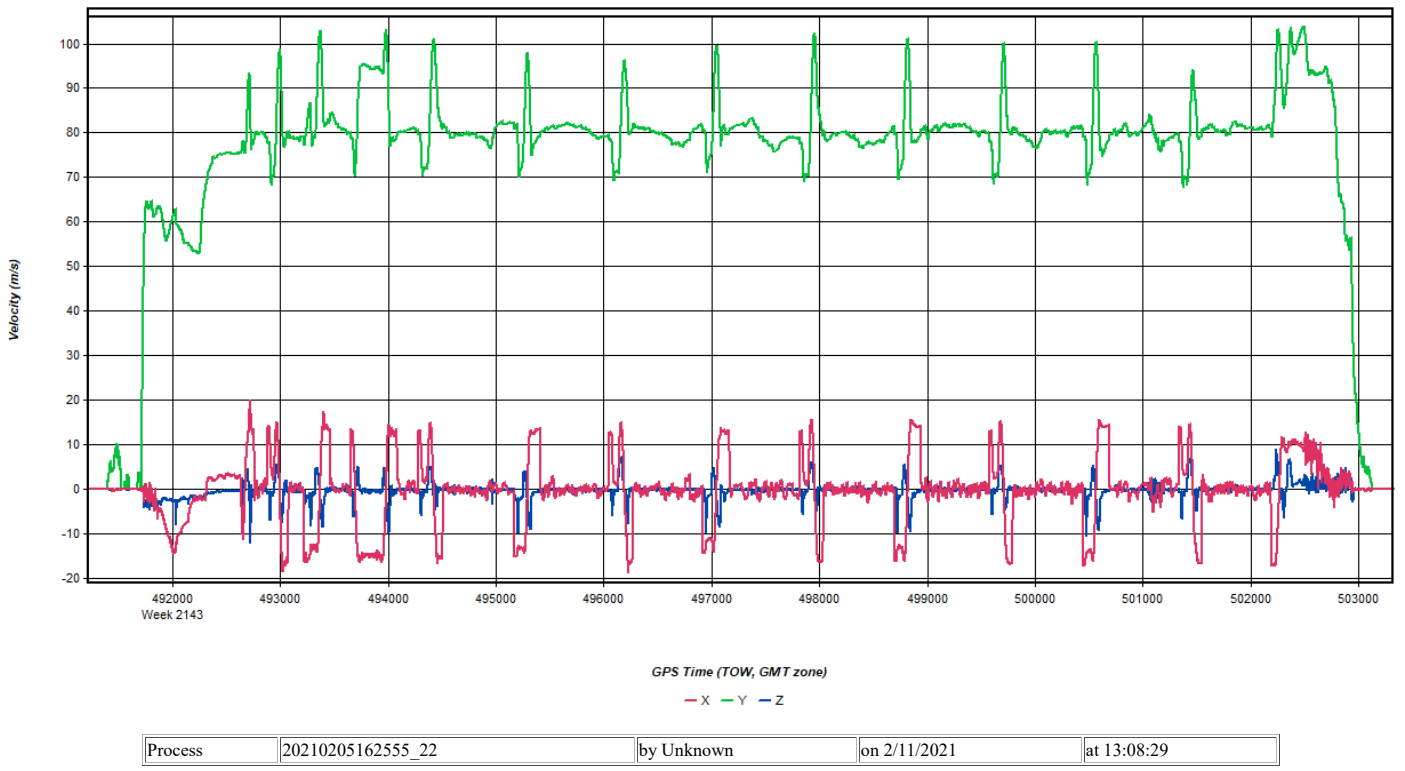


Figure 15: 20210205162555_22 [Smoothed TC Combined] - Height Profile Plot

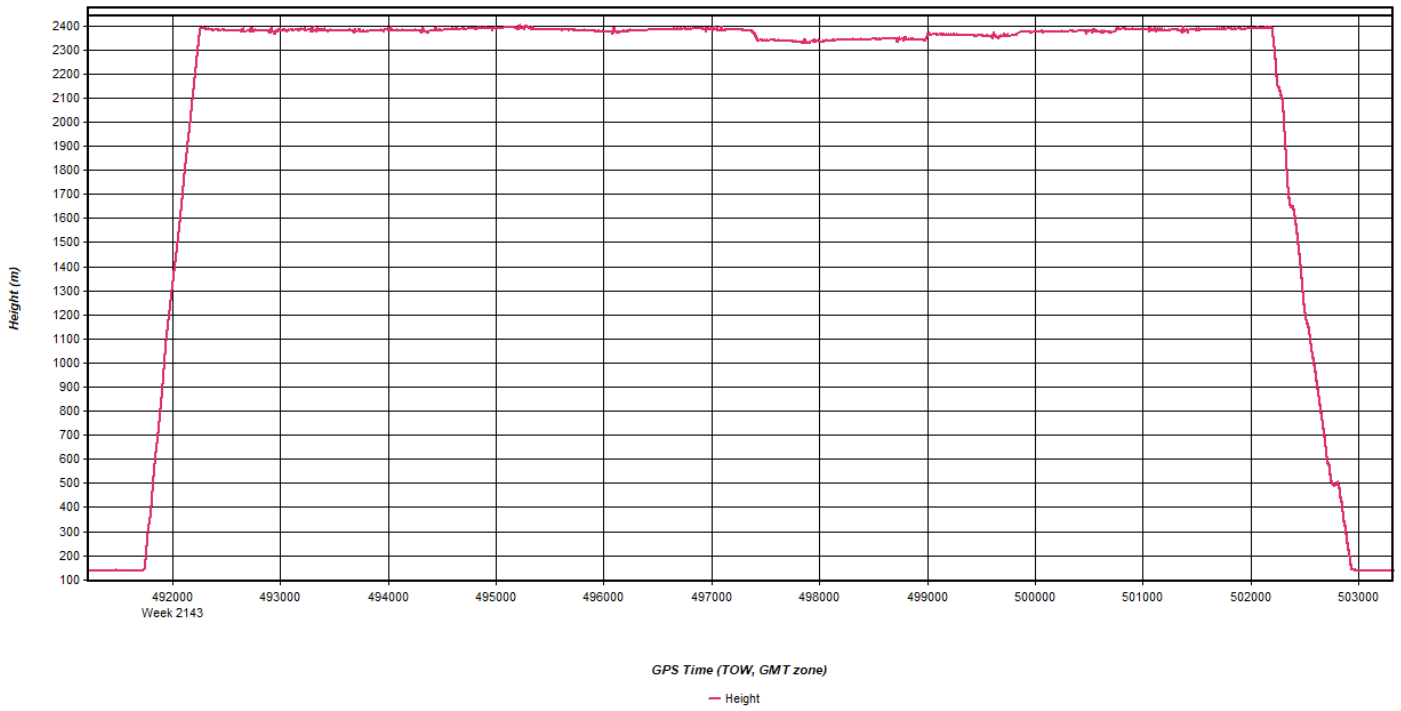


Figure 16: 20210205162555_22 [Smoothed TC Combined] - C/A Code Residual RMS Plot

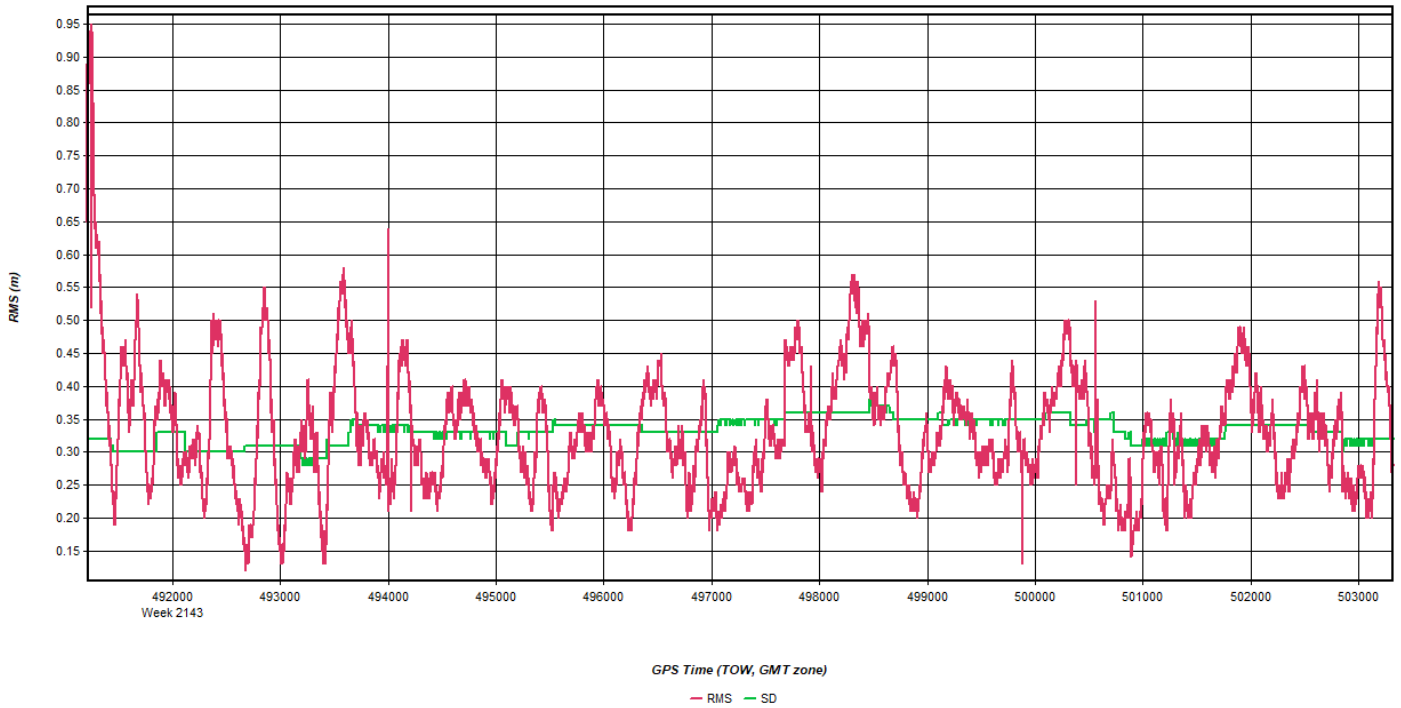
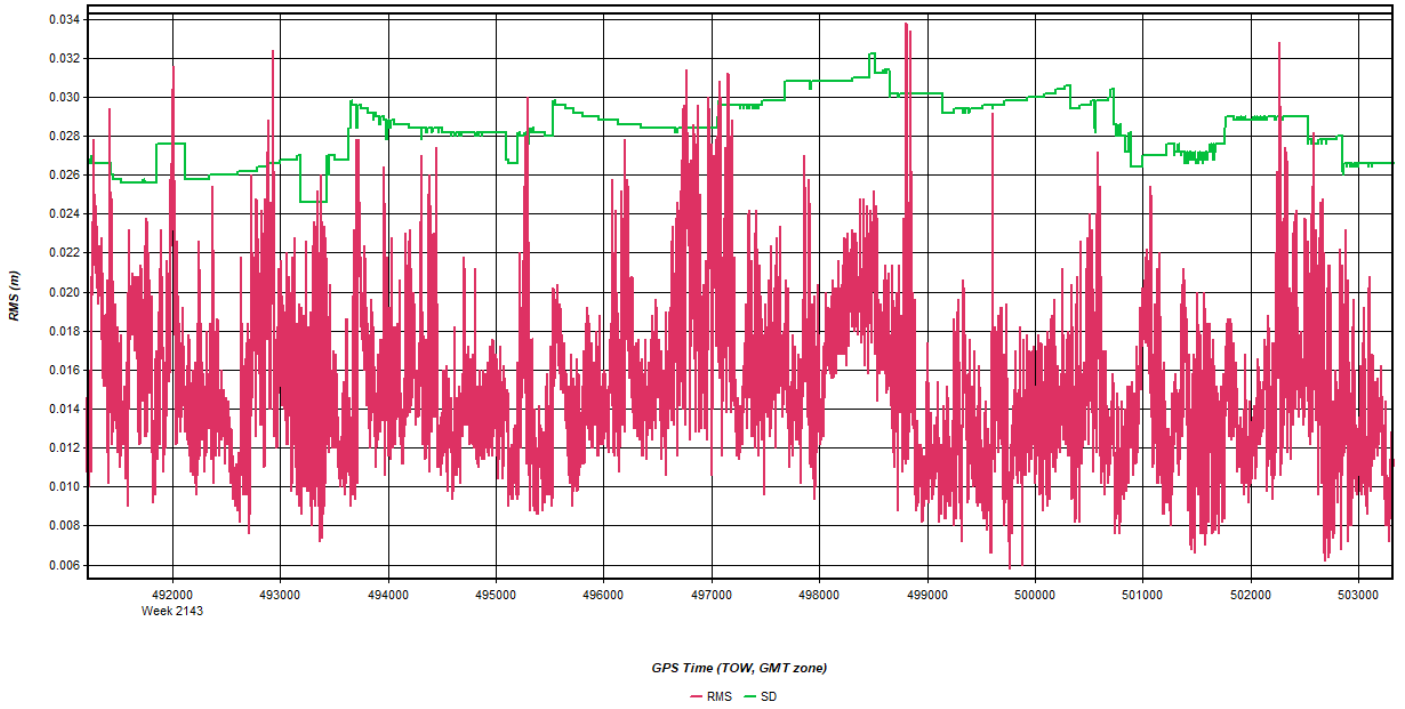
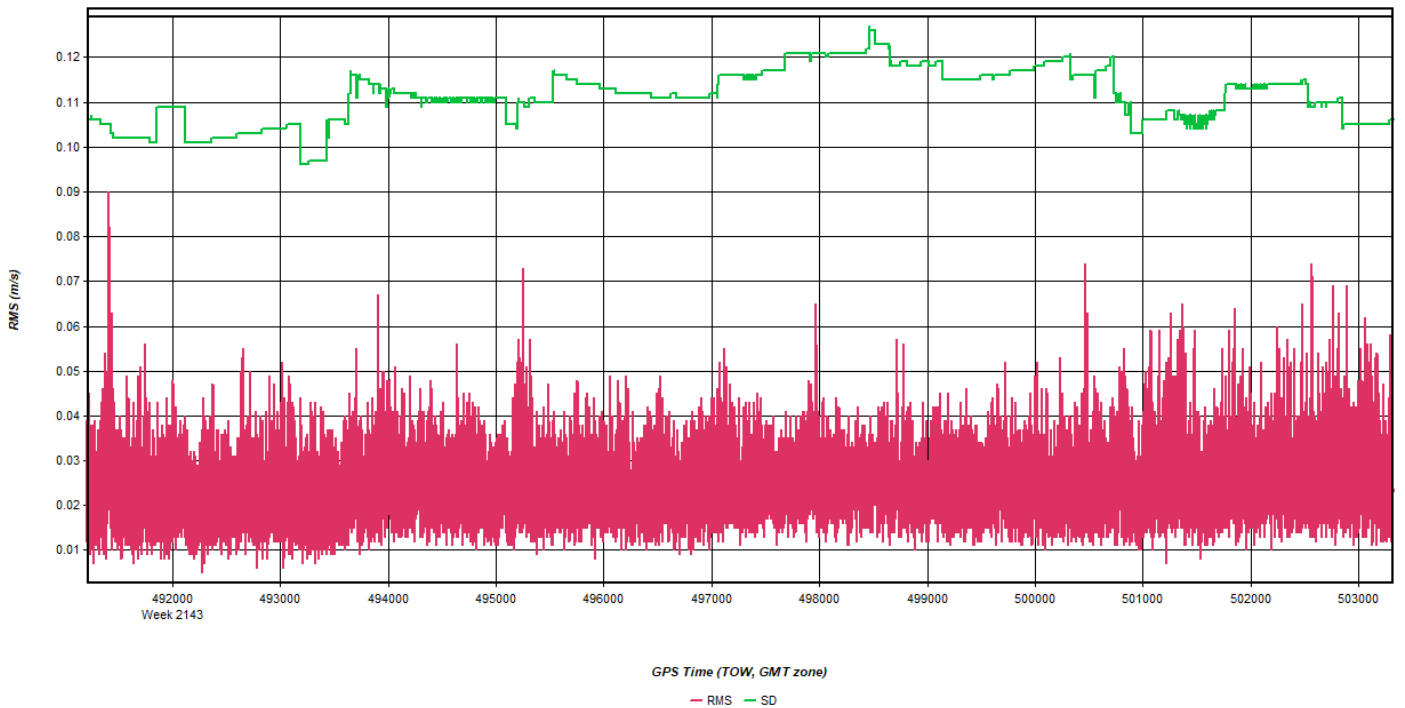


Figure 17: 20210205162555_22 [Smoothed TC Combined] - Carrier Residual RMS Plot



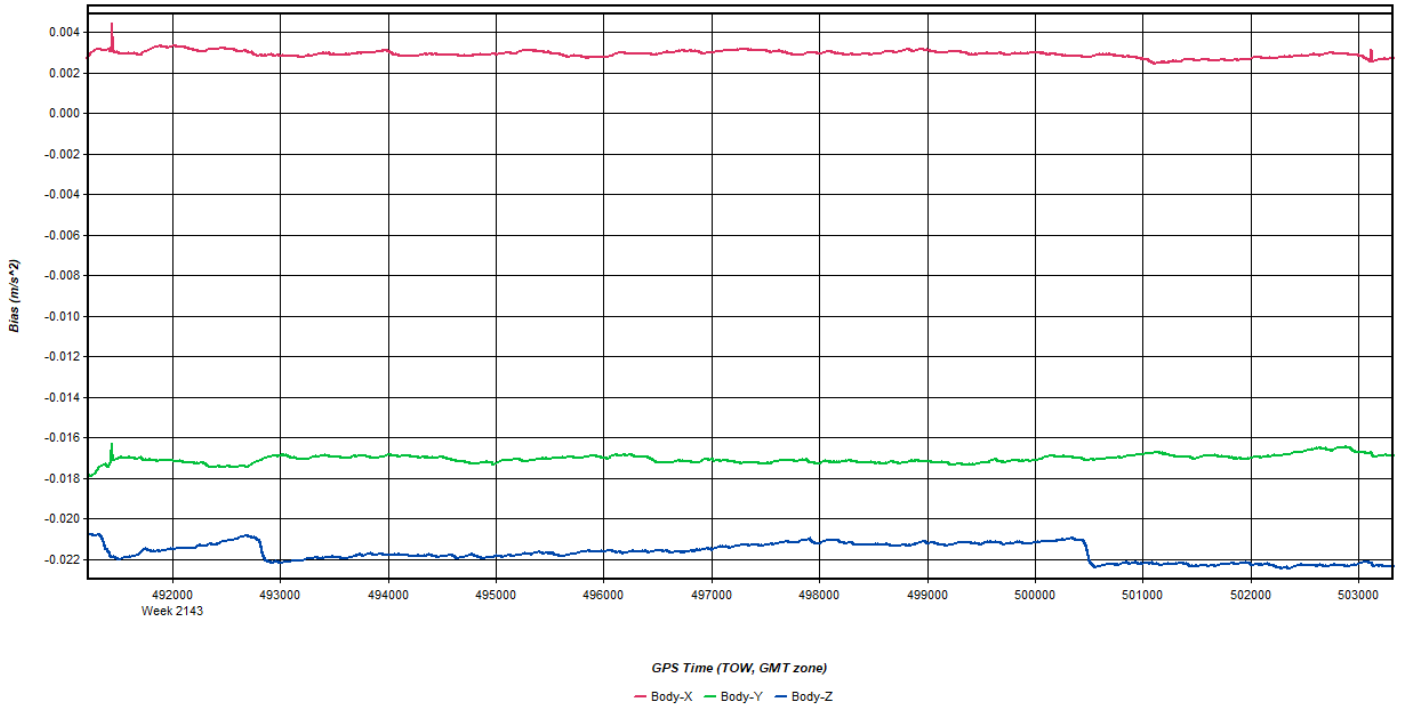
Process 20210205162555_22 by Unknown on 2/11/2021 at 13:08:29

Figure 18: 20210205162555_22 [Smoothed TC Combined] - Doppler Residual RMS Plot



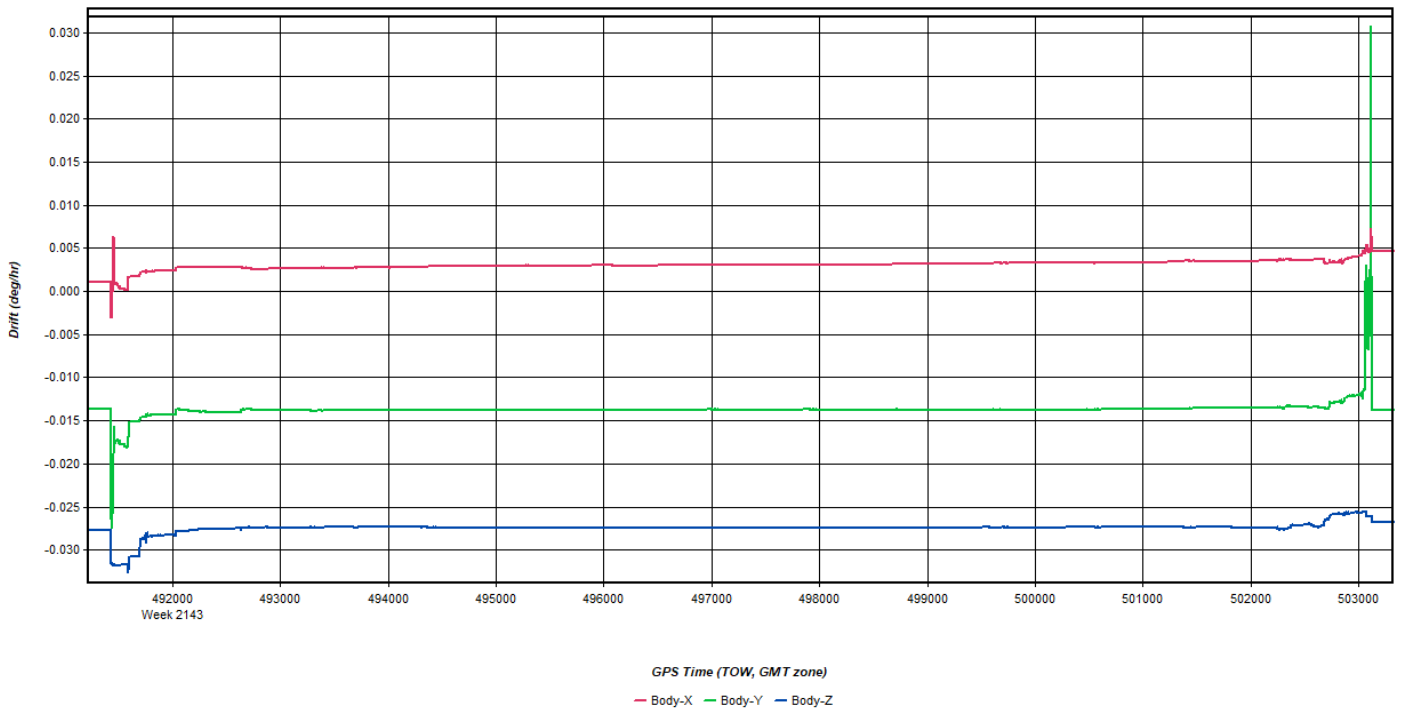
Process 20210205162555_22 by Unknown on 2/11/2021 at 13:08:29

Figure 19: 20210205162555_22 [Smoothed TC Combined] - Accelerometer Bias Plot



Process 20210205162555_22 by Unknown on 2/11/2021 at 13:08:29

Figure 20: 20210205162555_22 [Smoothed TC Combined] - Gyro Drift Plot

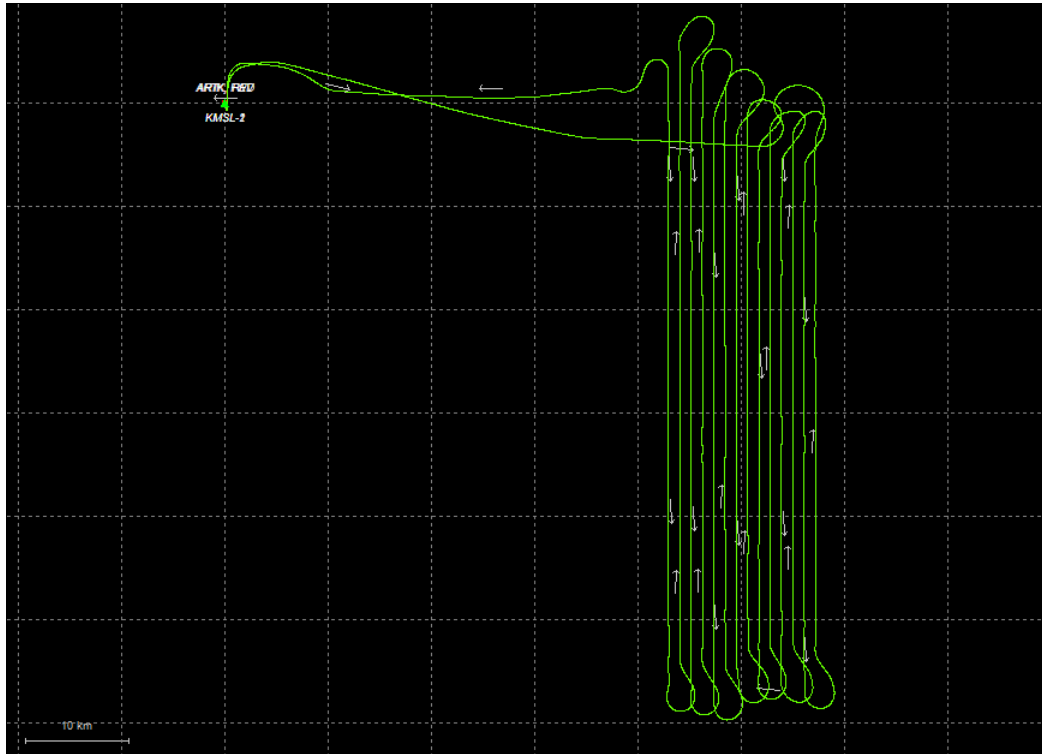


Process 20210205162555_22 by Unknown on 2/11/2021 at 13:08:29

Output Results for 20210205201312_23

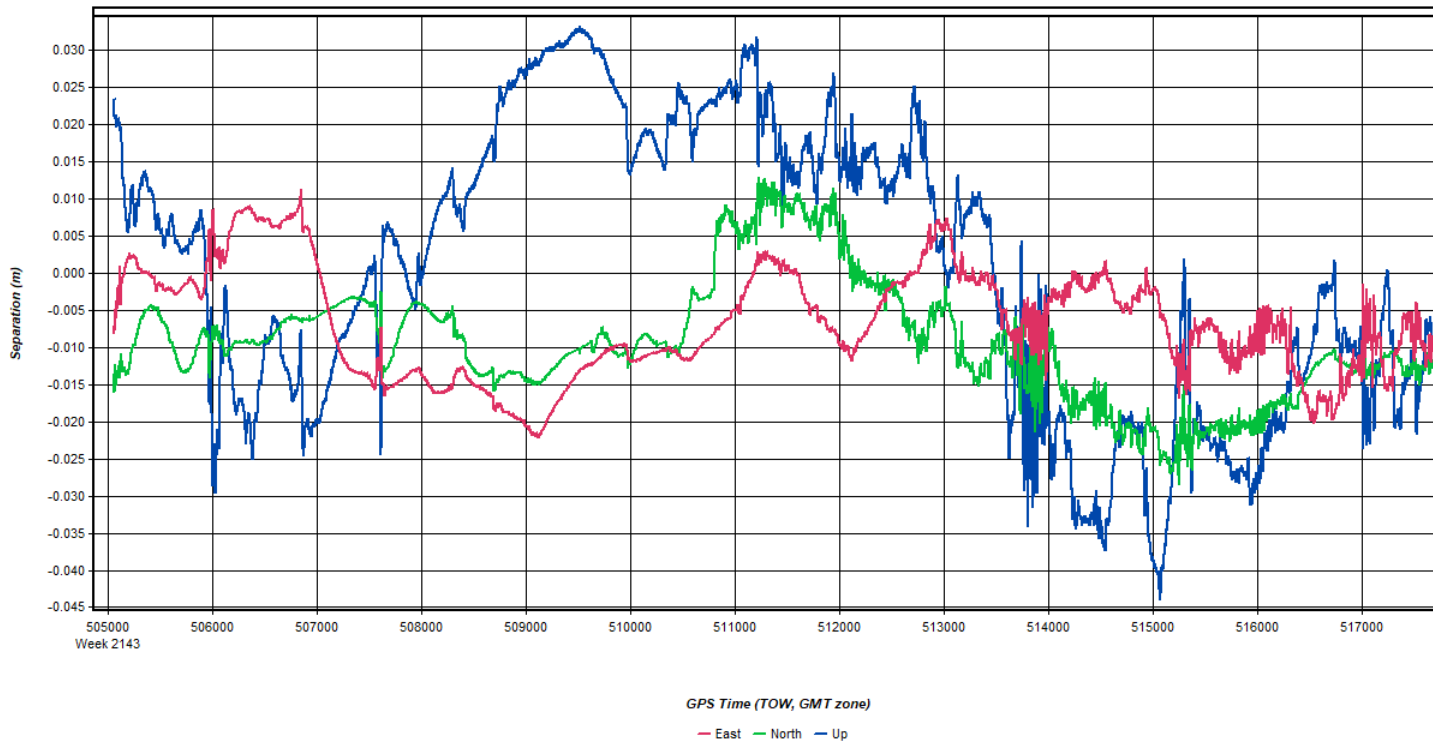
Inertial Explorer Version 8.90.2124
02/11/2021

Figure 1: Smoothed TC Combined - Map



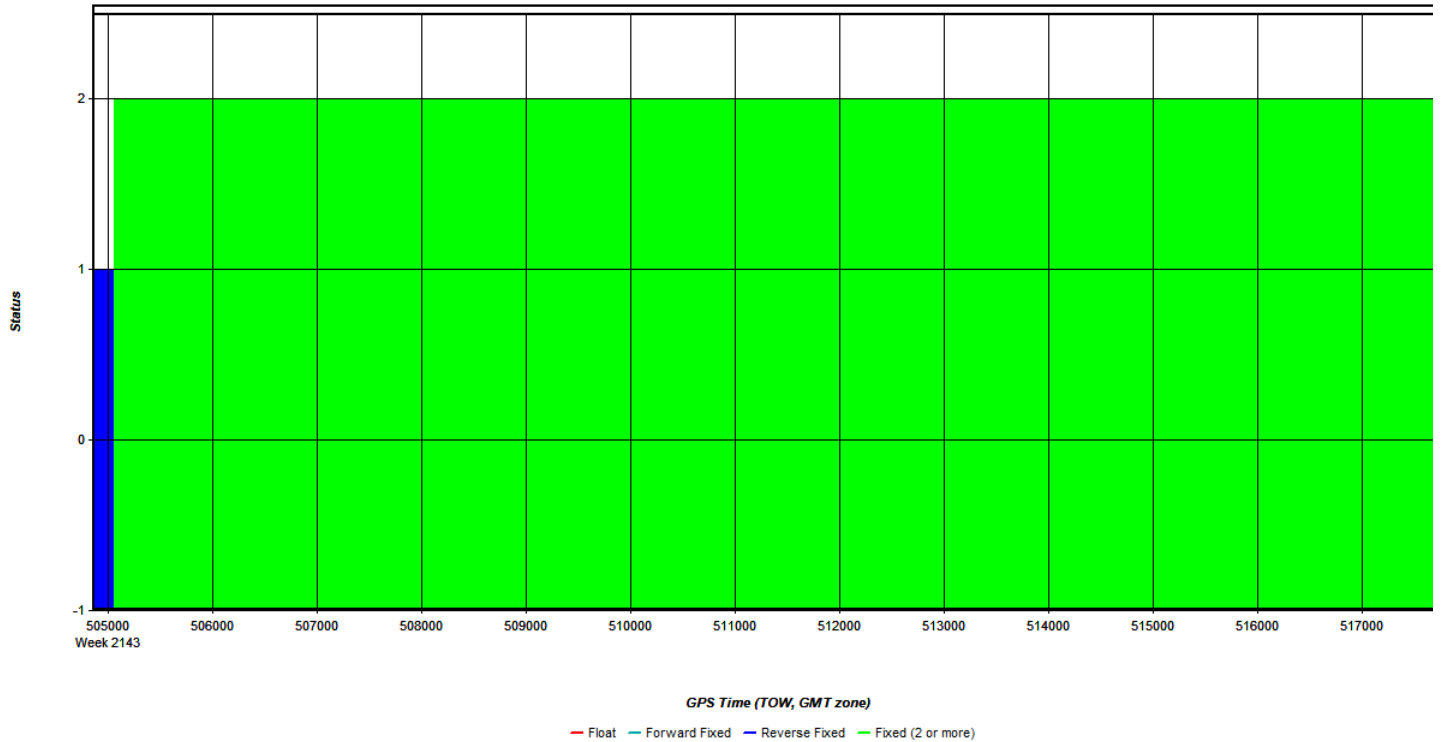
Process	20210205201312_23	by Unknown	on 2/11/2021	at 15:56:13
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Figure 2: 20210205201312_23 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



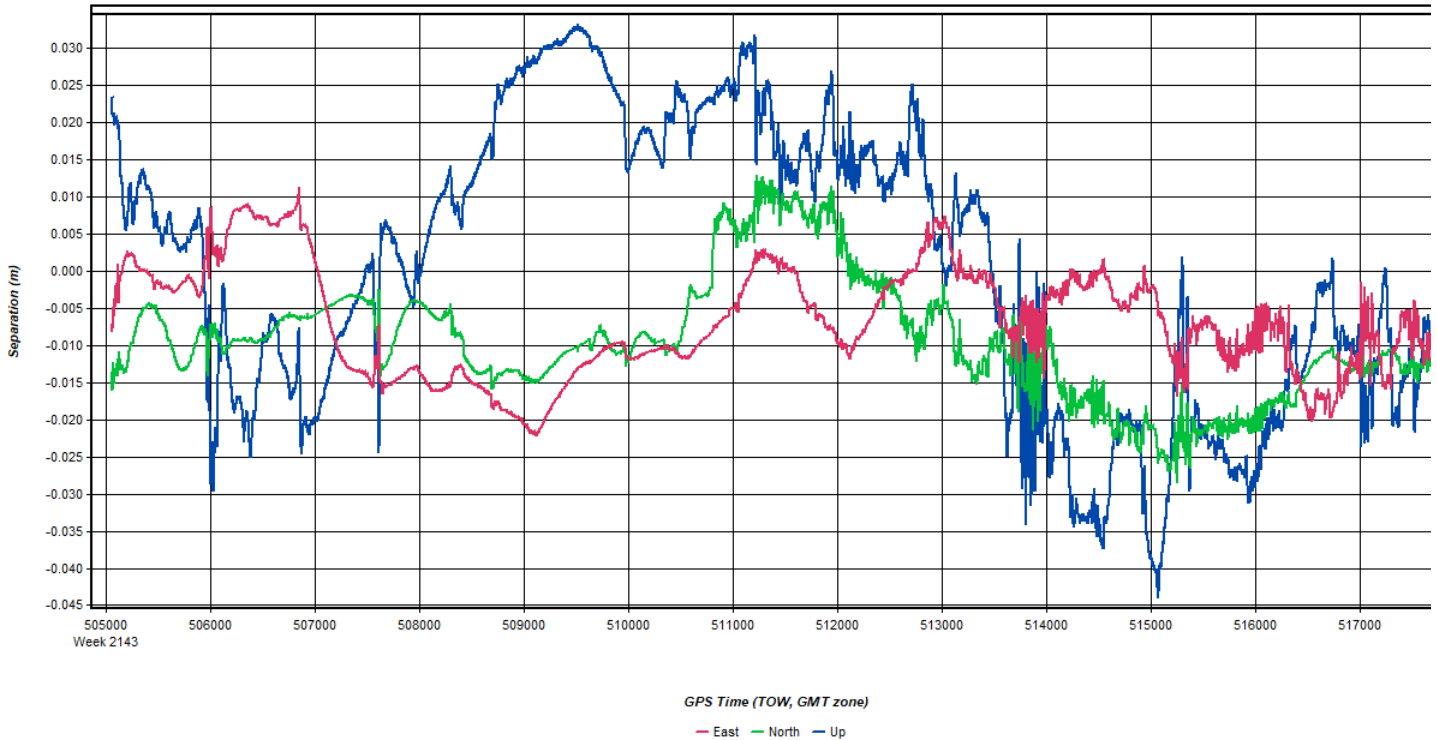
Process	20210205201312_23	by Unknown	on 2/11/2021	at 15:56:13
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Figure 3: 20210205201312_23 [Smoothed TC Combined] - Float or Fixed Ambiguity



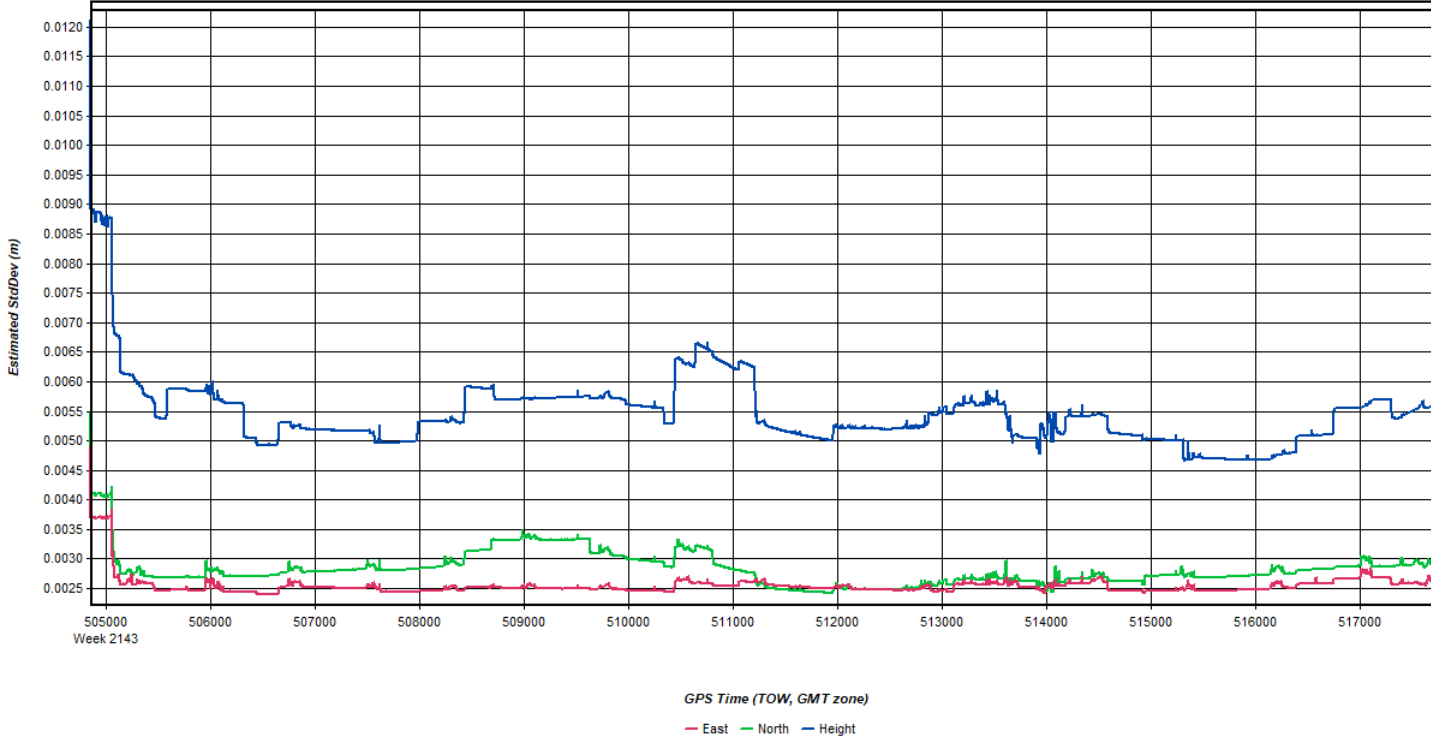
Process	20210205201312_23	by Unknown	on 2/11/2021	at 15:56:13
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Figure 4: 20210205201312_23 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



Process 20210205201312_23 by Unknown on 2/11/2021 at 15:56:13

Figure 5: 20210205201312_23 [Smoothed TC Combined] - Estimated Position Accuracy Plot



Process 20210205201312_23 by Unknown on 2/11/2021 at 15:56:13

Figure 6: 20210205201312_23 [Smoothed TC Combined] - PDOP Plot

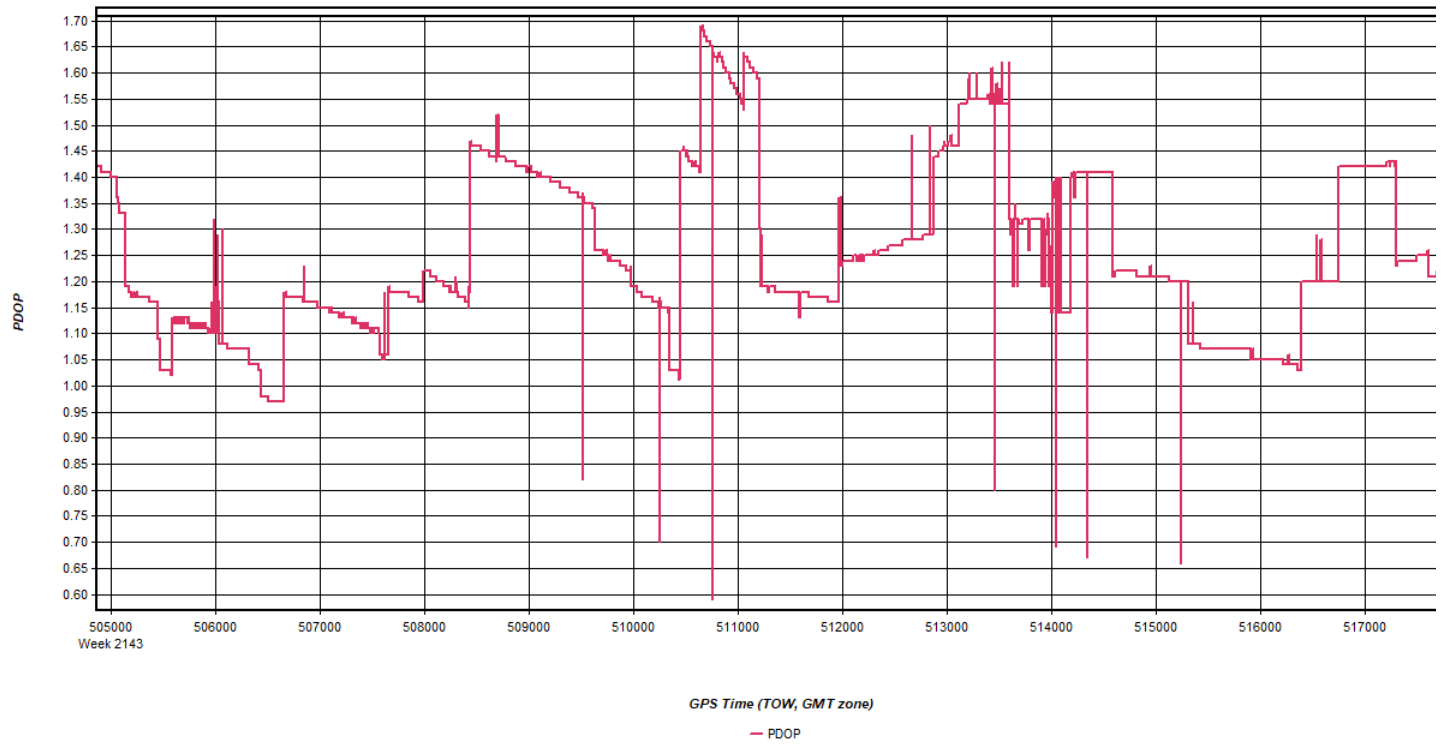


Figure 7: 20210205201312_23 [Smoothed TC Combined] - Number of Satellites Line Plot

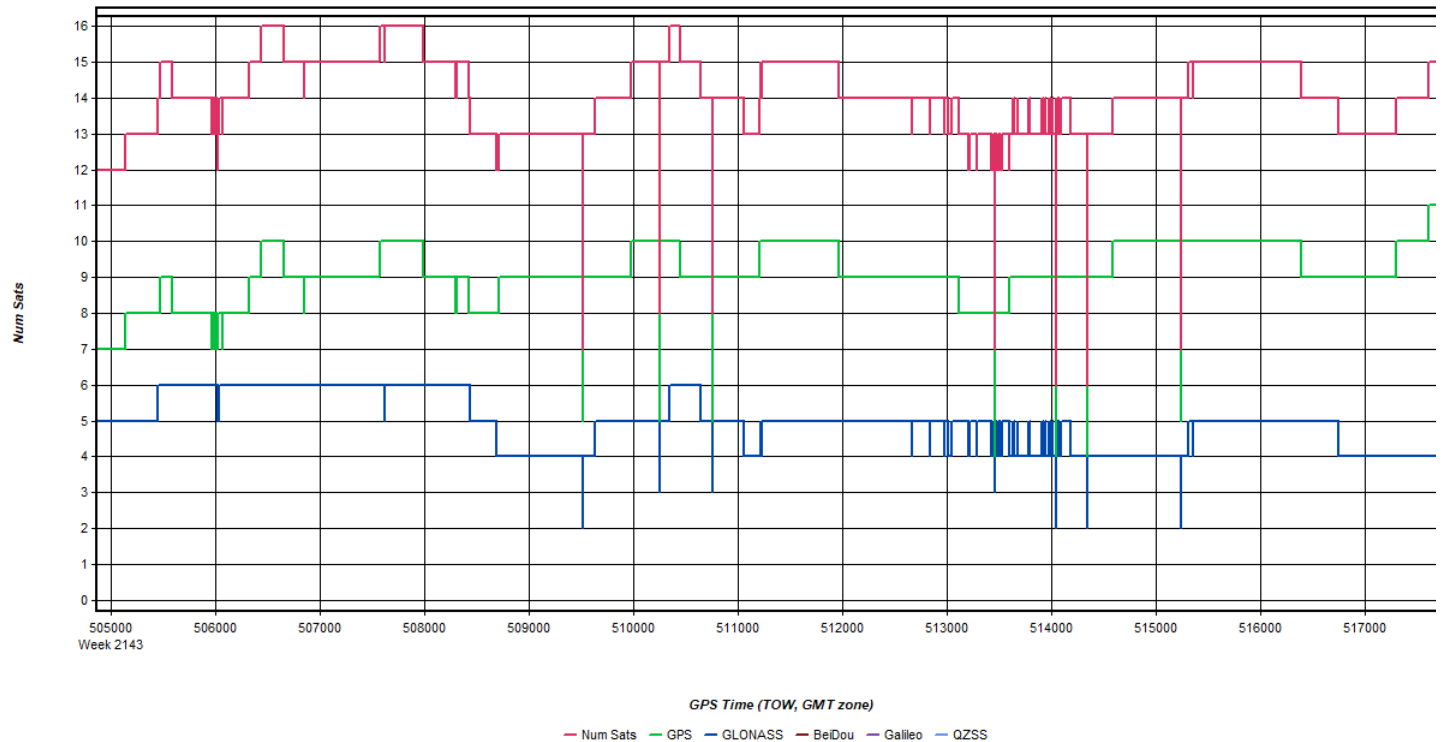
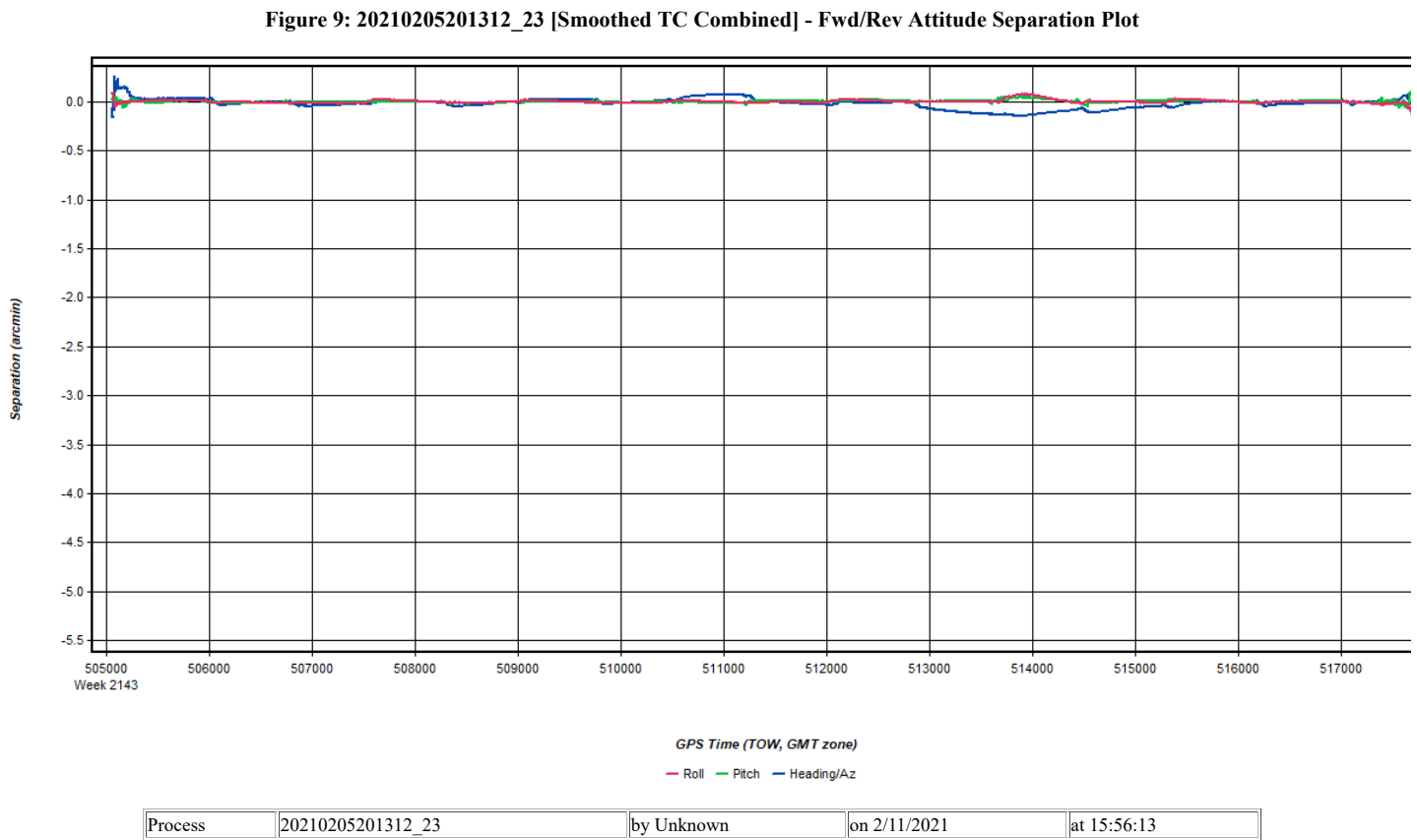
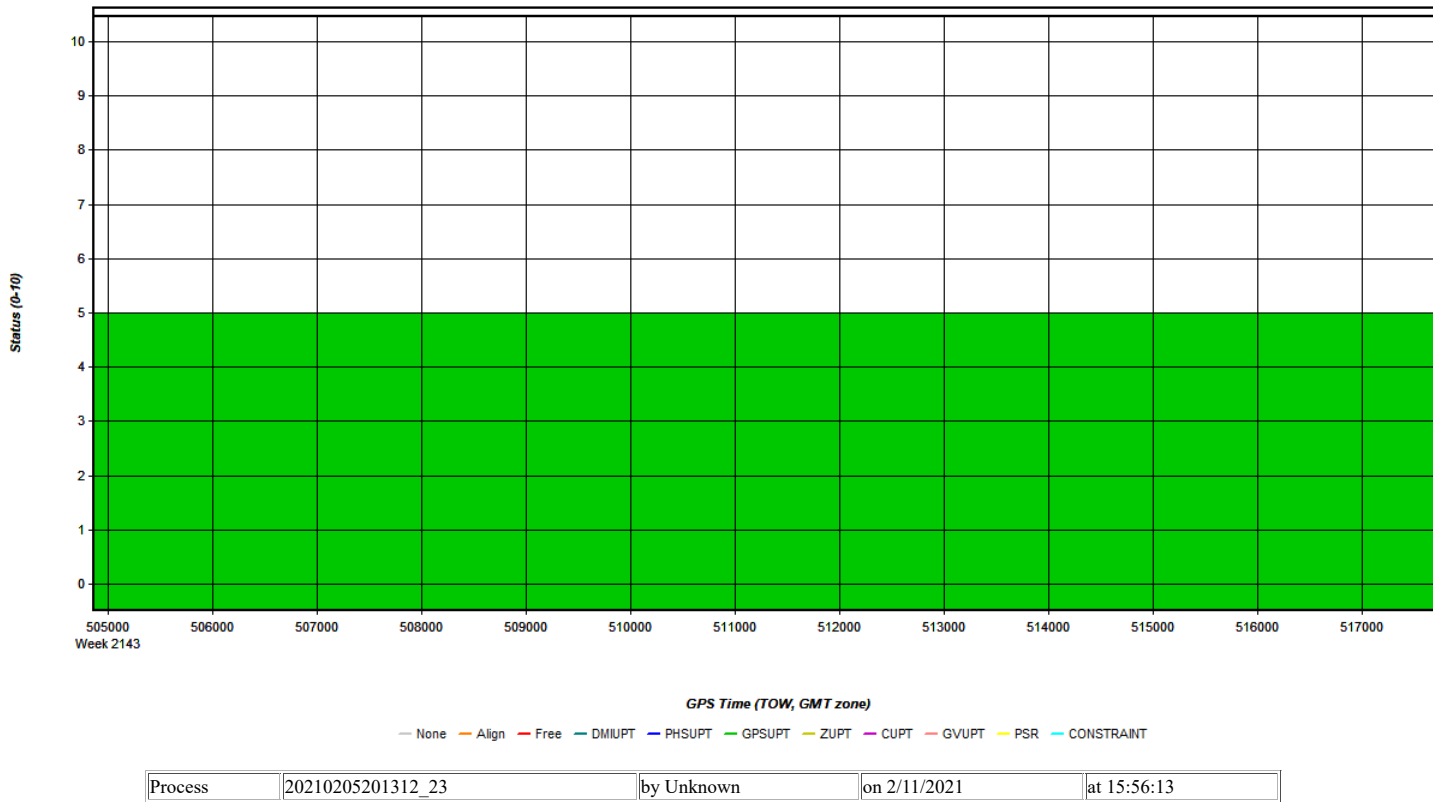


Figure 8: 20210205201312_23 [Smoothed TC Combined] - Status flag for IMU processing



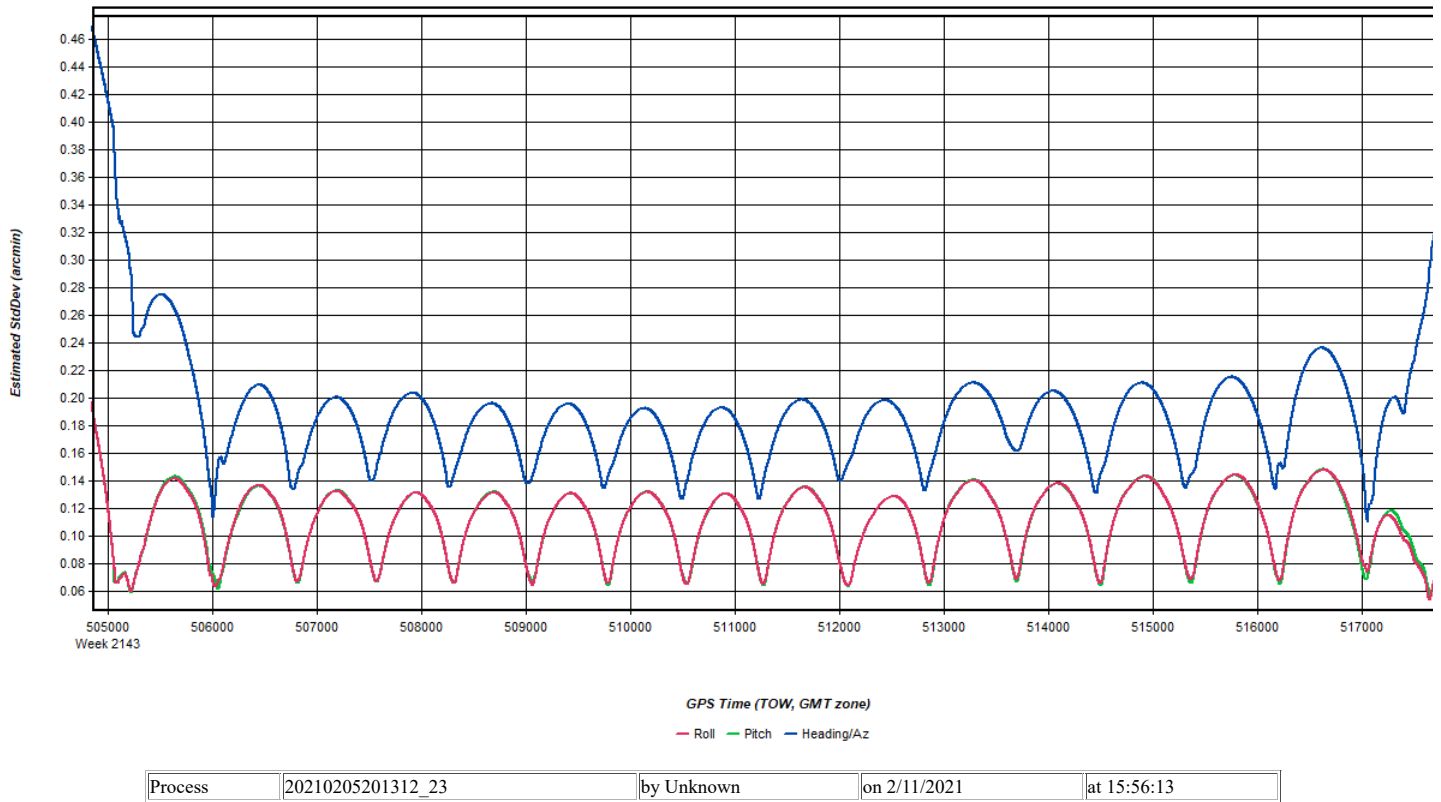


Figure 11: 20210205201312_23 [Smoothed TC Combined] - Azimuth Plot

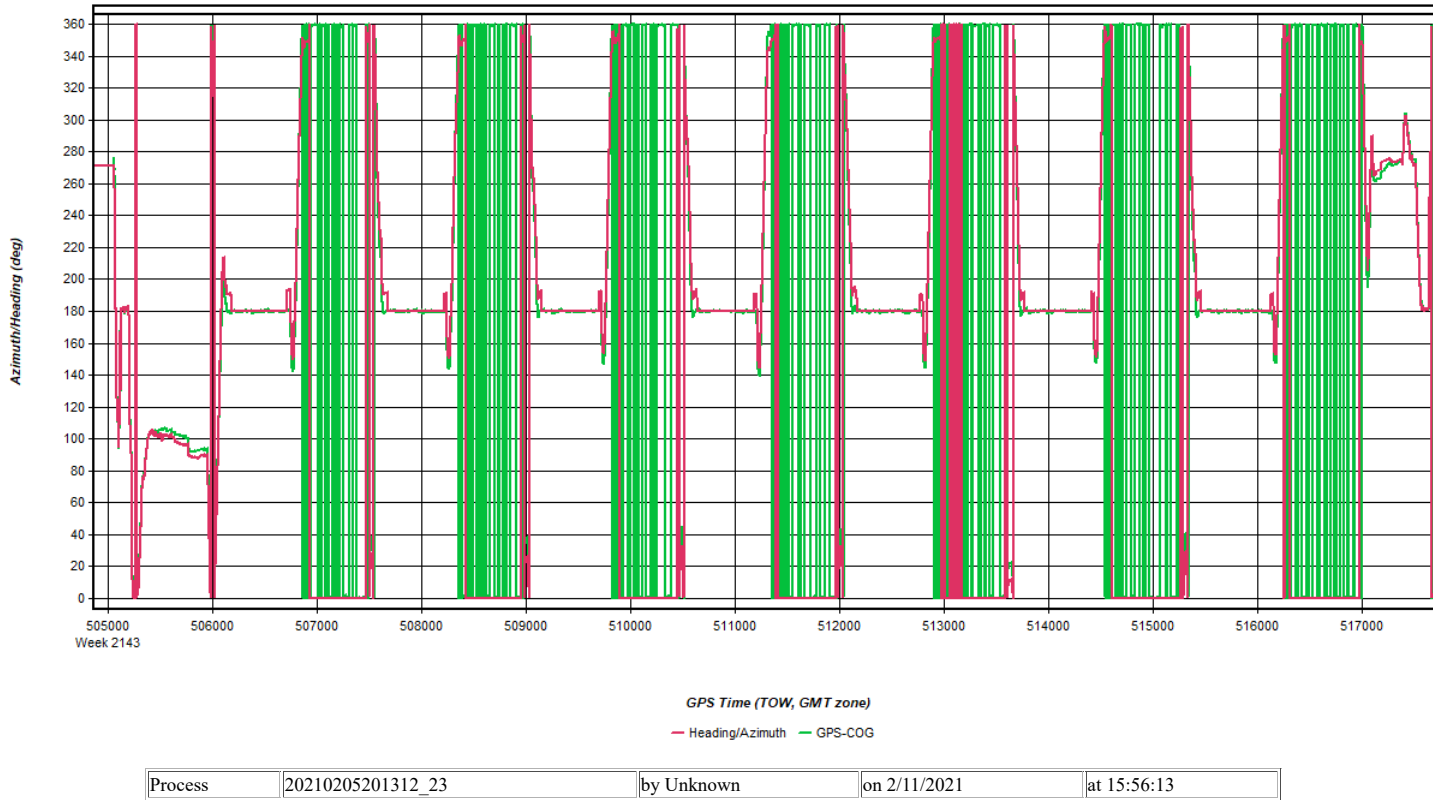
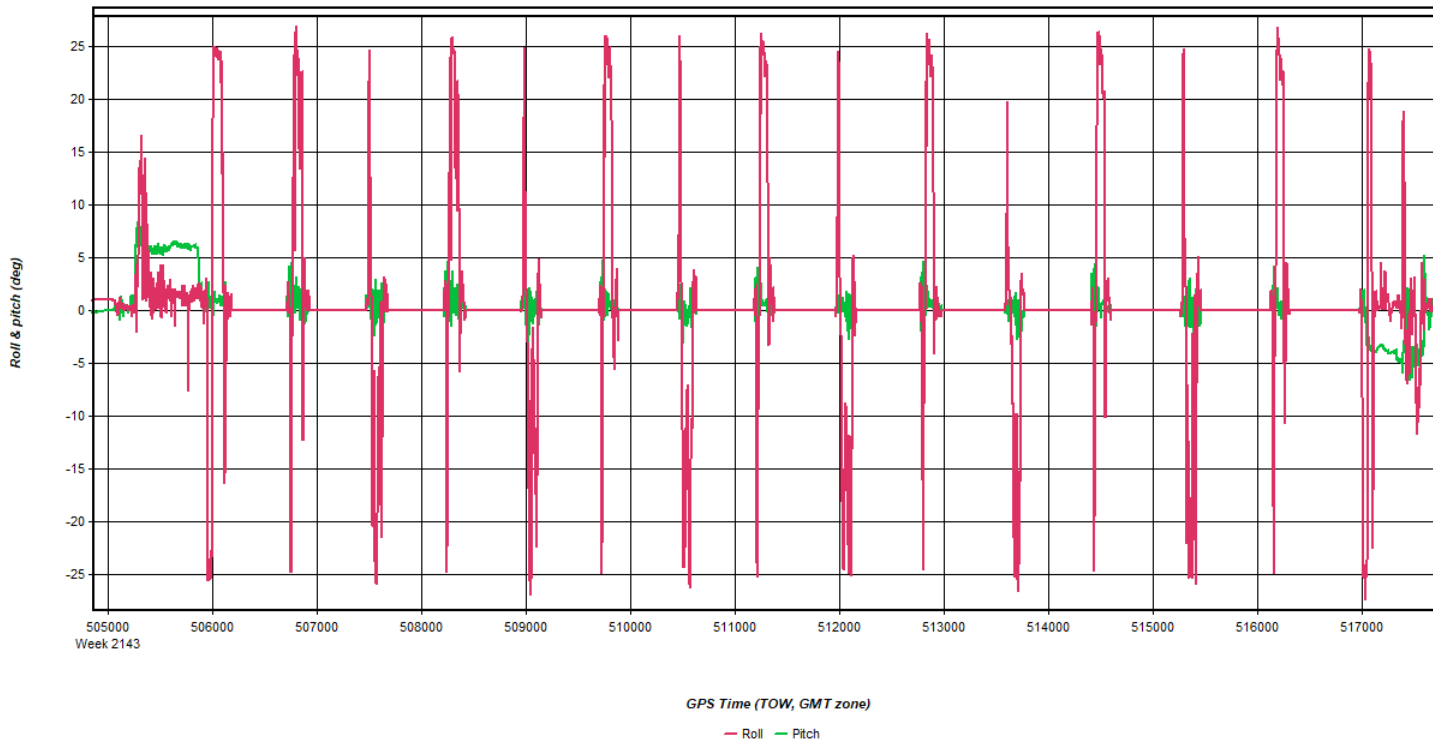
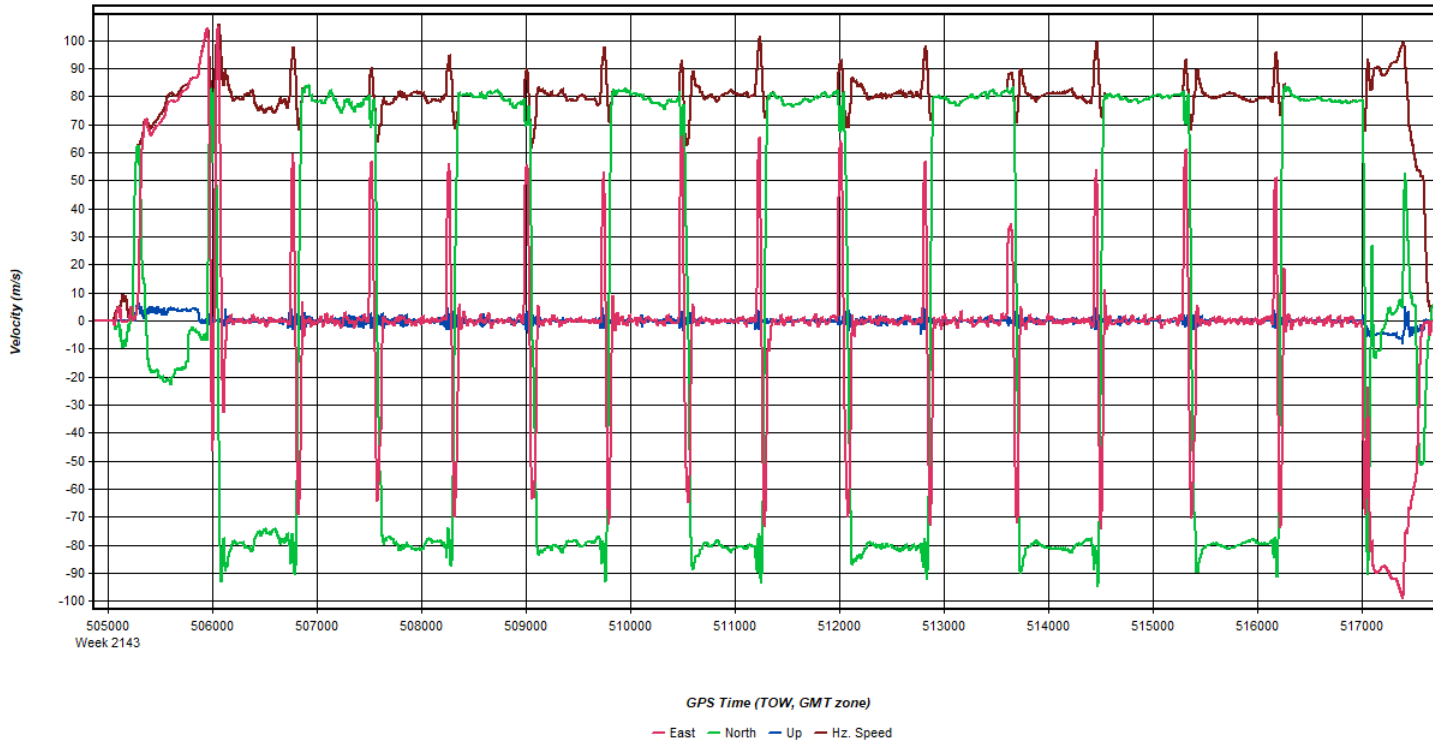


Figure 12: 20210205201312_23 [Smoothed TC Combined] - Roll & Pitch Plot



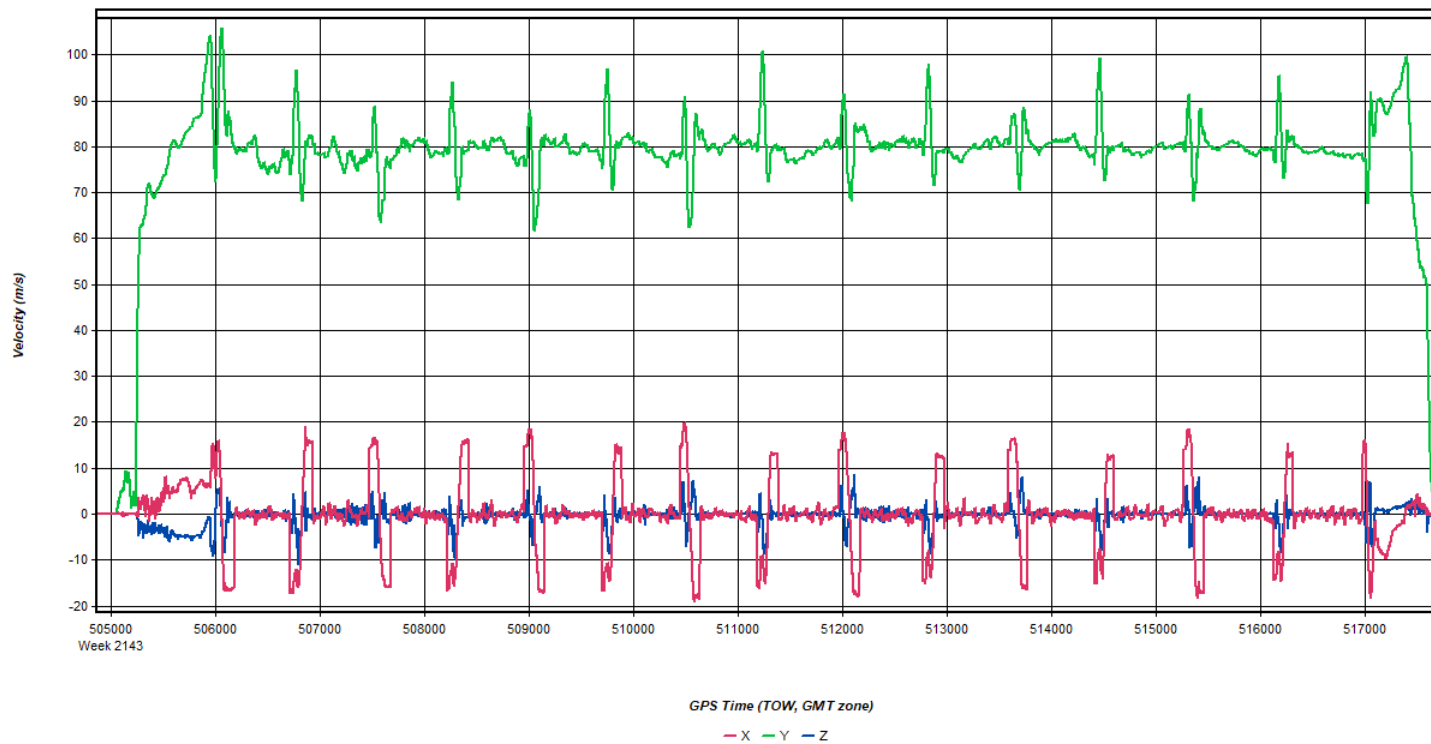
Process	20210205201312_23	by Unknown	on 2/11/2021	at 15:56:13
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Figure 13: 20210205201312_23 [Smoothed TC Combined] - Velocity Profile Plot



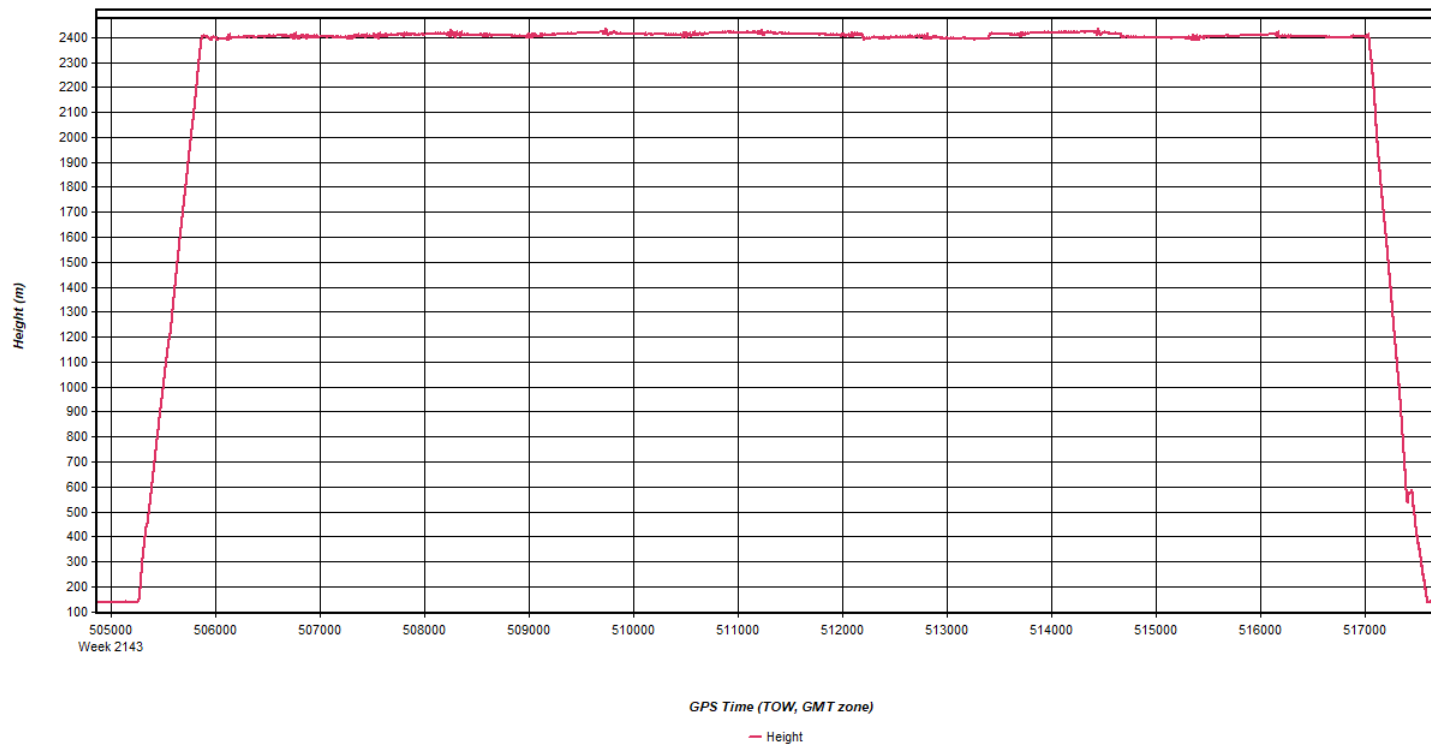
Process	20210205201312_23	by Unknown	on 2/11/2021	at 15:56:13
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Figure 14: 20210205201312_23 [Smoothed TC Combined] - Body Frame Velocity Plot



Process	20210205201312_23	by Unknown	on 2/11/2021	at 15:56:13
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Figure 15: 20210205201312_23 [Smoothed TC Combined] - Height Profile Plot



Process	20210205201312_23	by Unknown	on 2/11/2021	at 15:56:13
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Figure 16: 20210205201312_23 [Smoothed TC Combined] - C/A Code Residual RMS Plot

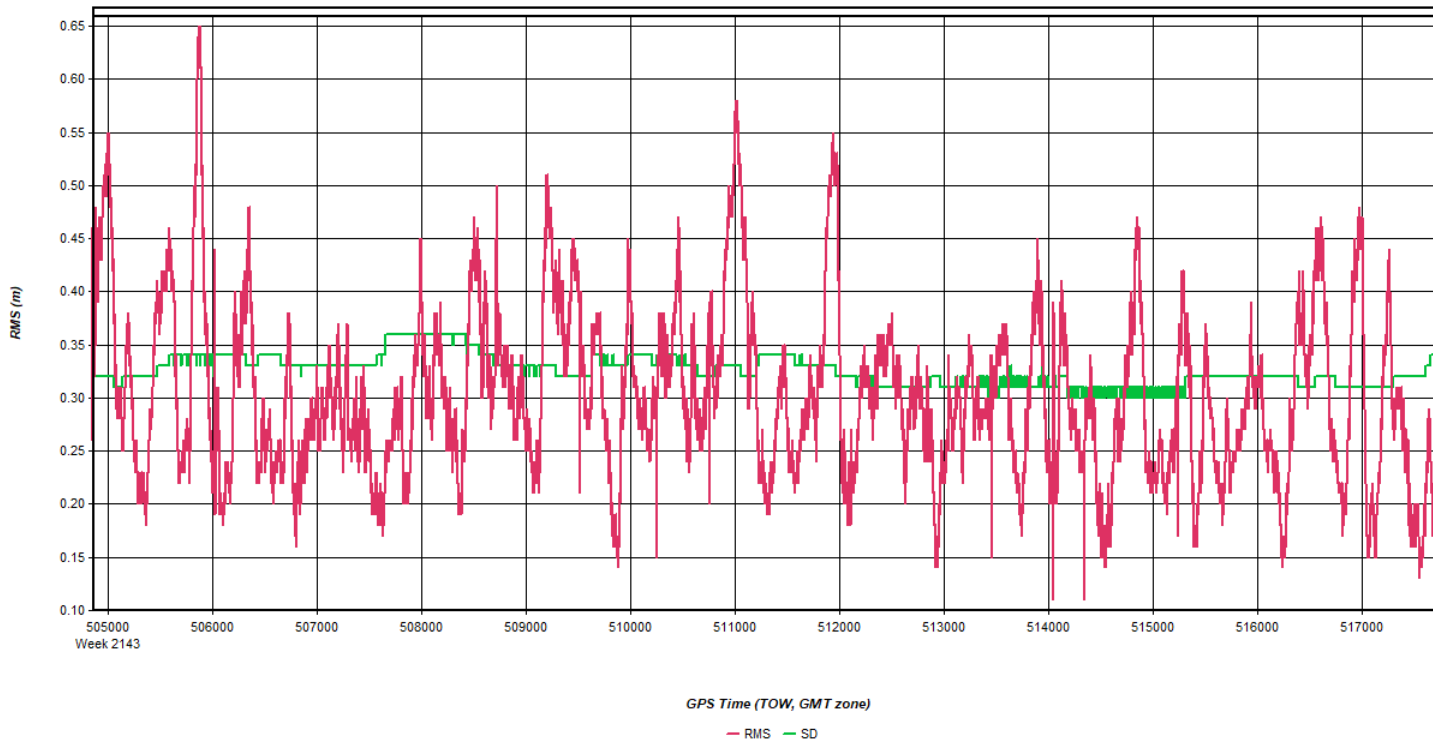


Figure 17: 20210205201312_23 [Smoothed TC Combined] - Carrier Residual RMS Plot

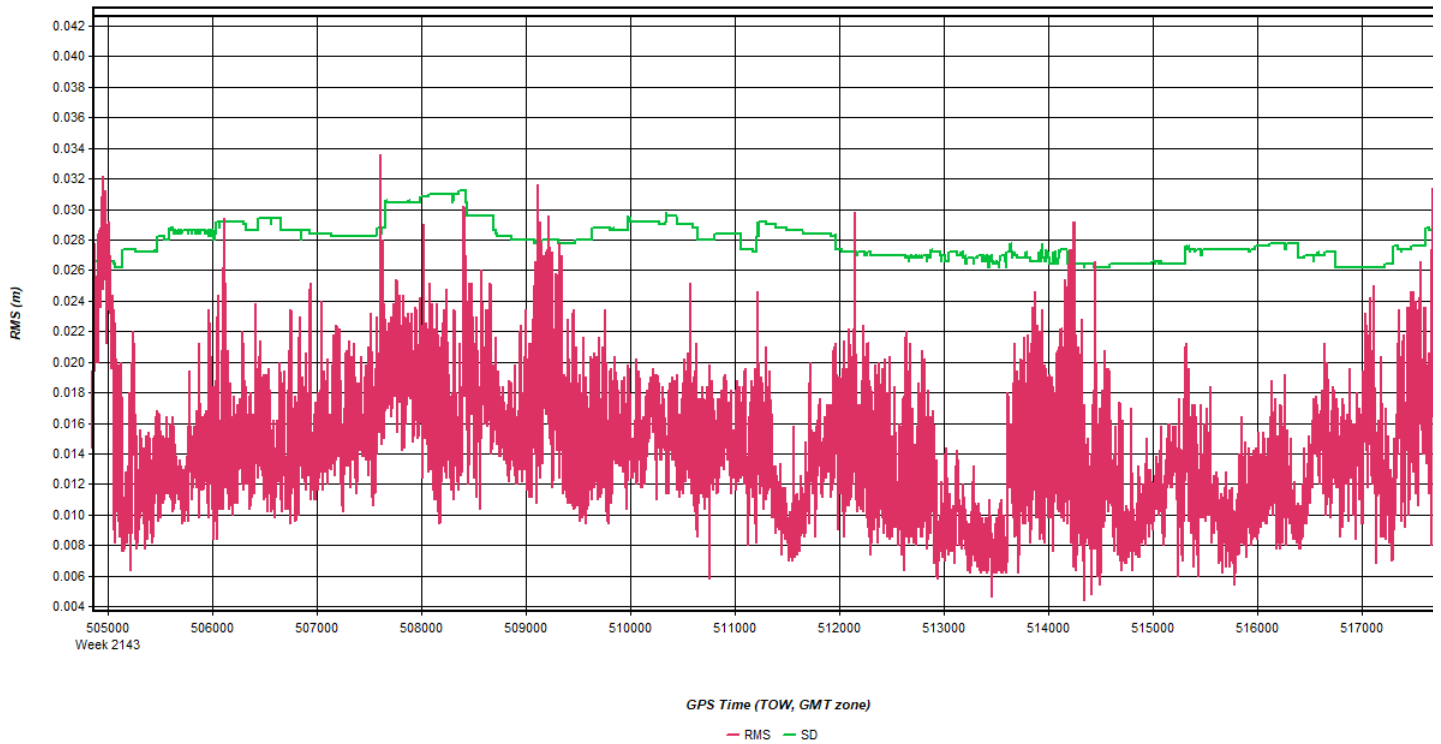
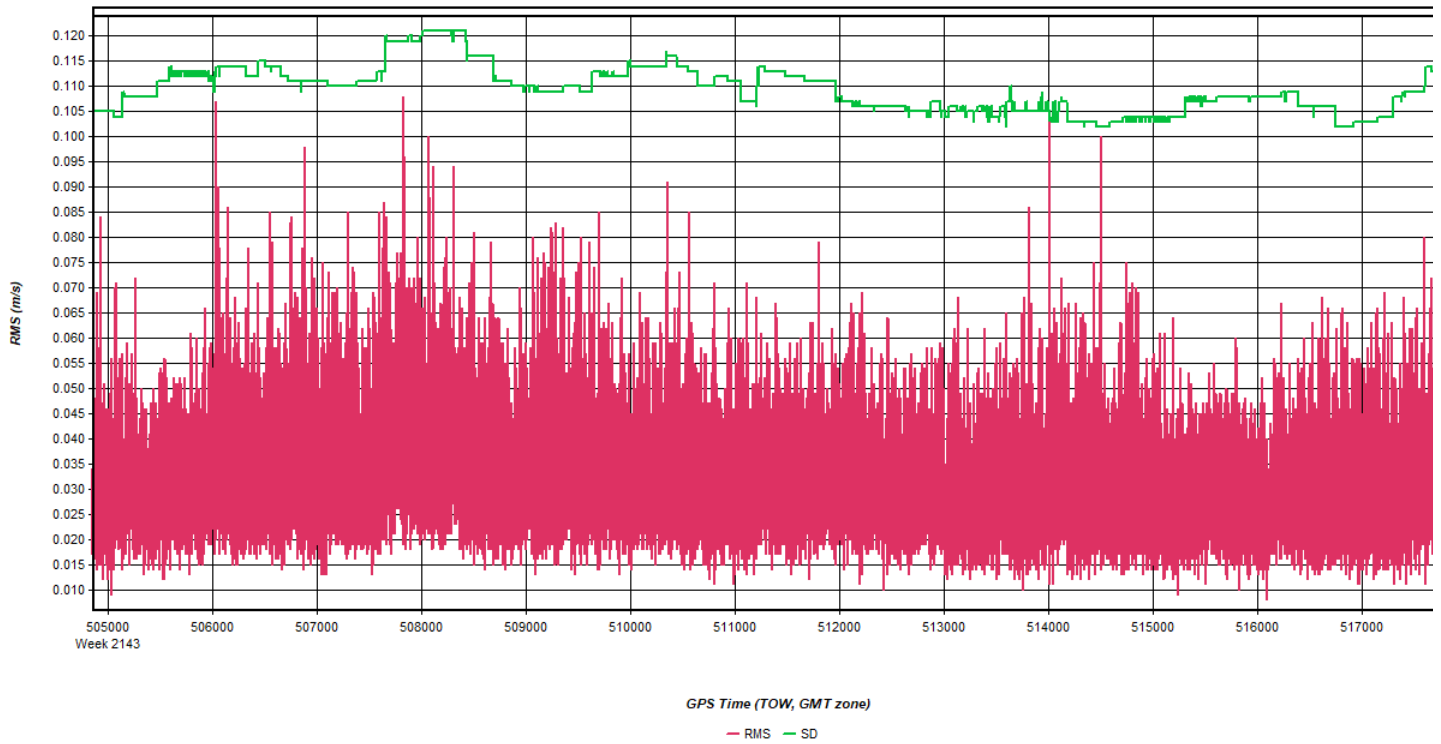
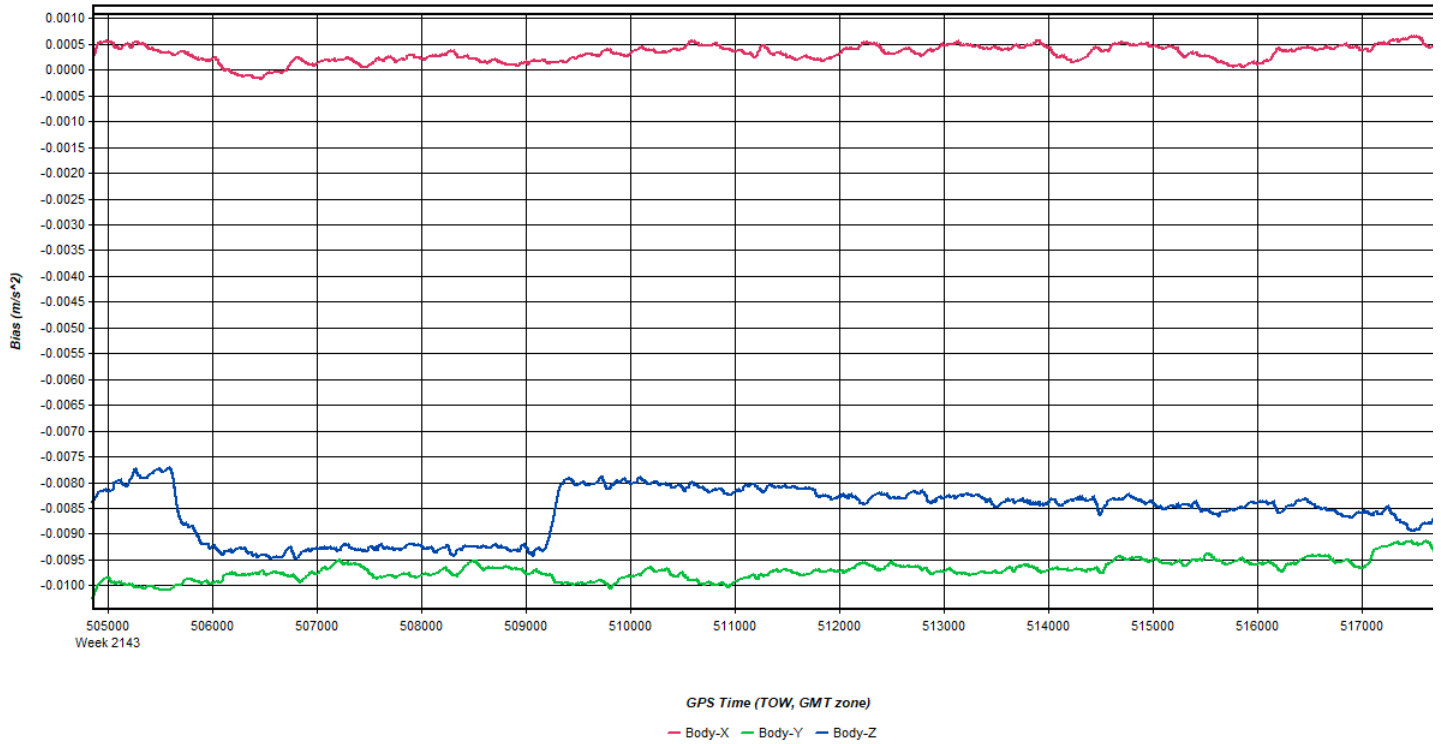


Figure 18: 20210205201312_23 [Smoothed TC Combined] - Doppler Residual RMS Plot



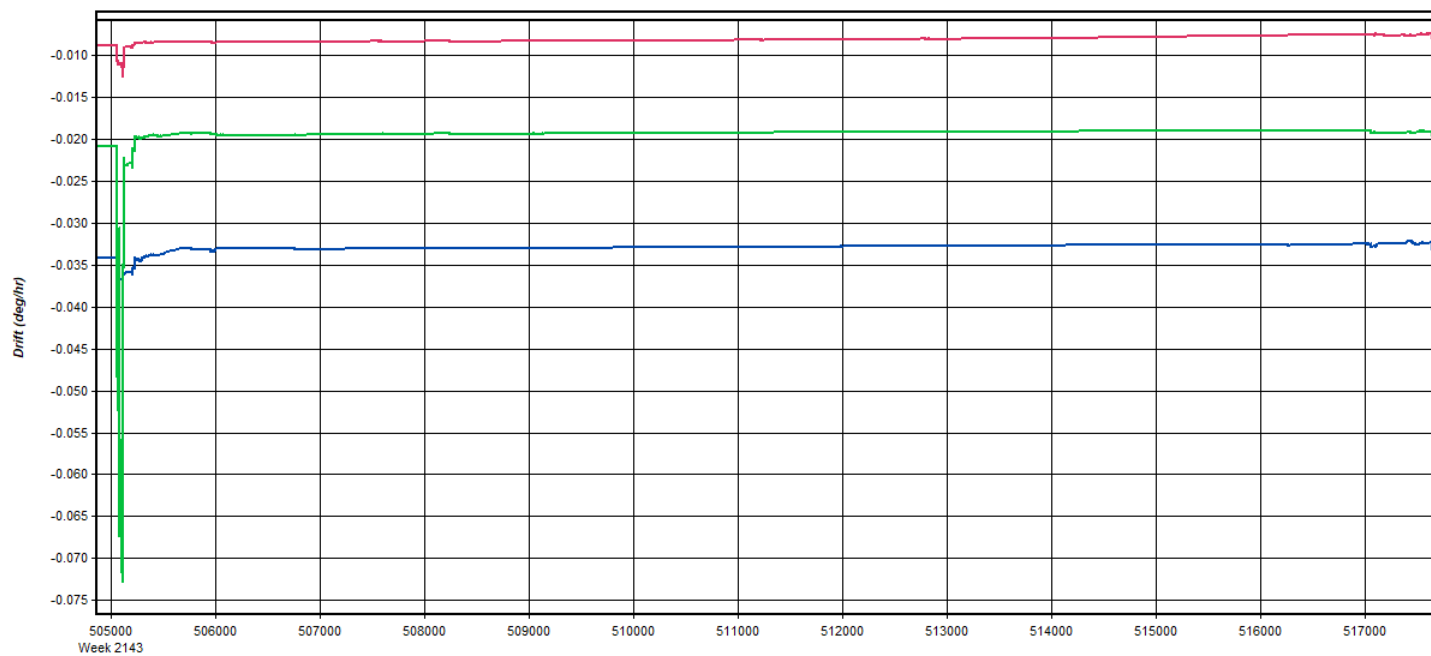
Process	20210205201312_23	by Unknown	on 2/11/2021	at 15:56:13
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Figure 19: 20210205201312_23 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210205201312_23	by Unknown	on 2/11/2021	at 15:56:13
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Figure 20: 20210205201312_23 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

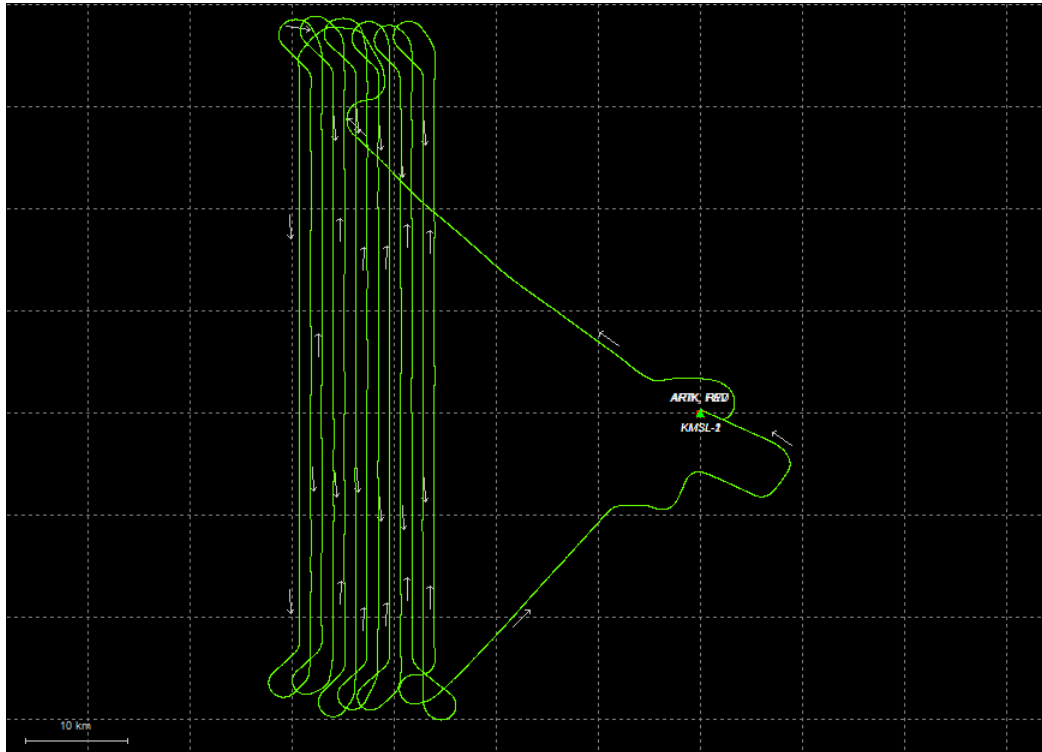
Body-X Body-Y Body-Z

Process	20210205201312_23	by Unknown	on 2/11/2021	at 15:56:13
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Output Results for 20210206140505_24

Inertial Explorer Version 8.90.2124
02/11/2021

Figure 1: Smoothed TC Combined - Map



Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 2: 20210206140505_24 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot

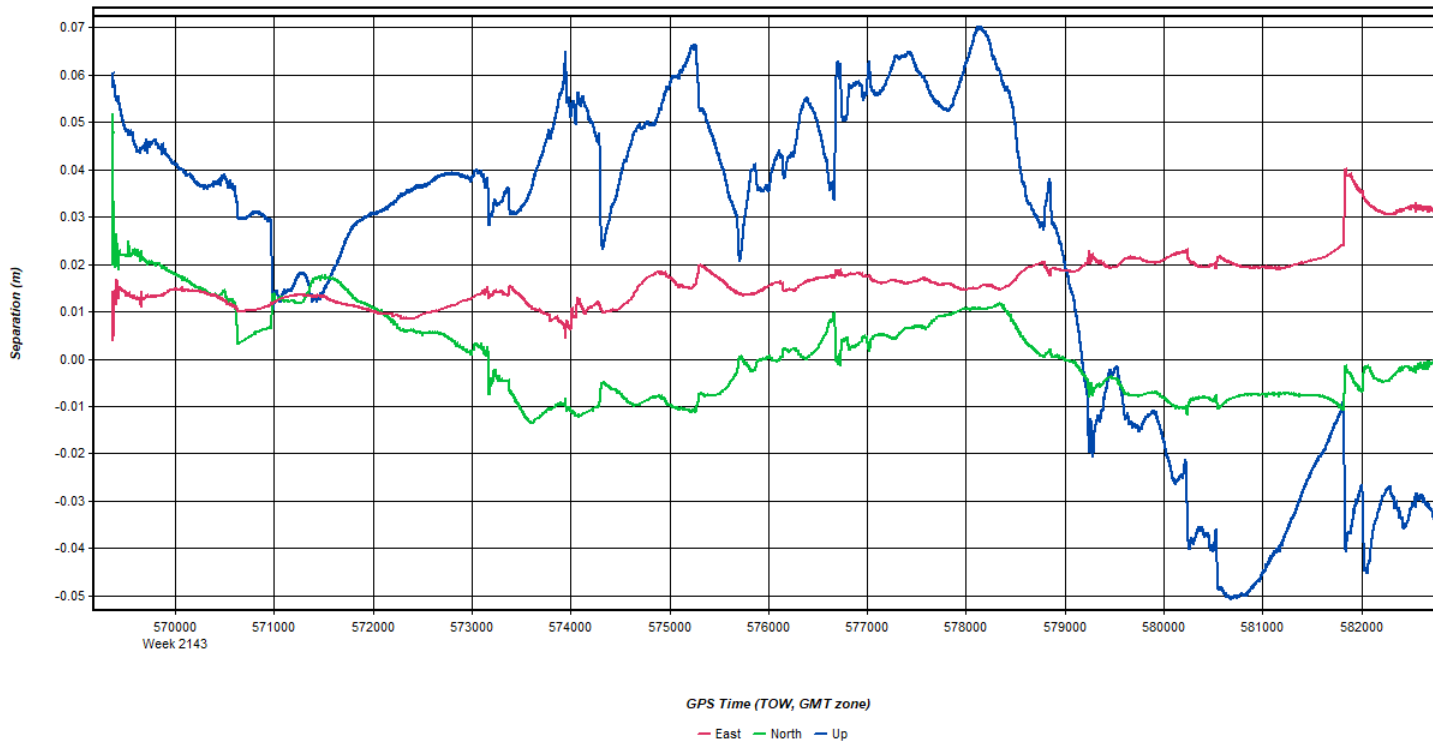


Figure 3: 20210206140505_24 [Smoothed TC Combined] - Float or Fixed Ambiguity

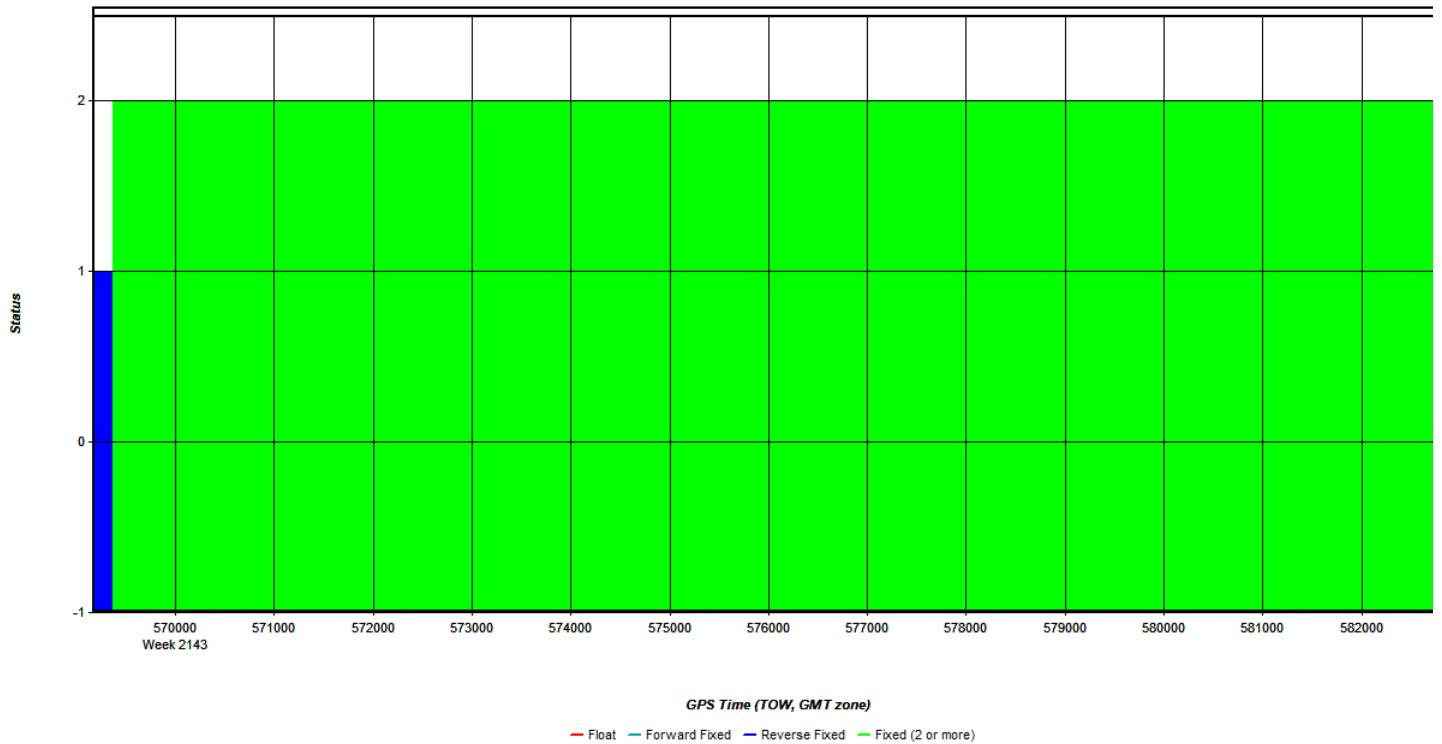


Figure 4: 20210206140505_24 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



Figure 5: 20210206140505_24 [Smoothed TC Combined] - Estimated Position Accuracy Plot

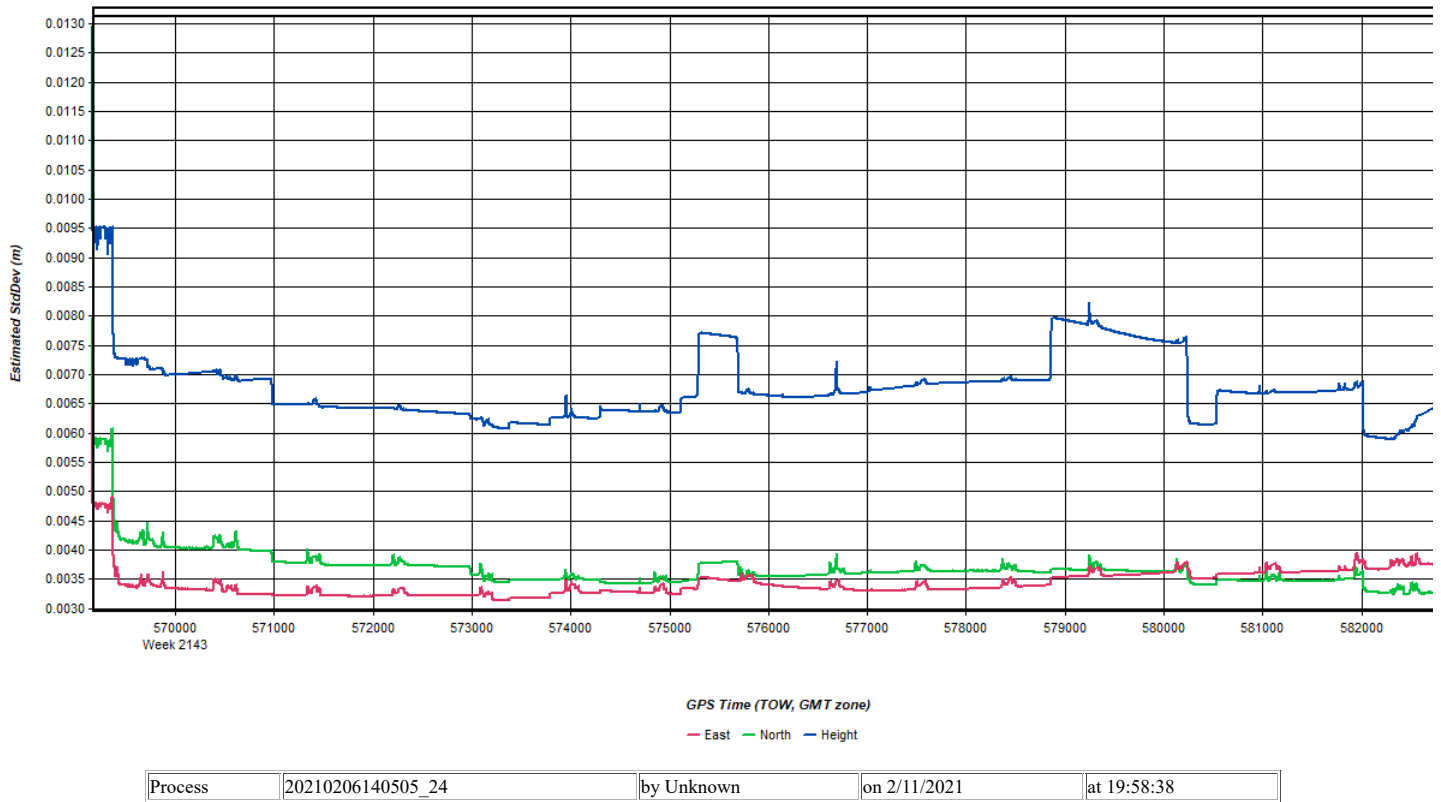
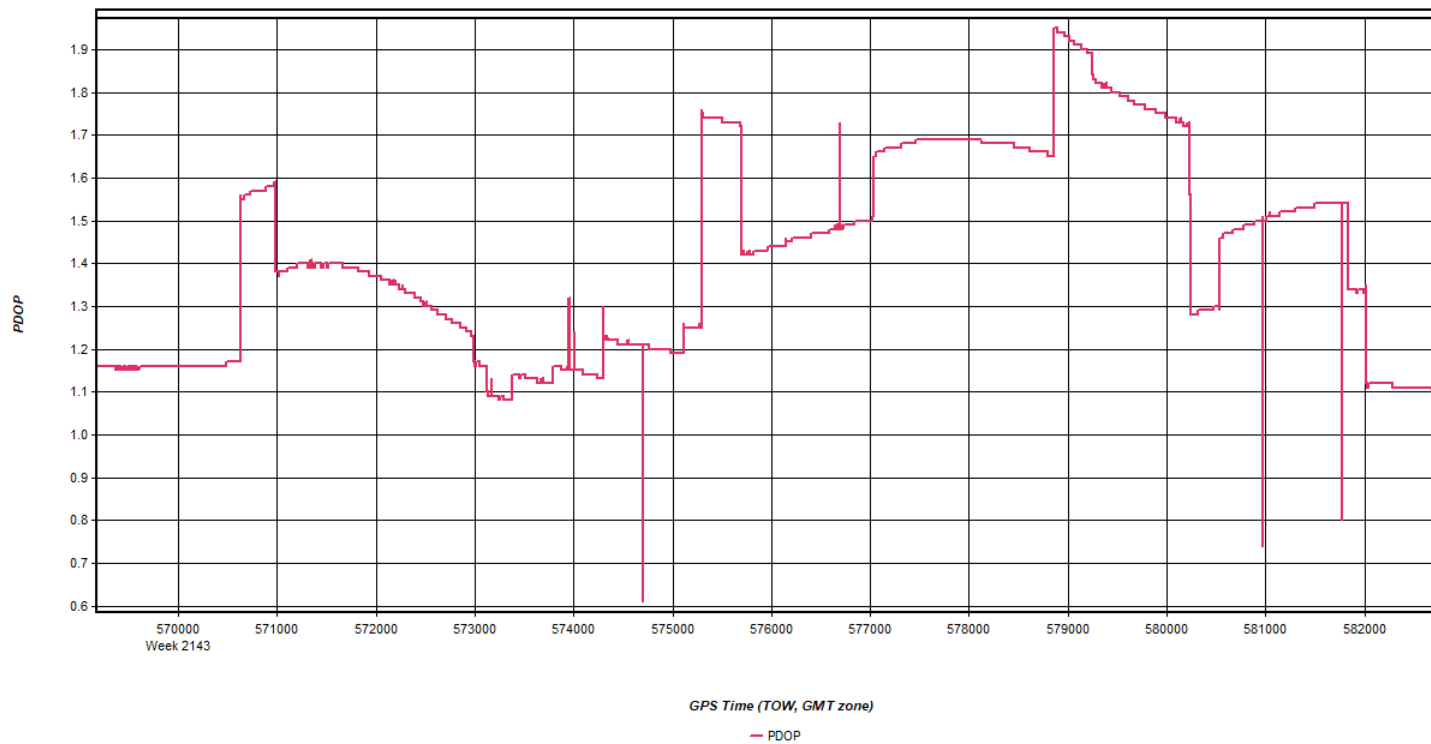
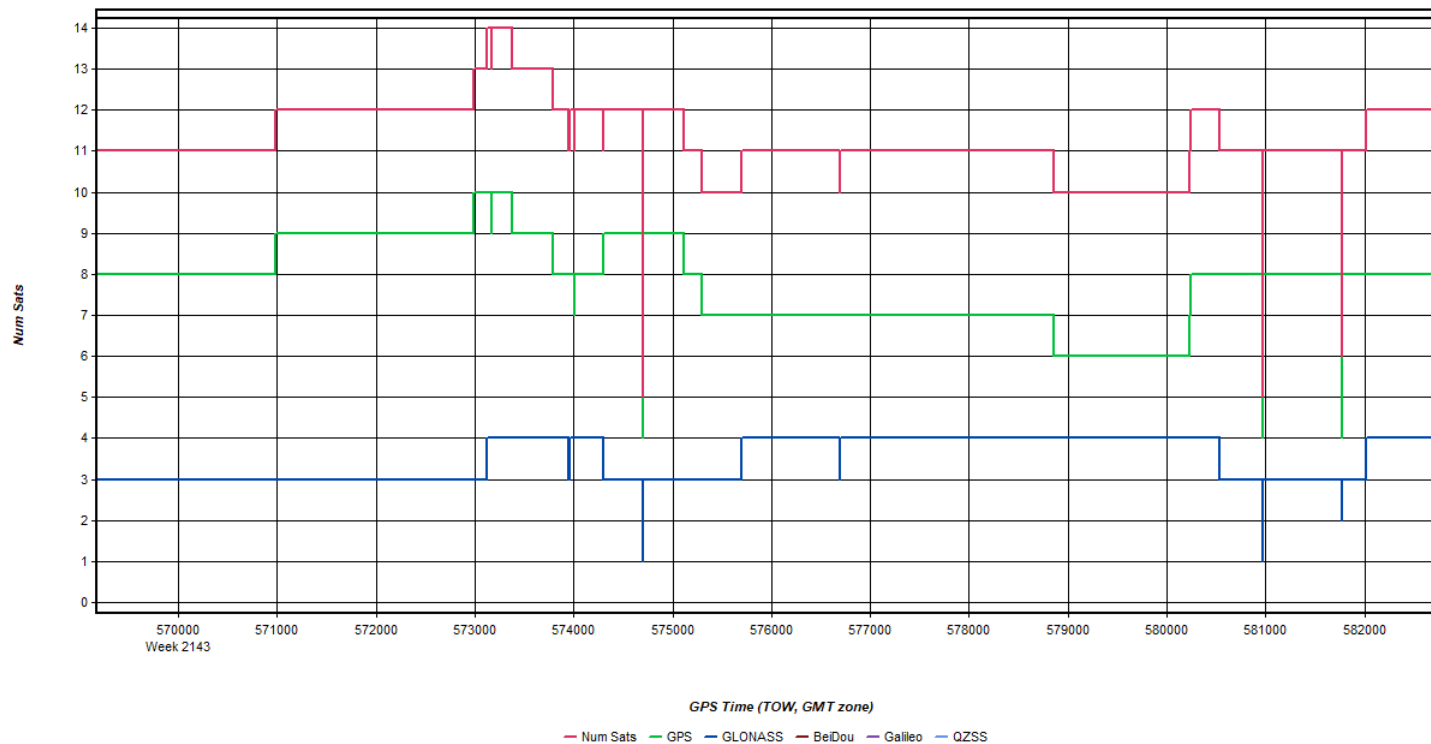


Figure 6: 20210206140505_24 [Smoothed TC Combined] - PDOP Plot



Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 7: 20210206140505_24 [Smoothed TC Combined] - Number of Satellites Line Plot



Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 8: 20210206140505_24 [Smoothed TC Combined] - Status flag for IMU processing

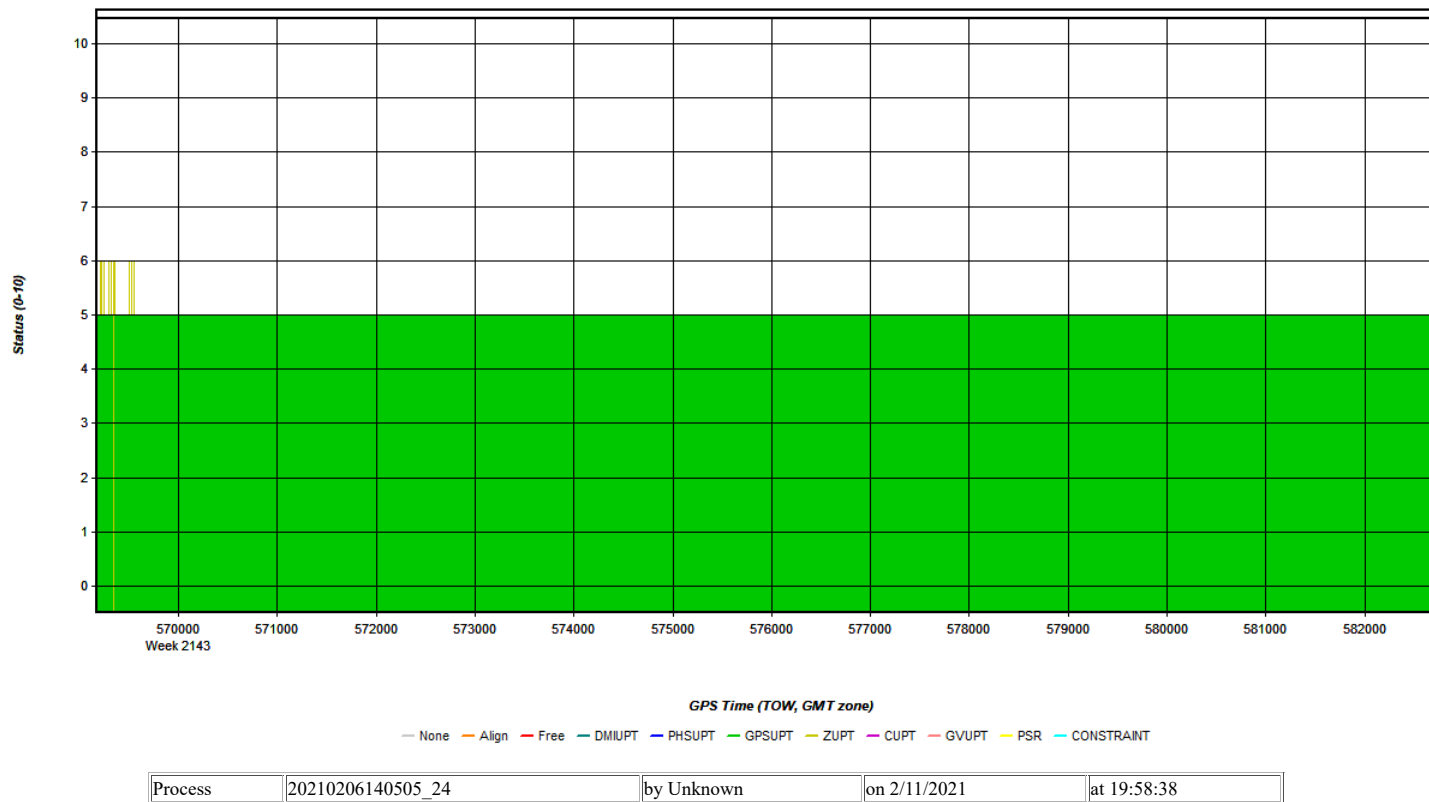


Figure 9: 20210206140505_24 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

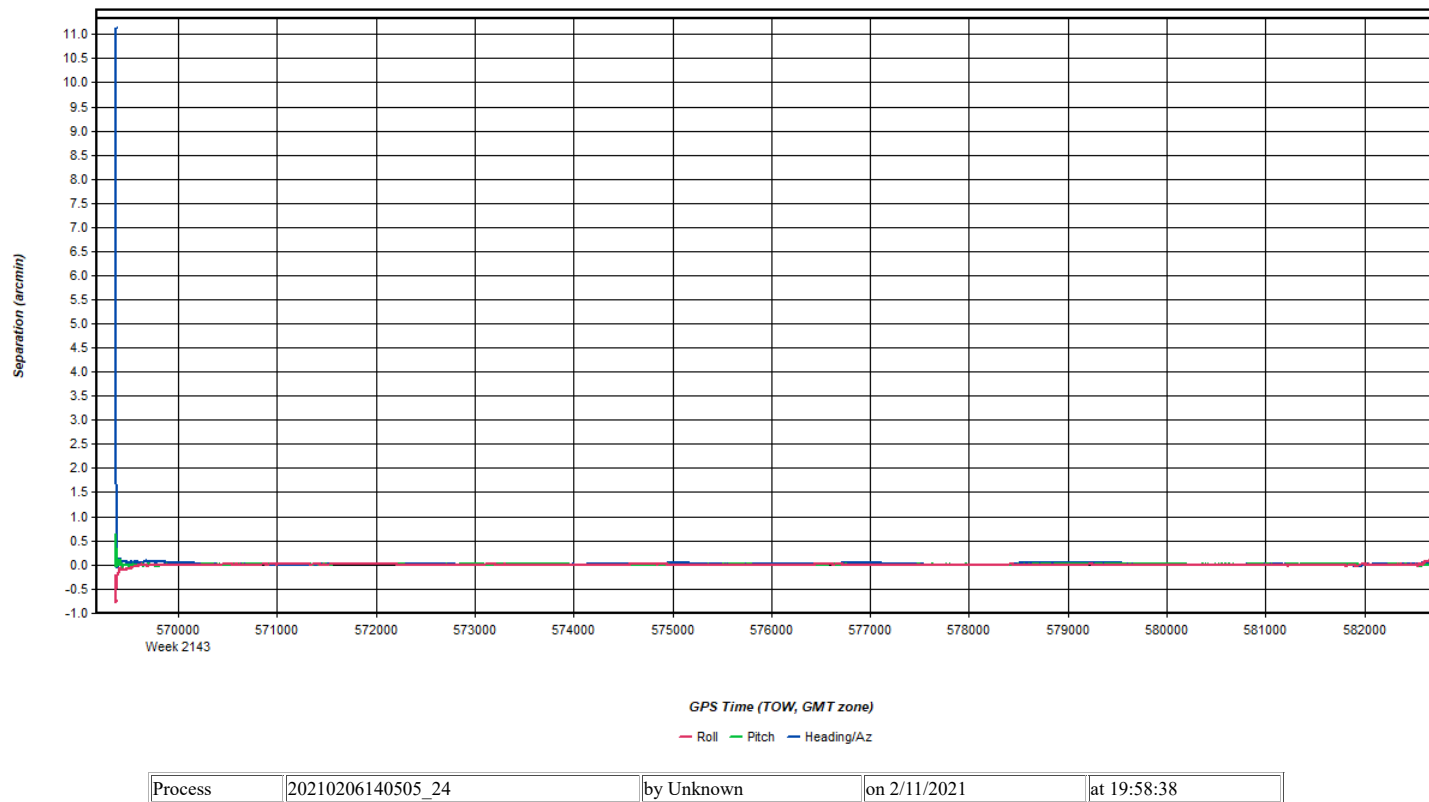


Figure 10: 20210206140505_24 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

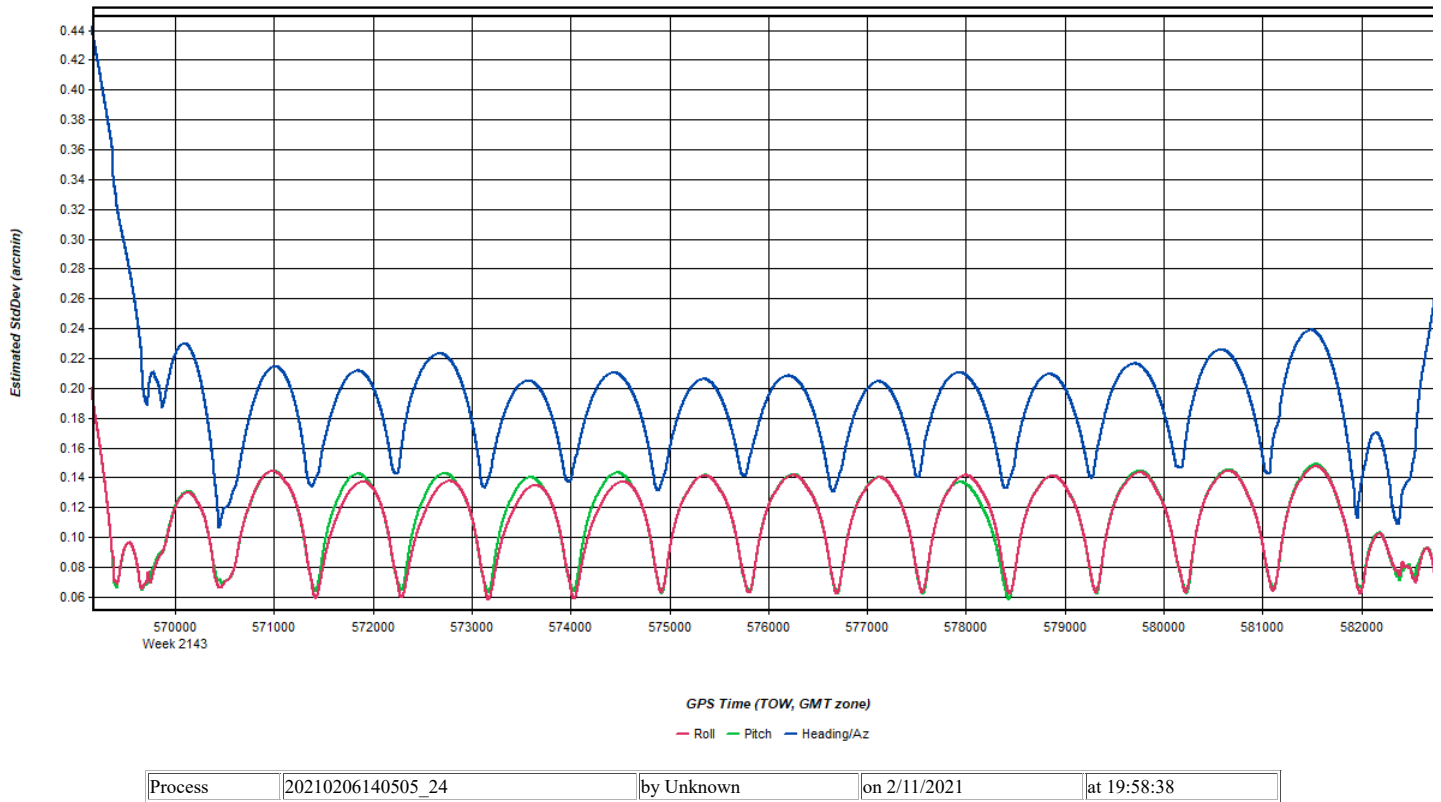


Figure 11: 20210206140505_24 [Smoothed TC Combined] - Azimuth Plot

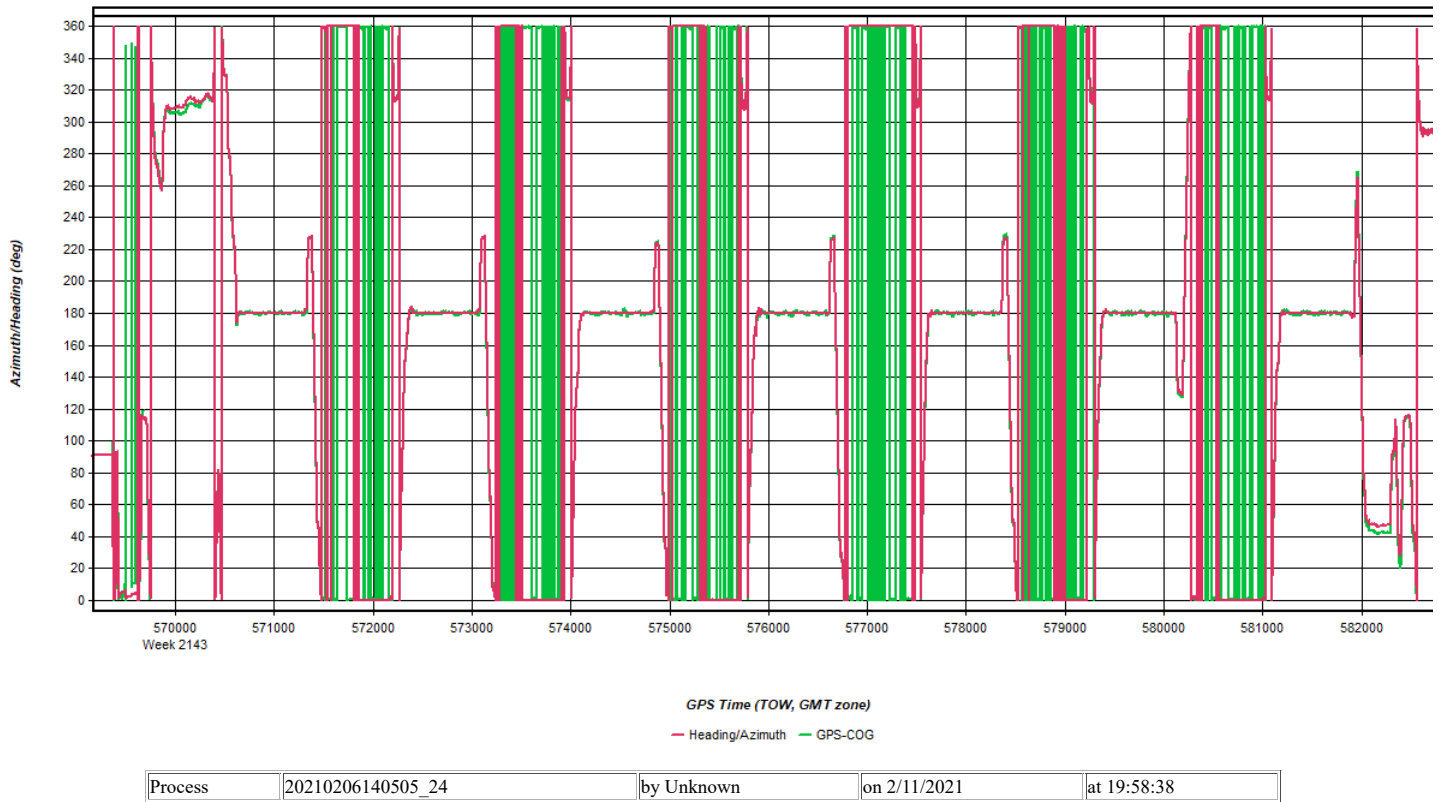
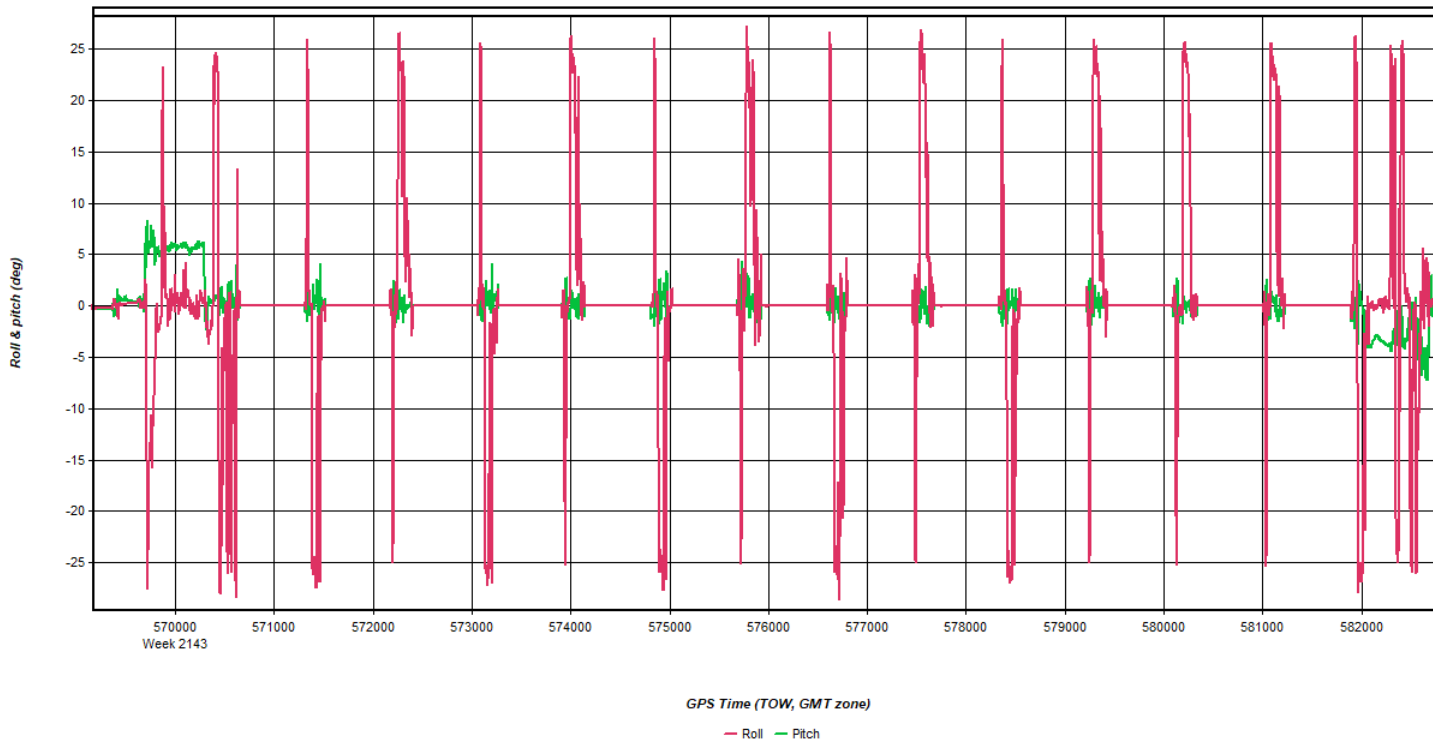
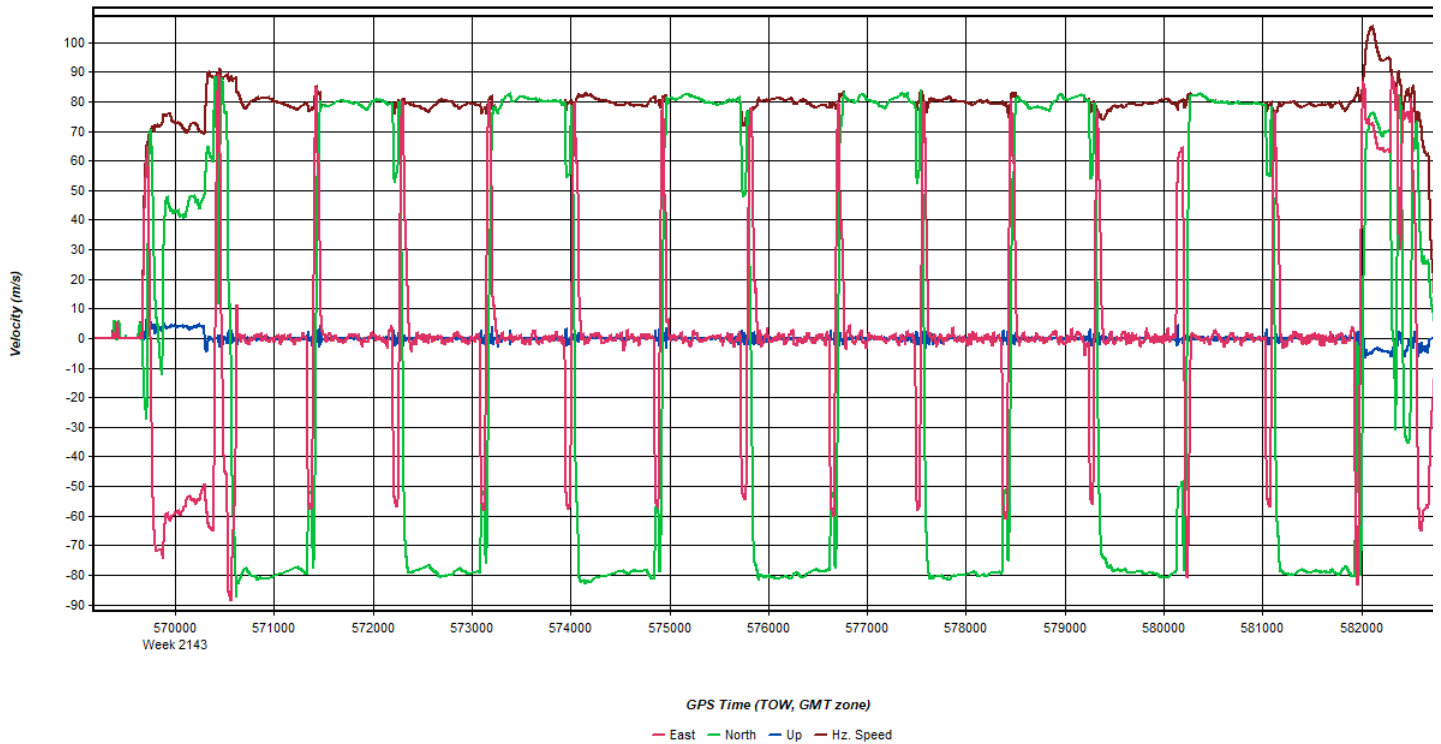


Figure 12: 20210206140505_24 [Smoothed TC Combined] - Roll & Pitch Plot



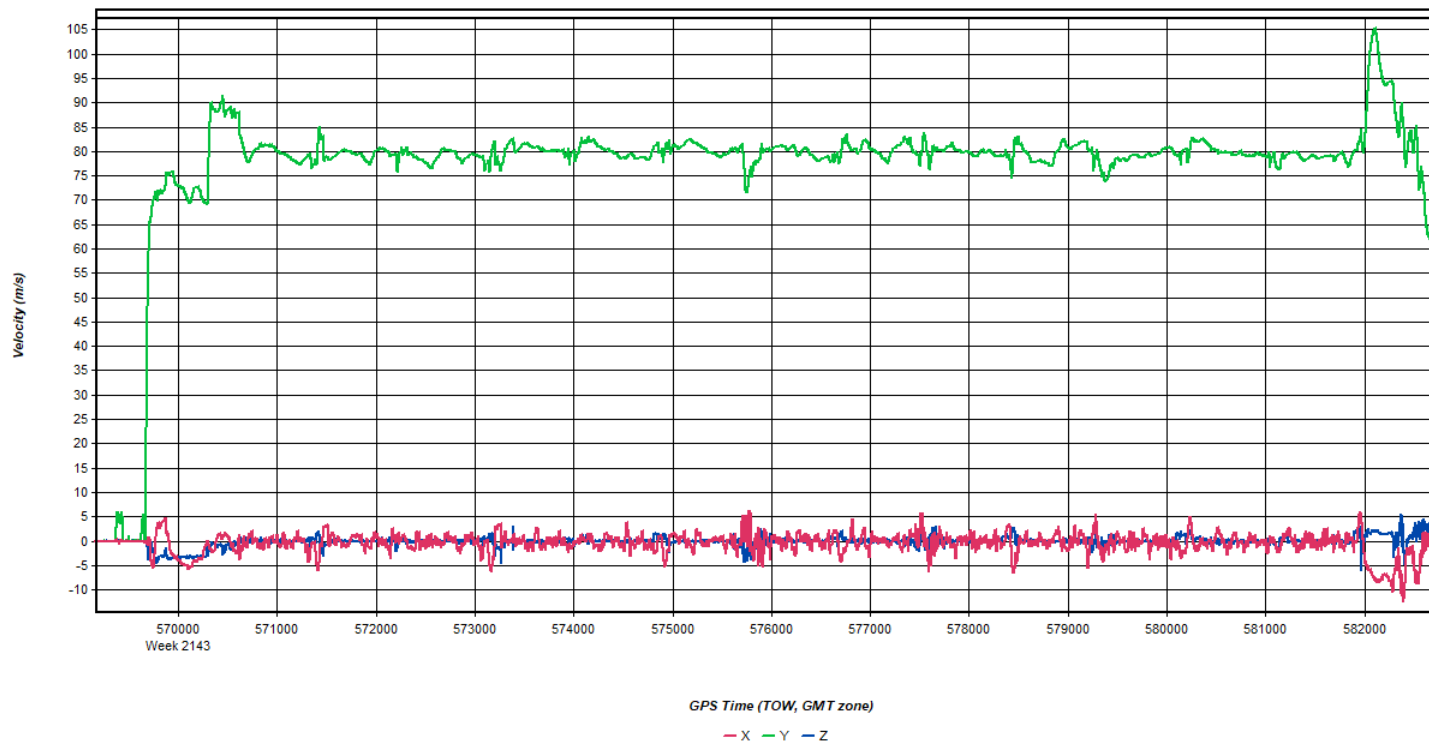
Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 13: 20210206140505_24 [Smoothed TC Combined] - Velocity Profile Plot



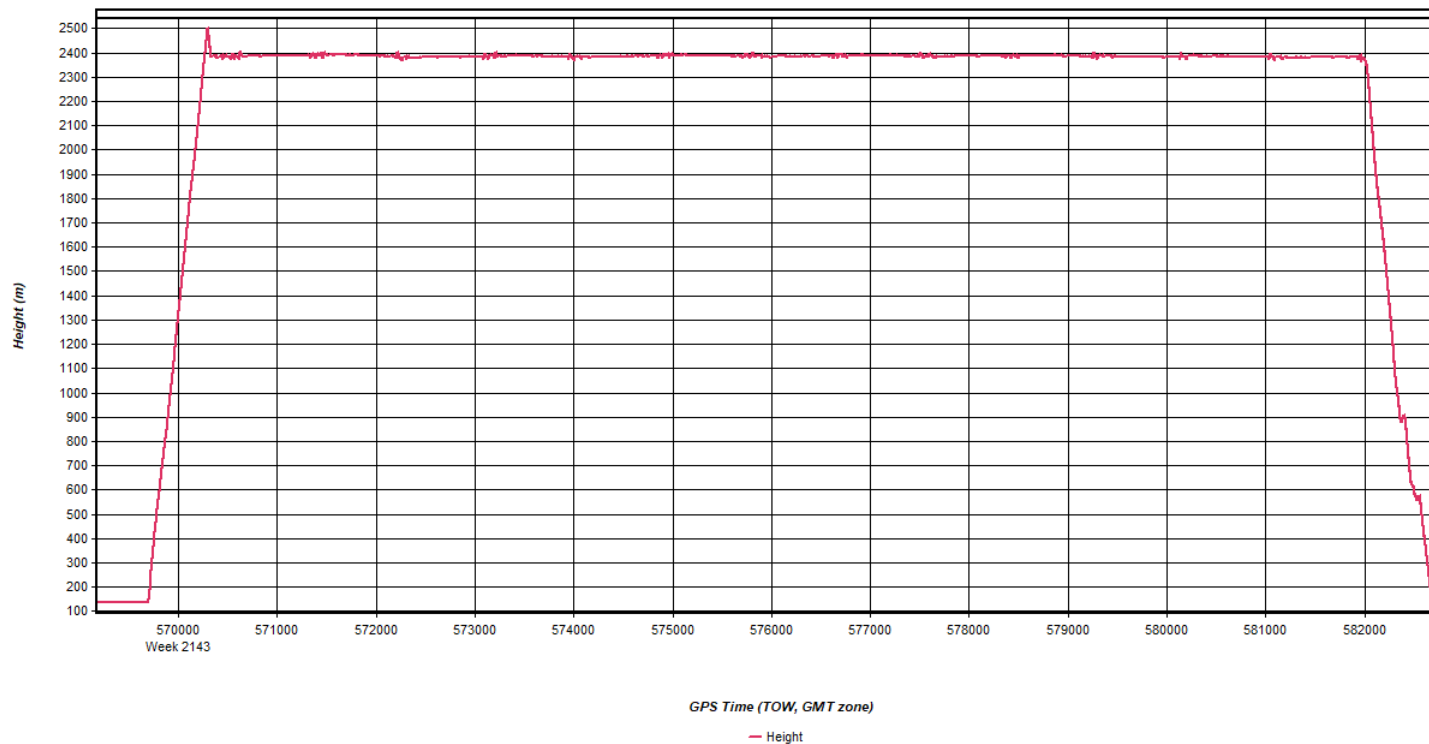
Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 14: 20210206140505_24 [Smoothed TC Combined] - Body Frame Velocity Plot



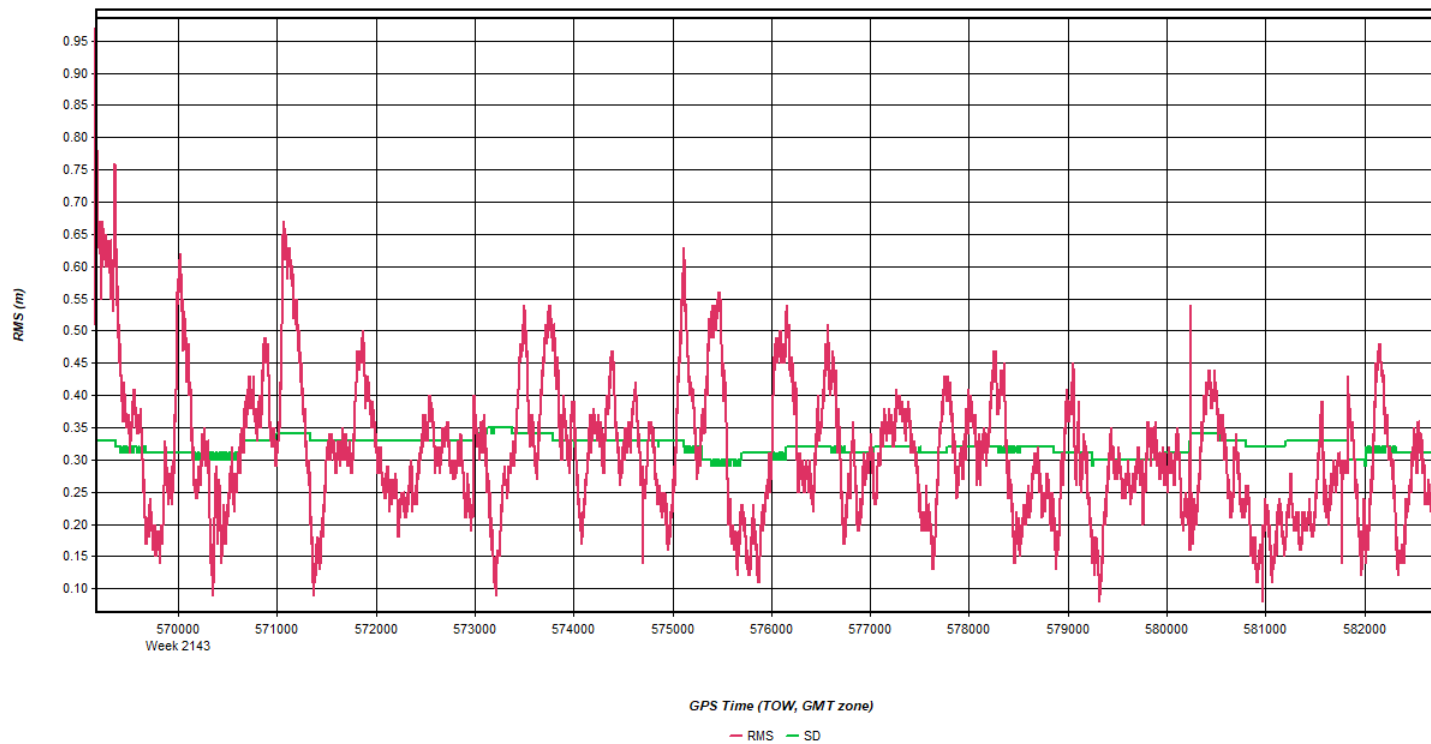
Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 15: 20210206140505_24 [Smoothed TC Combined] - Height Profile Plot



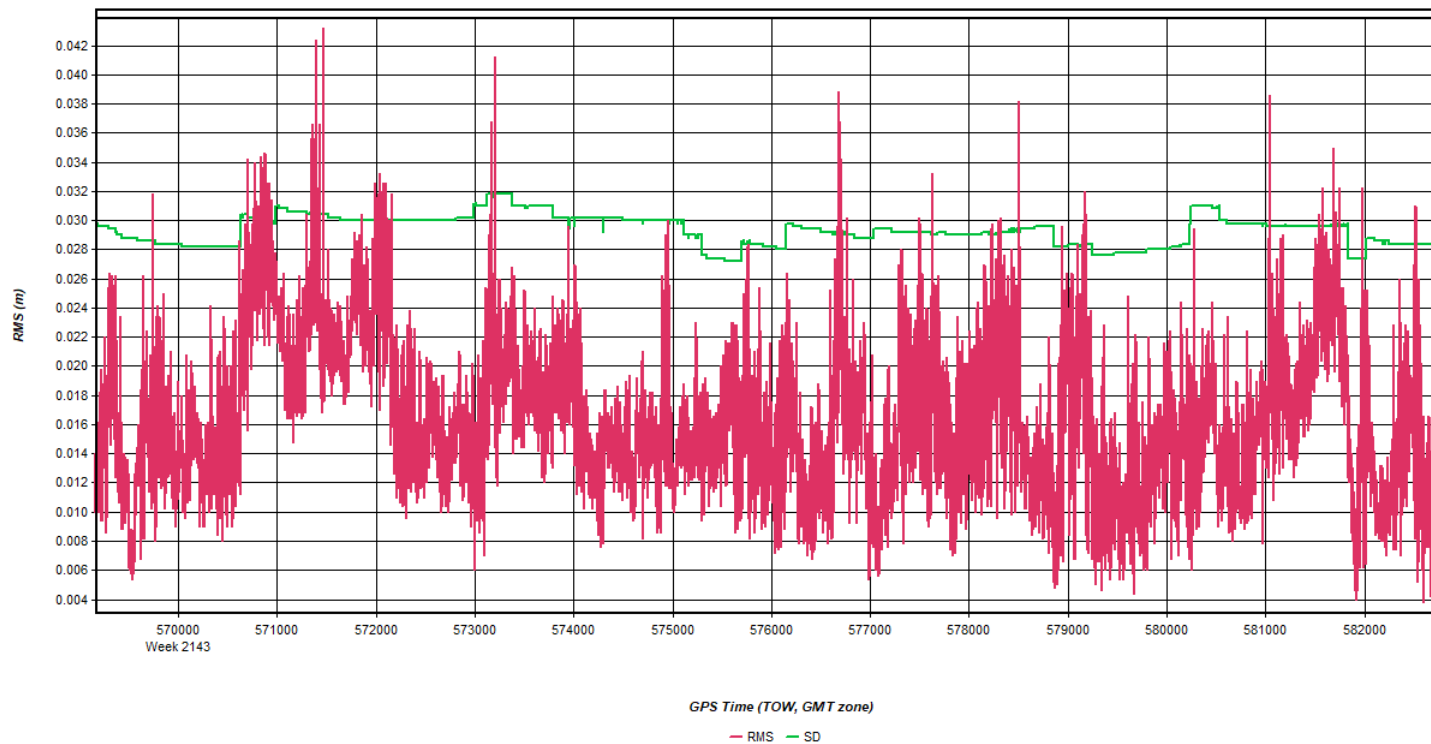
Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 16: 20210206140505_24 [Smoothed TC Combined] - C/A Code Residual RMS Plot



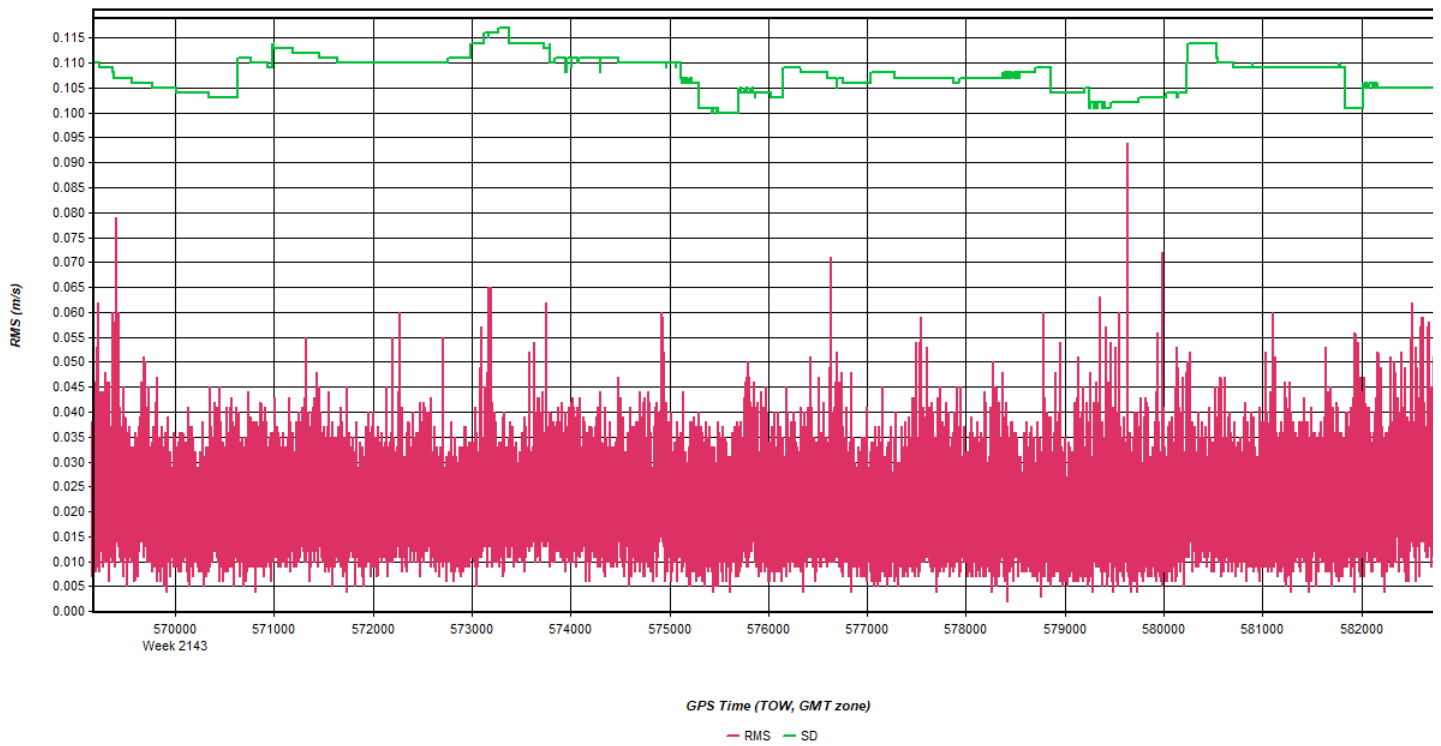
Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 17: 20210206140505_24 [Smoothed TC Combined] - Carrier Residual RMS Plot



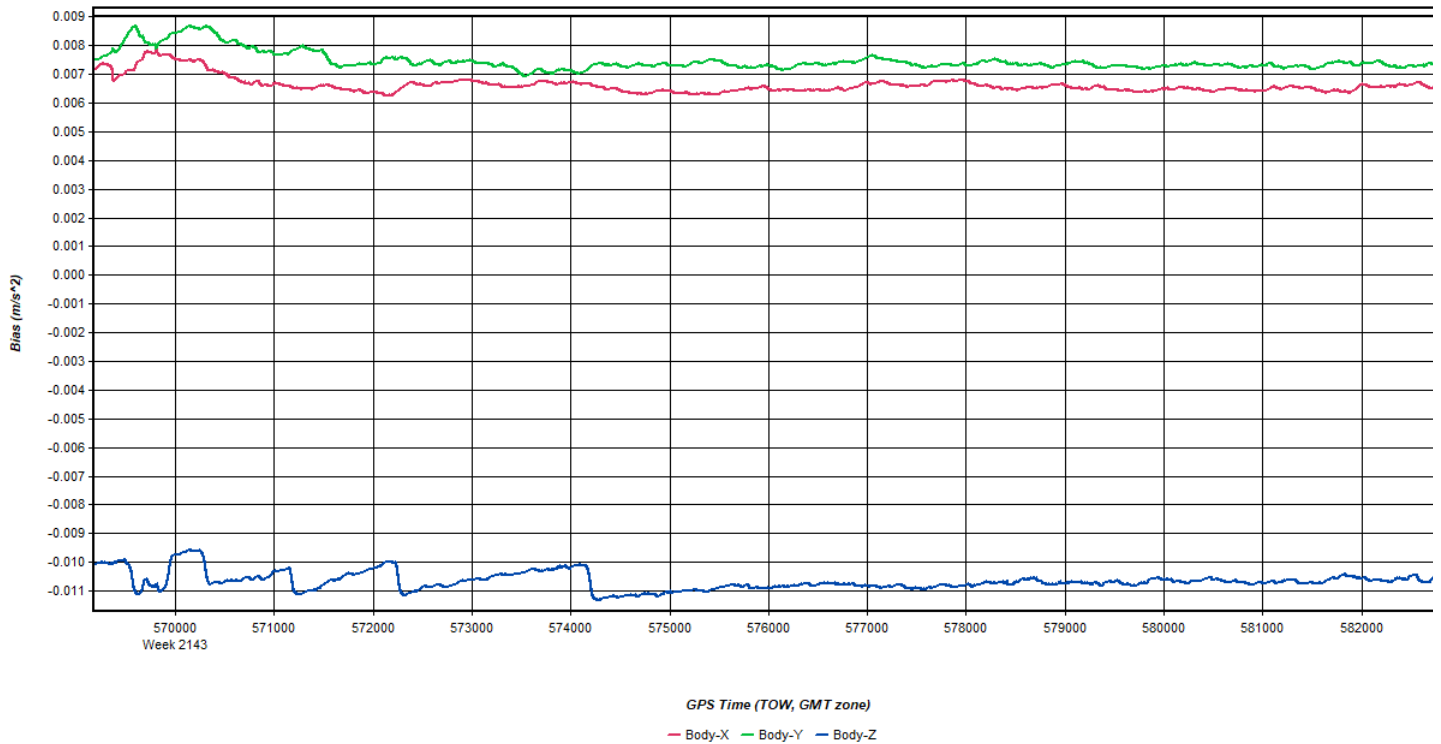
Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 18: 20210206140505_24 [Smoothed TC Combined] - Doppler Residual RMS Plot



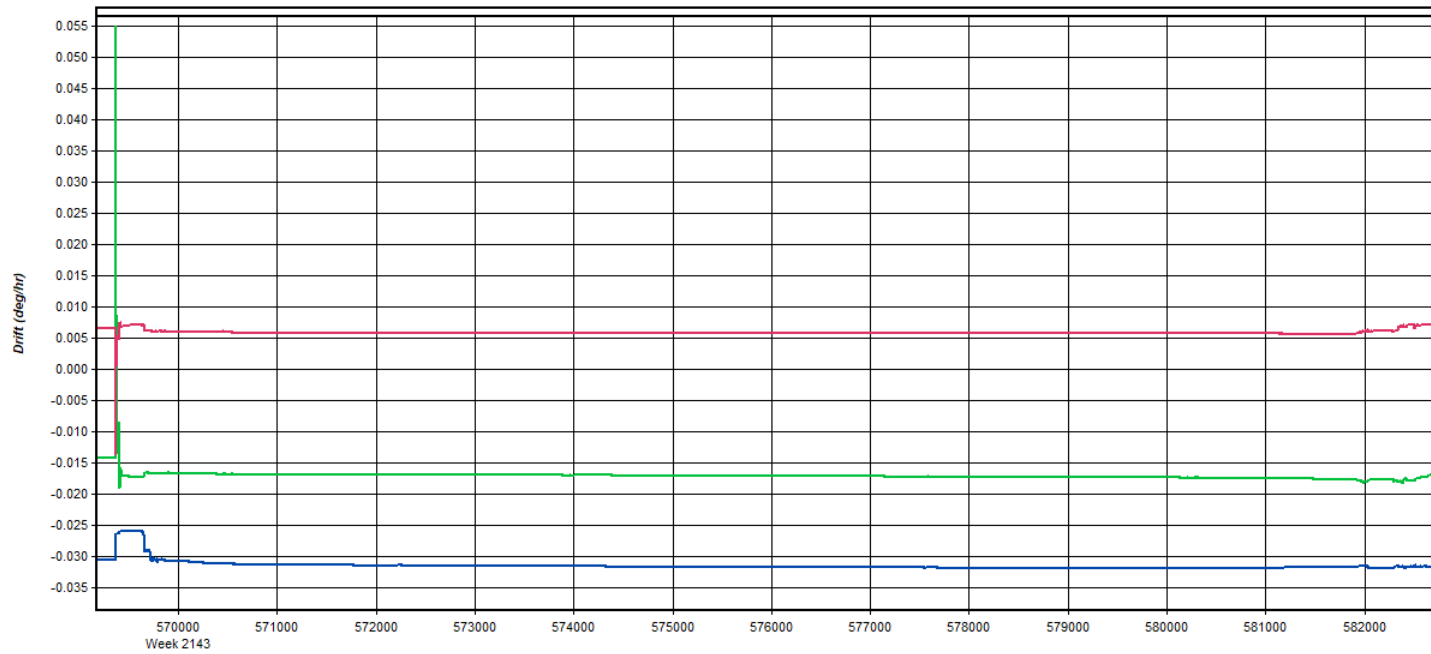
Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 19: 20210206140505_24 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Figure 20: 20210206140505_24 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

— Body-X — Body-Y — Body-Z

Process	20210206140505_24	by Unknown	on 2/11/2021	at 19:58:38
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Output Results for 20210206190229_25

Inertial Explorer Version 8.90.2124
02/11/2021

Figure 1: Smoothed TC Combined - Map



Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Figure 2: 20210206190229_25 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot

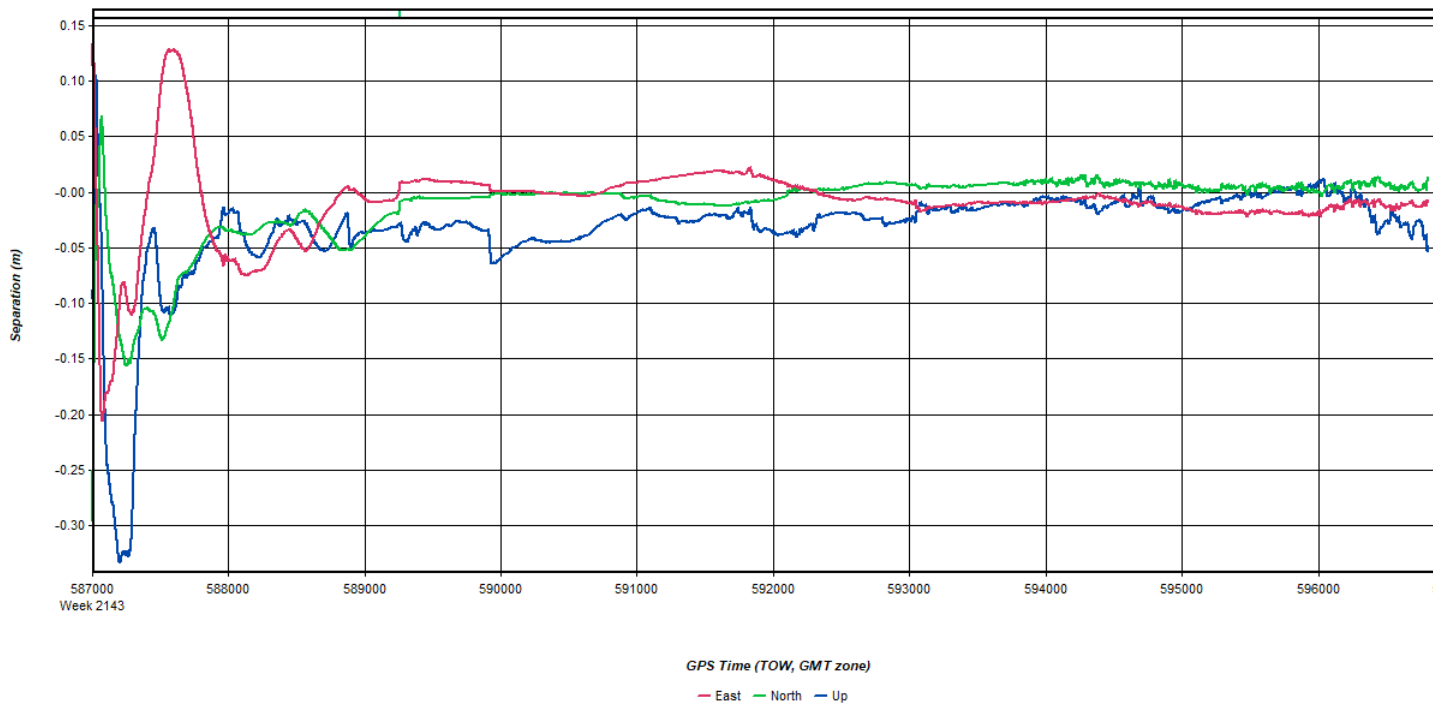


Figure 3: 20210206190229_25 [Smoothed TC Combined] - Float or Fixed Ambiguity

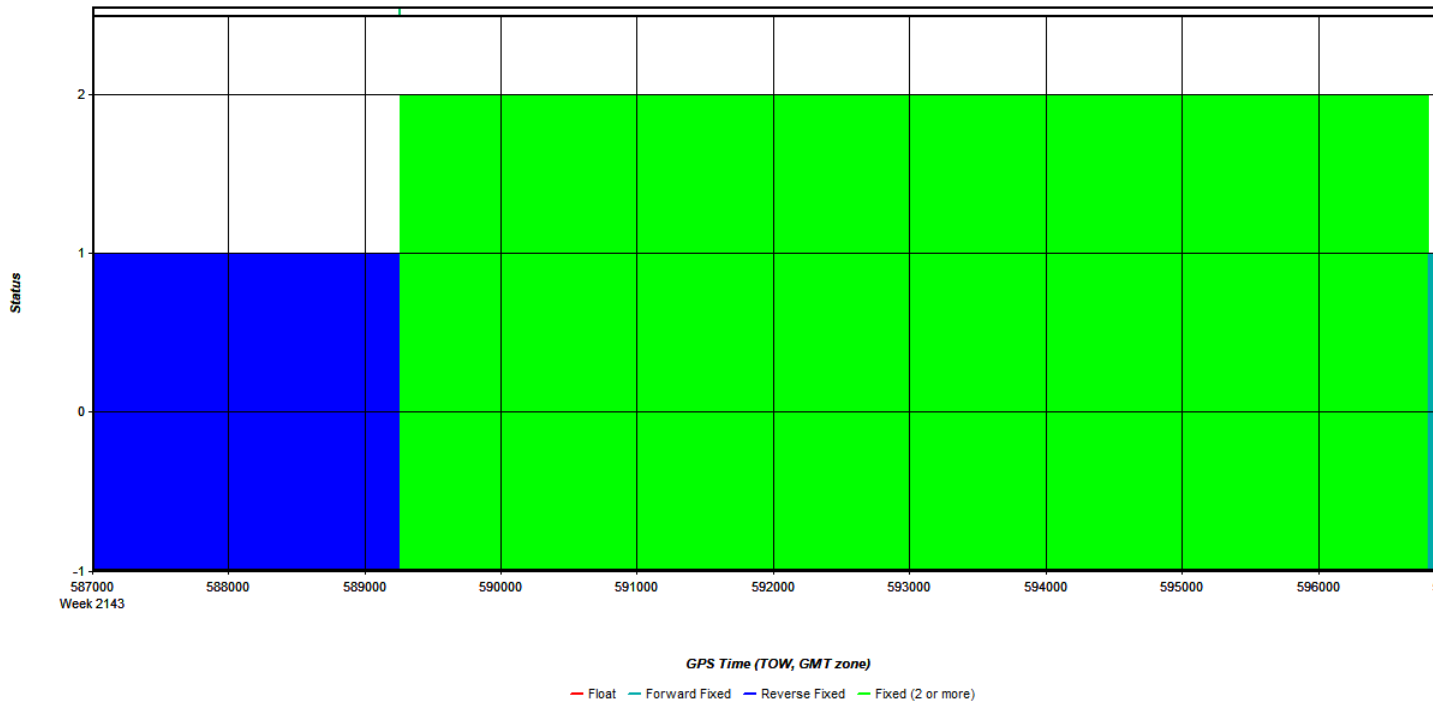


Figure 4: 20210206190229_25 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

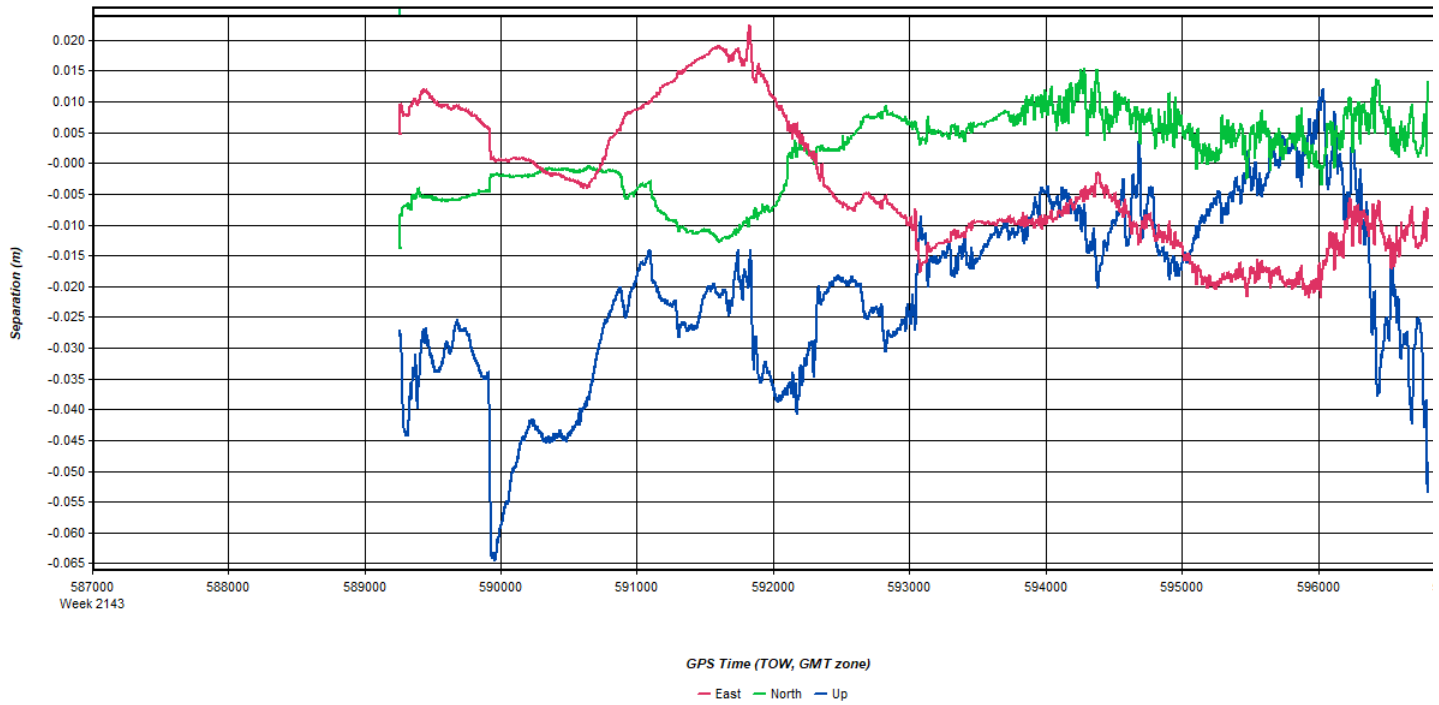
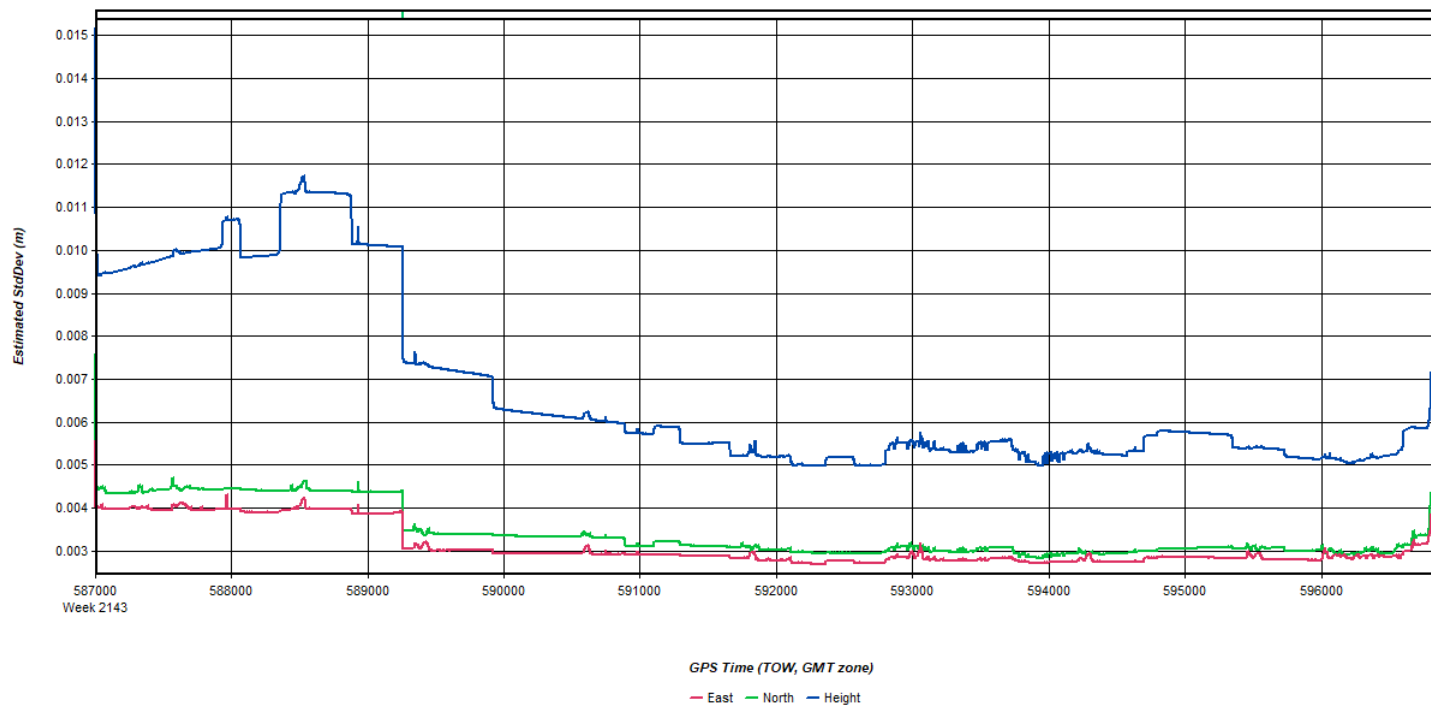
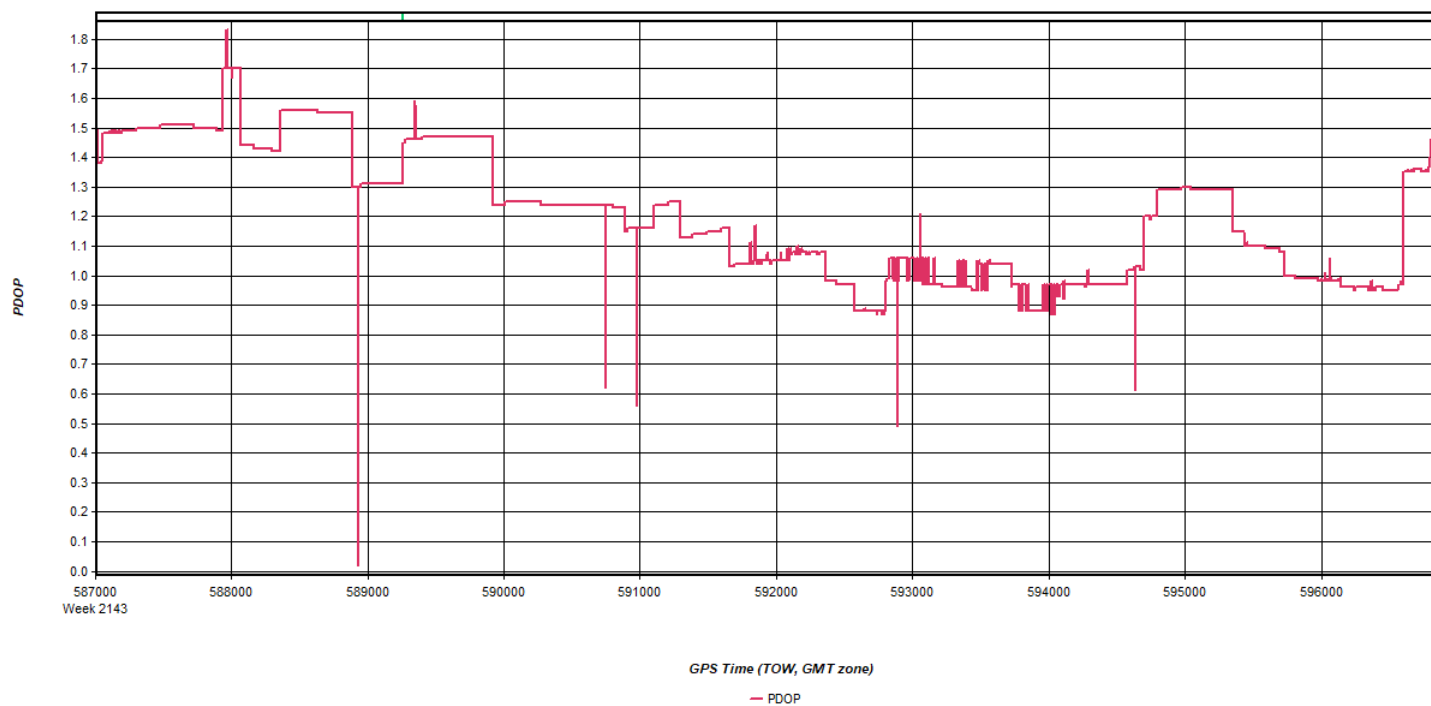


Figure 5: 20210206190229_25 [Smoothed TC Combined] - Estimated Position Accuracy Plot



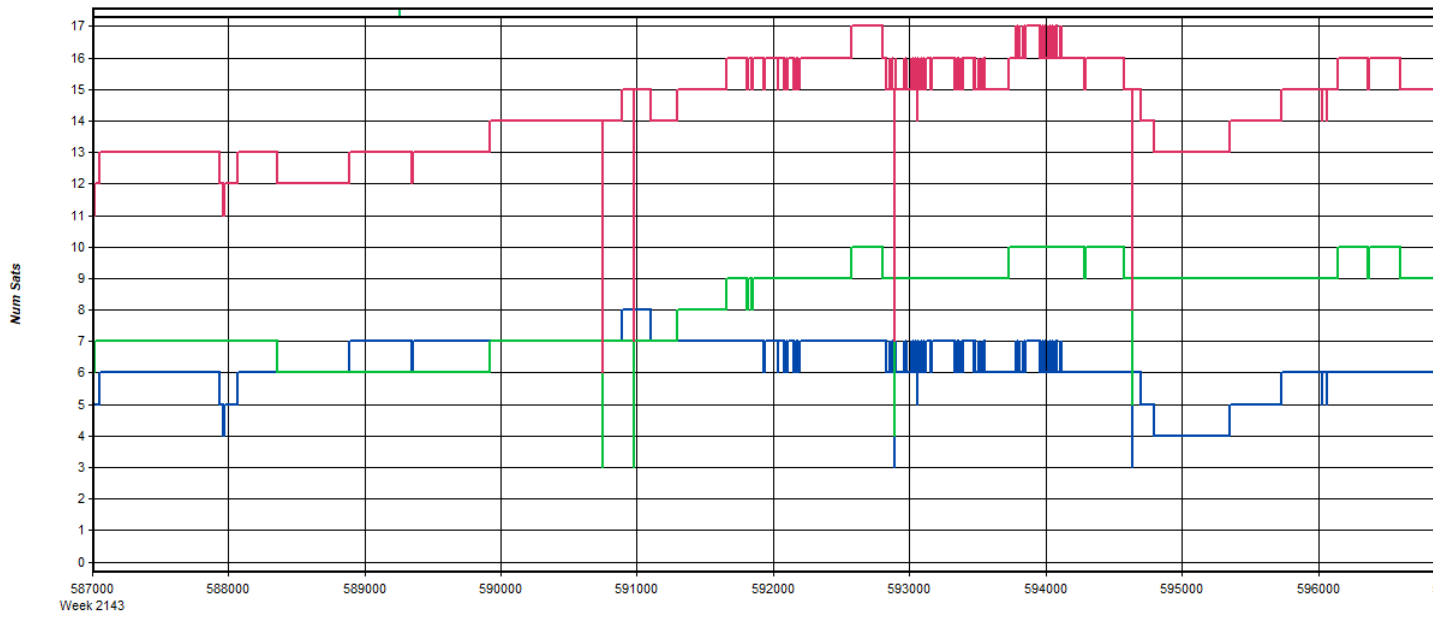
Process 20210206190229_25 by Unknown on 2/11/2021 at 20:59:19

Figure 6: 20210206190229_25 [Smoothed TC Combined] - PDOP Plot



Process 20210206190229_25 by Unknown on 2/11/2021 at 20:59:19

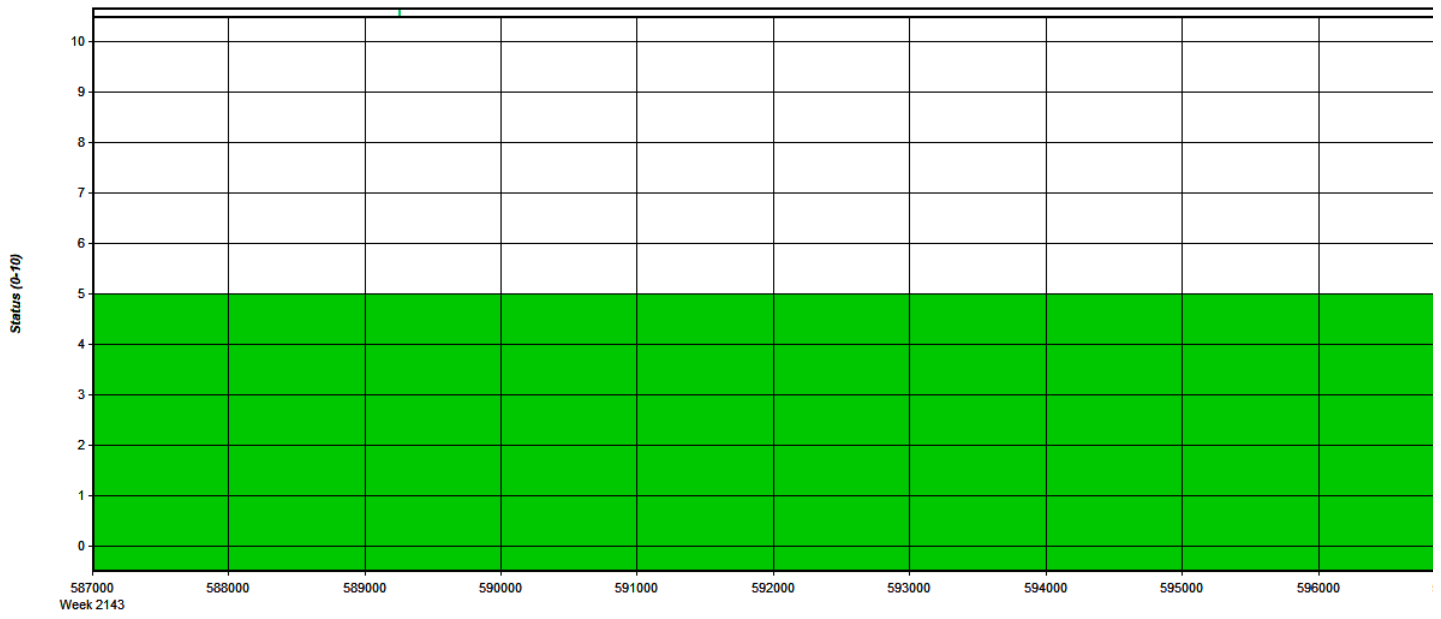
Figure 7: 20210206190229_25 [Smoothed TC Combined] - Number of Satellites Line Plot



GPS Time (TOW, GMT zone)
 - Num Sats - GPS - GLONASS - BeiDou - Galileo - QZSS

Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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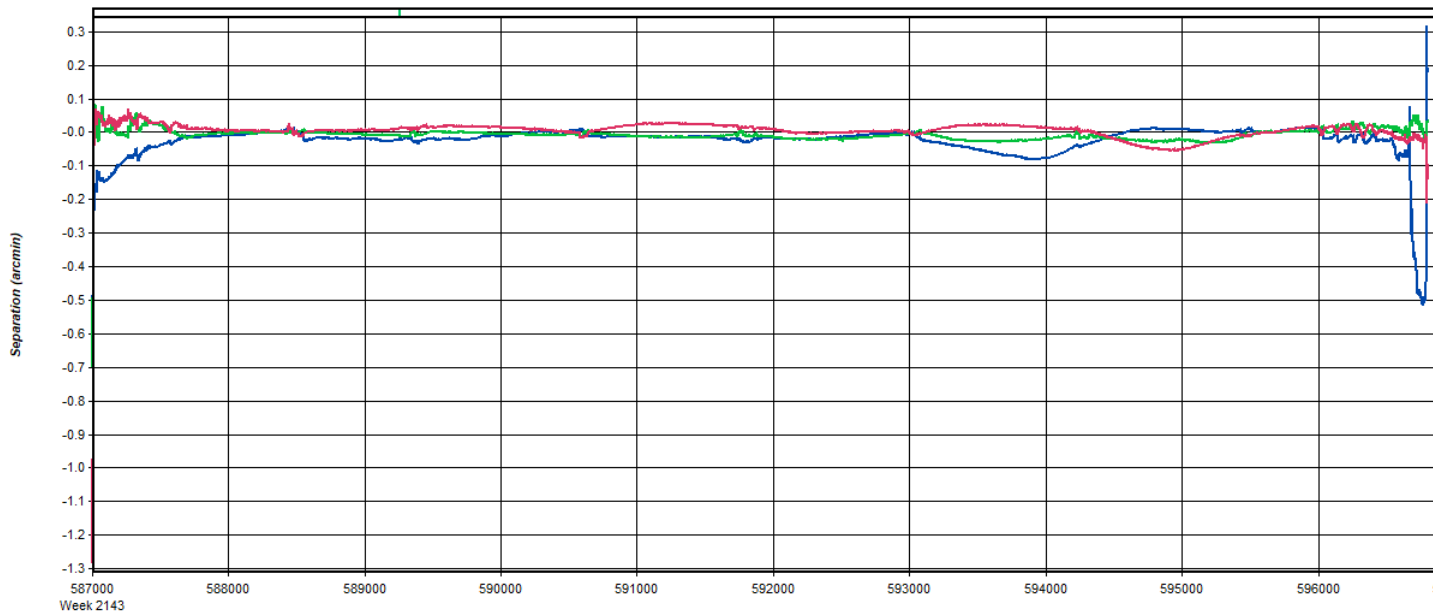
Figure 8: 20210206190229_25 [Smoothed TC Combined] - Status flag for IMU processing



GPS Time (TOW, GMT zone)
 - None - Align - Free - DMUIPT - PHSUPT - GPSUPT - ZUPT - CUPT - GVUPT - PSR - CONSTRAINT

Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Figure 9: 20210206190229_25 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

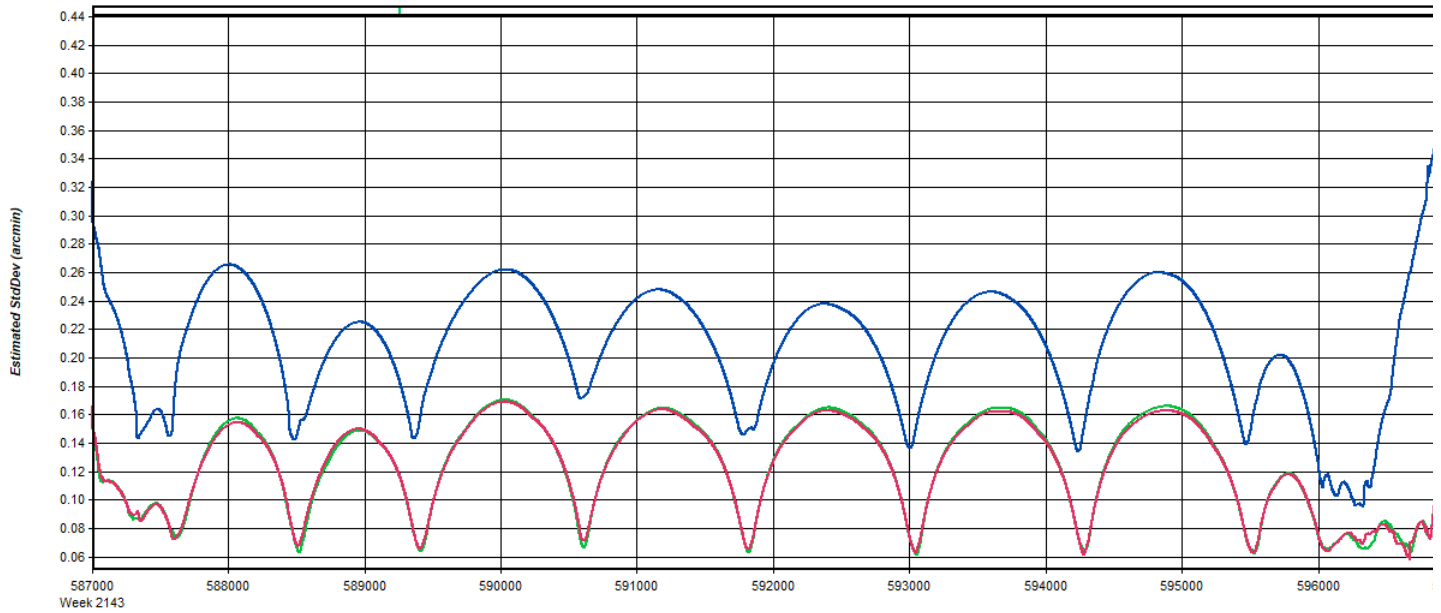


GPS Time (TOW, GMT zone)

Roll Pitch Heading/Az

Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Figure 10: 20210206190229_25 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

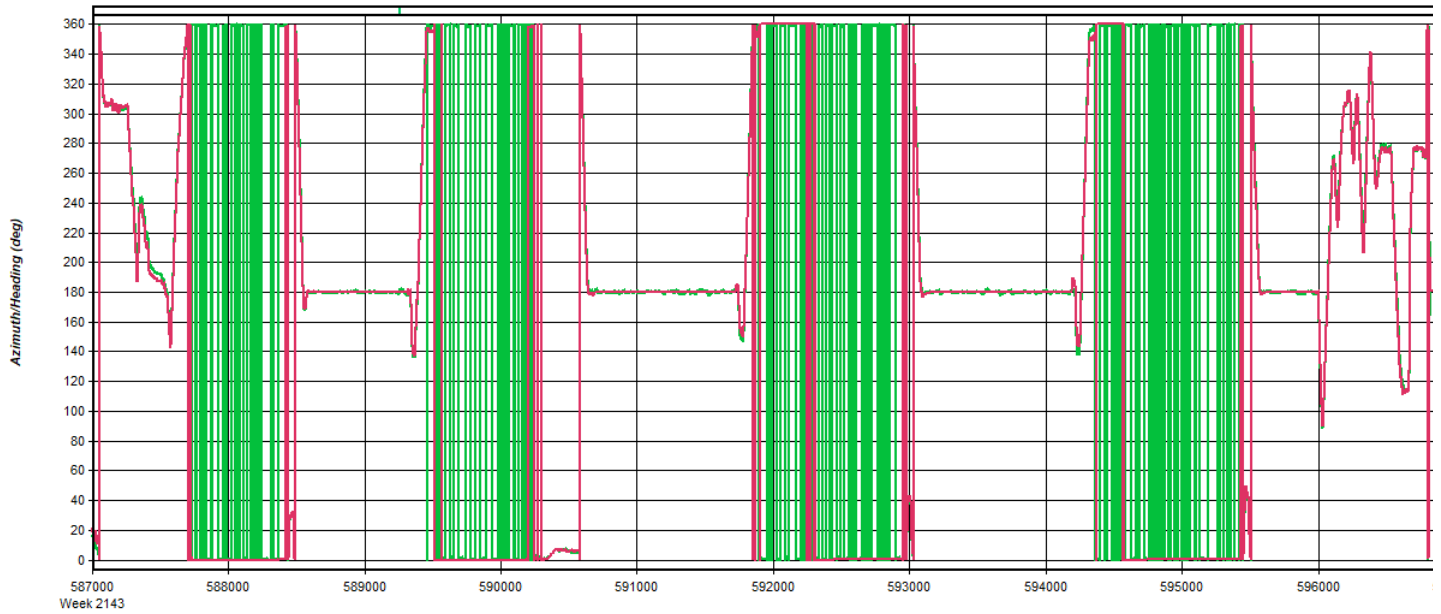


GPS Time (TOW, GMT zone)

Roll Pitch Heading/Az

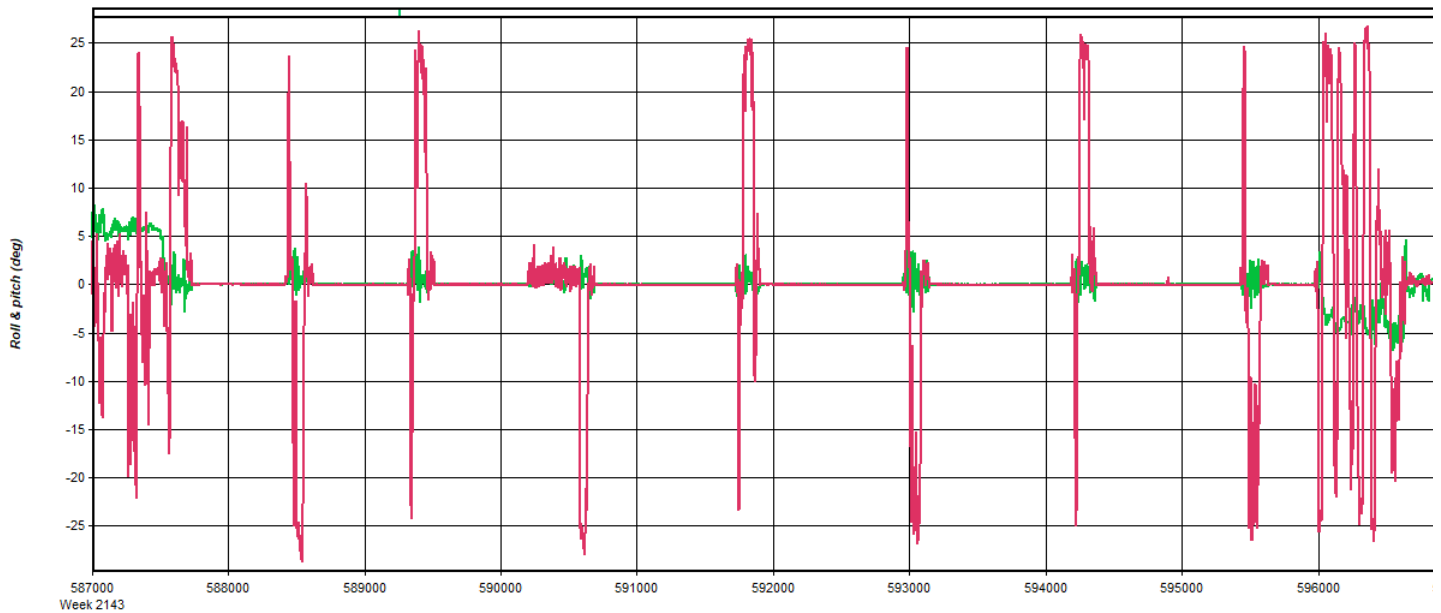
Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Figure 11: 20210206190229_25 [Smoothed TC Combined] - Azimuth Plot



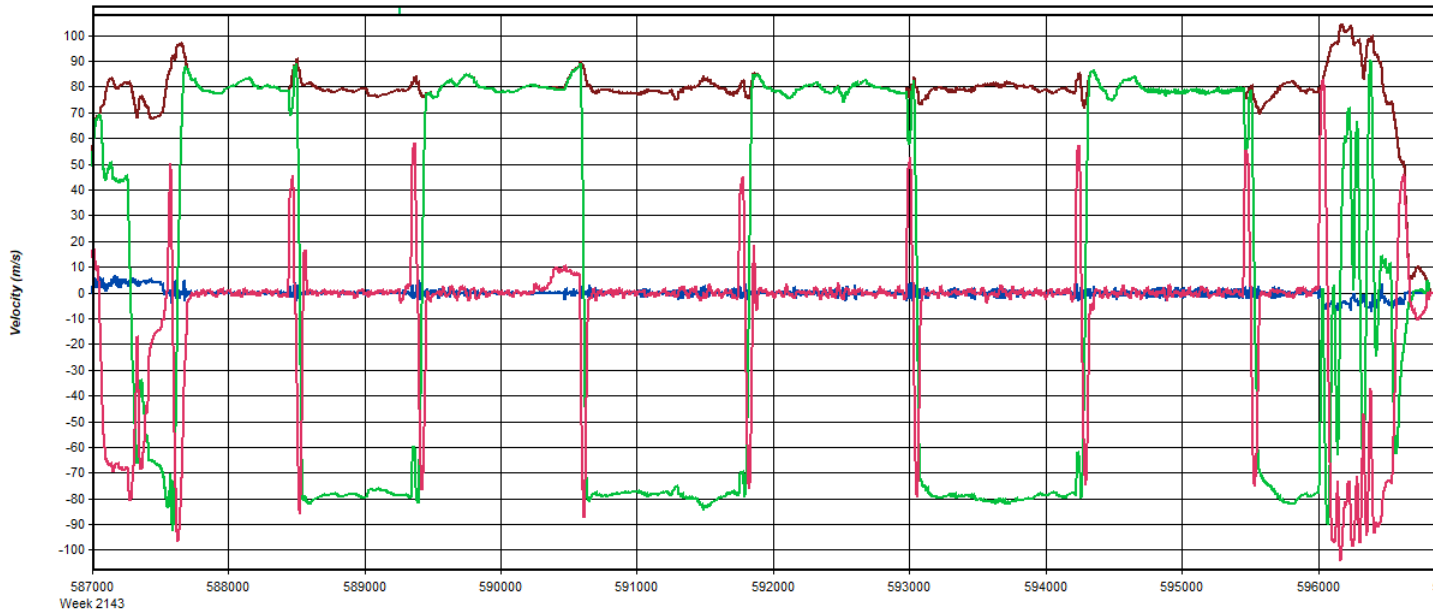
Process 20210206190229_25 by Unknown on 2/11/2021 at 20:59:19

Figure 12: 20210206190229_25 [Smoothed TC Combined] - Roll & Pitch Plot



Process 20210206190229_25 by Unknown on 2/11/2021 at 20:59:19

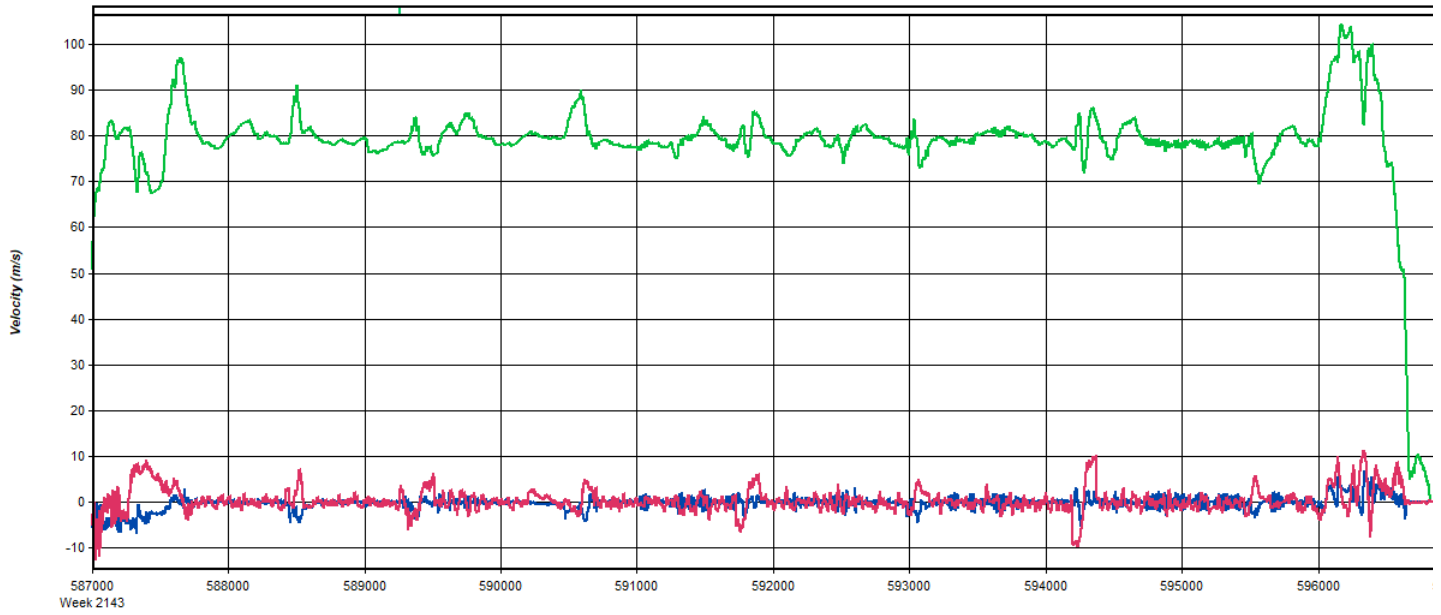
Figure 13: 20210206190229_25 [Smoothed TC Combined] - Velocity Profile Plot



GPS Time (TOW, GMT zone)
 - East - North - Up - Hz. Speed

Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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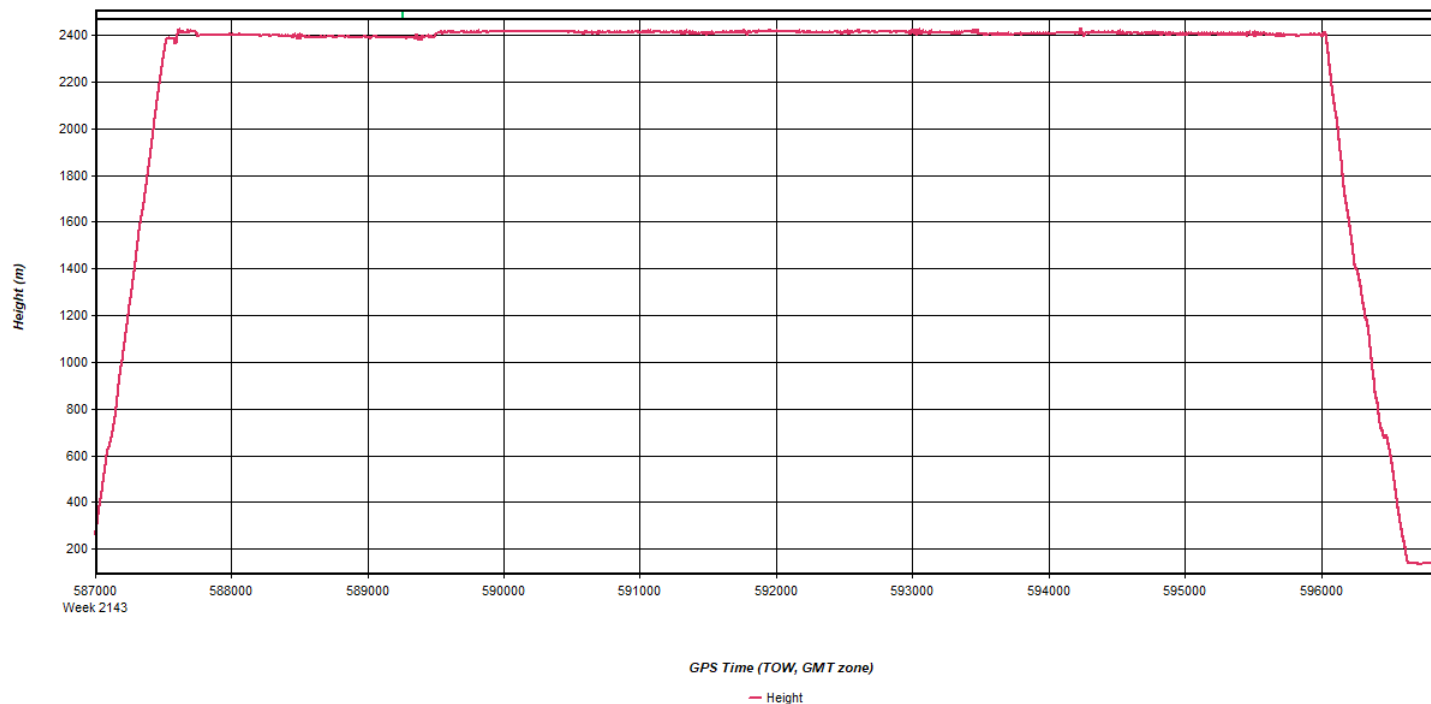
Figure 14: 20210206190229_25 [Smoothed TC Combined] - Body Frame Velocity Plot



GPS Time (TOW, GMT zone)
 - X - Y - Z

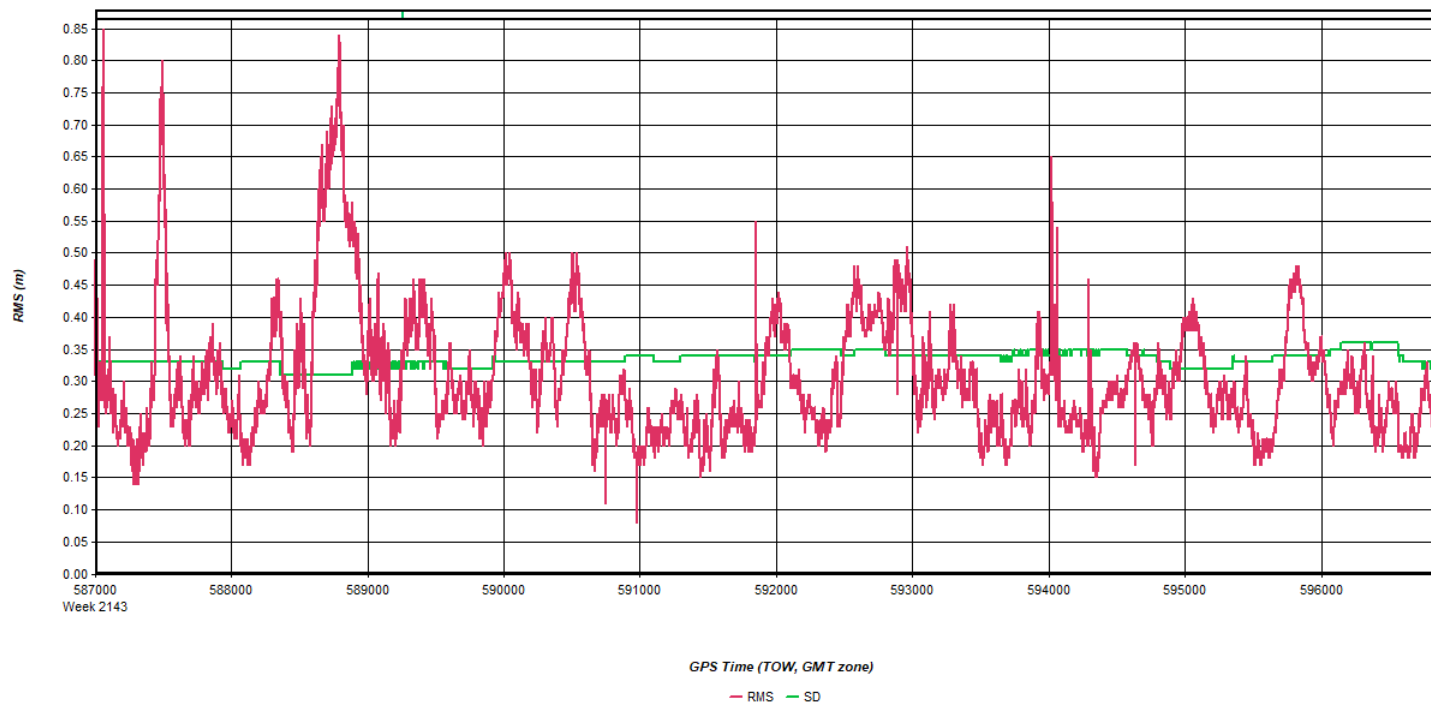
Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Figure 15: 20210206190229_25 [Smoothed TC Combined] - Height Profile Plot



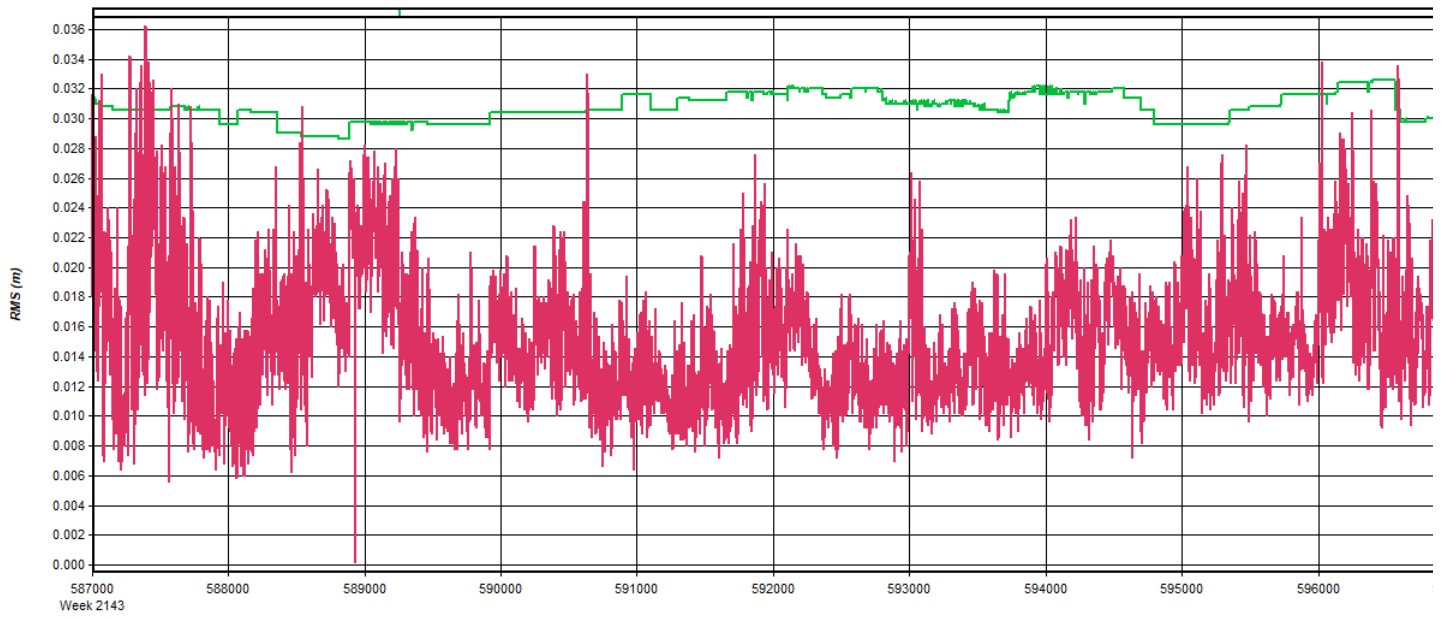
Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Figure 16: 20210206190229_25 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Figure 17: 20210206190229_25 [Smoothed TC Combined] - Carrier Residual RMS Plot

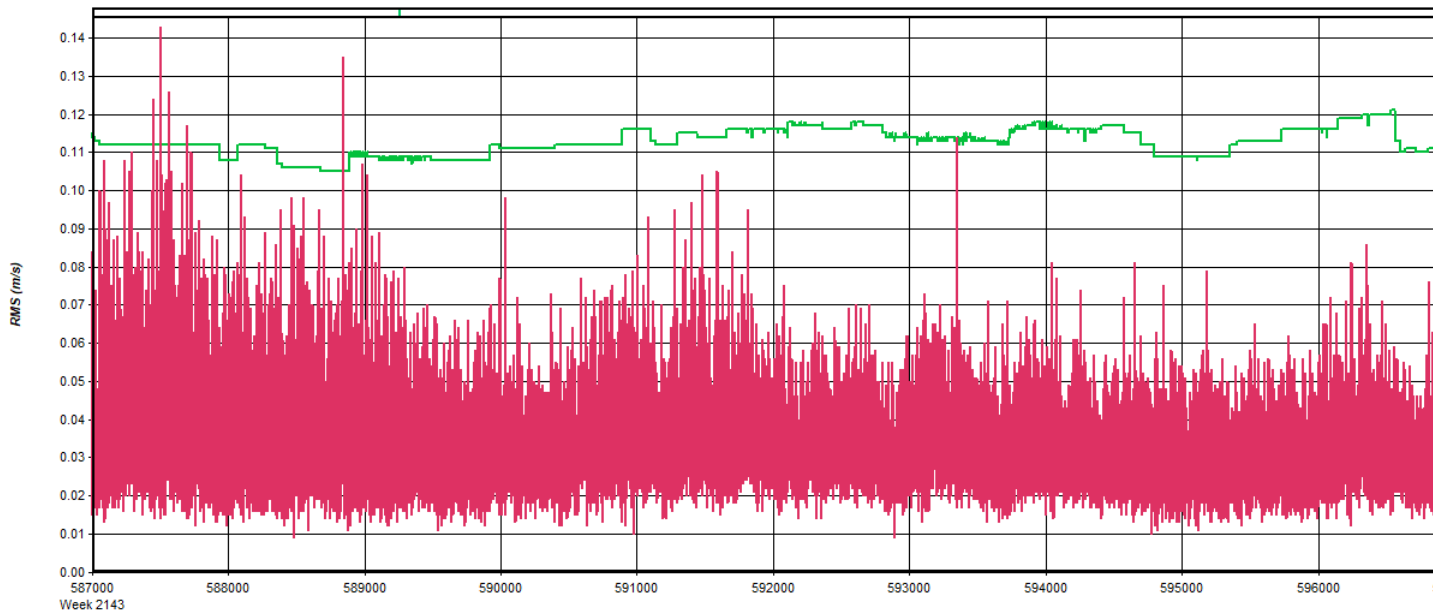


GPS Time (TOW, GMT zone)

— RMS — SD

Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Figure 18: 20210206190229_25 [Smoothed TC Combined] - Doppler Residual RMS Plot

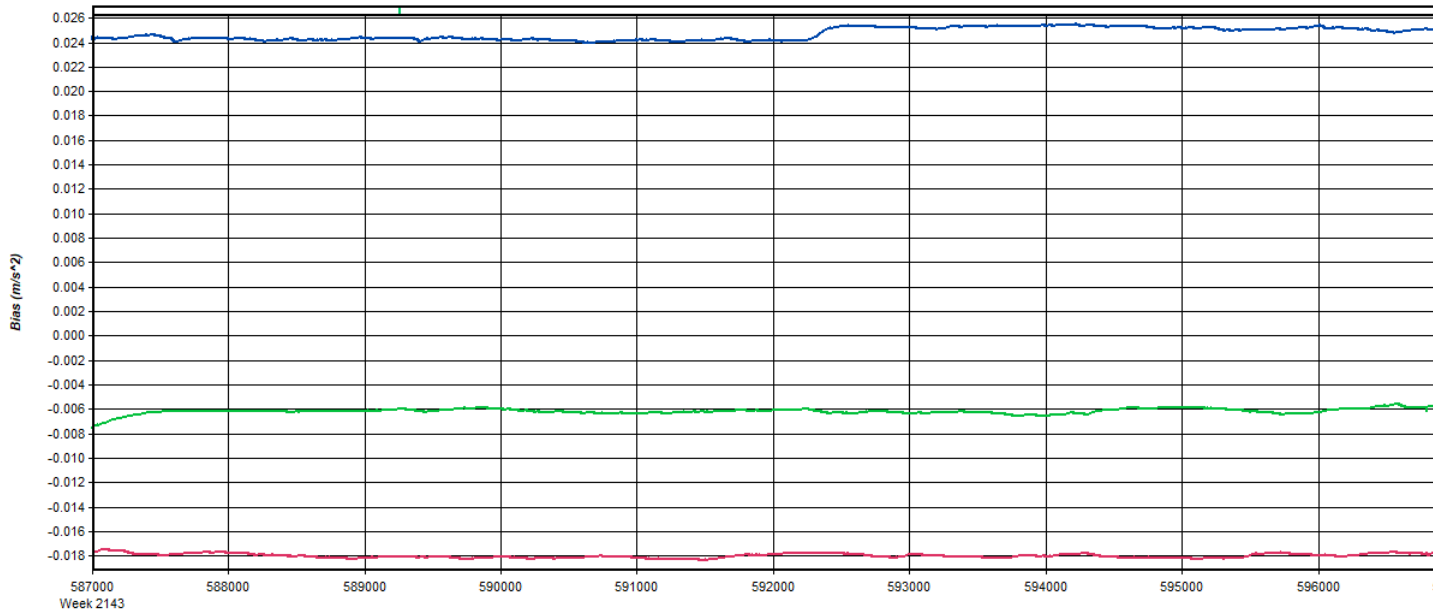


GPS Time (TOW, GMT zone)

— RMS — SD

Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Figure 19: 20210206190229_25 [Smoothed TC Combined] - Accelerometer Bias Plot

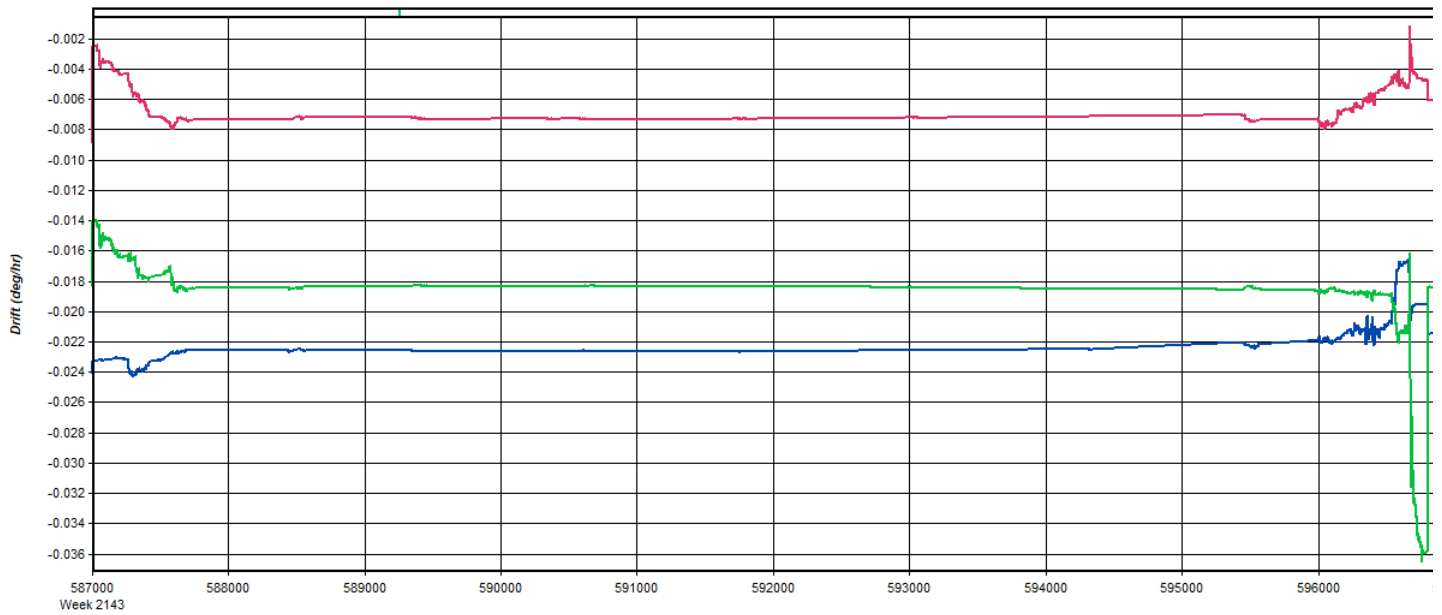


GPS Time (TOW, GMT zone)

Body-X Body-Y Body-Z

Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Figure 20: 20210206190229_25 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)

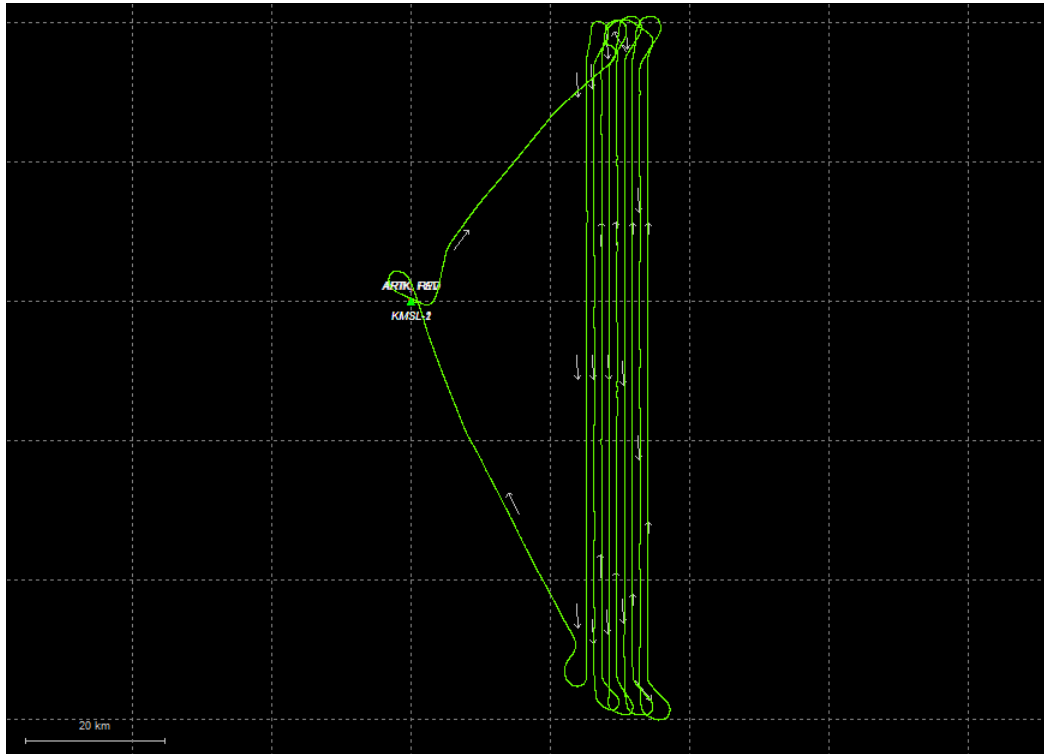
Body-X Body-Y Body-Z

Process	20210206190229_25	by Unknown	on 2/11/2021	at 20:59:19
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Output Results for 20210208194425_26

Inertial Explorer Version 8.90.2124
02/14/2021

Figure 1: Smoothed TC Combined - Map



Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 2: 20210208194425_26 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Figure 3: 20210208194425_26 [Smoothed TC Combined] - Float or Fixed Ambiguity

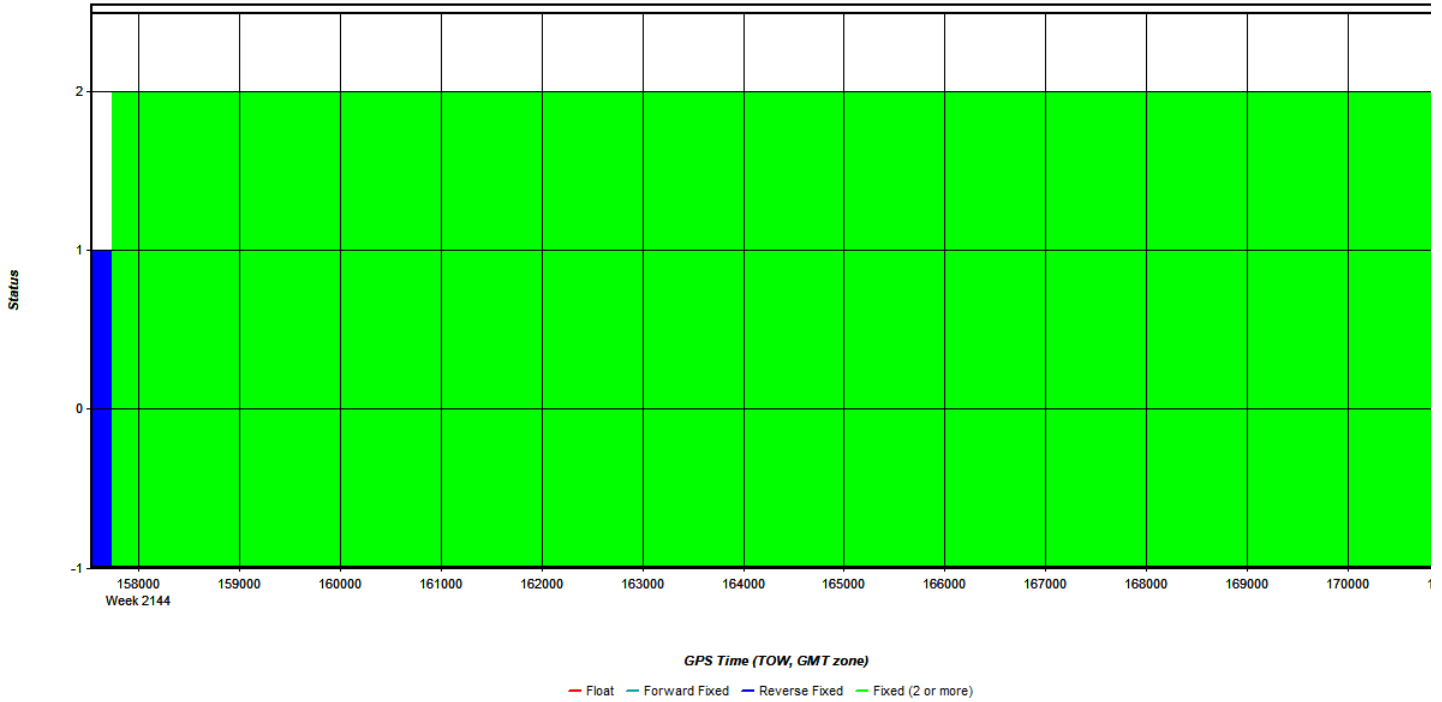


Figure 4: 20210208194425_26 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

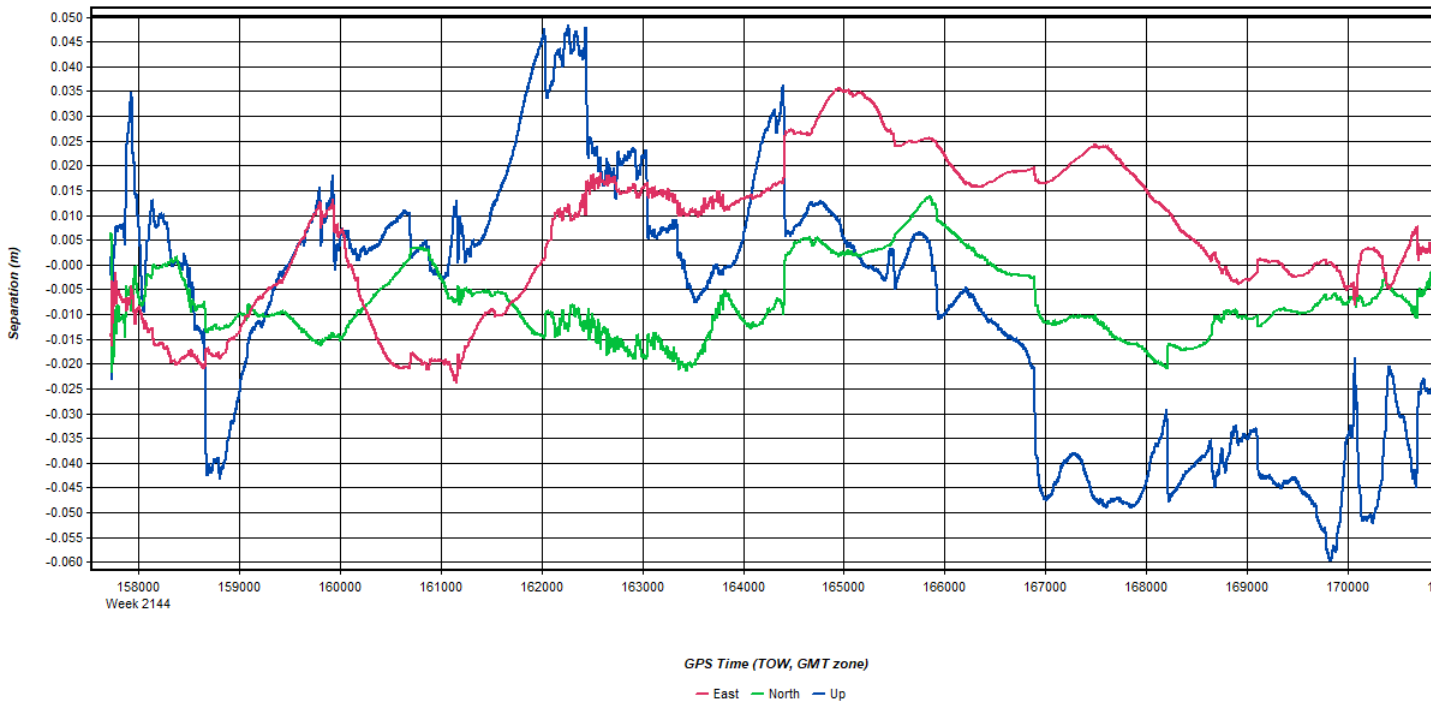
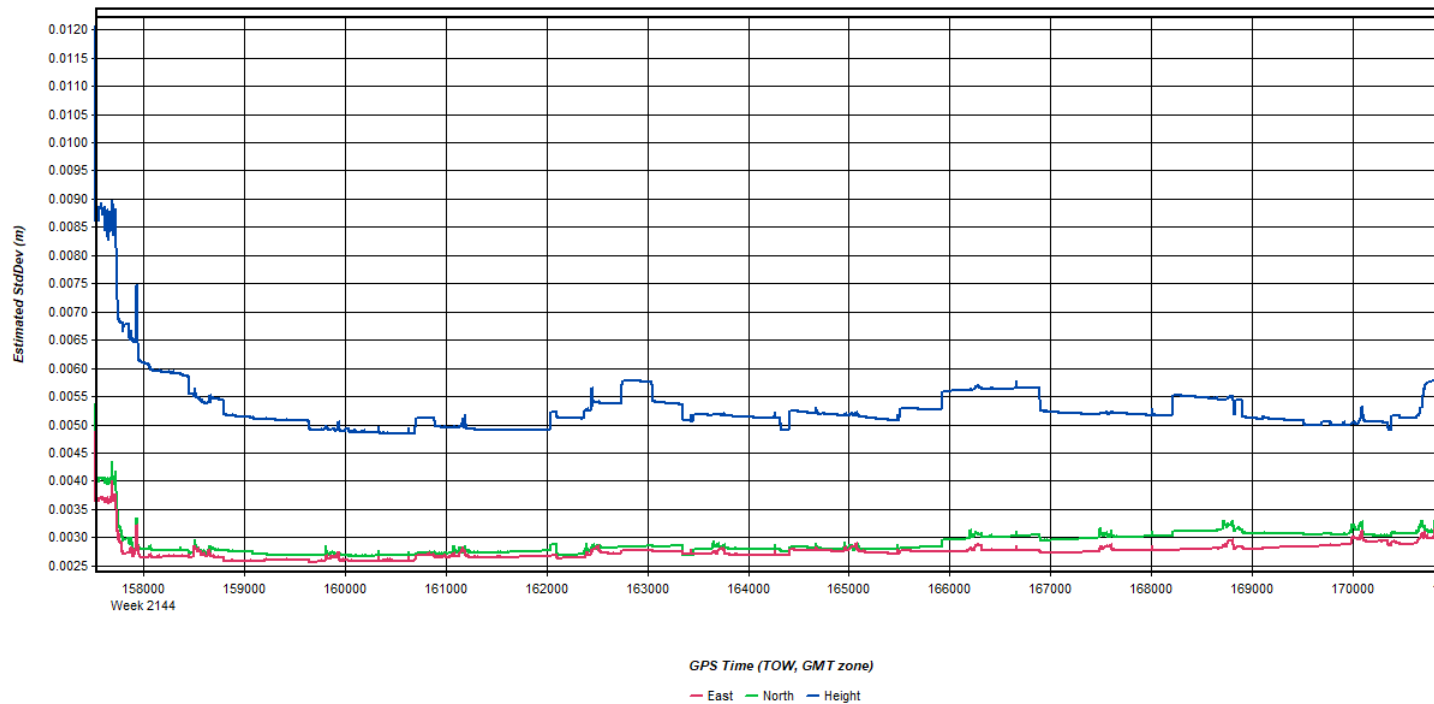
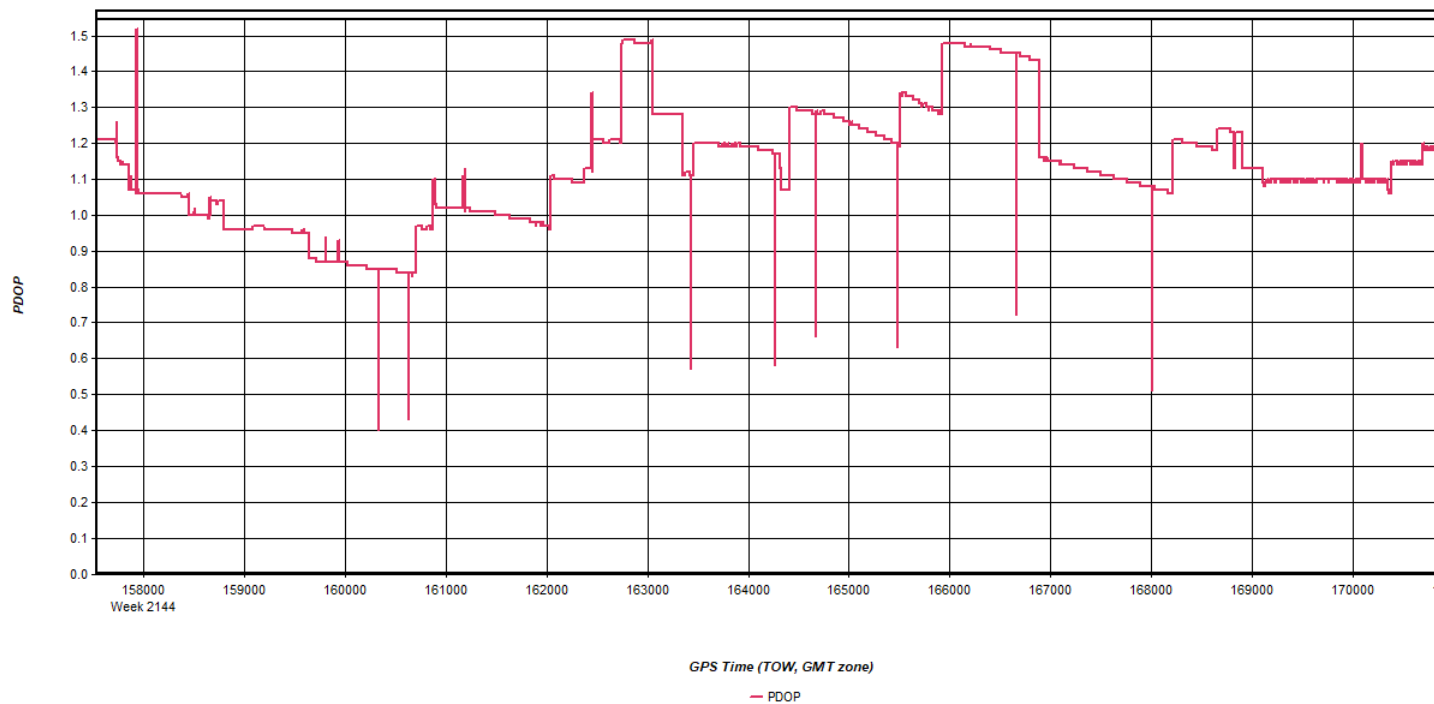


Figure 5: 20210208194425_26 [Smoothed TC Combined] - Estimated Position Accuracy Plot



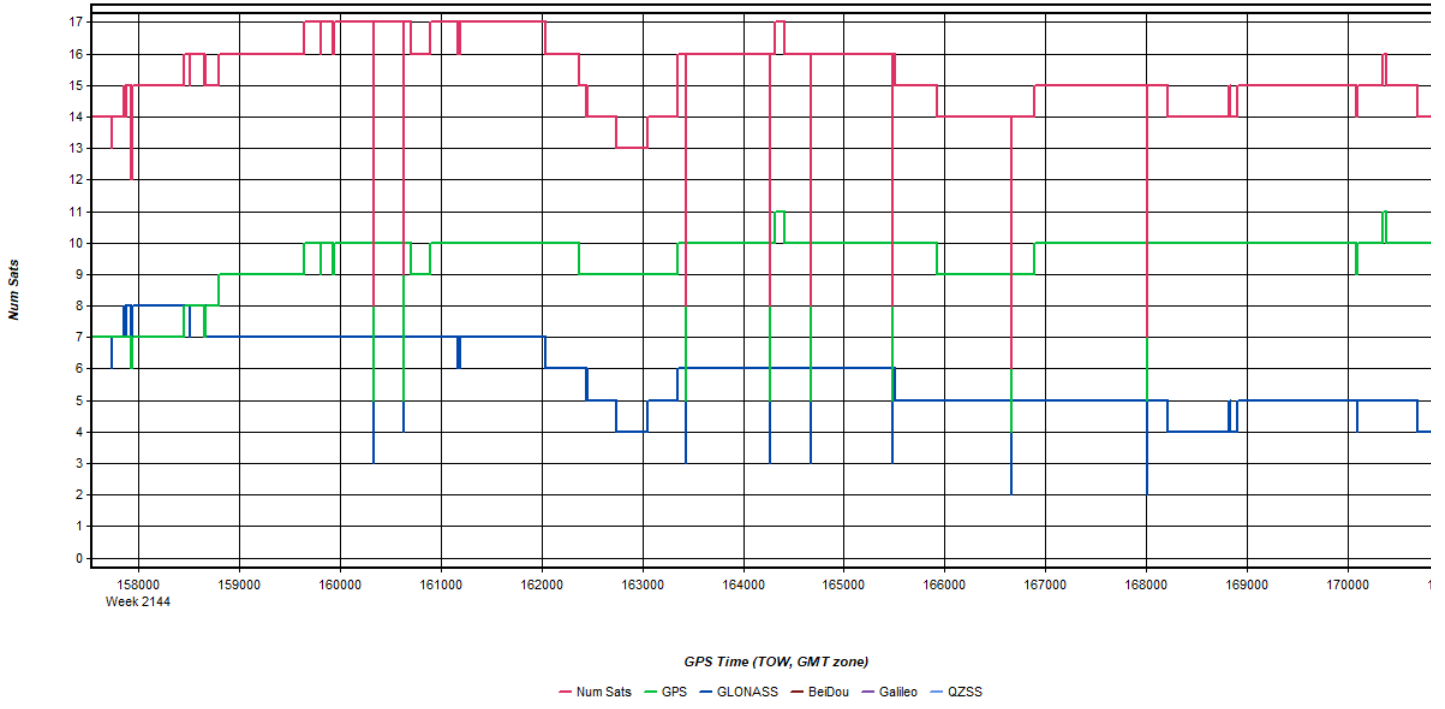
Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 6: 20210208194425_26 [Smoothed TC Combined] - PDOP Plot



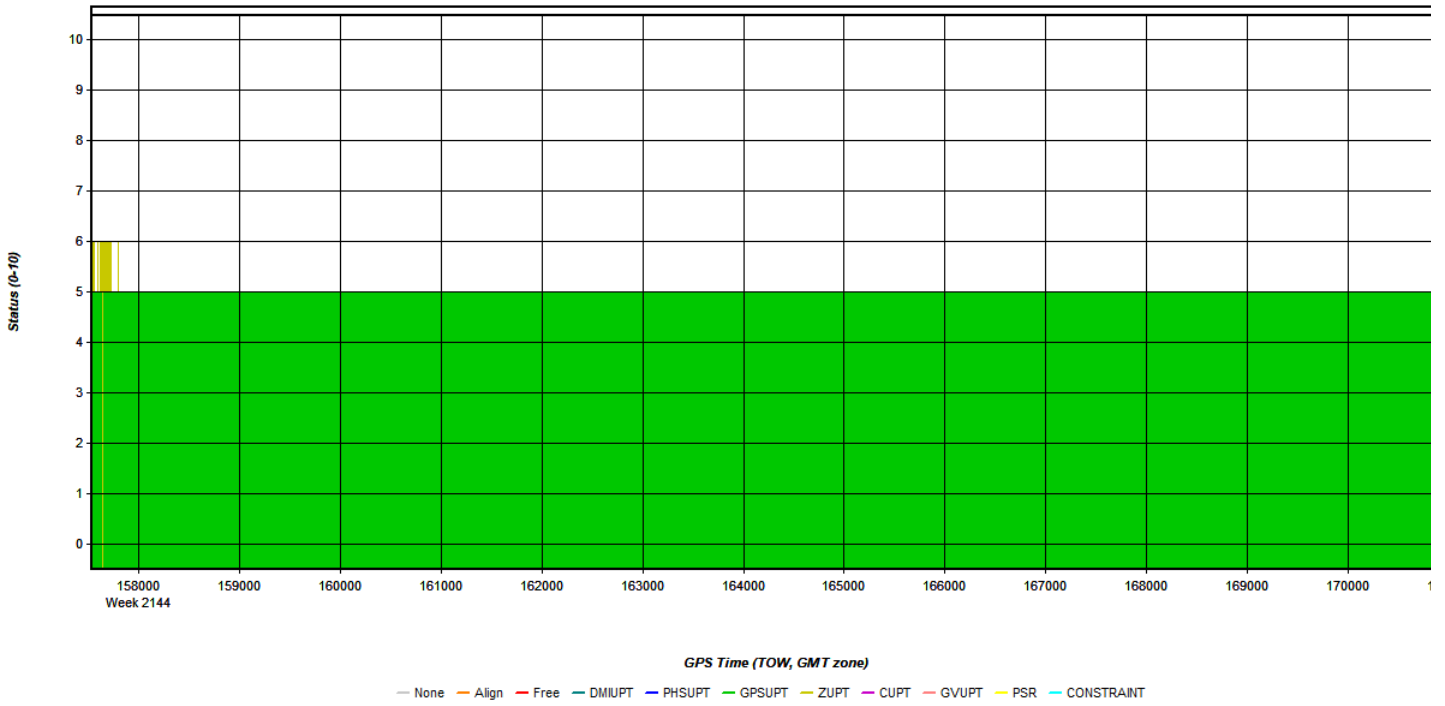
Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 7: 20210208194425_26 [Smoothed TC Combined] - Number of Satellites Line Plot



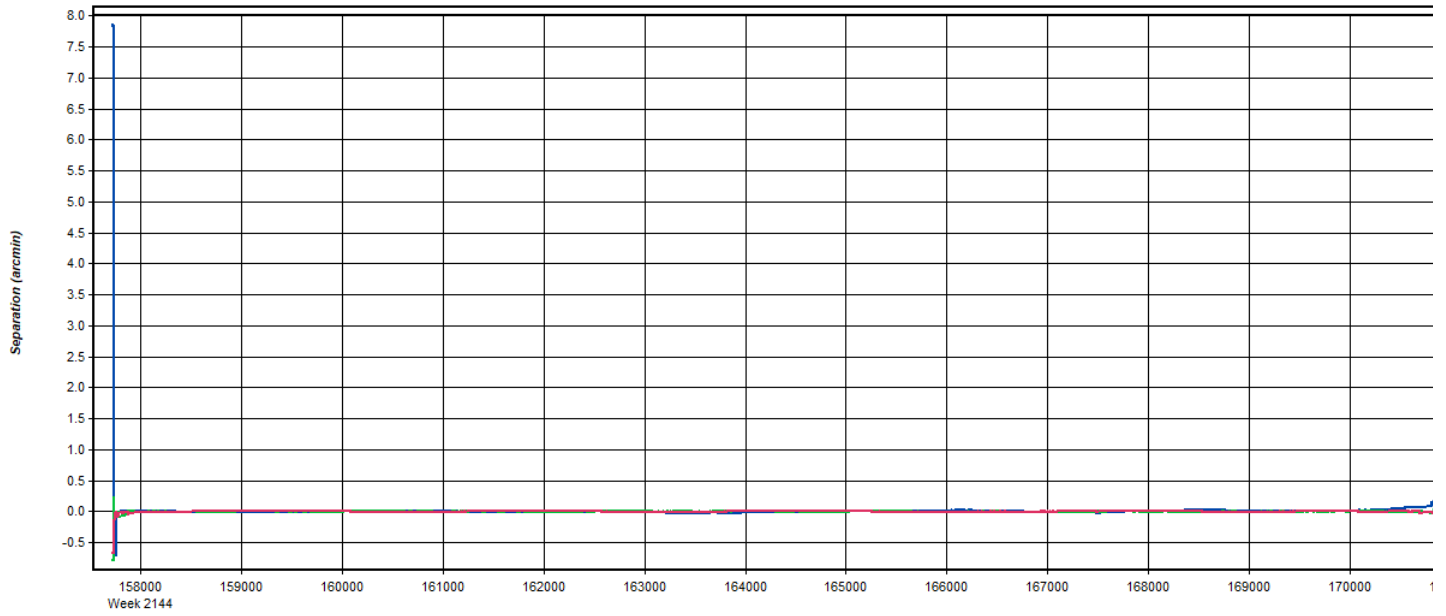
Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 8: 20210208194425_26 [Smoothed TC Combined] - Status flag for IMU processing



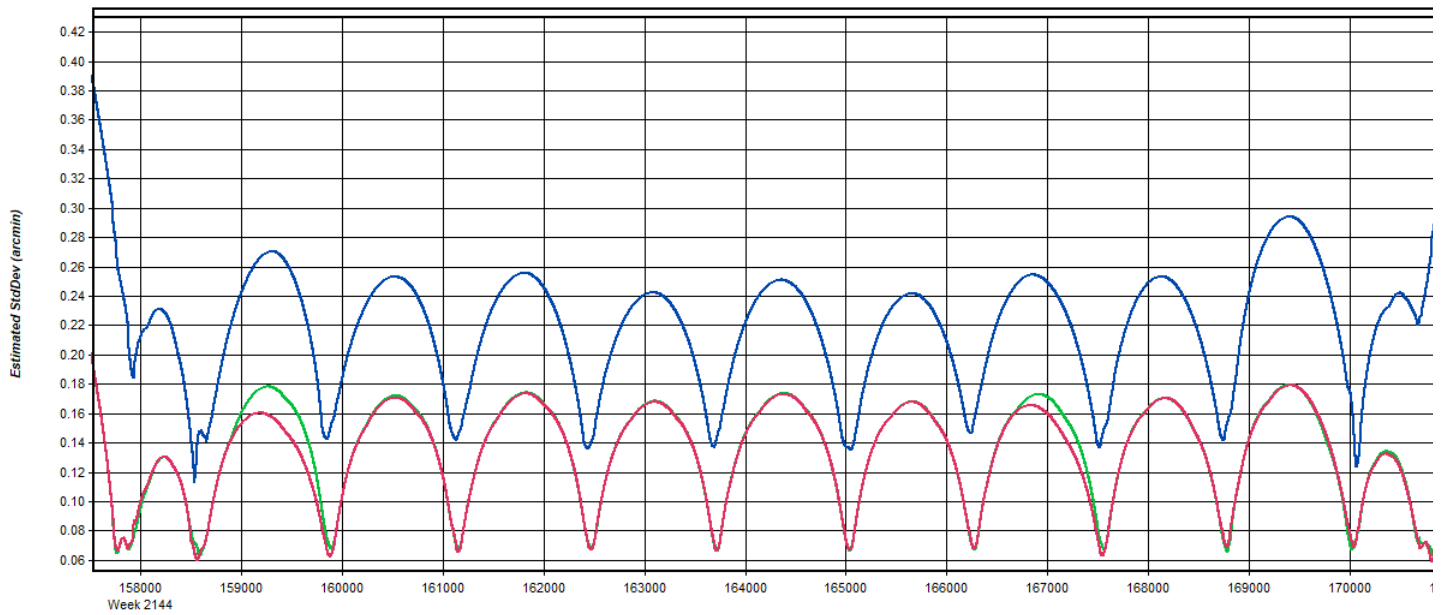
Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 9: 20210208194425_26 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot



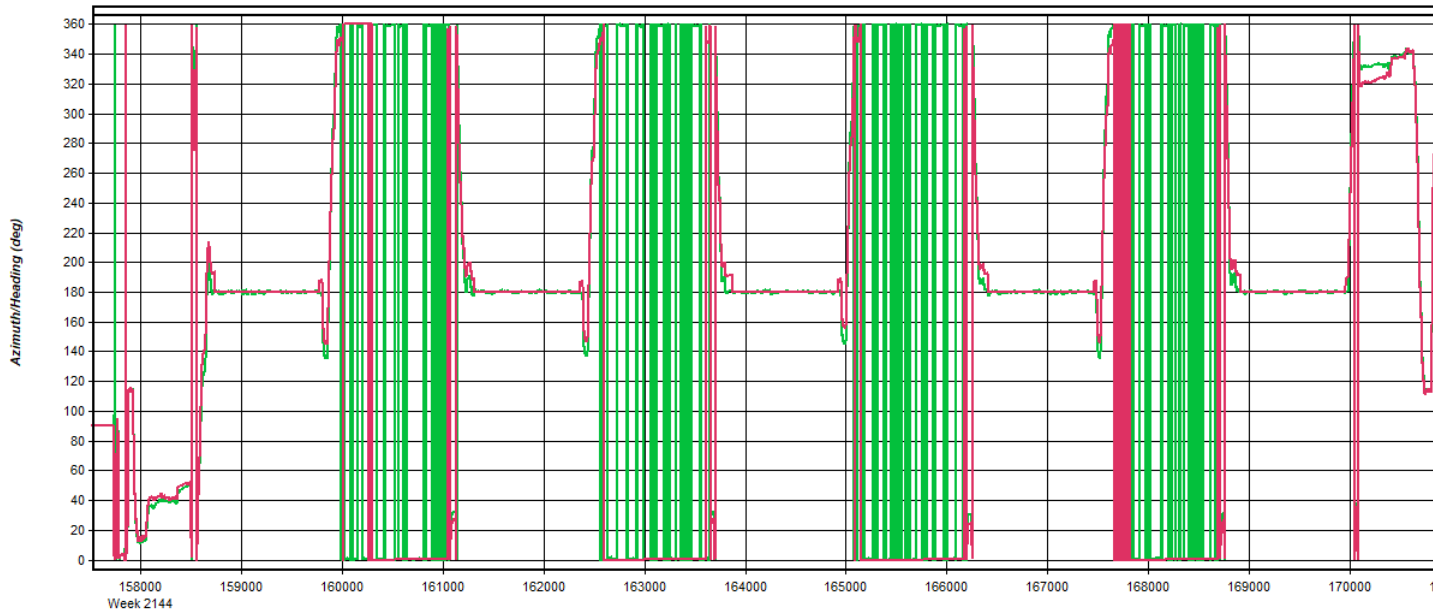
Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 10: 20210208194425_26 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot



Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 11: 20210208194425_26 [Smoothed TC Combined] - Azimuth Plot

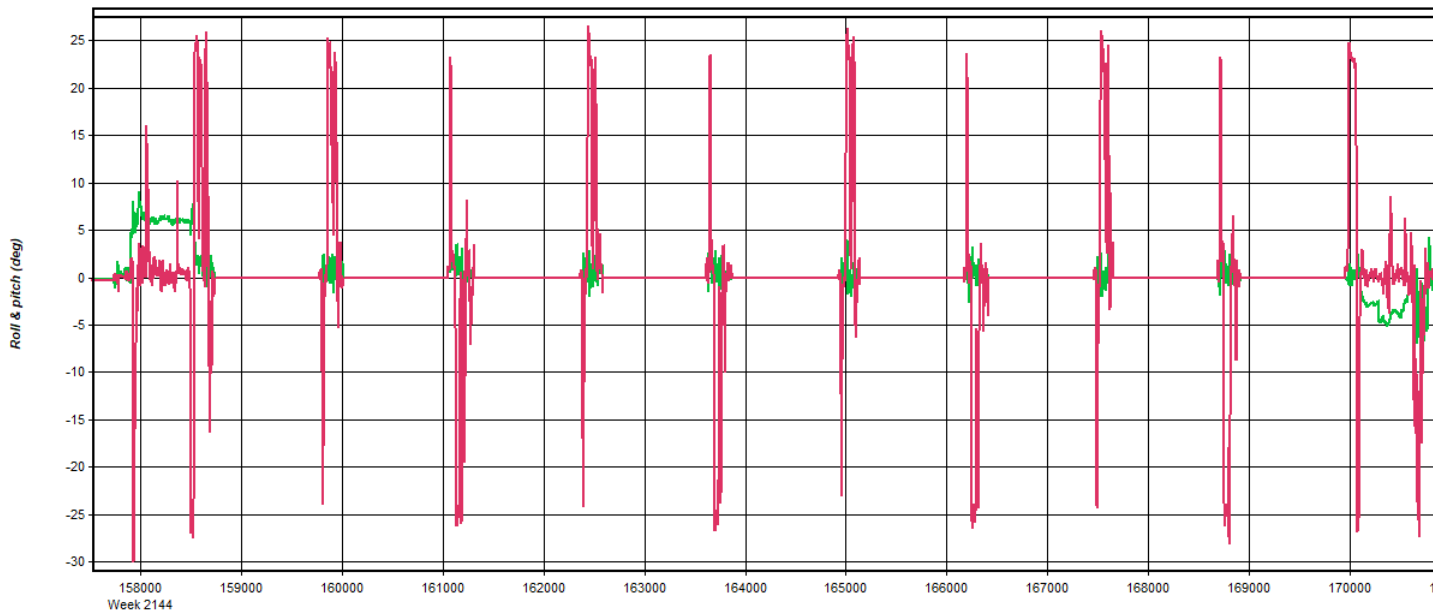


GPS Time (TOW, GMT zone)

— Heading/Azimuth — GPS-COG

Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 12: 20210208194425_26 [Smoothed TC Combined] - Roll & Pitch Plot

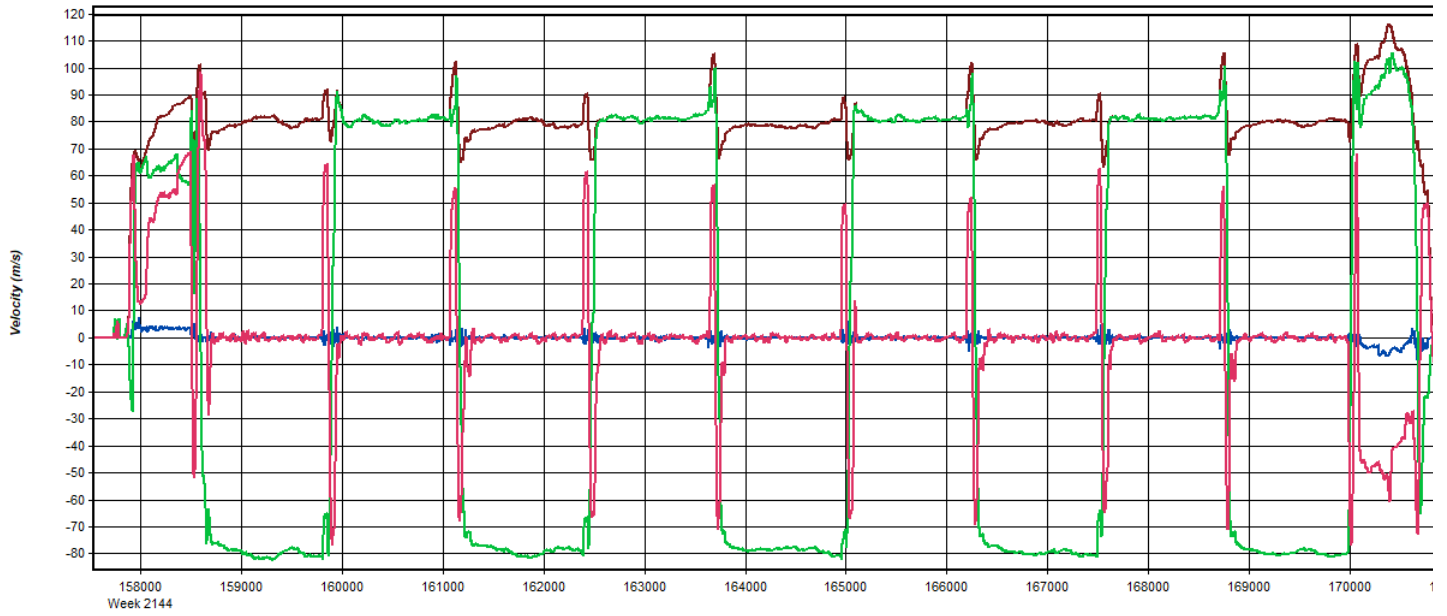


GPS Time (TOW, GMT zone)

— Roll — Pitch

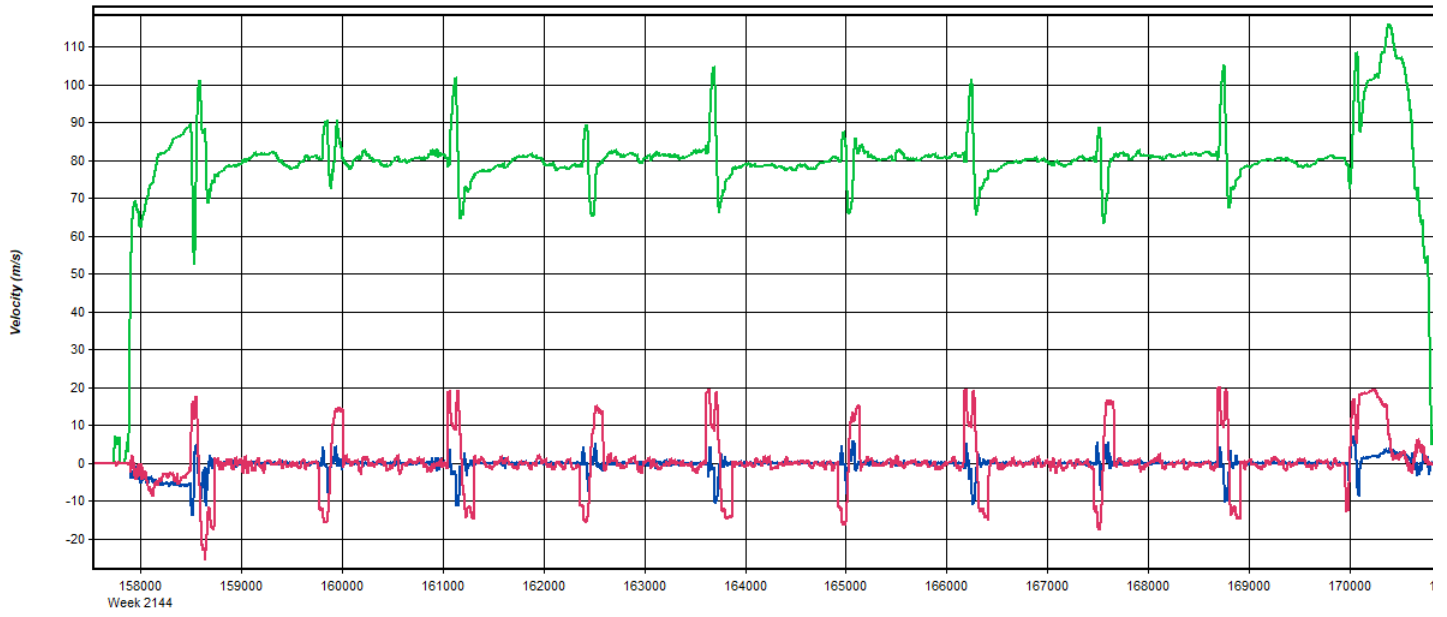
Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 13: 20210208194425_26 [Smoothed TC Combined] - Velocity Profile Plot



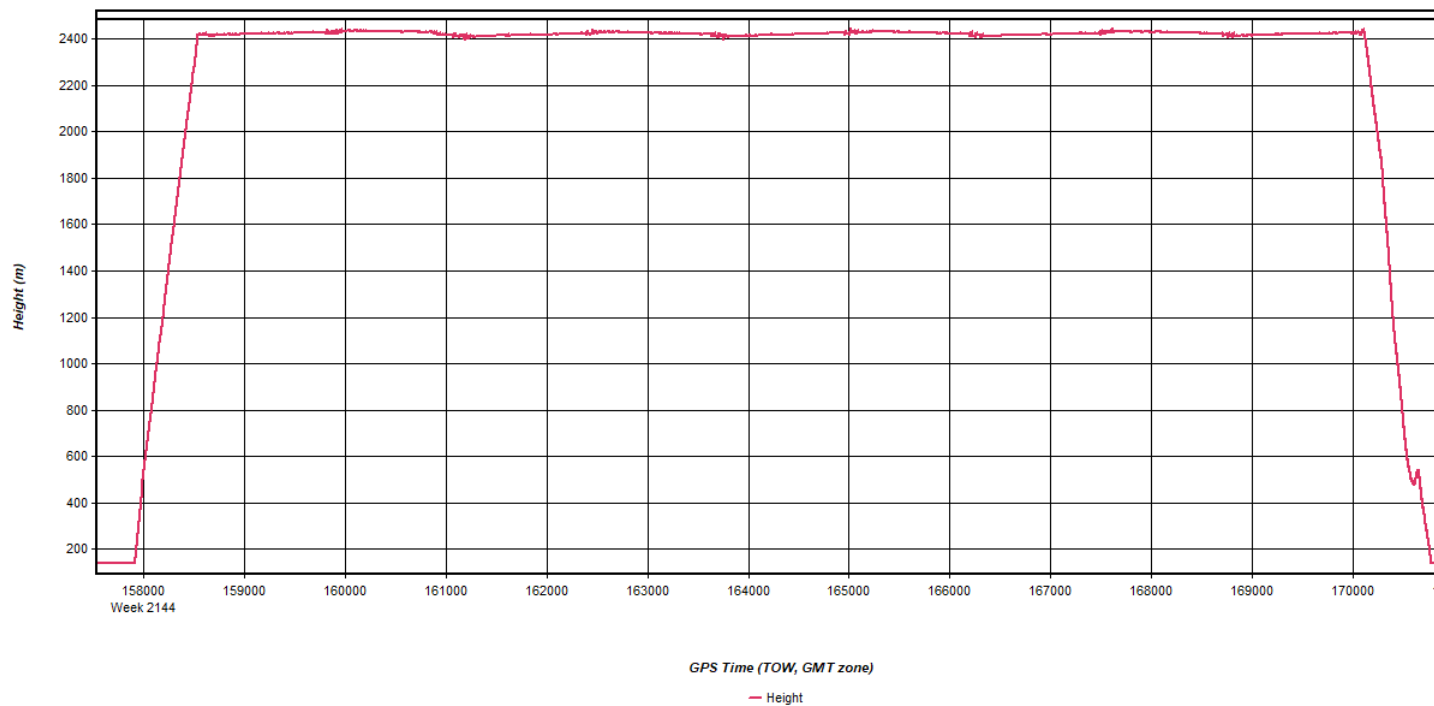
Process 20210208194425_26 by Unknown on 2/14/2021 at 09:22:27

Figure 14: 20210208194425_26 [Smoothed TC Combined] - Body Frame Velocity Plot



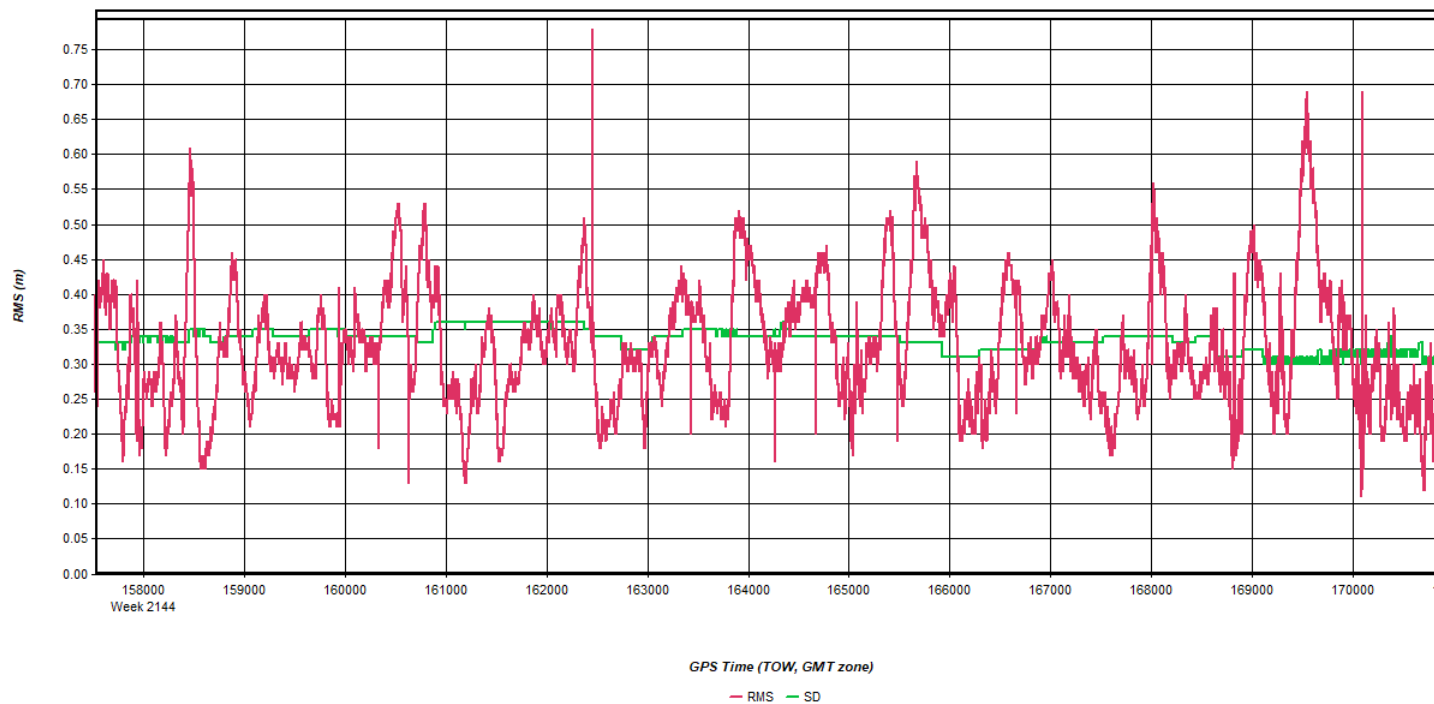
Process 20210208194425_26 by Unknown on 2/14/2021 at 09:22:27

Figure 15: 20210208194425_26 [Smoothed TC Combined] - Height Profile Plot



Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 16: 20210208194425_26 [Smoothed TC Combined] - C/A Code Residual RMS Plot



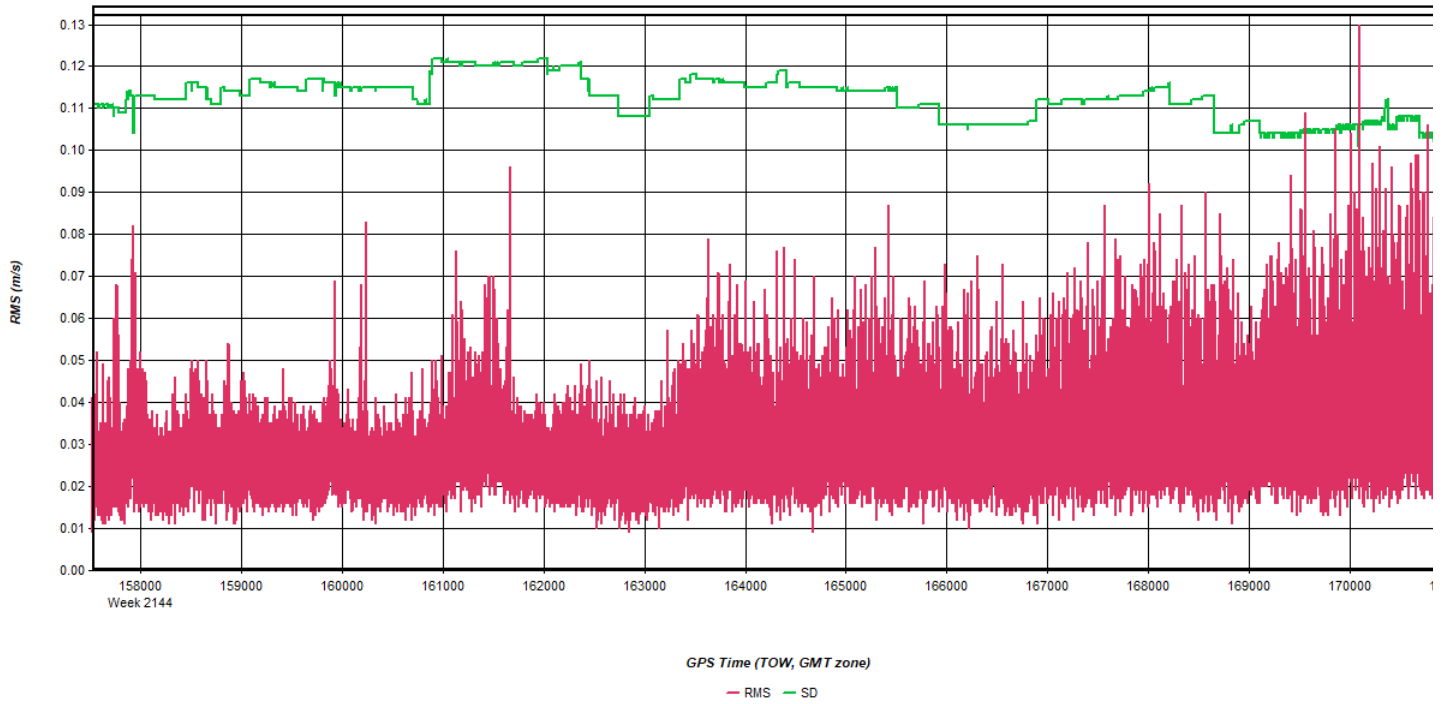
Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 17: 20210208194425_26 [Smoothed TC Combined] - Carrier Residual RMS Plot



Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 18: 20210208194425_26 [Smoothed TC Combined] - Doppler Residual RMS Plot



Process	20210208194425_26	by Unknown	on 2/14/2021	at 09:22:27
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Figure 19: 20210208194425_26 [Smoothed TC Combined] - Accelerometer Bias Plot

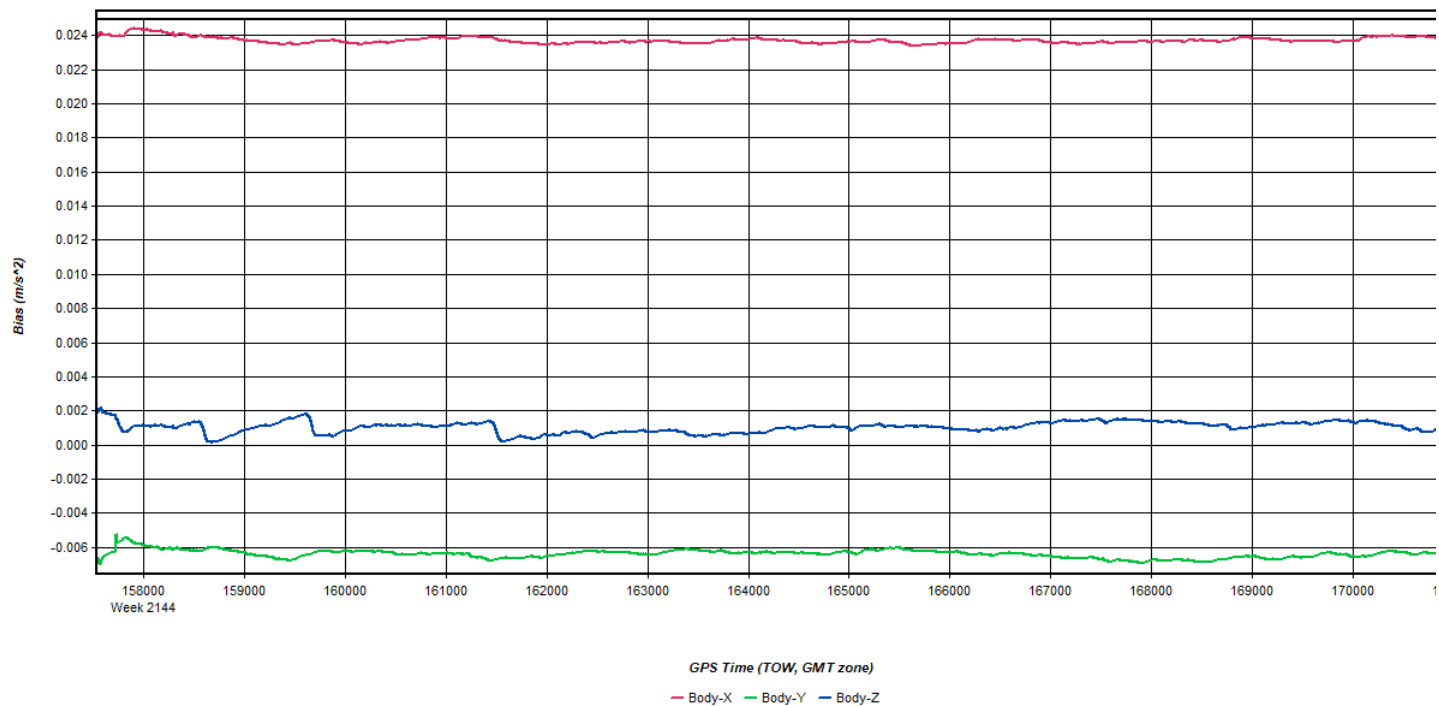
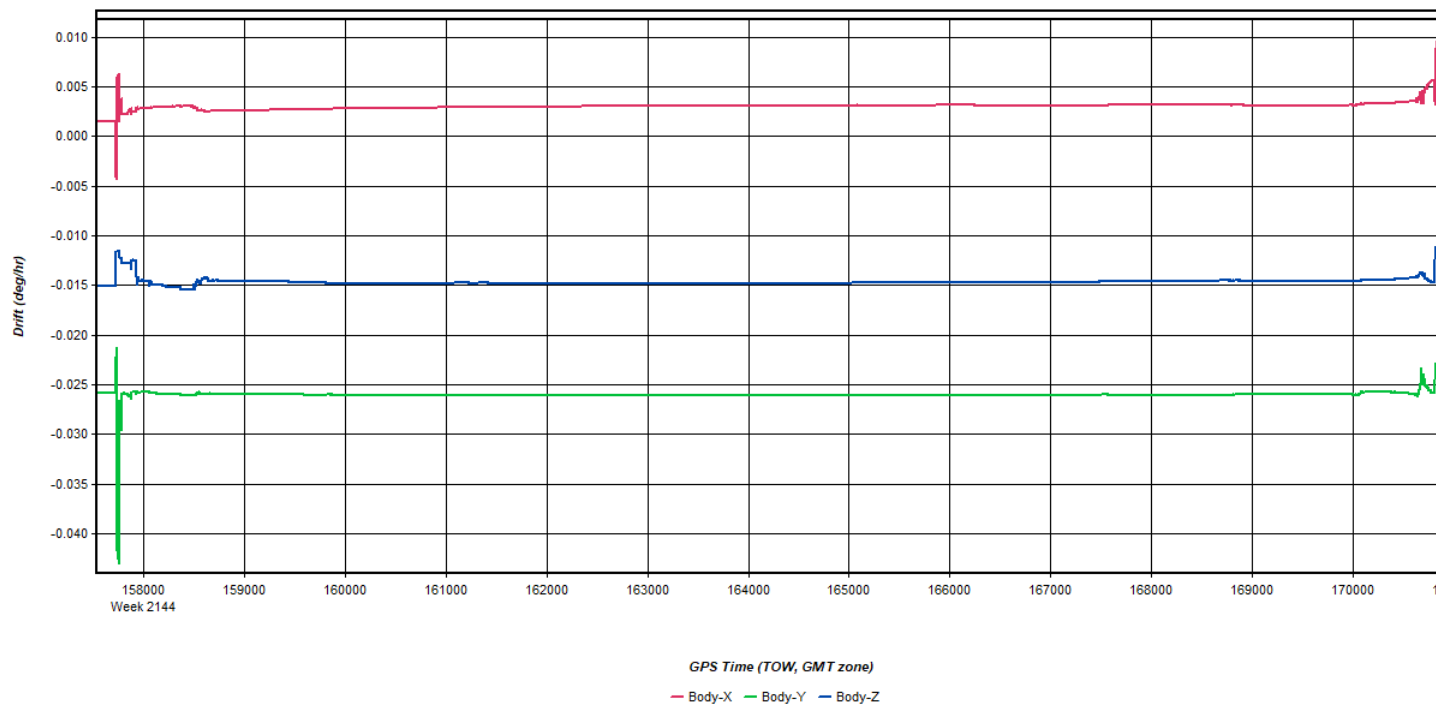


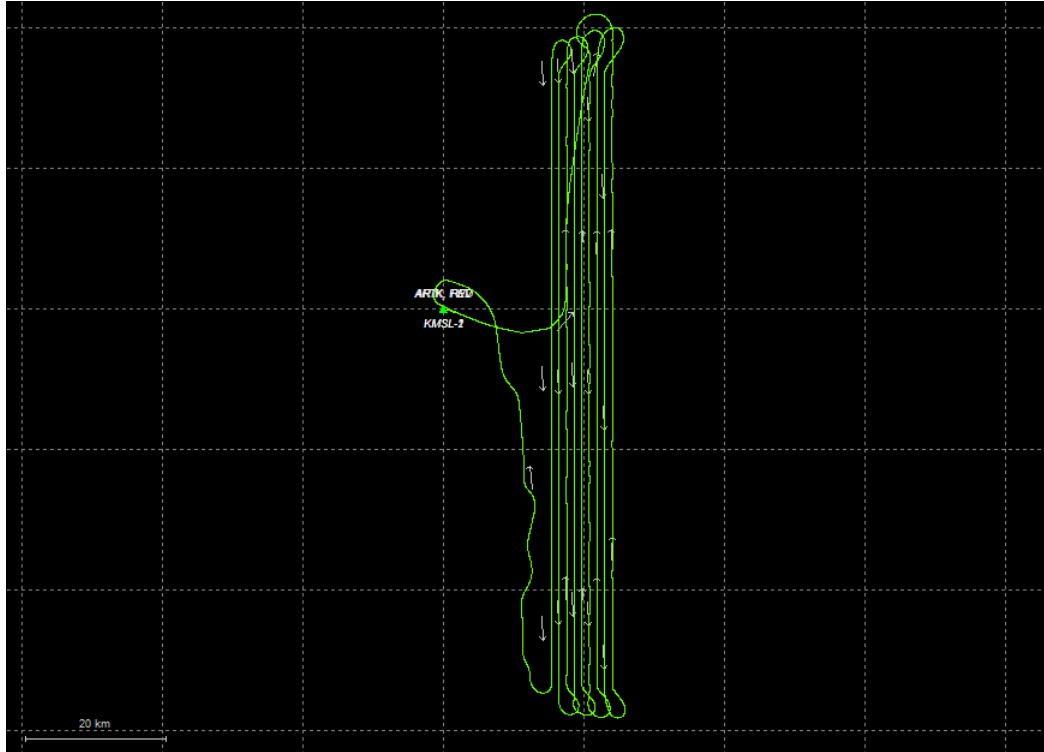
Figure 20: 20210208194425_26 [Smoothed TC Combined] - Gyro Drift Plot



Output Results for 20210208234931_27

Inertial Explorer Version 8.90.2124
02/14/2021

Figure 1: Smoothed TC Combined - Map



Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 2: 20210208234931_27 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot

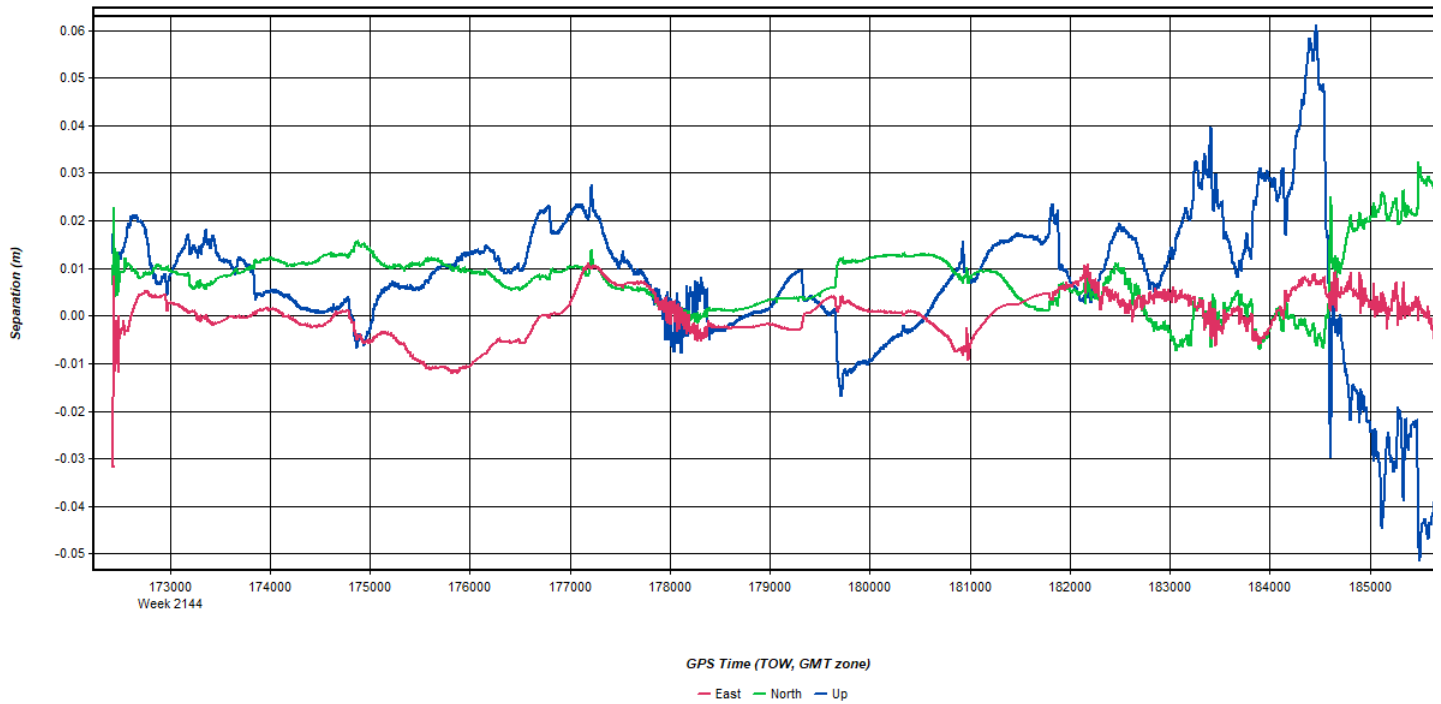


Figure 3: 20210208234931_27 [Smoothed TC Combined] - Float or Fixed Ambiguity

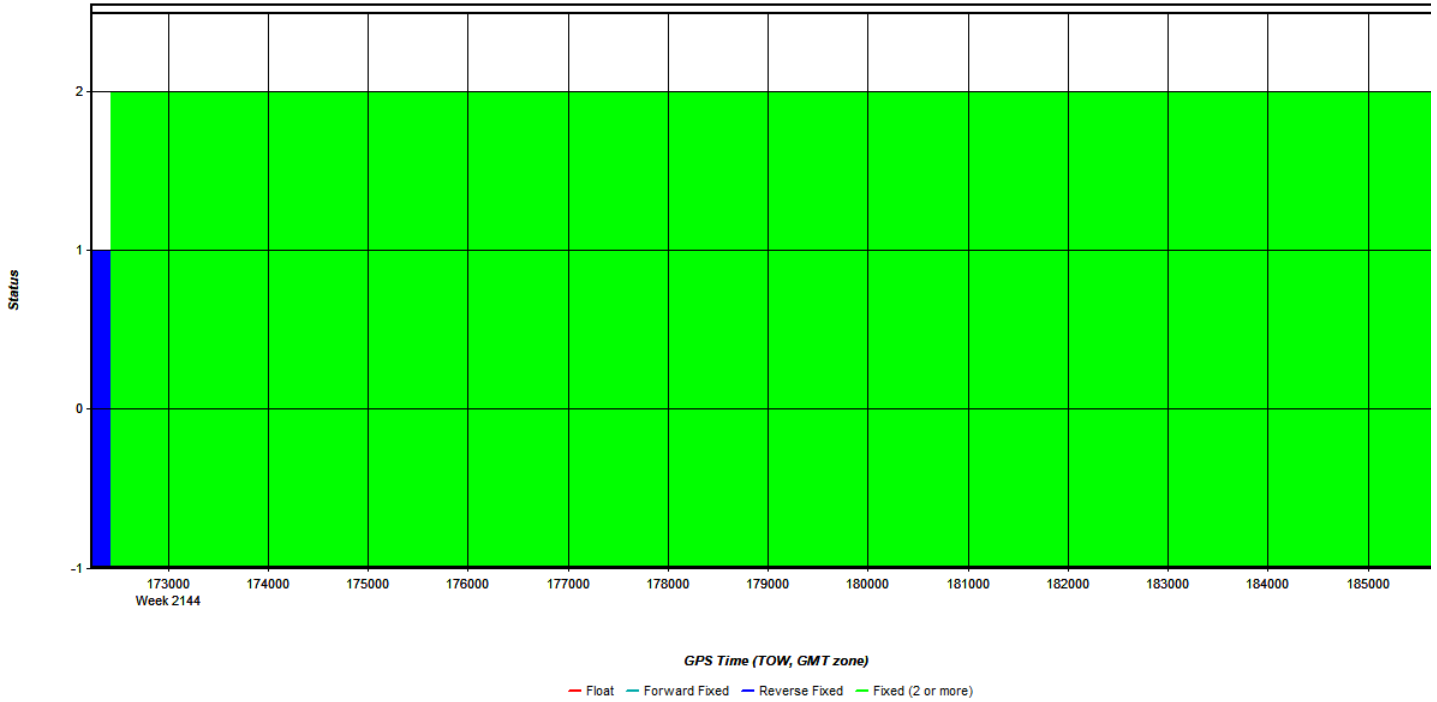


Figure 4: 20210208234931_27 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

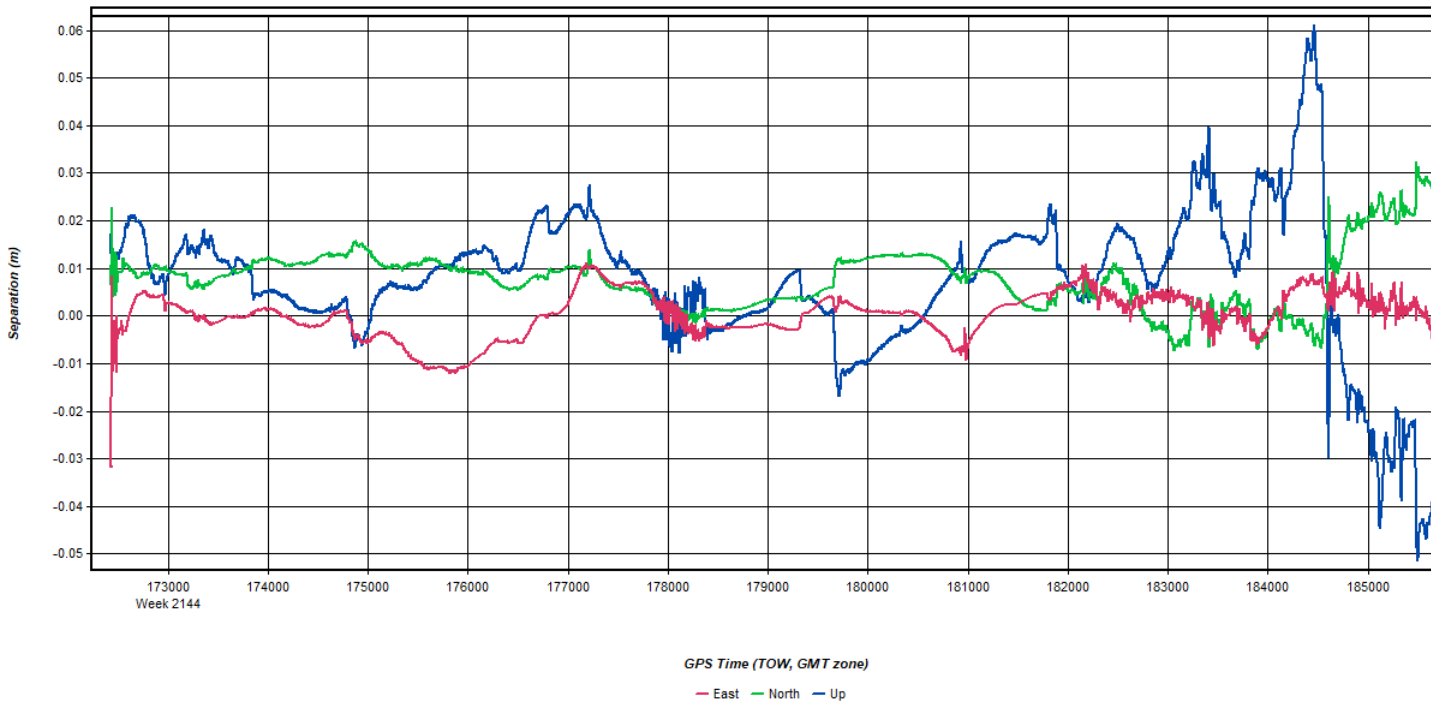
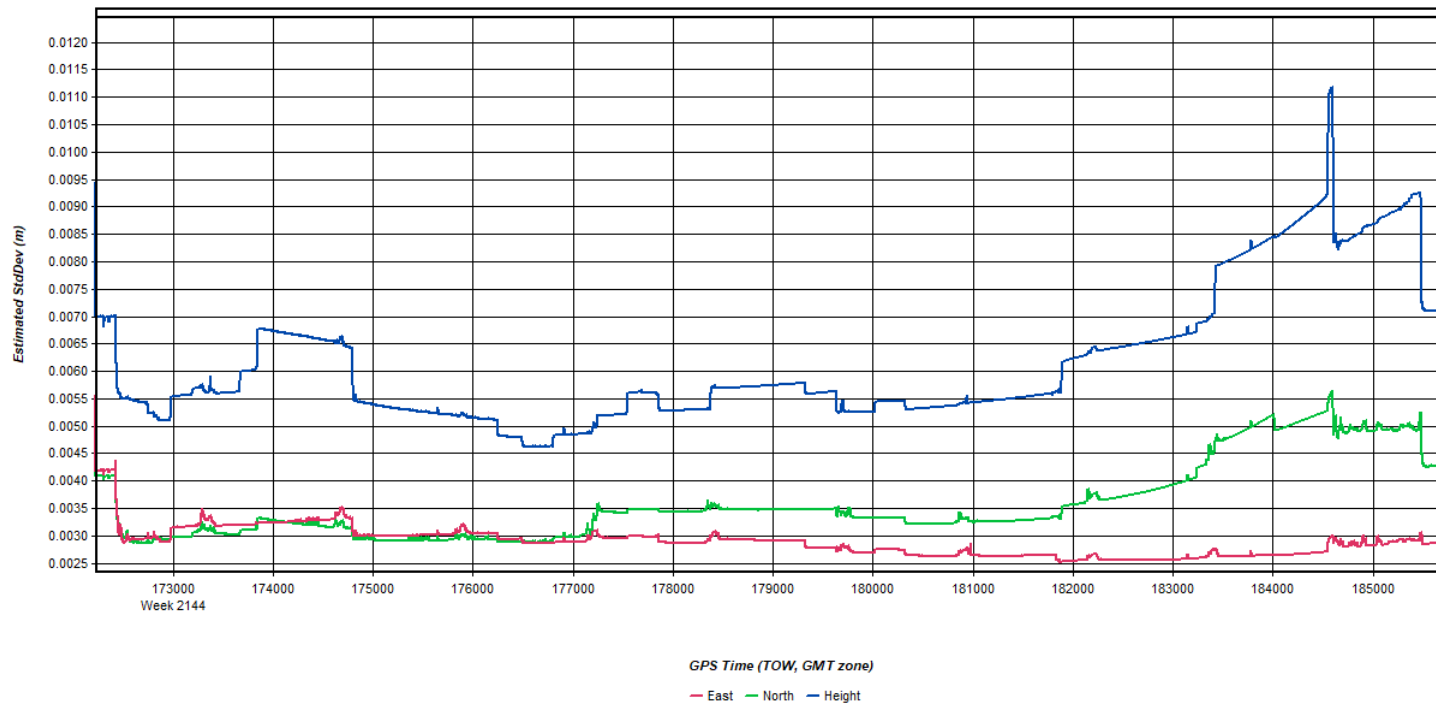
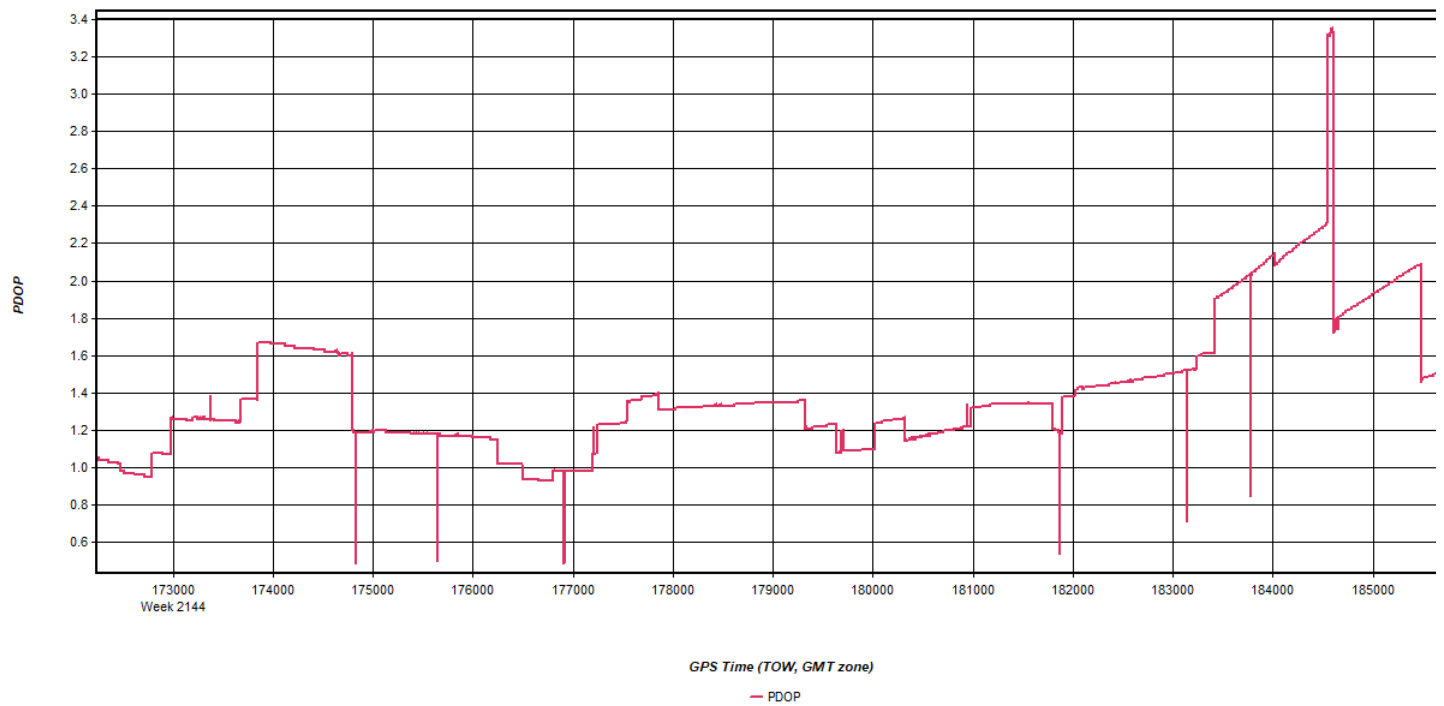


Figure 5: 20210208234931_27 [Smoothed TC Combined] - Estimated Position Accuracy Plot



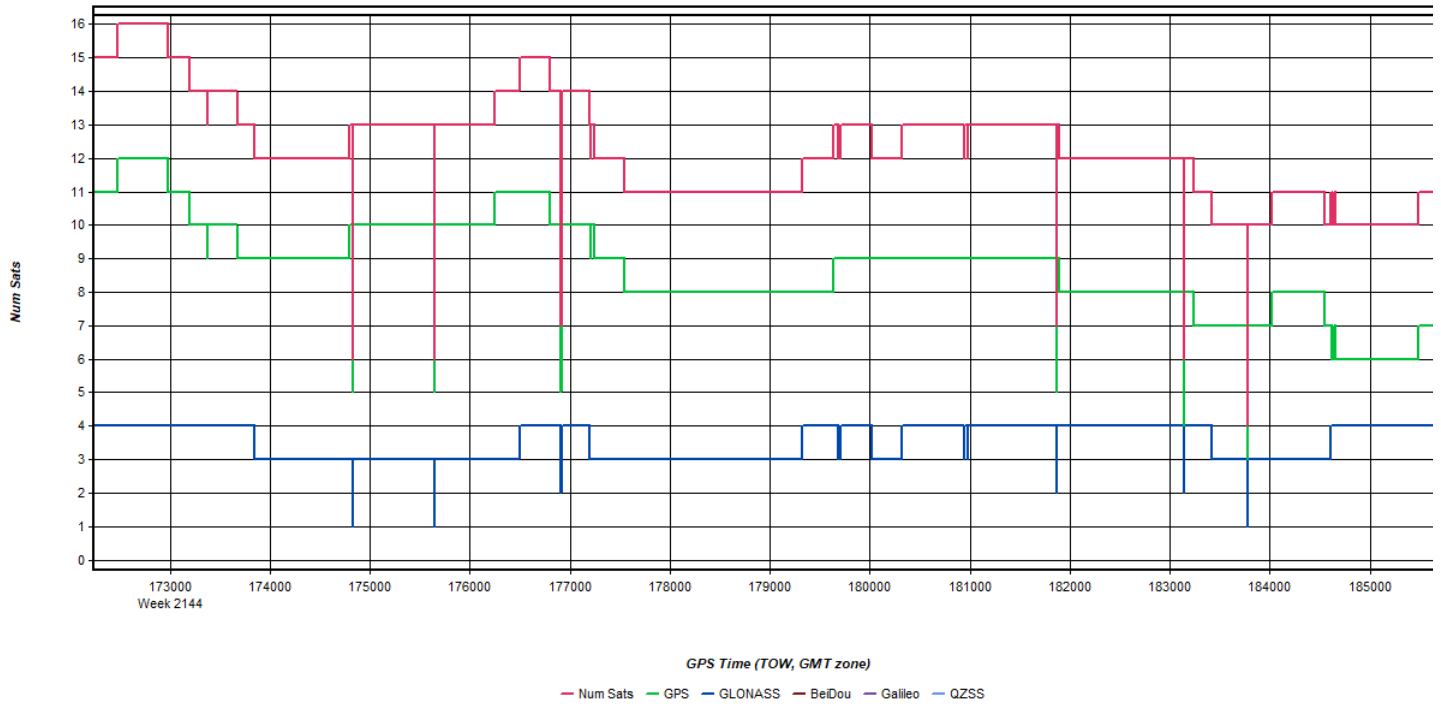
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 6: 20210208234931_27 [Smoothed TC Combined] - PDOP Plot



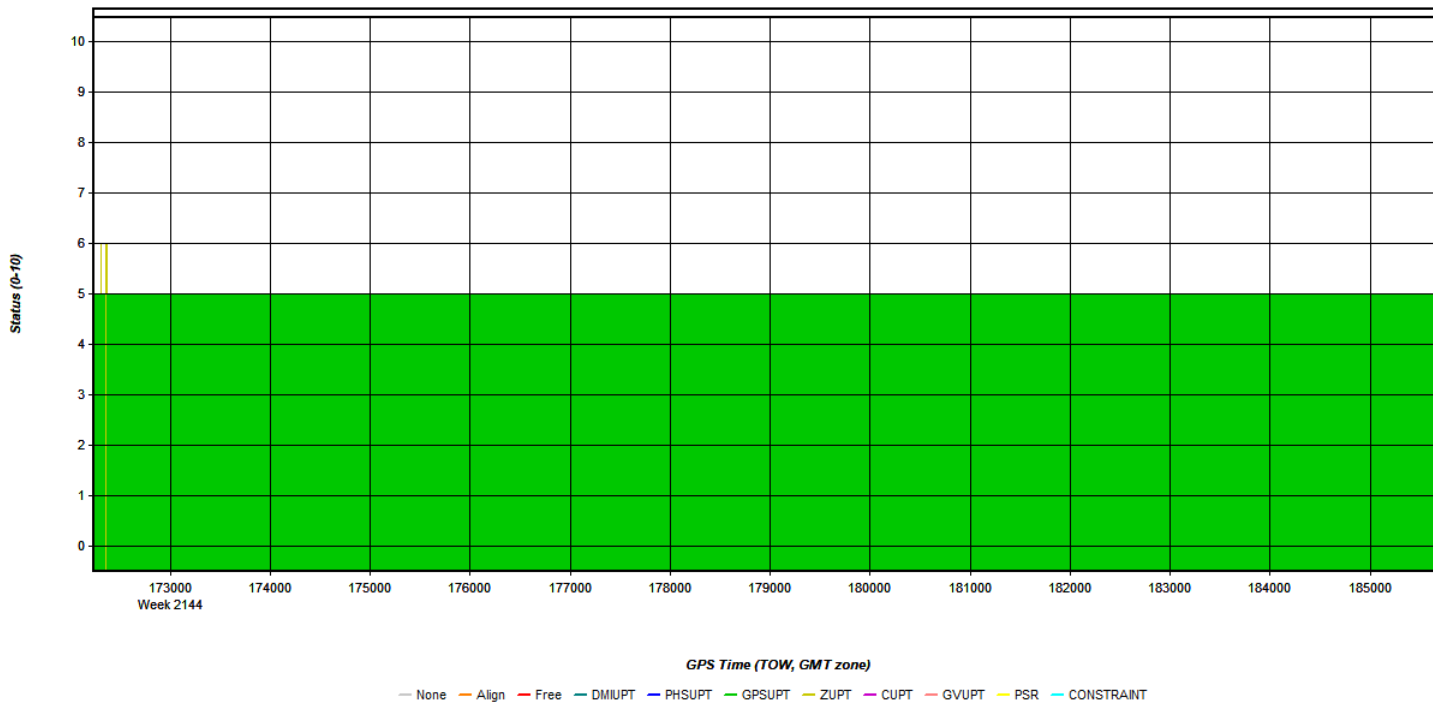
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 7: 20210208234931_27 [Smoothed TC Combined] - Number of Satellites Line Plot



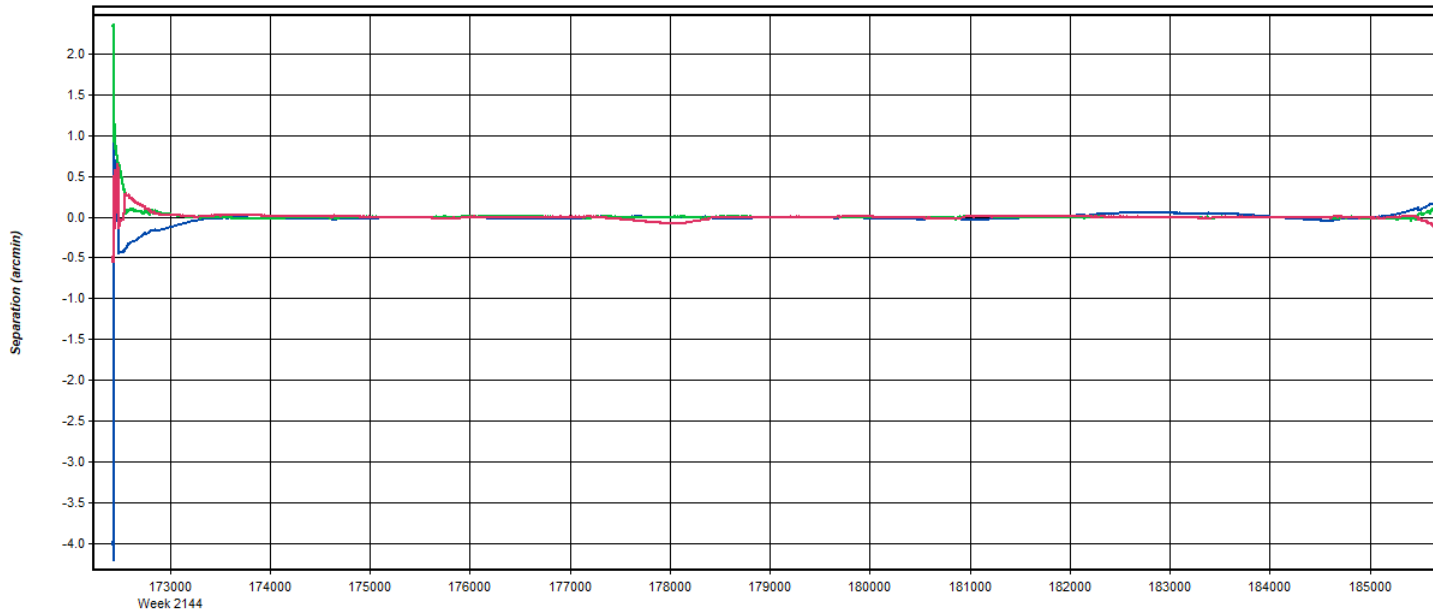
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 8: 20210208234931_27 [Smoothed TC Combined] - Status flag for IMU processing



Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 9: 20210208234931_27 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

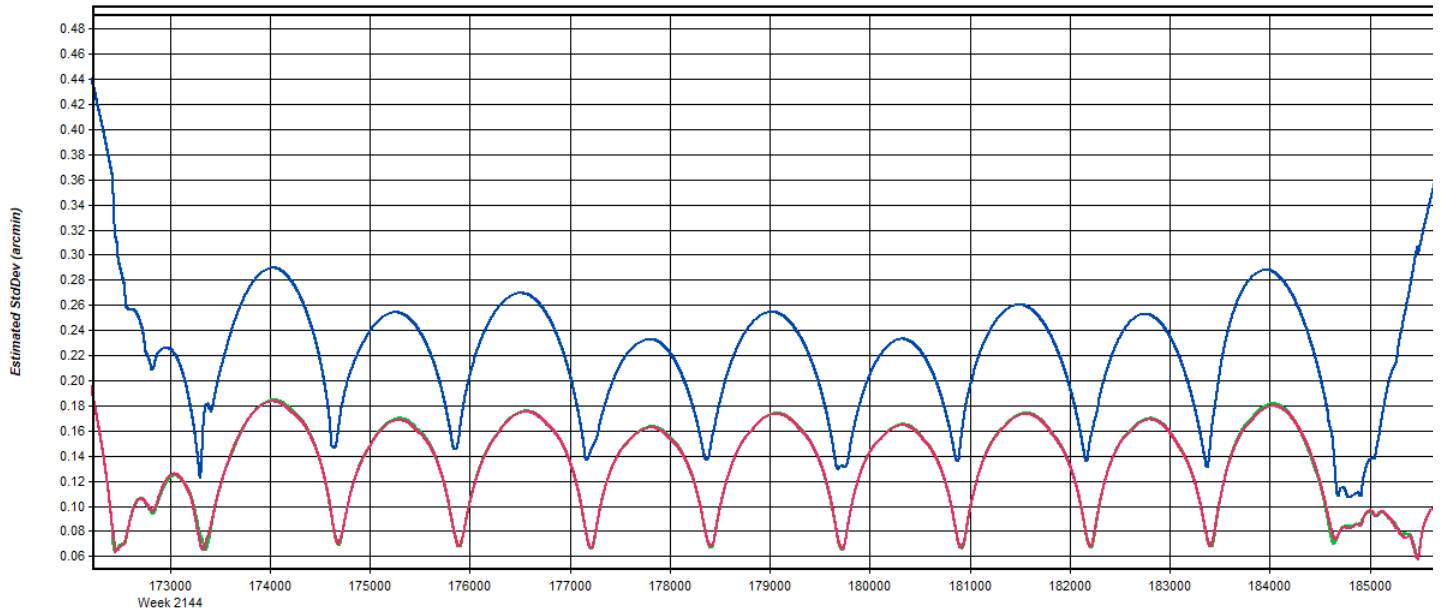


GPS Time (TOW, GMT zone)

— Roll — Pitch — Heading/Az

Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 10: 20210208234931_27 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

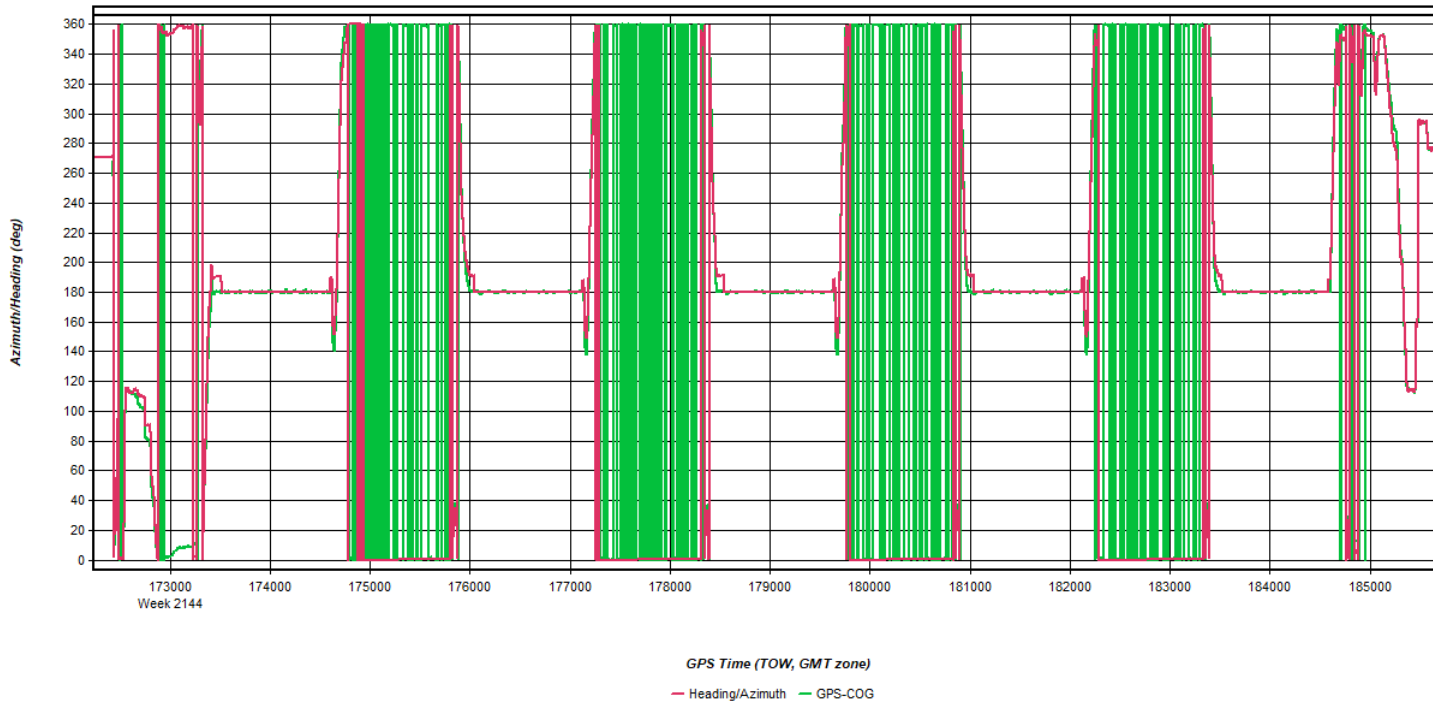


GPS Time (TOW, GMT zone)

— Roll — Pitch — Heading/Az

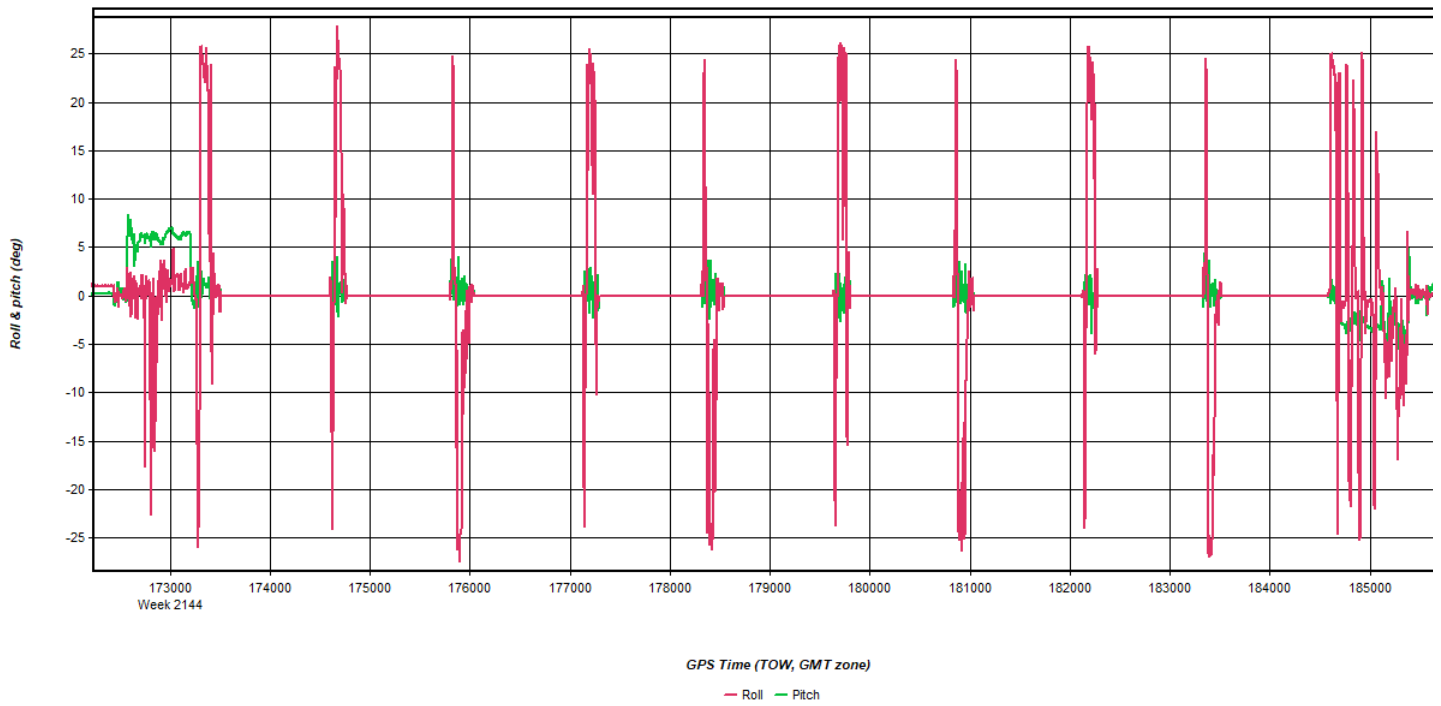
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 11: 20210208234931_27 [Smoothed TC Combined] - Azimuth Plot



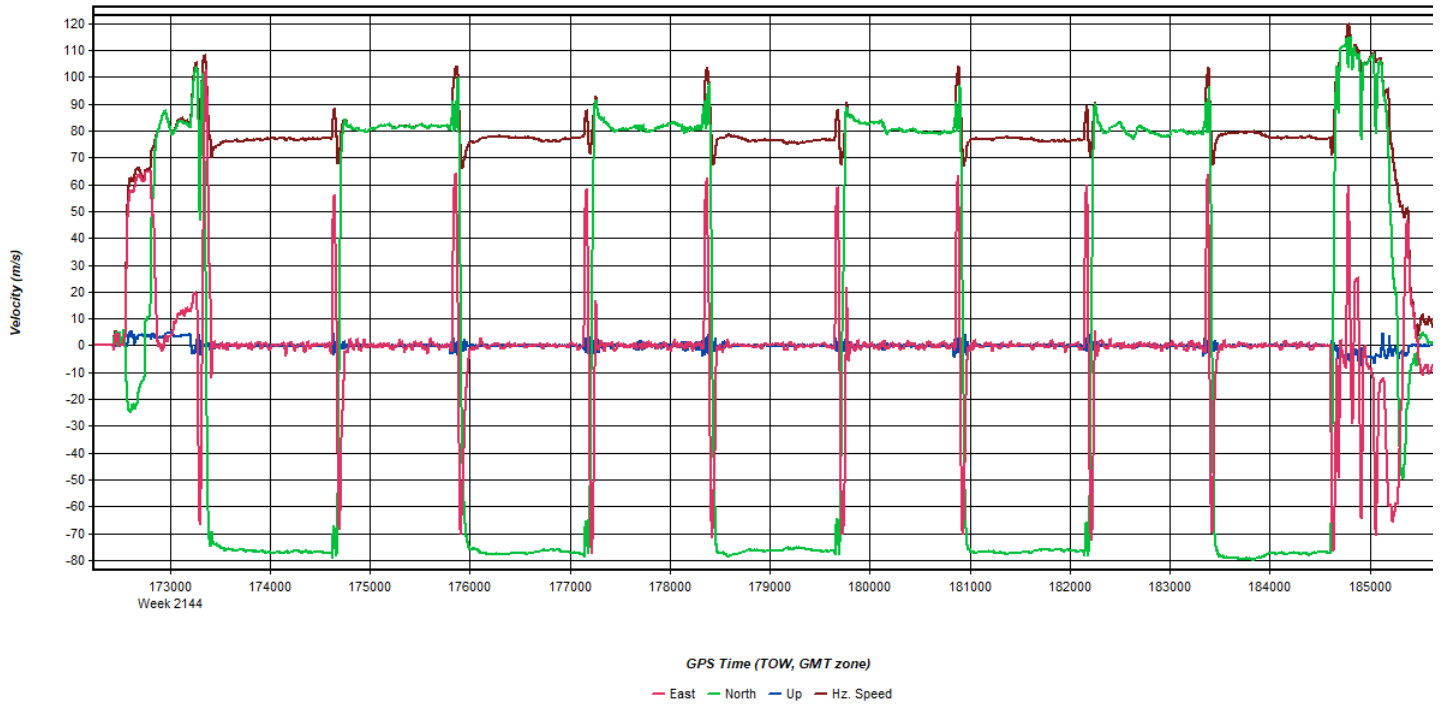
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 12: 20210208234931_27 [Smoothed TC Combined] - Roll & Pitch Plot



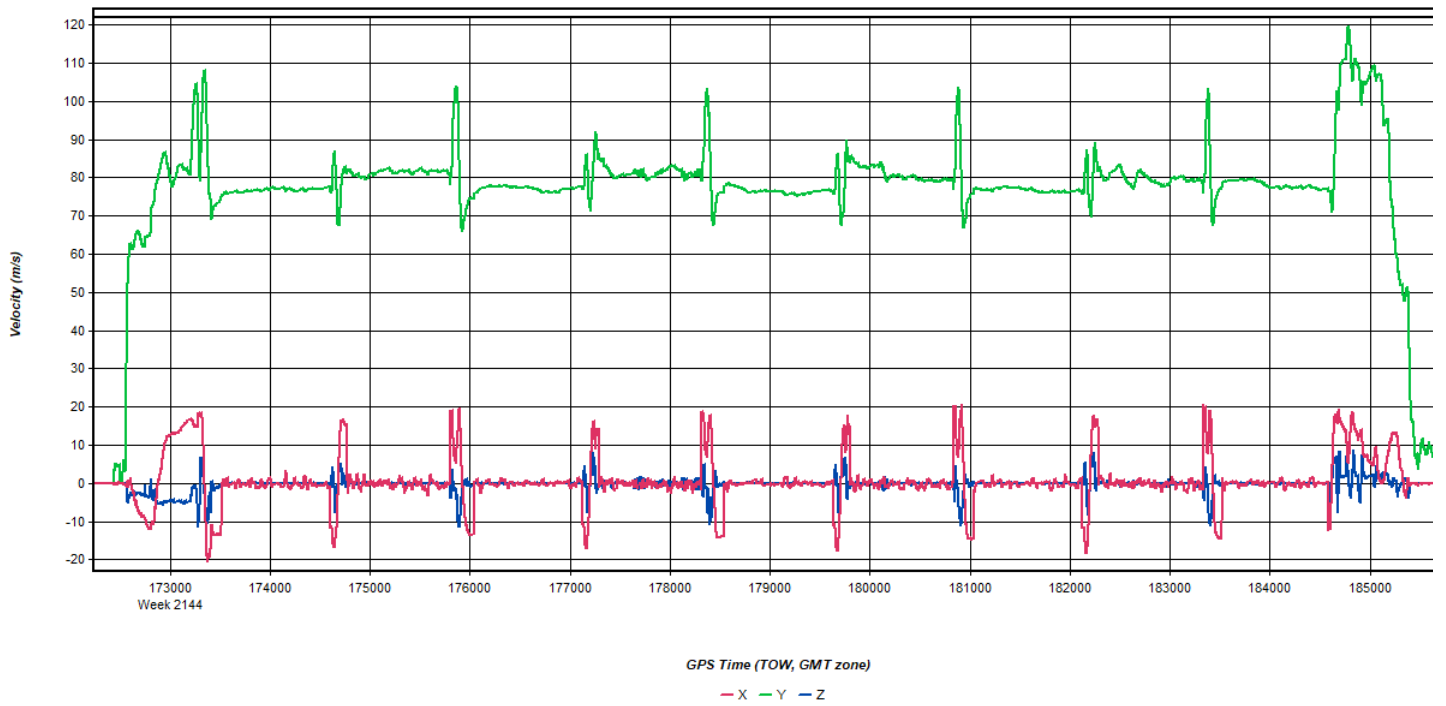
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 13: 20210208234931_27 [Smoothed TC Combined] - Velocity Profile Plot



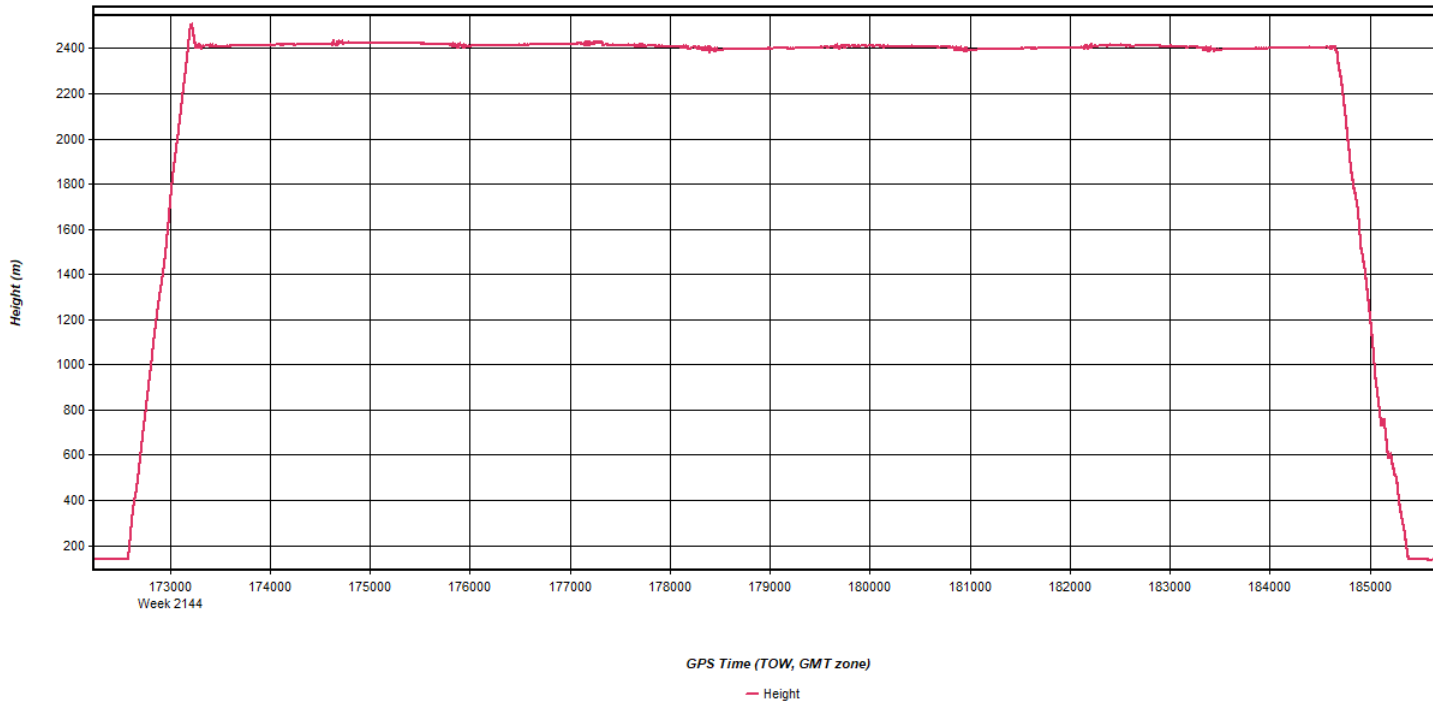
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 14: 20210208234931_27 [Smoothed TC Combined] - Body Frame Velocity Plot



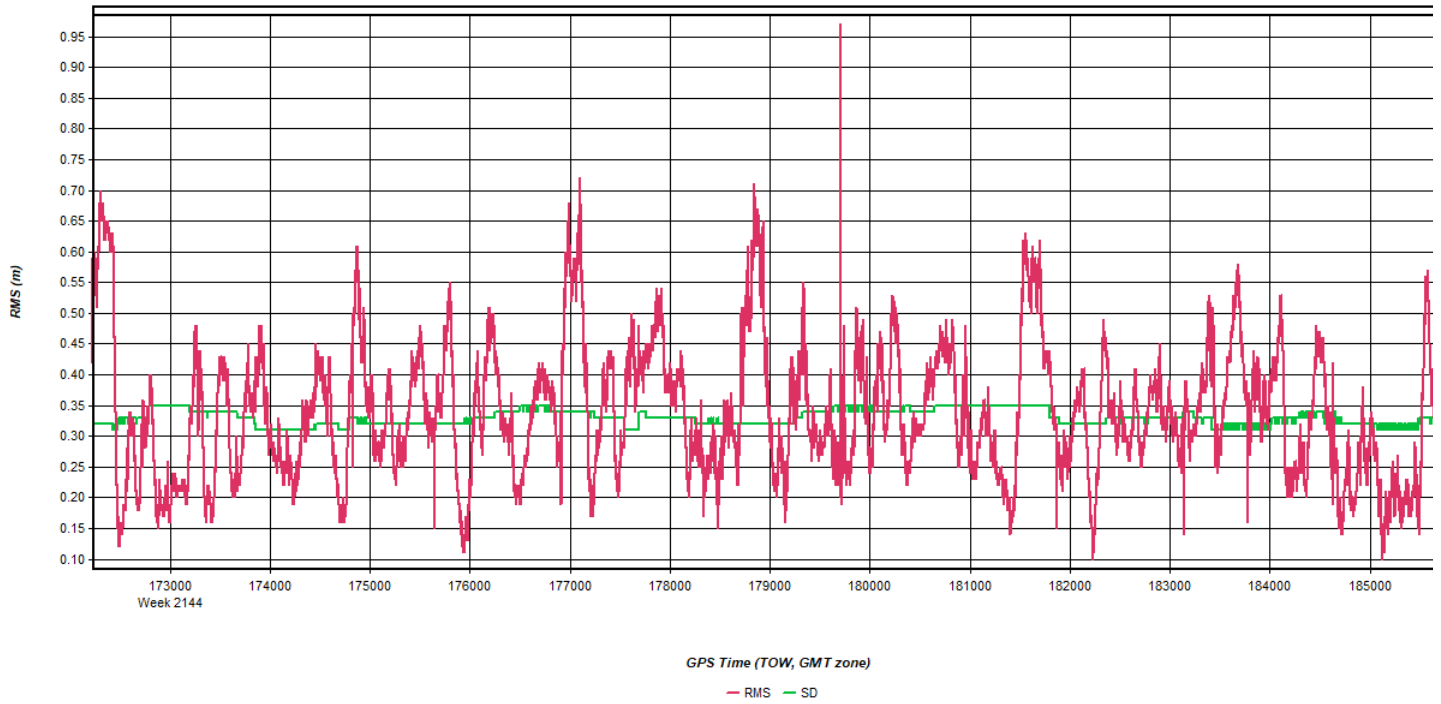
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 15: 20210208234931_27 [Smoothed TC Combined] - Height Profile Plot



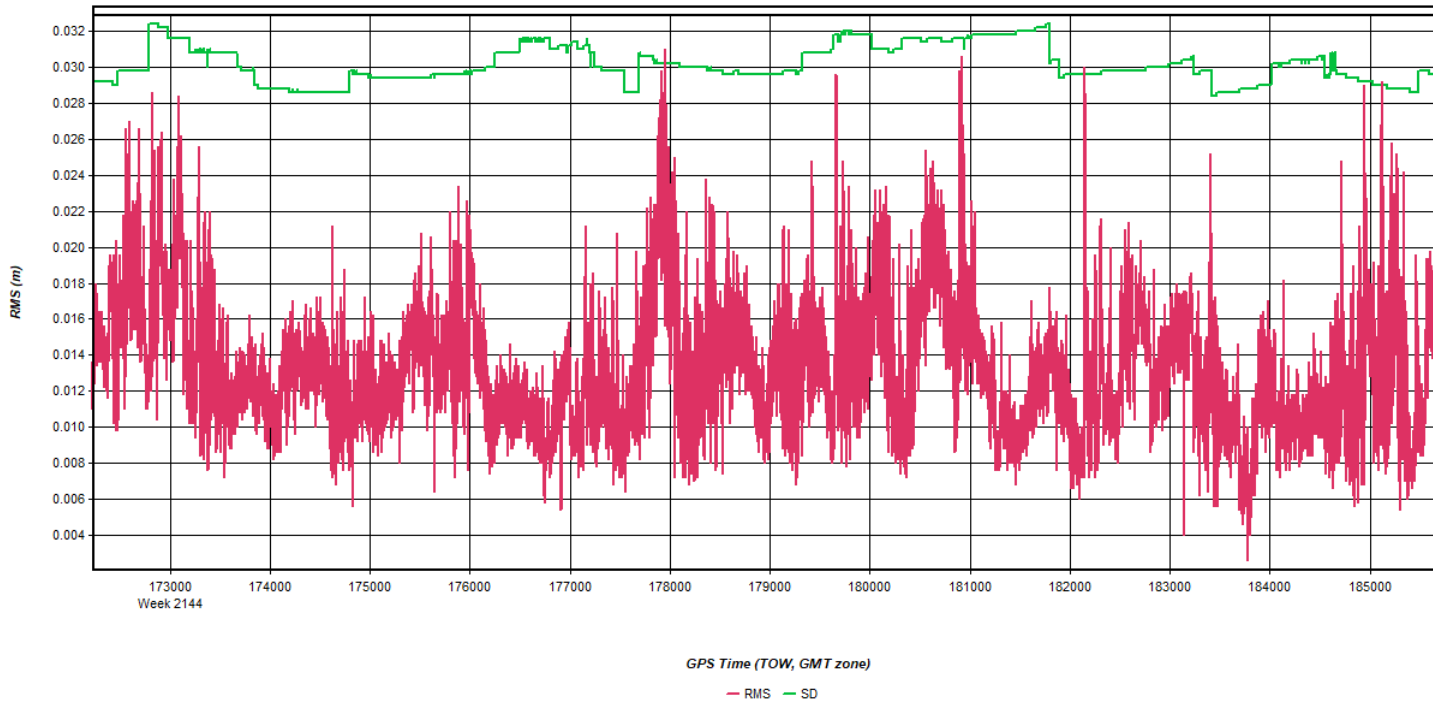
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 16: 20210208234931_27 [Smoothed TC Combined] - C/A Code Residual RMS Plot



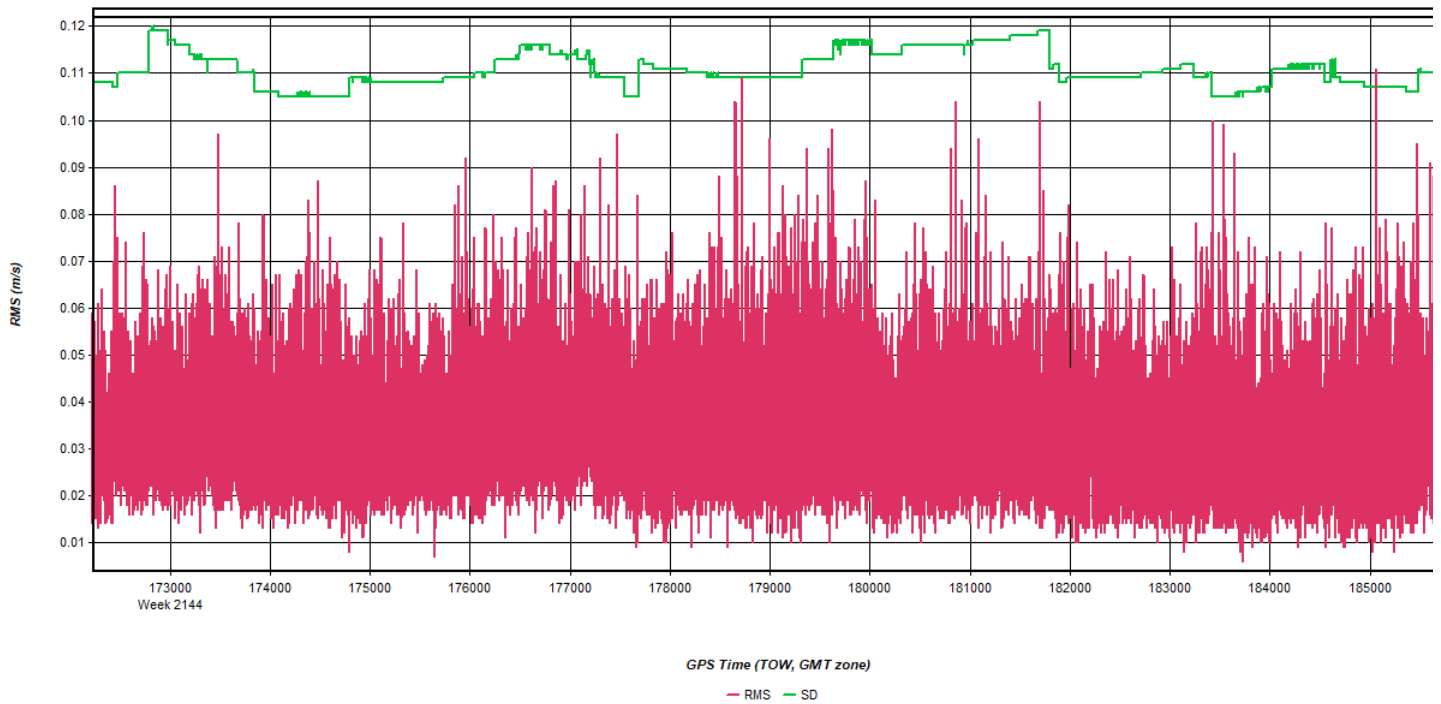
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 17: 20210208234931_27 [Smoothed TC Combined] - Carrier Residual RMS Plot



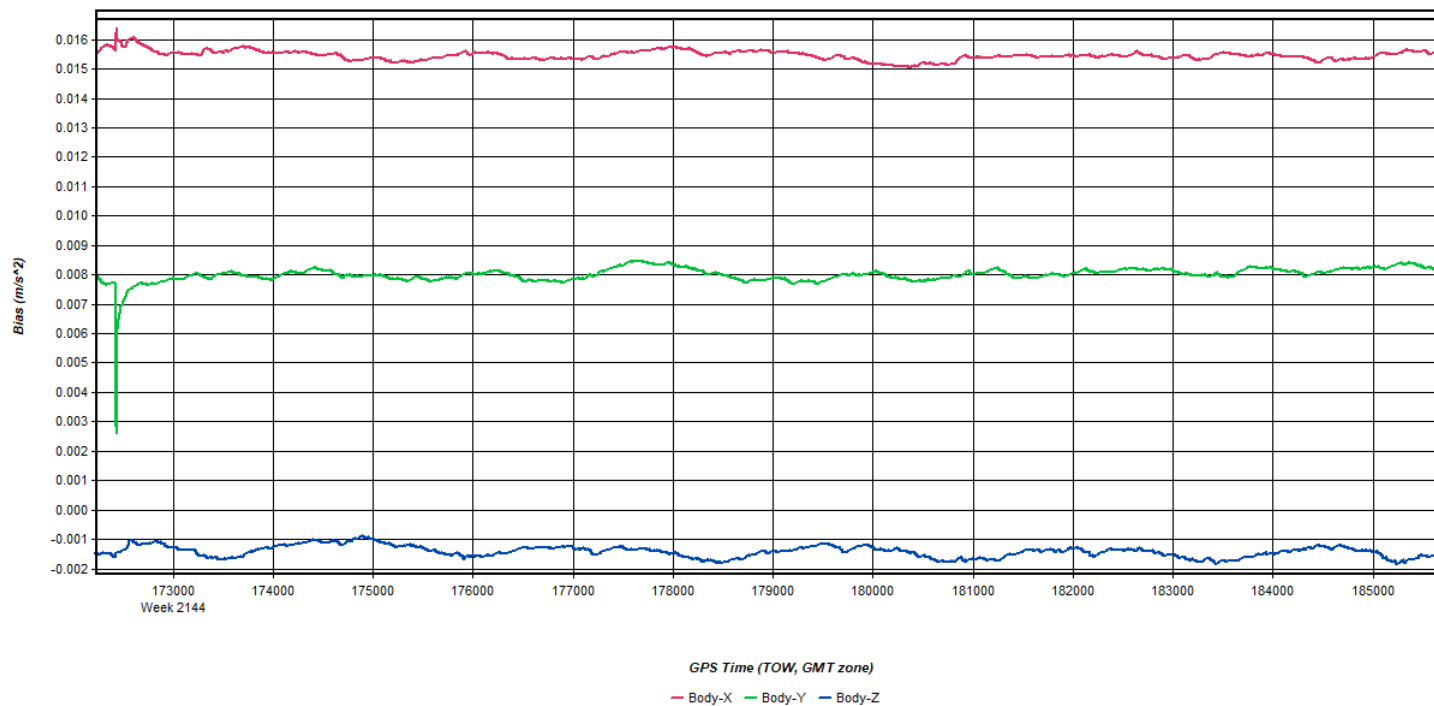
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 18: 20210208234931_27 [Smoothed TC Combined] - Doppler Residual RMS Plot



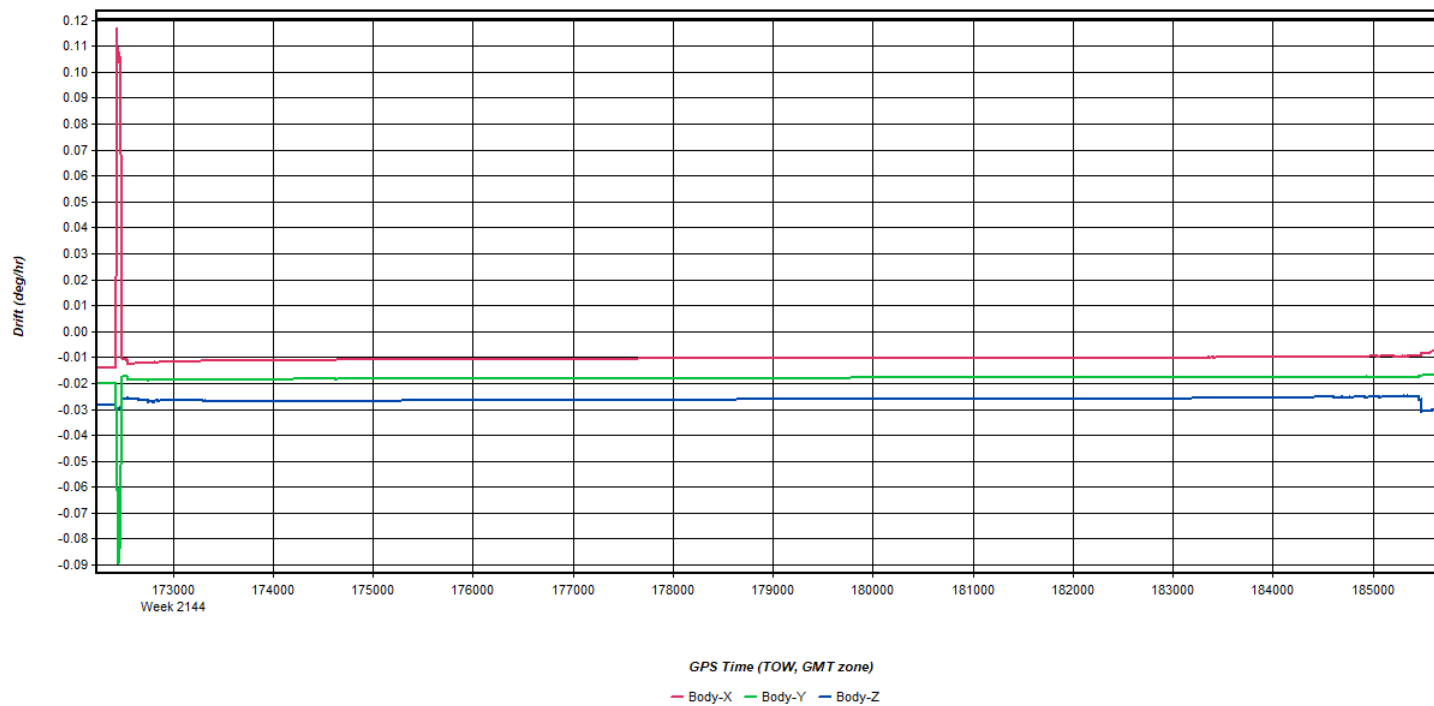
Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 19: 20210208234931_27 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Figure 20: 20210208234931_27 [Smoothed TC Combined] - Gyro Drift Plot

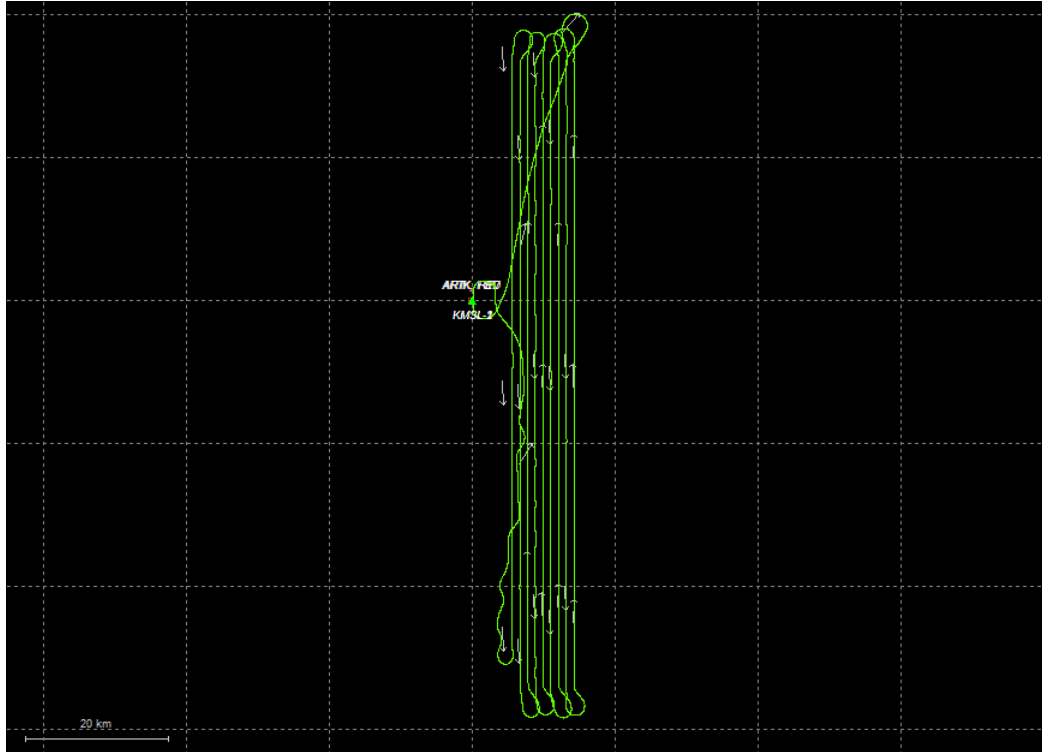


Process	20210208234931_27	by Unknown	on 2/14/2021	at 11:11:57
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Output Results for 20210210192257_28

Inertial Explorer Version 8.90.2124
02/15/2021

Figure 1: Smoothed TC Combined - Map



Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 2: 20210210192257_28 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Figure 3: 20210210192257_28 [Smoothed TC Combined] - Float or Fixed Ambiguity

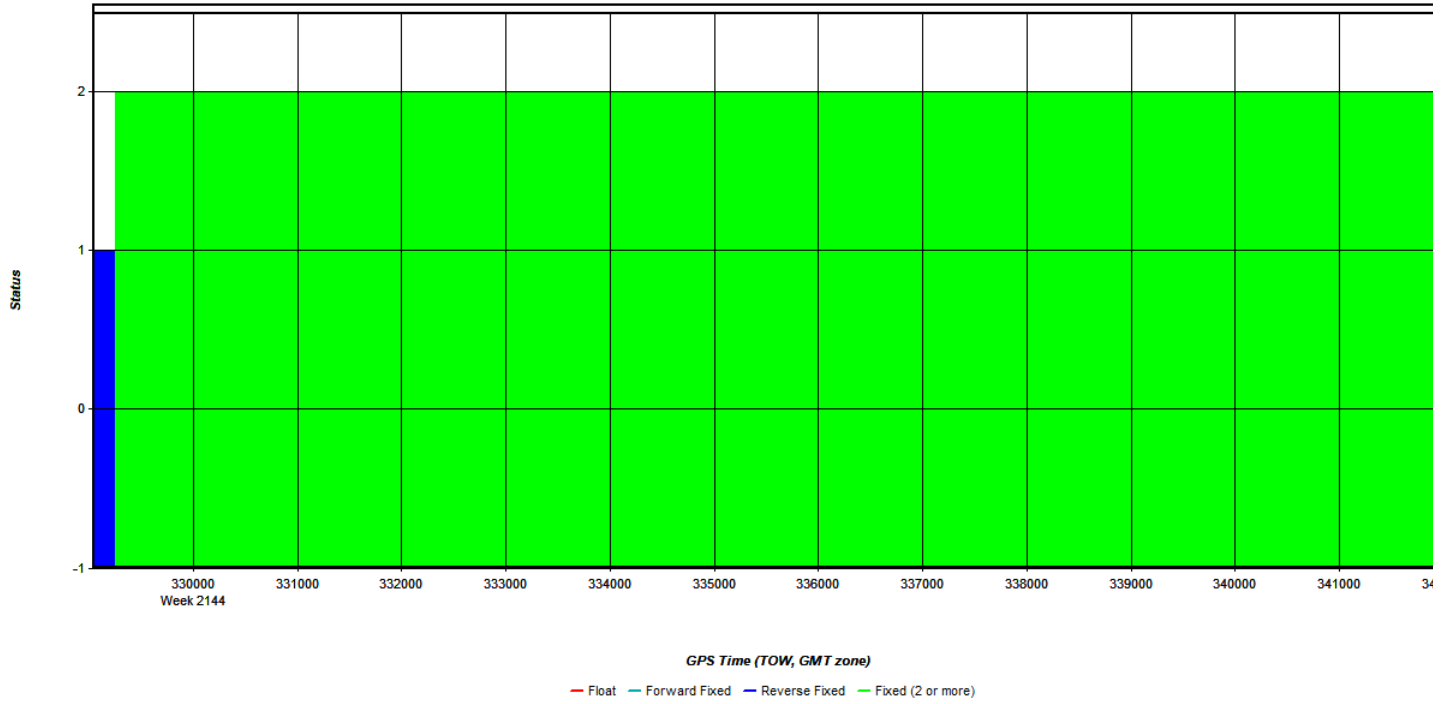


Figure 4: 20210210192257_28 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

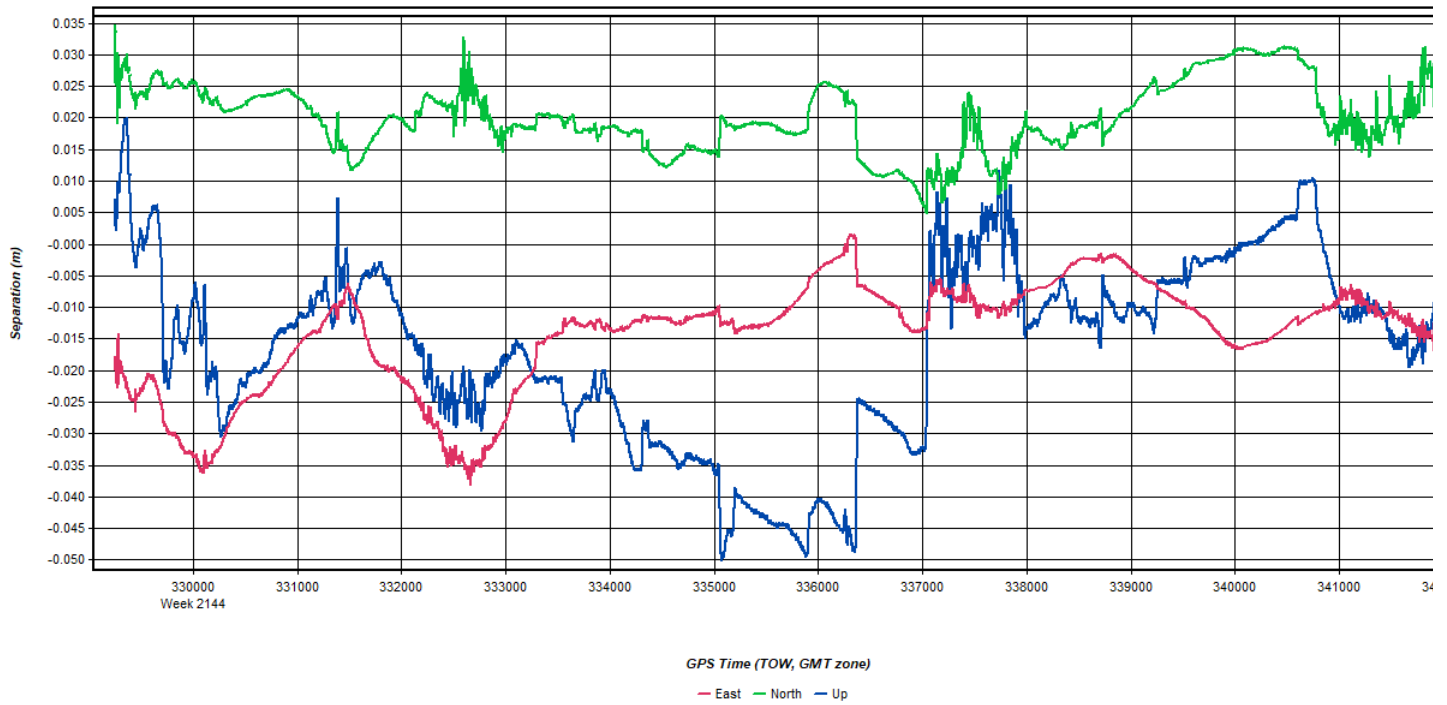
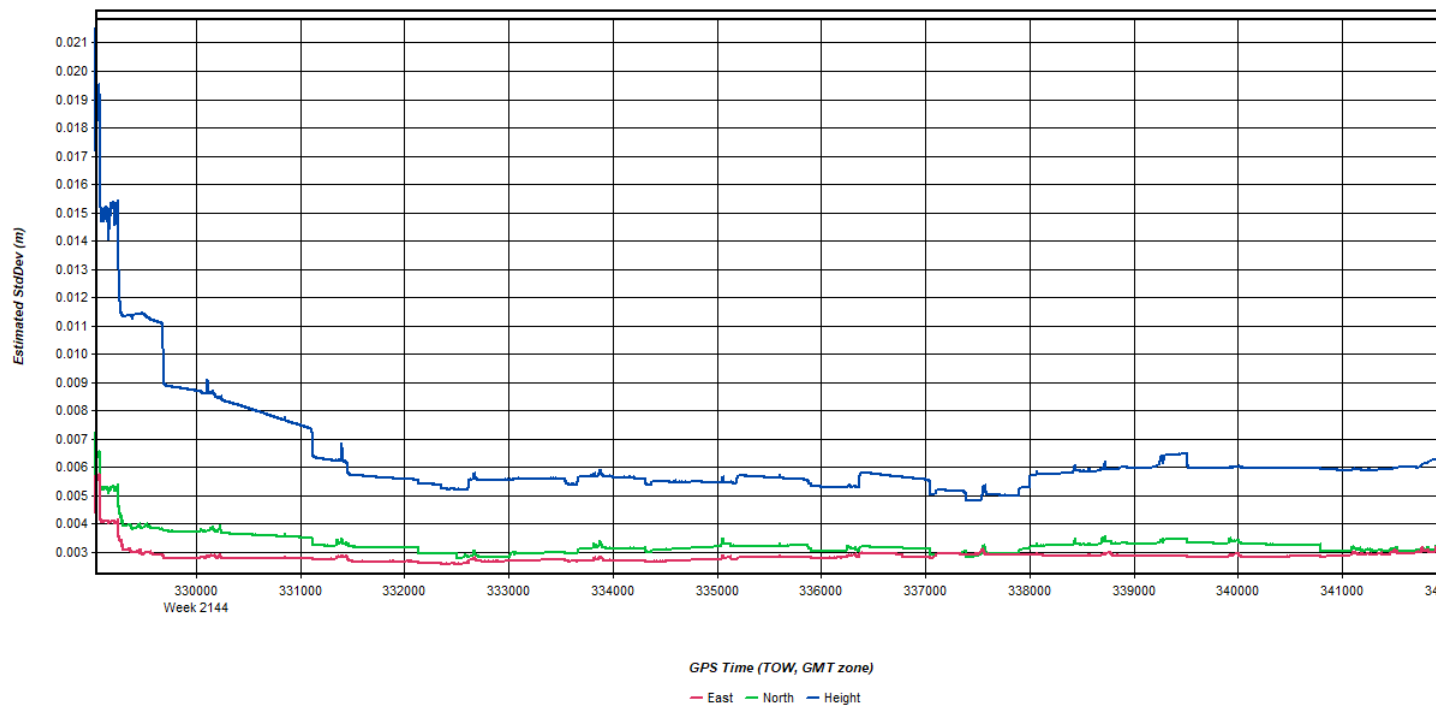
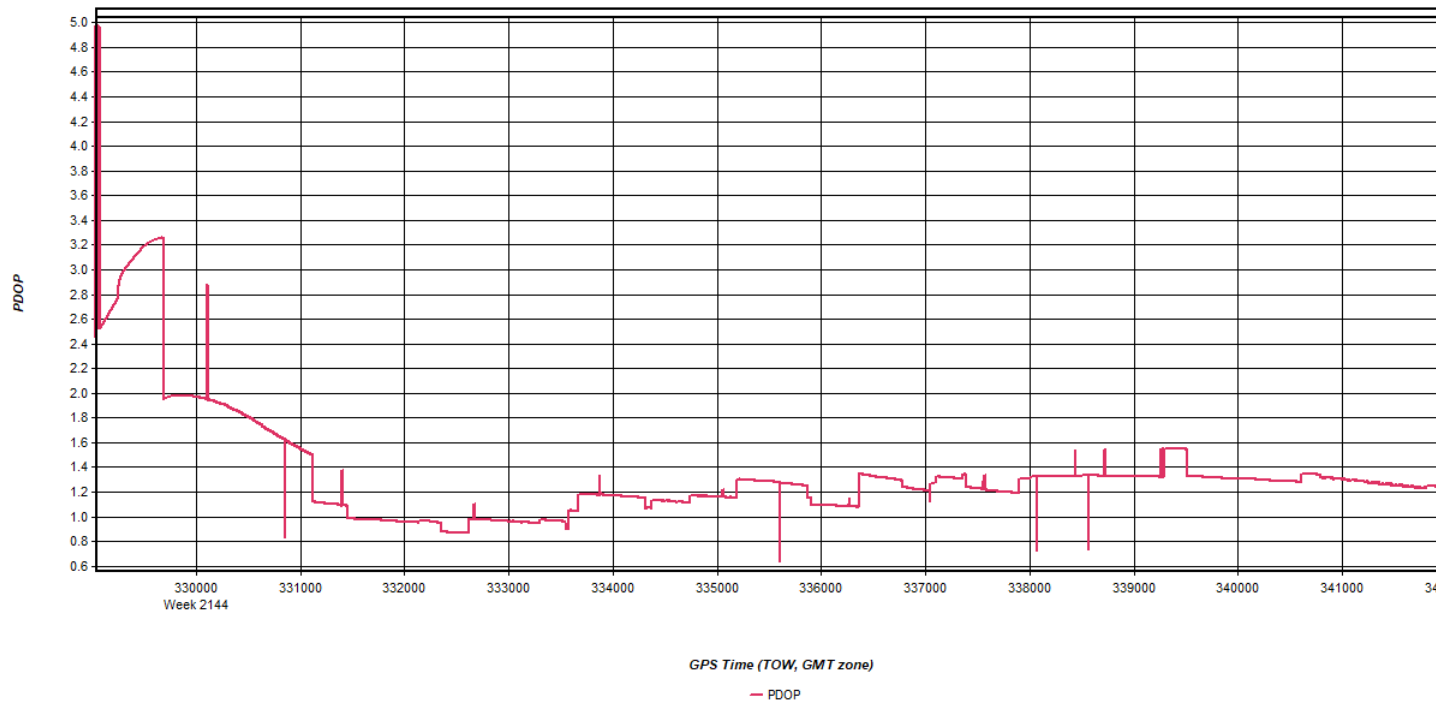


Figure 5: 20210210192257_28 [Smoothed TC Combined] - Estimated Position Accuracy Plot



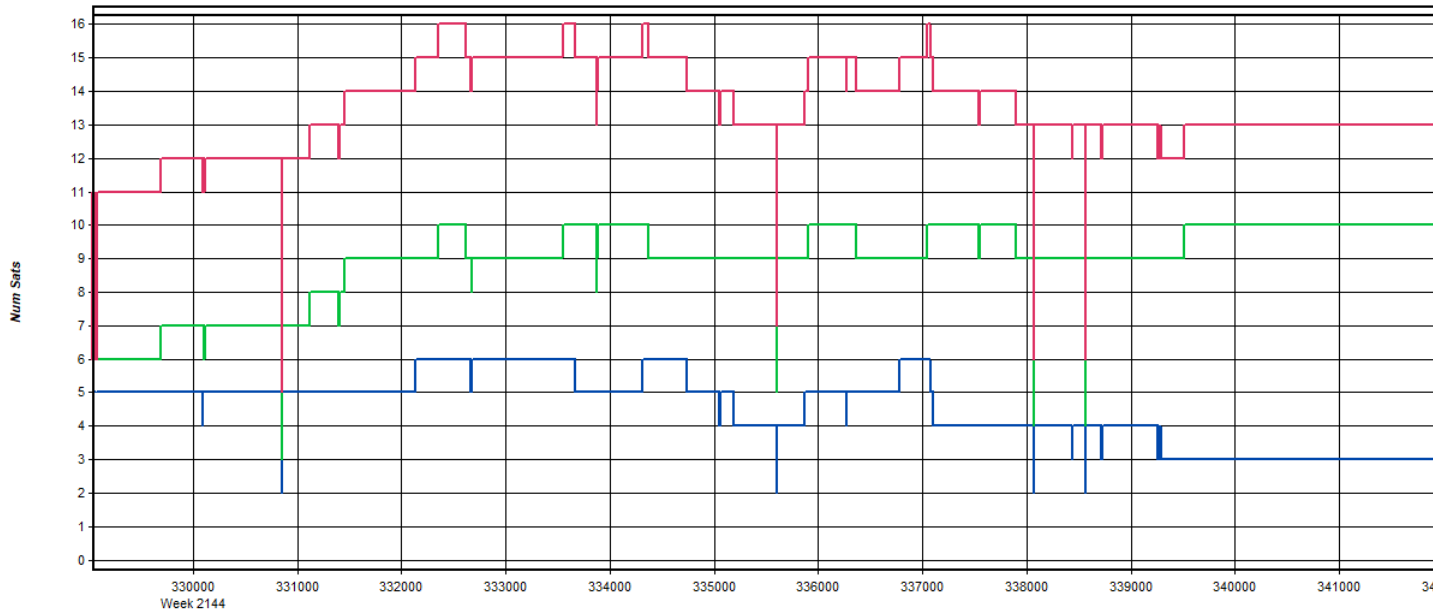
Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 6: 20210210192257_28 [Smoothed TC Combined] - PDOP Plot



Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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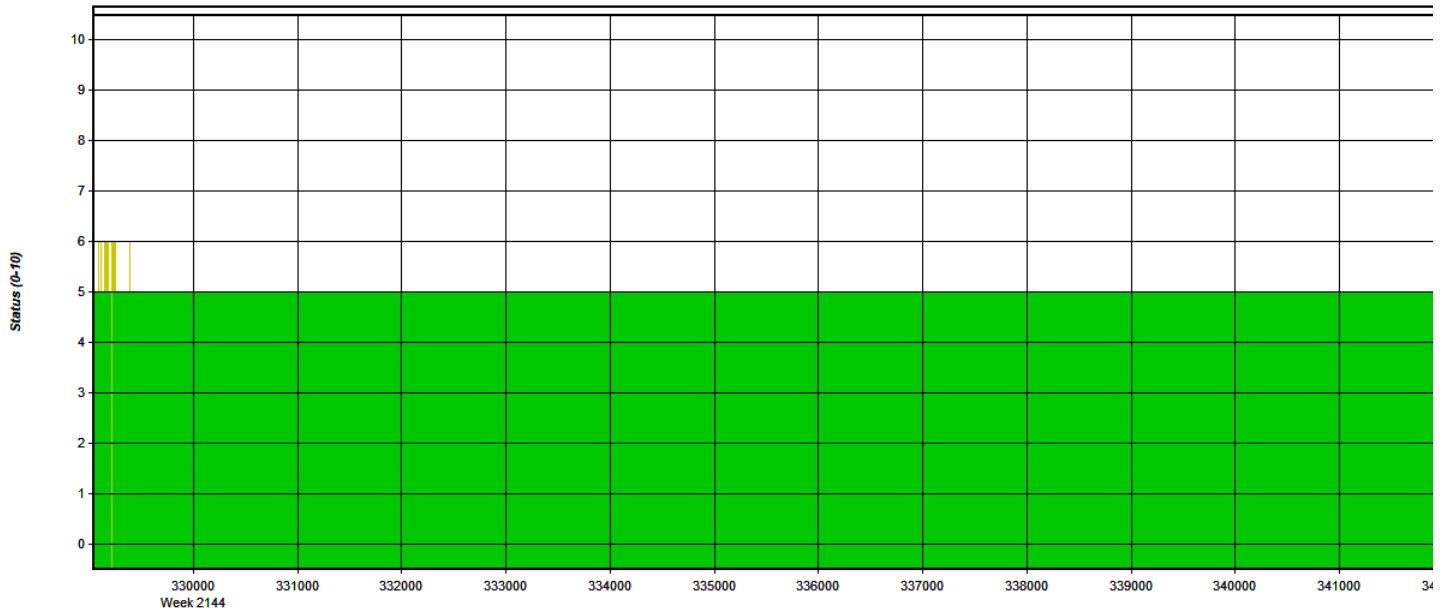
Figure 7: 20210210192257_28 [Smoothed TC Combined] - Number of Satellites Line Plot



GPS Time (TOW, GMT zone)
 - Num Sats - GPS - GLONASS - BeiDou - Galileo - QZSS

Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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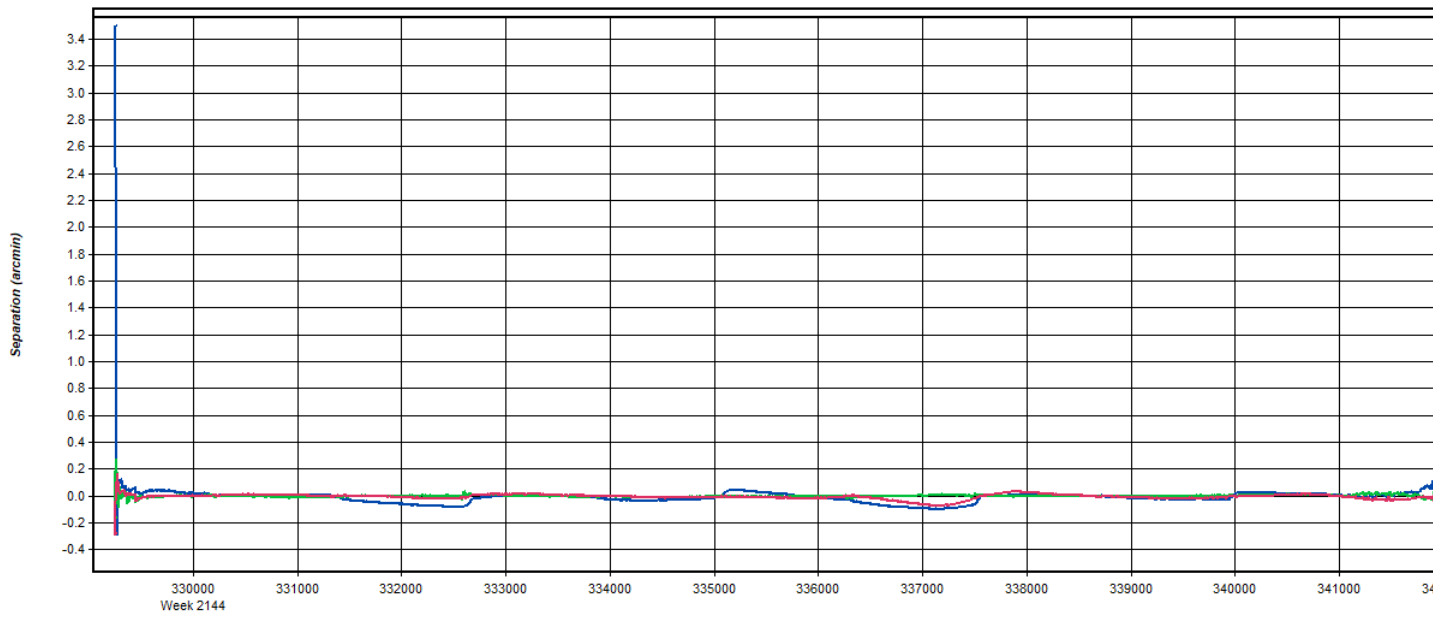
Figure 8: 20210210192257_28 [Smoothed TC Combined] - Status flag for IMU processing



GPS Time (TOW, GMT zone)
 - None - Align - Free - DMUIPT - PHSUPT - GPSUPT - ZUPT - CUPT - GVUPT - PSR - CONSTRAINT

Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 9: 20210210192257_28 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

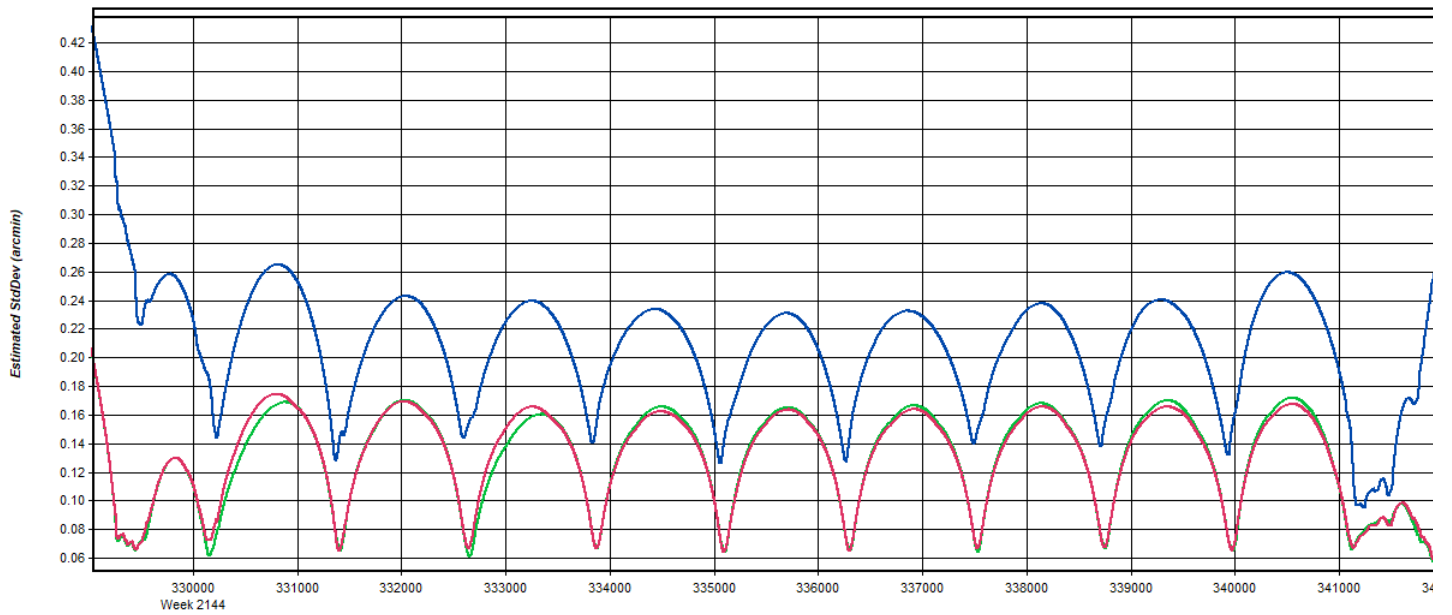


GPS Time (TOW, GMT zone)

Roll Pitch Heading/Az

Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 10: 20210210192257_28 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

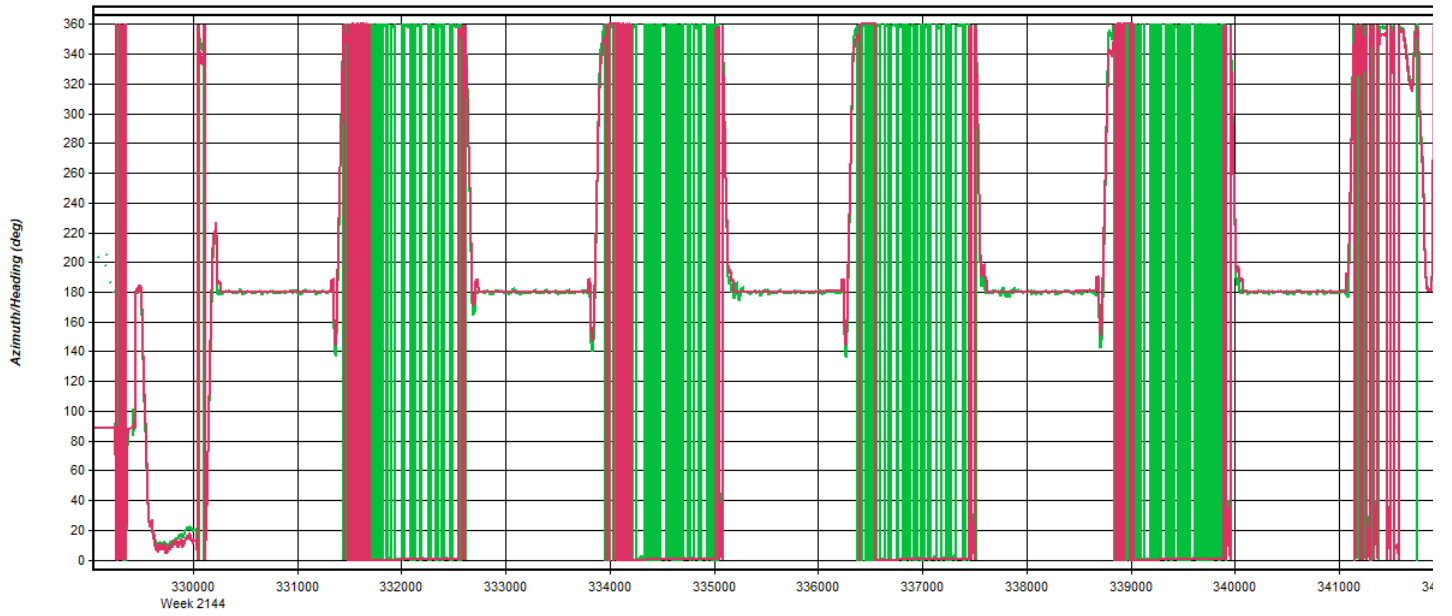


GPS Time (TOW, GMT zone)

Roll Pitch Heading/Az

Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 11: 20210210192257_28 [Smoothed TC Combined] - Azimuth Plot

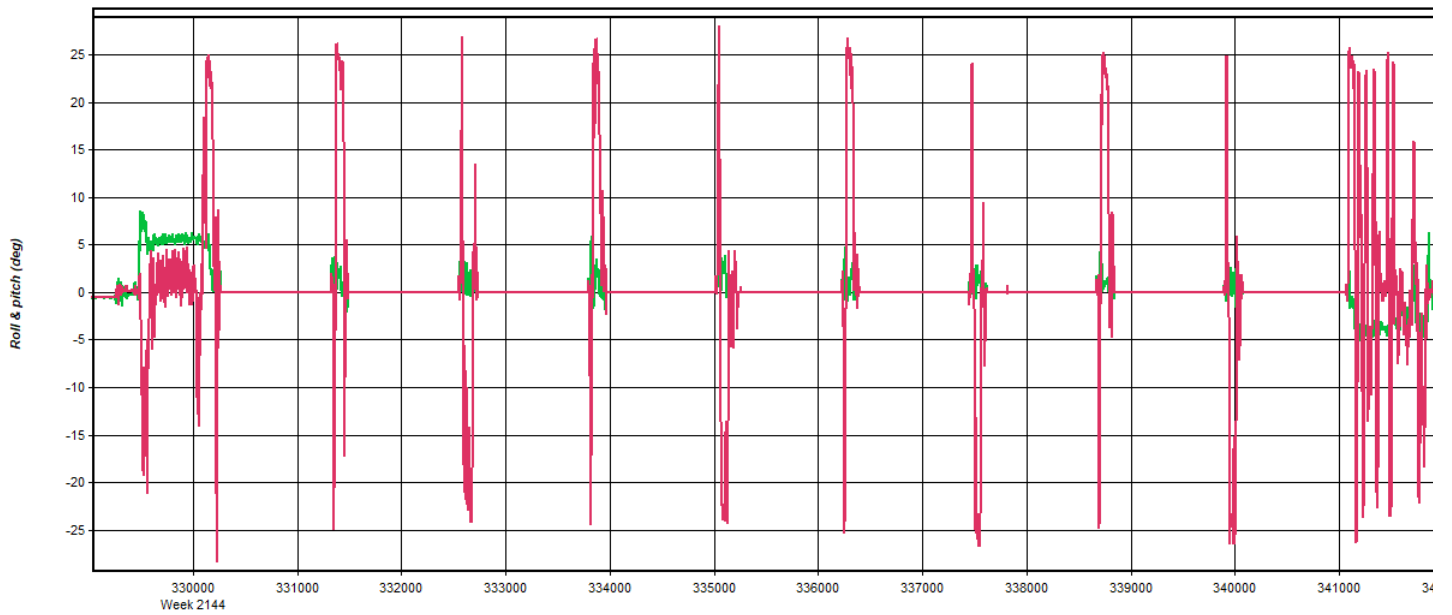


GPS Time (TOW, GMT zone)

— Heading/Azimuth — GPS-COG

Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 12: 20210210192257_28 [Smoothed TC Combined] - Roll & Pitch Plot

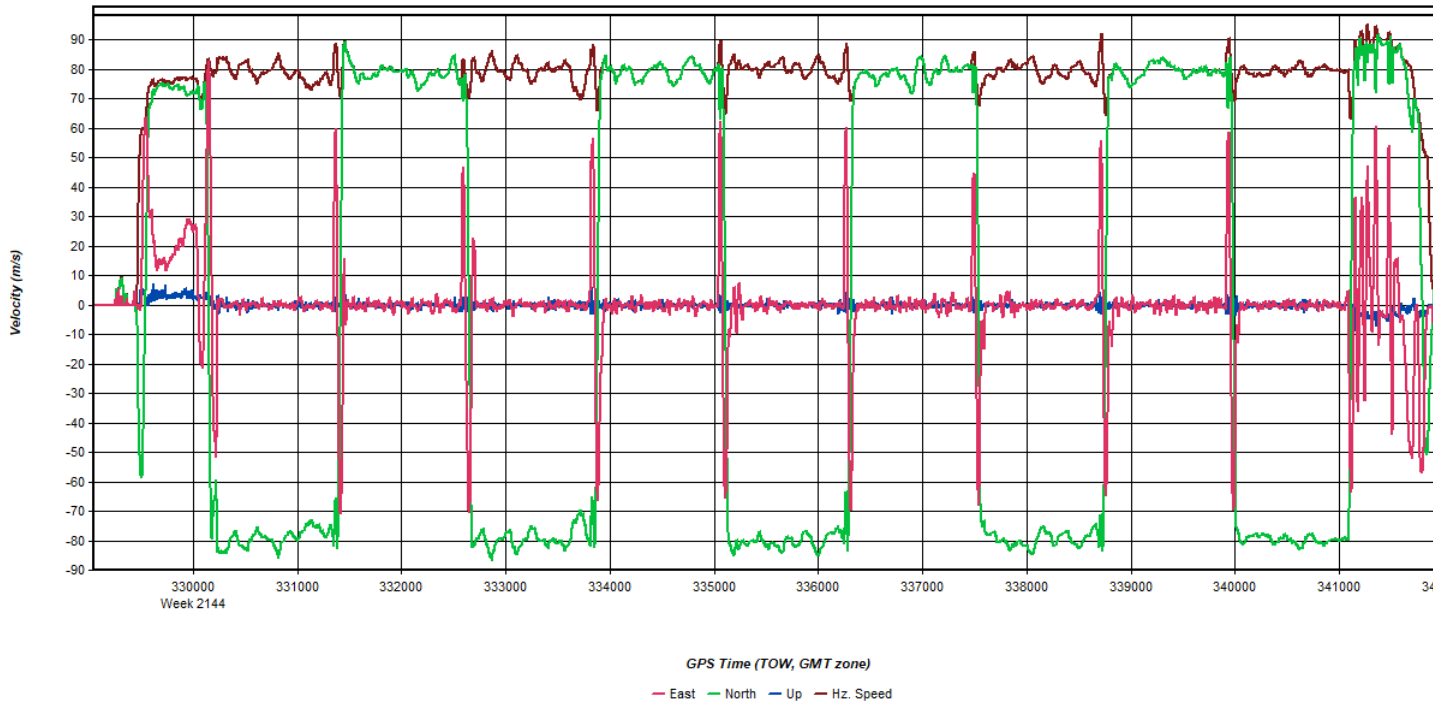


GPS Time (TOW, GMT zone)

— Roll — Pitch

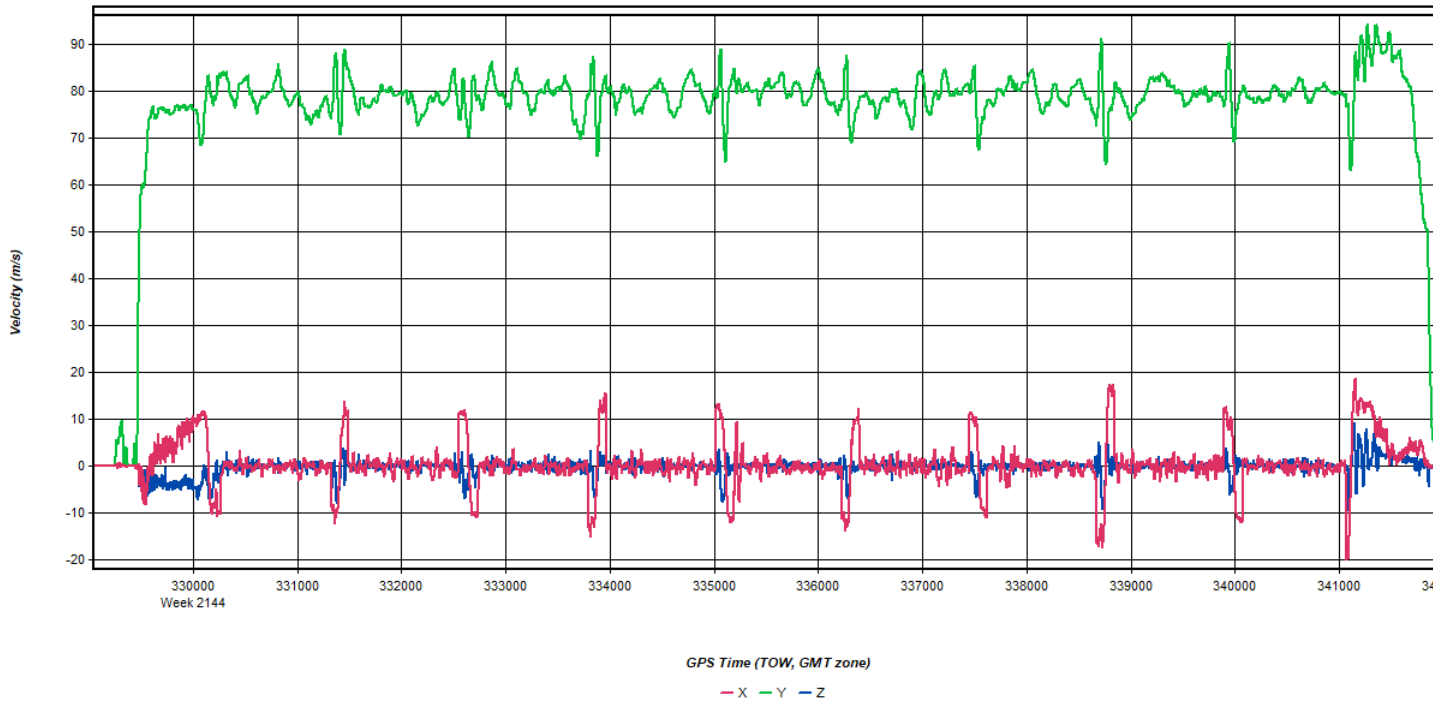
Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 13: 20210210192257_28 [Smoothed TC Combined] - Velocity Profile Plot



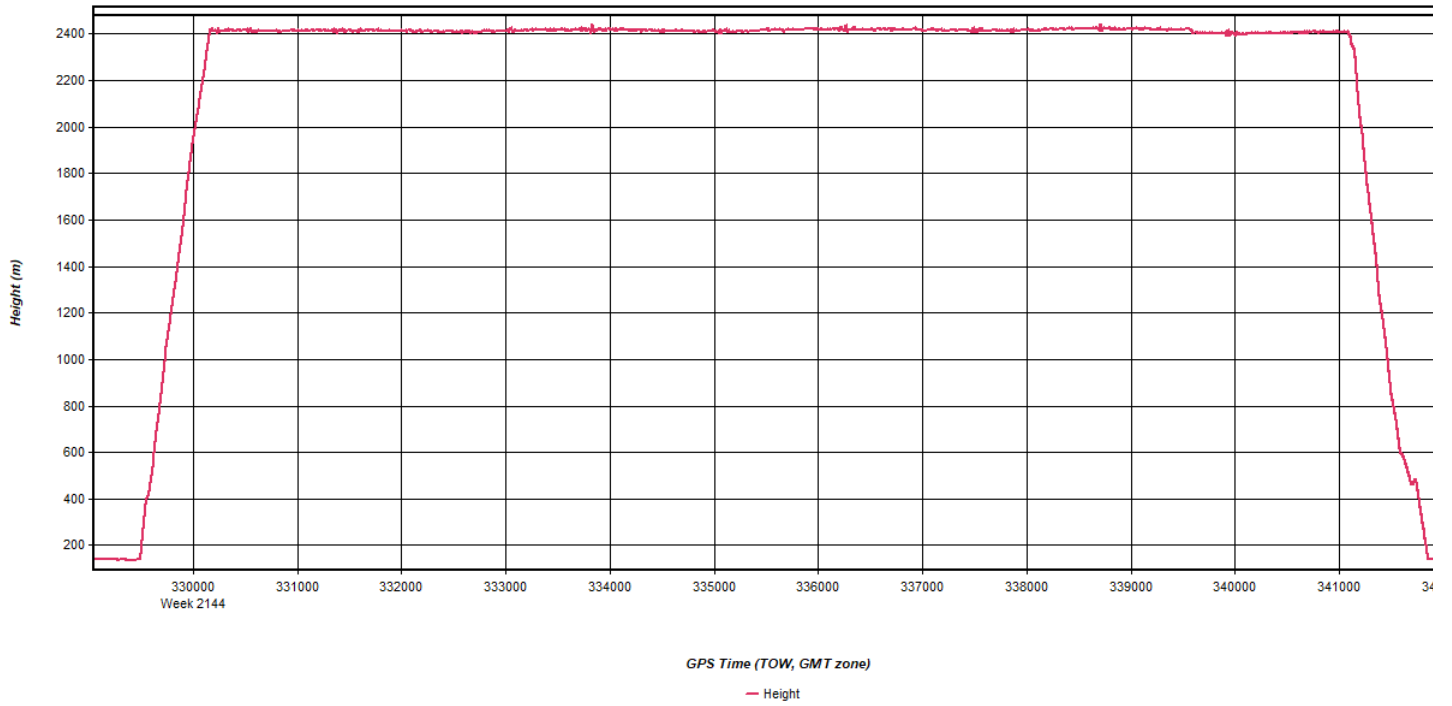
Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 14: 20210210192257_28 [Smoothed TC Combined] - Body Frame Velocity Plot



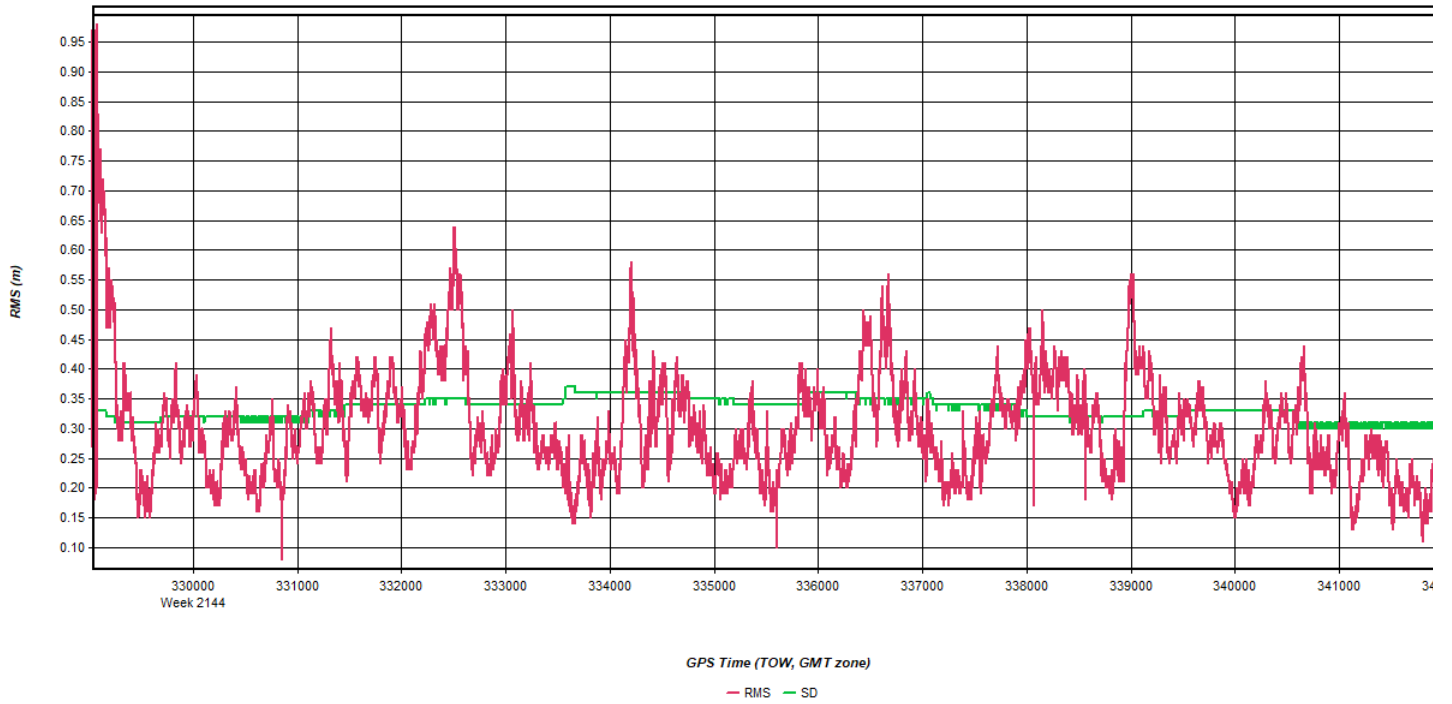
Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 15: 20210210192257_28 [Smoothed TC Combined] - Height Profile Plot



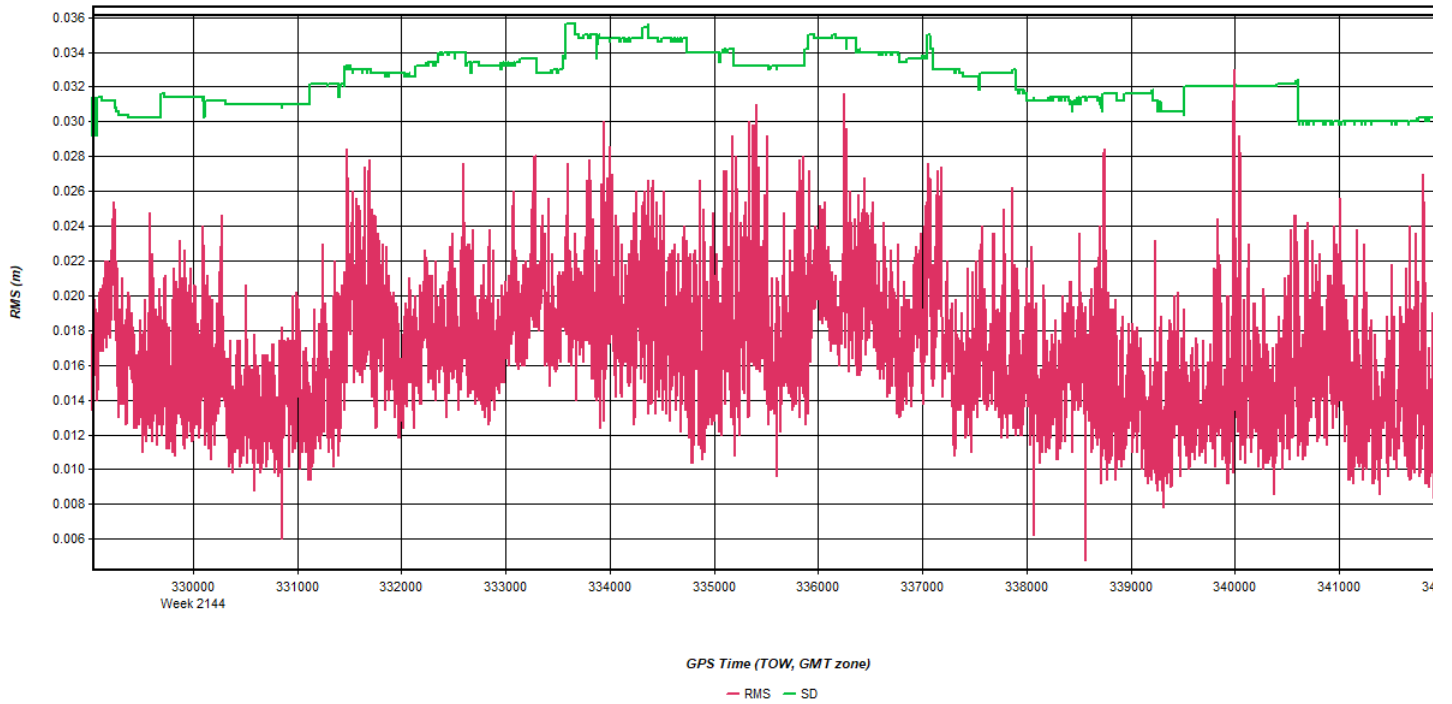
Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 16: 20210210192257_28 [Smoothed TC Combined] - C/A Code Residual RMS Plot



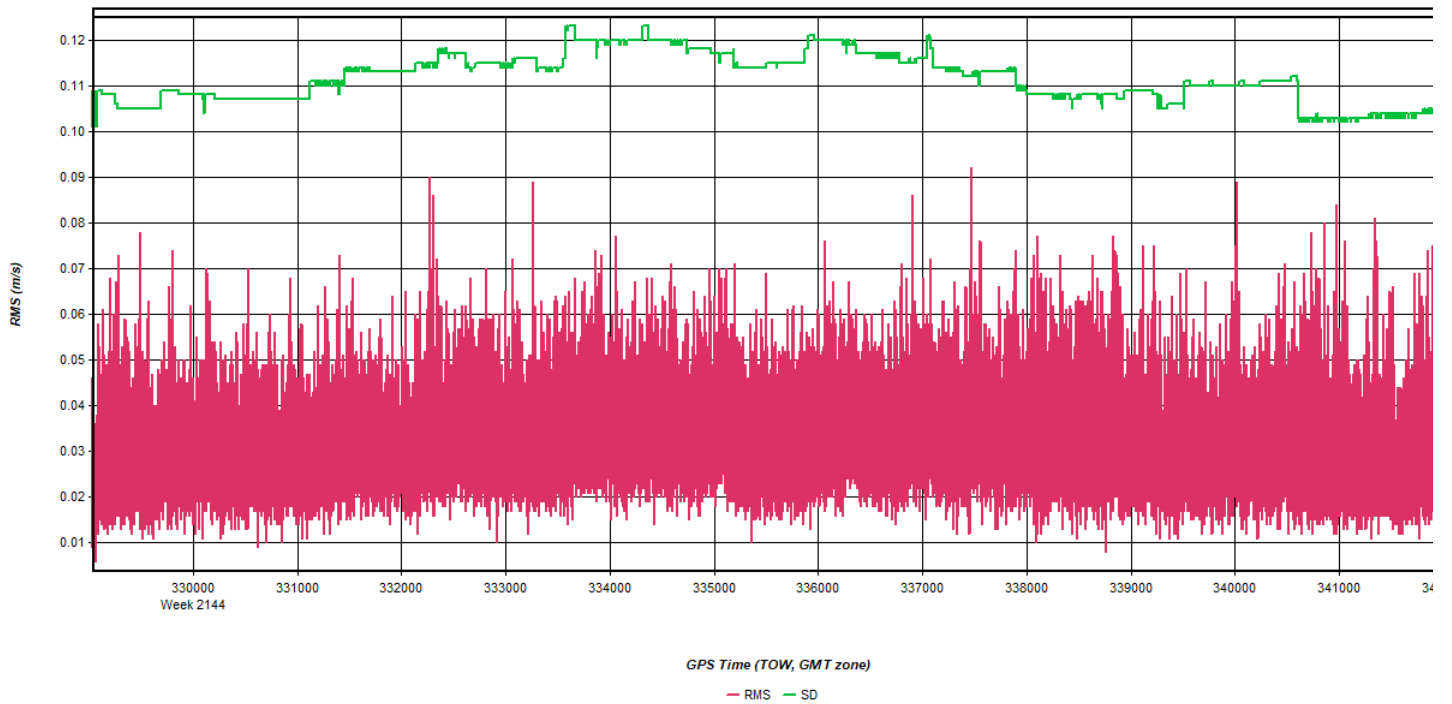
Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 17: 20210210192257_28 [Smoothed TC Combined] - Carrier Residual RMS Plot



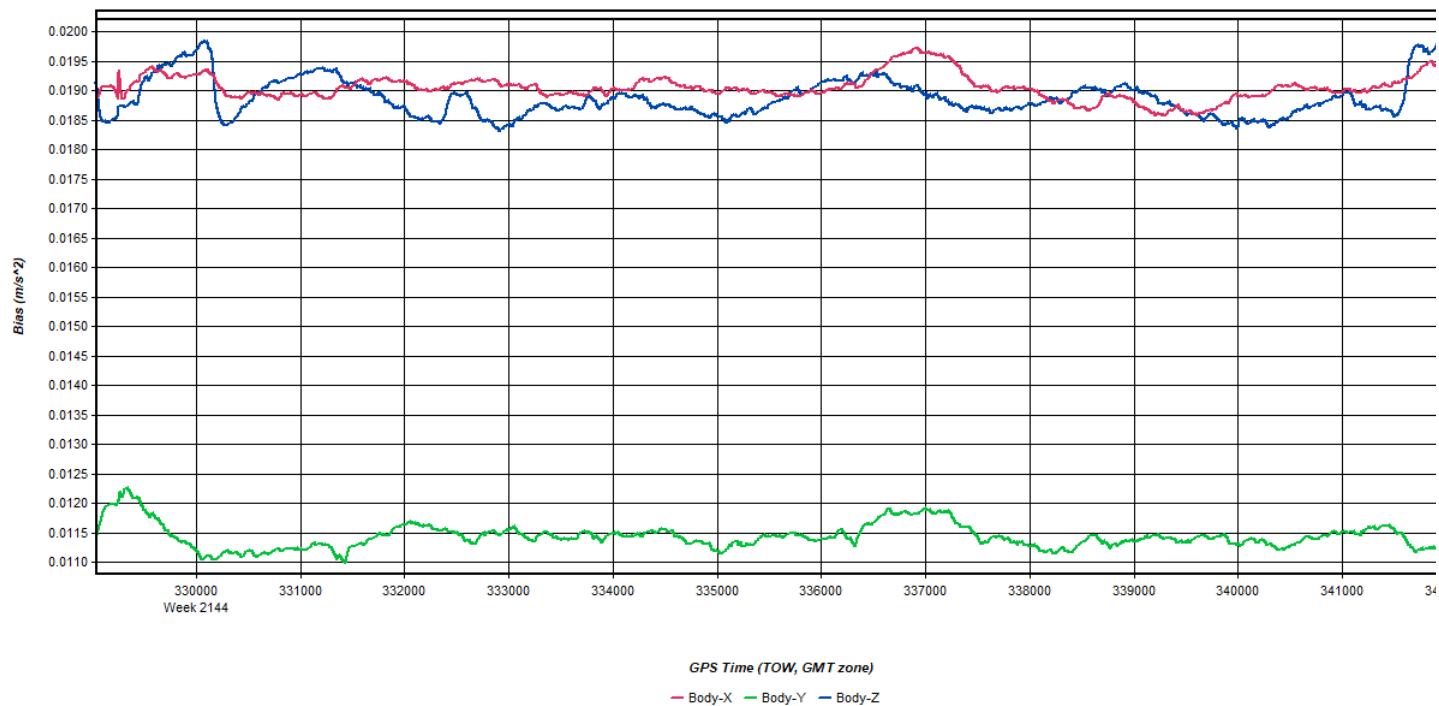
Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 18: 20210210192257_28 [Smoothed TC Combined] - Doppler Residual RMS Plot



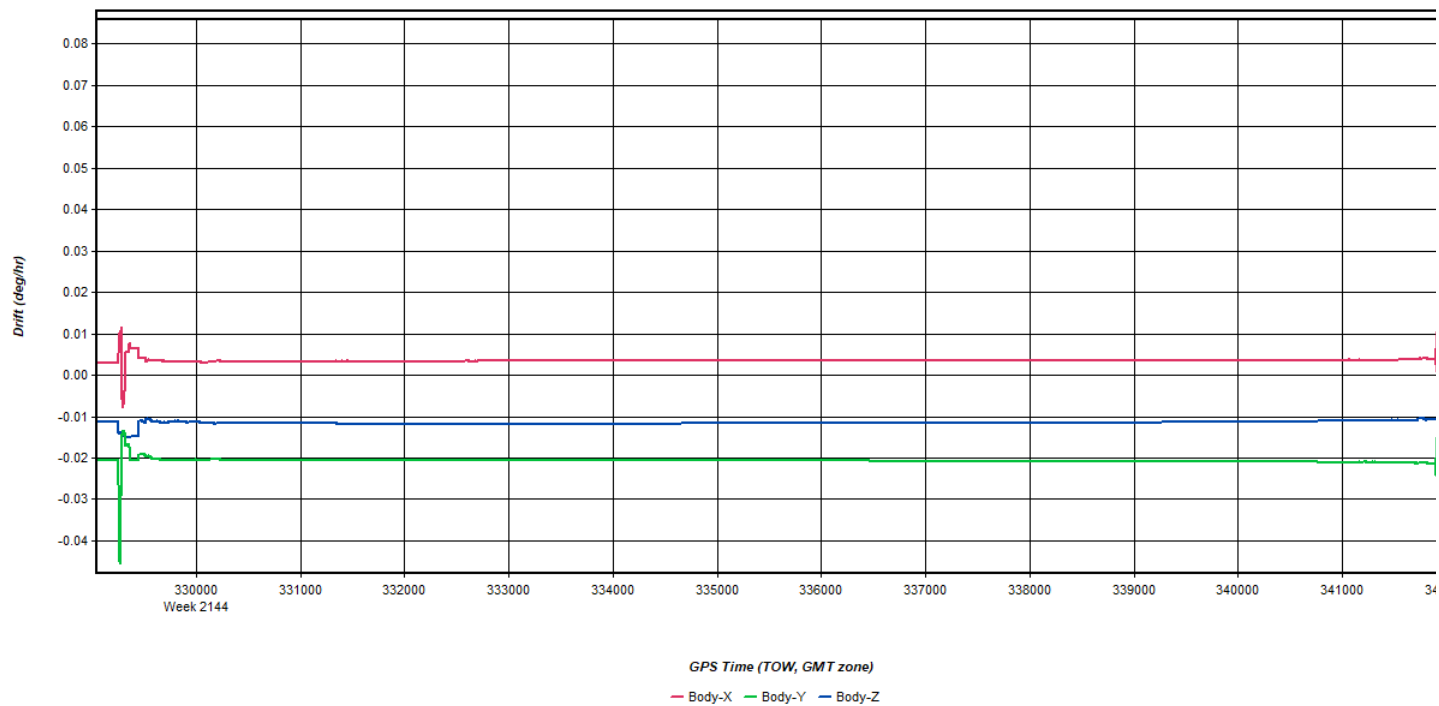
Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 19: 20210210192257_28 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Figure 20: 20210210192257_28 [Smoothed TC Combined] - Gyro Drift Plot

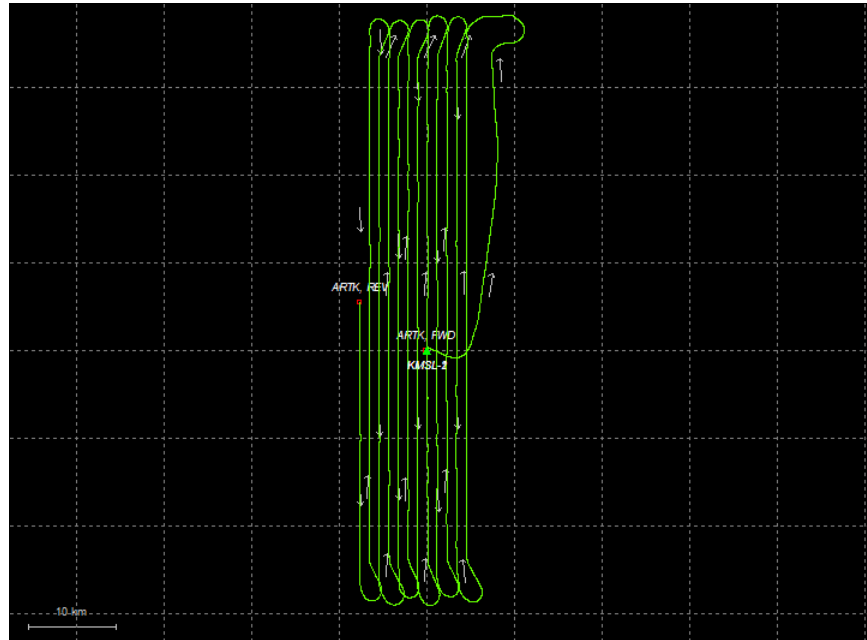


Process	20210210192257_28	by Unknown	on 2/15/2021	at 10:01:39
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Output Results for 20210210231922_29

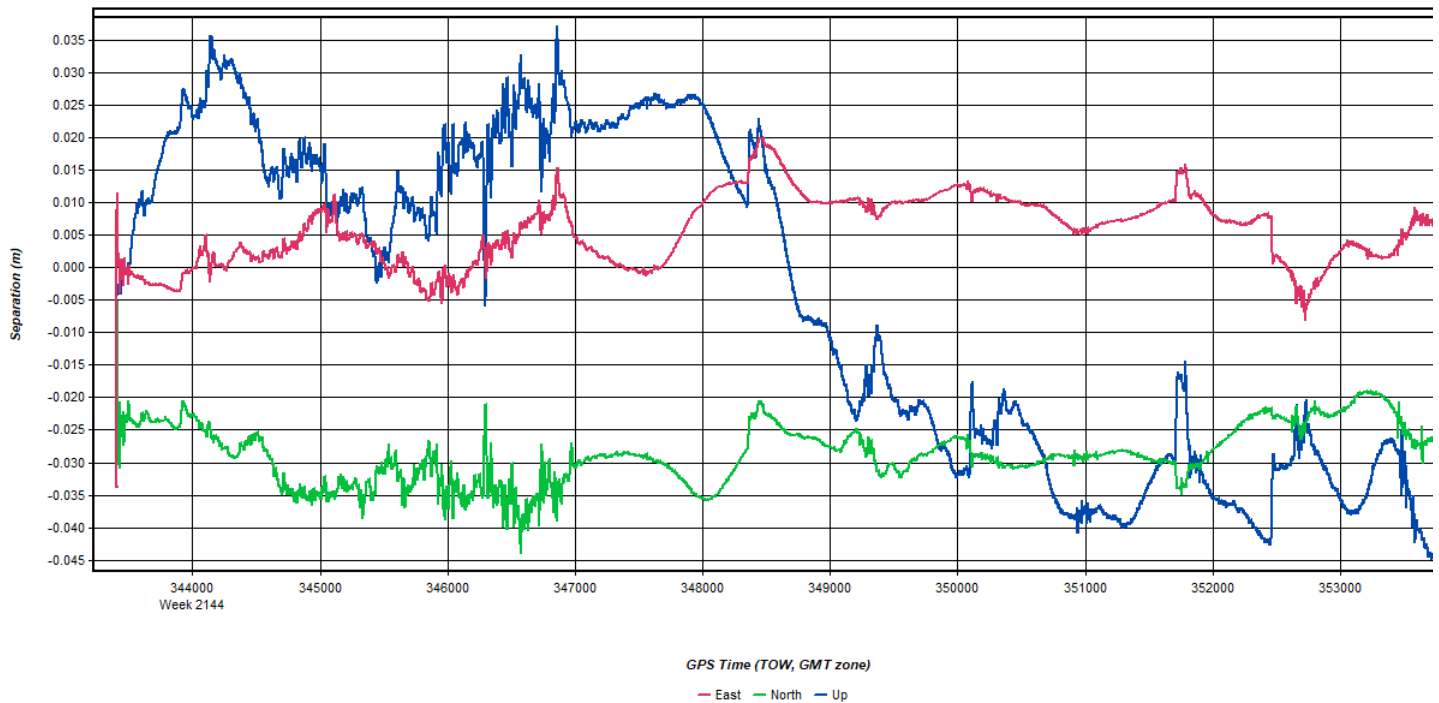
Inertial Explorer Version 8.90.2124
02/15/2021

Figure 1: Smoothed TC Combined - Map



Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 2: 20210210231922_29 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 3: 20210210231922_29 [Smoothed TC Combined] - Float or Fixed Ambiguity

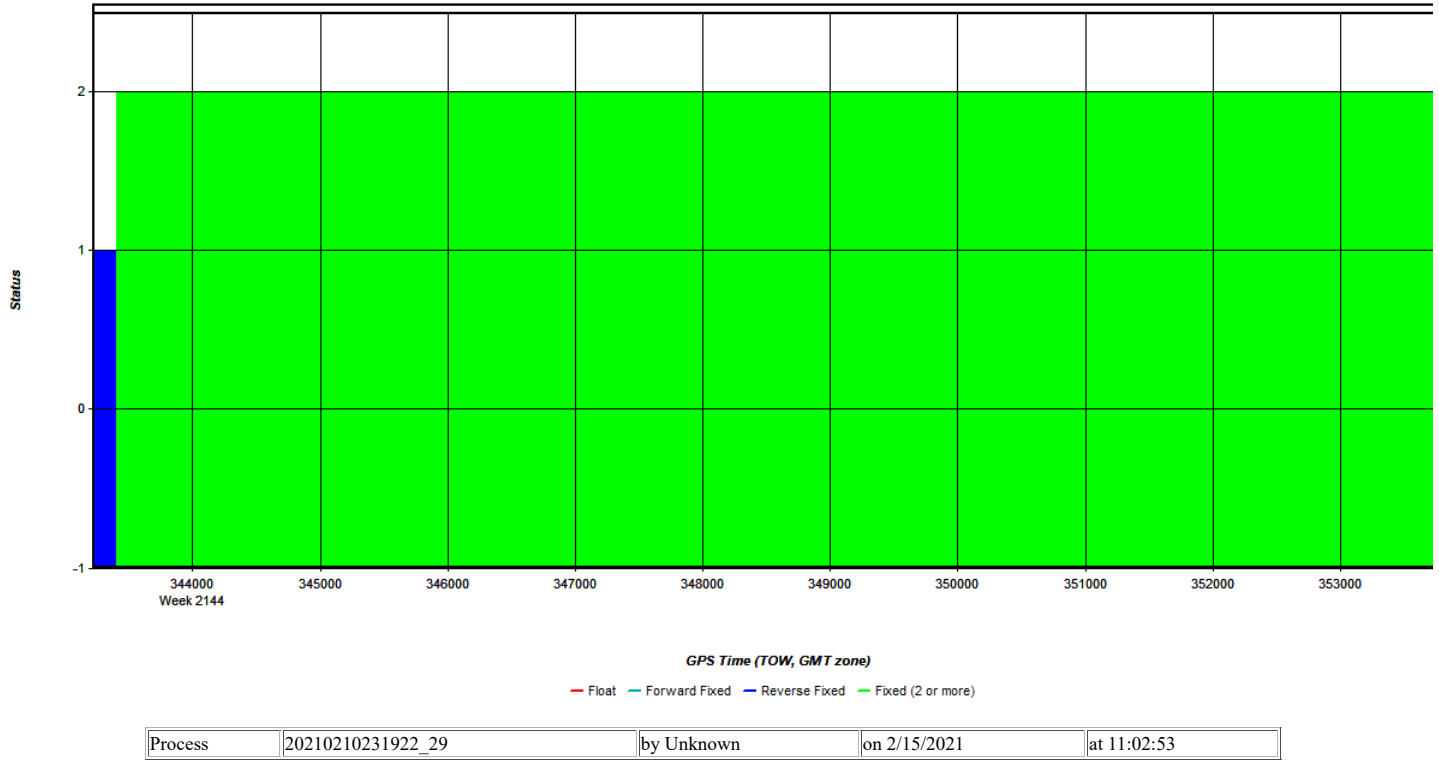


Figure 4: 20210210231922_29 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

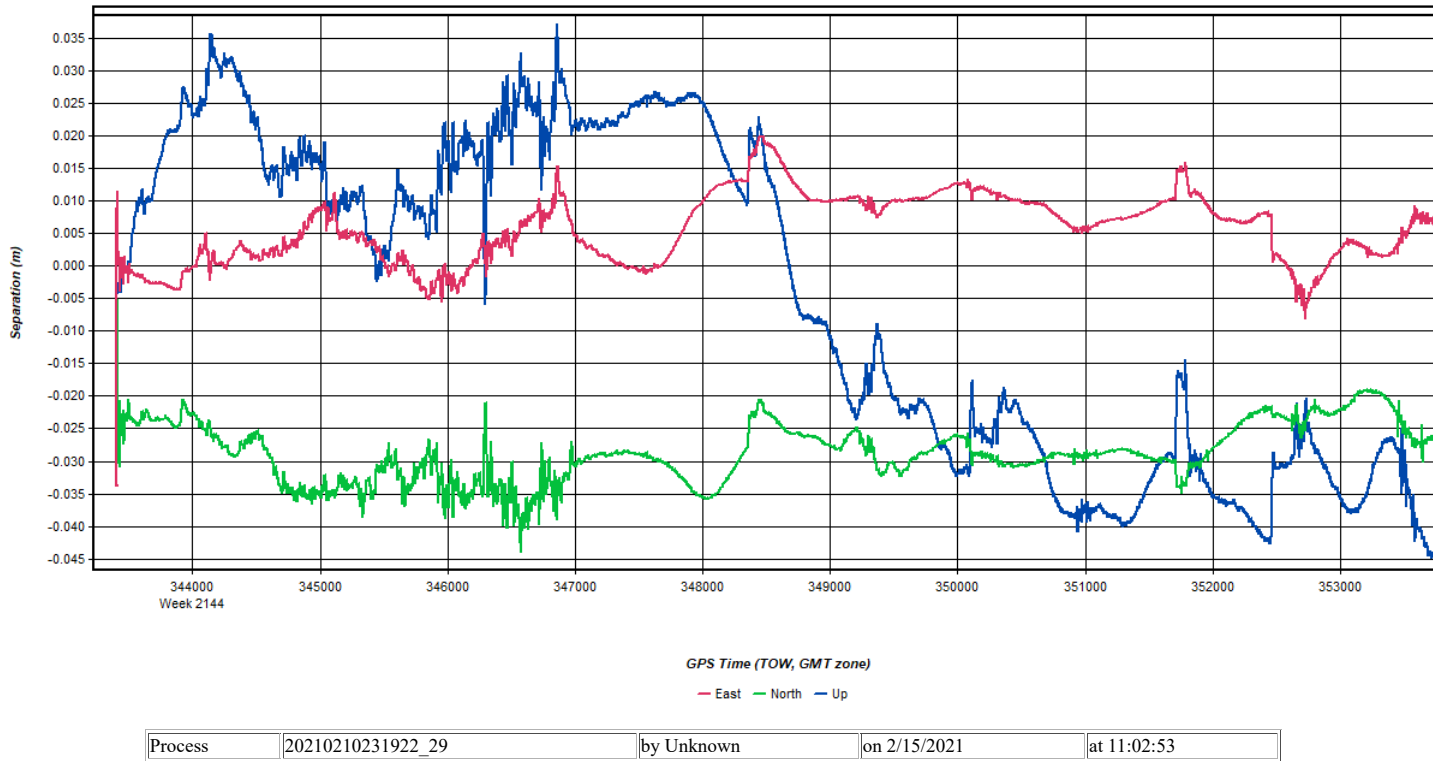
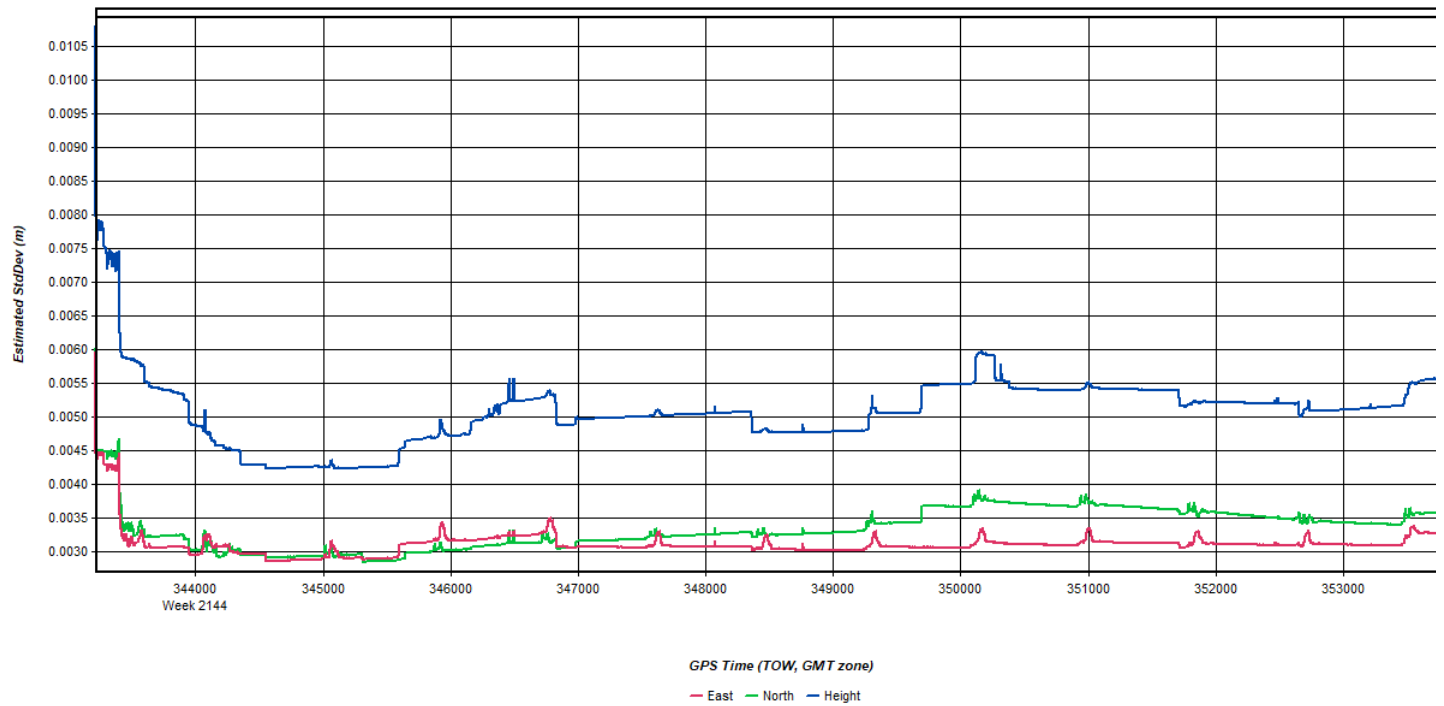
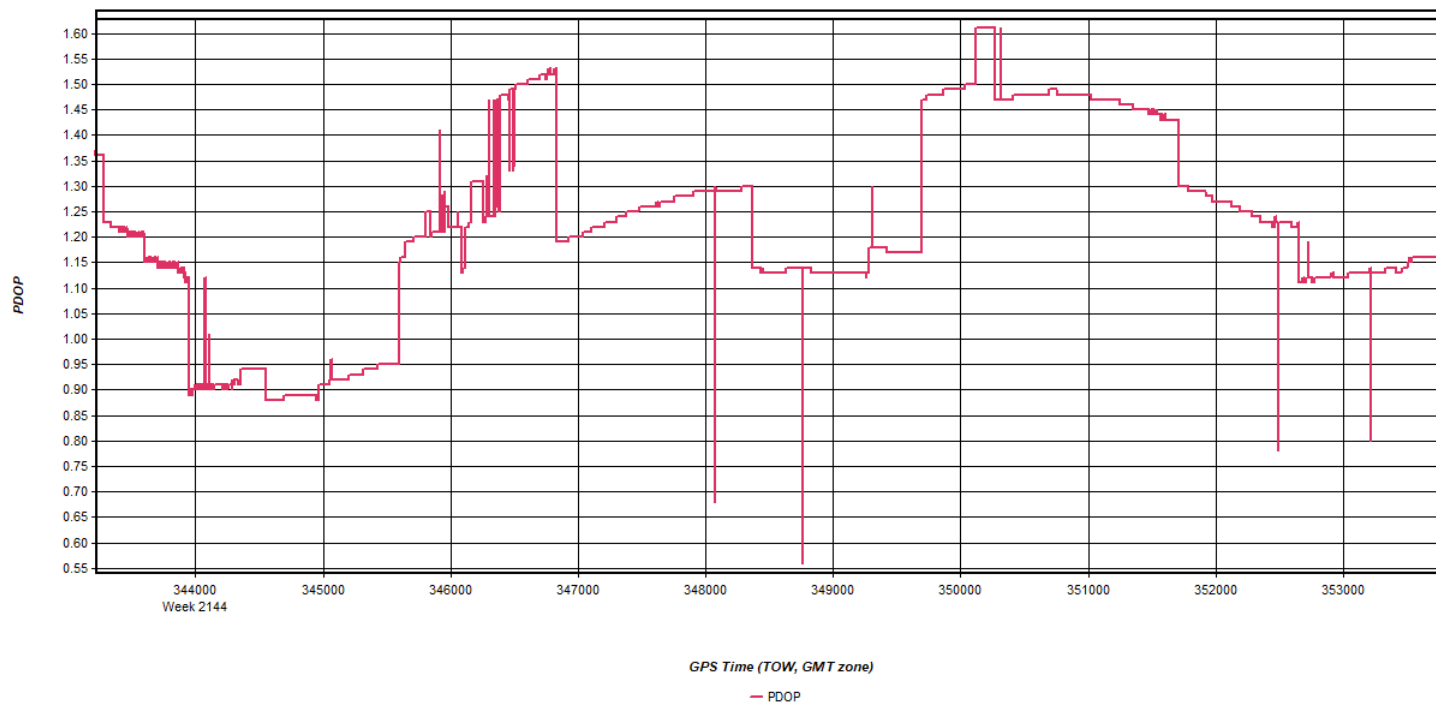


Figure 5: 20210210231922_29 [Smoothed TC Combined] - Estimated Position Accuracy Plot



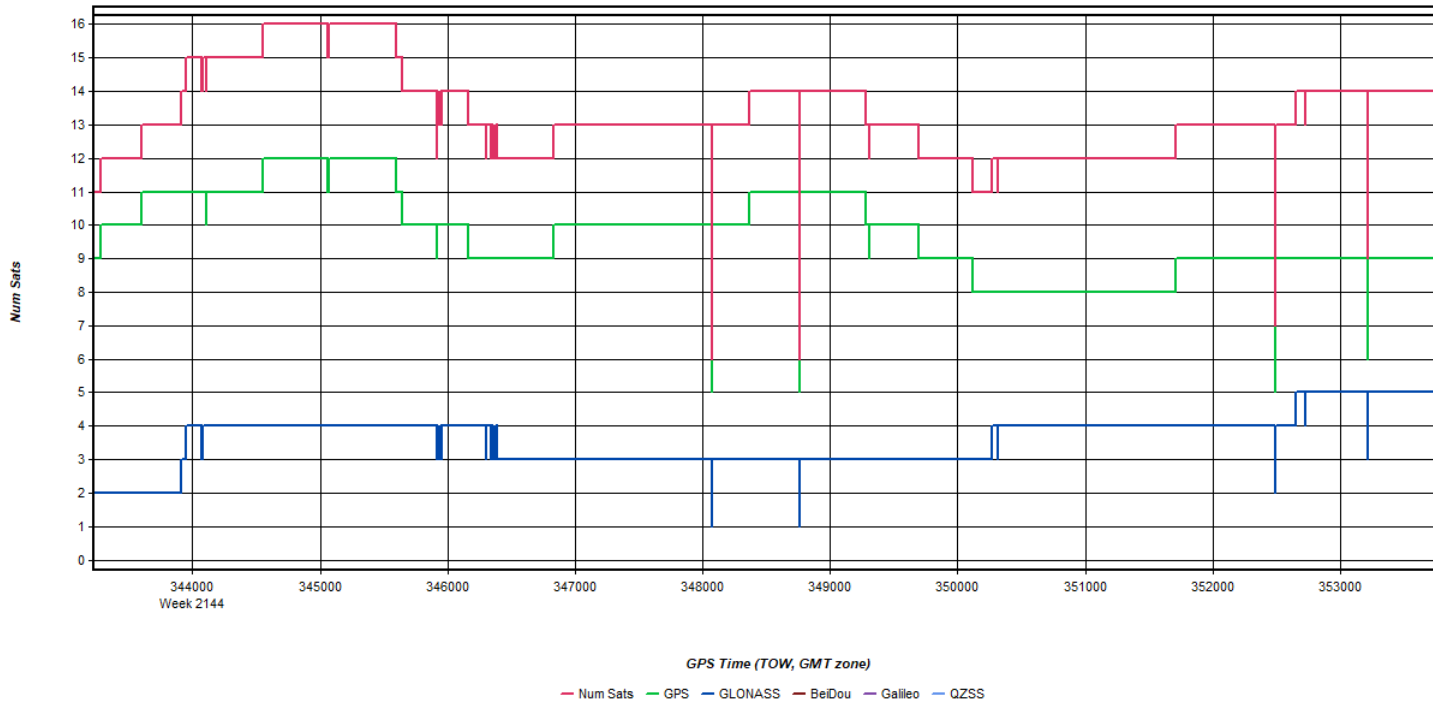
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 6: 20210210231922_29 [Smoothed TC Combined] - PDOP Plot



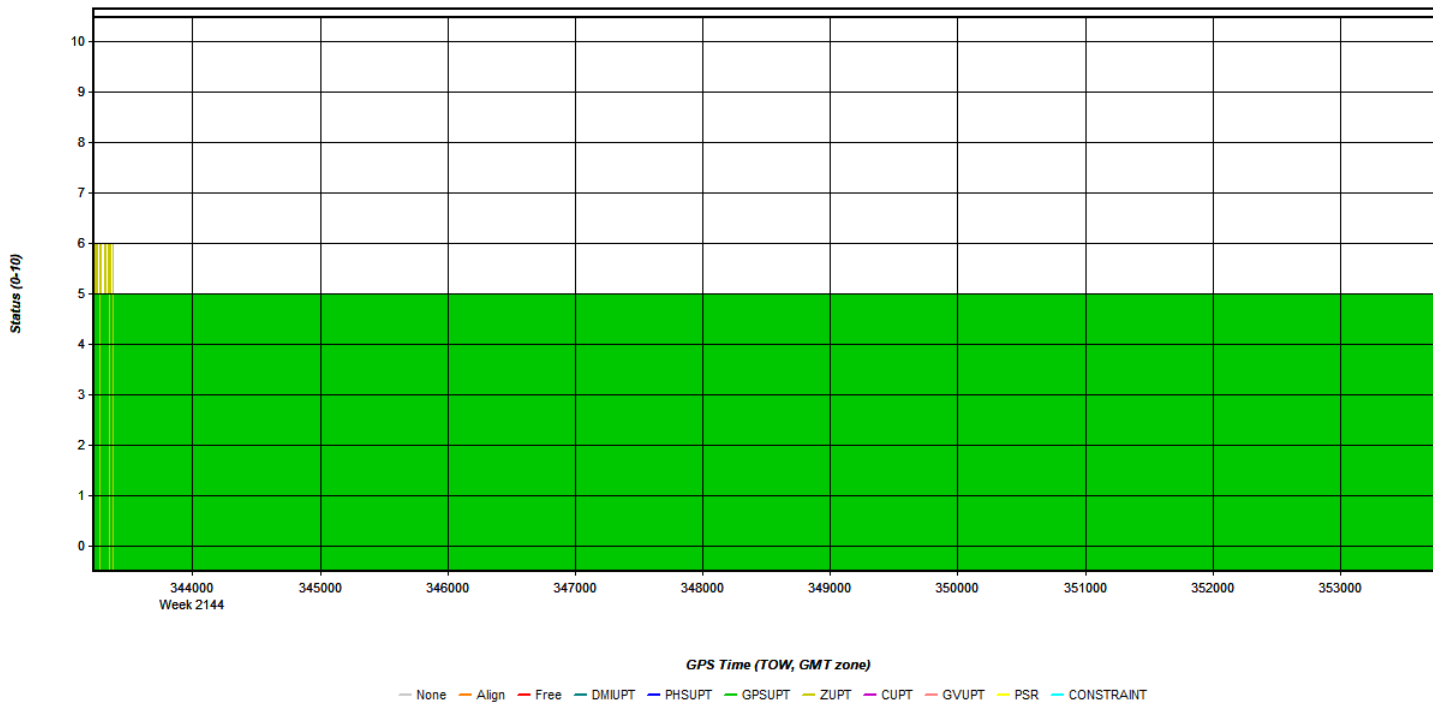
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 7: 20210210231922_29 [Smoothed TC Combined] - Number of Satellites Line Plot



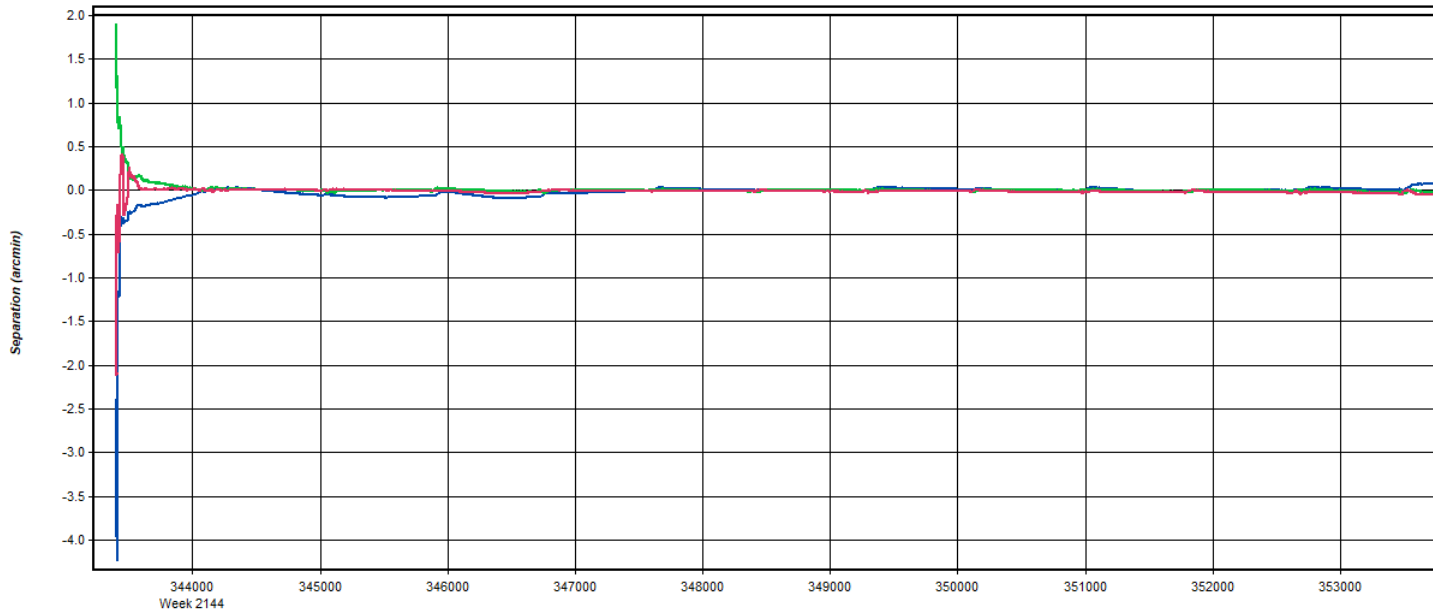
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 8: 20210210231922_29 [Smoothed TC Combined] - Status flag for IMU processing



Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 9: 20210210231922_29 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

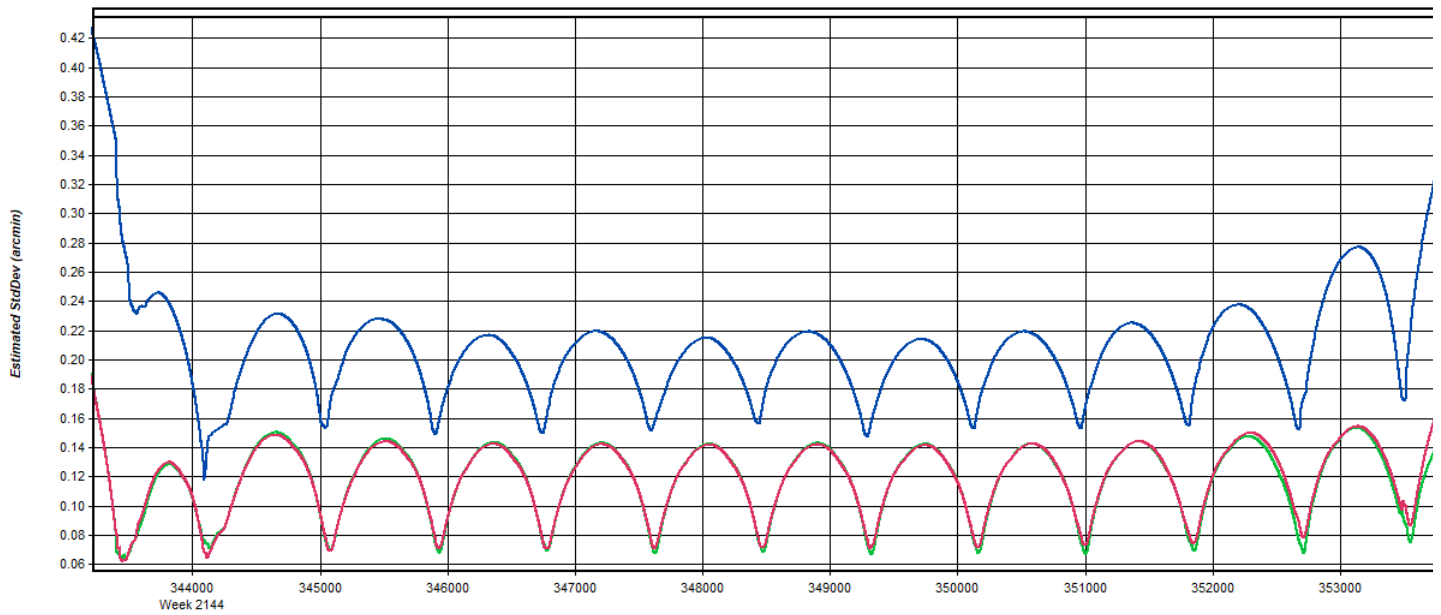


GPS Time (TOW, GMT zone)

— Roll — Pitch — Heading/Az

Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 10: 20210210231922_29 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

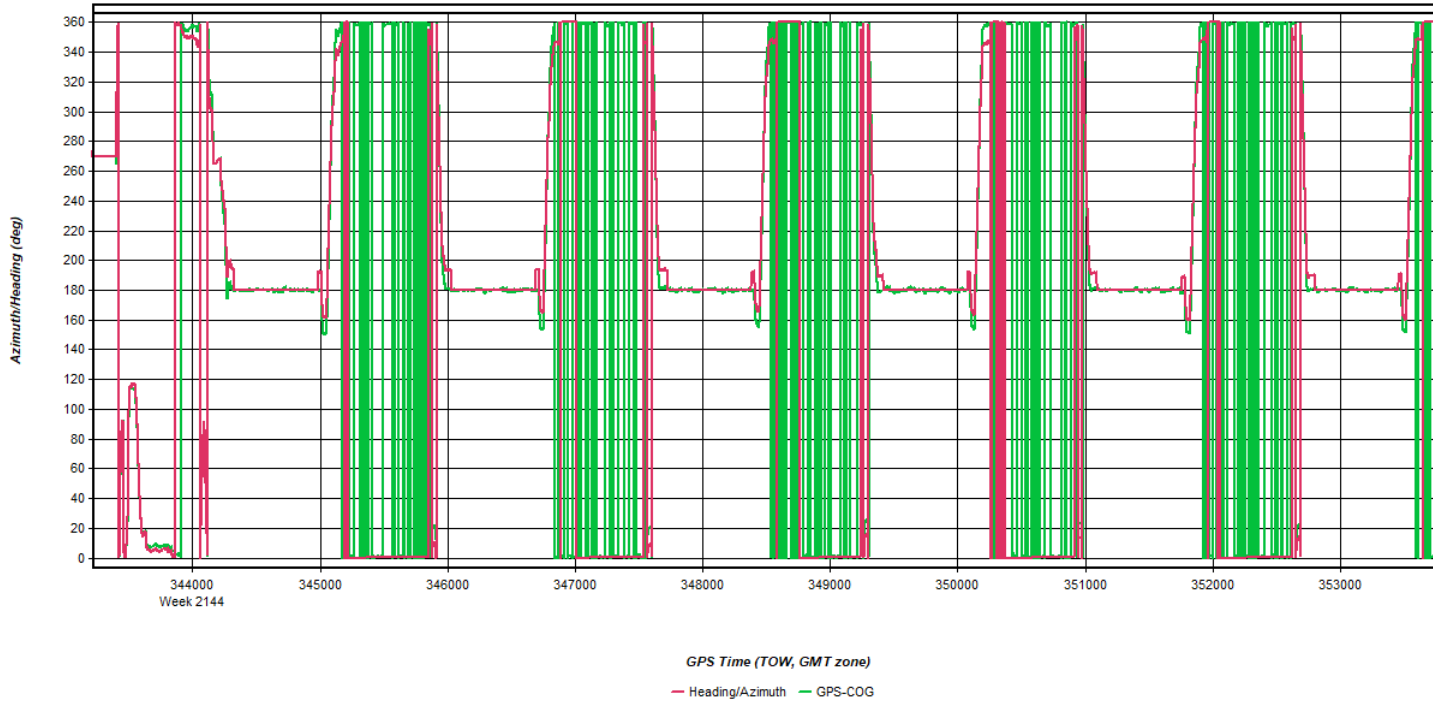


GPS Time (TOW, GMT zone)

— Roll — Pitch — Heading/Az

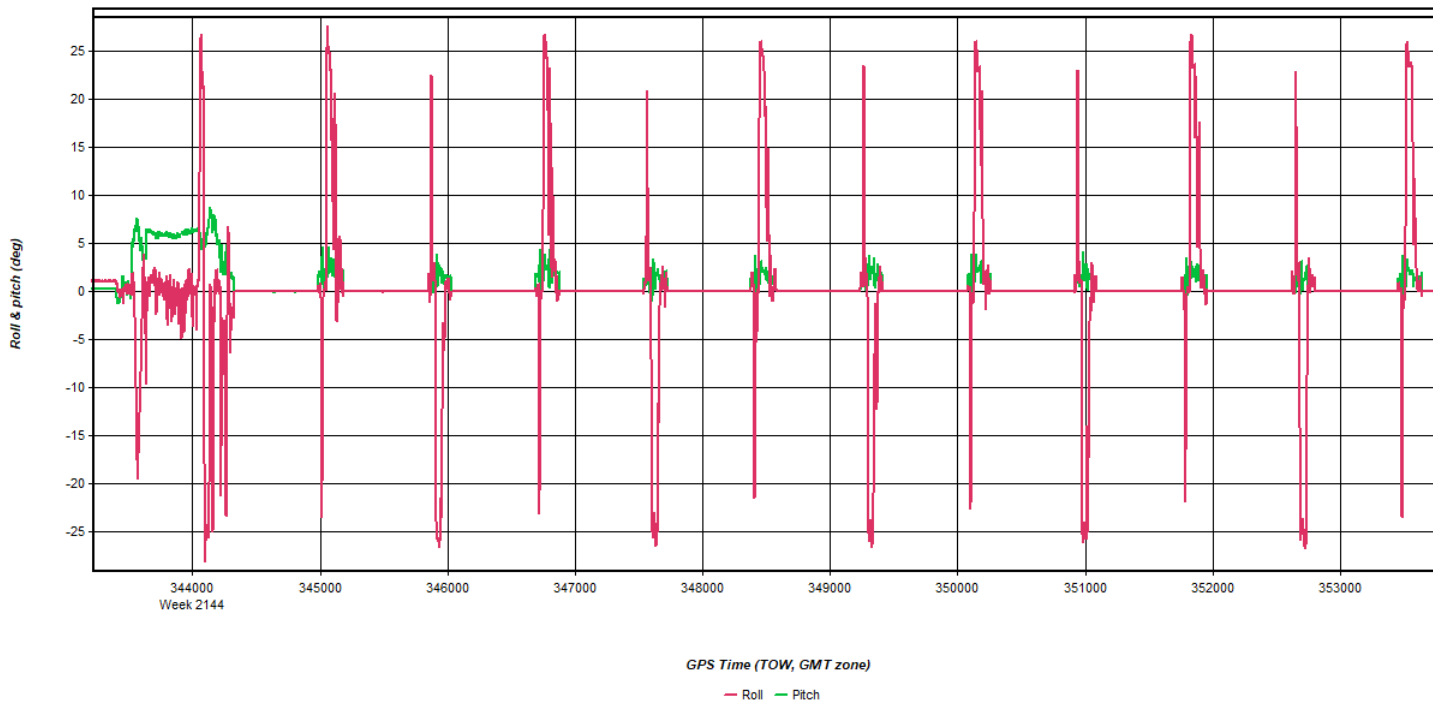
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 11: 20210210231922_29 [Smoothed TC Combined] - Azimuth Plot



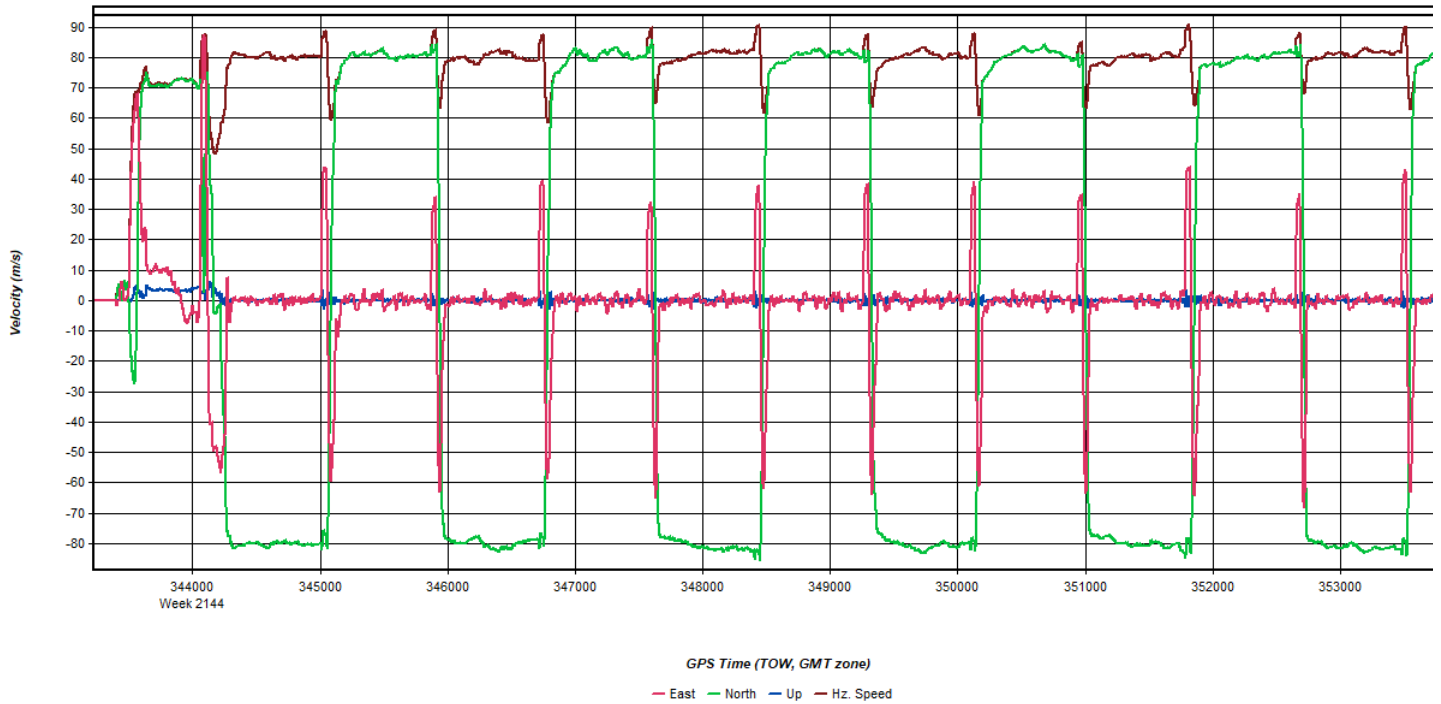
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 12: 20210210231922_29 [Smoothed TC Combined] - Roll & Pitch Plot



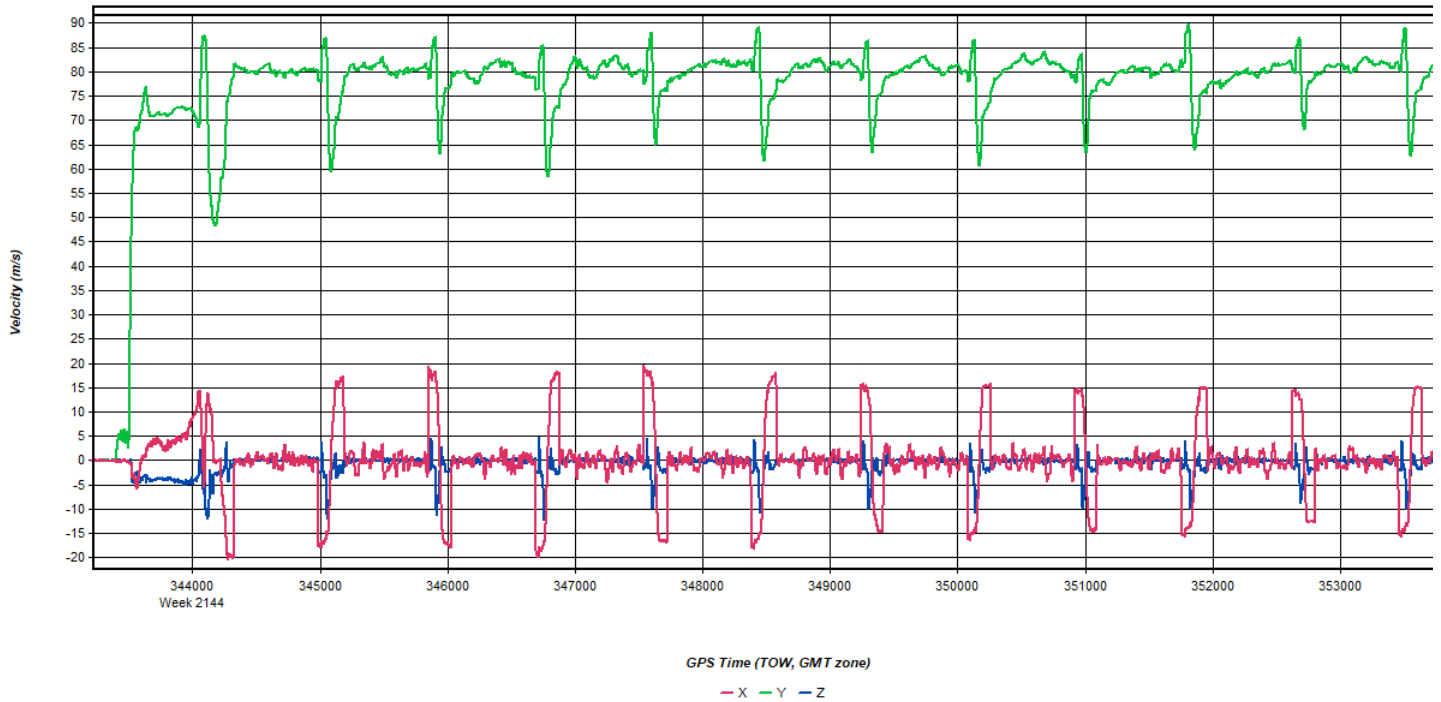
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 13: 20210210231922_29 [Smoothed TC Combined] - Velocity Profile Plot



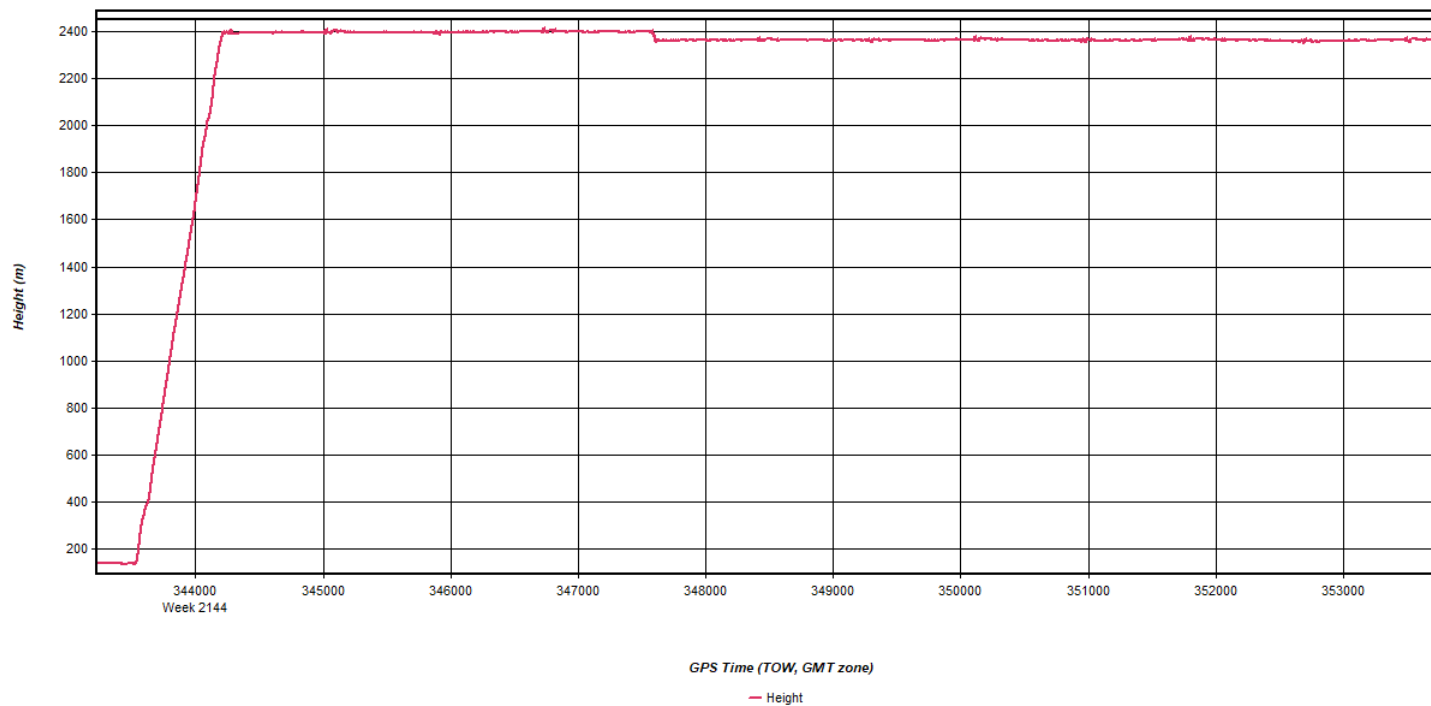
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 14: 20210210231922_29 [Smoothed TC Combined] - Body Frame Velocity Plot



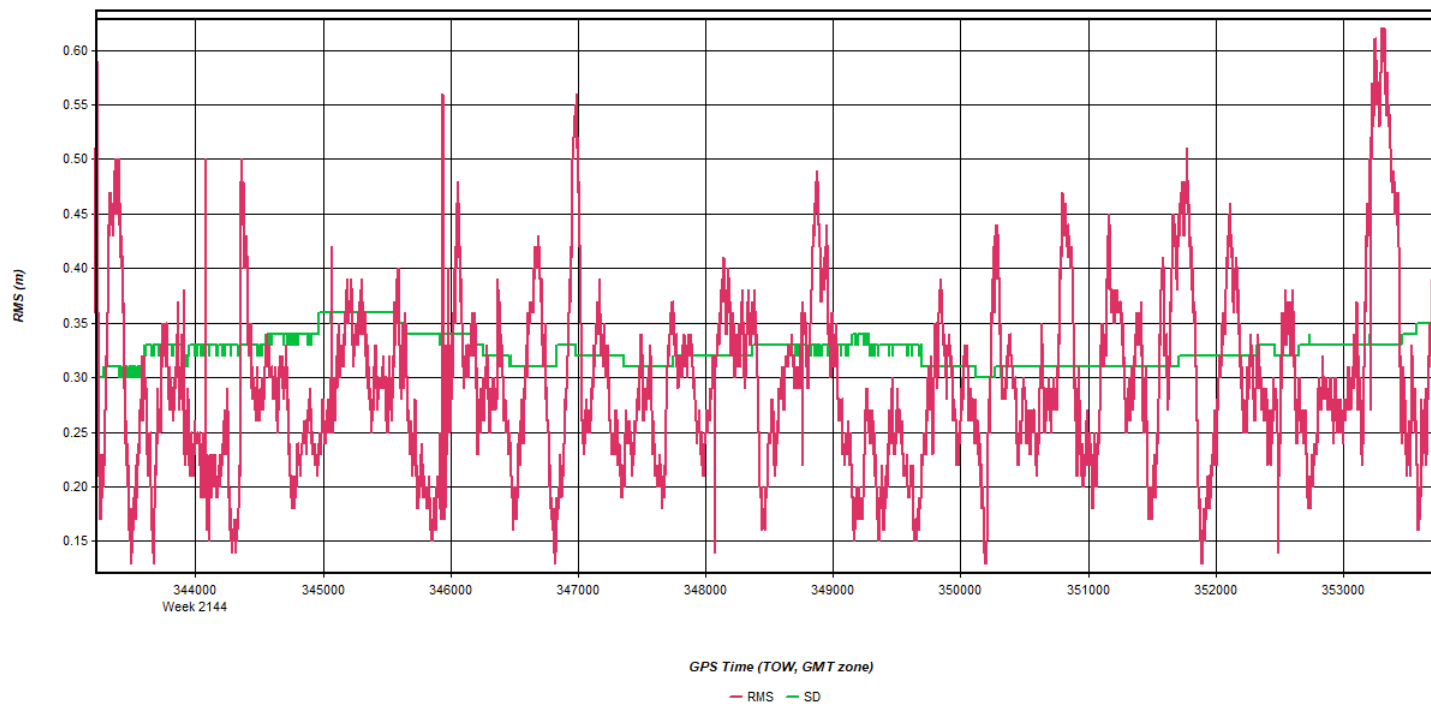
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 15: 20210210231922_29 [Smoothed TC Combined] - Height Profile Plot



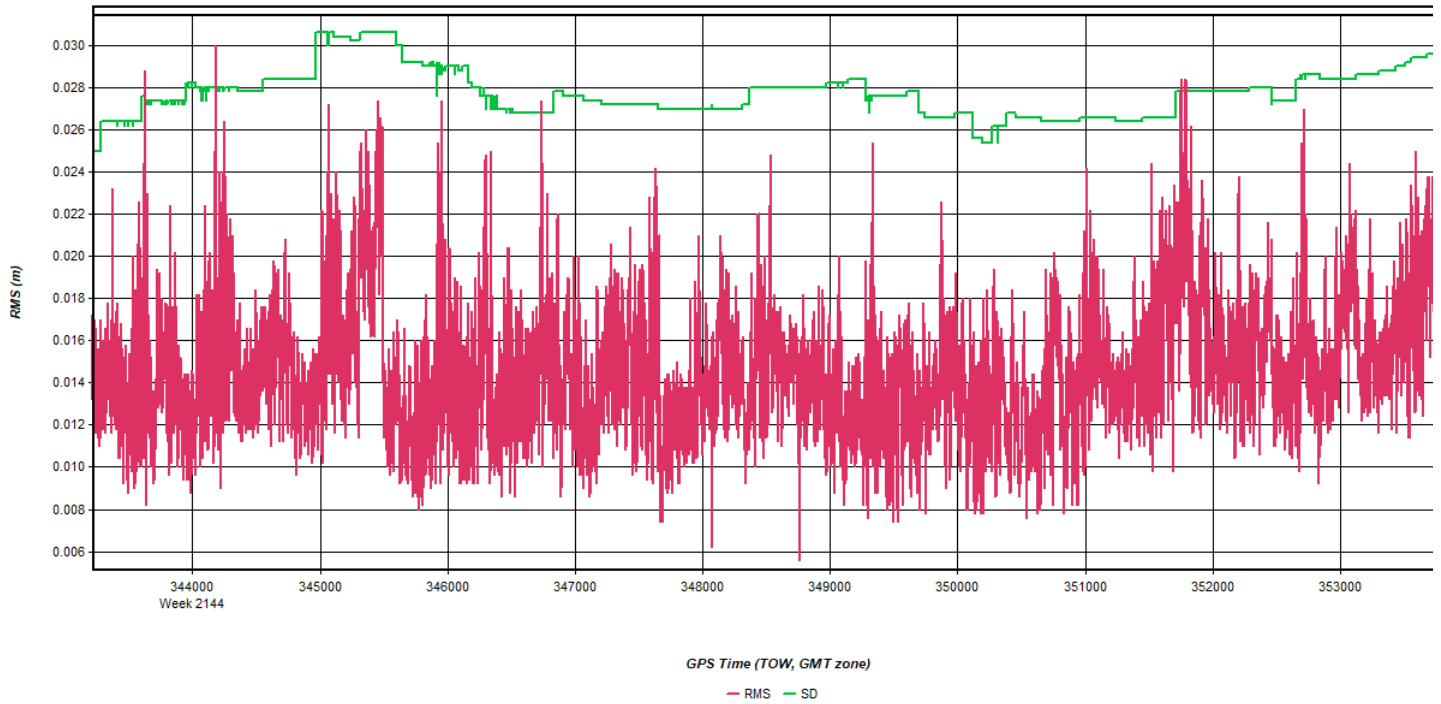
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 16: 20210210231922_29 [Smoothed TC Combined] - C/A Code Residual RMS Plot



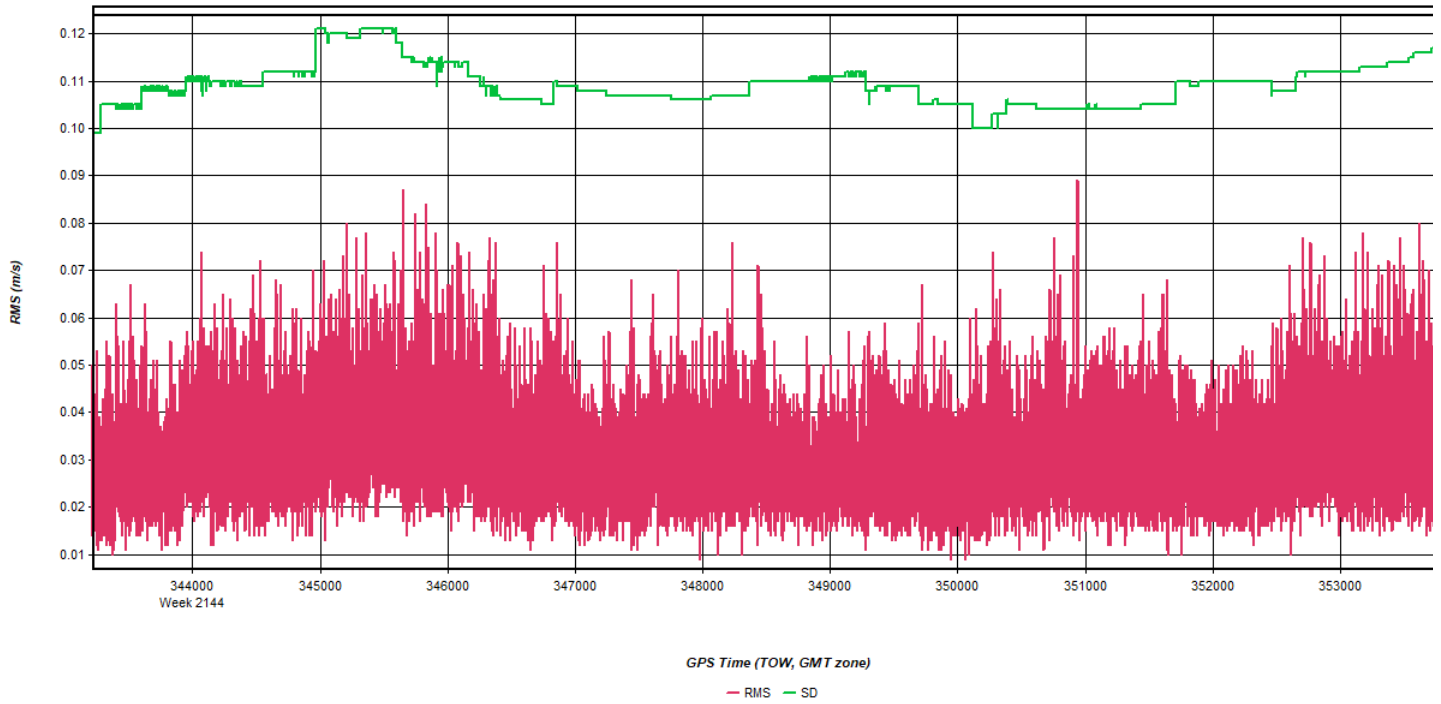
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 17: 20210210231922_29 [Smoothed TC Combined] - Carrier Residual RMS Plot



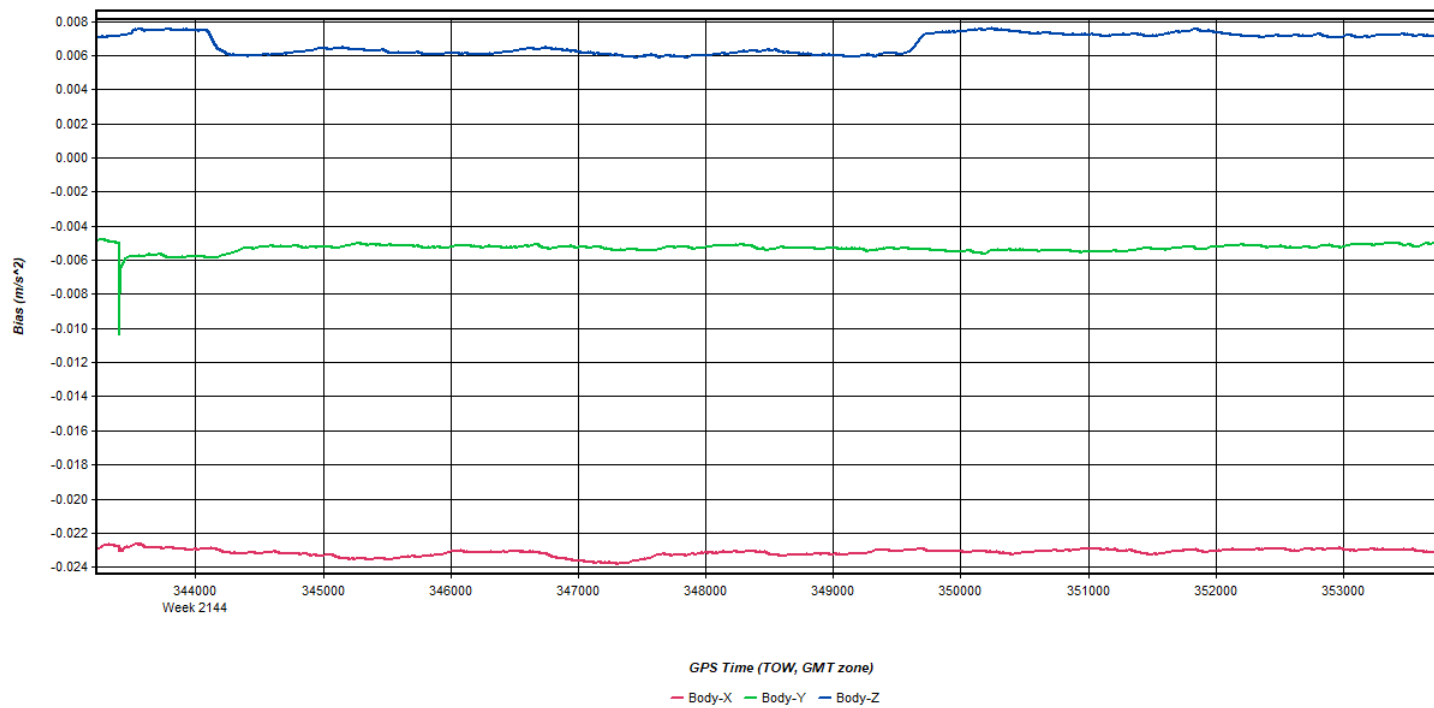
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 18: 20210210231922_29 [Smoothed TC Combined] - Doppler Residual RMS Plot



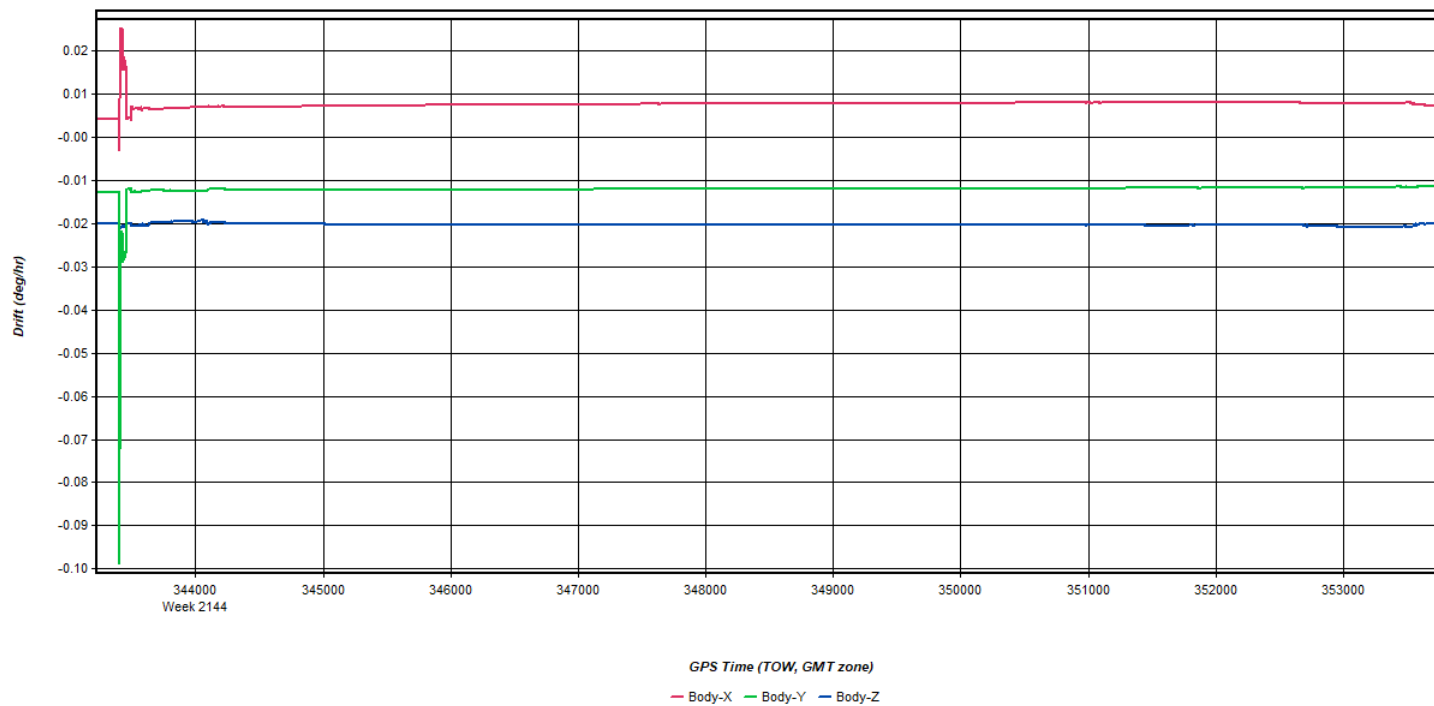
Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 19: 20210210231922_29 [Smoothed TC Combined] - Accelerometer Bias Plot



Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Figure 20: 20210210231922_29 [Smoothed TC Combined] - Gyro Drift Plot

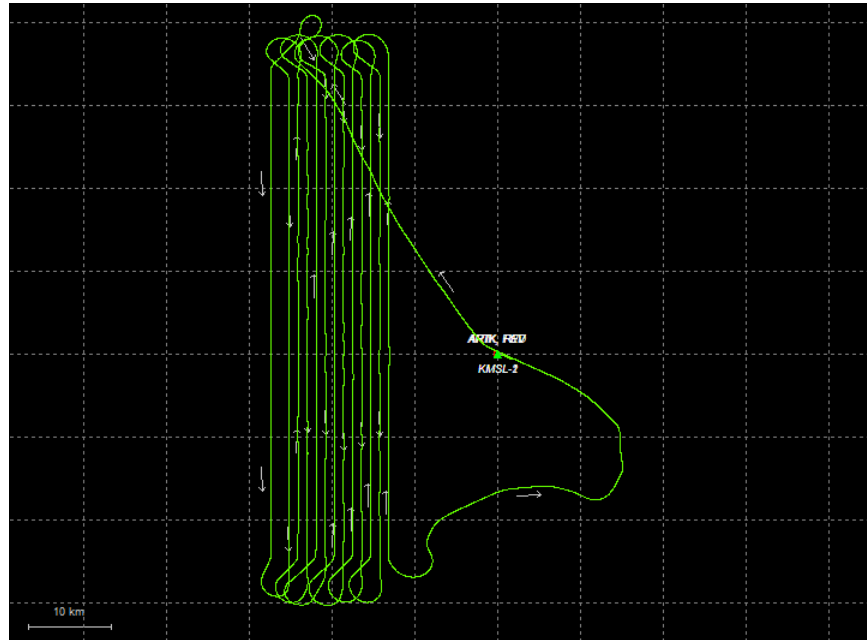


Process	20210210231922_29	by Unknown	on 2/15/2021	at 11:02:53
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Output Results for 20210222191451_30

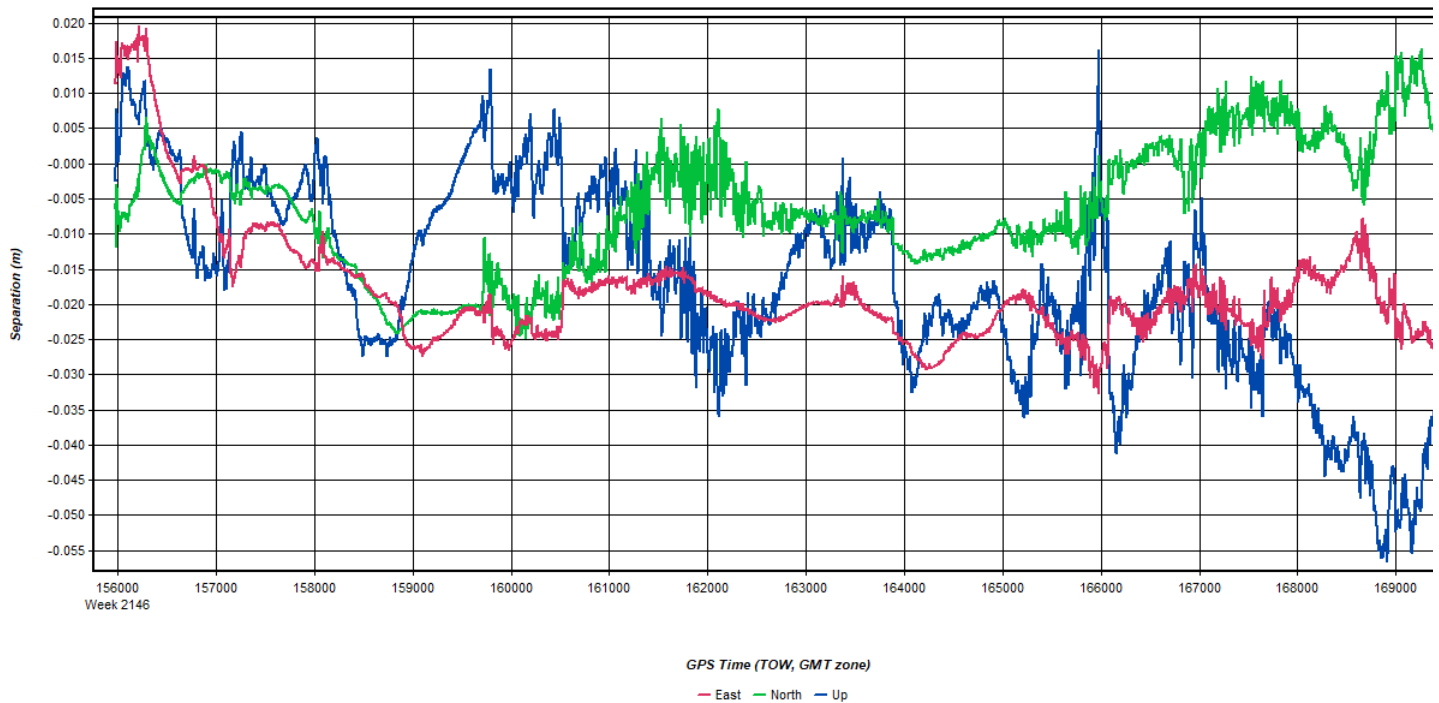
Inertial Explorer Version 8.90.2124
02/23/2021

Figure 1: Smoothed TC Combined - Map



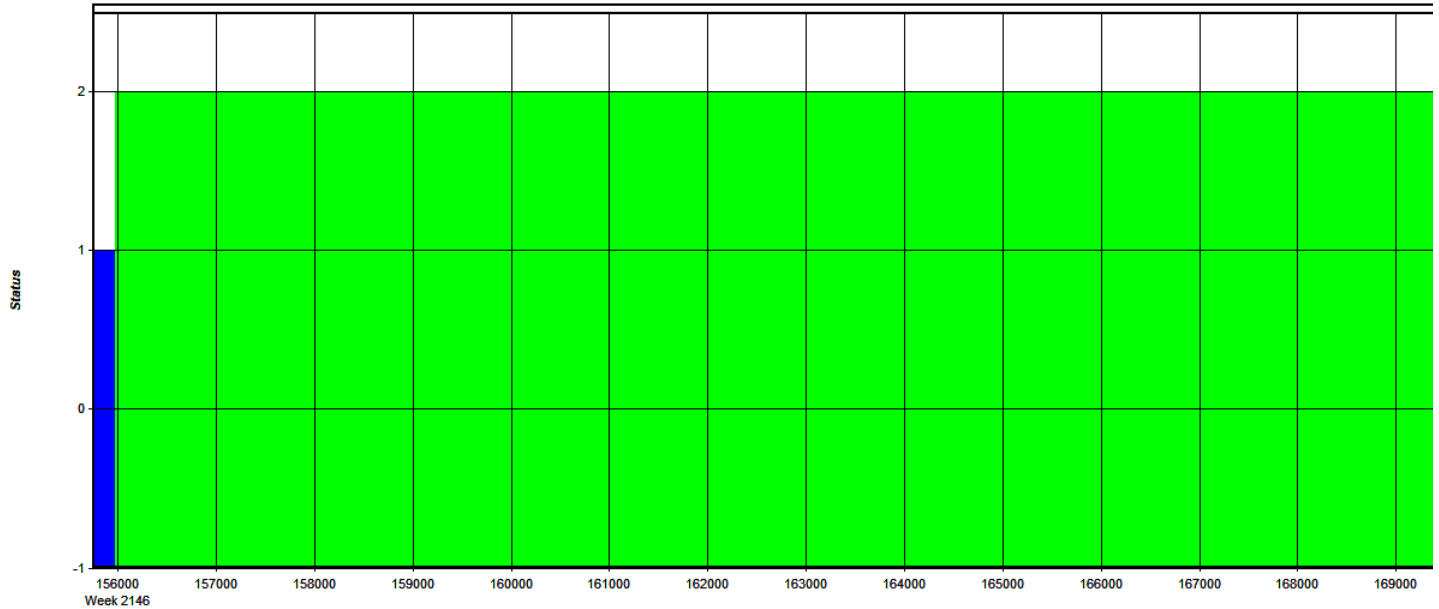
Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 2: 20210222191451_30 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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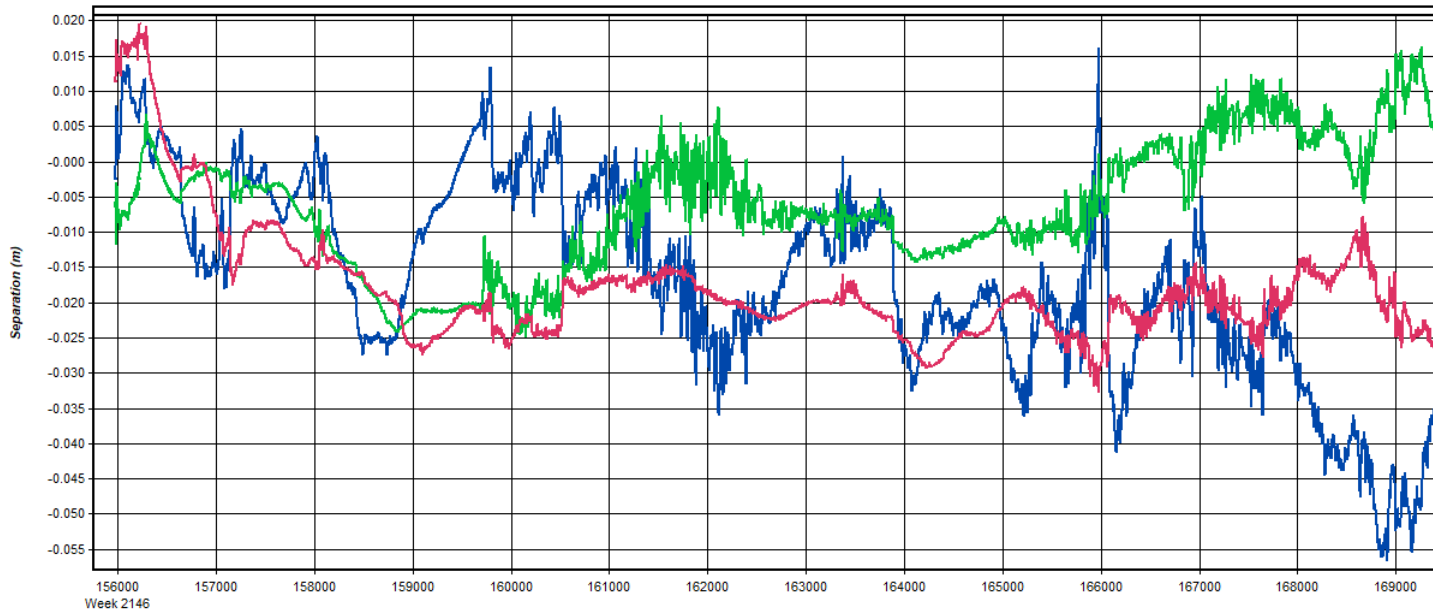
Figure 3: 20210222191451_30 [Smoothed TC Combined] - Float or Fixed Ambiguity



GPS Time (TOW, GMT zone)
 - Float - Forward Fixed - Reverse Fixed - Fixed (2 or more)

Process 20210222191451_30 by Unknown on 2/23/2021 at 20:30:23

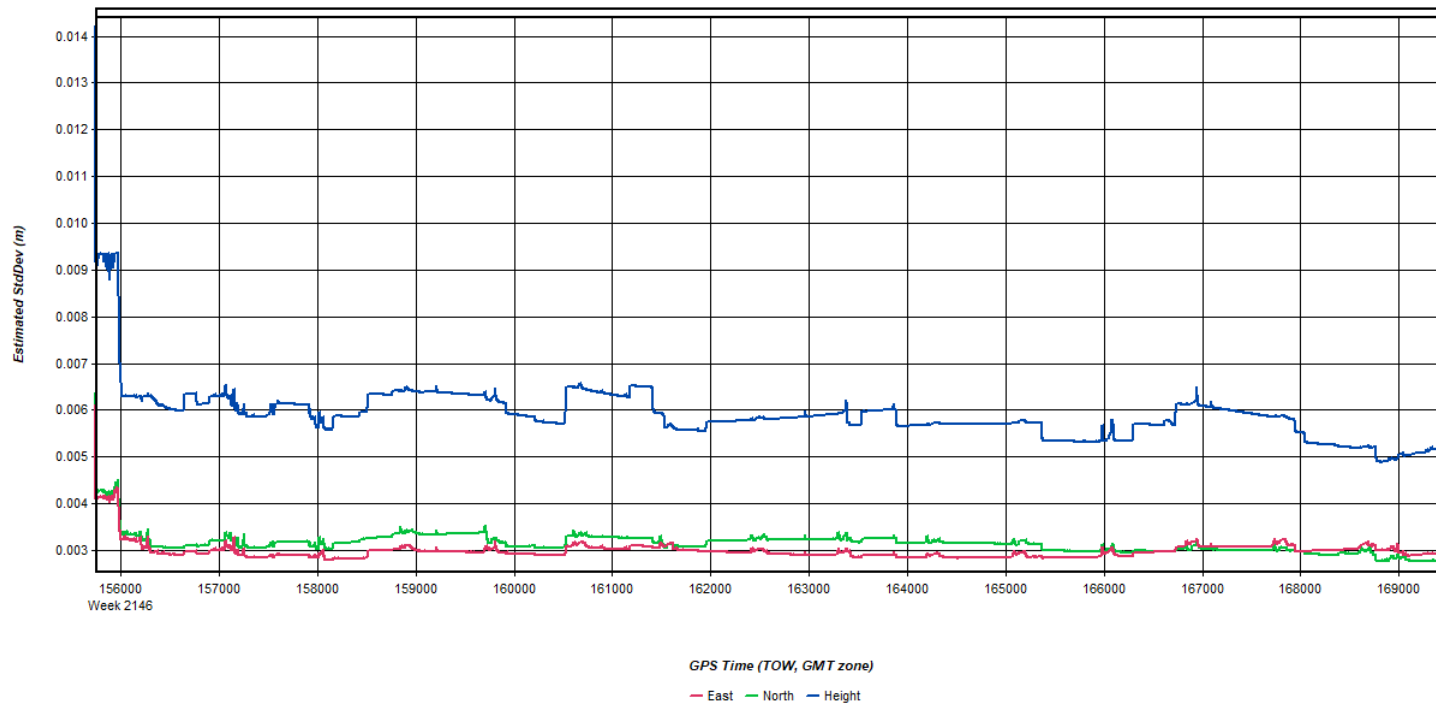
Figure 4: 20210222191451_30 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)



GPS Time (TOW, GMT zone)
 - East - North - Up

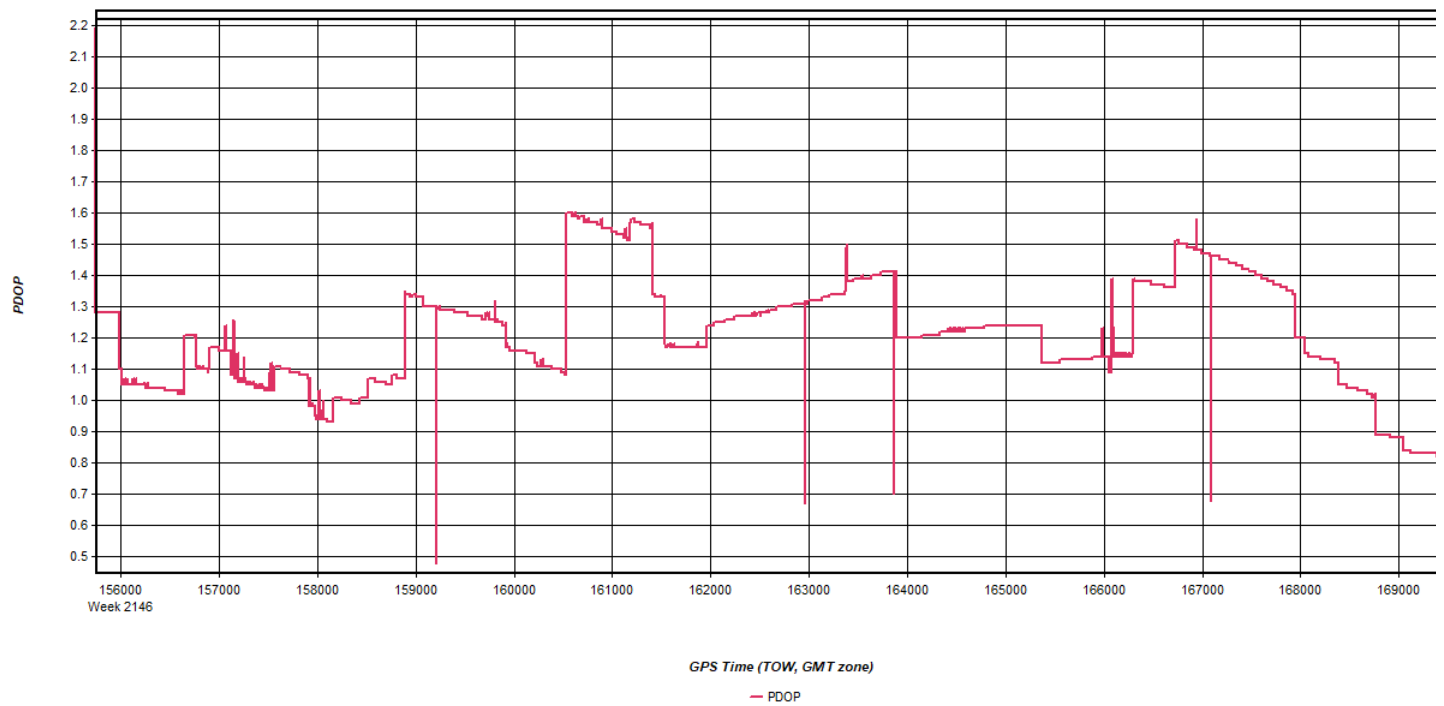
Process 20210222191451_30 by Unknown on 2/23/2021 at 20:30:23

Figure 5: 20210222191451_30 [Smoothed TC Combined] - Estimated Position Accuracy Plot



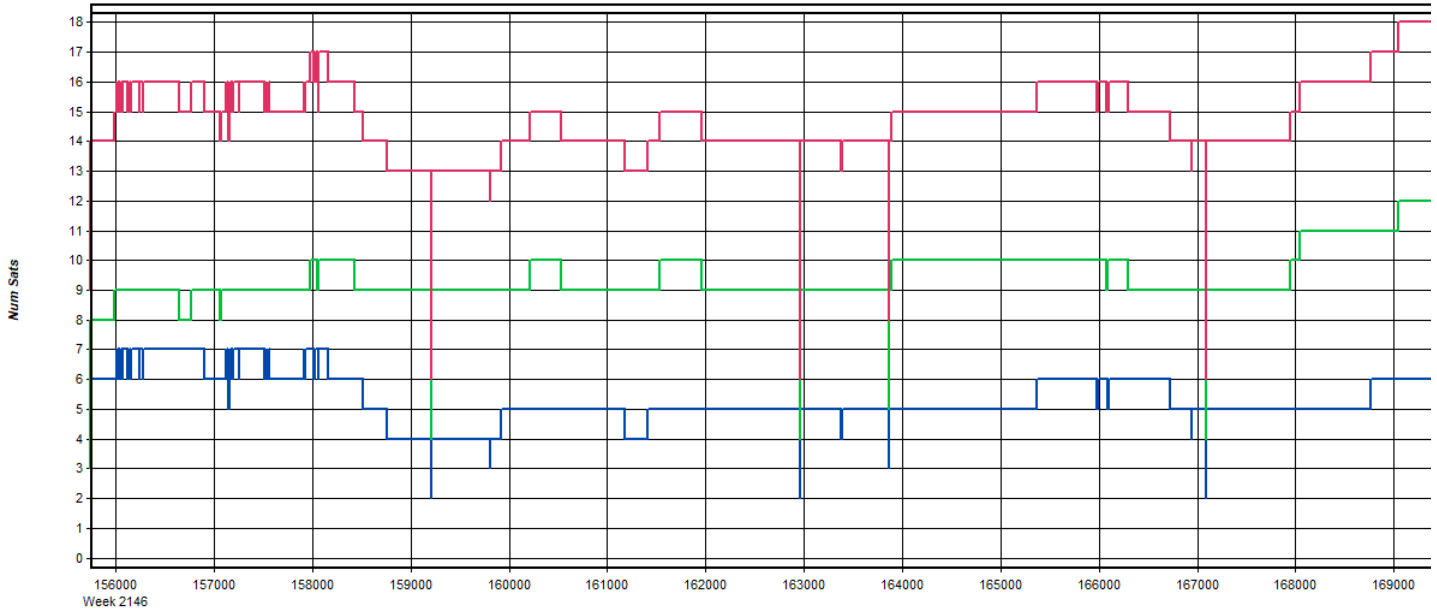
Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 6: 20210222191451_30 [Smoothed TC Combined] - PDOP Plot



Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 7: 20210222191451_30 [Smoothed TC Combined] - Number of Satellites Line Plot

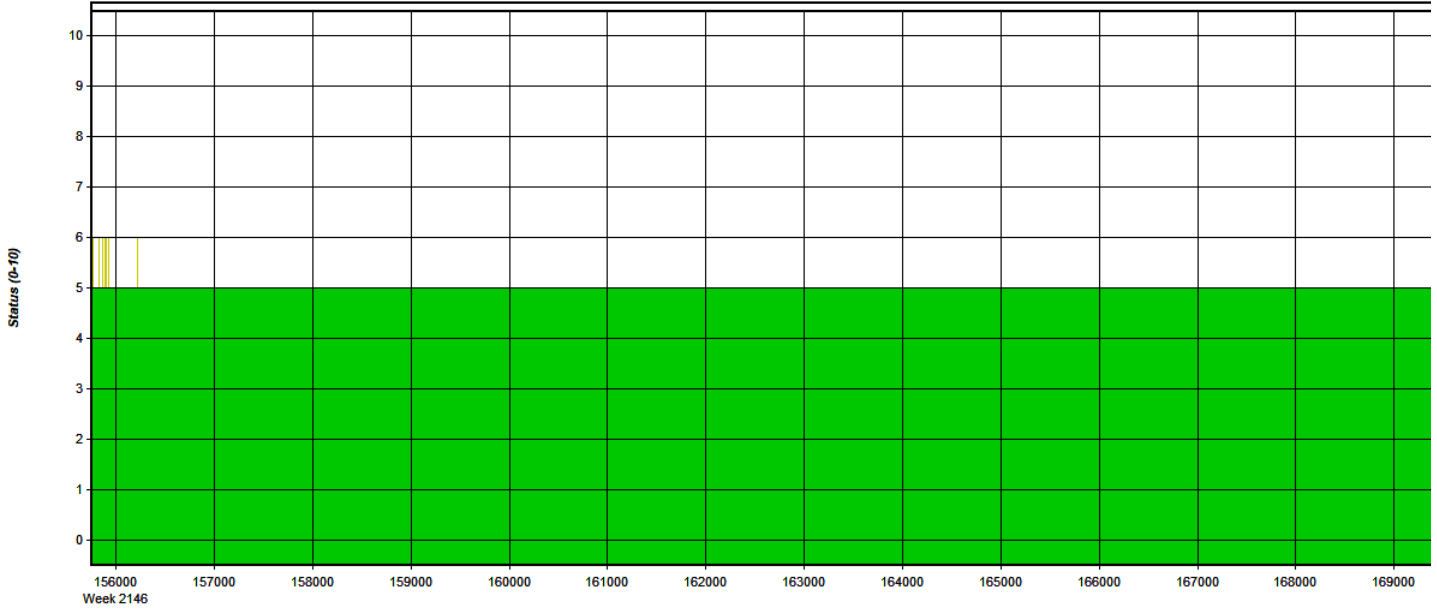


GPS Time (TOW, GMT zone)

— Num Sats — GPS — GLONASS — BeiDou — Galileo — QZSS

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 8: 20210222191451_30 [Smoothed TC Combined] - Status flag for IMU processing

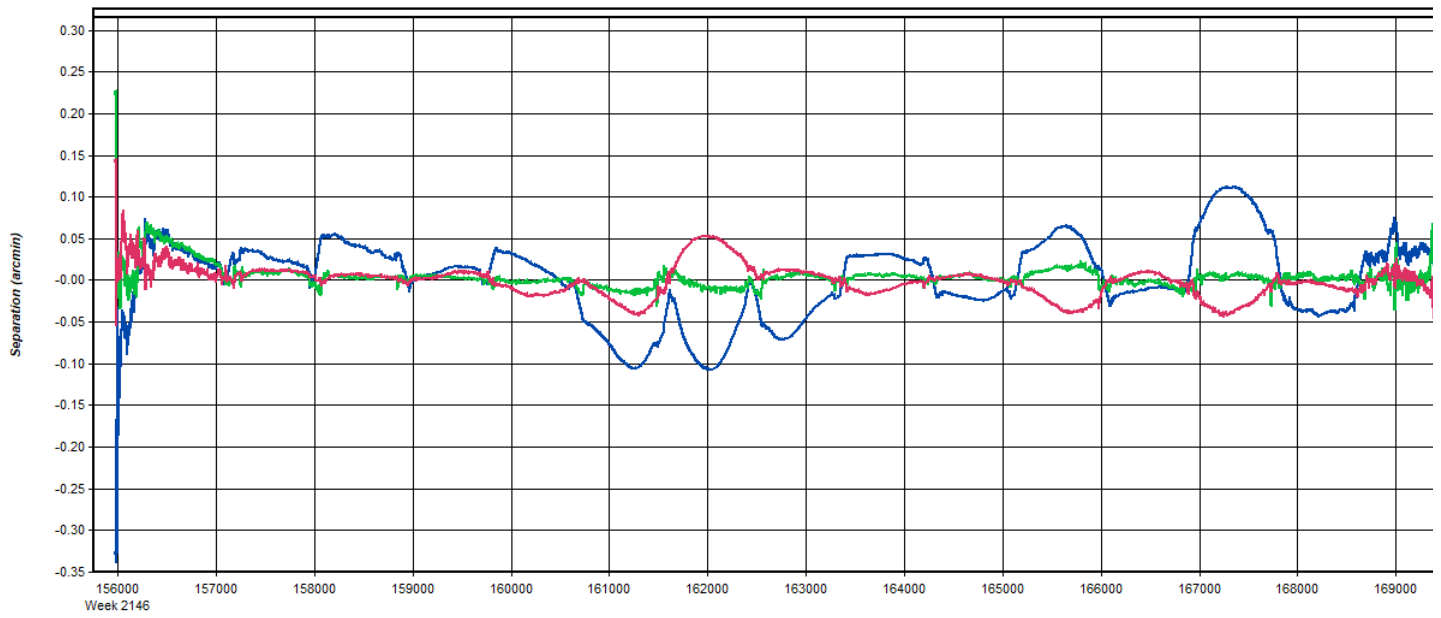


GPS Time (TOW, GMT zone)

— None — Align — Free — DMUIPT — PHSUPT — GPSUPT — ZUPT — CUPT — GVUPT — PSR — CONSTRAINT

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 9: 20210222191451_30 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

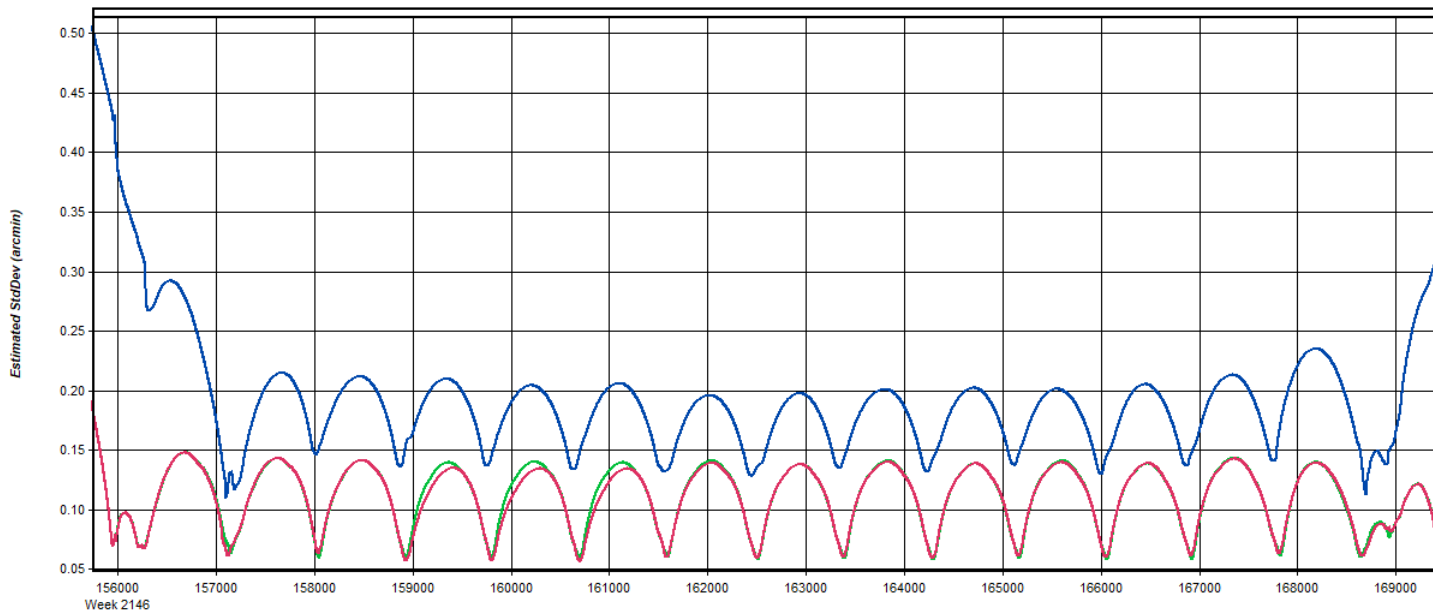


GPS Time (TOW, GMT zone)

Roll Pitch Heading/Az

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 10: 20210222191451_30 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

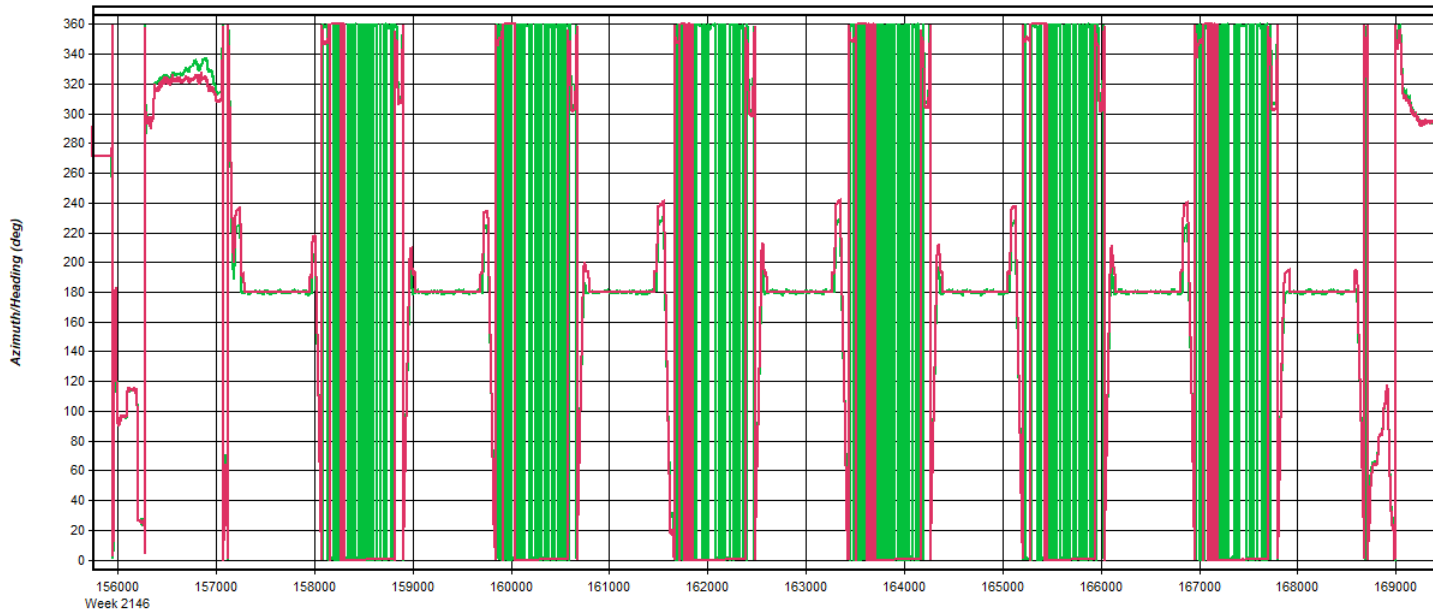


GPS Time (TOW, GMT zone)

Roll Pitch Heading/Az

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 11: 20210222191451_30 [Smoothed TC Combined] - Azimuth Plot

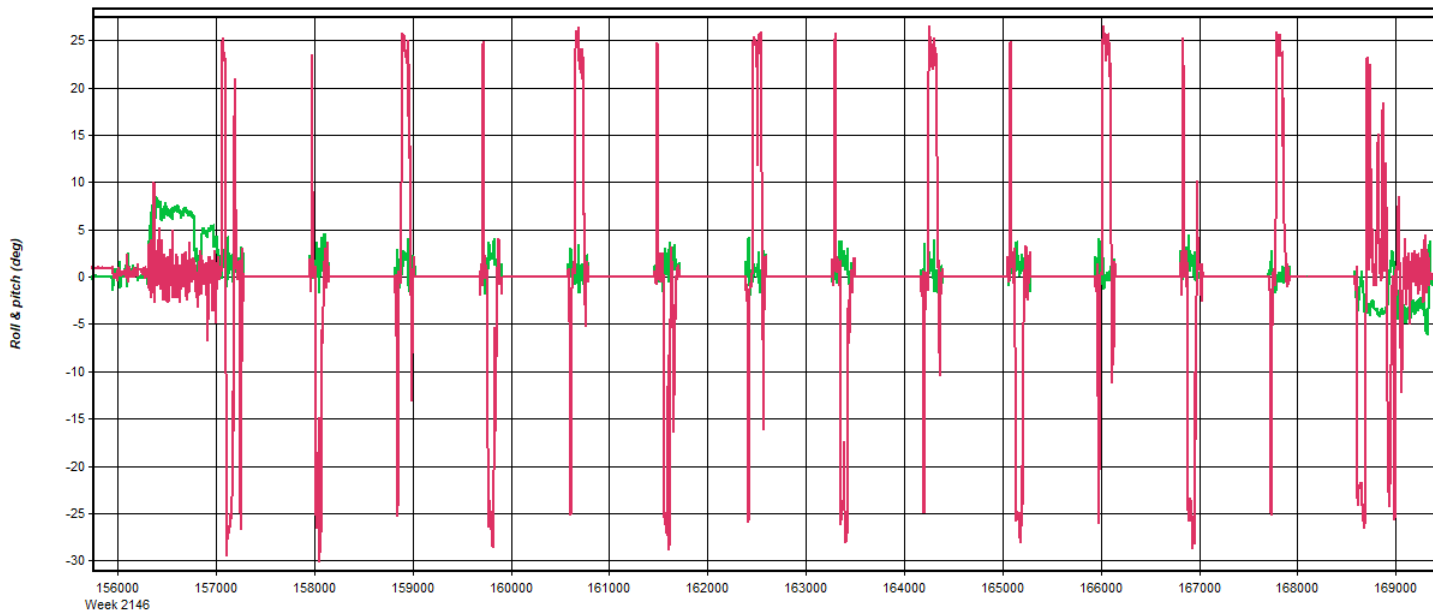


GPS Time (TOW, GMT zone)

— Heading/Azimuth — GPS-COG

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 12: 20210222191451_30 [Smoothed TC Combined] - Roll & Pitch Plot

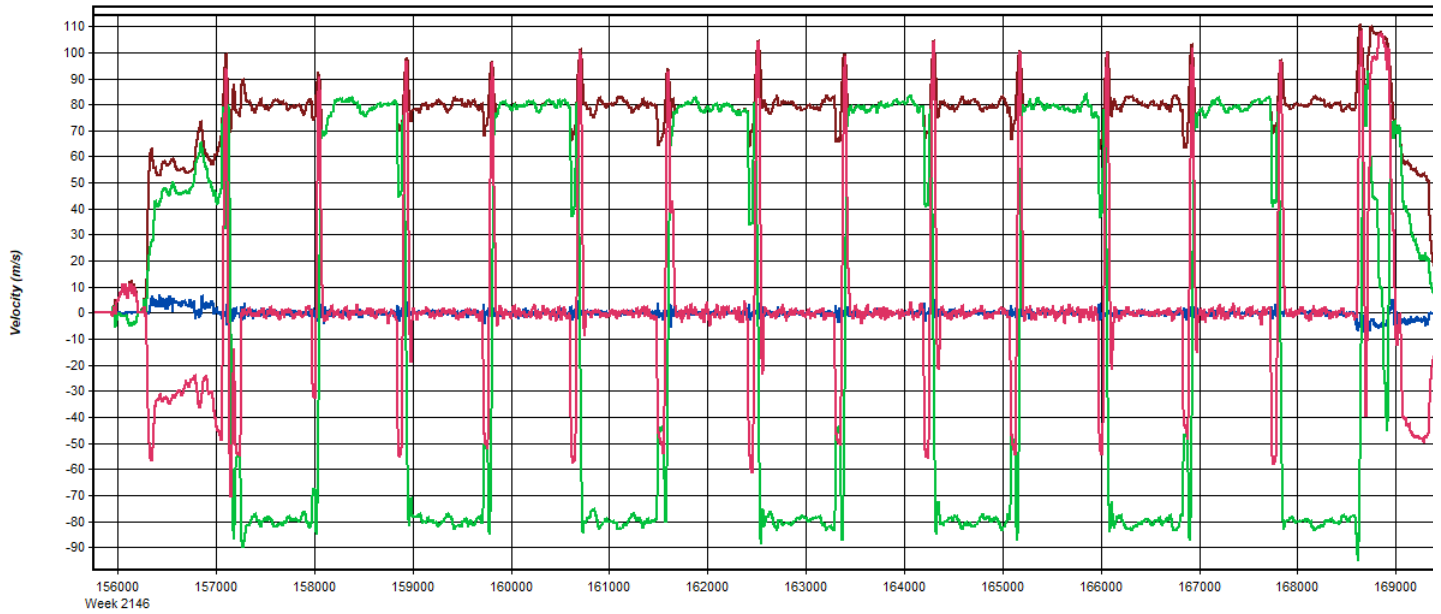


GPS Time (TOW, GMT zone)

— Roll — Pitch

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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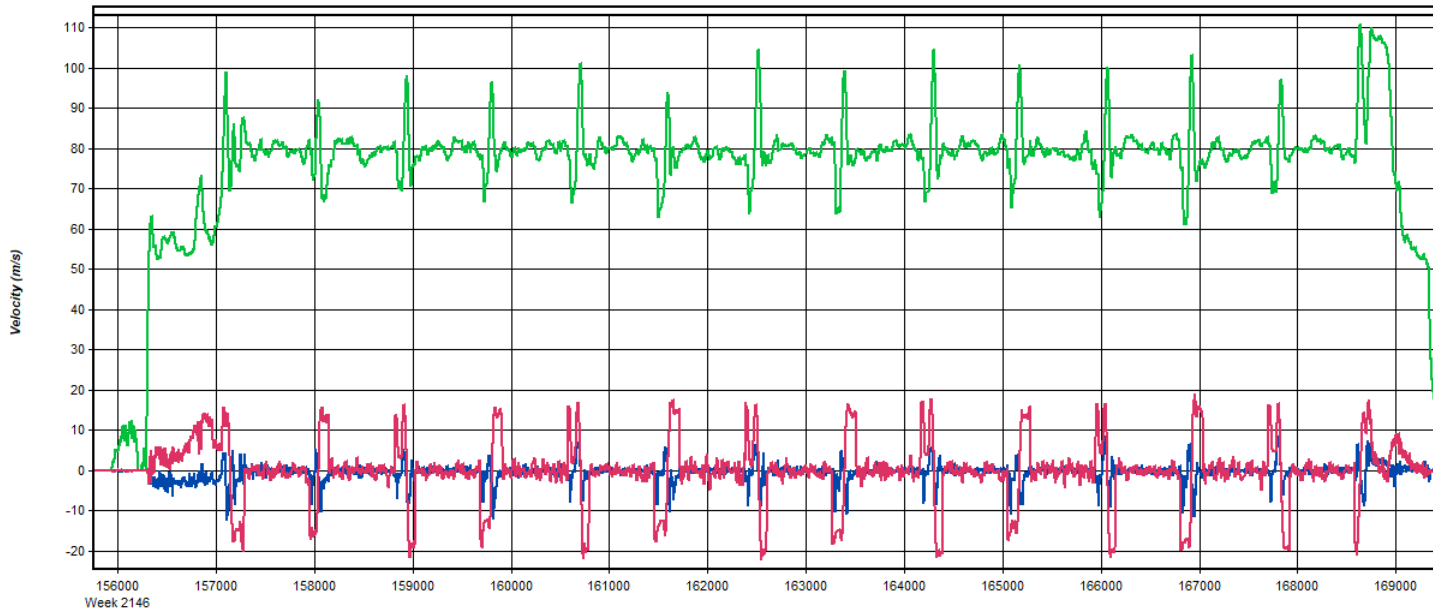
Figure 13: 20210222191451_30 [Smoothed TC Combined] - Velocity Profile Plot



GPS Time (TOW, GMT zone)
 - East - North - Up - Hz. Speed

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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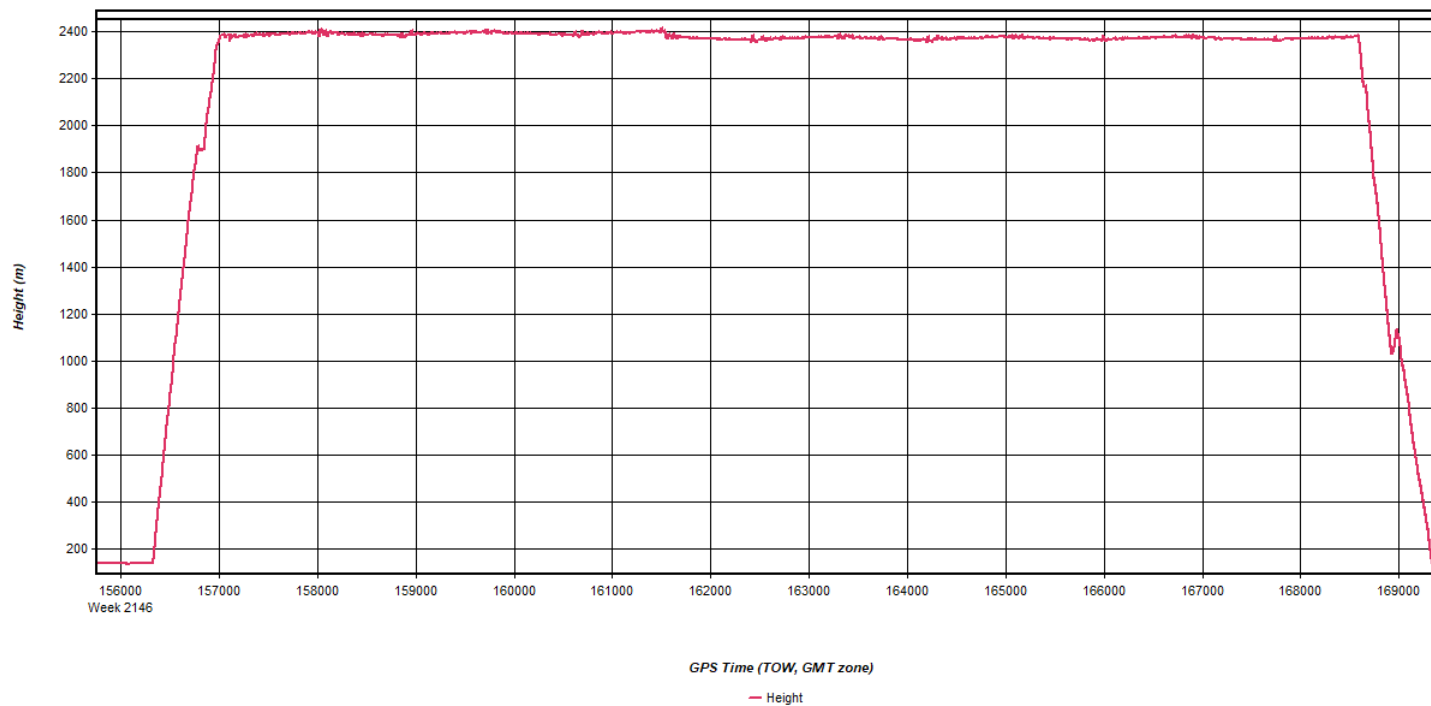
Figure 14: 20210222191451_30 [Smoothed TC Combined] - Body Frame Velocity Plot



GPS Time (TOW, GMT zone)
 - X - Y - Z

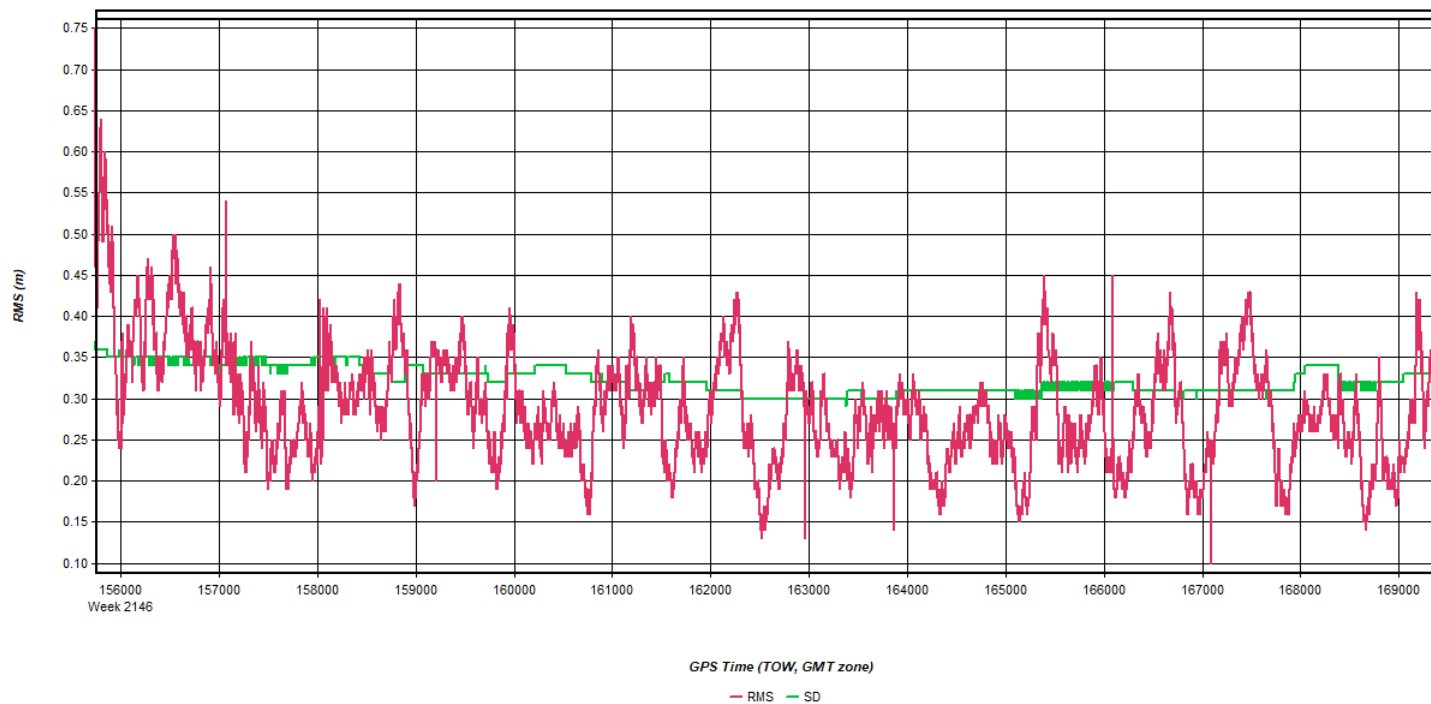
Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 15: 20210222191451_30 [Smoothed TC Combined] - Height Profile Plot



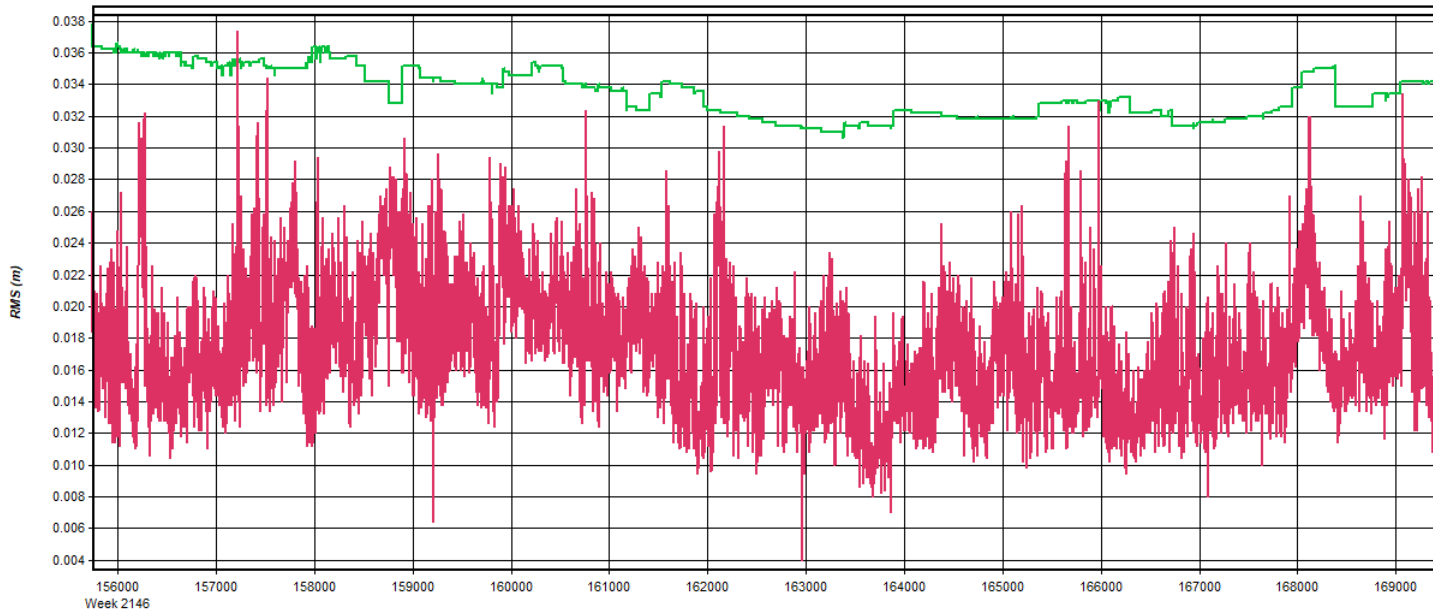
Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 16: 20210222191451_30 [Smoothed TC Combined] - C/A Code Residual RMS Plot



Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 17: 20210222191451_30 [Smoothed TC Combined] - Carrier Residual RMS Plot

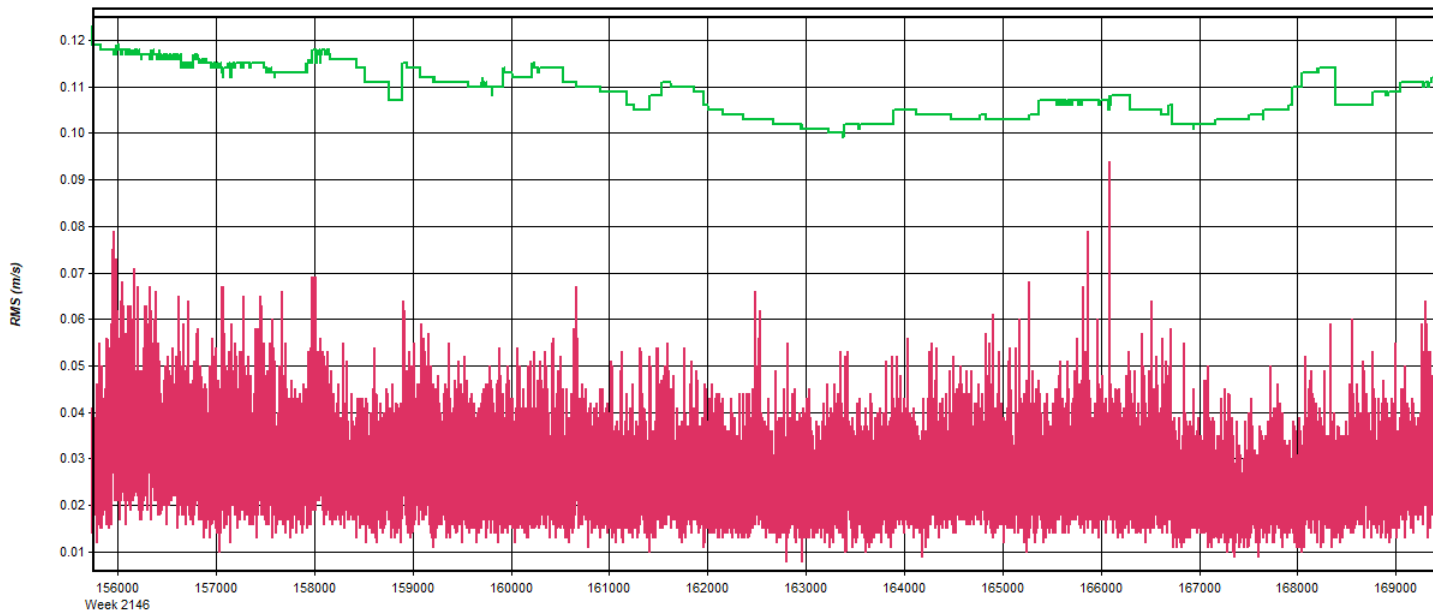


GPS Time (TOW, GMT zone)

— RMS — SD

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 18: 20210222191451_30 [Smoothed TC Combined] - Doppler Residual RMS Plot

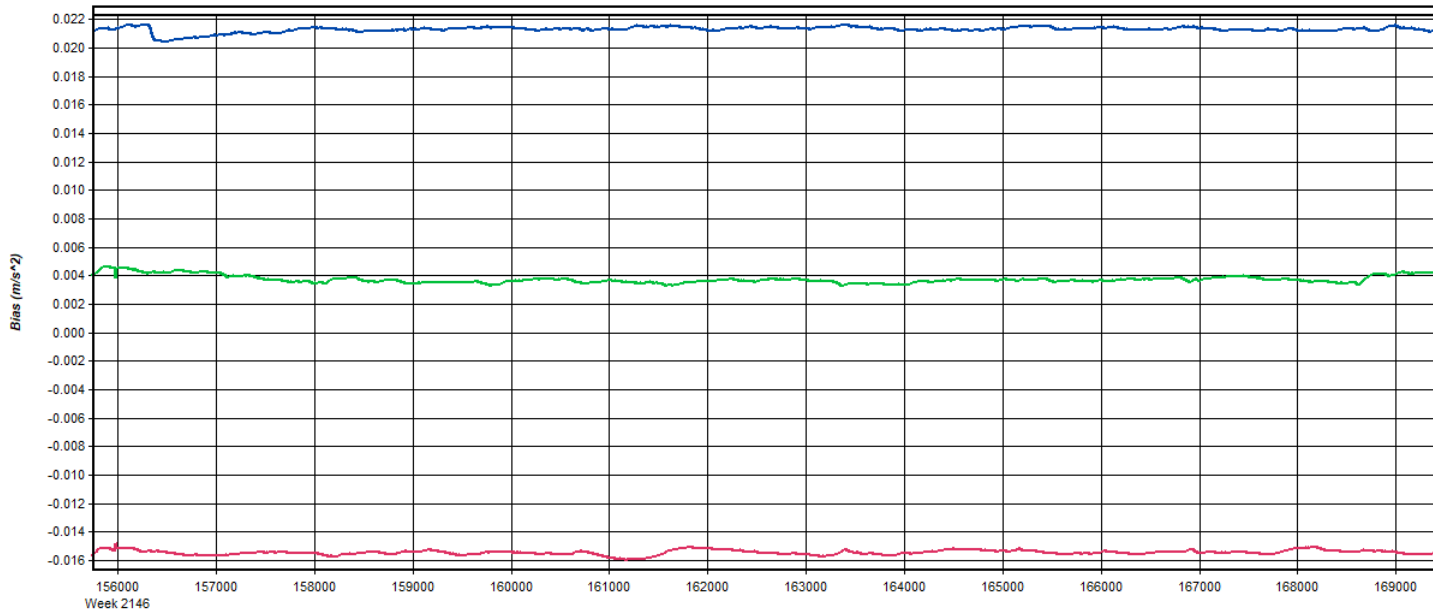


GPS Time (TOW, GMT zone)

— RMS — SD

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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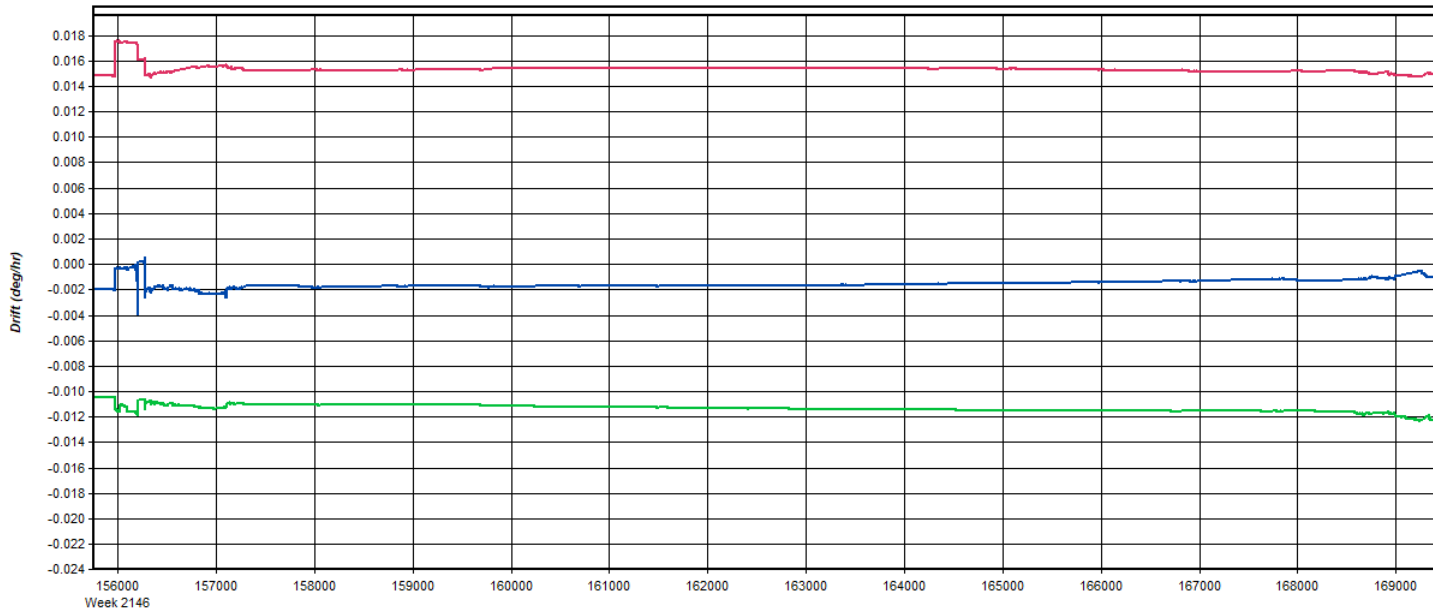
Figure 19: 20210222191451_30 [Smoothed TC Combined] - Accelerometer Bias Plot



GPS Time (TOW, GMT zone)
 - Body-X - Body-Y - Body-Z

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Figure 20: 20210222191451_30 [Smoothed TC Combined] - Gyro Drift Plot



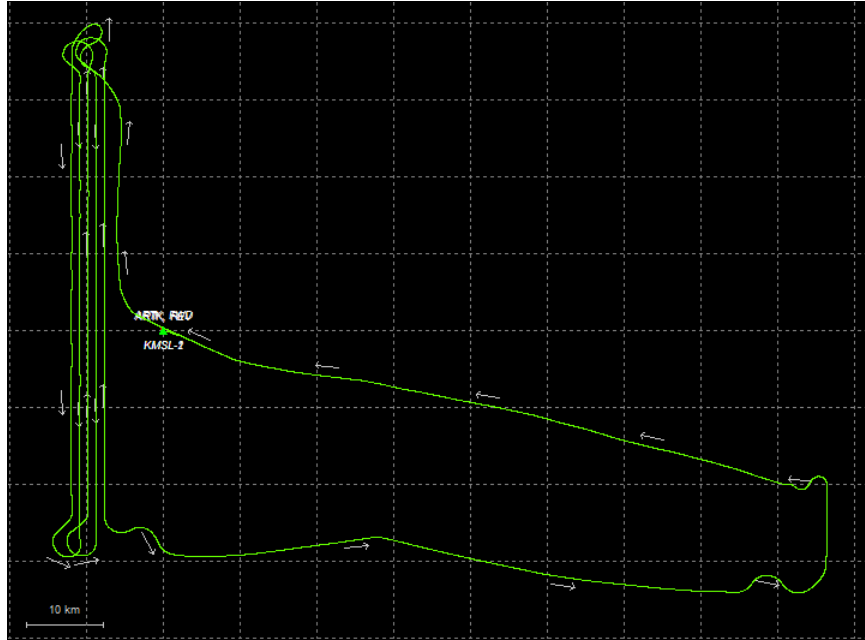
GPS Time (TOW, GMT zone)
 - Body-X - Body-Y - Body-Z

Process	20210222191451_30	by Unknown	on 2/23/2021	at 20:30:23
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Output Results for 20210222234210_31

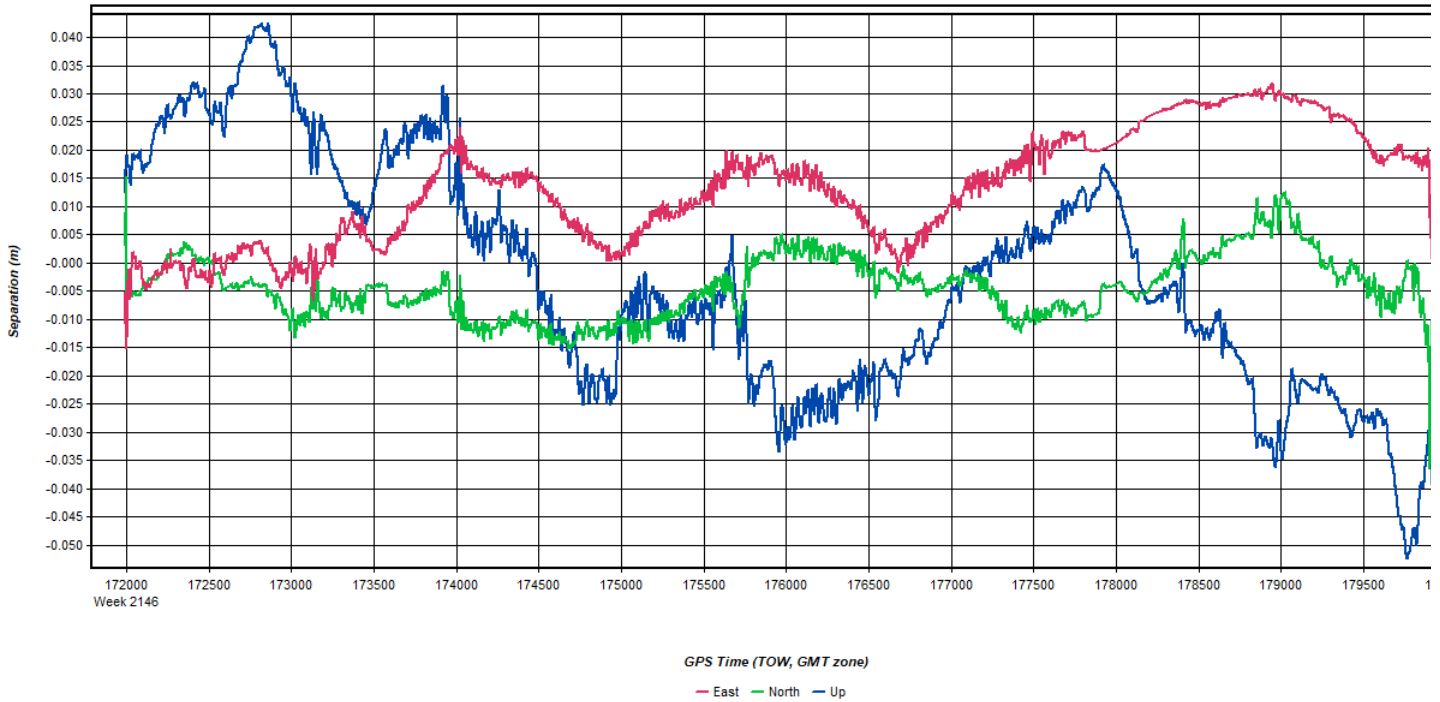
Inertial Explorer Version 8.90.2124
02/24/2021

Figure 1: Smoothed TC Combined - Map



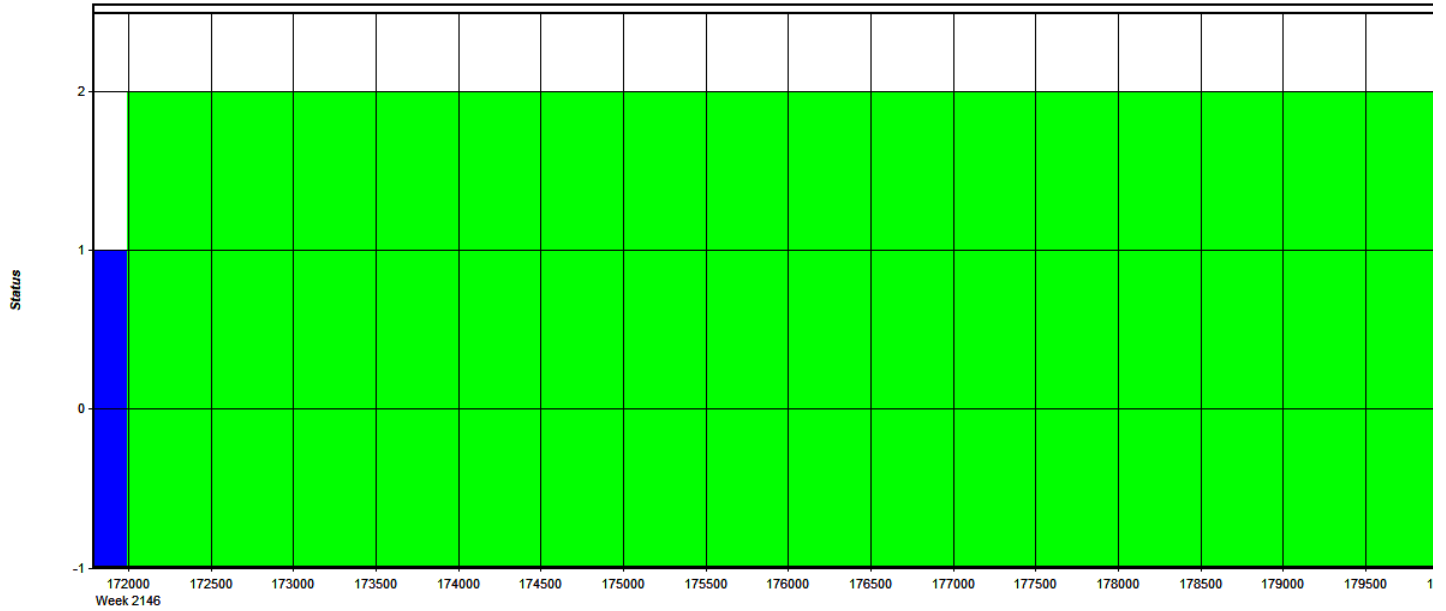
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 2: 20210222234210_31 [Smoothed TC Combined] - Forward/Reverse or Combined Separation Plot



Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 3: 20210222234210_31 [Smoothed TC Combined] - Float or Fixed Ambiguity

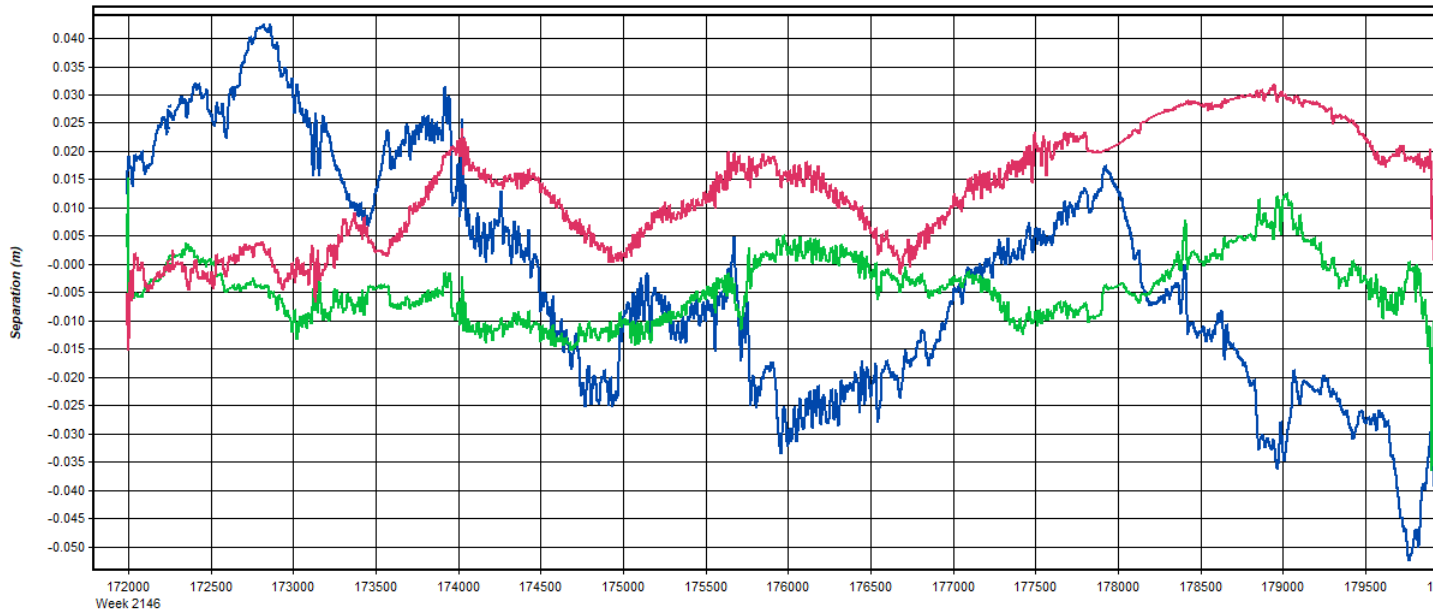


GPS Time (TOW, GMT zone)

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

Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 4: 20210222234210_31 [Smoothed TC Combined] - Forward/Reverse Separation Plot (Fixed)

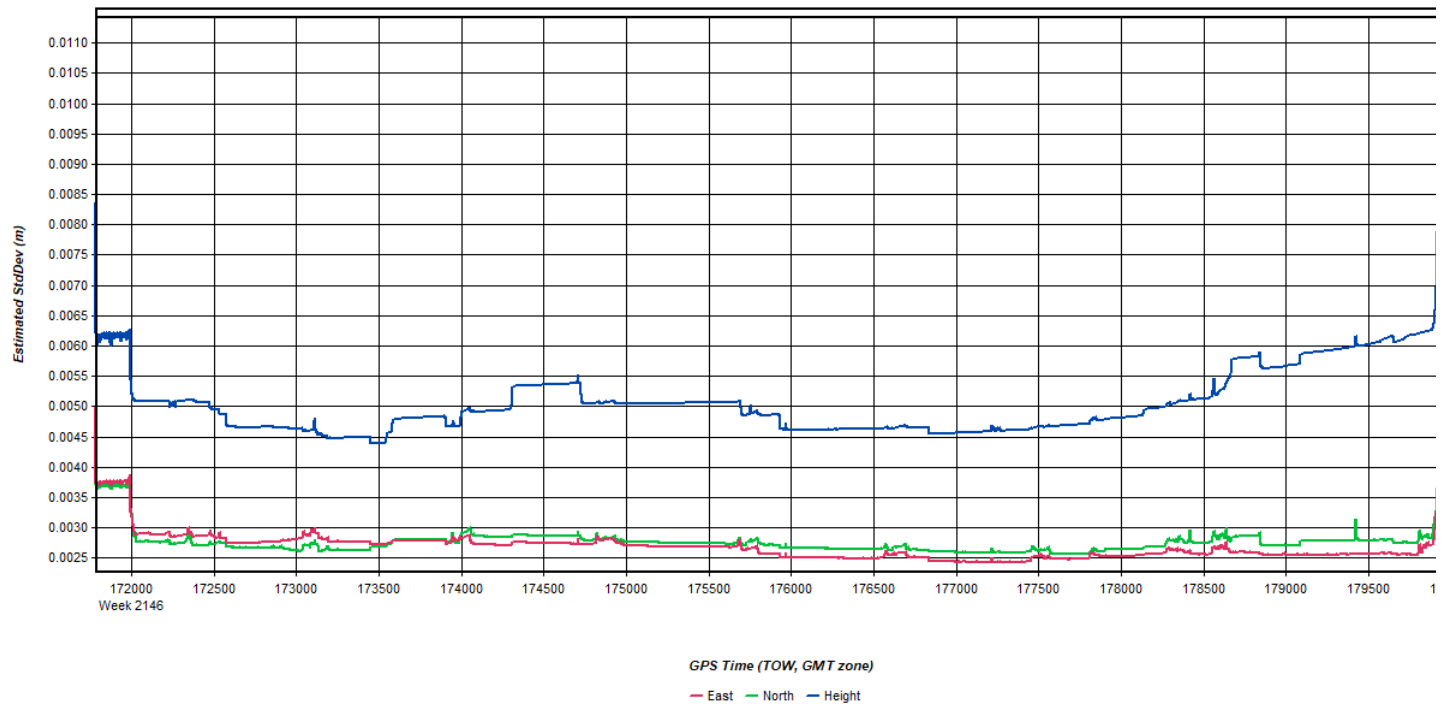


GPS Time (TOW, GMT zone)

— East — North — Up

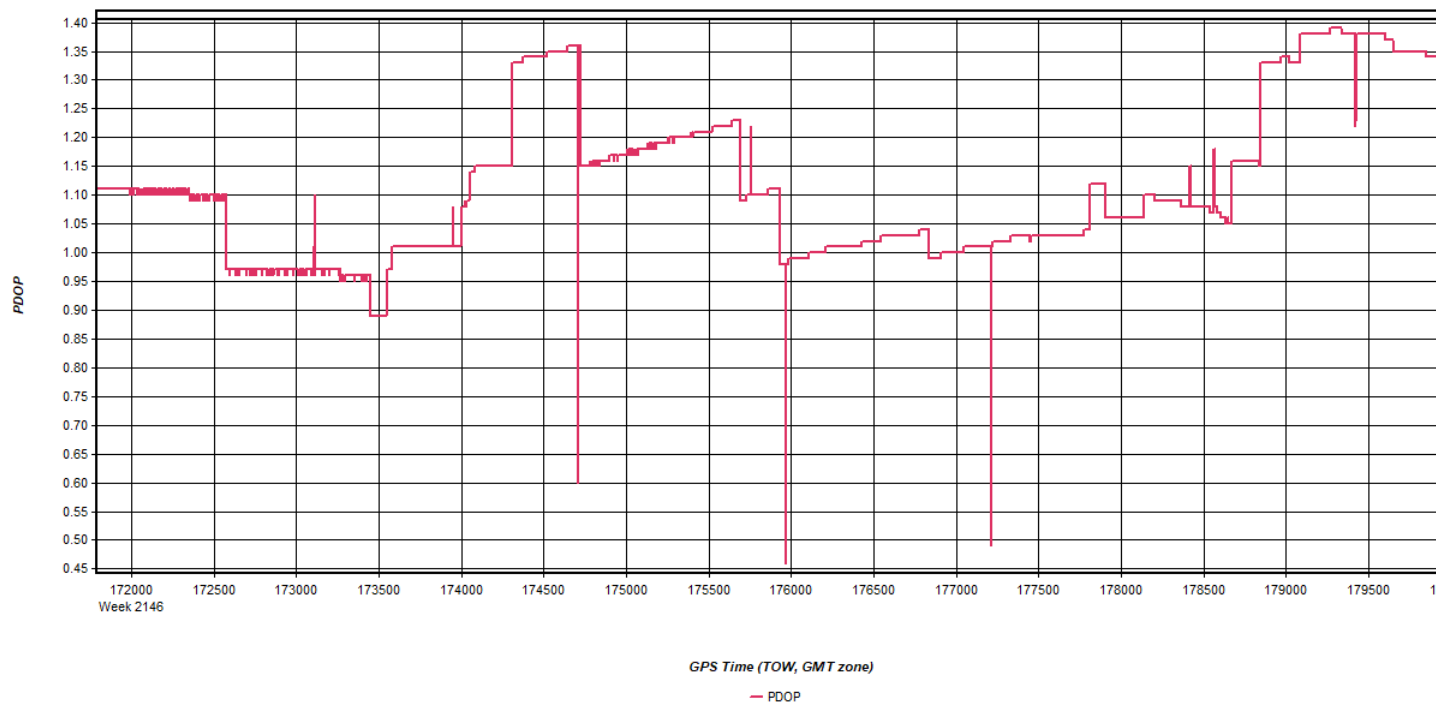
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 5: 20210222234210_31 [Smoothed TC Combined] - Estimated Position Accuracy Plot



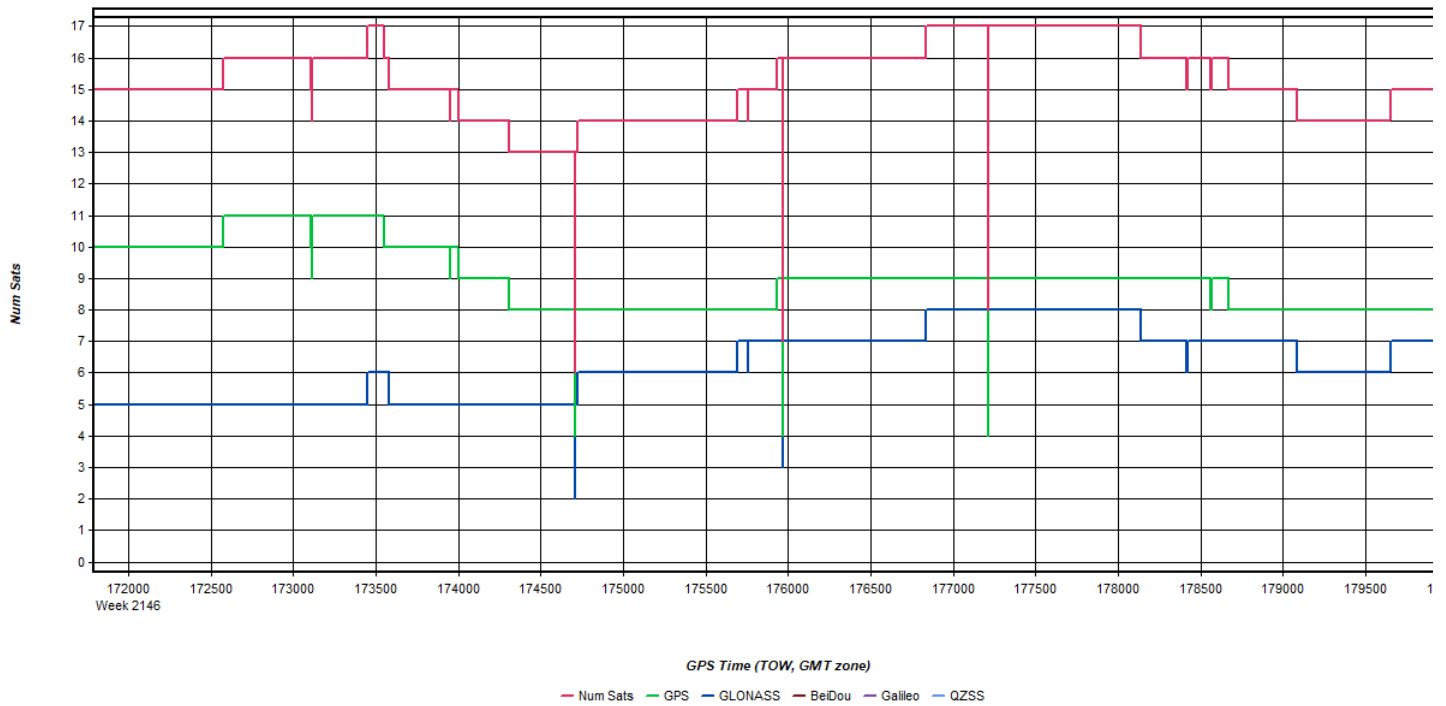
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 6: 20210222234210_31 [Smoothed TC Combined] - PDOP Plot



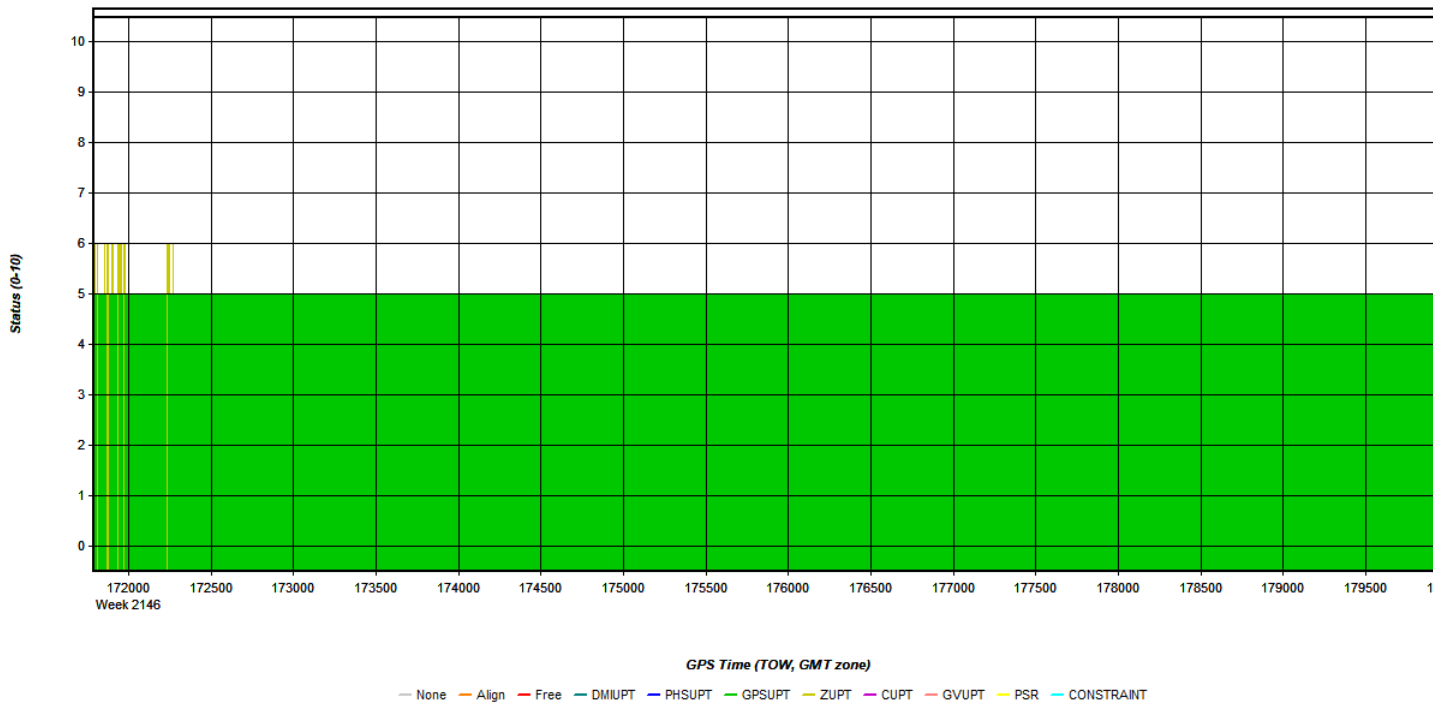
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 7: 20210222234210_31 [Smoothed TC Combined] - Number of Satellites Line Plot



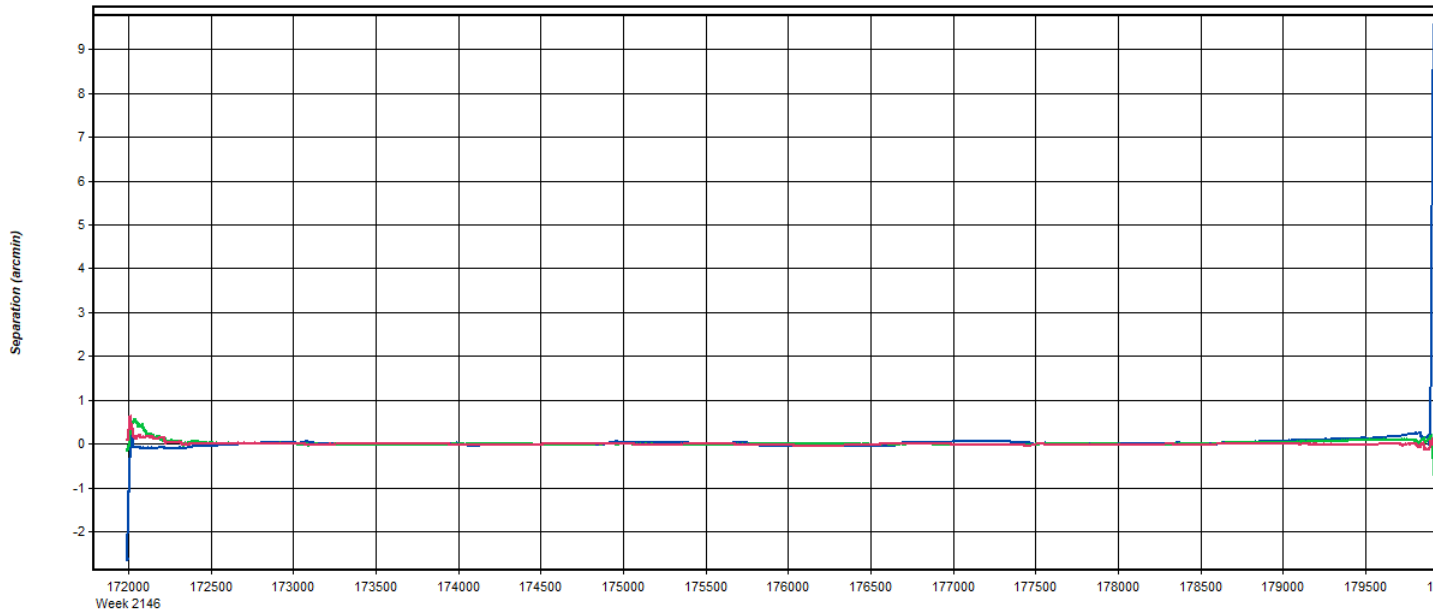
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 8: 20210222234210_31 [Smoothed TC Combined] - Status flag for IMU processing



Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 9: 20210222234210_31 [Smoothed TC Combined] - Fwd/Rev Attitude Separation Plot

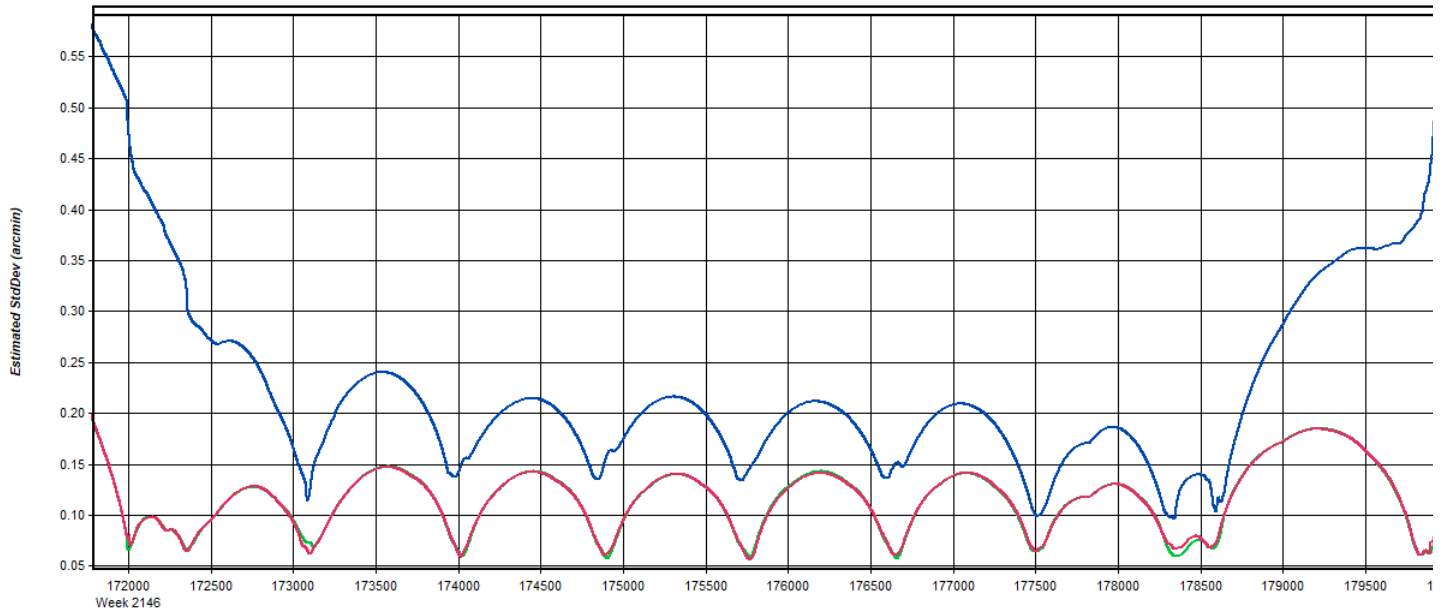


GPS Time (TOW, GMT zone)

Roll Pitch Heading/Az

Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 10: 20210222234210_31 [Smoothed TC Combined] - Estimated Attitude Accuracy Plot

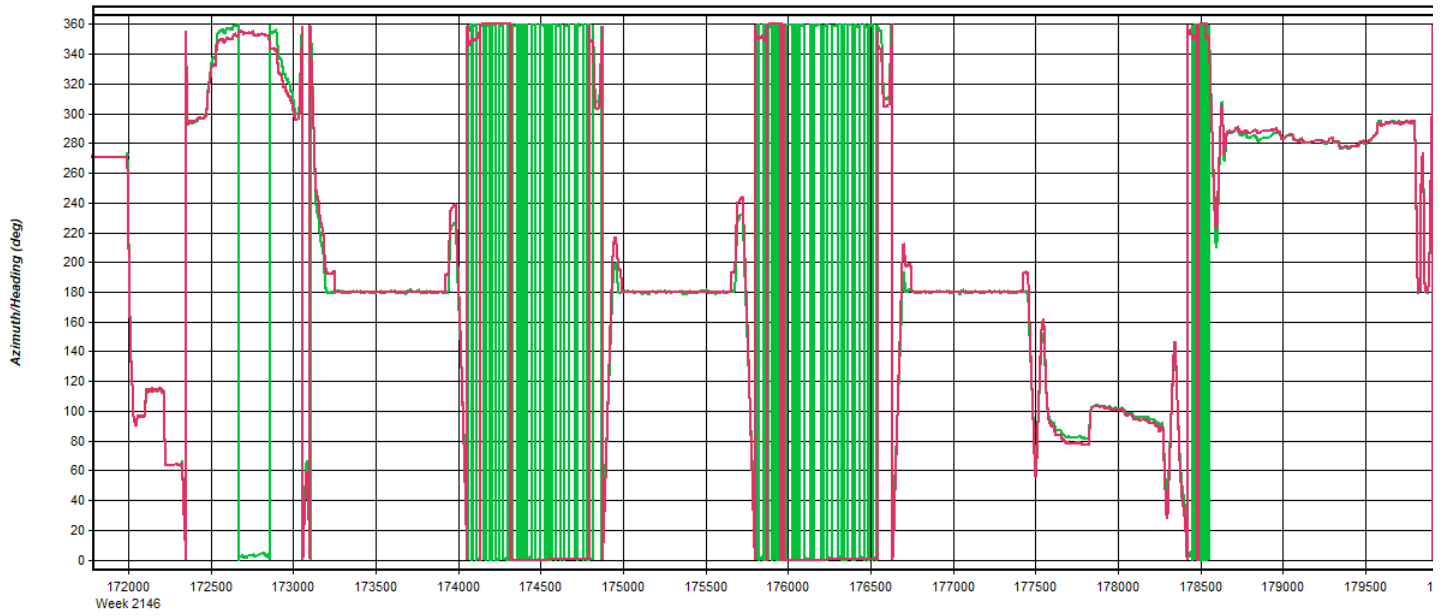


GPS Time (TOW, GMT zone)

Roll Pitch Heading/Az

Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 11: 20210222234210_31 [Smoothed TC Combined] - Azimuth Plot

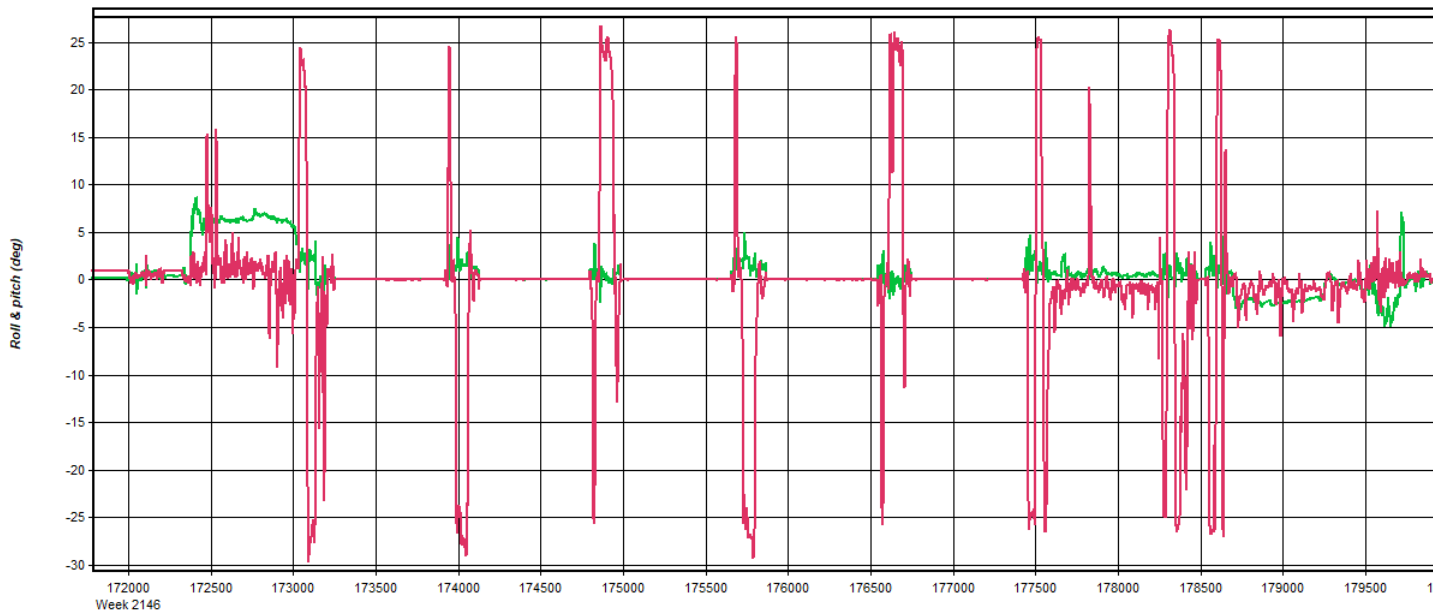


GPS Time (TOW, GMT zone)

— Heading/Azimuth — GPS-COG

Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 12: 20210222234210_31 [Smoothed TC Combined] - Roll & Pitch Plot

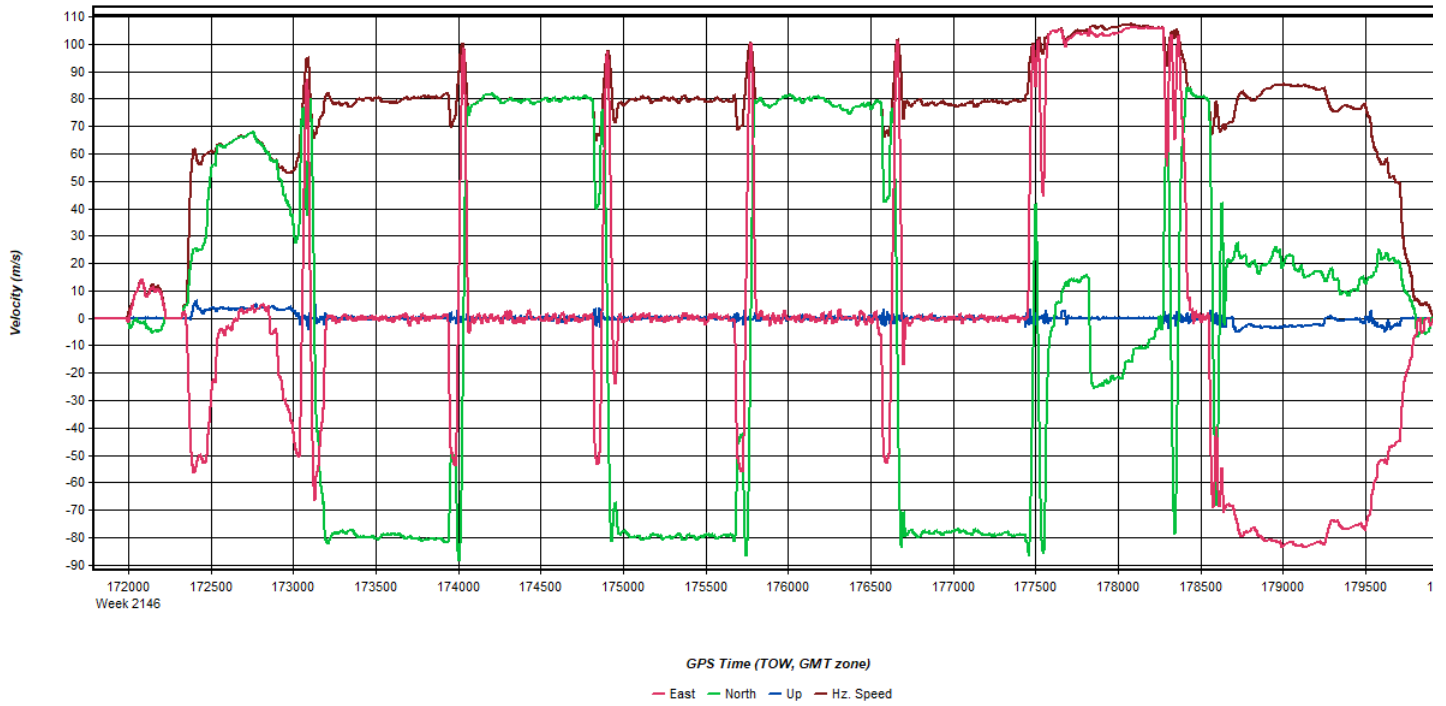


GPS Time (TOW, GMT zone)

— Roll — Pitch

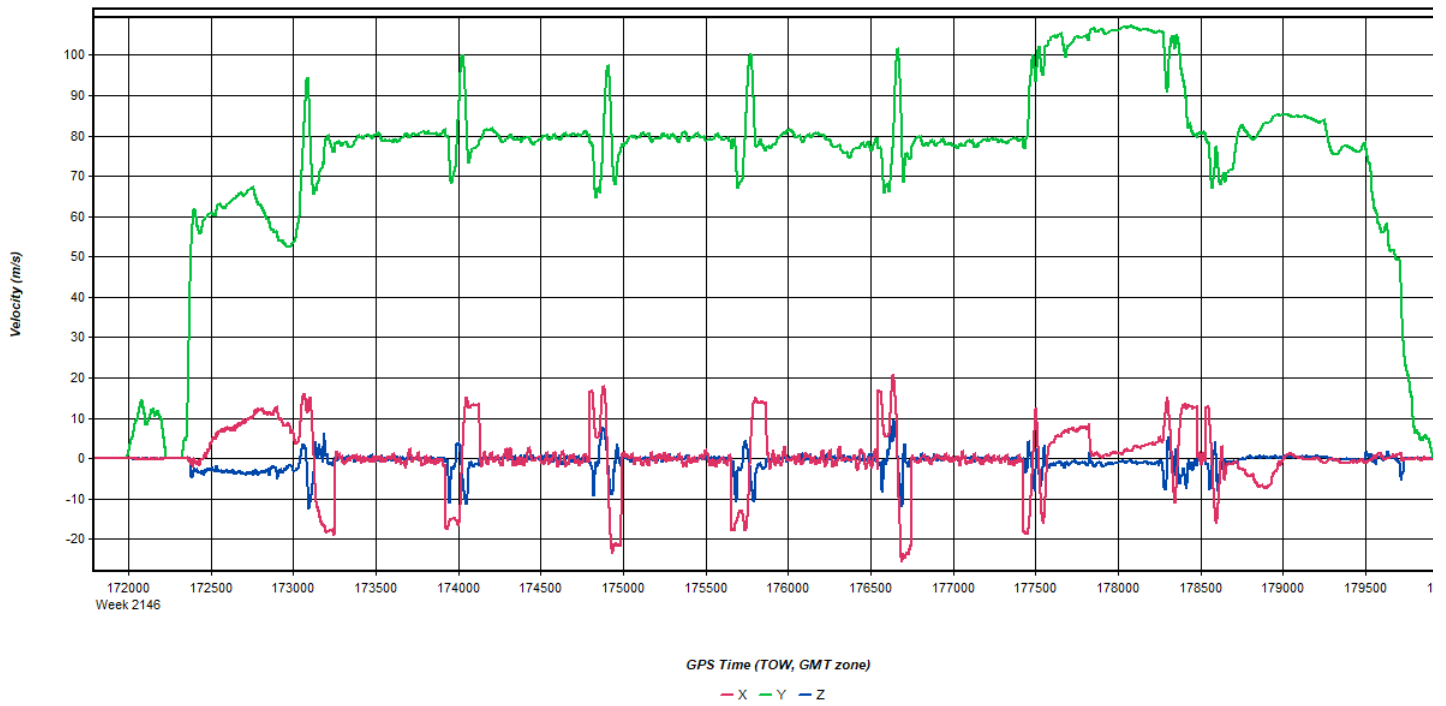
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 13: 20210222234210_31 [Smoothed TC Combined] - Velocity Profile Plot



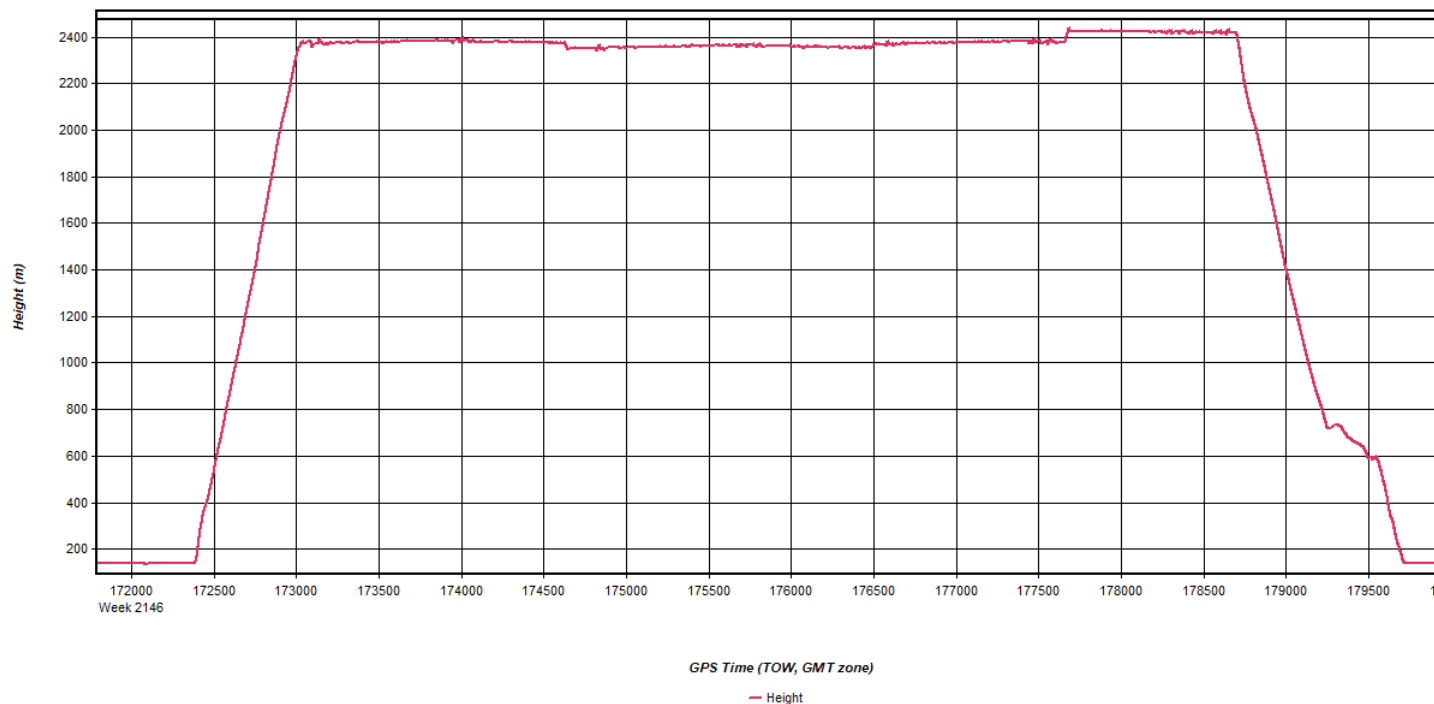
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 14: 20210222234210_31 [Smoothed TC Combined] - Body Frame Velocity Plot



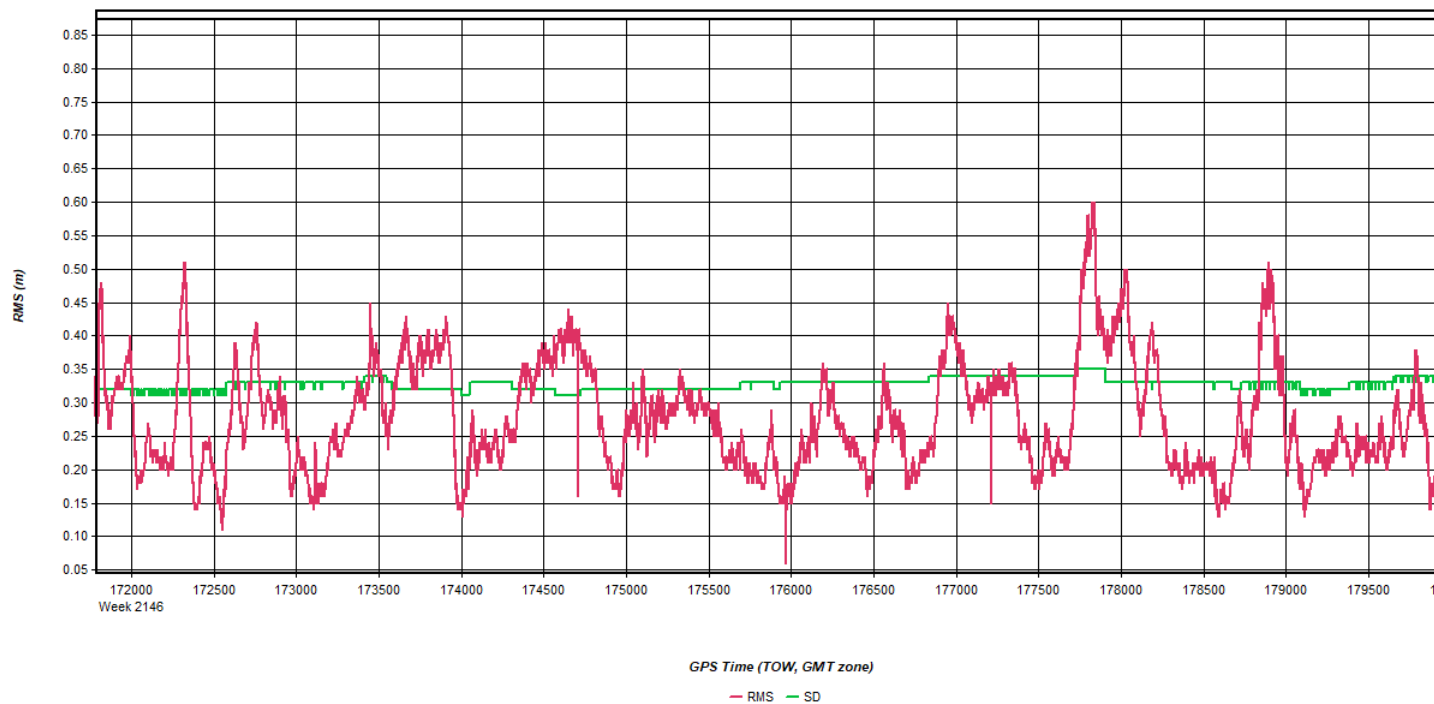
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 15: 20210222234210_31 [Smoothed TC Combined] - Height Profile Plot



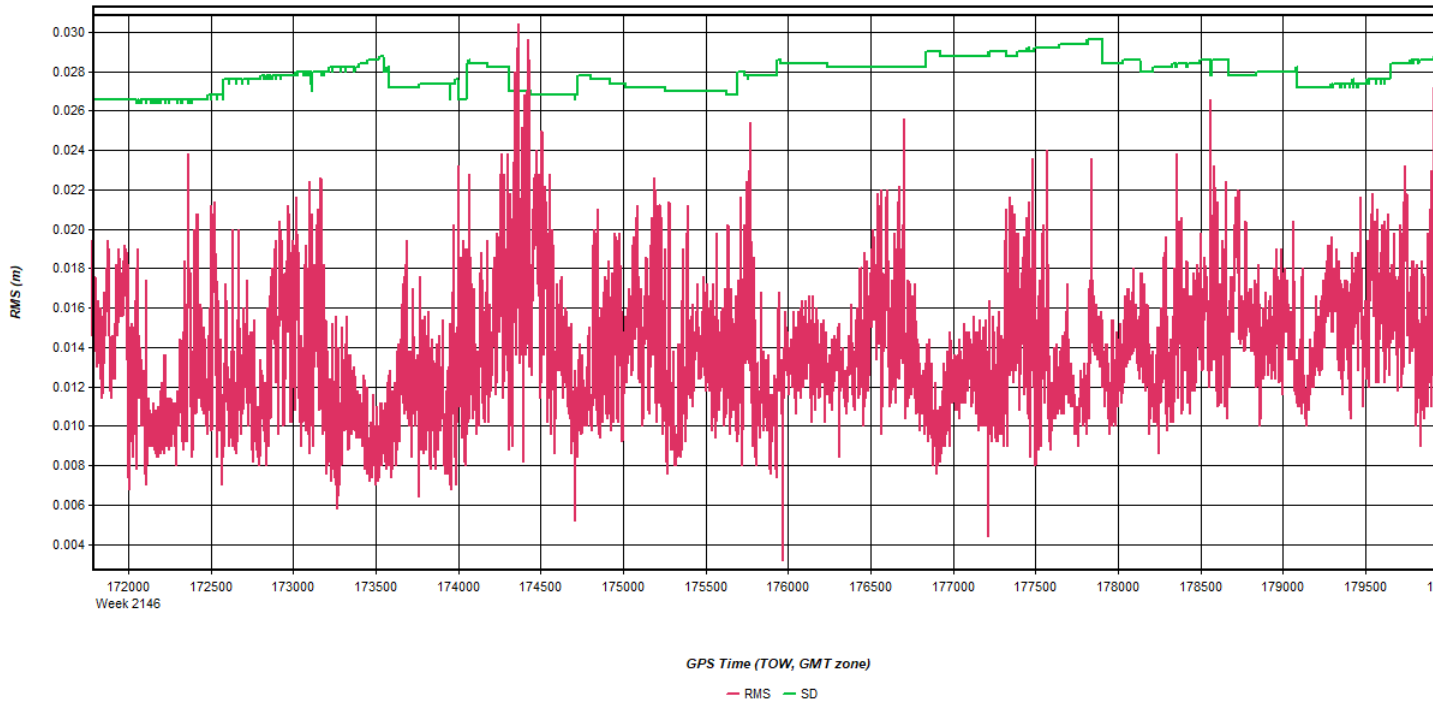
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 16: 20210222234210_31 [Smoothed TC Combined] - C/A Code Residual RMS Plot



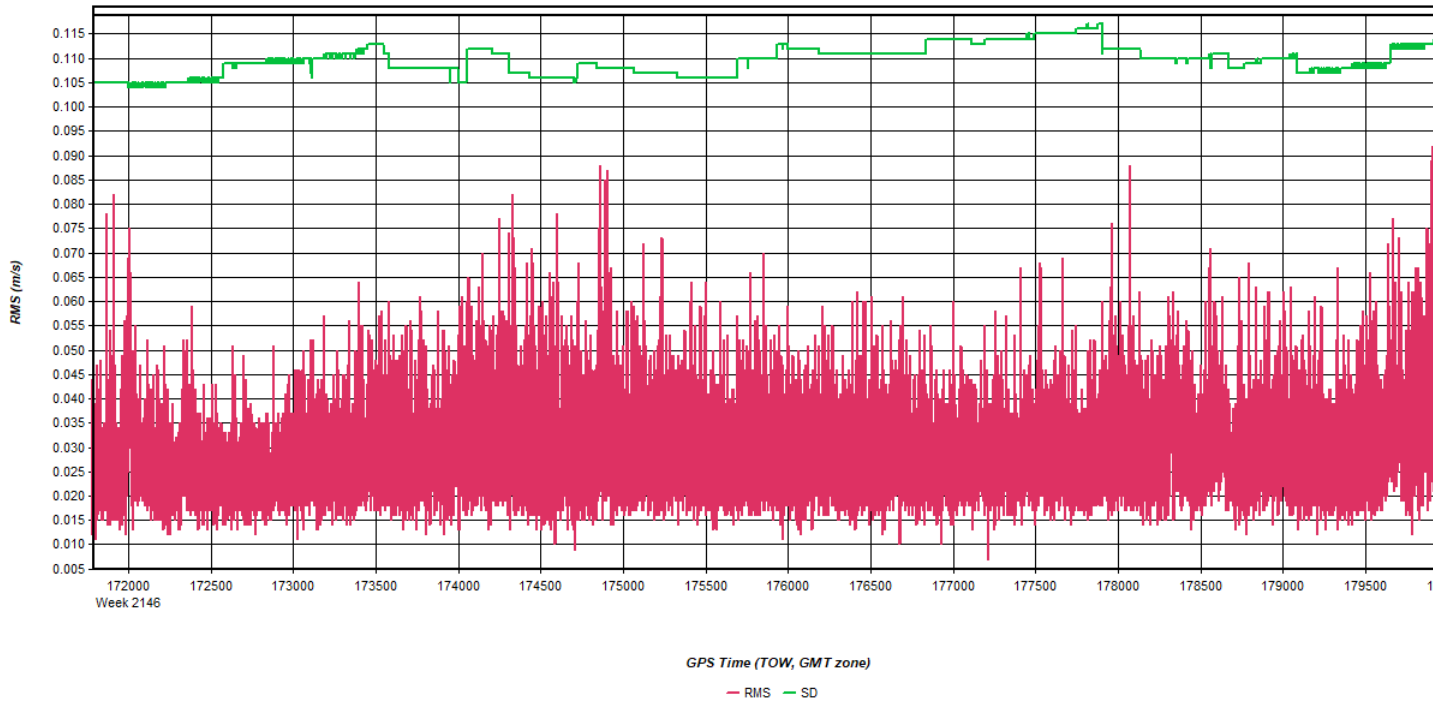
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 17: 20210222234210_31 [Smoothed TC Combined] - Carrier Residual RMS Plot



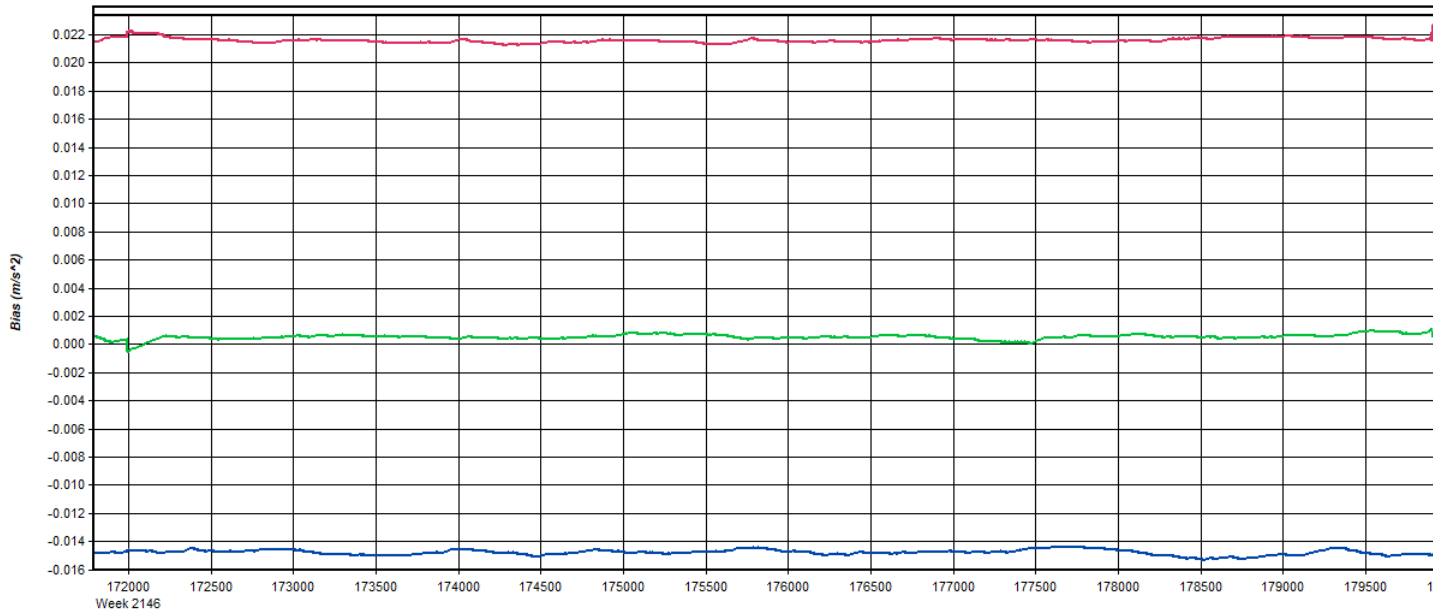
Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 18: 20210222234210_31 [Smoothed TC Combined] - Doppler Residual RMS Plot



Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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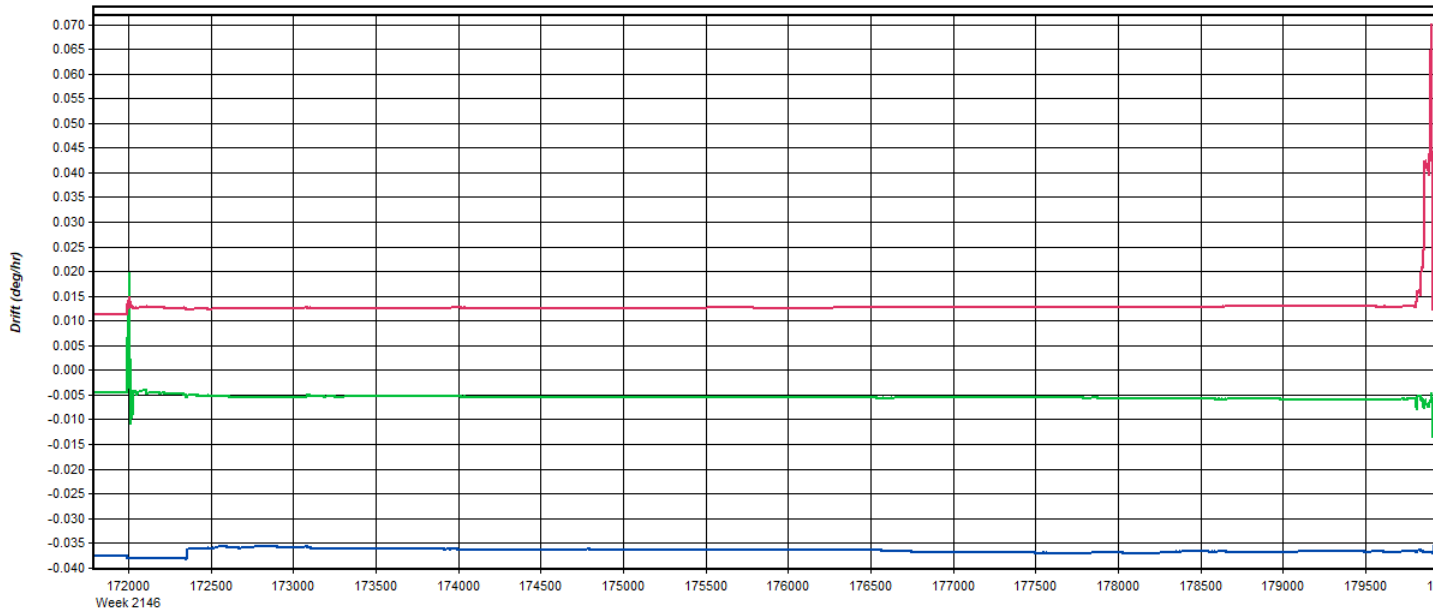
Figure 19: 20210222234210_31 [Smoothed TC Combined] - Accelerometer Bias Plot



GPS Time (TOW, GMT zone)
 Body-X Body-Y Body-Z

Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Figure 20: 20210222234210_31 [Smoothed TC Combined] - Gyro Drift Plot



GPS Time (TOW, GMT zone)
 Body-X Body-Y Body-Z

Process	20210222234210_31	by Unknown	on 2/23/2021	at 21:31:05
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Appendix E. Vertical Accuracy Flight Line & Scan Direction

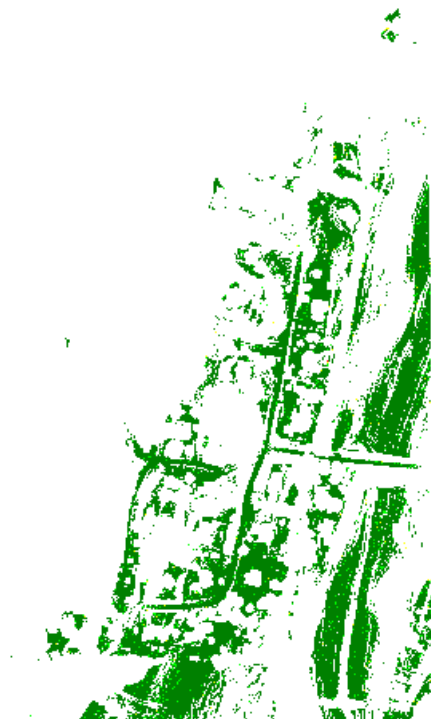
Vertical Accuracy Flightline Comparison- 20220111_203118

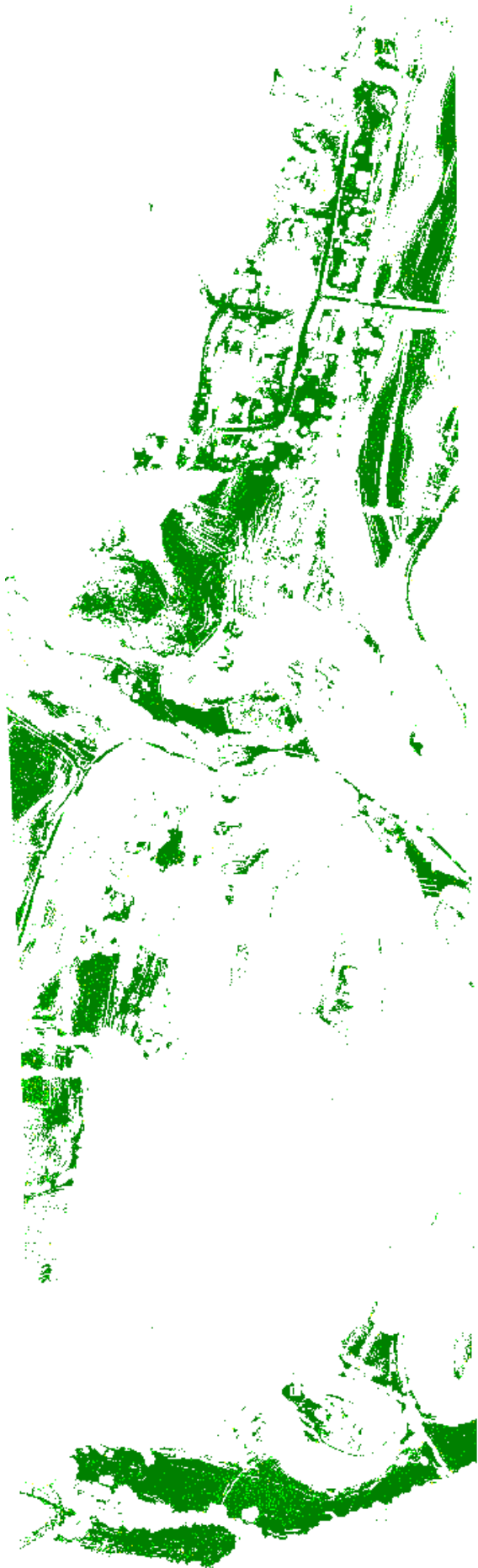
076_174852_vs_075_180319

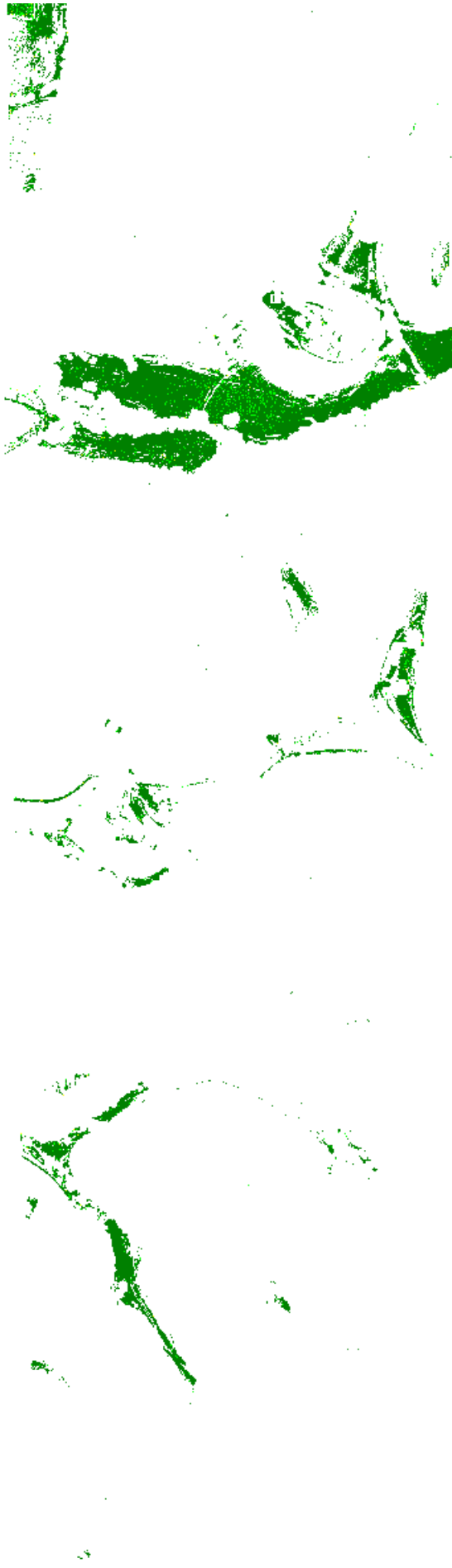
480157 valid patches with size of 2 m found. Only patches with standard deviation < 0.05 m and minimum of 5 points are included.

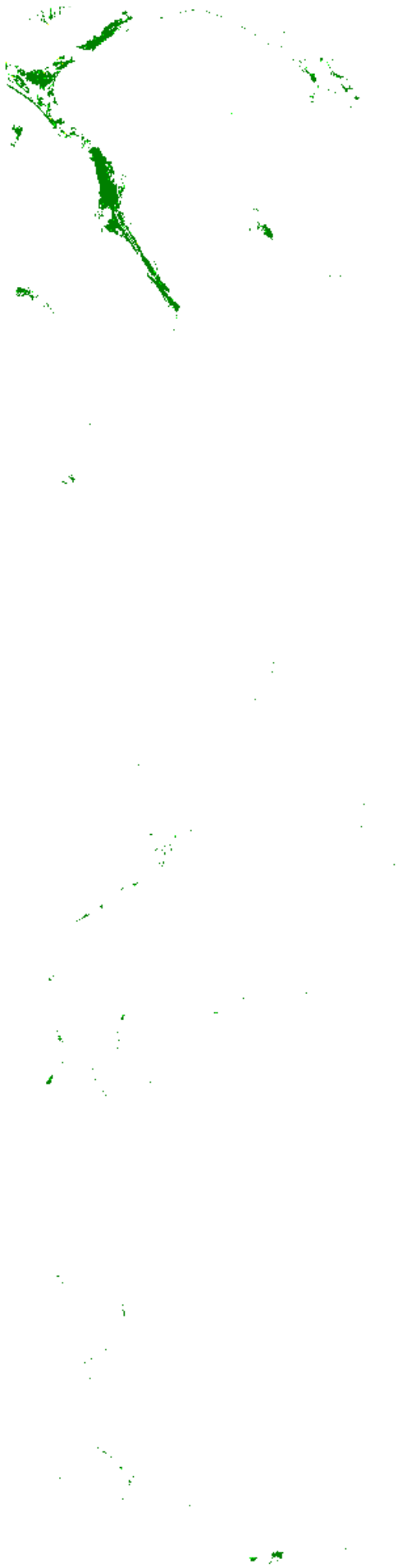
Color	Limits [m]	Number of patches	Proportion of total number of patches [%]
	<=0.03	450999	93.93
	0.03-0.05	26612	5.54
	0.05-0.1	2507	0.52
	>0.1	39	0.01



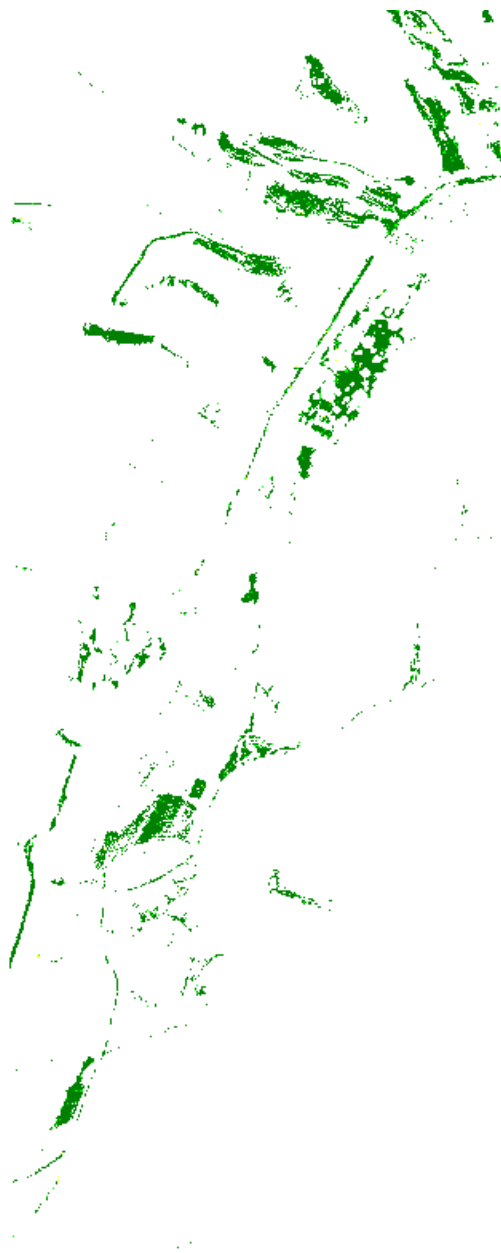














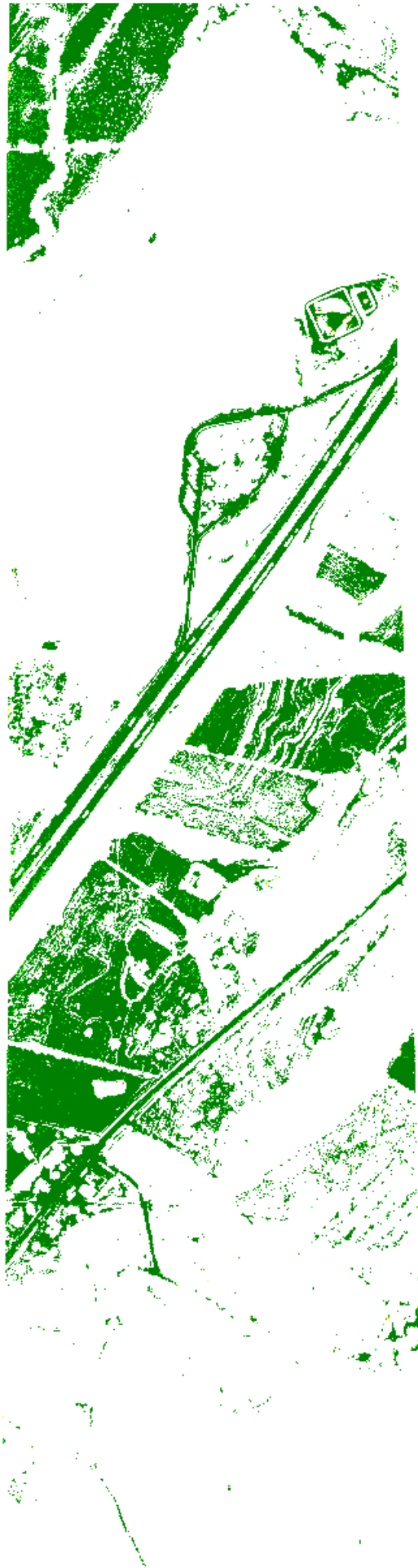


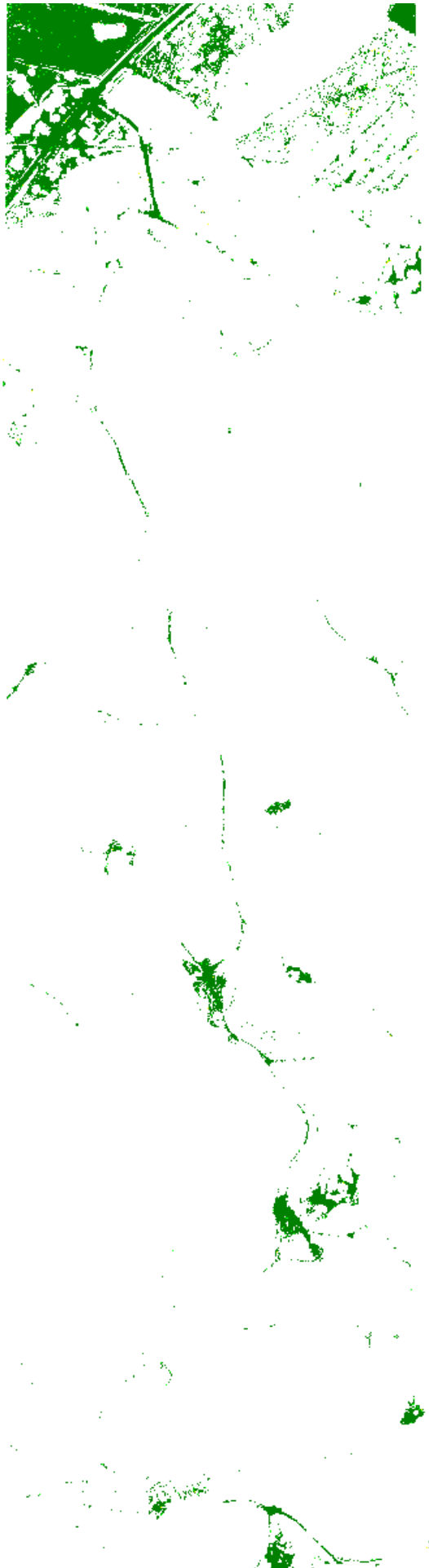
1892

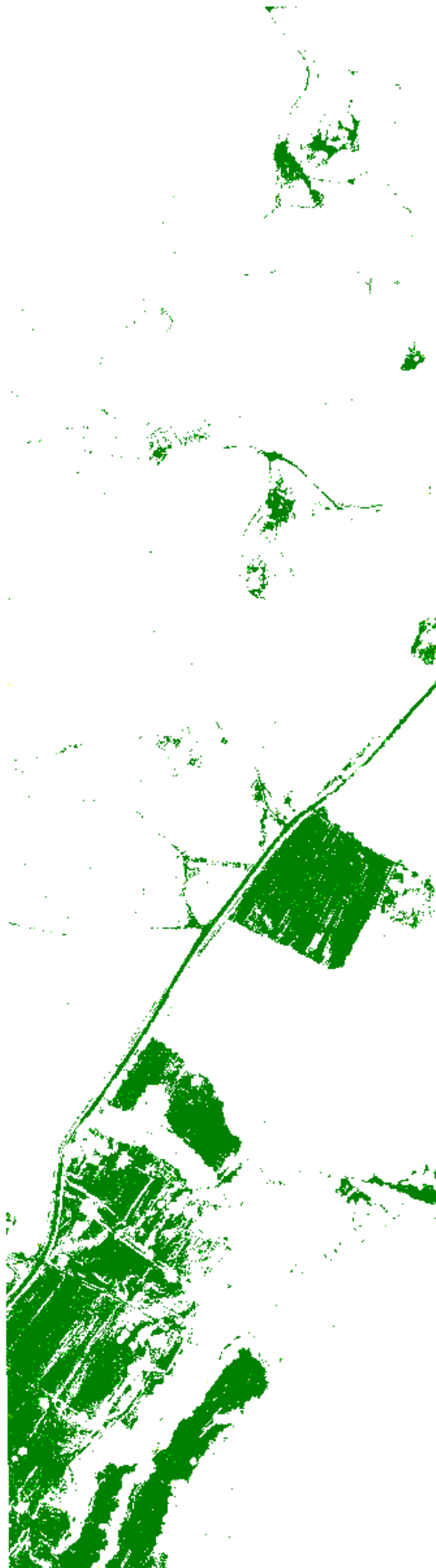
1892

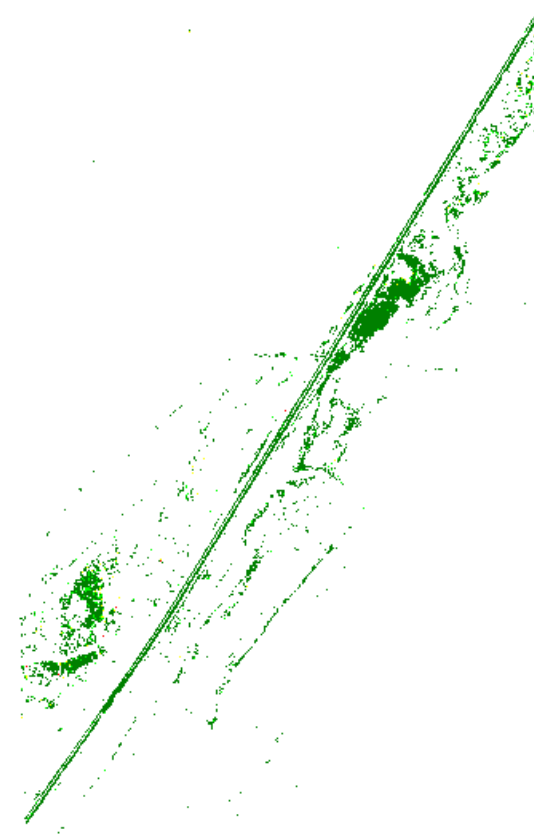
1892

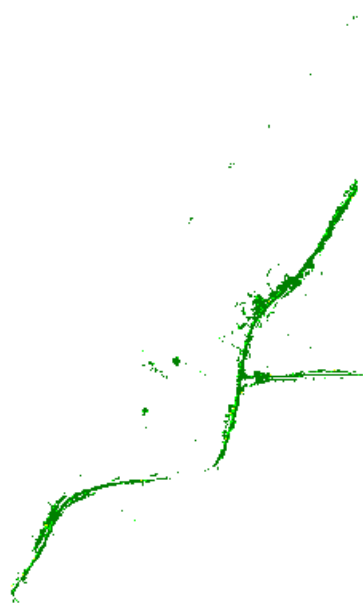
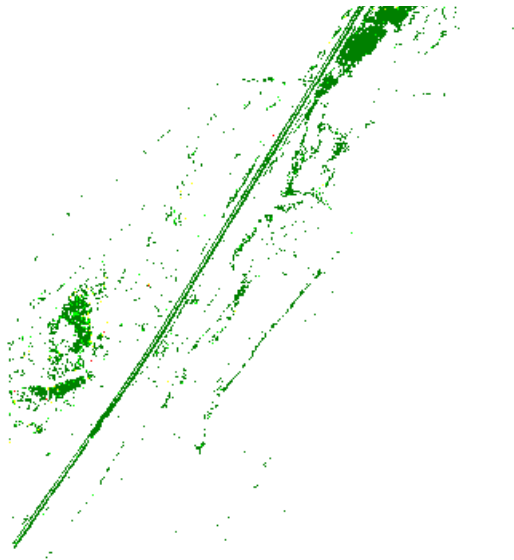


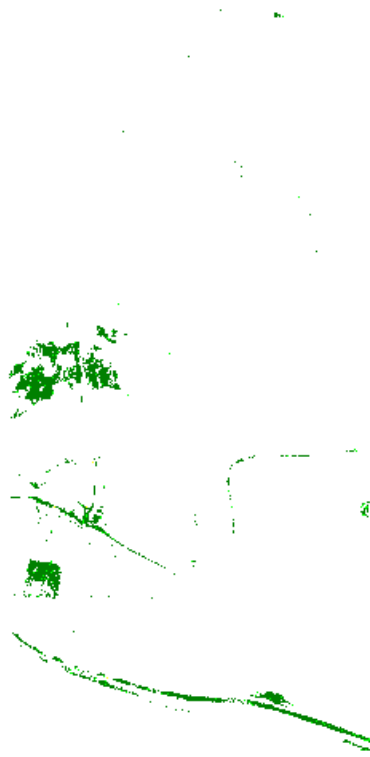
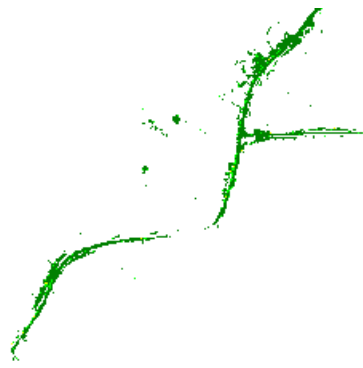


















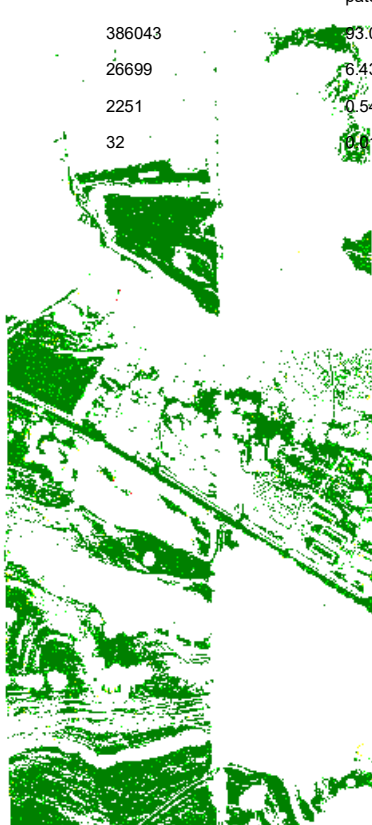


Vertical difference

077_173621_vs_076_174852

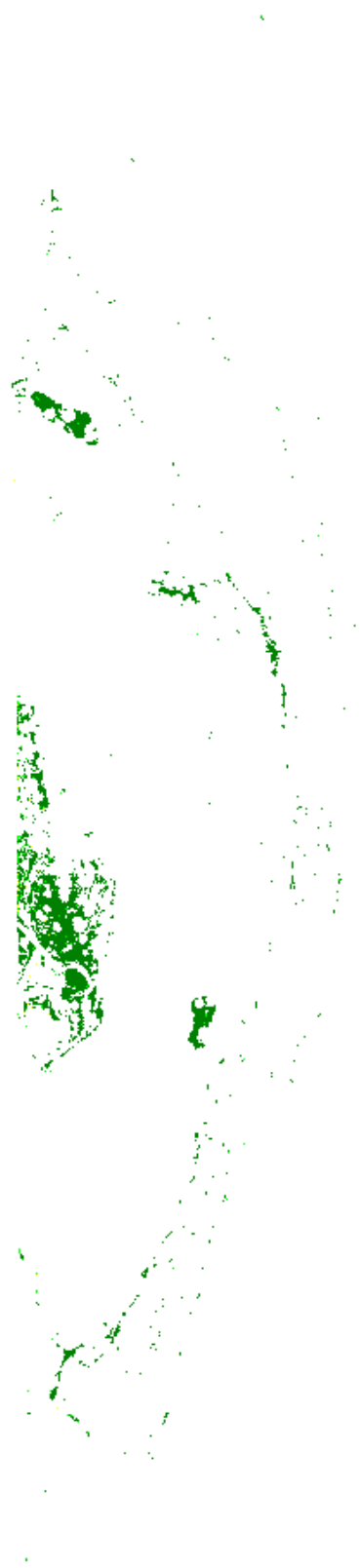
415025 valid patches with size of 2 m found. Only patches with standard deviation < 0.05 m and minimum of 5 points are included.

Color	Limits [m]	Number of patches	Proportion of total number of patches [%]
Light Green	<=0.03	386043	93.02
Yellow	0.03-0.05	26699	6.43
Orange	0.05-0.1	2251	0.54
Red	>0.1	32	0.01



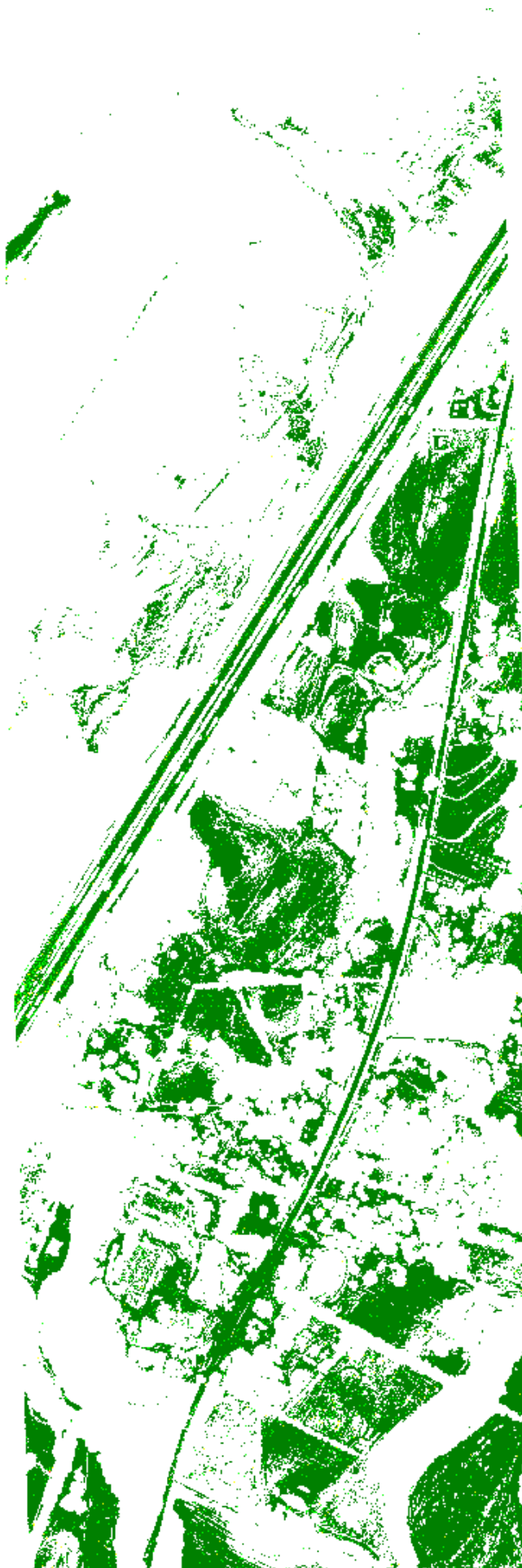


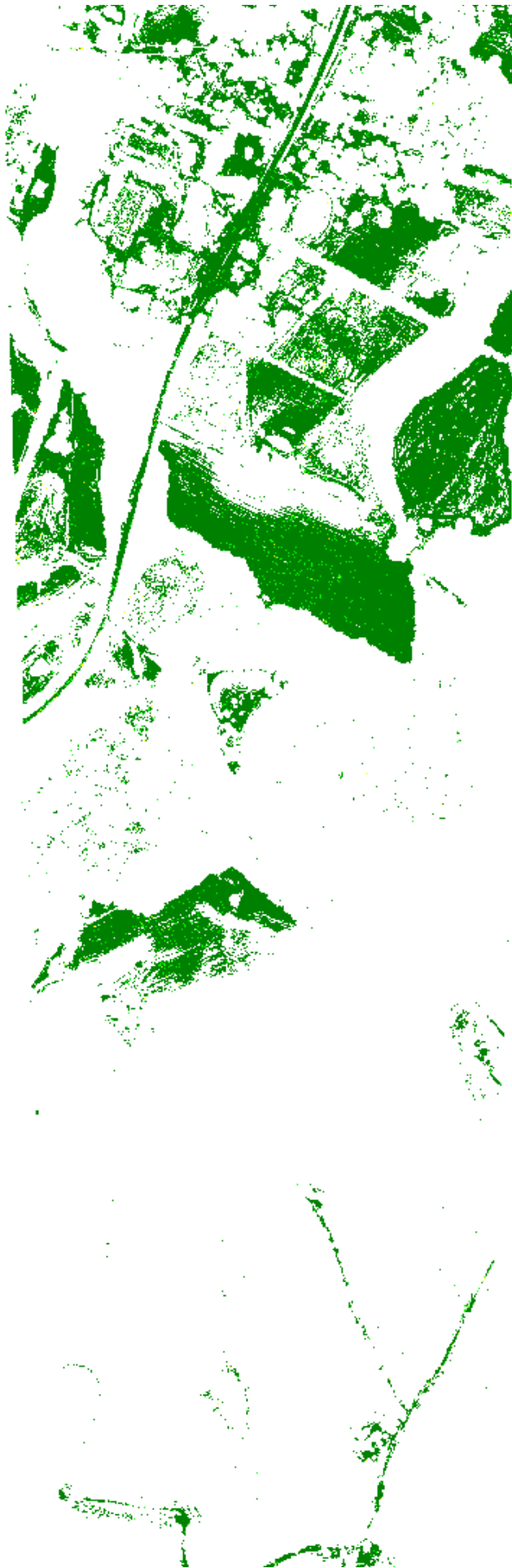
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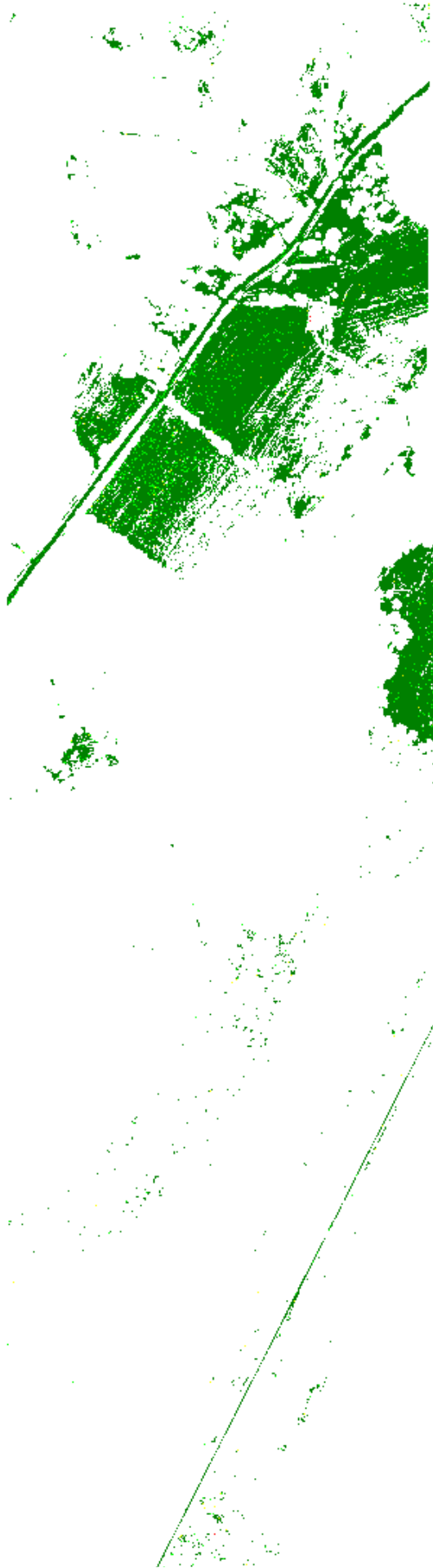


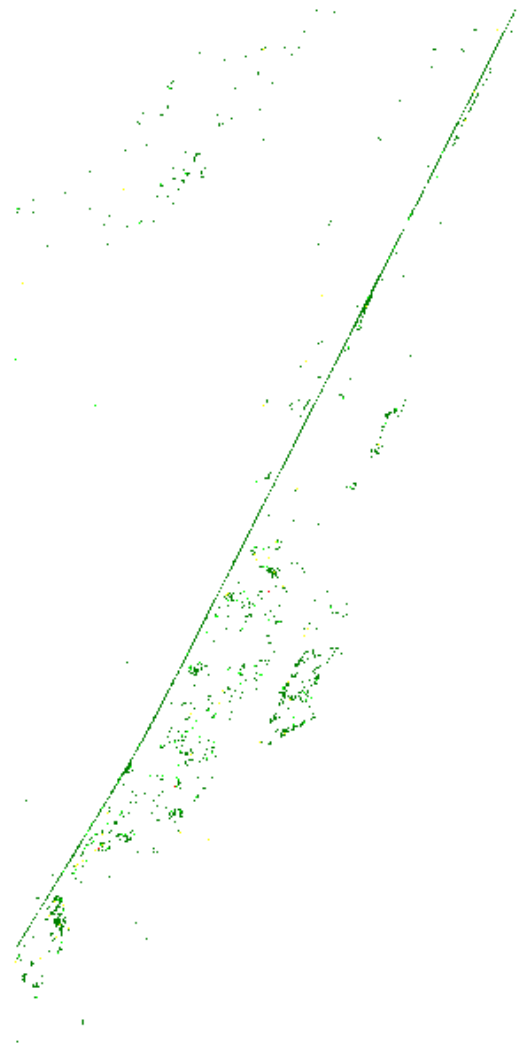




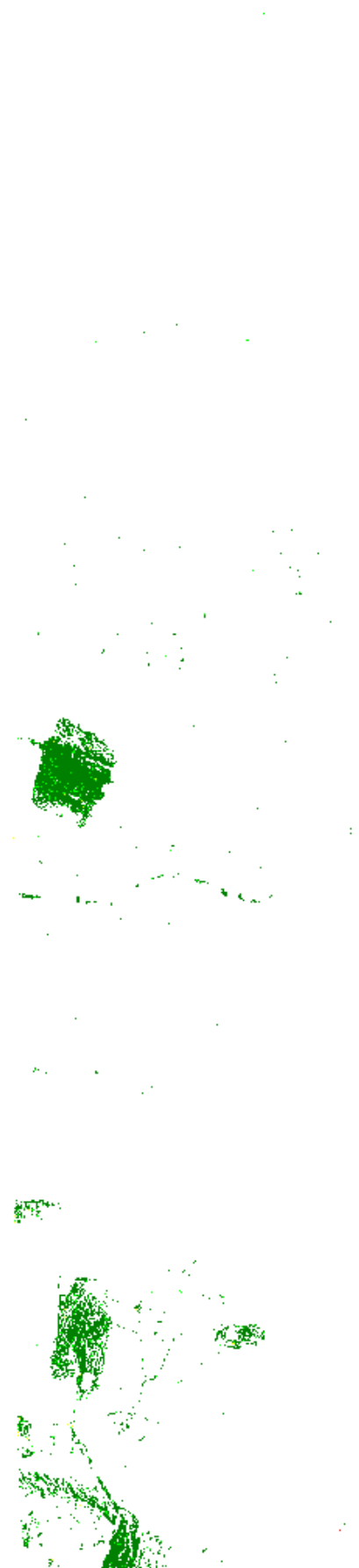




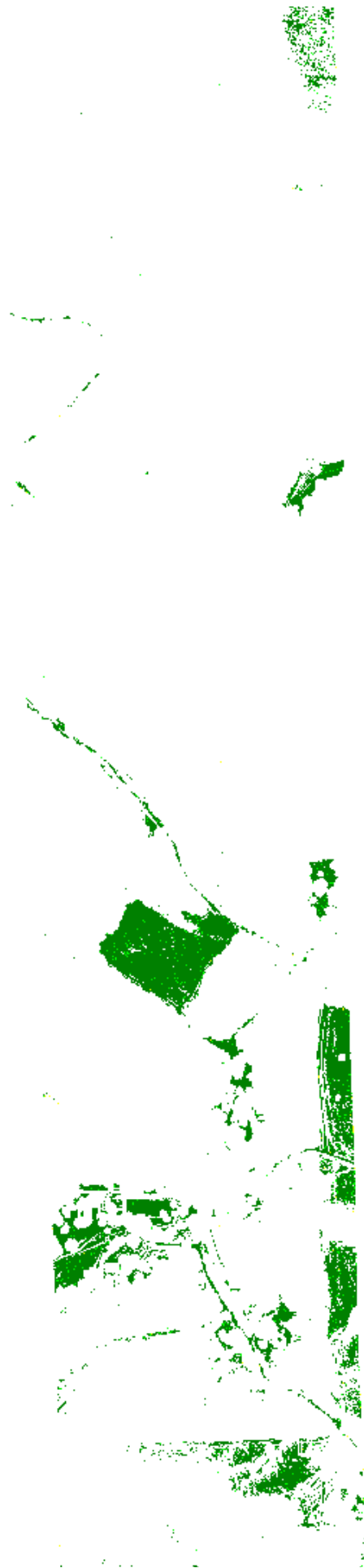


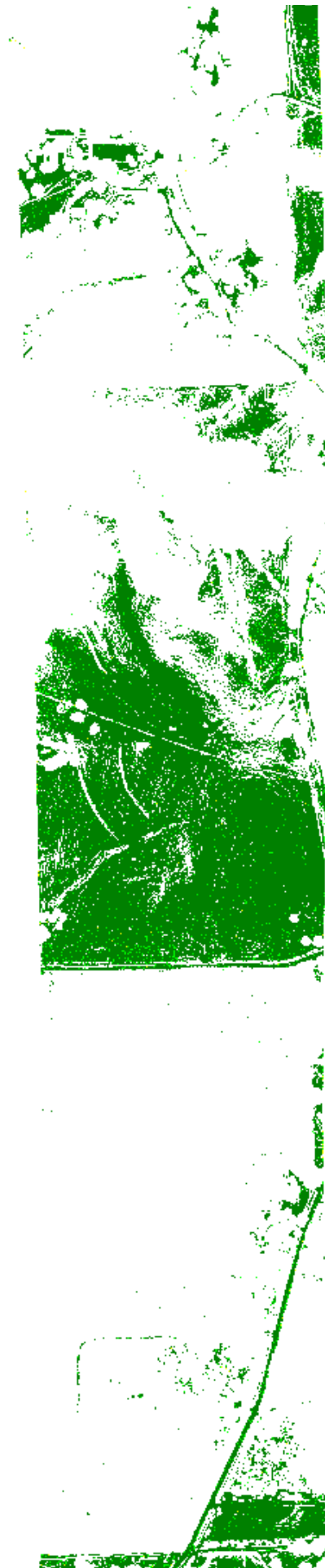
















Vertical difference



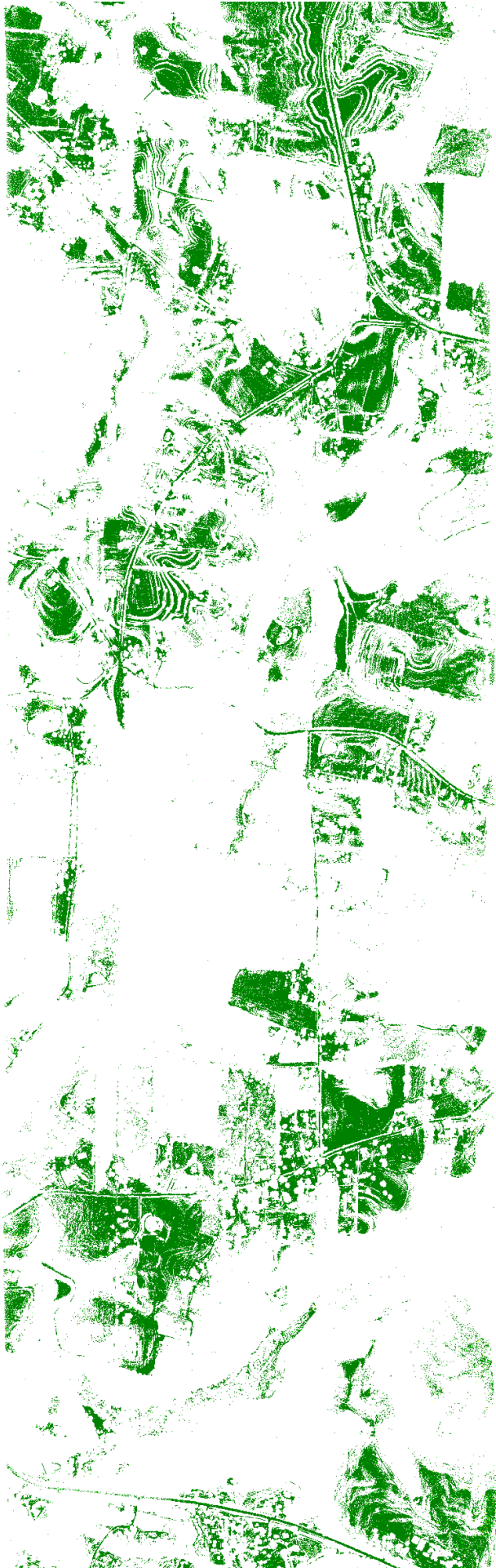
Vertical Accuracy Scan Direction Comparison- 20220111_203118

075_180319

2031226 valid patches with size of 2 m found. Only patches with standard deviation < 0.05 m and minimum of 5 points are included.

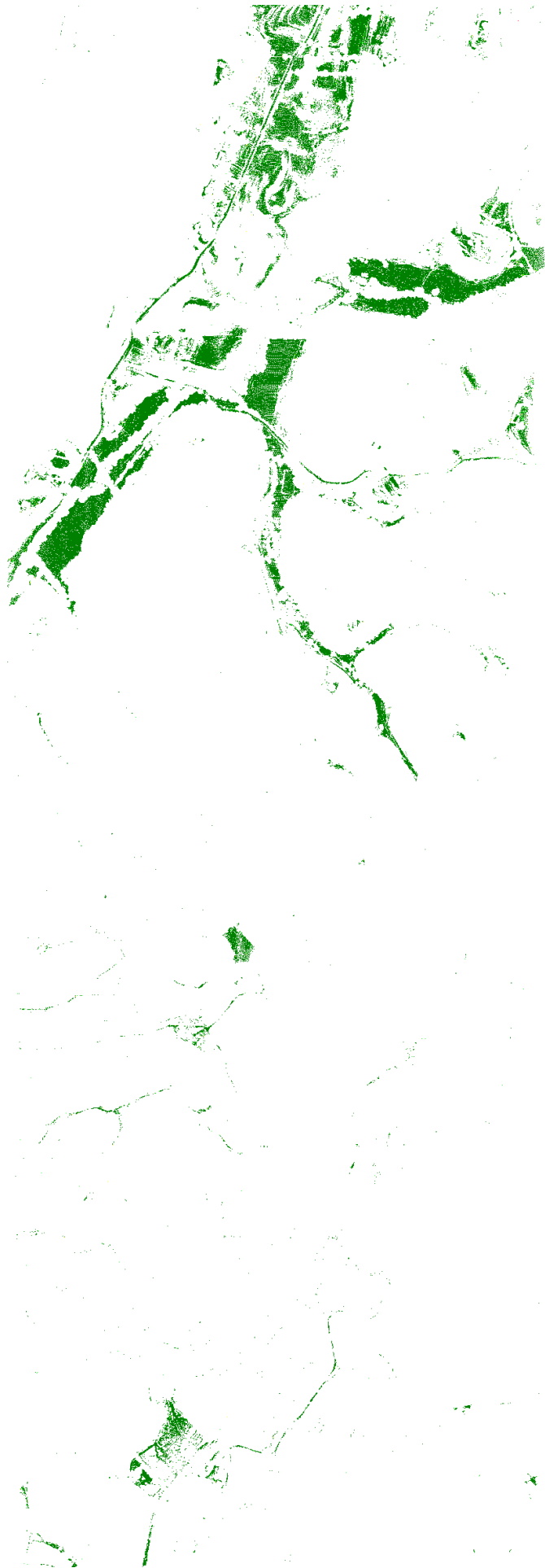
Color	Limits [m]	Number of patches	Proportion of total number of patches [%]
	<=0.03	1943823	95.70
	0.03-0.05	77072	3.79
	0.05-0.1	10279	0.51
	>0.1	52	0.00

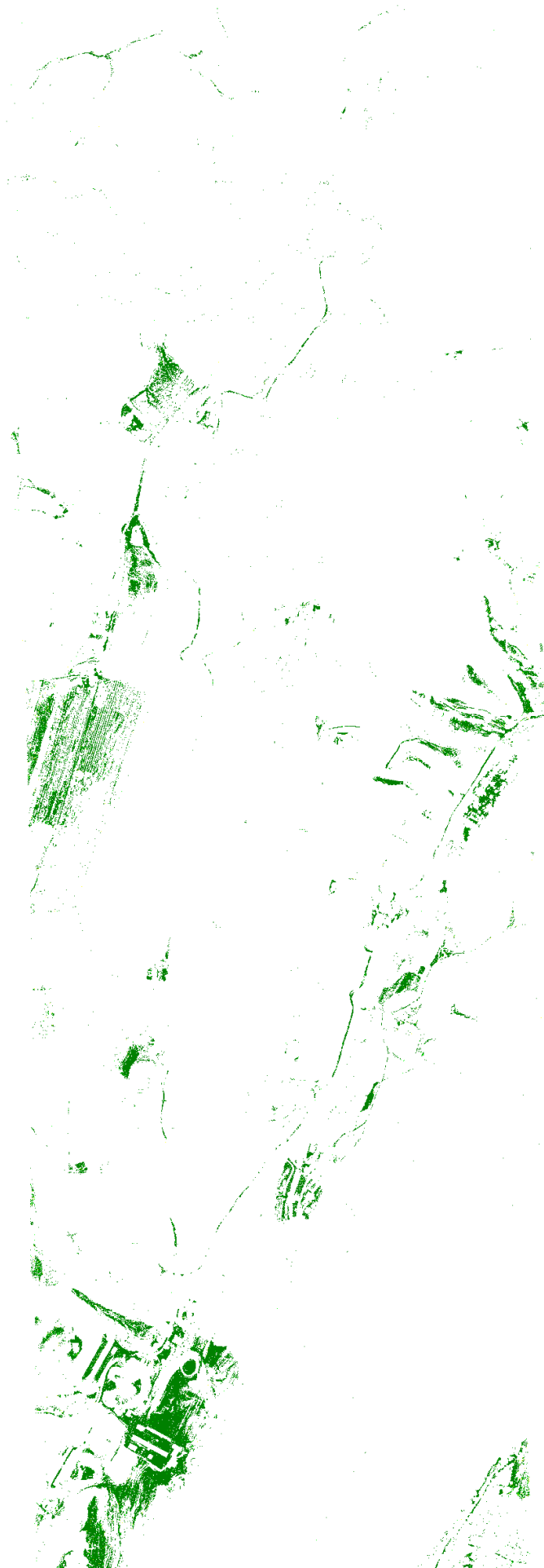






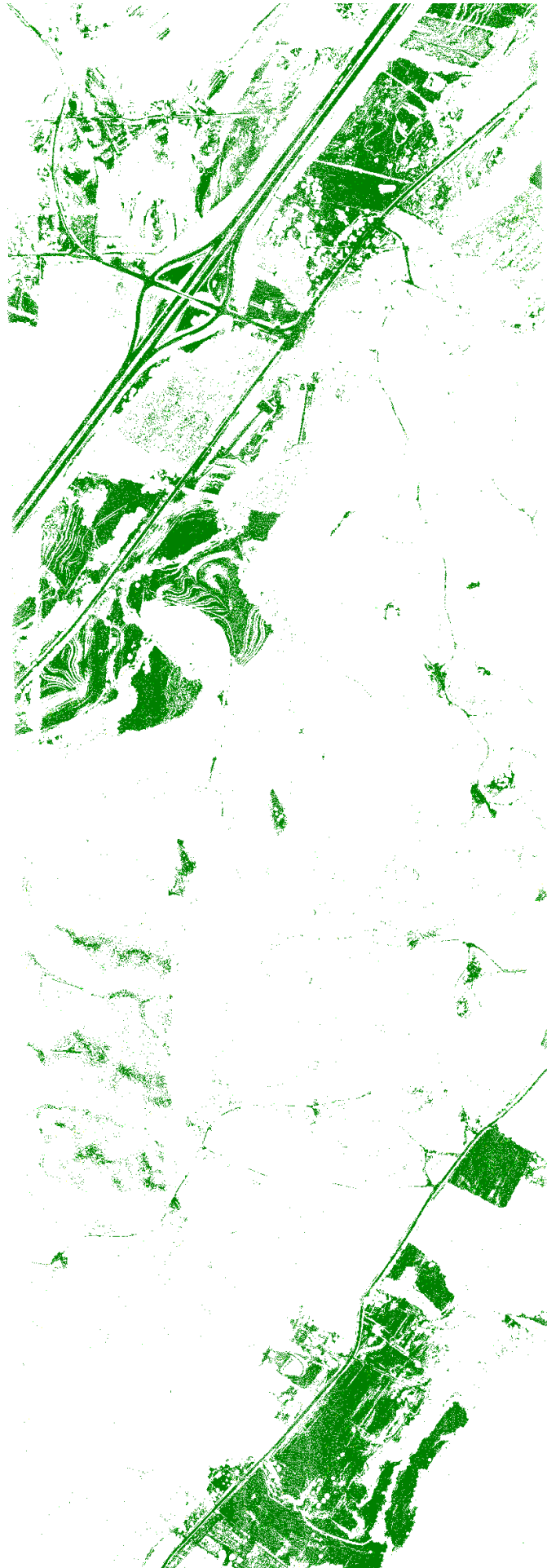


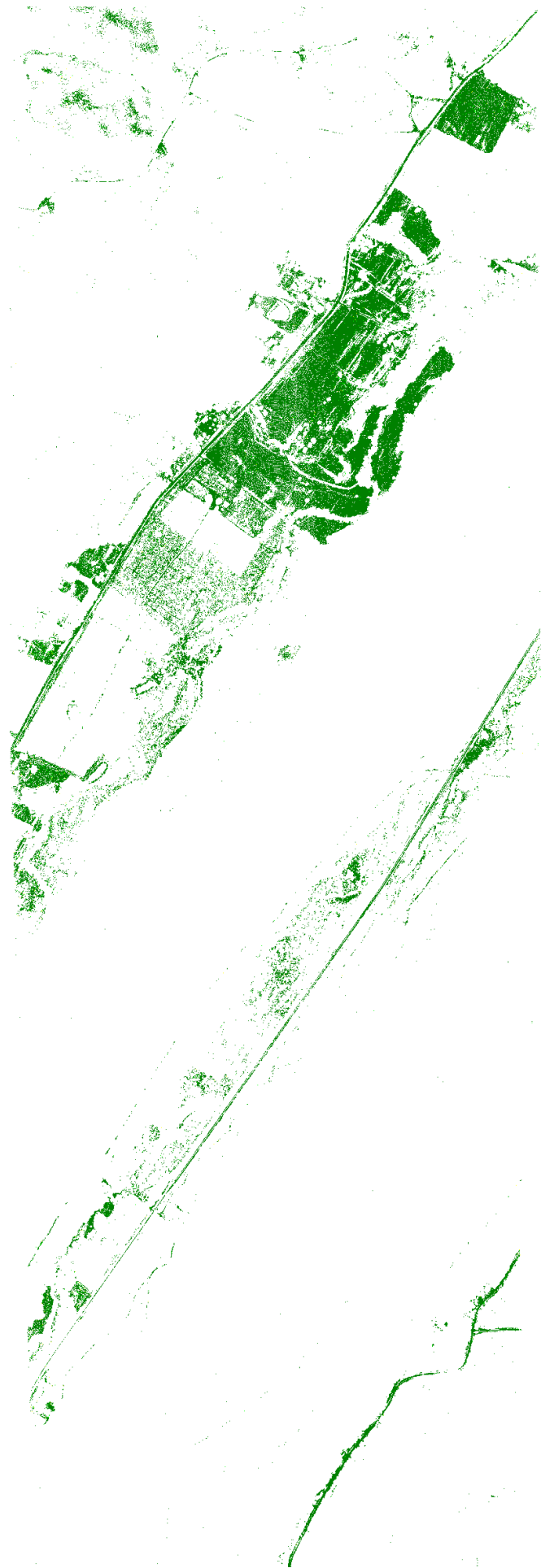


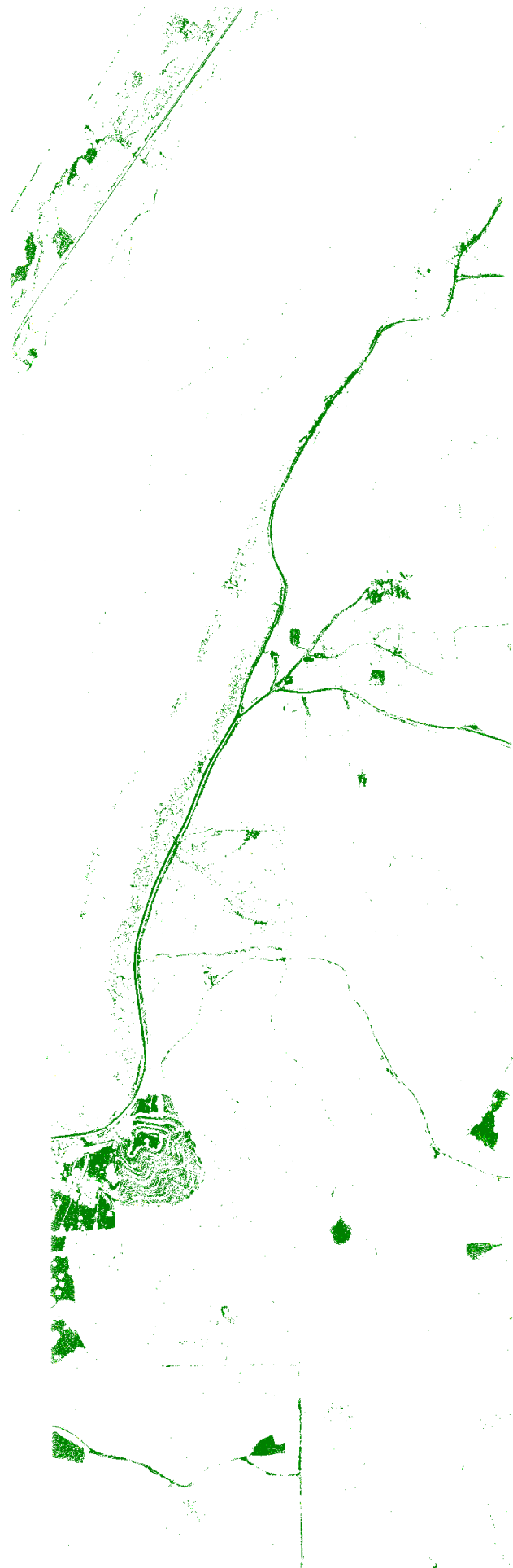
















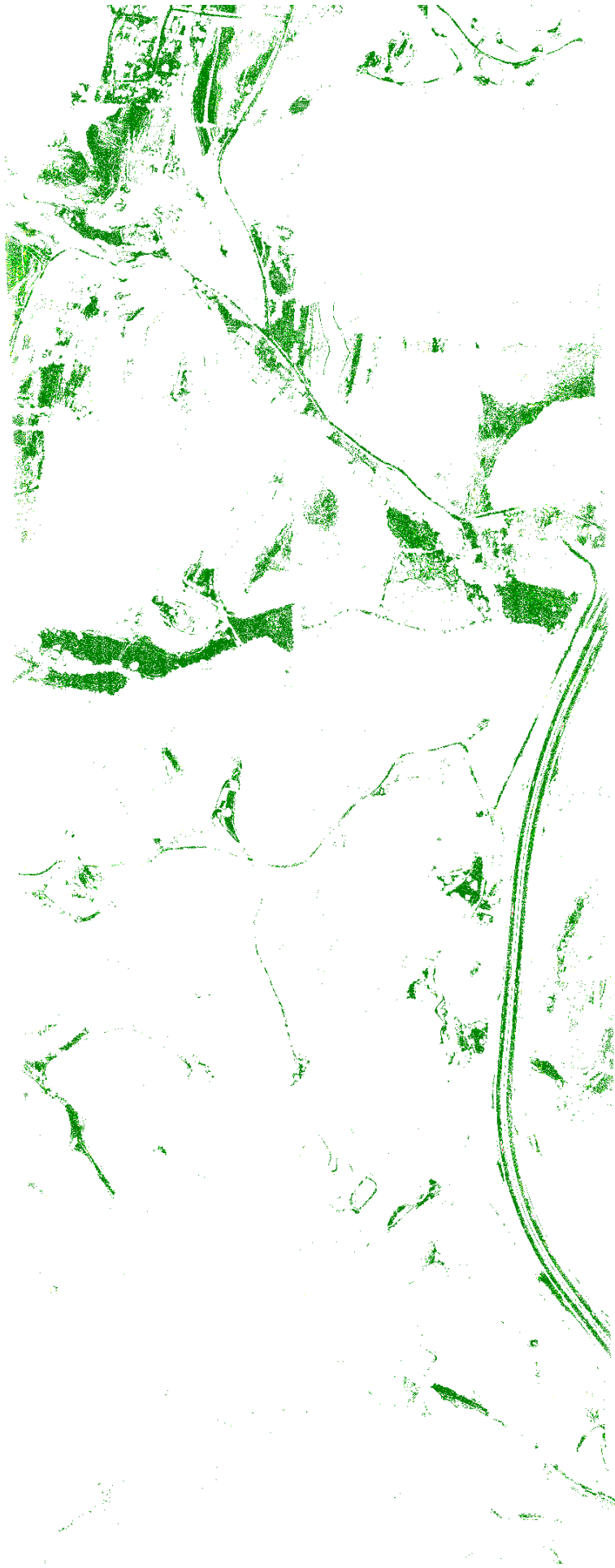
Vertical difference

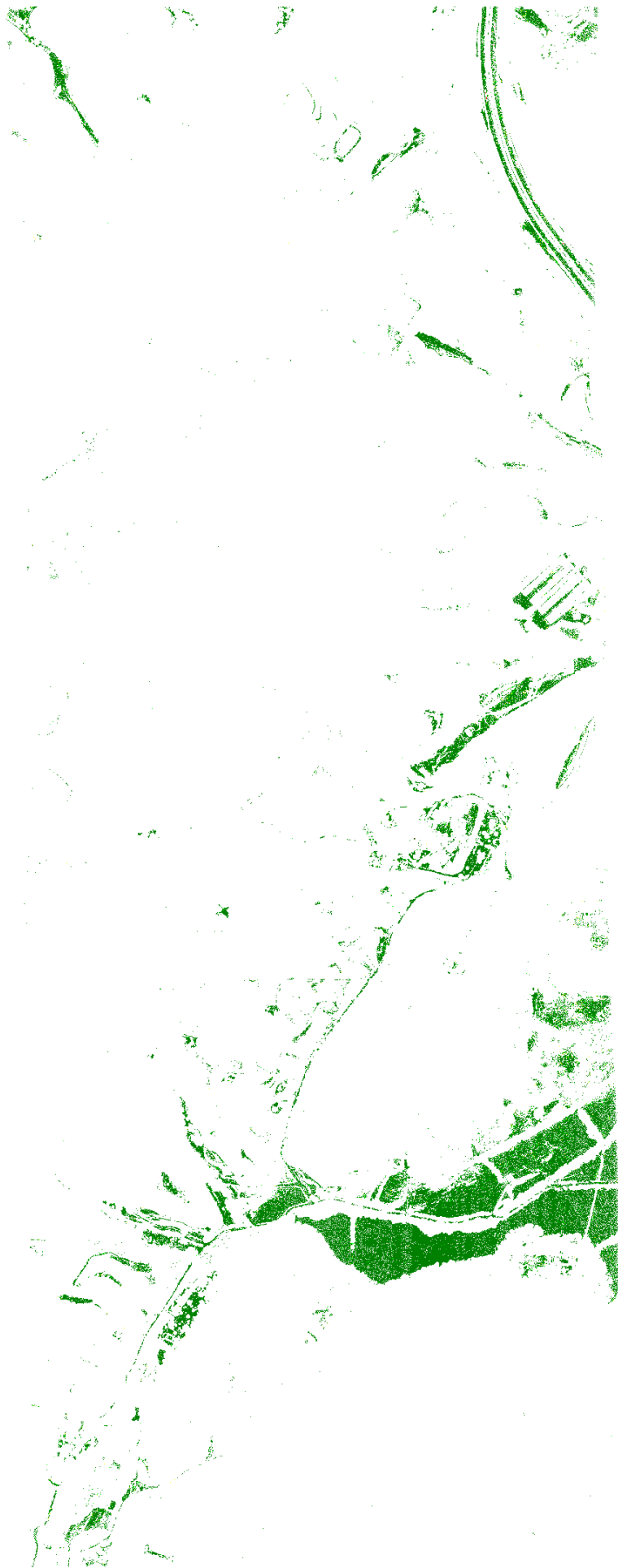
076_174852

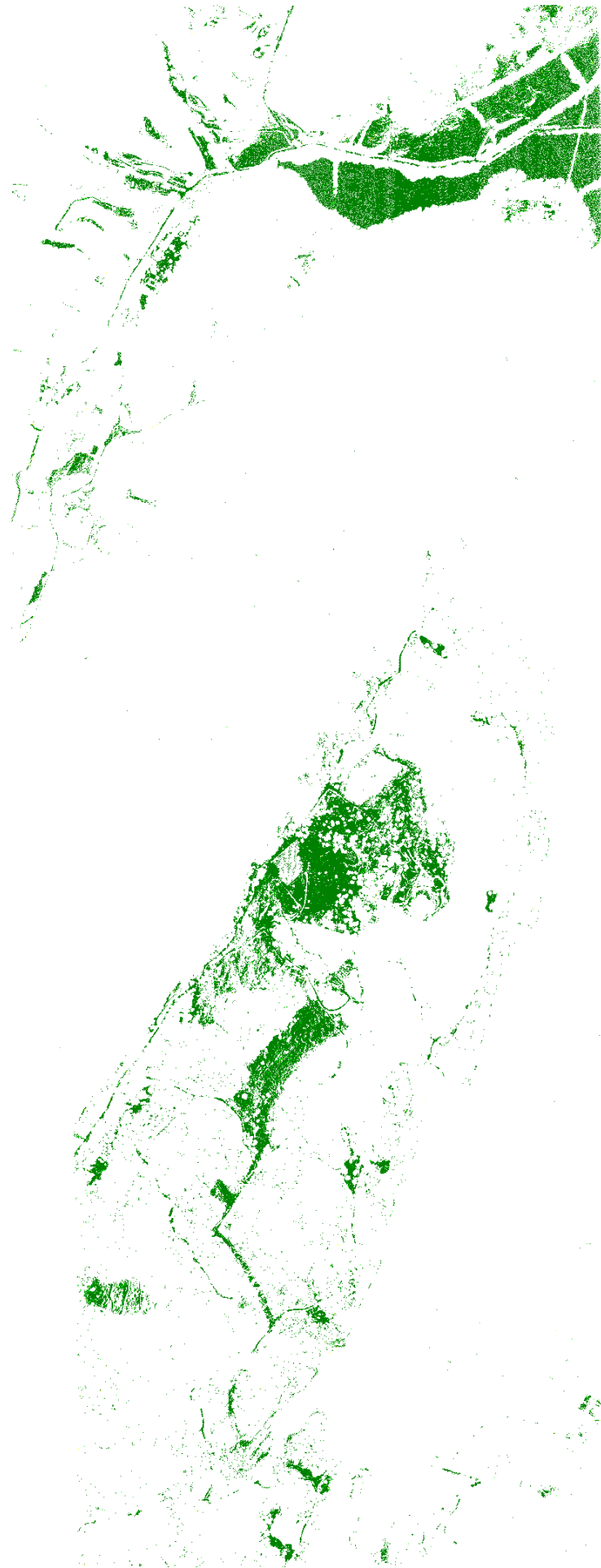
1337139 valid patches with size of 2 m found. Only patches with standard deviation < 0.05 m and minimum of 5 points are included.

Color	Limits [m]	Number of patches	Proportion of total number of patches [%]
Red	<=0.03	1255568	93.90
Yellow	0.03-0.05	70336	5.24
Green	0.05-0.1	11165	0.83
Blue	>0.1	170	0.01

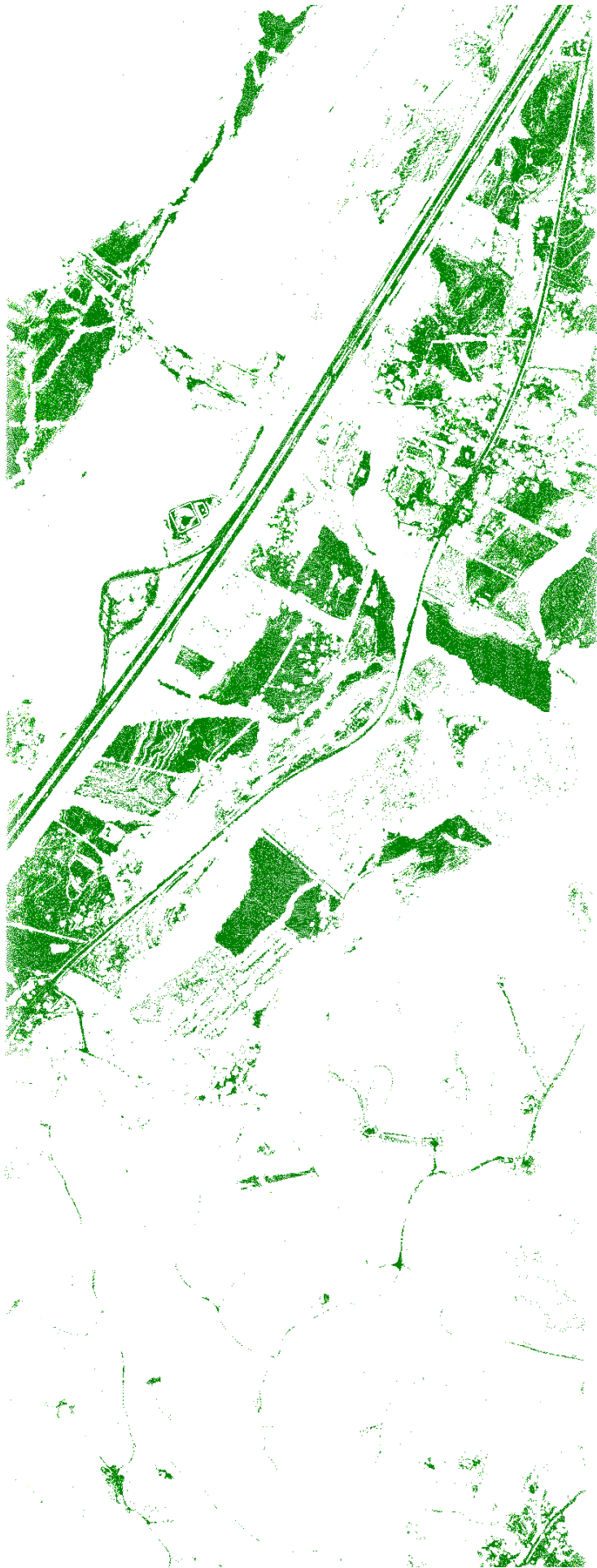


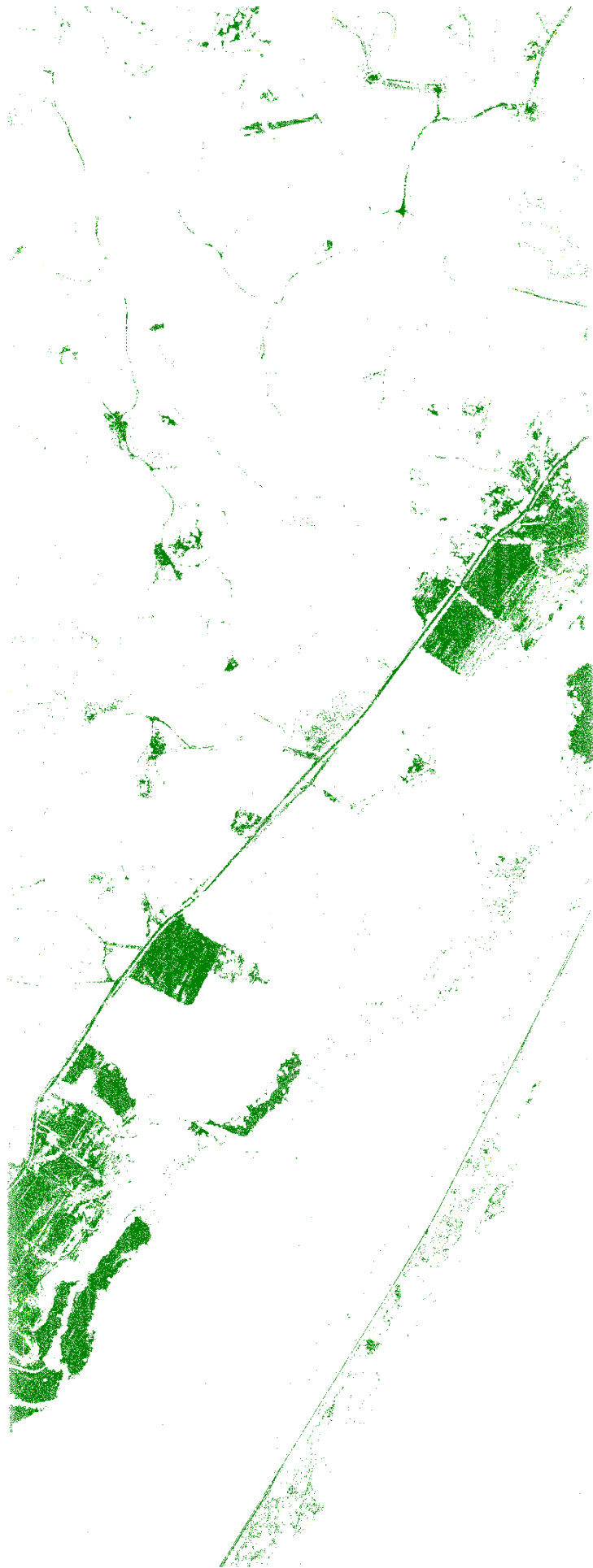


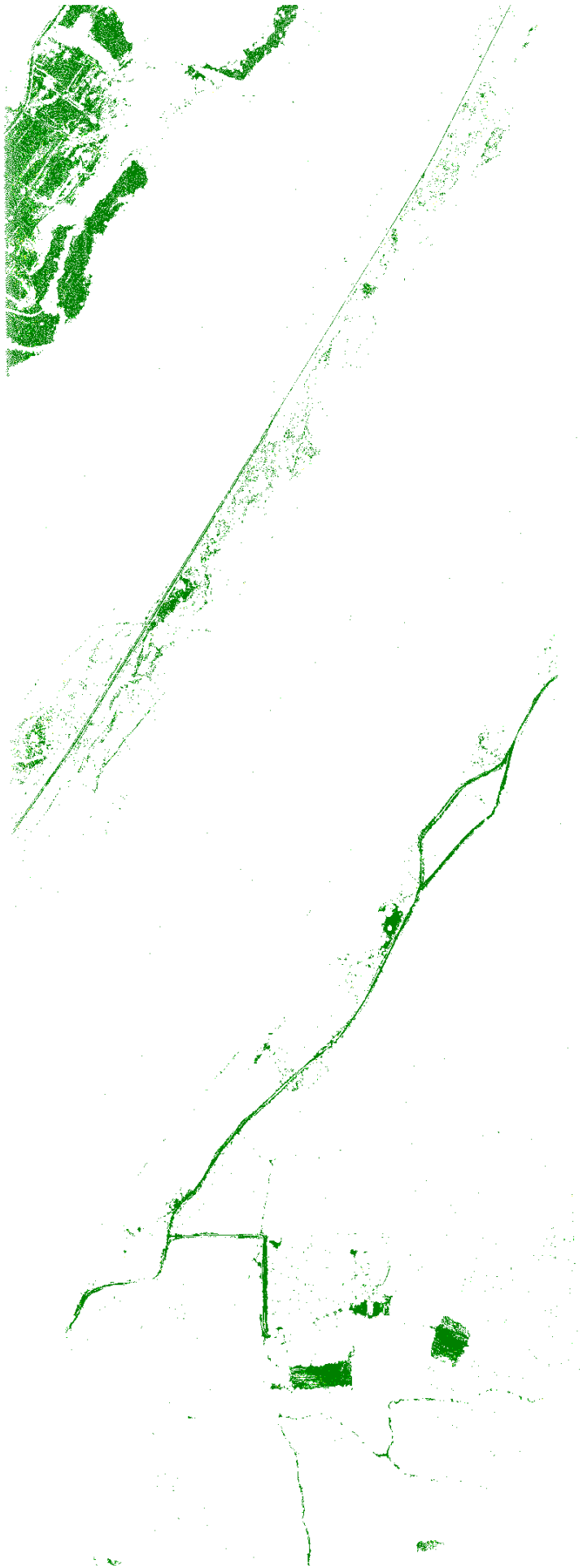






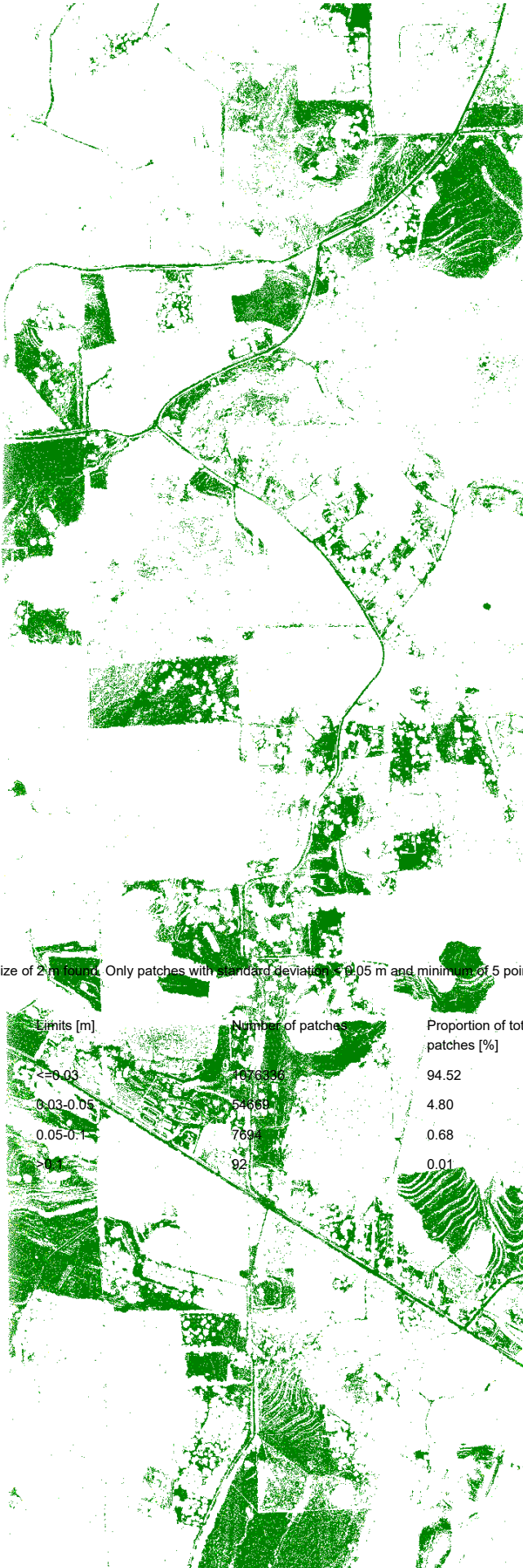












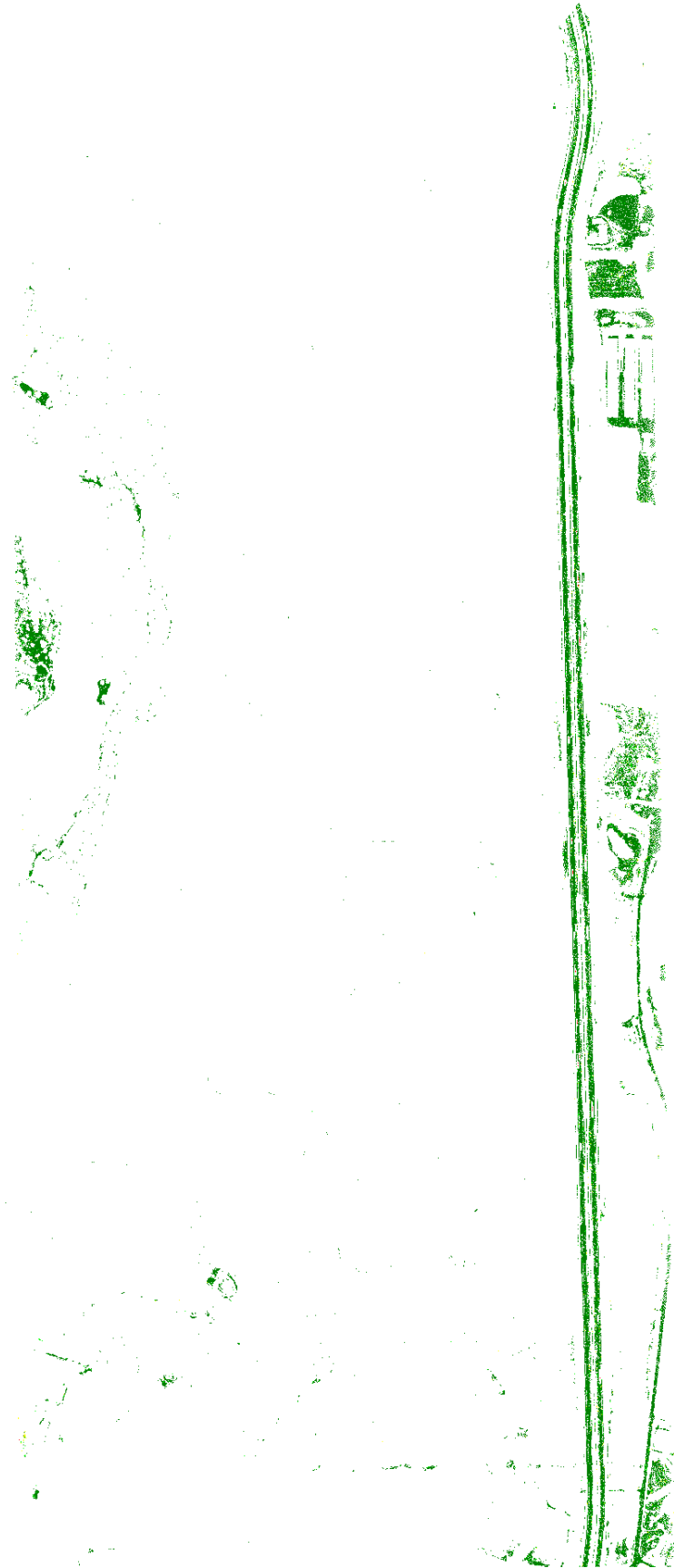
Vertical difference

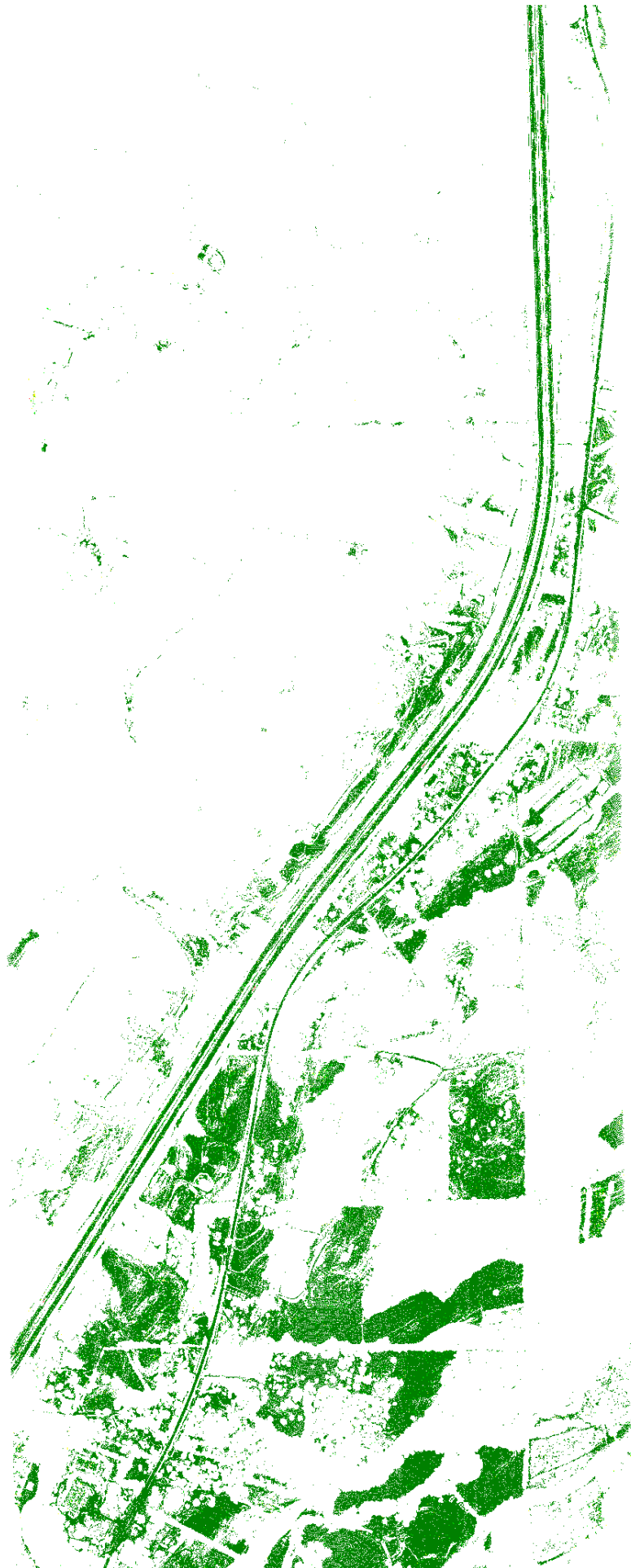
077_173621

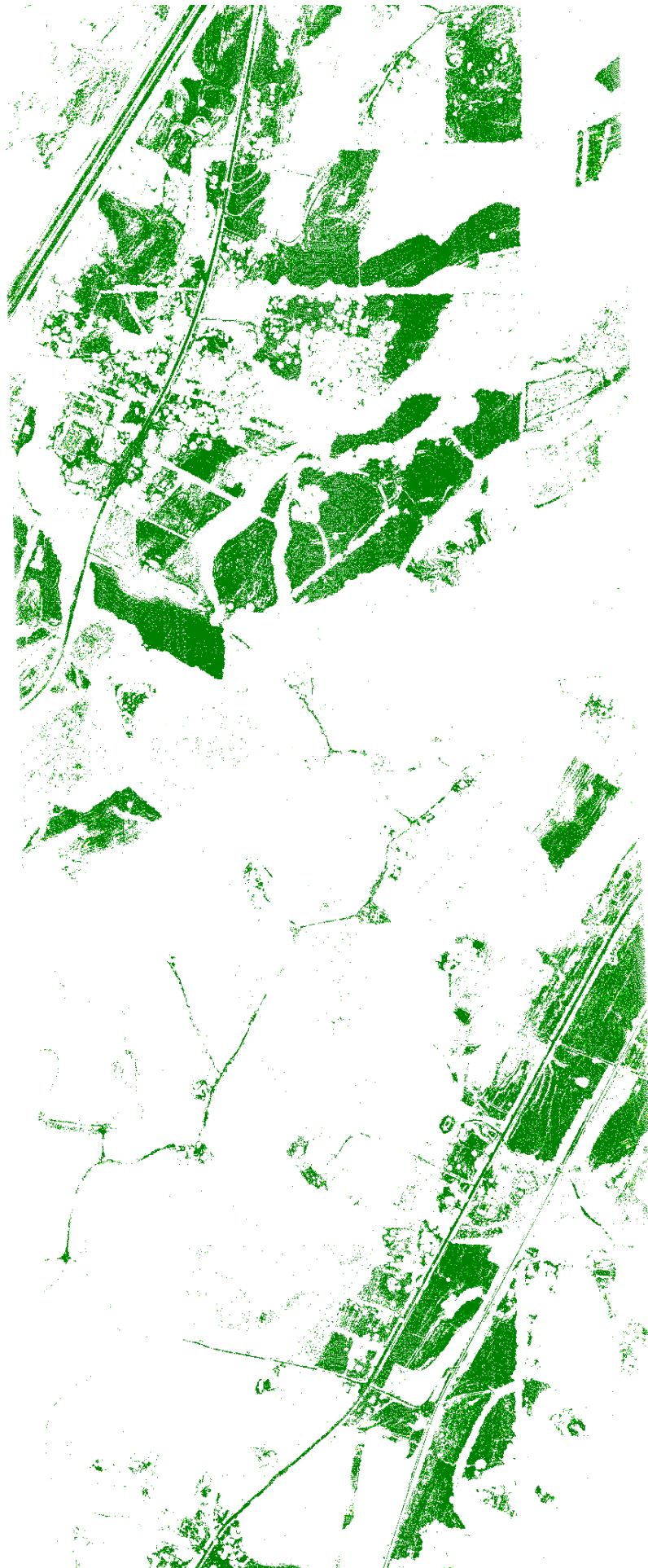
1138791 valid patches with size of 2m found. Only patches with standard deviation ≤ 0.05 m and minimum of 5 points are included.

Color

Limits [m]	Number of patches	Proportion of total number of patches [%]
≤ 0.03	1076336	94.52
0.03-0.05	54688	4.80
0.05-0.1	769	0.68
> 0.1	92	0.01

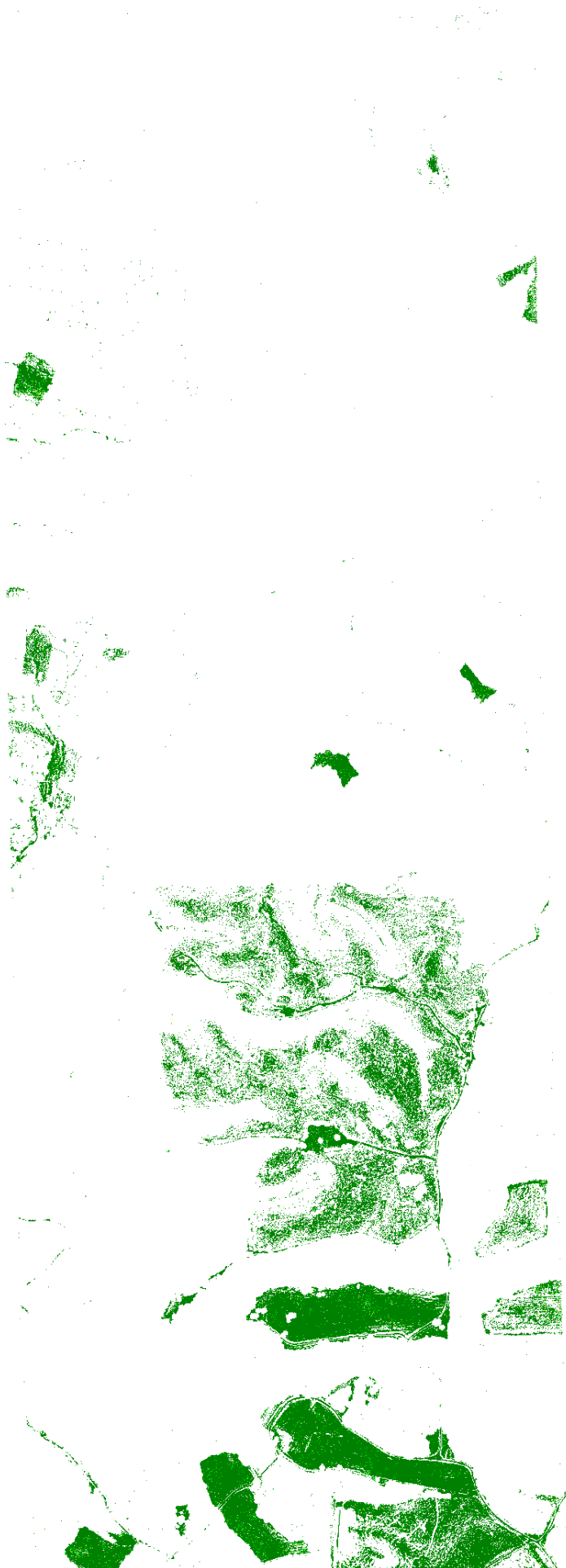
















Vertical difference

