

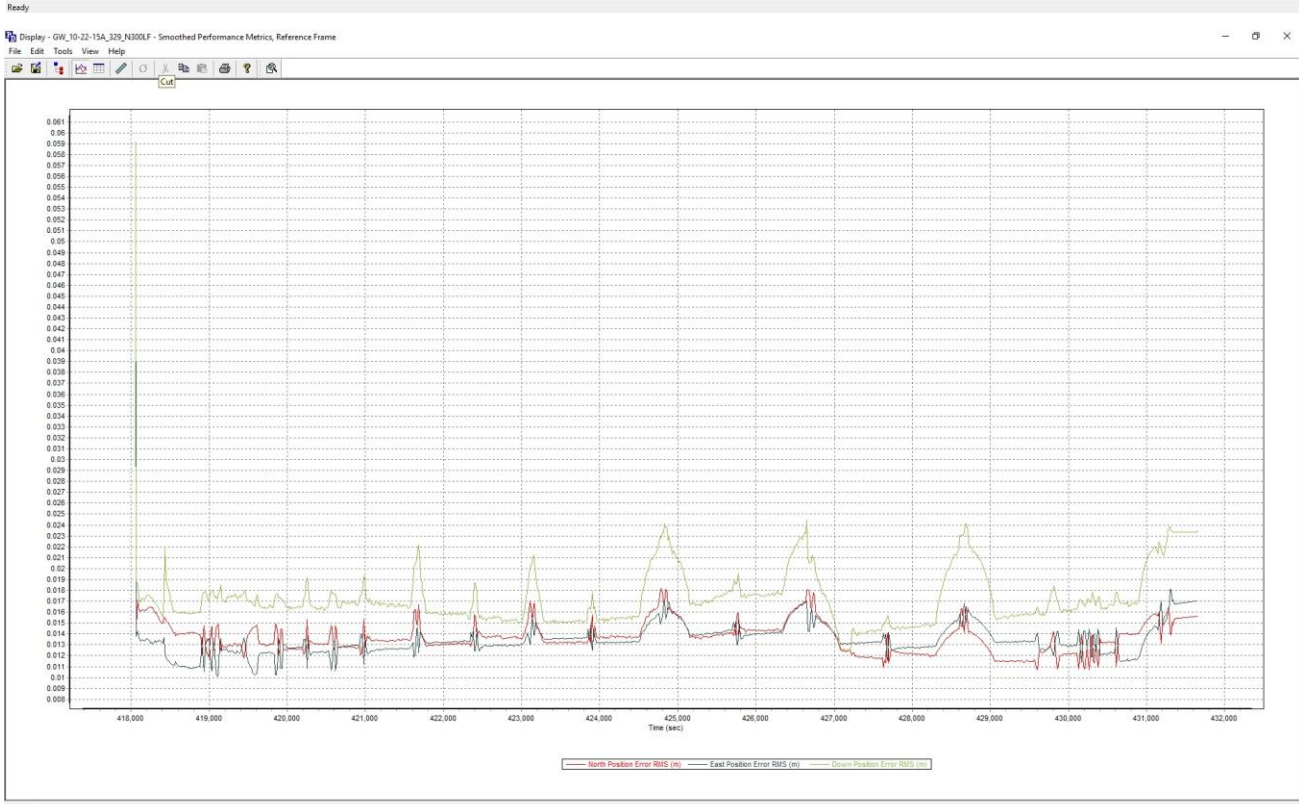
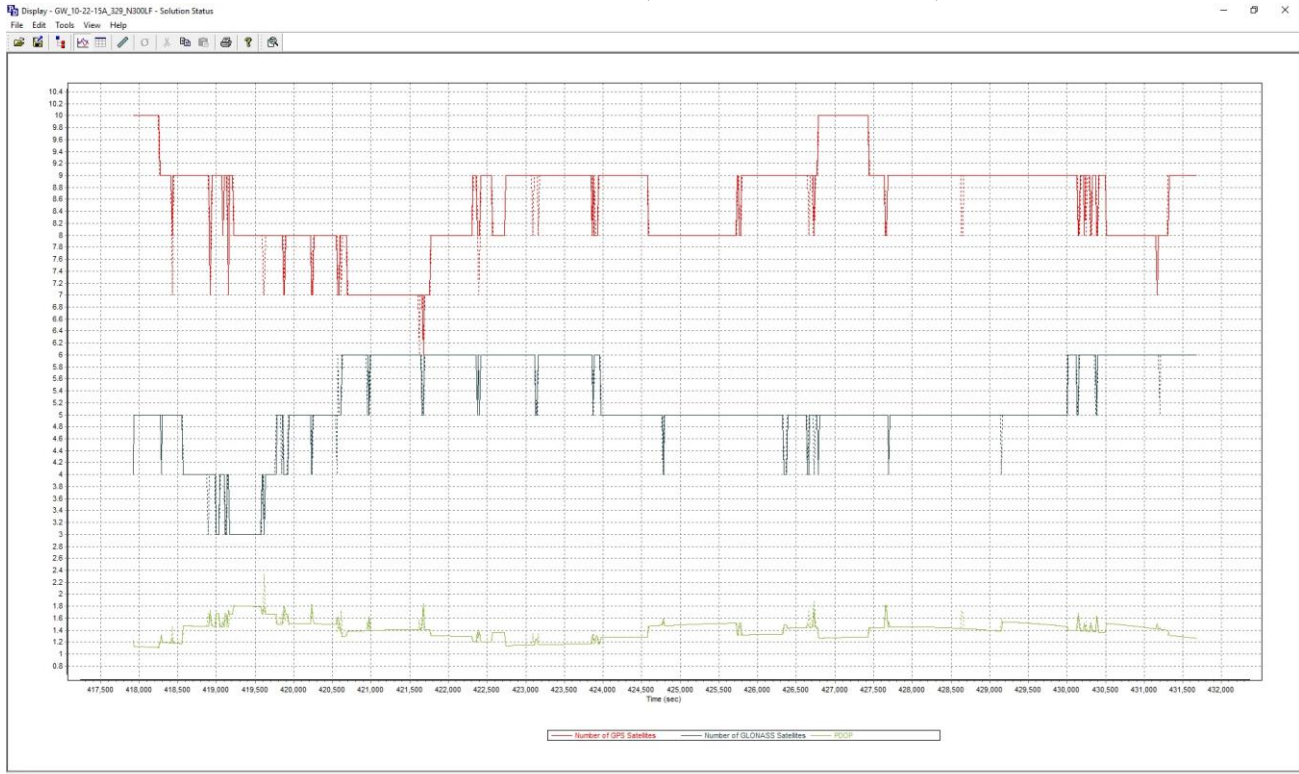
Appendix A:

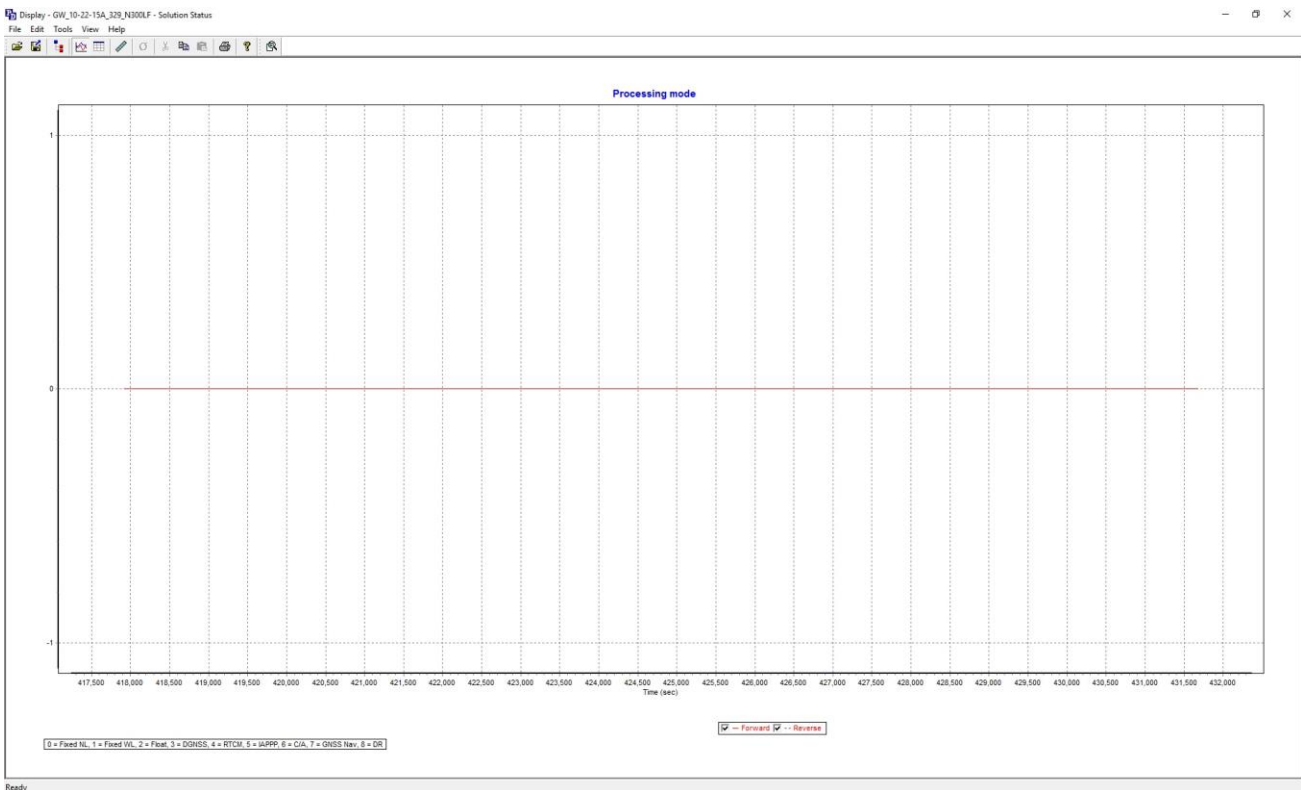
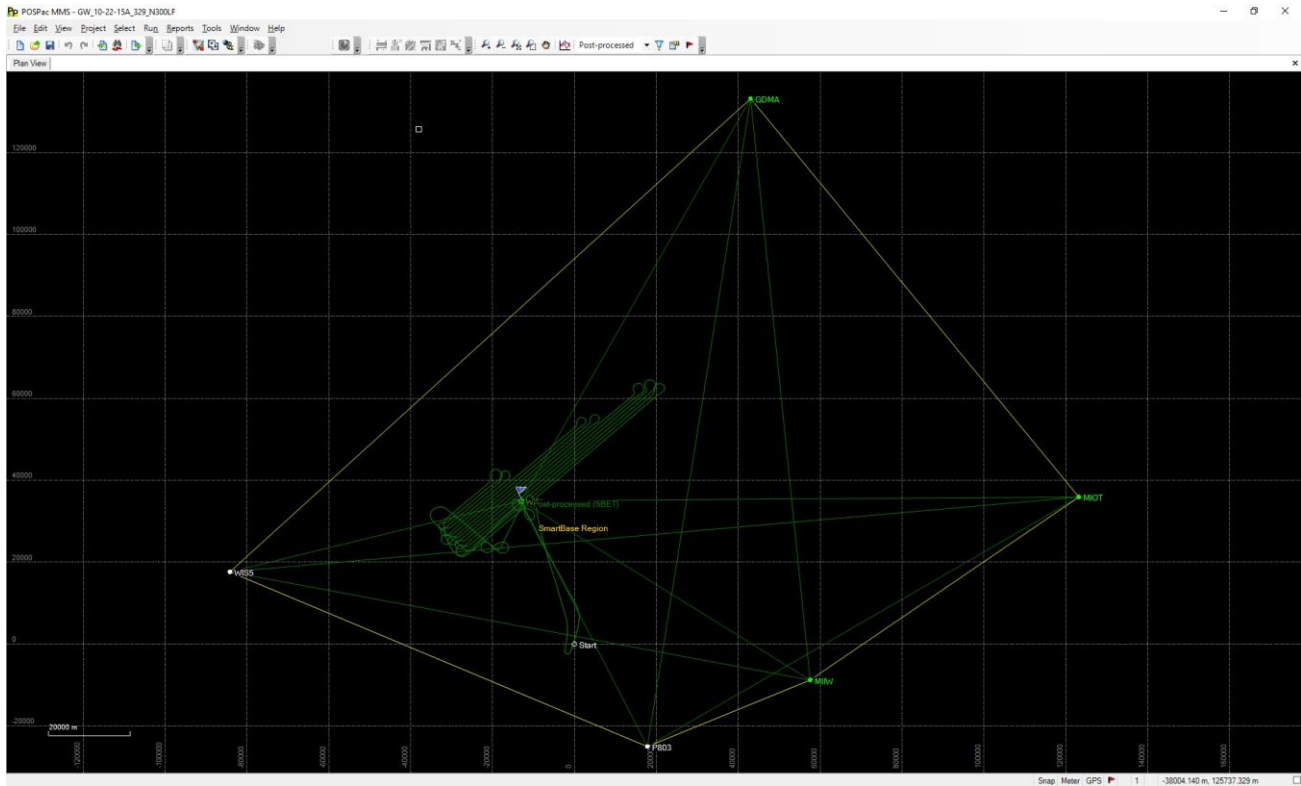
GPS/IMU Statistics, Flight Logs, and Base Station Logs

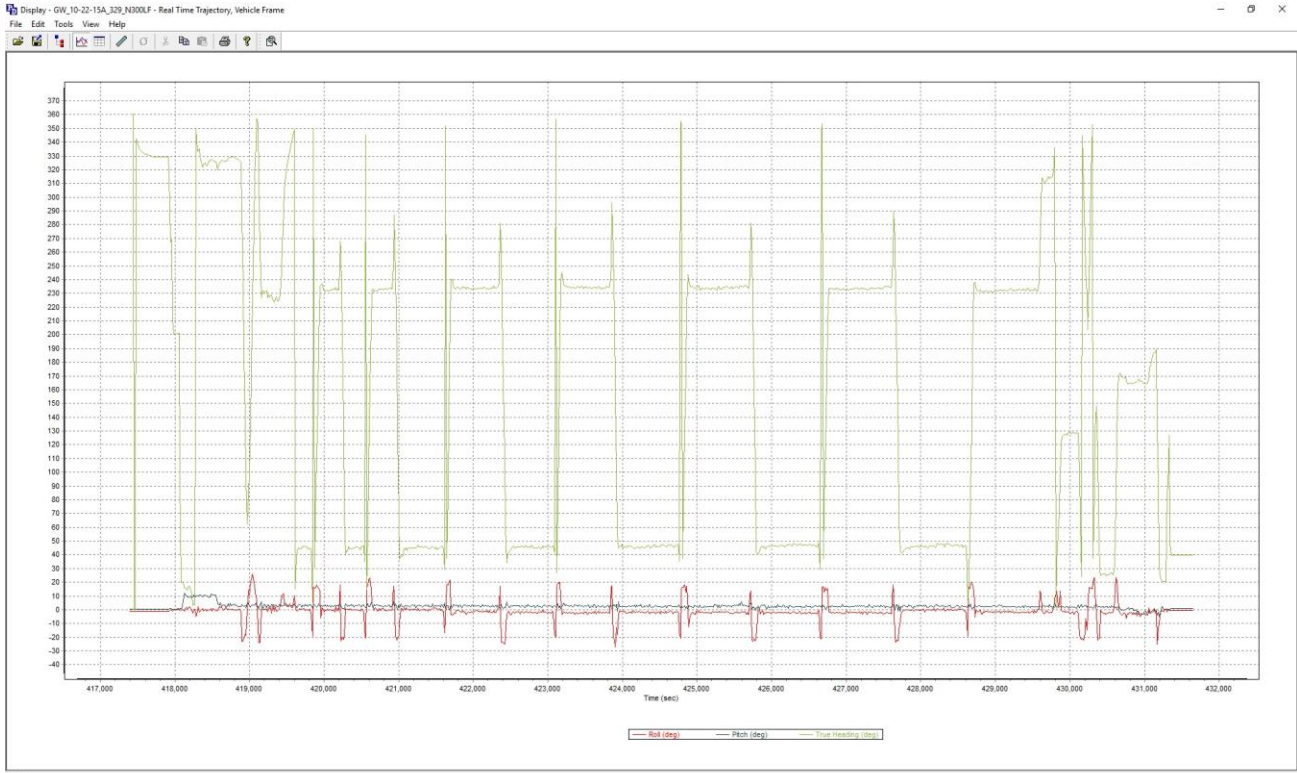
There were sixteen total lifts. Graph reports generated from processing software, flight logs, and base station logs are found on the following pages.

Oct 22, 2015-A (N300LF, SN329)	2
Oct 22, 2015-A (N7266Z, SN324).....	6
Oct 22, 2015-B (N7266Z, SN324).....	11
Oct 25, 2015-A (N300LF, SN329)	16
Oct 25, 2015-B (N300LF, SN329).....	20
Oct 25, 2015-B (N73TM, SN324)	24
Oct 27, 2015-A (N300LF SN329)	28
Oct 27, 2015-A (N7266Z, SN324).....	29
Oct 27, 2015-B (N300LF, SN329).....	33
Nov 2, 2015-A (N300LF, SN329)	34
Nov 2, 2015-A (N73TM, SN324).....	38
Nov 2, 2015-B (N73TM, SN324)	42
Nov 3, 2015-A (N300LF, SN329)	46
Nov 3, 2015-A (N73TM, SN324).....	50
Nov 7, 2015-A (N73TM, SN324).....	53
Nov 8, 2015-A (N73TM, SN324).....	59

Oct 22, 2015-A (N300LF, SN329)







Ready

Coordinate Manager

Station Information

Station ID:

Coordinates

Latitude:

Longitude:

Altitude: m

Decimal Degrees

Antenna Reference Point (ARP) coordinates Apply Changes

Antenna **Frame**

Height: m

Method:

Manufacturer:

Type:

Offset from Measured Point to APC: m

Station Database

Station ID: Station Fullname:

Primary Service ID: Edit Coordinate Accuracy:

Secondary Service ID: Edit Add Delete Update

Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

Import Coordinates Export Coordinates Close

Scanned by CamScanner

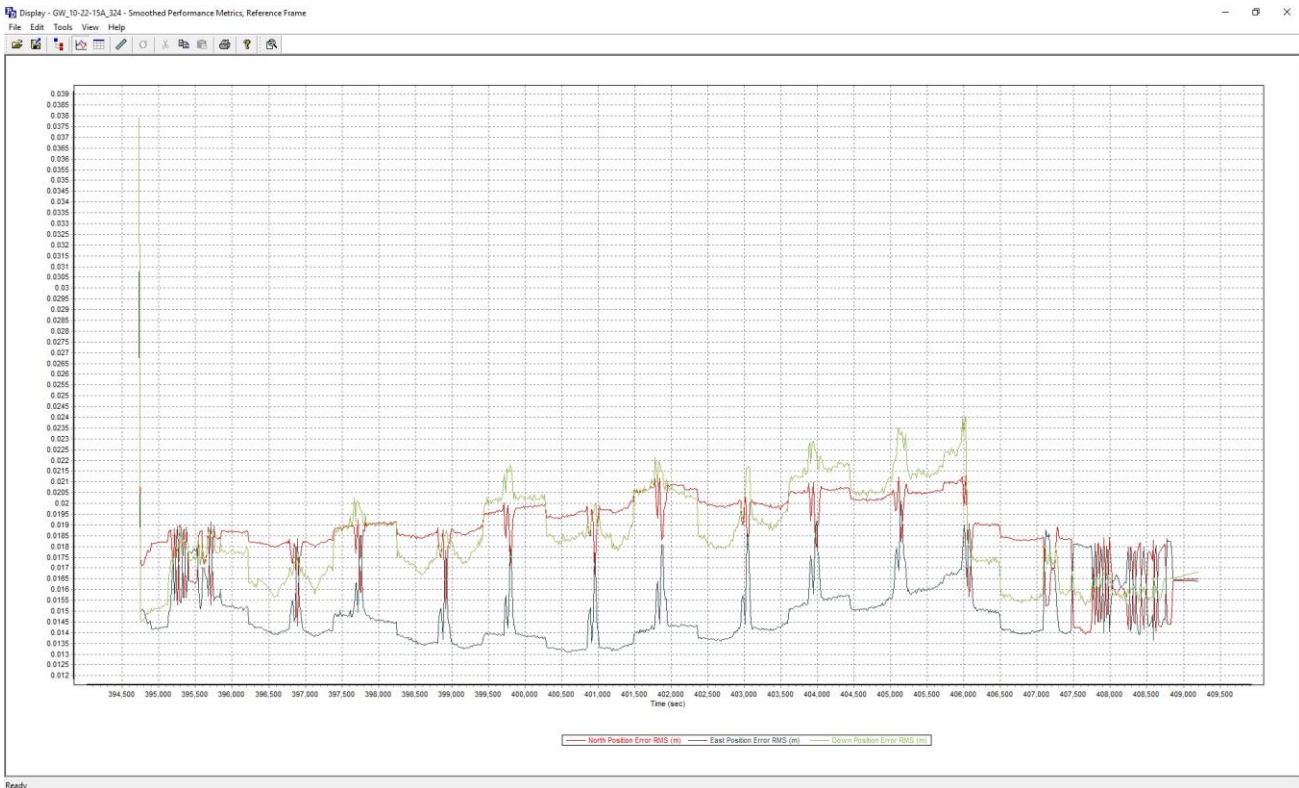
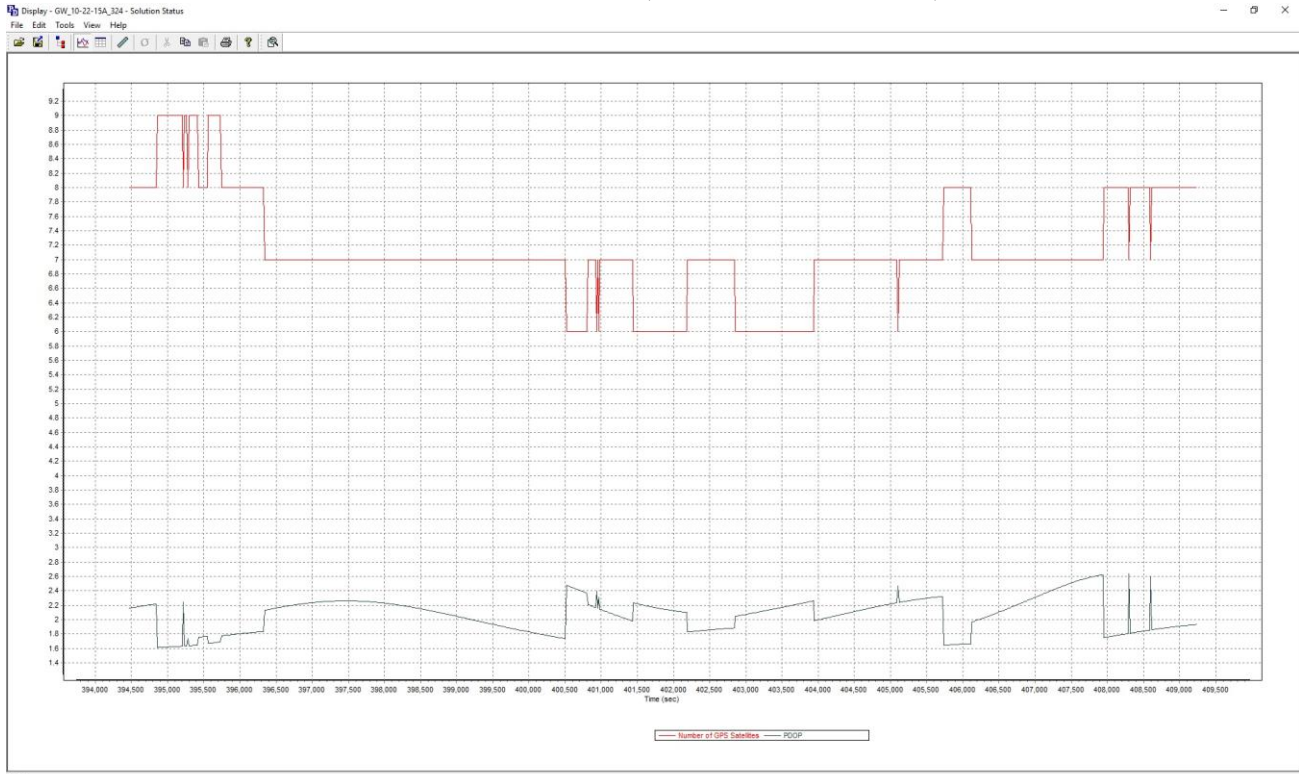
10/10/10 10:20.87 10294.4

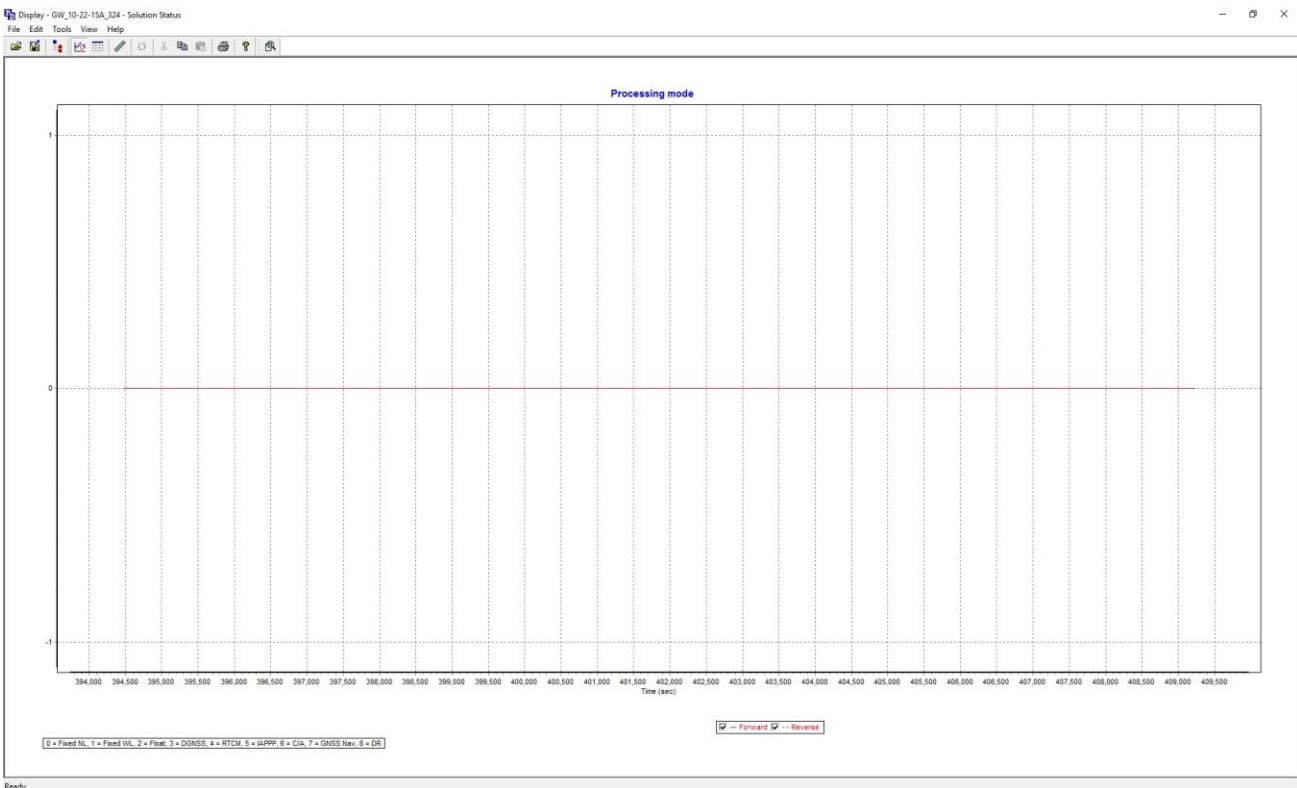
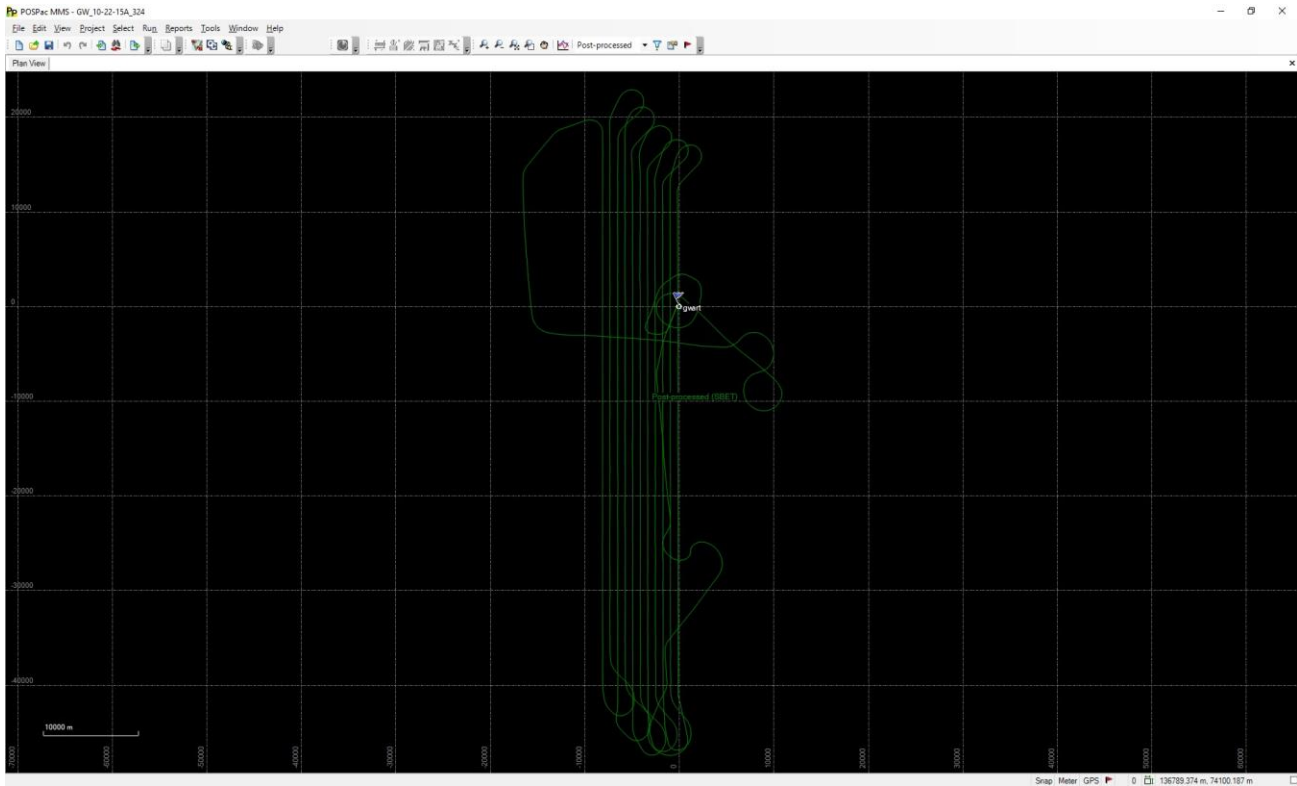
OPERATORS FLIGHT LOG

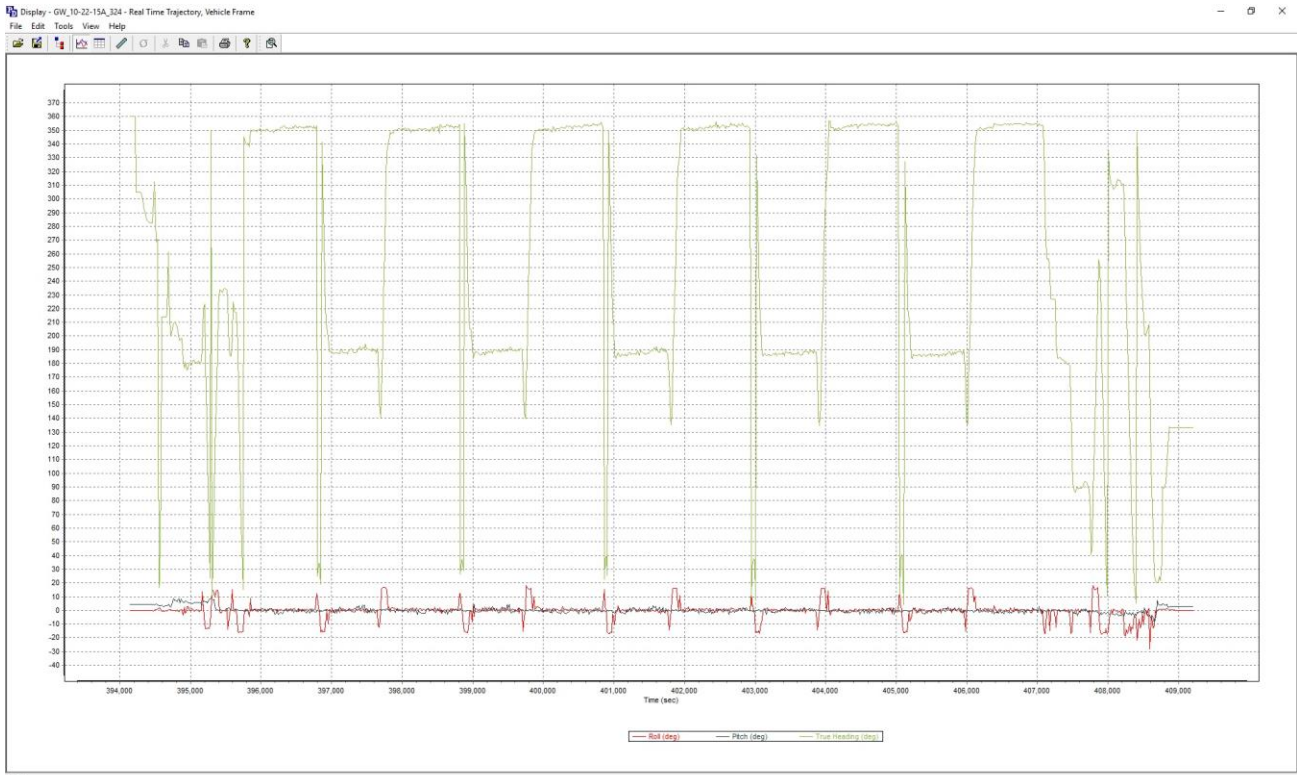
MISSION: S	DATE: 10/22/2015				OPERATOR: P. Jones		AIRCRAFT: 300LF		REMARKS		
	PILOT: B. K	LINE NO. & Hdg	GROUND SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF KHz	FIXED GAIN	ALT (m)		START TIME	STOP TIME
PROJECT NUMBER	1								19:56	20:01	1
Bayfield									20:04		
Notes									20:33	20:38	
26947	50.1	50	129	57	38	225	N/A	1831	20:39	20:43	
	49.1	230	120					1935	20:49	20:48	
	48.1	50	132					1849	20:51	20:55	
	47.1	230	121					1824	20:57	21:04	
	46.1	50	130					1834	21:08	21:18	
	45.1	230	122					1838	21:21	21:31	
	44.1	50	130					1845	21:33	21:43	over roll on turn
	43.1	230	121					1851	21:46	21:56	
	42.1	50	132					1842	22:01	22:14	
	41.1	230	134					1841	22:17	22:30	
	40.1	50	136					1850	22:33	22:44	
	39.1	230	134					1862	22:44	23:03	
	38.1	50	132					1873	23:05	23:11	
	37.1	230	134					1860	23:24	23:28	Partial on O-B FWE
	52 (tie)	234	140						23:47		Land
									23:49	23:52	Static Stop
STATUS	TOTAL LINES	FLOWN	LEFT	SITE	AIRCRAFT	FERRY	STATIC	START	STOP	NOTES	
26947	52	14	38	3.0	0.6	0.6	W	19:56	20:01	High power setting WISCONSIN BELL Station Used	

AERO-METRIC, INC. N 6216 Reservoir Drive Sheboygan Falls, WI 53085 PHONE: 920-467-2865 FAX: 920-467-2865 E-Mail: ainfo@aerometric.com

Oct 22, 2015-A (N7266Z, SN324)







Coordinate Manager

Station Information

Station ID: gw

Coordinates

Latitude: N 46 33 5.94204000

Longitude: W 90 54 57.26501000

Altitude: 219.2730 m

Decimal Degrees

Antenna Frame

Height: 2.000 m

Method: Bottom of antenna mount

Manufacturer: NovAtel

Type: 702-GG 1.03

Offset from Measured Point to APC: 0.069 m

Ground Reference Point (GRP) coordinates Apply Changes

Station Database

Station ID: gw Station Fullname: gw

Primary Service ID: Edit

Secondary Service ID: Edit

Coordinate Accuracy: UNKNOWN_ACC

Add Delete Update

Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

Import Coordinates Export Coordinates Close

LIDAR FLIGHT LOG

MISSION: 20151022A DATE: 10/22/15 AIRCRAFT: N7266Z
 PILOT: CHRISTOPHER OPERATOR: NELSON LASER TIME: 13 SEP 324
 PROJECT NUMBER: 26947 SCAN FREQ ANGLE PRF ALT (m) START STOP TZPK
 52 19 225 1650 13:40
 BAYFIELD CD
 L=46947 53 0 105 1650 13:57 14:13
 L=46947 54 180 150 1640 14:07 14:27
 L=47697 55 0 105 1645 14:31 14:46
 L=48946 56 180 150 1640 14:49 15:01
 L=49077 57 0 115 1655 15:05 15:20
 L=47736 58 180 150 1640 15:23 15:36
 L=49946 59 0 120 1645 15:40 16:55
 L=49296 60 180 135 1680 15:59 16:11
 L=4056 61 0 120 1655 16:15 16:30
 L=47715 62 180 135 1650 16:34 16:46
 L=47018 63 0 120 1660 16:50 17:04
 XPT E 130 1680 17:11 17:15
 17:30
 1471.9
 TWO TEST FIRES
 7mi end clouds
 CROSSHAIR
 STATE → KASX 14776.2

STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	FERRY	STATIC START:	STOP:	NOTES:
26947	117	11	106	3.3	1.0			
						WK		

GPS OBSERVATION LOG

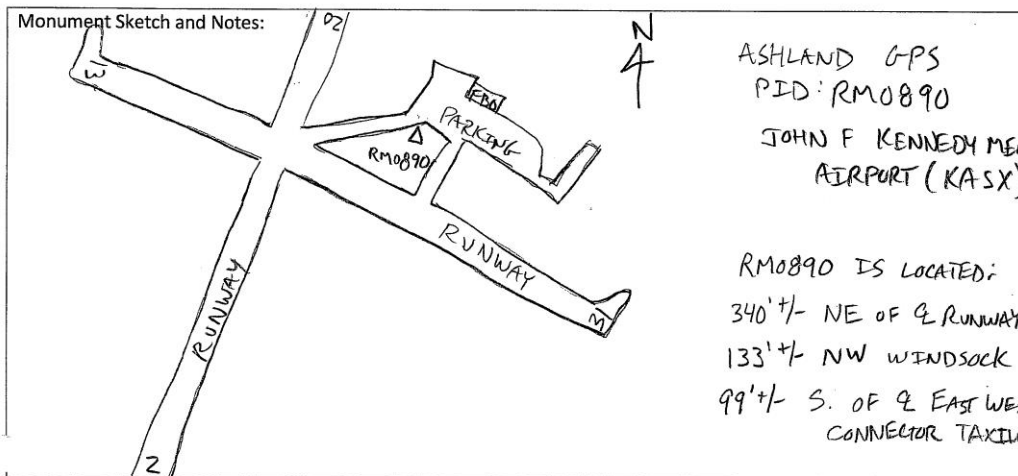
Station ID	<u>ASHLAND GPS</u> <u>PID: RMO890</u>	Date	<u>10 / 22 / 15</u>
Project Number	<u>26947</u>	Julian Date	<u>295</u>
Project Name	<u>BAYFIELD LIDAR</u>	Start Time	<u>12 : 40 : (2) :</u>
Rcvr. Type	<u>Novatel DLV3 L1 L2</u>	Stop Time	<u>24 : 08 : (2) :</u>
Rcvr. S/N	<u>NBV 12130007</u>	Rcvr. File Name	<u>00072950.PDC</u>
Antenna Type	<u>Novatel 702GG v1.03</u>	Observer	<u>BDN</u>
Antenna S/N	<u>01017577</u>		

New or Existing Mon. New Existing
 Photo Taken: Yes No
 Monument Type: DISK IN CONCRETE
 Spike PK Nail AM Washer
 Other _____

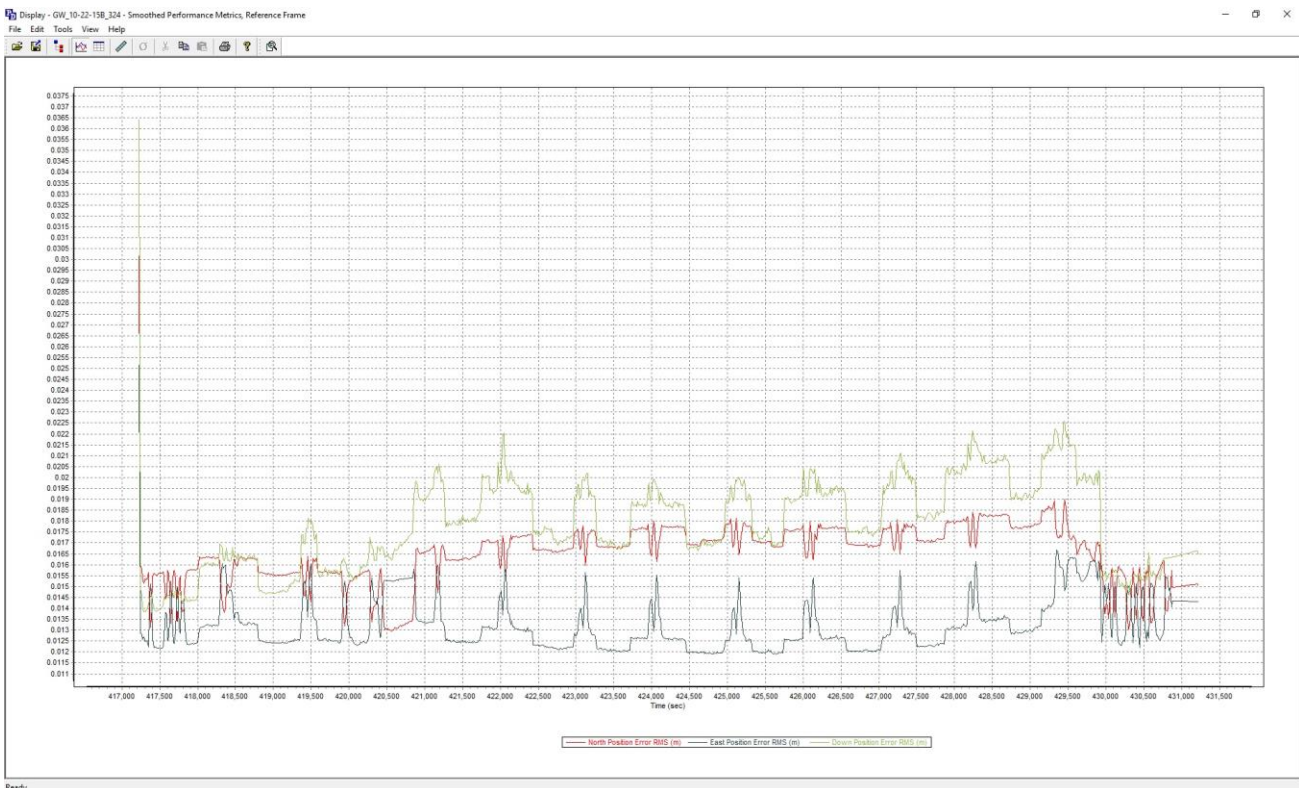
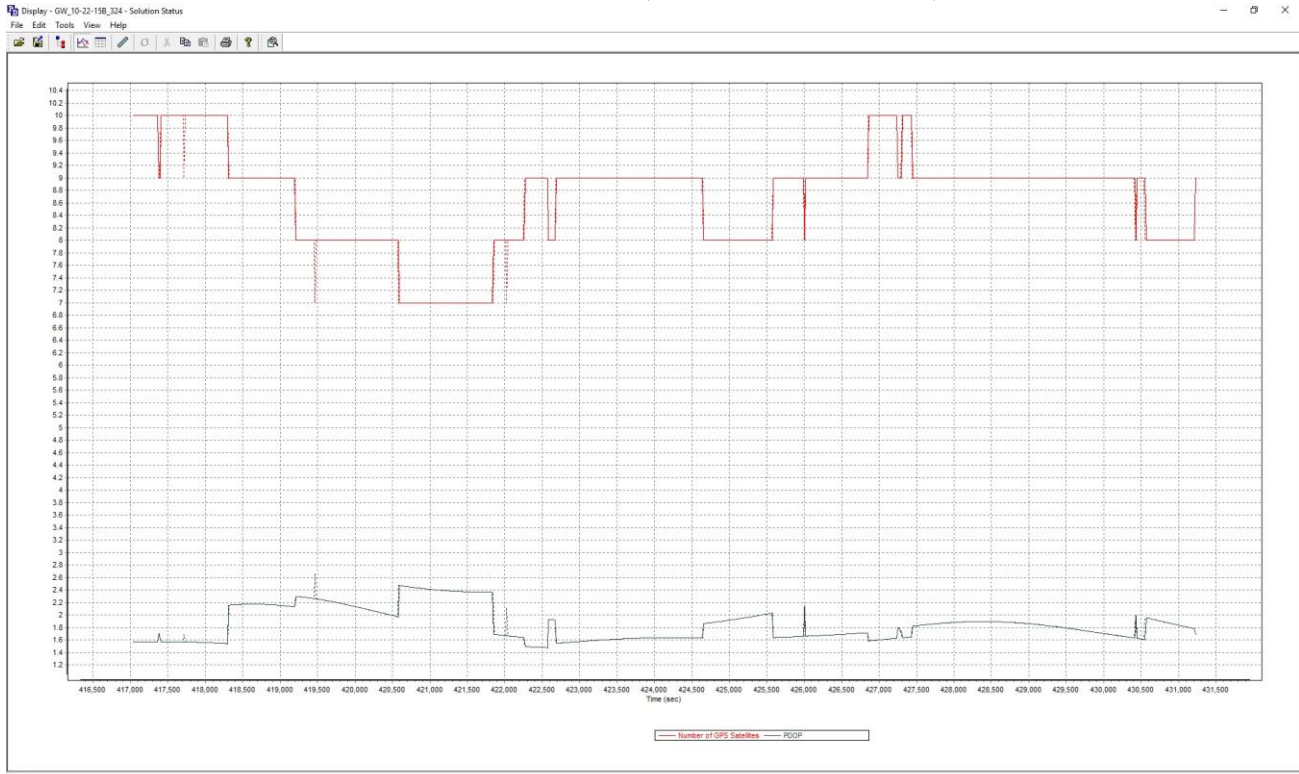
Height Readings:
(Top of Monument to Bottom of Ground Plane)

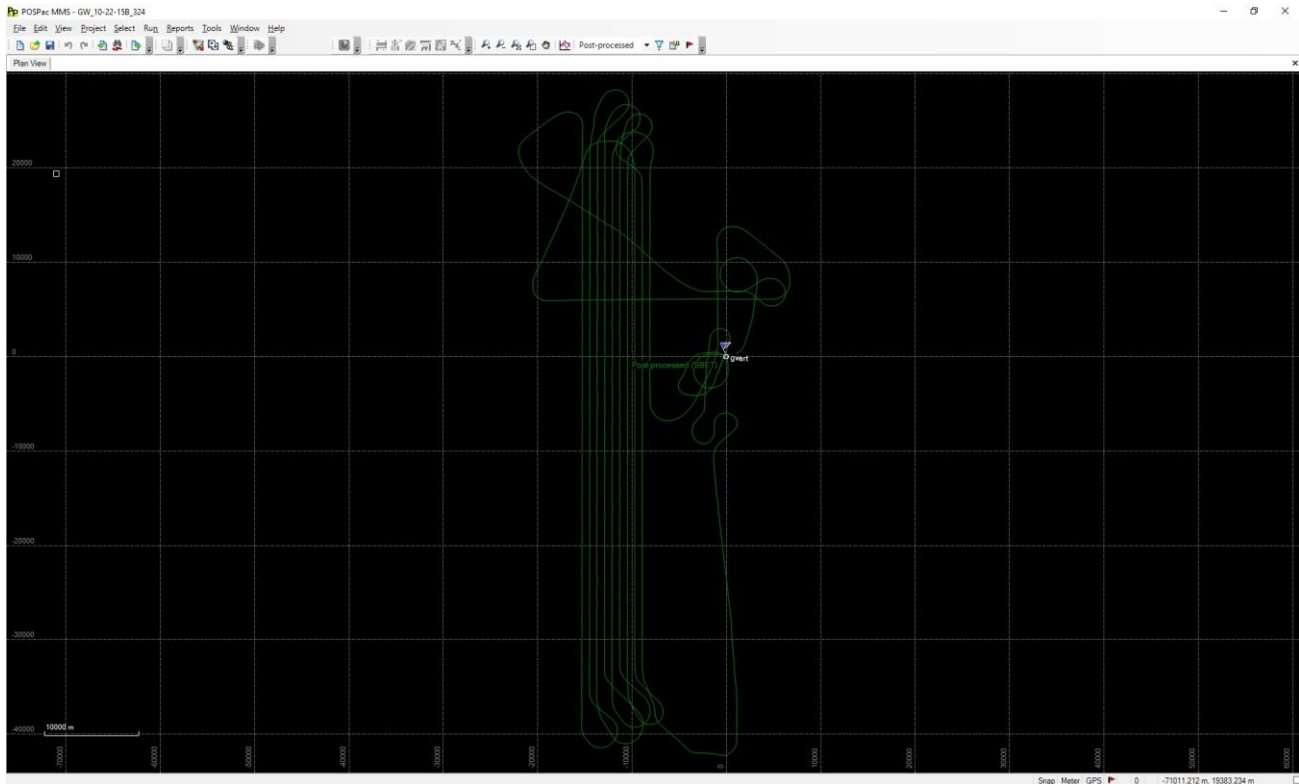
Start 2.0 M. _____ Ft.
 Stop _____ M. _____ Ft.
 Mean _____ M. _____ Ft.

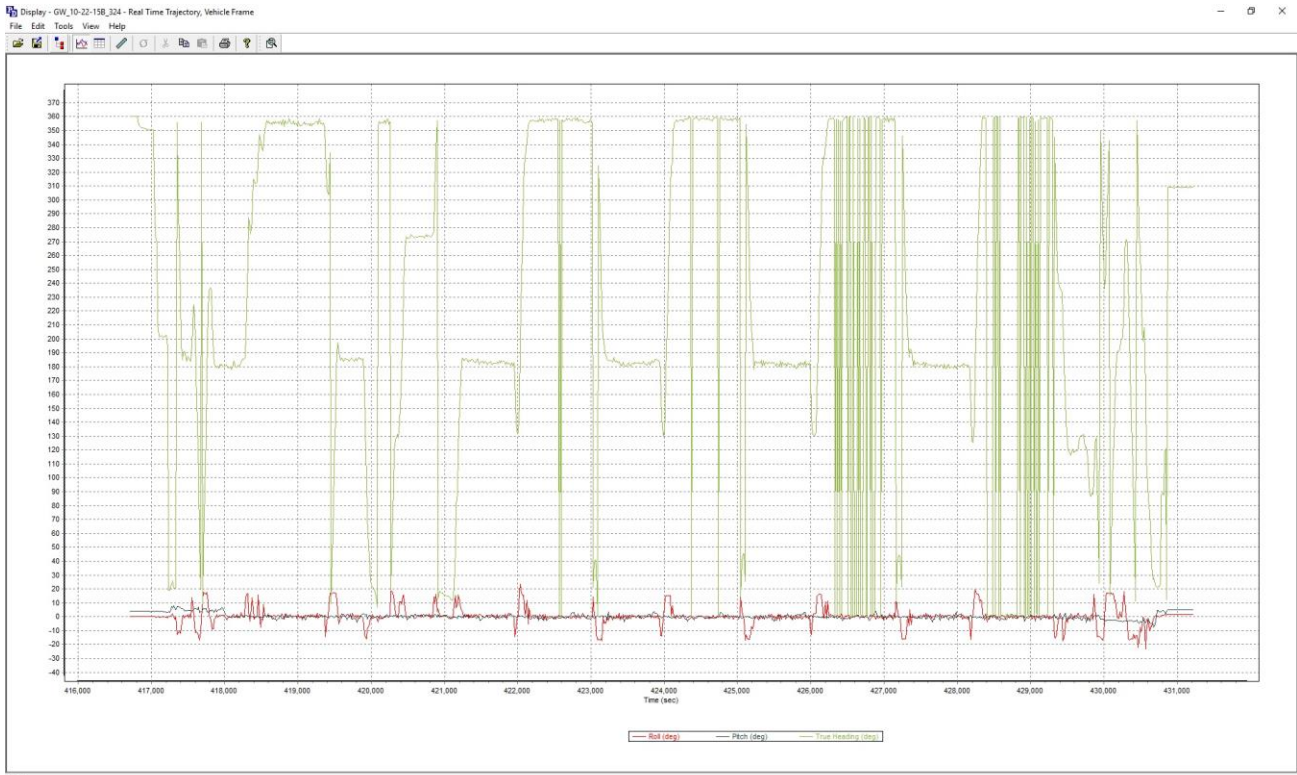
FIXED POLE



Oct 22, 2015-B (N7266Z, SN324)







Coordinate Manager

Station Information

Station ID: gw

Coordinates

Latitude: N 46 33 5.94204000

Longitude: W 90 54 57.26501000

Altitude: 219.2730 m

Decimal Degrees

Antenna **Frame**

Height: 2.000 m

Method: Bottom of antenna mount

Manufacturer: NovAtel

Type: 702-GG 1.03

Offset from Measured Point to APC: 0.069 m

Ground Reference Point (GRP) coordinates Apply Changes

Station Database

Station ID: gw Station Fullname: gw

Primary Service ID: Edit

Secondary Service ID: Edit

Coordinate Accuracy: UNKNOWN_ACC

Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc
[Empty Table]								

LIDAR FLIGHT LC

MISSION: 20151622B DATE: 10/22/15
PILOT: CHRISTOPHER NELSON AIRCRAFT: N7266Z
13 SEN 324

PROJECT NUMBER	LINE NO. & Hdg	OPERATOR: NELSON	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS	
26947			52	19	225	1650	19:50				KASX → SITE 1476 Z	
BAYFIELD CO											TWO TEST FRES	
L=46807	64 0					1655	20:15	20:29				
L=47018	63 180					1660	20:33	20:38			0 → 10MMI Rework From Cuds	
L=46947	54 0					1660	20:41	20:44			REWORK	
	X-FIT W					1640	20:48	20:54			CROSSHEAT	
L=46985	65 180					1655	21:00	21:12				
L=47114	66 0					1660	21:16	21:30				
L=47448	67 180					1640	21:33	21:45				
L=47942	68 0					1650	21:49	22:03				
L=49020	69 180					1650	22:07	22:19				
L=50710	70 0					1645	22:24	22:39				
L=52777	71 180					1655	22:42	22:54				
L=55120	72 0					1650	22:57	23:15				
	X-FIT E					1640	23:18	23:24			CROSSHEAT	
								23:40			SAFE → KASX 1480 Z	
STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	FERRY	STATIC START	STATIC STOP	NOTES:				
26947	117	11		3.1	0.9							

AERO-METRIC, INC. N.6216 Resource Drive Sheboygan Falls, WI. 53085 PHONE: 920-467-2655 FAX: 888-253-6695 E-Mail: amphoto@aerometric.com

GPS OBSERVATION LOG

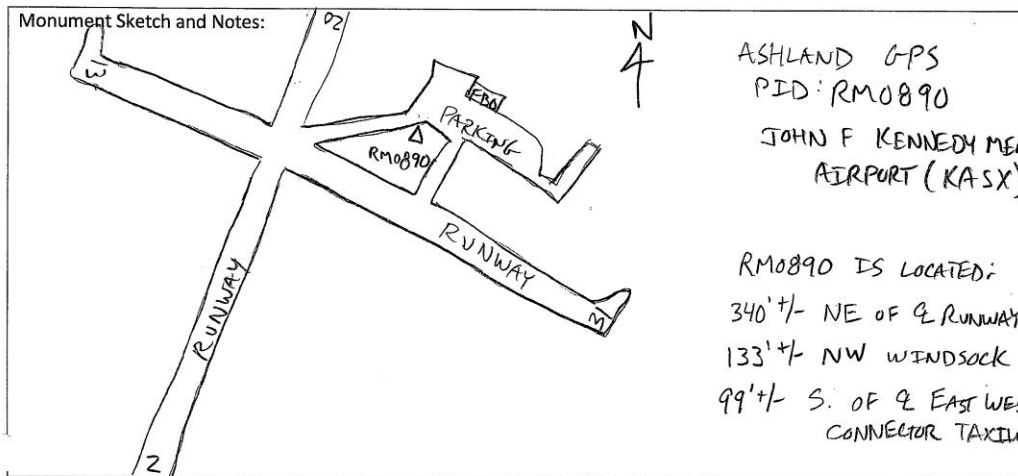
Station ID	<u>ASHLAND GPS</u> <u>PID: RMO890</u>	Date	<u>10 / 22 / 15</u>
Project Number	<u>26947</u>	Julian Date	<u>295</u>
Project Name	<u>BAYFIELD LIDAR</u>	Start Time	<u>12 : 40 : (2) :</u>
Rcvr. Type	<u>Novatel DLV3 L1 L2</u>	Stop Time	<u>21 : 08 : (2) :</u>
Rcvr. S/N	<u>NBV 12130007</u>	Rcvr. File Name	<u>00072950_PDC</u>
Antenna Type	<u>Novatel 702GG v1.03</u>	Observer	<u>BDN</u>
Antenna S/N	<u>01017577</u>		

New or Existing Mon. New Existing
 Photo Taken: Yes No
 Monument Type: DISK IN CONCRETE
 Spike PK Nail AM Washer
 Other _____

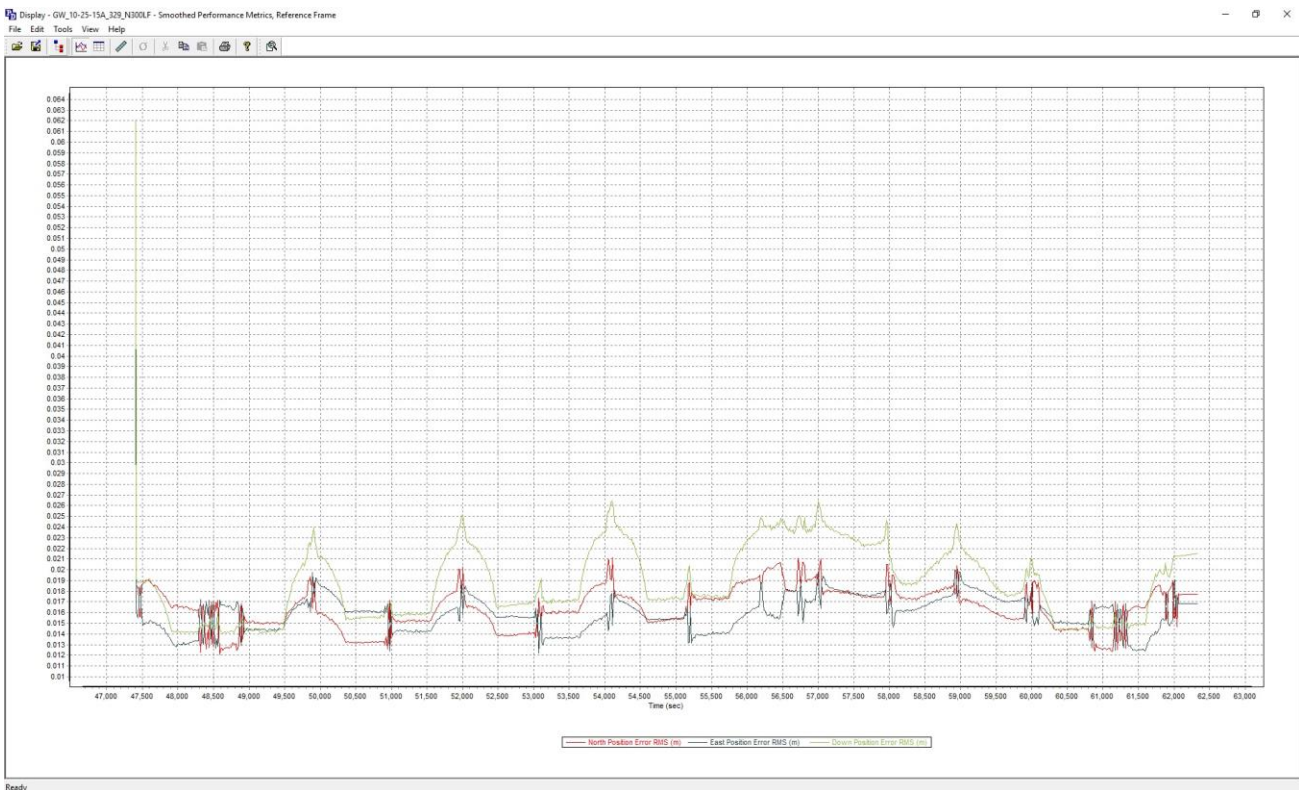
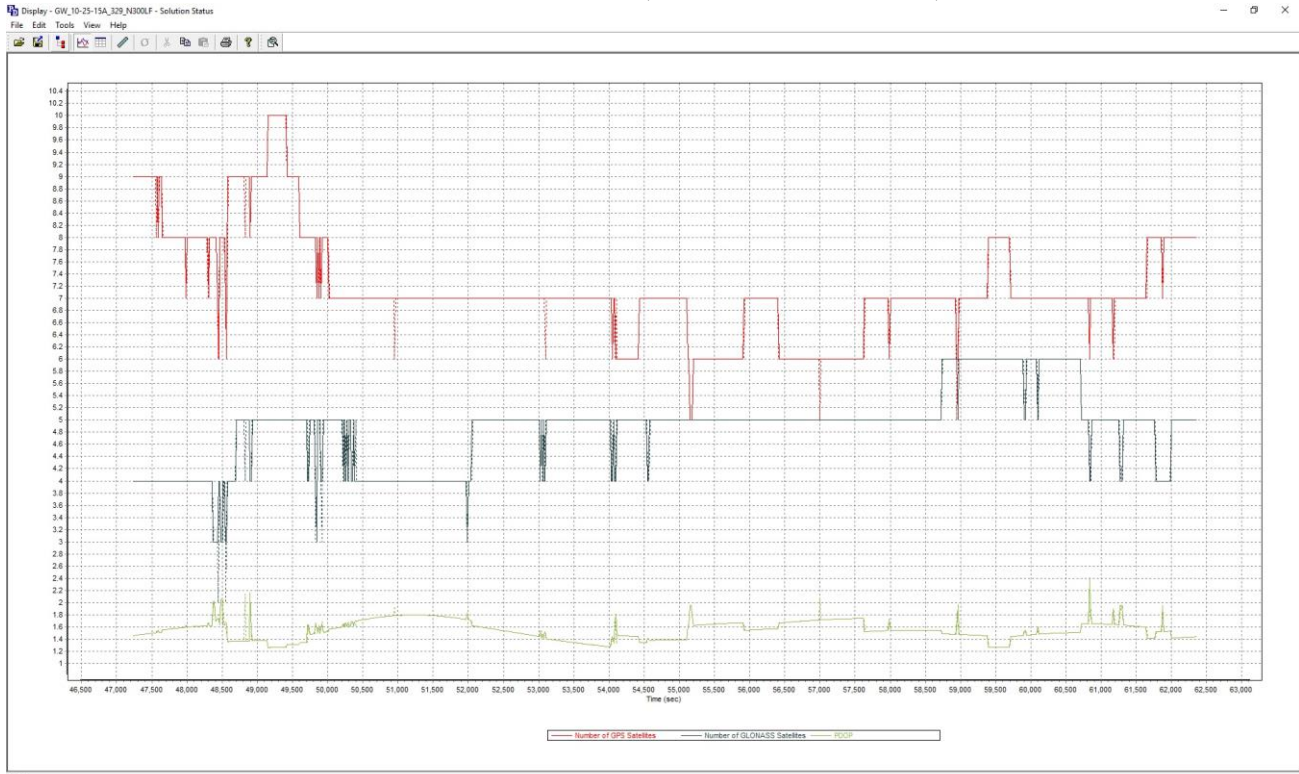
Height Readings:
(Top of Monument to Bottom of Ground Plane)

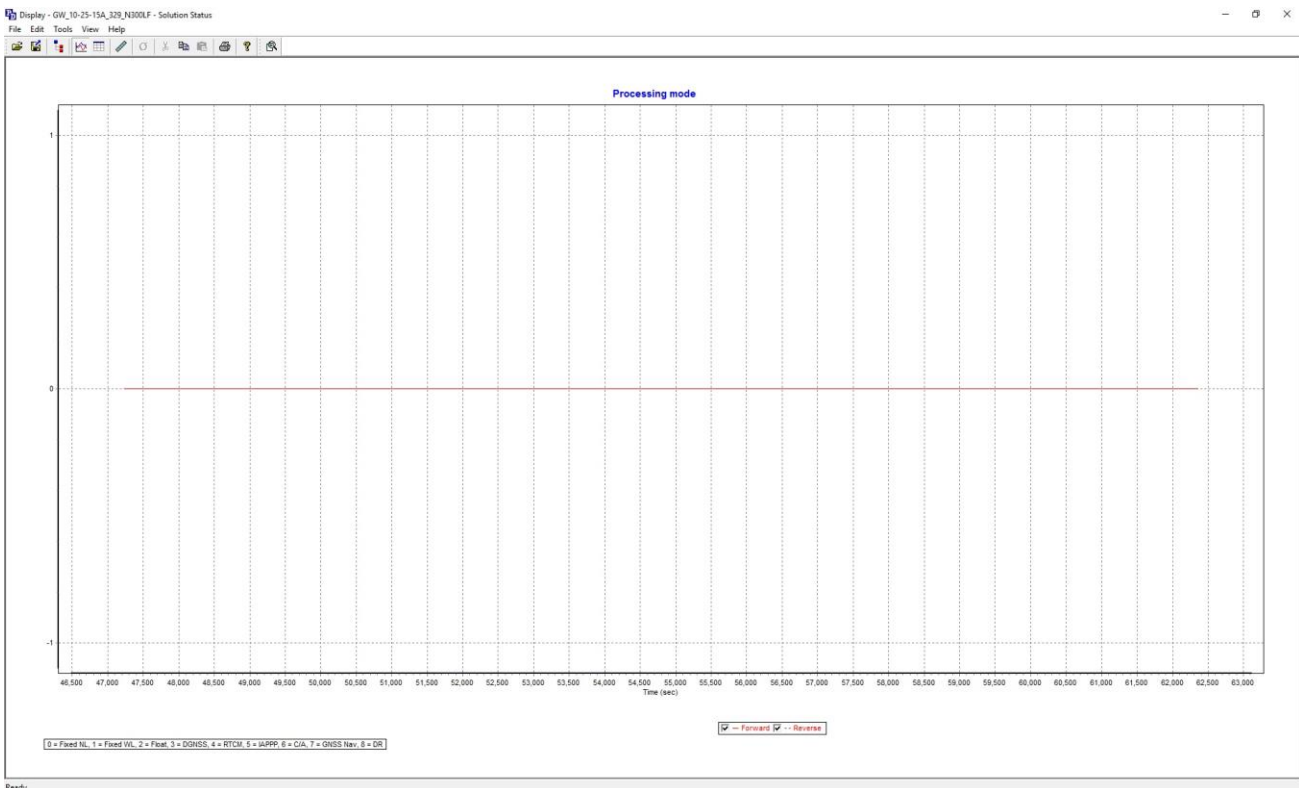
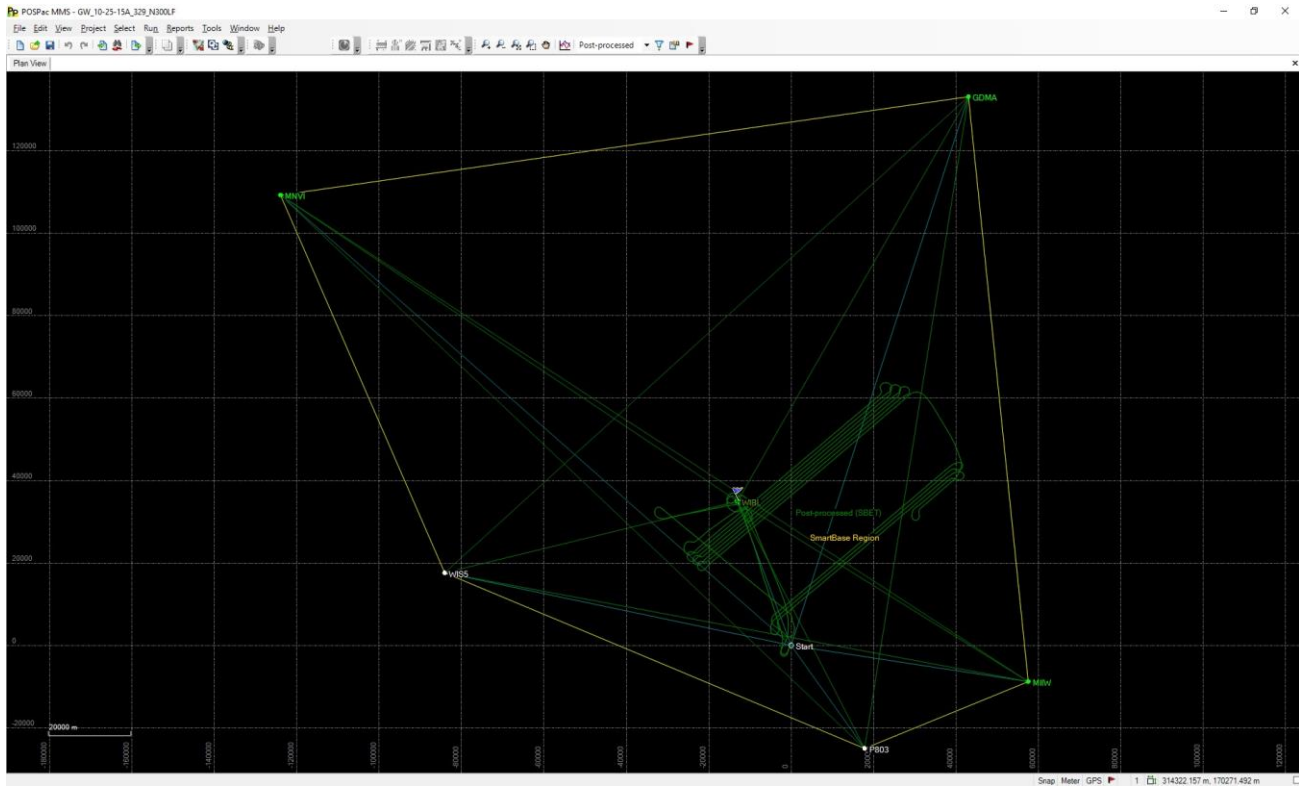
Start 2.0 M. _____ Ft.
 Stop _____ M. _____ Ft.
 Mean _____ M. _____ Ft.

FIXED POLE



Oct 25, 2015-A (N300LF, SN329)







Coordinate Manager

Station Information

Station ID:

Coordinates

Latitude:

Longitude:

Altitude: m

Decimal Degrees

Antenna Reference Point (ARP) coordinates

Antenna Frame

Height: m

Method:

Manufacturer:

Type:

Offset from Measured Point to APC: m

Station Database

Station ID: Station Fullname:

Primary Service ID: Coordinate Accuracy:

Secondary Service ID:

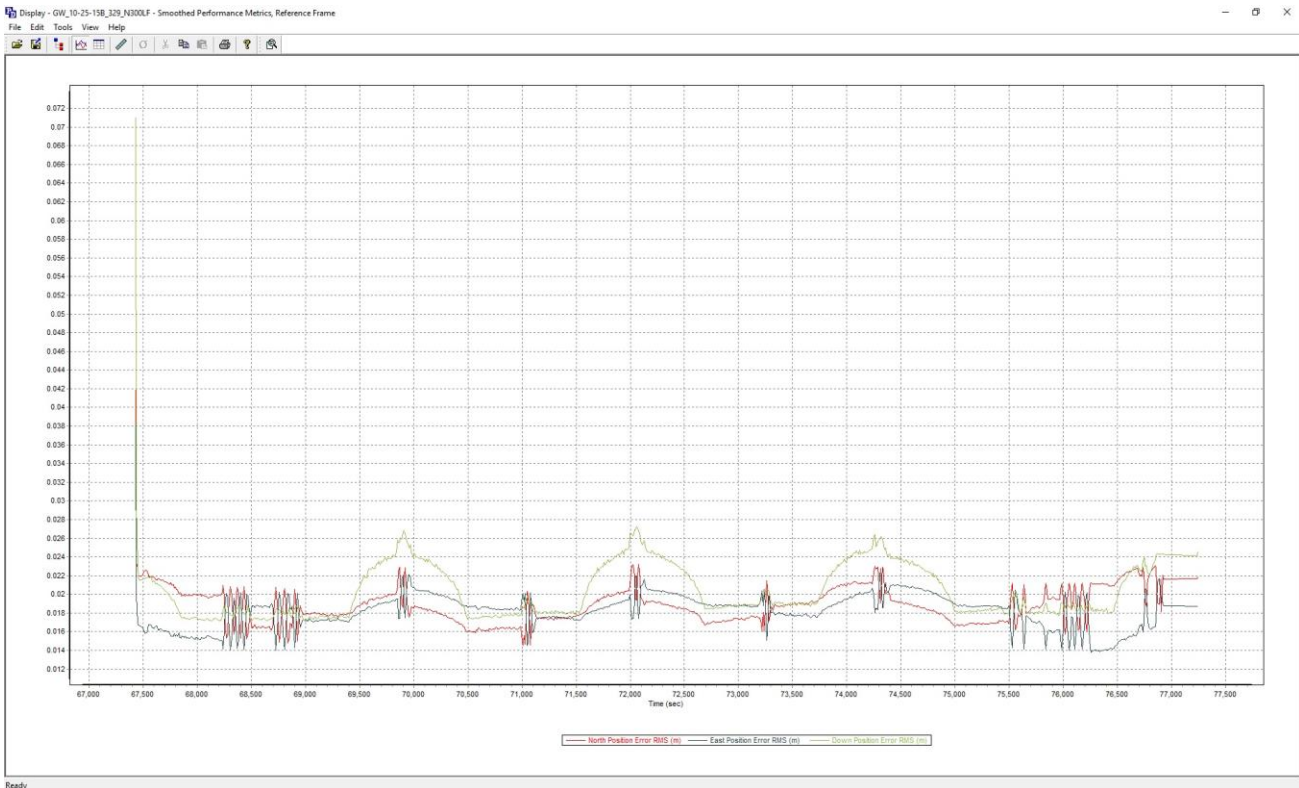
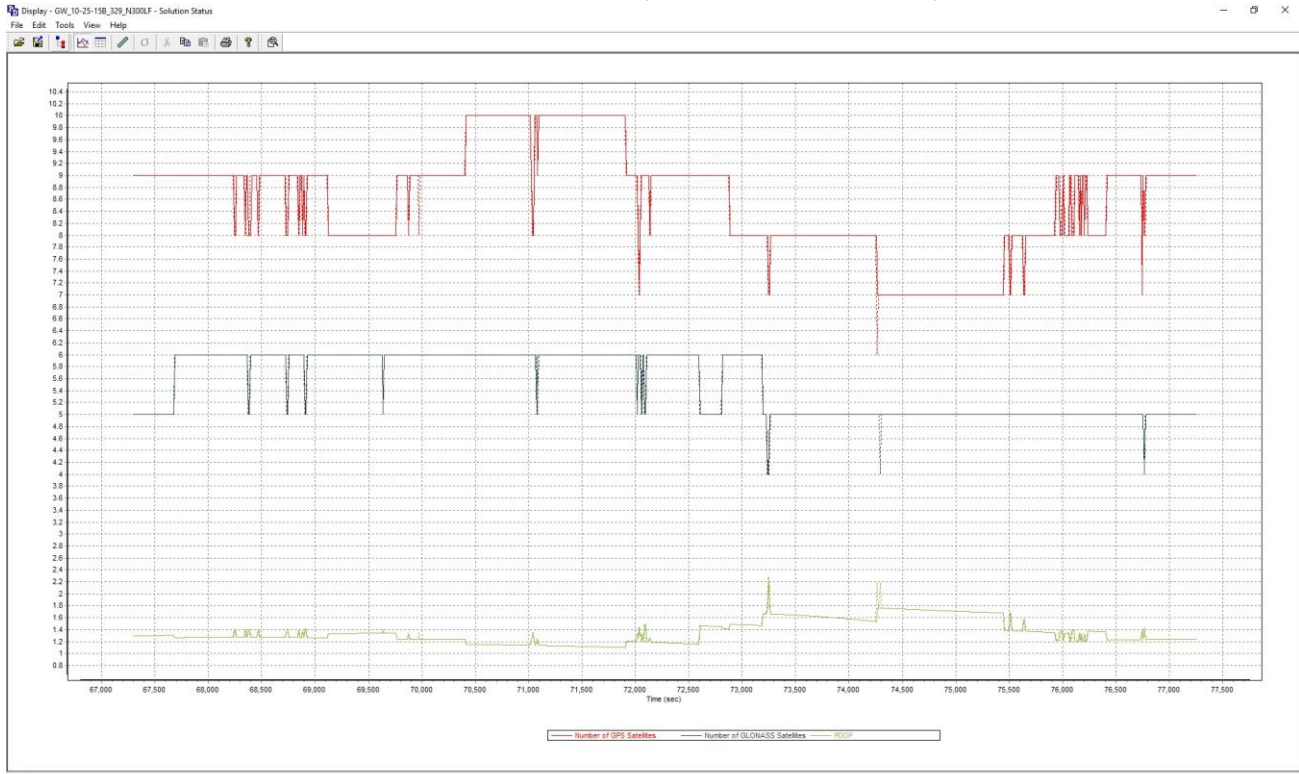
Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

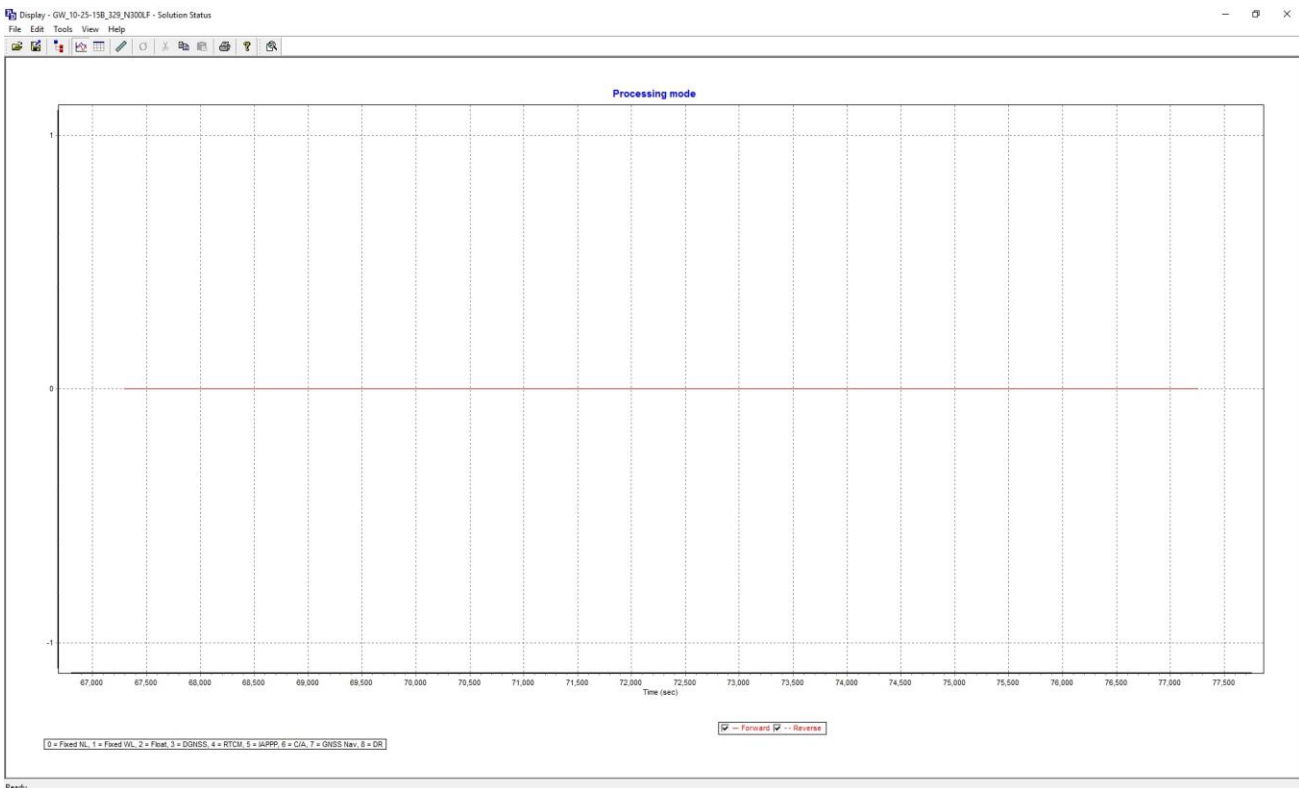
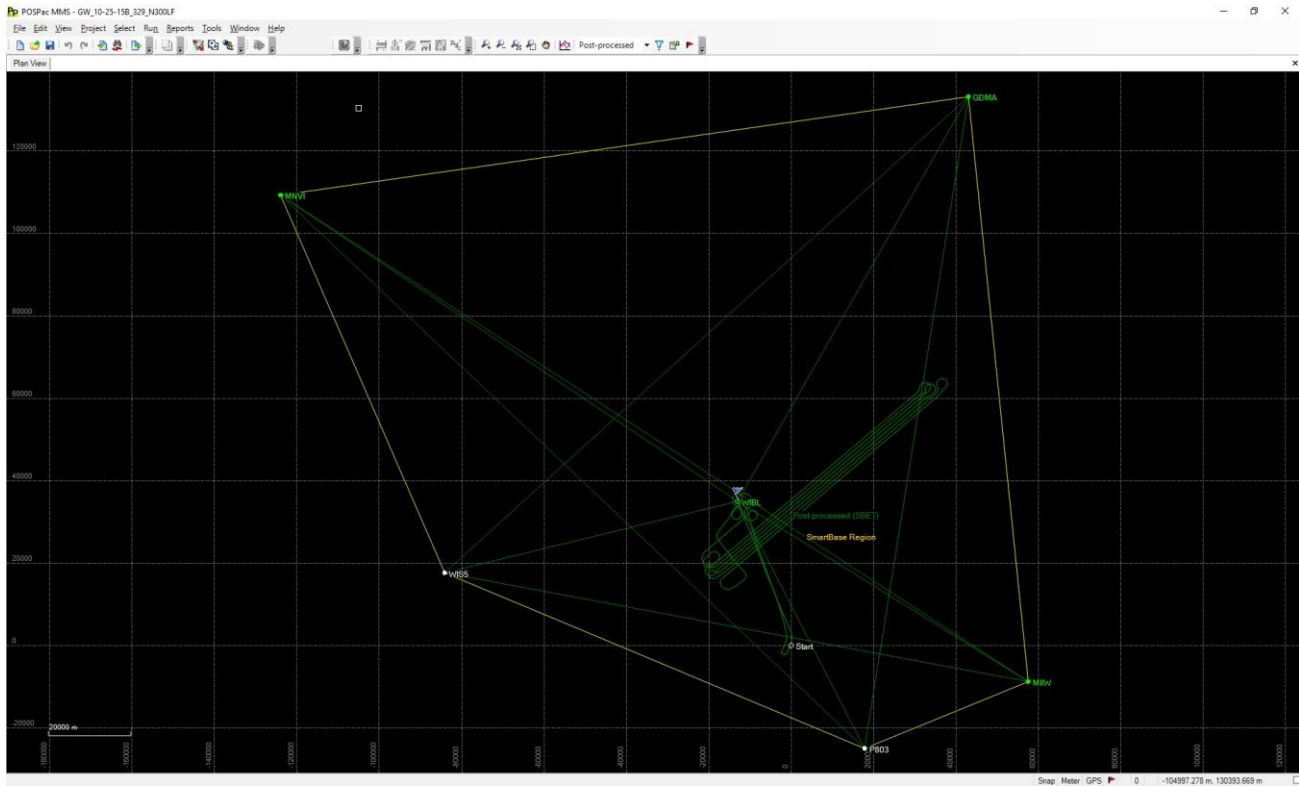
Scanned by CamScanner

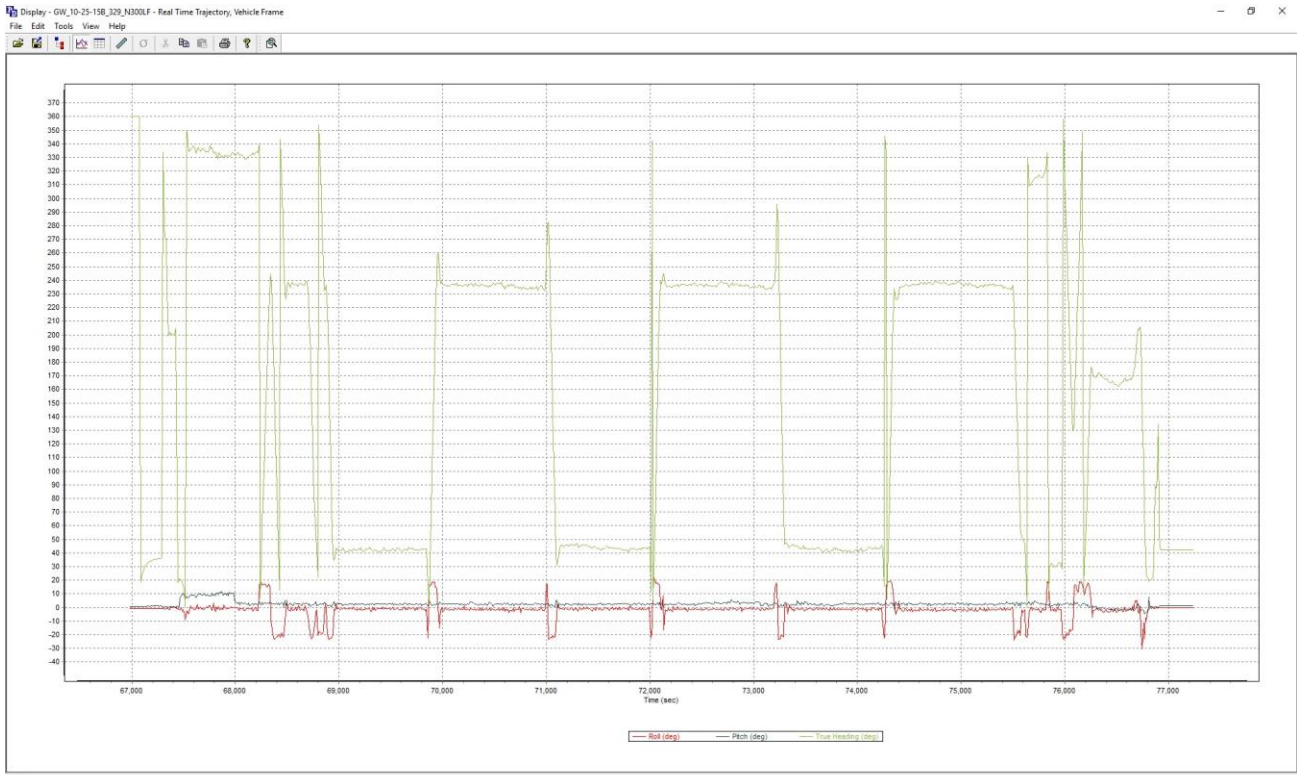
Hobbs 1024.4 → 1028.5

OPERATORS FLIGHT LOG														
MISSION: 25102015A Bayfield			DATE: 10/25/2015			ORION H.S.N: 13581329			SENSOR: 135EN329					
PROJECT NUMBER AND NAME	PILOT: Buck	OPERATOR: Kofles	LINE No.	LH	Hdg	GND SPEED (KTS)	FREQ (Hz)	SCAN ANGLE	PRF (KHz)	FIXED GAIN	FLYING HL (m)	START TIME	STOP TIME	REMARKS
26947	Bayfield		36	50	122	52	3.8	22.5	N/A	1881	13:02	13:07	1	Static Start T/D
			35	230	124					1871	13:52	14:08		
			34	50	12.8					1947	14:10	14:25		
			33	230	120					1901	14:27	14:43		
			32	50	138					1903	14:45	15:00		
			31	230	121					1900	15:02	15:18		← possible cut at 4:17 FNE ✓
			30	50	12.8					1830	15:47	15:54		mi 23 → cut
			2	50	136					1831	15:46	15:49		cut mi 6 + mi 9 FSE + mi 16
			3	230	124					1833	15:51	16:05		
			4	50	126					1833	16:08	16:21		
			5	230	124					1834	16:23	16:38		
			52	309	115					1890	16:41	16:53		Land
											17:12			Static Stop
											17:14	17:19		
STATUS			TOTAL LINES	52										
	26947		FLOWN	13	26	3.3	0.8							NOTES: High Power setting
			SITE											Used WISCONS BELE station
			LEFT											
			STATIC											
			FERRY											
			AIRCRAFT											
			START											
			STOP											

Oct 25, 2015-B (N300LF, SN329)







Coordinate Manager

Station Information

Station ID:

Coordinates

Latitude:

Longitude:

Altitude: m

Decimal Degrees

Antenna Reference Point (ARP) coordinates Apply Changes

Antenna Frame

Height: m

Method:

Manufacturer:

Type:

Offset from Measured Point to APC: m

Station Database

Station ID: Station Fullname:

Primary Service ID: Edit Coordinate Accuracy:

Secondary Service ID: Edit Add Delete Update

Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

Import Coordinates Export Coordinates Close

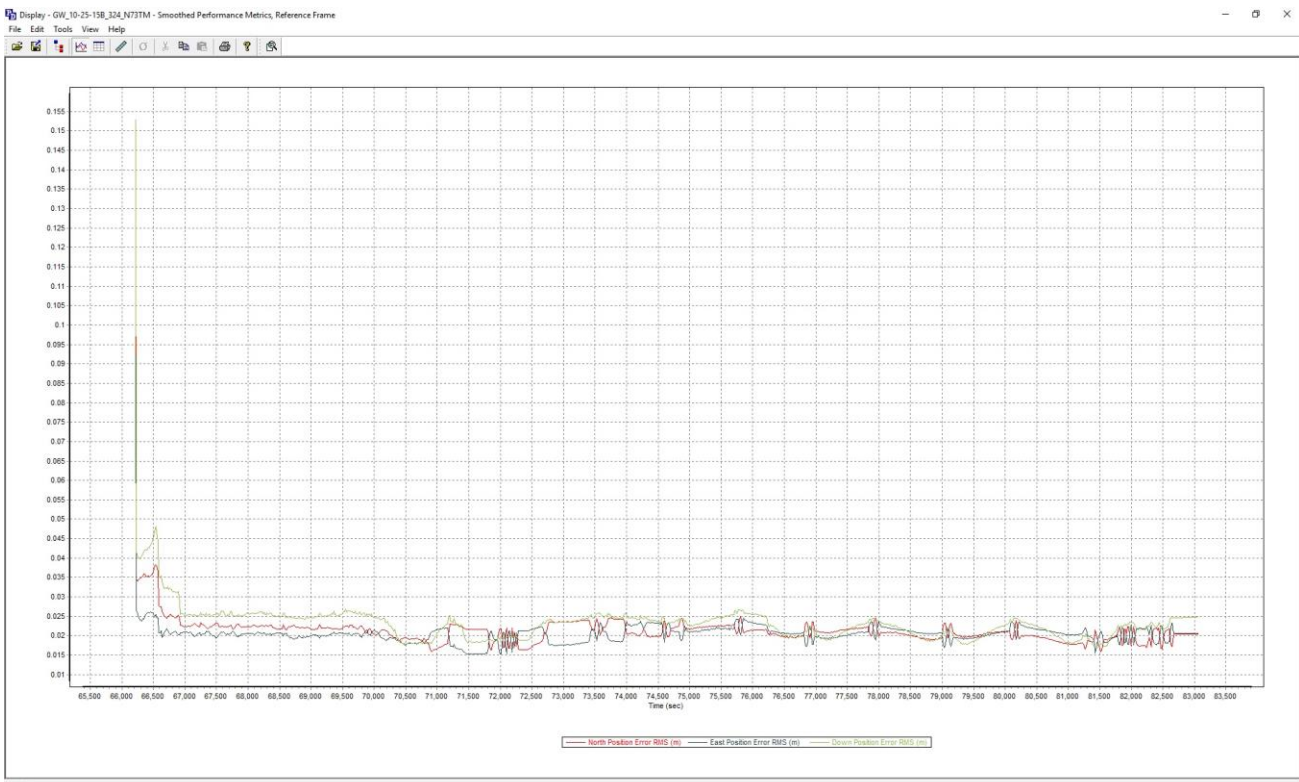
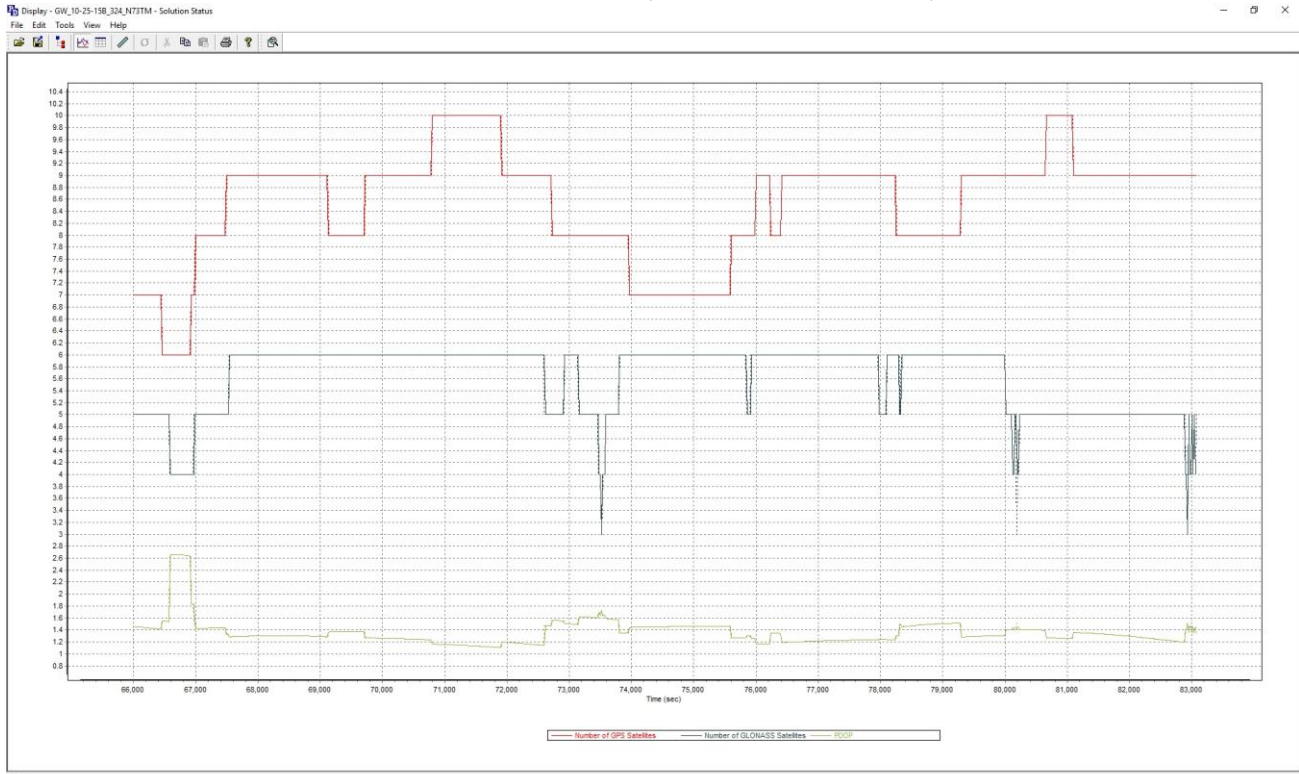
Scanned by CamScanner

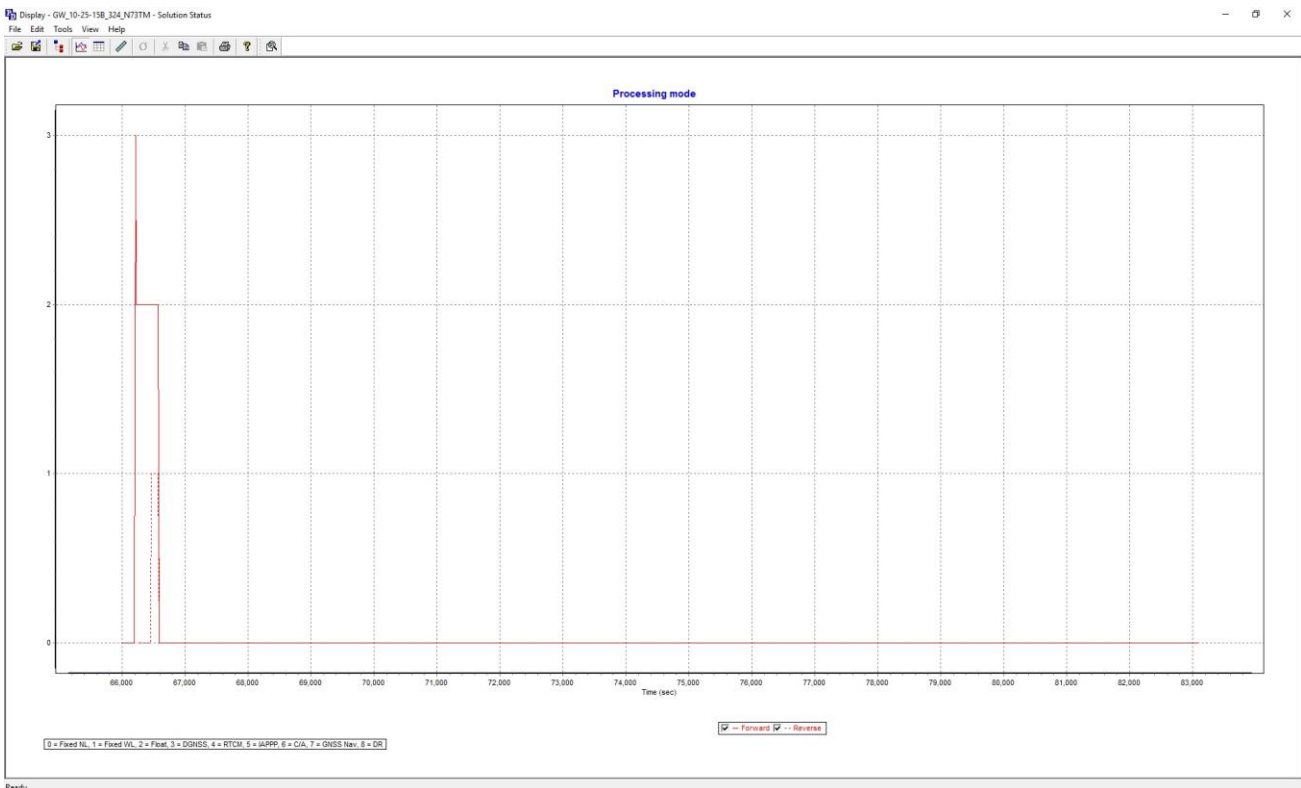
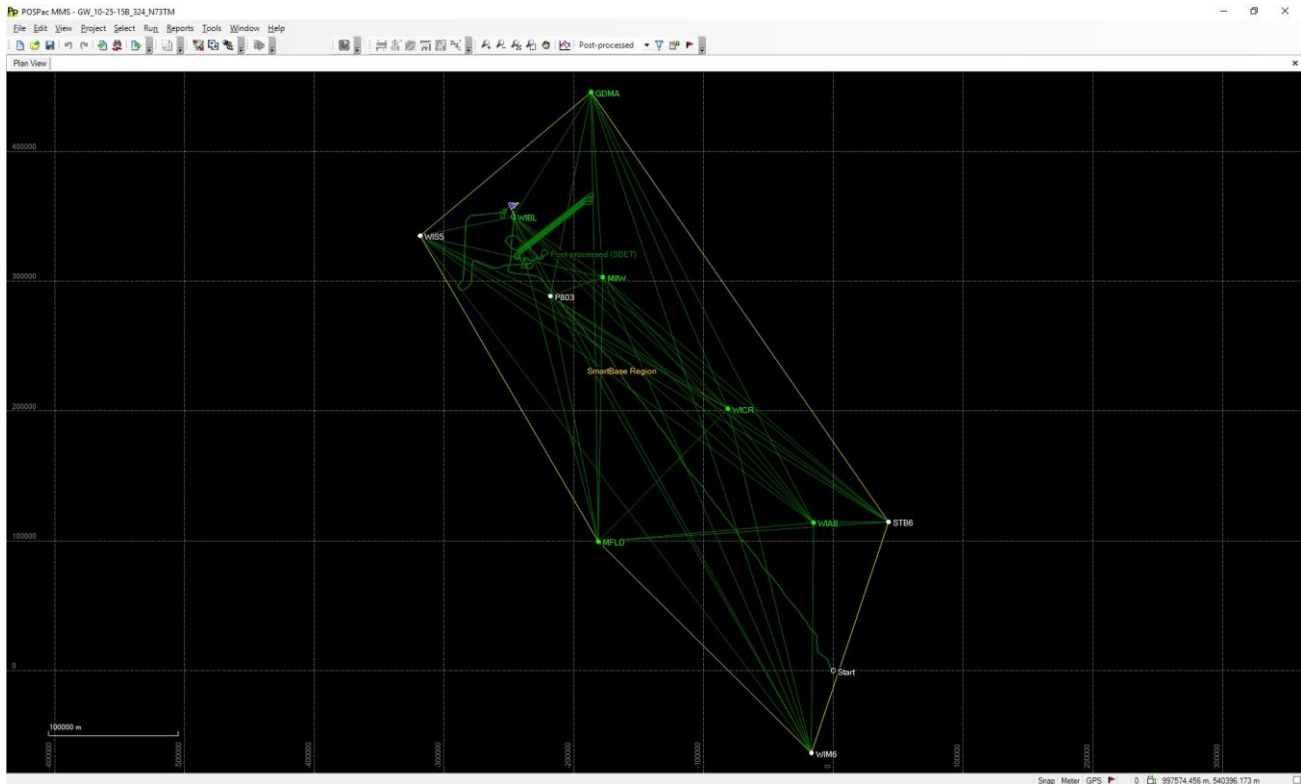
Hobbs 1024.5 → 1031.1

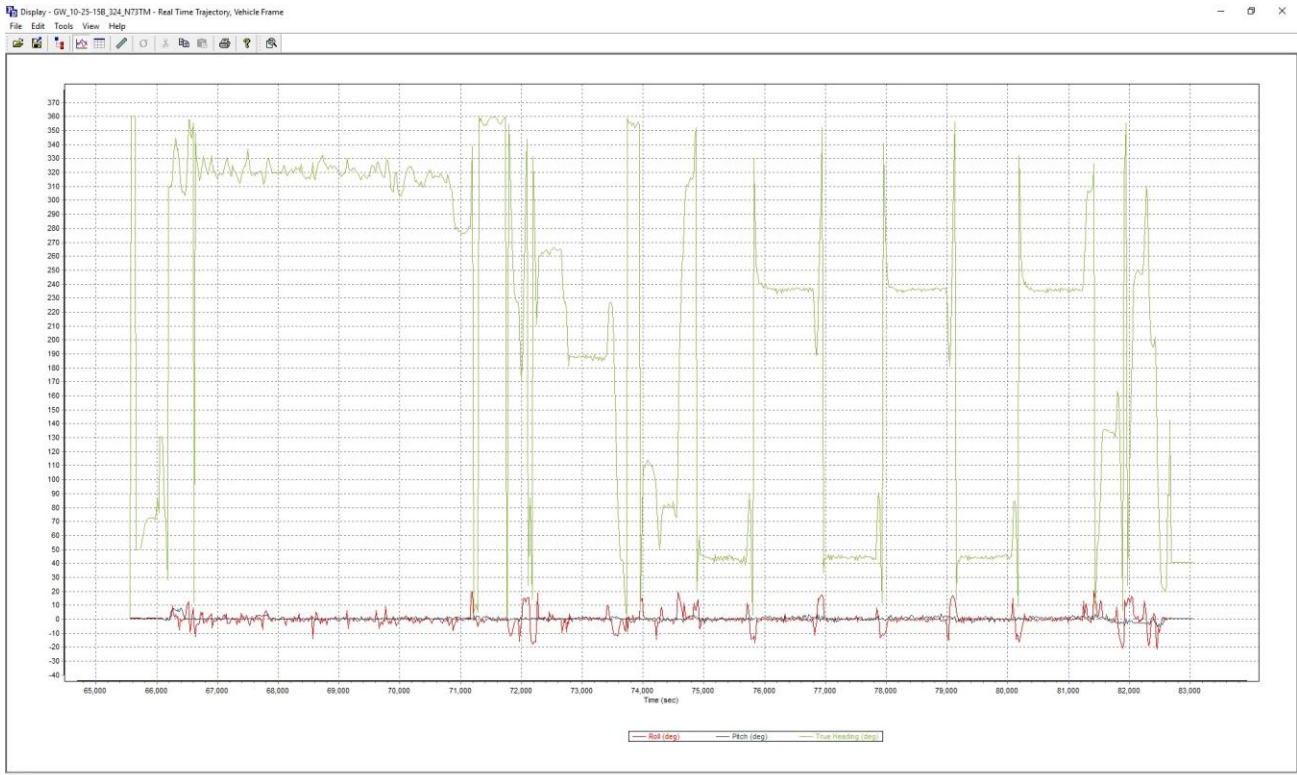
OPERATORS FLIGHT LOG													
YYYYMMDD_TIME(GPS)													
MISSION: 2015 25.10.2015B		OPERATOR: Bayfield		DATE: 10/25/2015		Orion H.S.N: 135EN329		AIRCRAFT: N300LF		SENSOR:			
PILOT: Buck		OPERATOR: Rolles		DATE: 10/25/2015		Orion H.S.N: 135EN329		AIRCRAFT: N300LF		SENSOR:			
PROJECT NUMBER AND NAME	LINE No.	Lbi	Hhg	SPEED (KTS)	FREQ Hz	SCAN ANGLE	PRF KHz	FIXED GAIN	FLYING HL (m)	TIME		REMARKS	MM70 DRIVE
										START	STOP		
Avres Cell Bayfield	29		50	142	52	38	225	NA	1906	19:09	19:24	Static Start	
	28		230	124					1914	19:26	19:43	TD	
	27		50	144					1919	19:45	19:59		
	26		230	122					1919	20:02	20:19		
	25		50	146					1915	20:22	20:37		
	24		230	119					1908	20:39	20:57		
	42		315	113					1900	21:00	21:03	Load Static Stop	
										21:20	21:27	yielded to TM who moved into area other block clouded out	
STATUS													
○ 26947	TOTAL LINES	62		6	19	1,9	0.7		STATIC	START	STOP	NOTES: High power settings Used WISCONSIN BELL station	
○										18:36	21:27		
○													

Quantum Spatial N6216 Resource Drive Sheboygan Falls, WI 53085 E-Mail: flight-log-distribution-list@quantumspatial.com

Oct 25, 2015-B (N73TM, SN324)







Ready

Coordinate Manager

Station Information

Station ID:

Coordinates

Latitude:

Longitude:

Altitude: m

Decimal Degrees

Antenna Reference Point (ARP) coordinates

Antenna: Frame

Height: m

Method:

Manufacturer:

Type:

Offset from Measured Point to APC: m

Station Database

Station ID: Station Fullname:

Primary Service ID: Coordinate Accuracy:

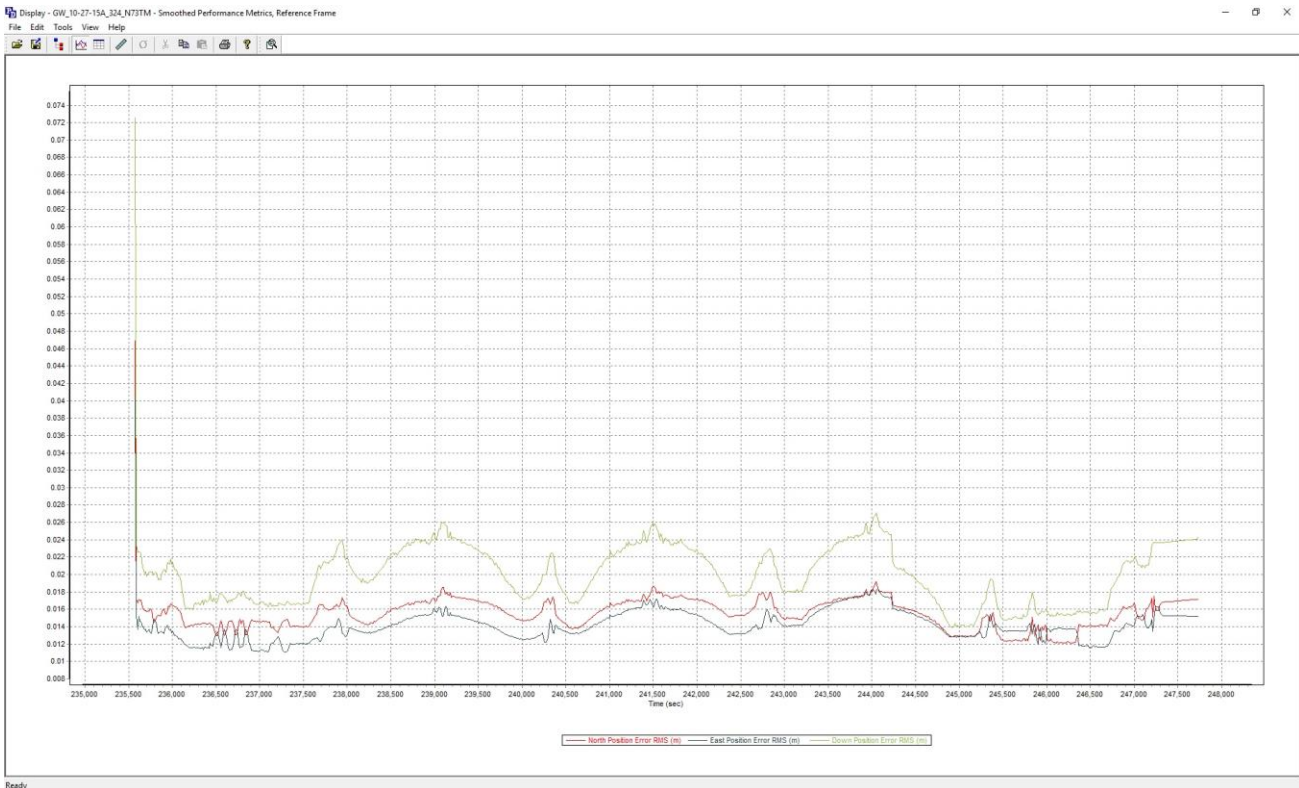
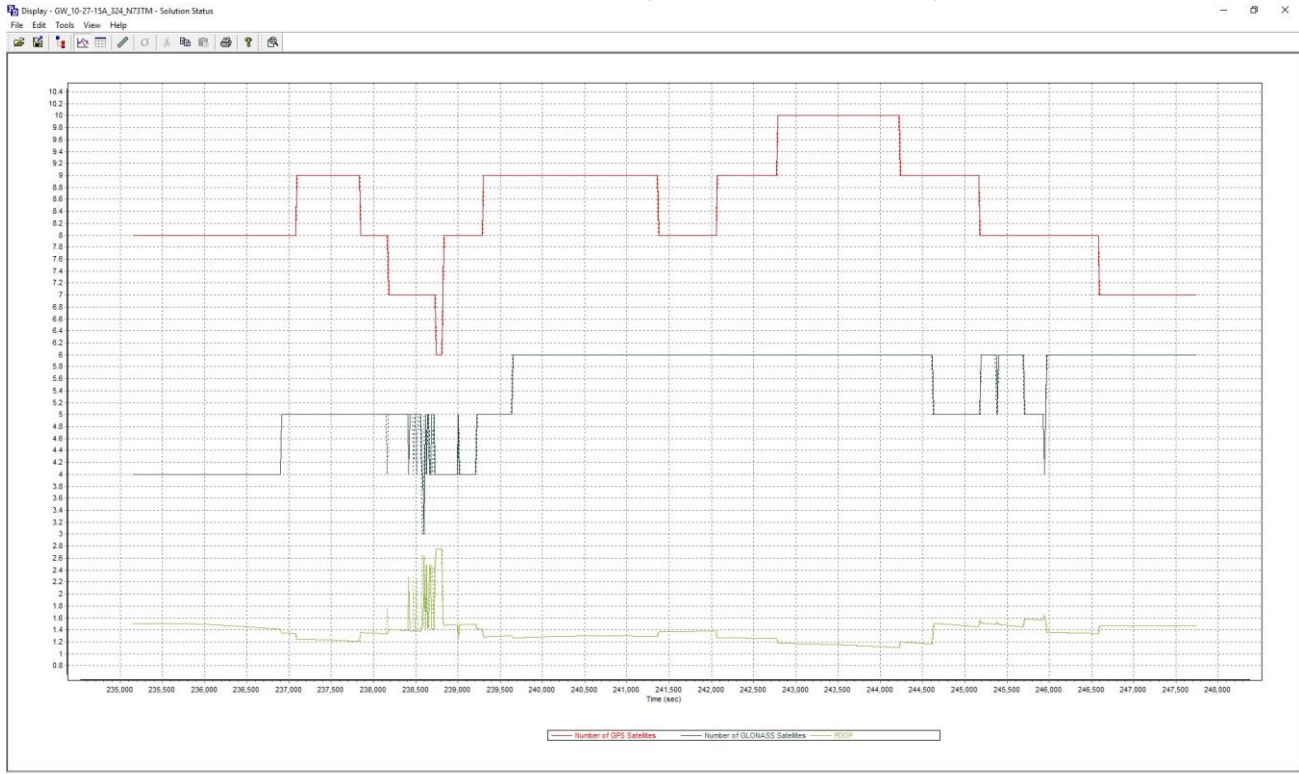
Secondary Service ID:

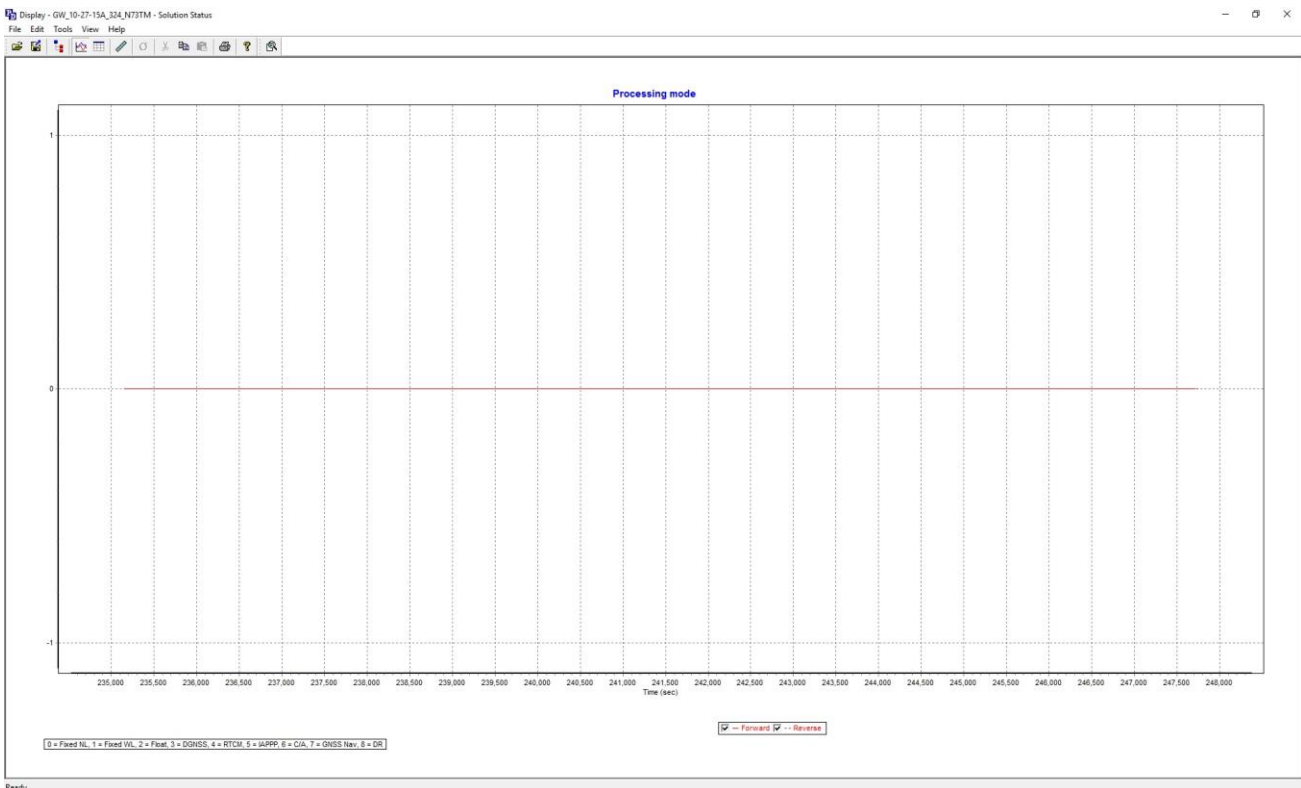
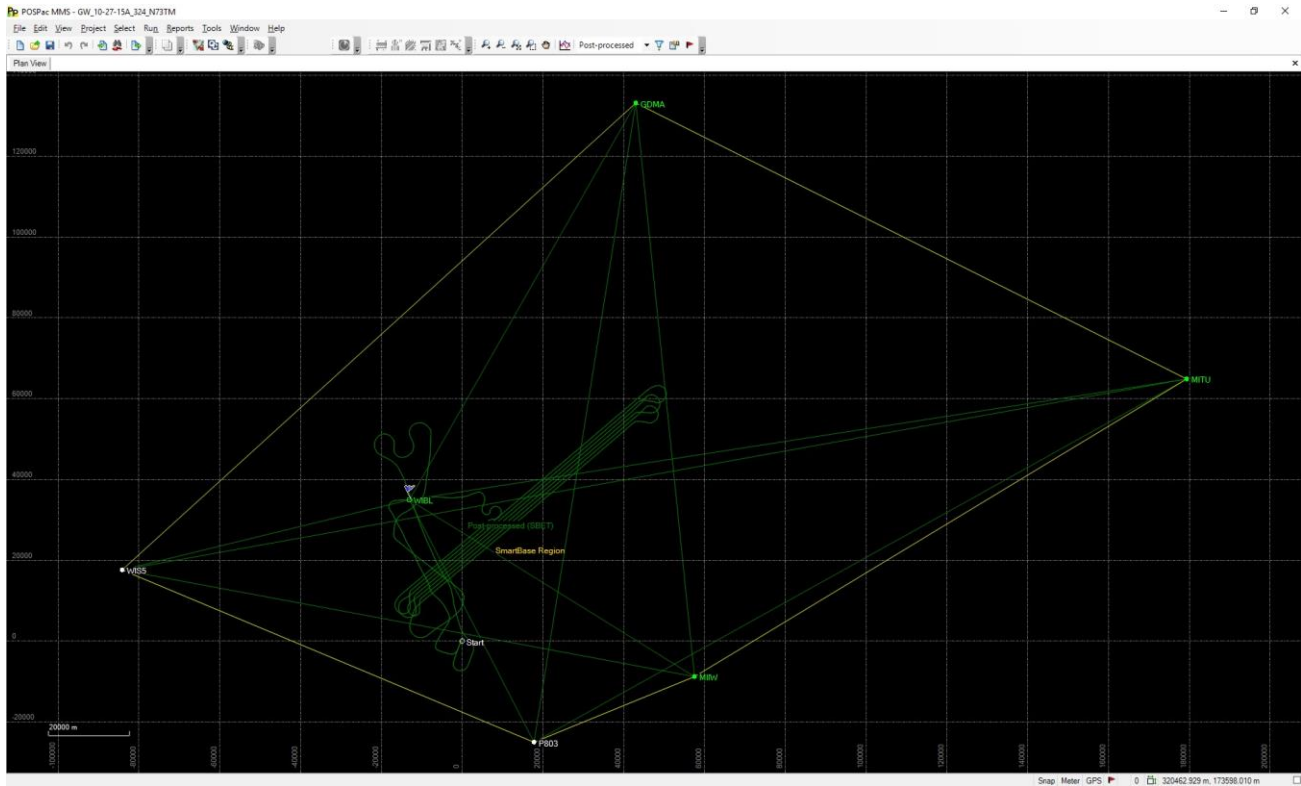
Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

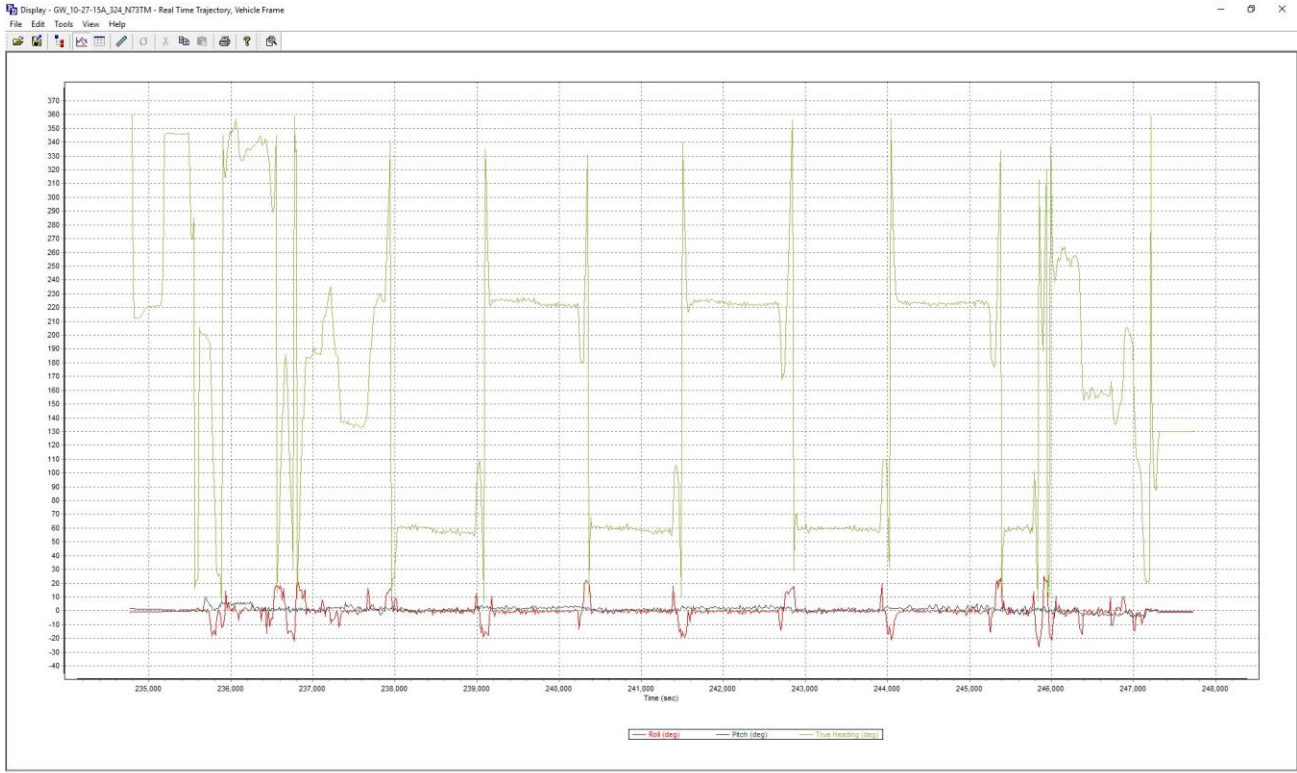
LIDAR FLIGHT LOG											
MISSION: 20151025 D			DATE: 10/25/15		ALTIMETER: N73TM			PROJECT NUMBER: 26947		PROJECT NAME: BAYFIELD	
PILOT: CHRISTOPHER			OPERATOR: NELSON		AIRCRAFT: N73TM			Laser Time		TZPK	
PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	REMARKS		
			52	19	225	1650	18:25		SBM → SITE	58875	
									TWO TEST FLIES		
	115	180	52	19	225	1650	20:13	20:23	CLOUDS AT LAST 1 NME		
	167	0					20:29		CLOUDS ABOARDED REFLY		
	6	50				1670	20:48	21:01			
	7	230				1650	21:05	21:20			
	8	50				1650	21:23	21:37			
	9	230				1650	21:41	21:56			
	10	50				1650	22:00	22:13			
	11	230				1660	22:18	22:33			
	X-PT	E 160				1660	22:39	23:42	CROSSFLIGHT		
								23:00	SITE → KASX 5892.1		
STATUS		TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	FERRY	STATIC START:	STOP:	NOTES:		
0	26947	117	6		1.9	2.7	18:15	23:05	WISLOR BELL 19:55		
0							WX		BASE PETE 20:42, 23:00		
0											

Quantum Spatial N.6216 Resource Drive Sheboygan Falls, WI. 53085 PHONE: 920-467-2655 FAX: 888-253-6695 E-Mail: amphoto@quantumspatial.com

Oct 27, 2015-A (N7266Z, SN324)







Ready

Coordinate Manager

Station Information

Station ID:

Coordinates

Latitude:

Longitude:

Altitude: m

Decimal Degrees

Antenna Reference Point (ARP) coordinates

Antenna **Frame**

Height: m

Method:

Manufacturer:

Type:

Offset from Measured Point to APC: m

Station Database

Station ID: Station Fullname:

Primary Service ID: Coordinate Accuracy:

Secondary Service ID:

Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

LIDAR FLIGHT LOG

MISSION: 20151027A

PILOT: CHRISTOPHER

PROJECT NUMBER: 26947

3 ✓

4 ✓

5 ✓

6 -

7 -

8 ✓

9 -

10 -

DATE: 10/27/15

OPERATOR: NELSON

FREQ: 52

SCAN ANGLE: 19

GND SPEED (KTS): 117

12 50 135

13 230 135

14 50 140

15 230 130

16 50 140

17 230 130

18 50 140

AIRCRFT: N73TM

TIME START STOP

17:30

17:55 18:01

18:07 18:22

18:27 18:43

18:47 19:03

19:07 19:24

19:28 19:45

19:49 20:07

20:11 20:14

20:40

20:40

13 SEN 324

REMARKS

KASX → SITE 5892.1

TWO TEST FLIES

22000M NORTH (DEZ)/87000

22000M NORTH (DIRZ)/87000

~~6000M NORTH (DIRZ)/6000~~

LT RASN 8 NME END

ABORT 11 NME START REFLY

SITE → KASX 5895.3

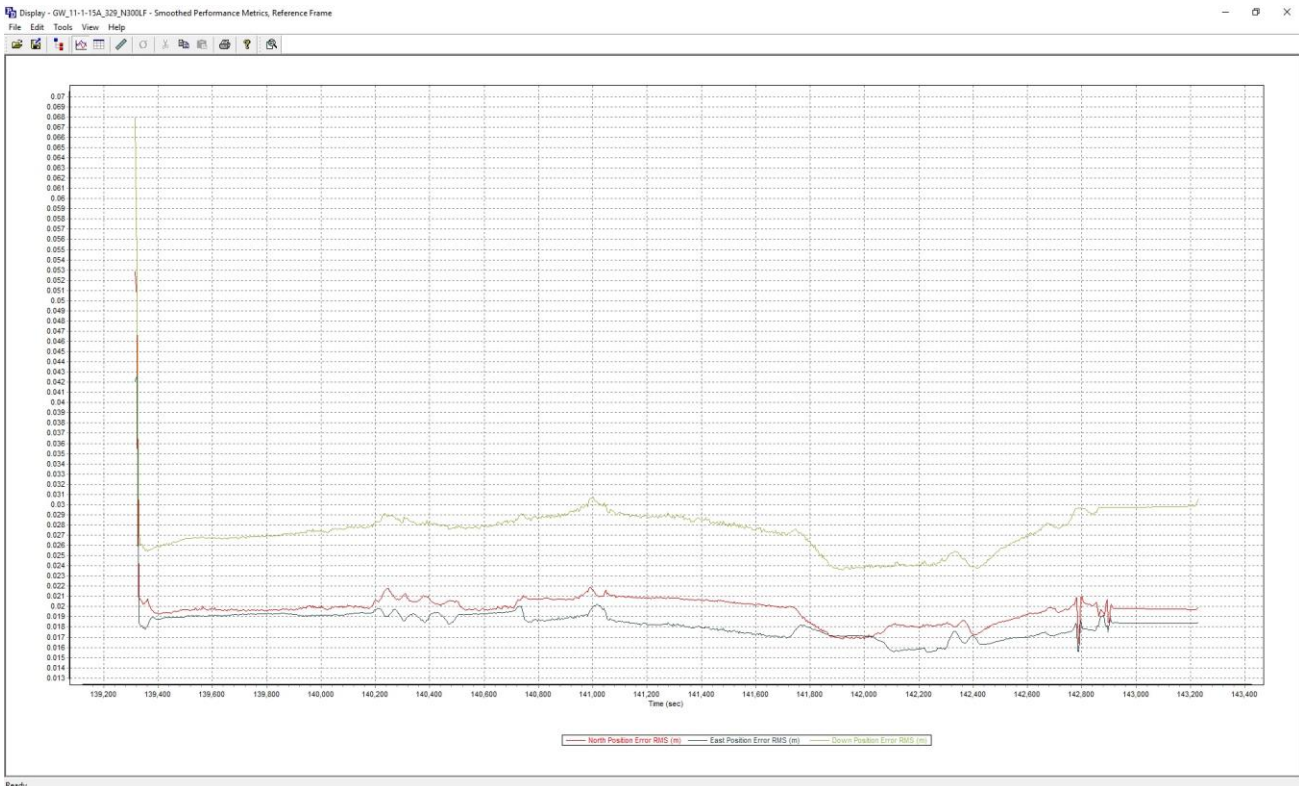
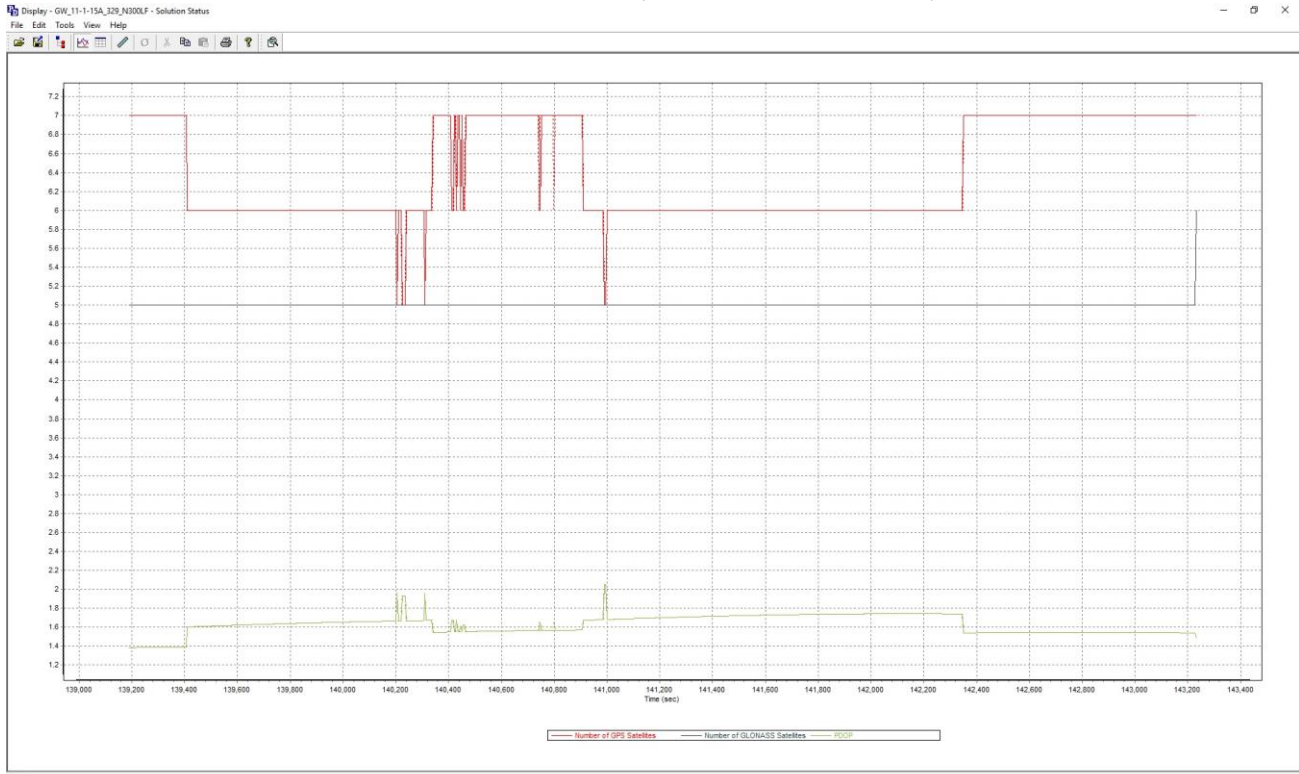
REFLY 17, 18 ALL

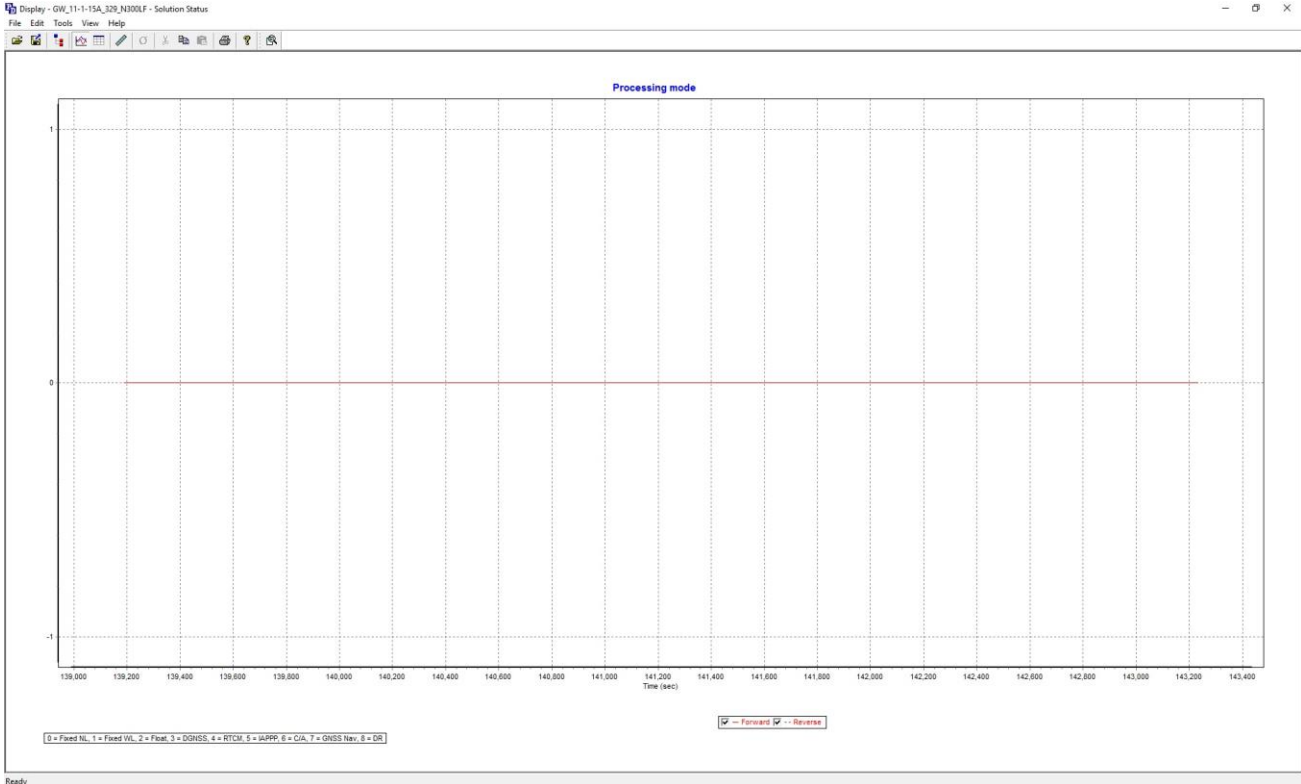
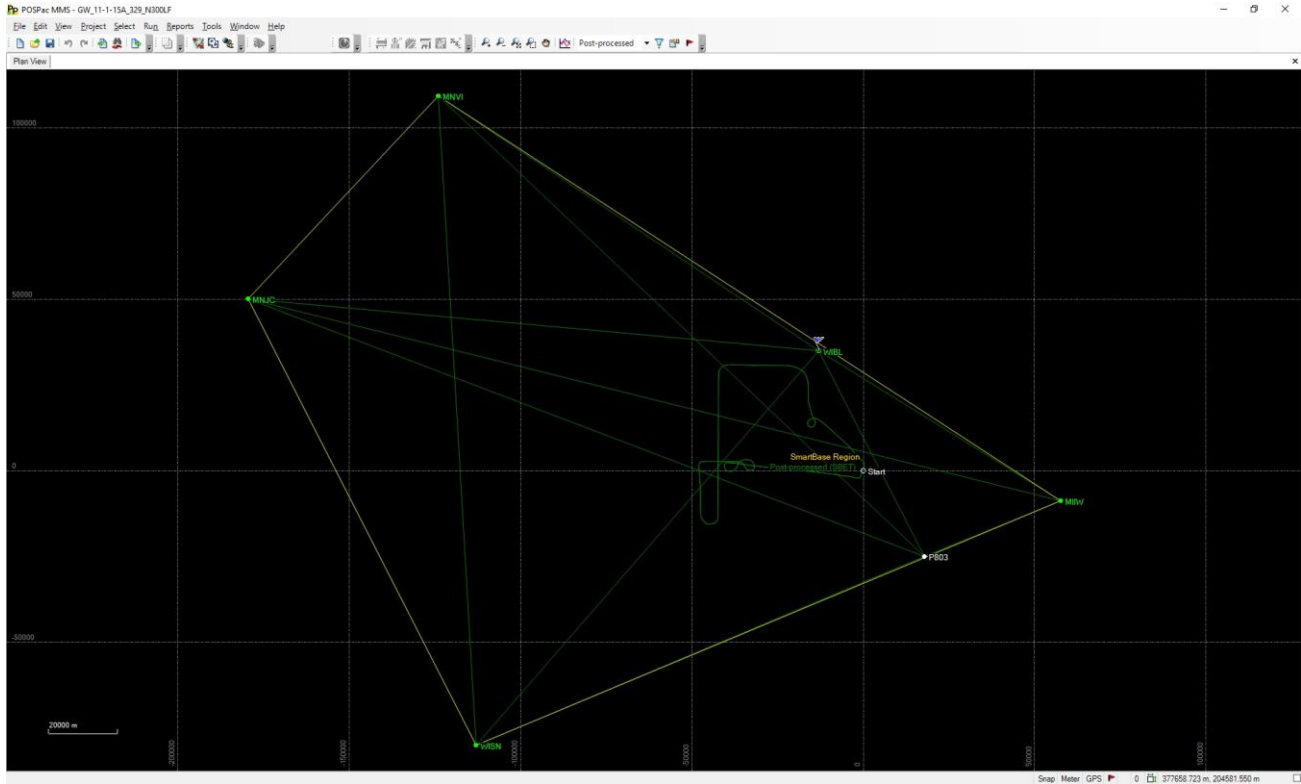
N 15 NME LEAVE 14+15

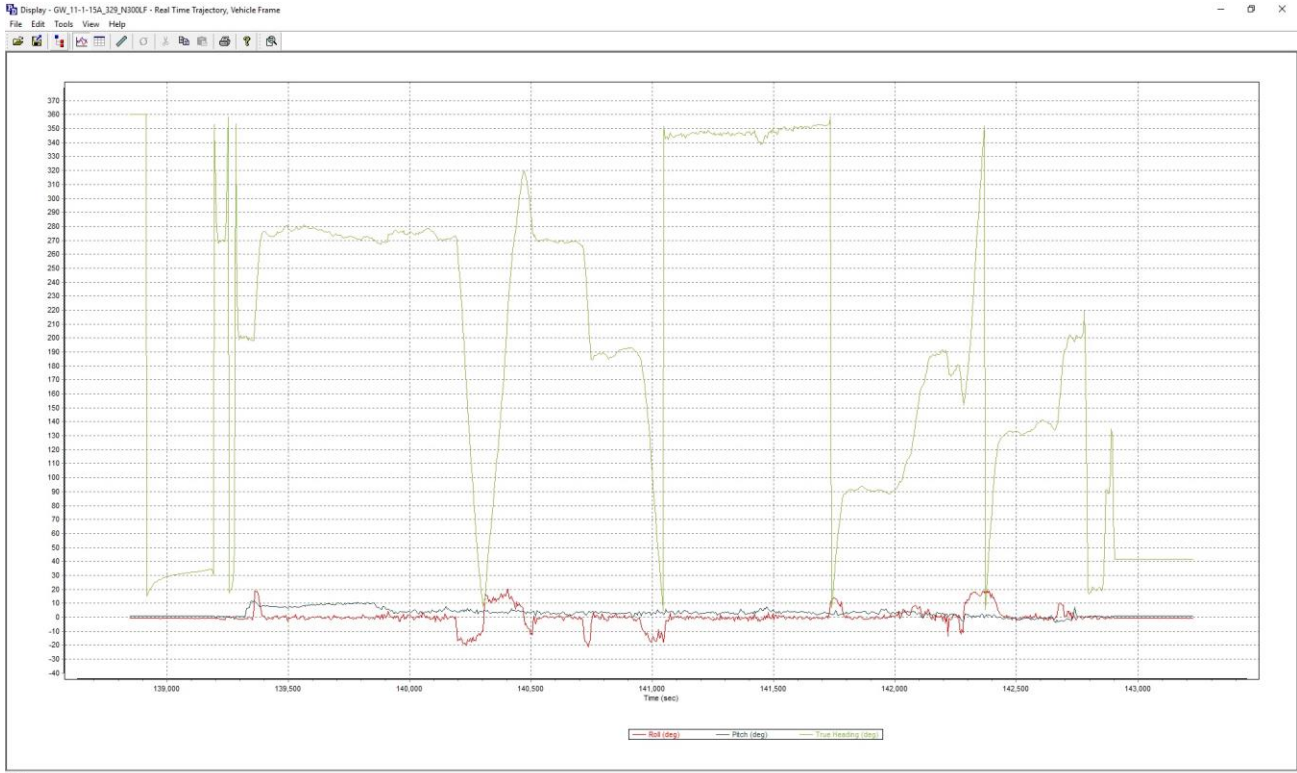
STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	FERRY	STATIC START:	STOP:	NOTES:
0	26947	6		2.2	1.0	17:15	20:50	BELL 17:40 20:24
0						WV OVC 8500		
0								

Quantum Spatial N 6216 Resource Drive Sheboygan Falls, WI 53085 PHONE: 920-467-2655 FAX: 888-253-6695 E-Mail: amphoto@quantumspatial.com

Nov 2, 2015-A (N300LF, SN329)







Coordinate Manager

Station Information

Station ID: WIBL

Coordinates

Latitude: N 46 51 58.80345000

Longitude: W 91 5 8.72582000

Altitude: 201.7100 m

Decimal Degrees

Antenna Reference Point (ARP) coordinates Apply Changes

Antenna Frame

Height: 0.000 m

Method: Bottom of antenna mount

Manufacturer: Trimble

Type: Zephyr Geodetic 2 RoHS

Offset from Measured Point to APC: 0.085 m

Station Database

Station ID: WIBL Station Fullname: WIBL

Primary Service ID: Edit

Secondary Service ID: Edit

Coordinate Accuracy: UNKNOWN_ACC

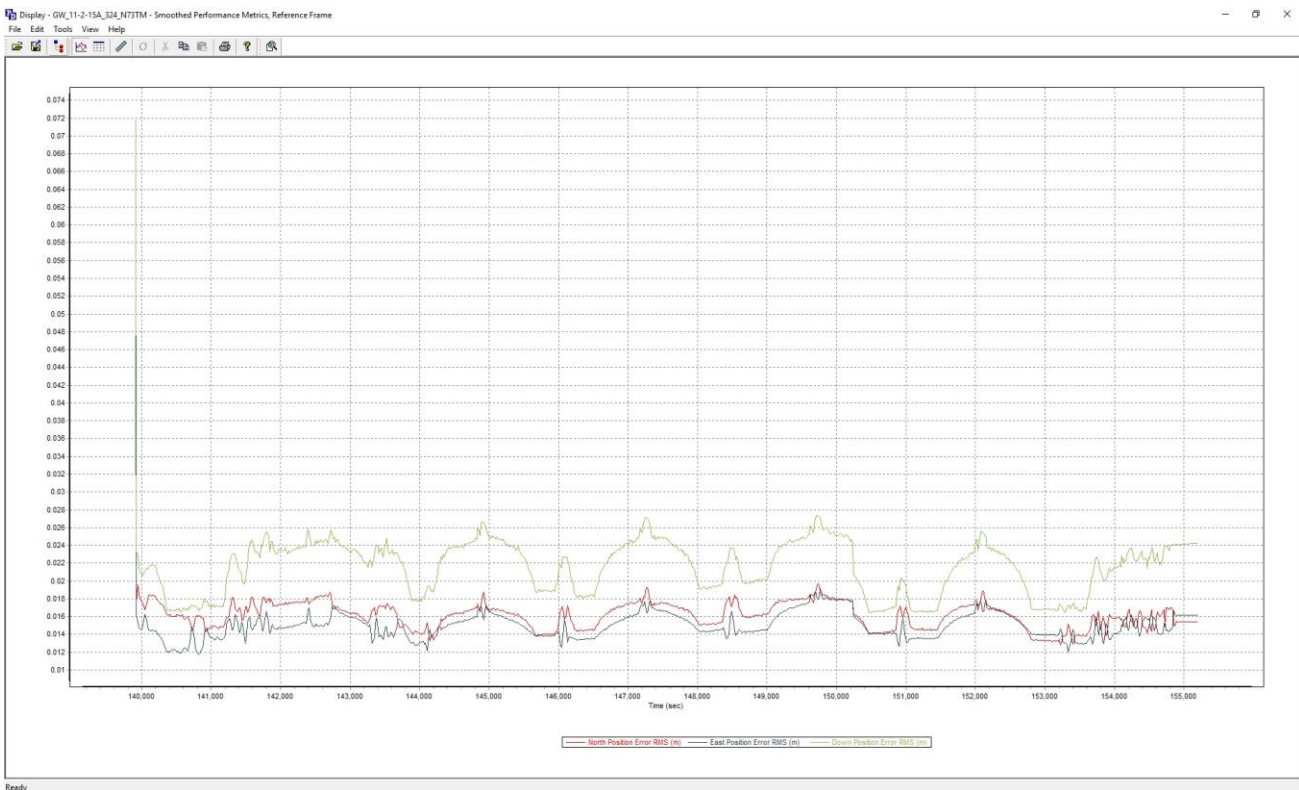
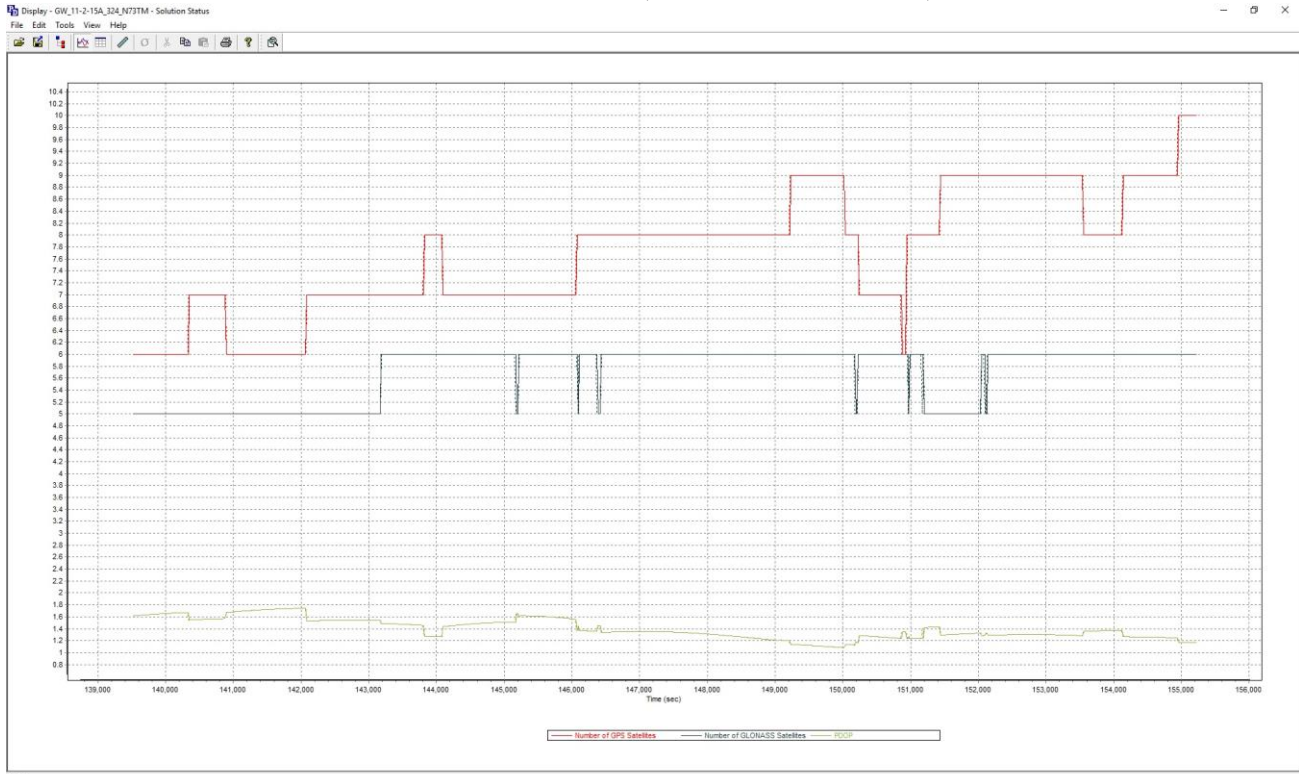
Add Delete Update

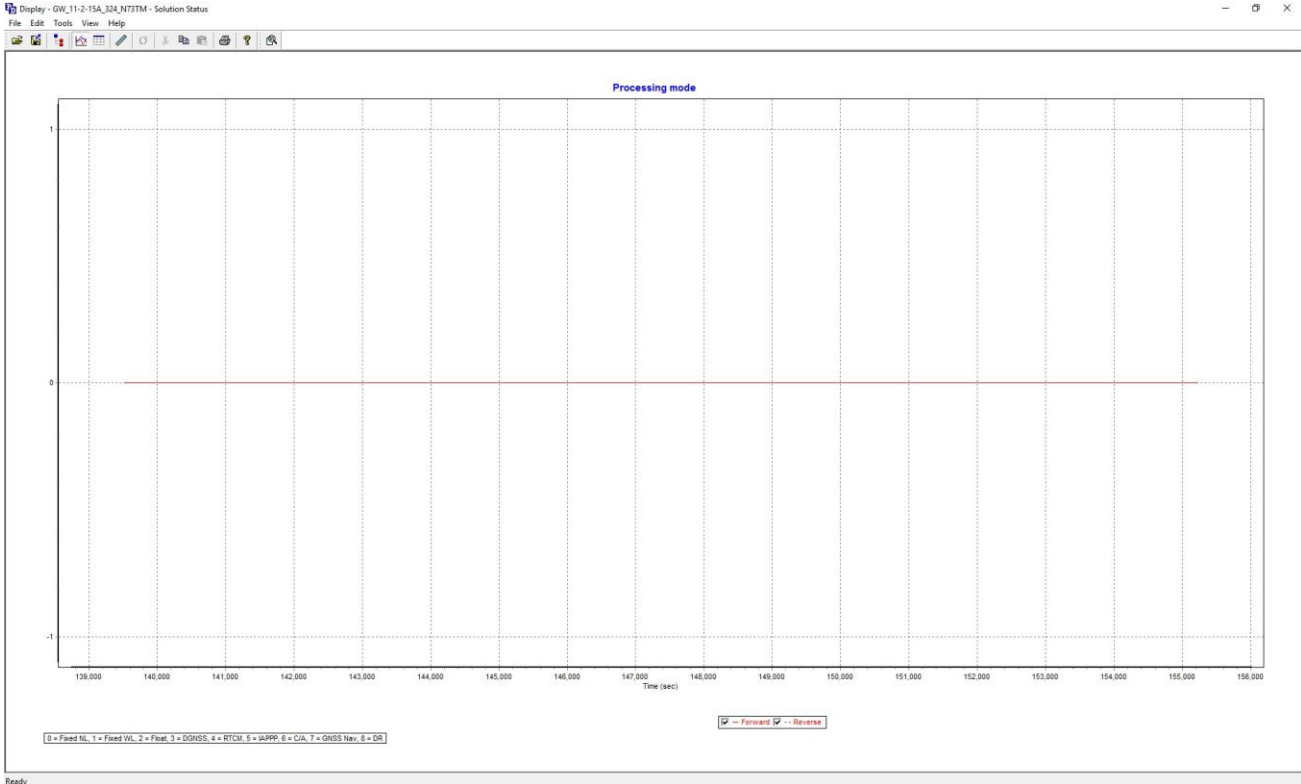
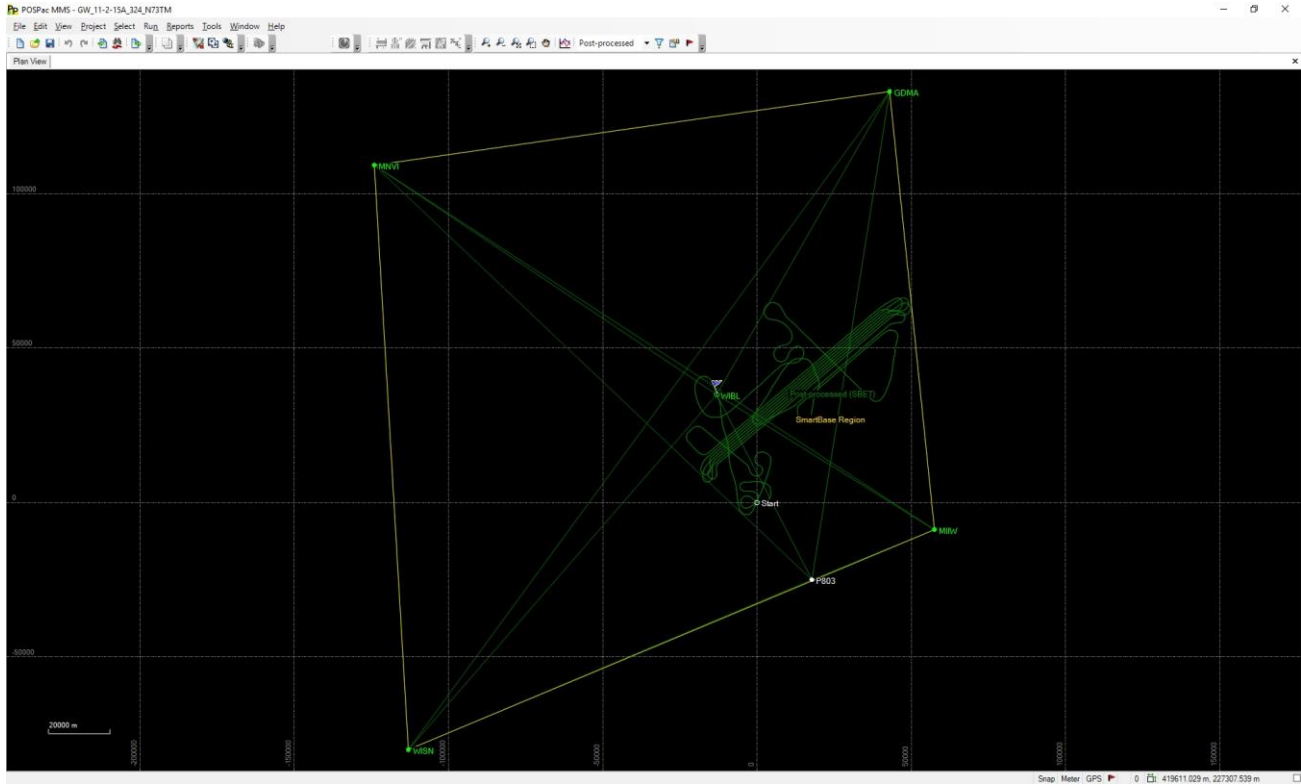
Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

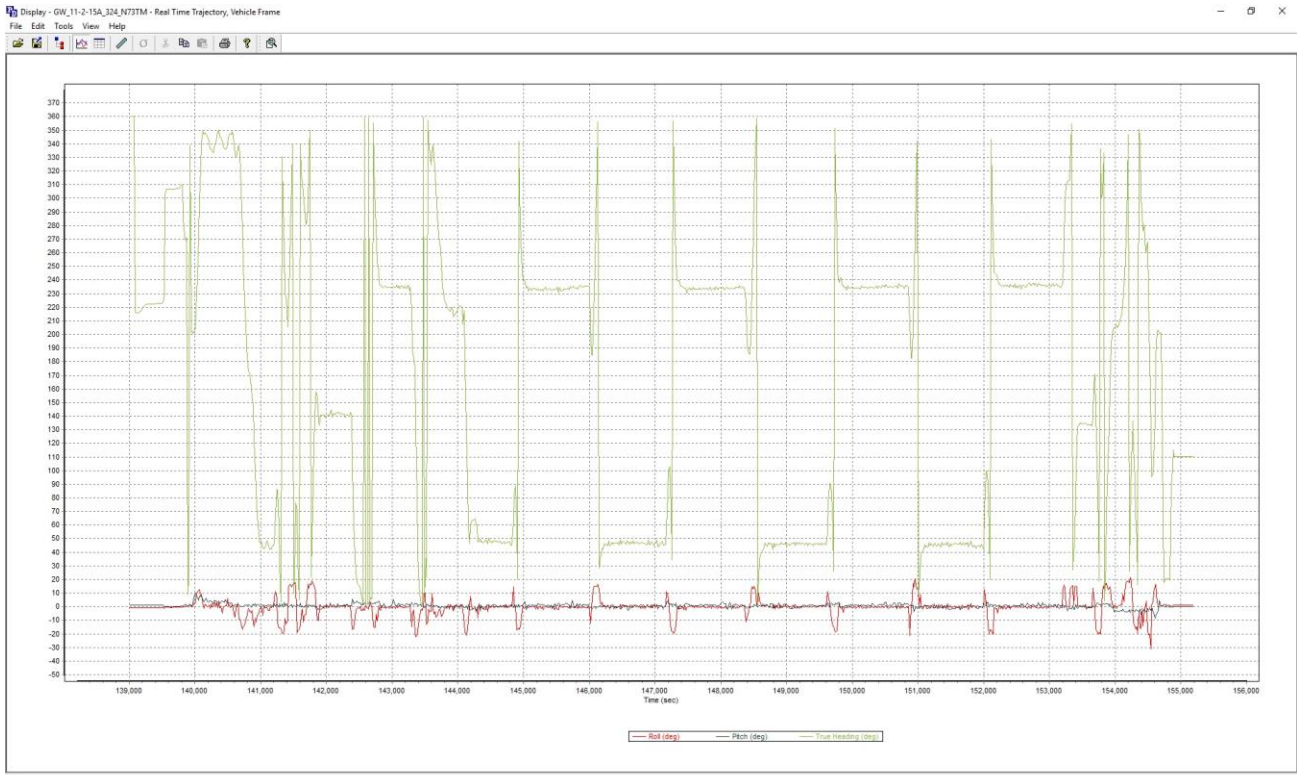
Import Coordinates Export Coordinates

Close

Nov 2, 2015-A (N73TM, SN324)







Ready

Coordinate Manager

Station Information

Station ID:

Coordinates

Latitude:

Longitude:

Altitude: m

Decimal Degrees

Antenna Reference Point (ARP) coordinates Apply Changes

Antenna Frame

Height: m

Method:

Manufacturer:

Type:

Offset from Measured Point to APC: m

Station Database

Station ID: Station Fullname:

Primary Service ID: Edit Coordinate Accuracy:

Secondary Service ID: Edit Add Delete Update

Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

Import Coordinates Export Coordinates Close

LIDAR FLIGHT LOG

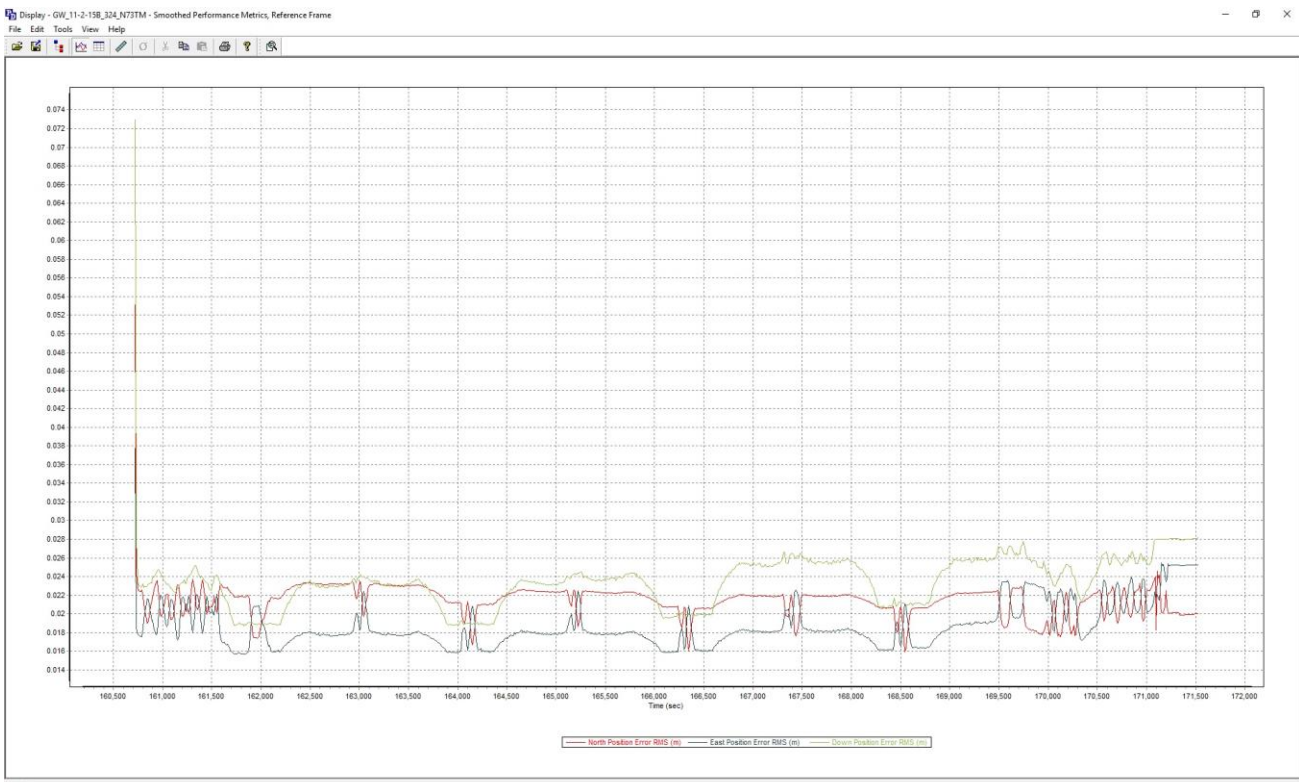
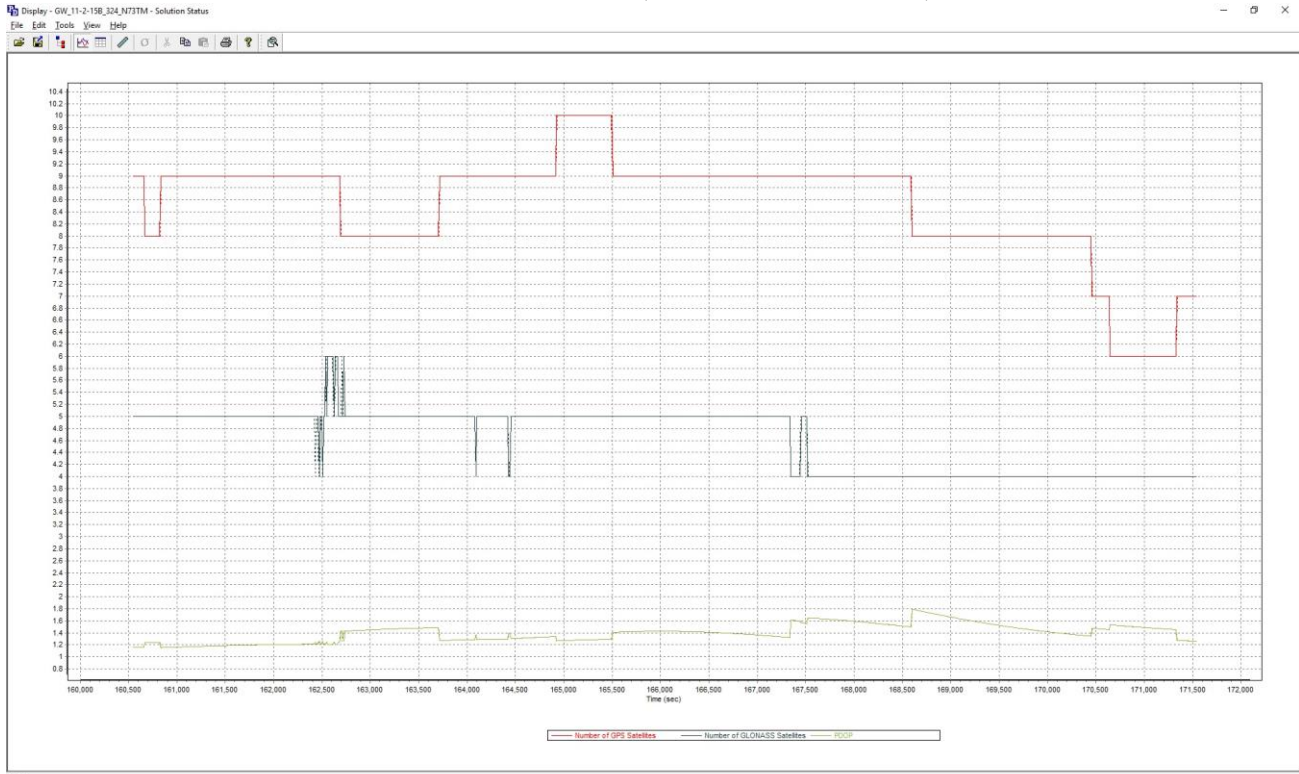
MISSION: 20151027A
PILOT: CHRISTOPHER
PROJECT NUMBER: 26947
OPERATOR: NELSON

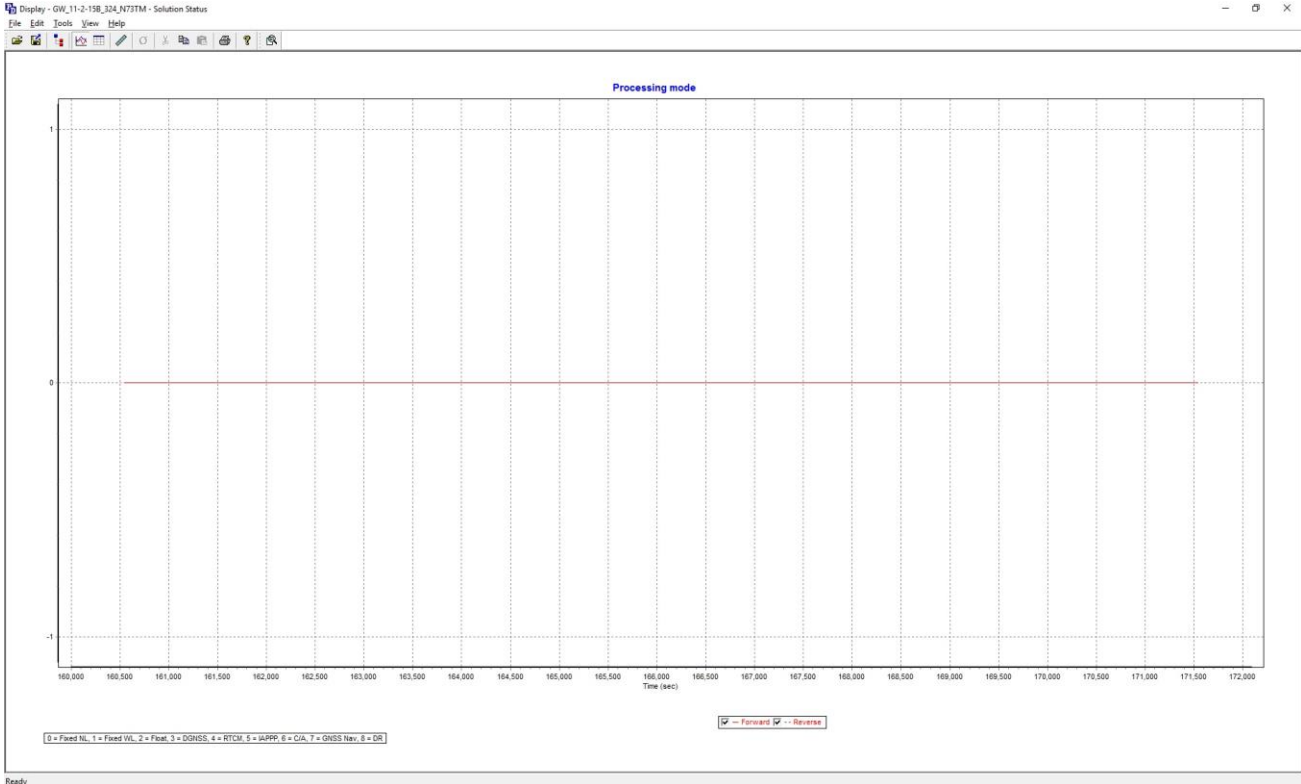
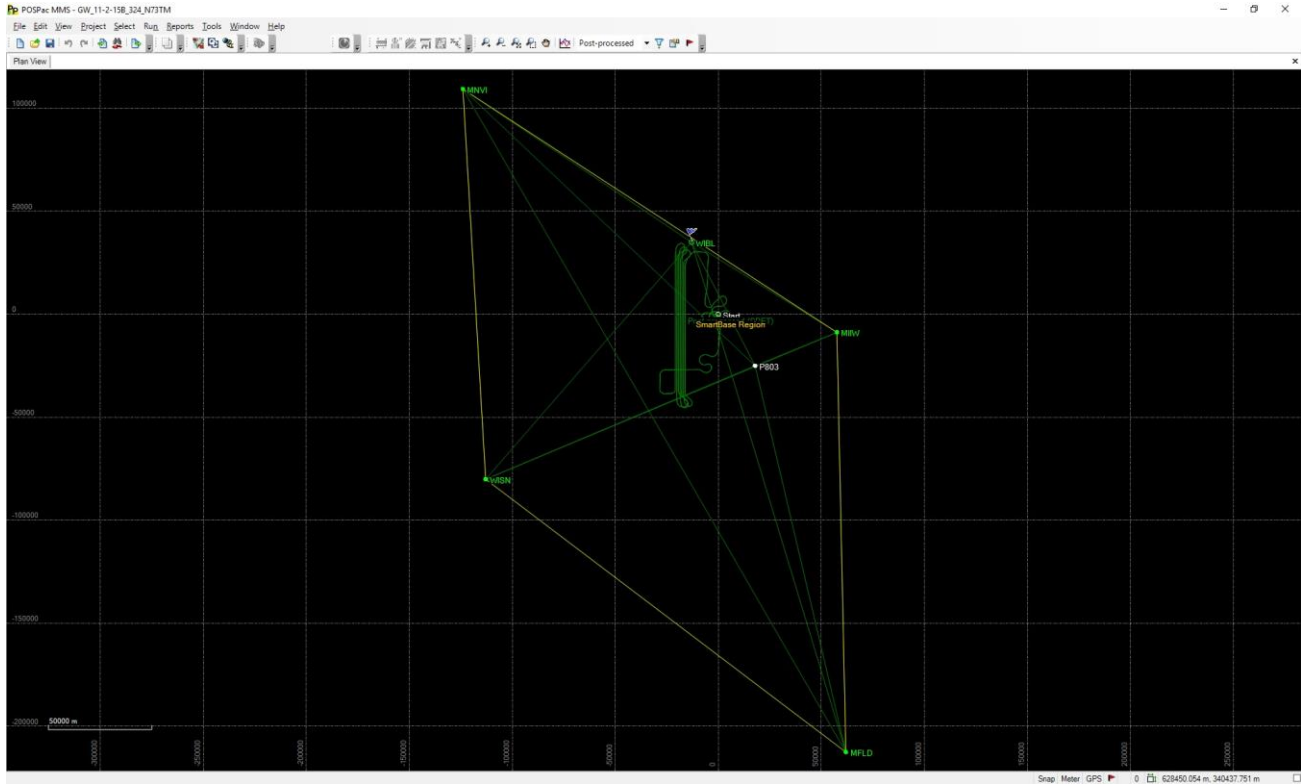
DATE: 10/27/15
AIRCREFT: N737M
13 SEN 324

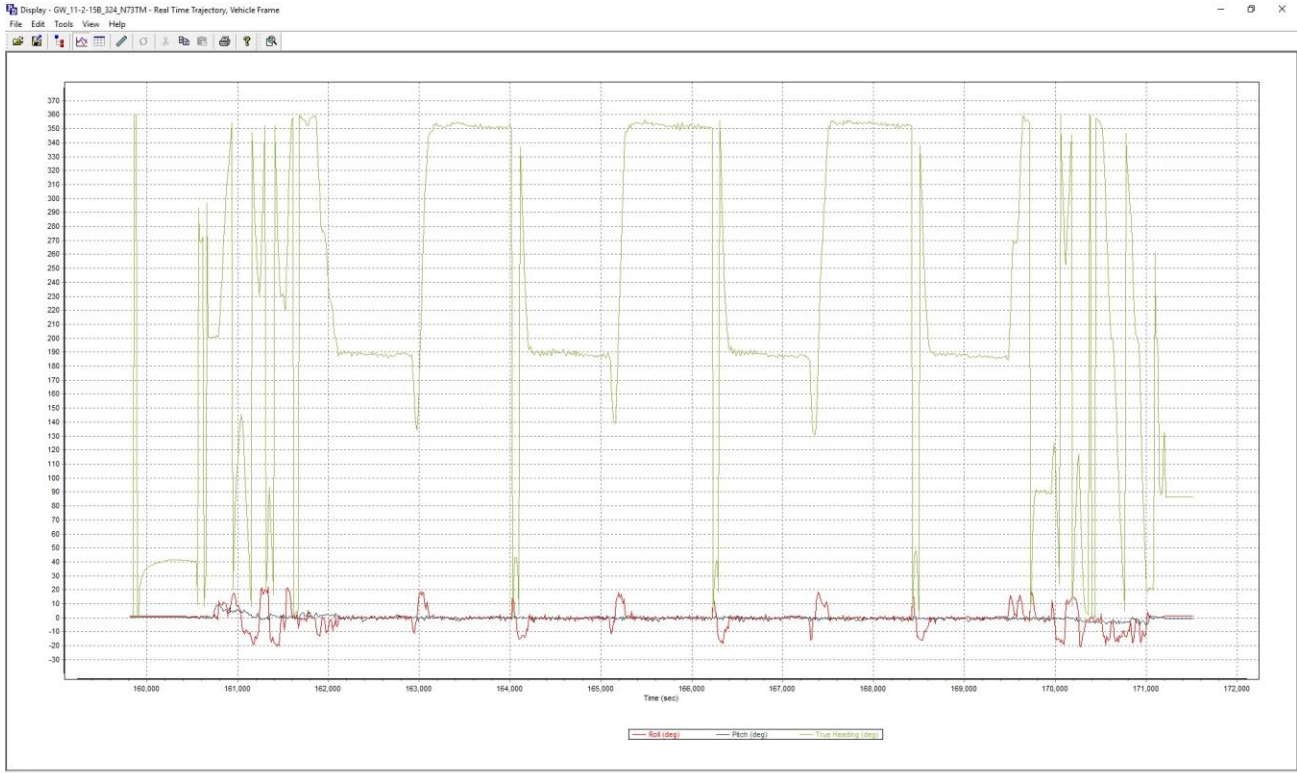
PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME		TZPK	REMARKS
							START	STOP		
3 ✓	X-FAUSE	117	52	19	225	1650	17:30			KASX → SITE 5892.1
4 ✓	12 50	135				1650	17:55	18:01		TWO TEST FLIES
5 ✓	13 230	135				1650	18:07	18:22		
6 -	14 50	140				1650	18:27	18:43		
7 -	15 230	130				1650	18:47	19:03		22000M NORTH (DIR2) / 87000
8 ✓	16 50	140				1660	19:07	19:24		22000M NORTH (DIR2) / 87000
9 -	17 230	130				1650	19:28	19:45		6600 M NORTH (DIR2) / 6000
10 -	18 50	140			↓	1650	19:49	20:07		LT RASIN 8 NME END
						1650	20:11	20:14		ABORT 11 NME START REFLY
								20:40		SITE ⇒ KASX 5895.3
										REFLY 17, 18 ALL
										N 15 NME LEAVE 14+15
STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	FERRY	STATIC		START: STOP:		NOTES:
0 26947	117	6		2.2	1.0			17:15	20:50	BELL 17:40 20:24
0										
0										

Quantum Spatial N 6216 Resource Drive Sheboygan Falls, WI. 53085 PHONE: 920-467-2655 FAX: 888-253-6695 E-Mail: amepphoto@quantumspatial.com

Nov 2, 2015-B (N73TM, SN324)







Ready

Coordinate Manager

Station Information

Station ID: WIBL

Coordinates

Latitude: N 46 51 58.80345000

Longitude: W 91 5 8.72582000

Altitude: 201.7100 m

Decimal Degrees

Antenna Reference Point (ARP) coordinates Apply Changes

Antenna Frame

Height: 0.000 m

Method: Bottom of antenna mount

Manufacturer: Trimble

Type: Zephyr Geodetic 2 RoHS

Offset from Measured Point to APC: 0.085 m

Station Database

Station ID: WIBL Station Fullname: WIBL

Primary Service ID: Edit

Secondary Service ID: Edit

Coordinate Accuracy: UNKNOWN_ACC

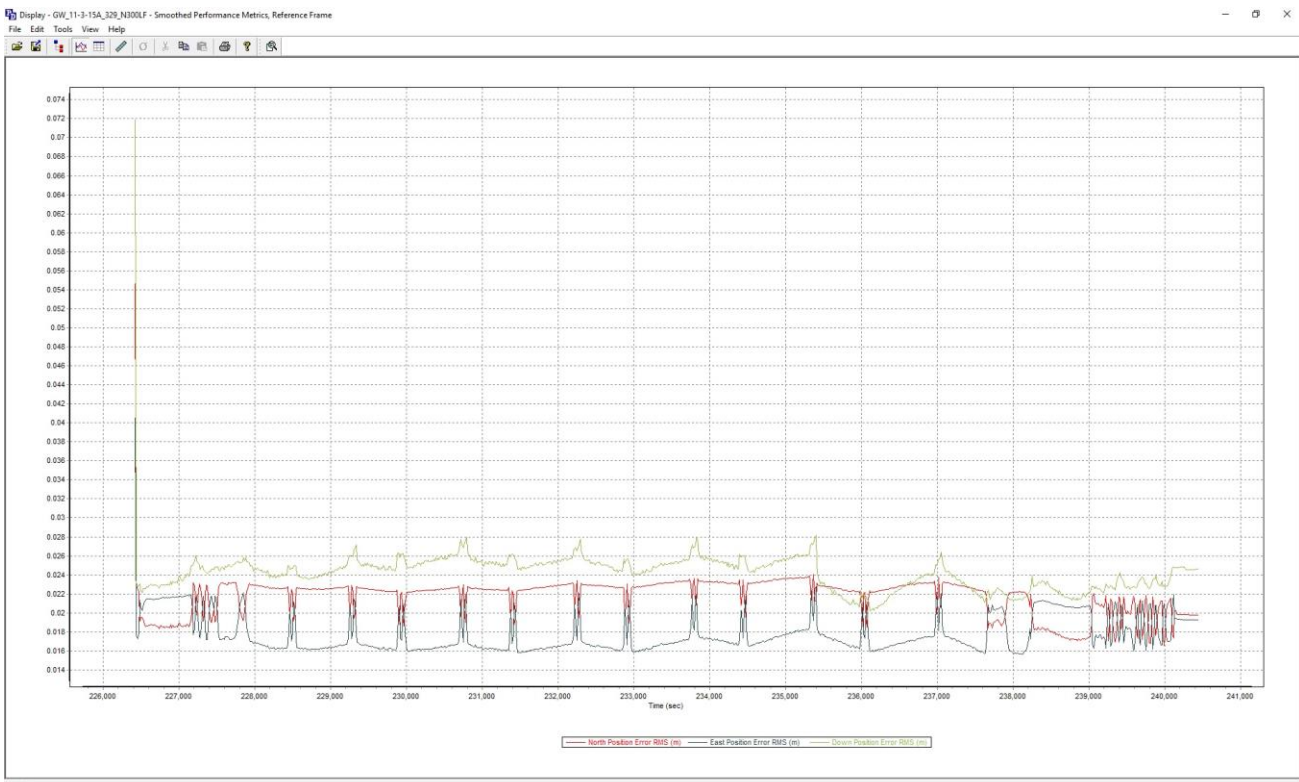
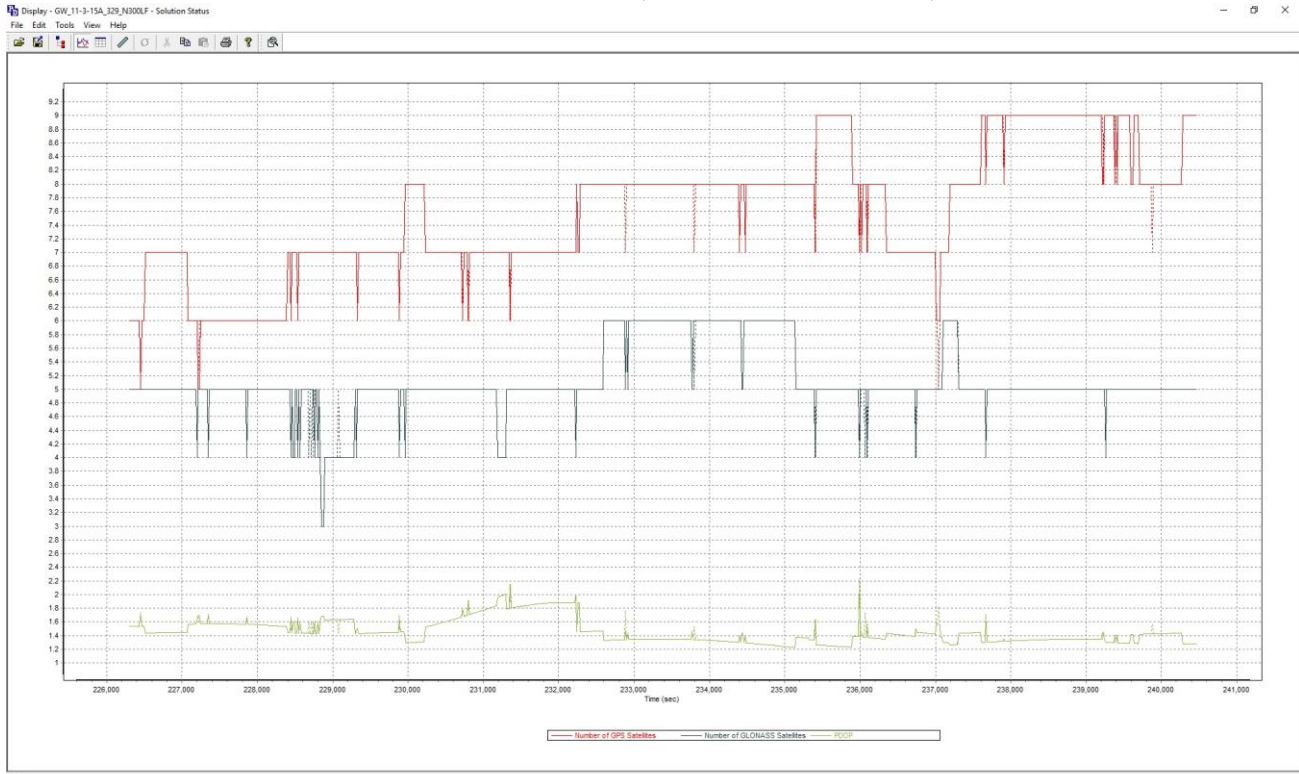
Add Delete Update

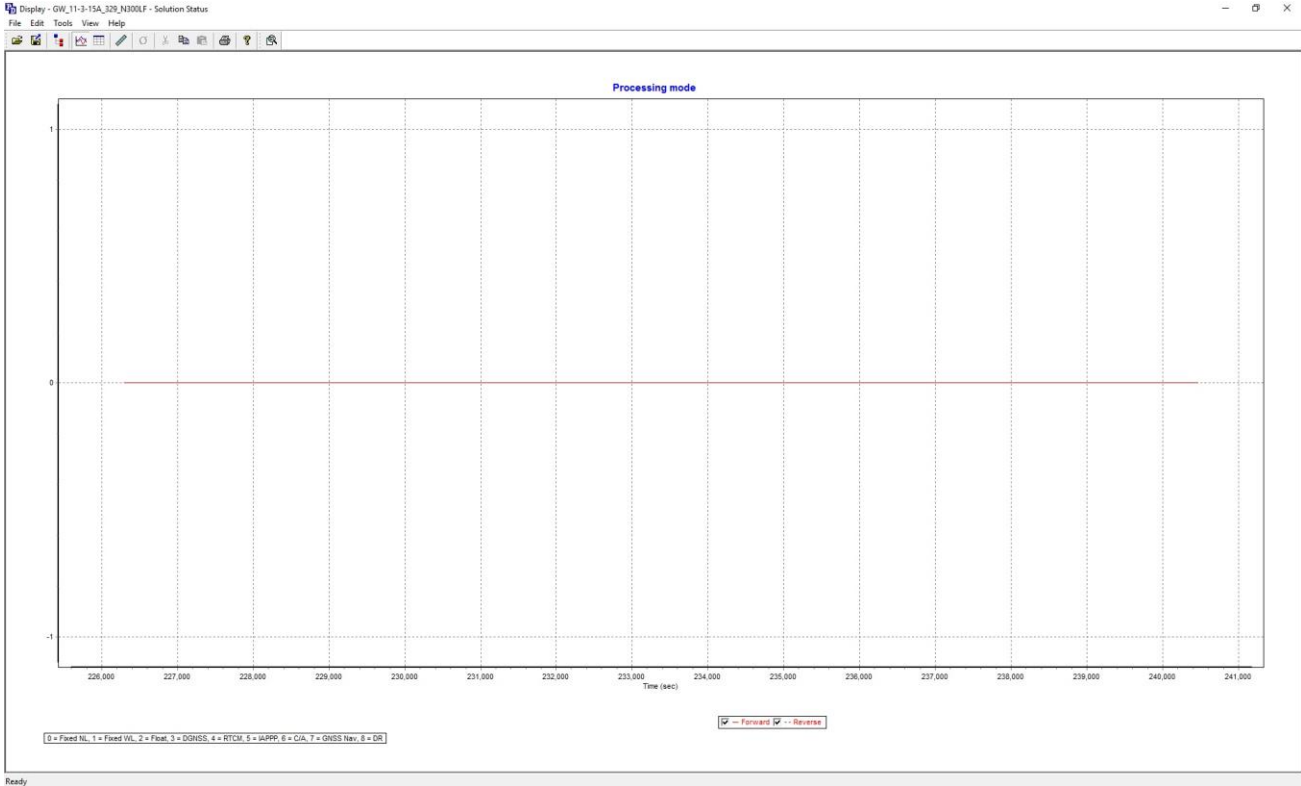
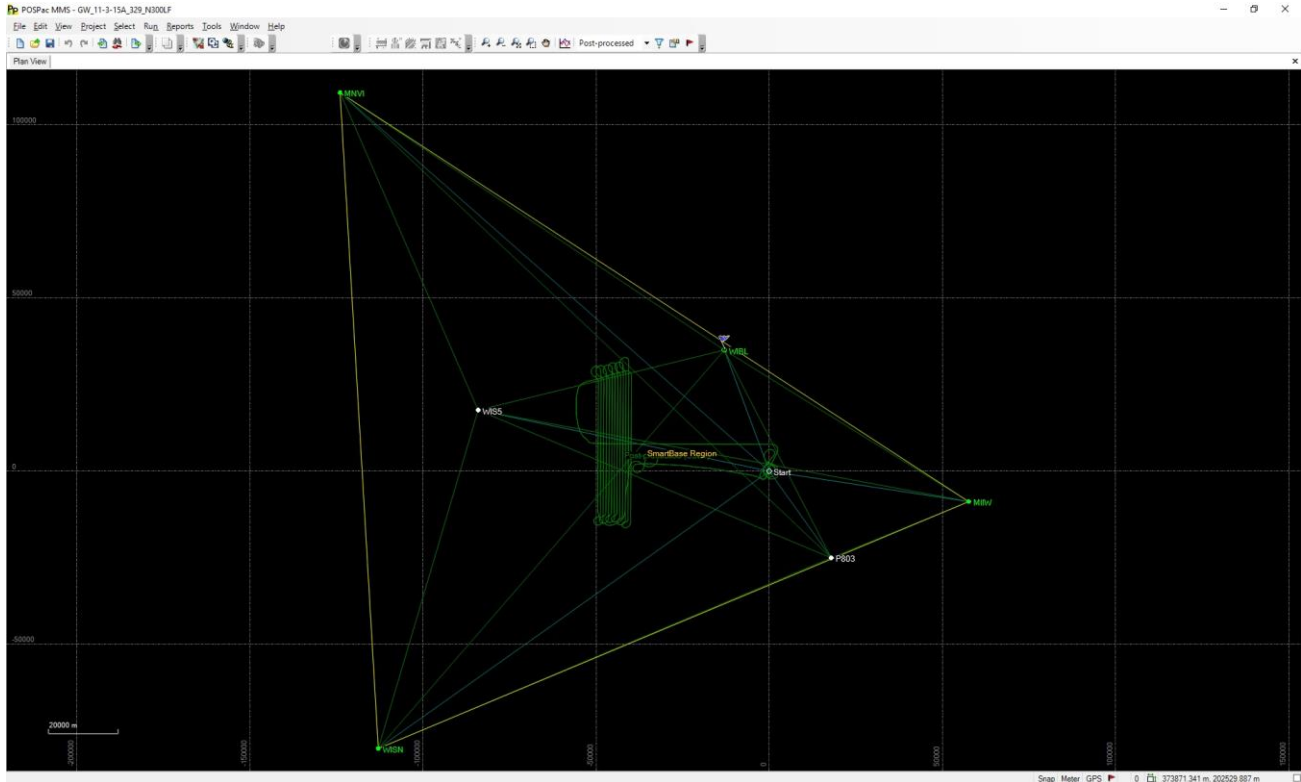
Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

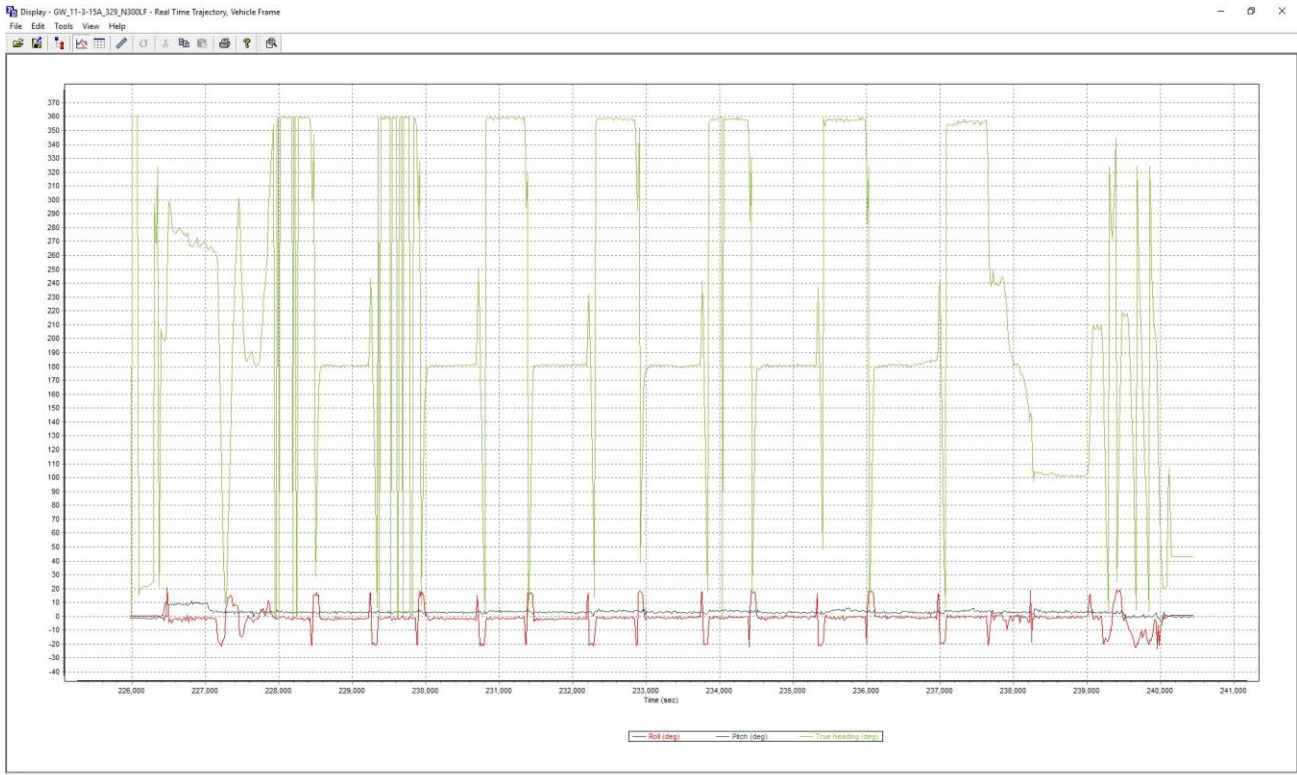
Import Coordinates Export Coordinates

Close

Nov 3, 2015-A (N300LF, SN329)







Coordinate Manager

Station Information

Station ID:

Coordinates

Latitude:

Longitude:

Altitude: m

Decimal Degrees

Antenna **Frame**

Height: m

Method:

Manufacturer:

Type:

Offset from Measured Point to APC: m

Antenna Reference Point (ARP) coordinates

Station Database

Station ID: Station Fullname:

Primary Service ID: Coordinate Accuracy:

Secondary Service ID:

Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

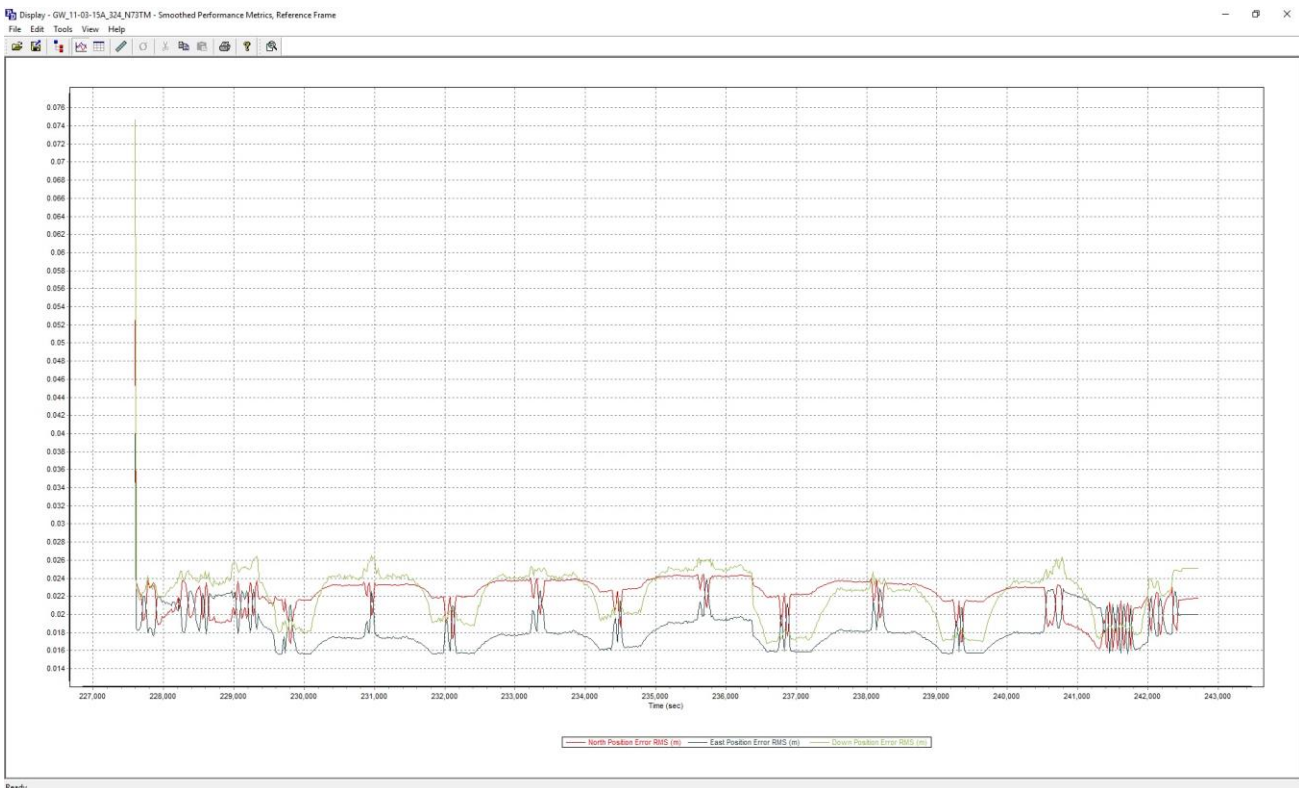
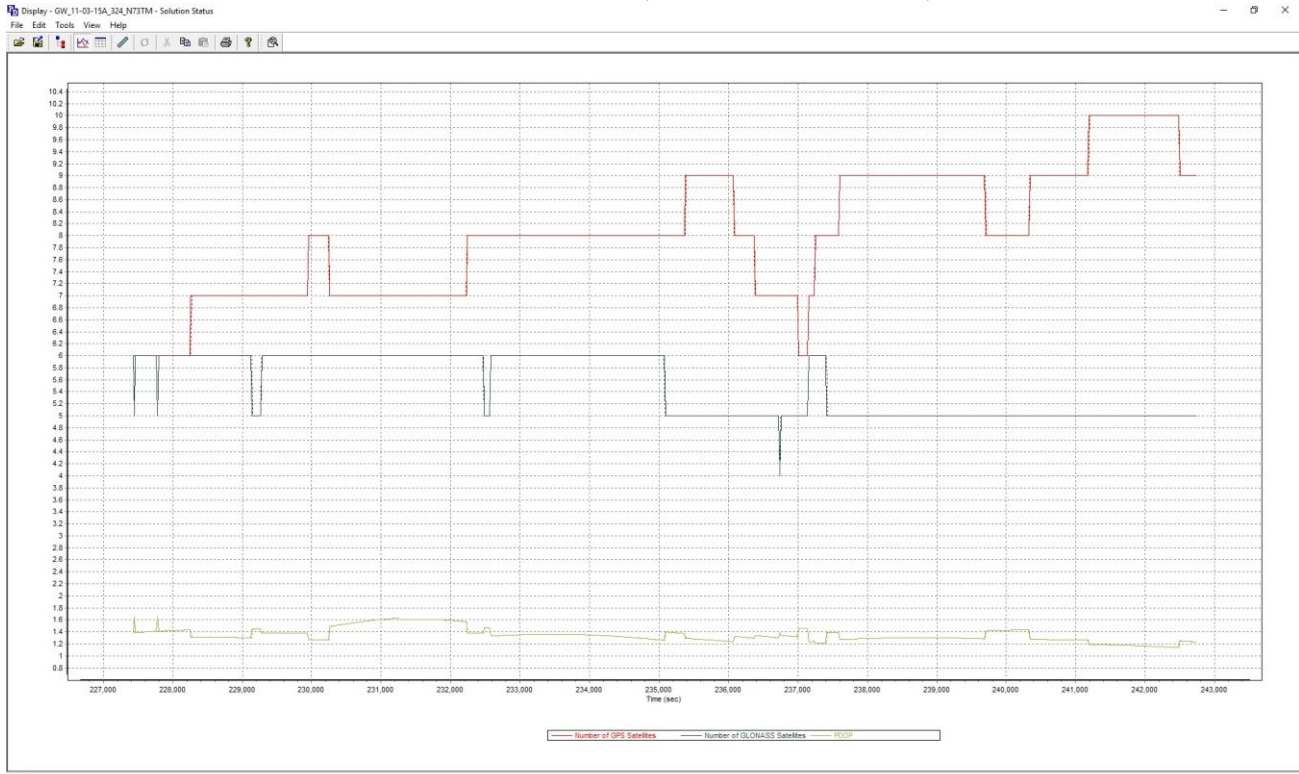
Heb 1041.1 → 1041.9

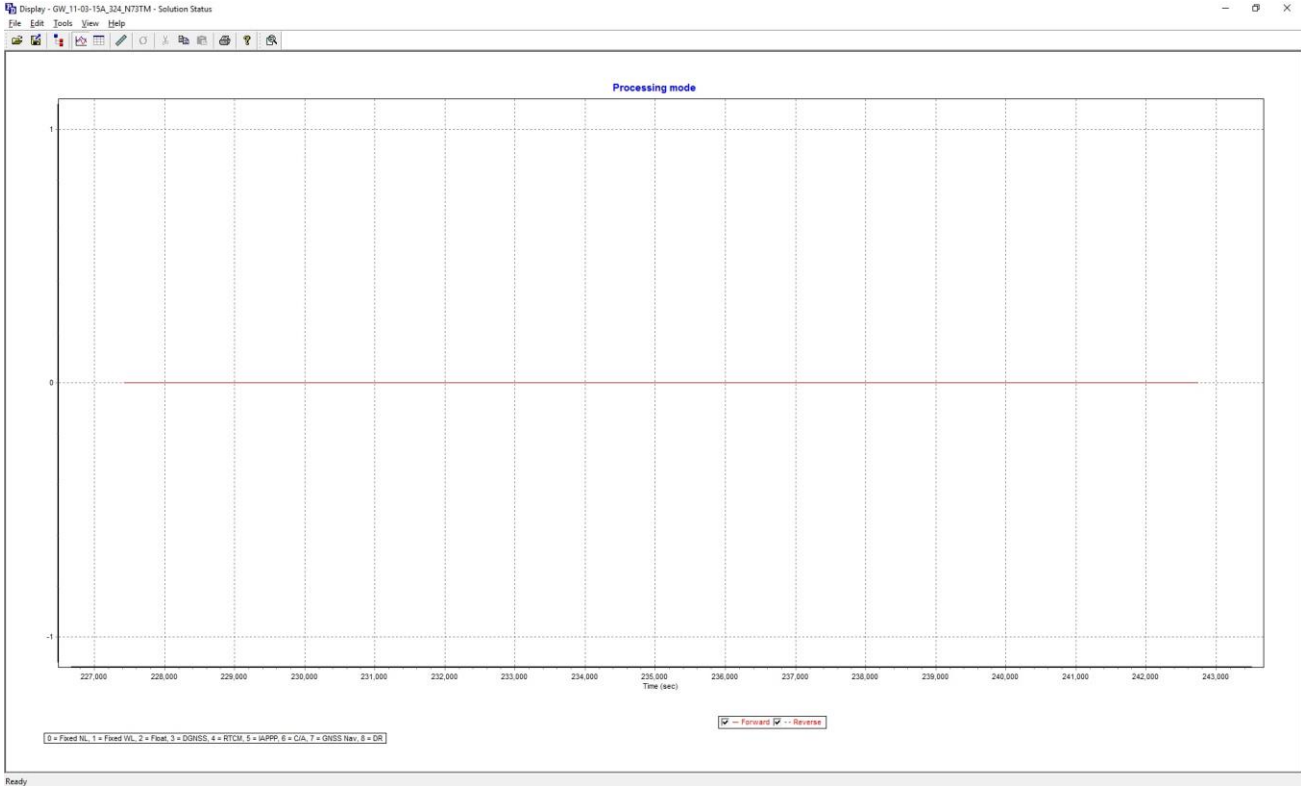
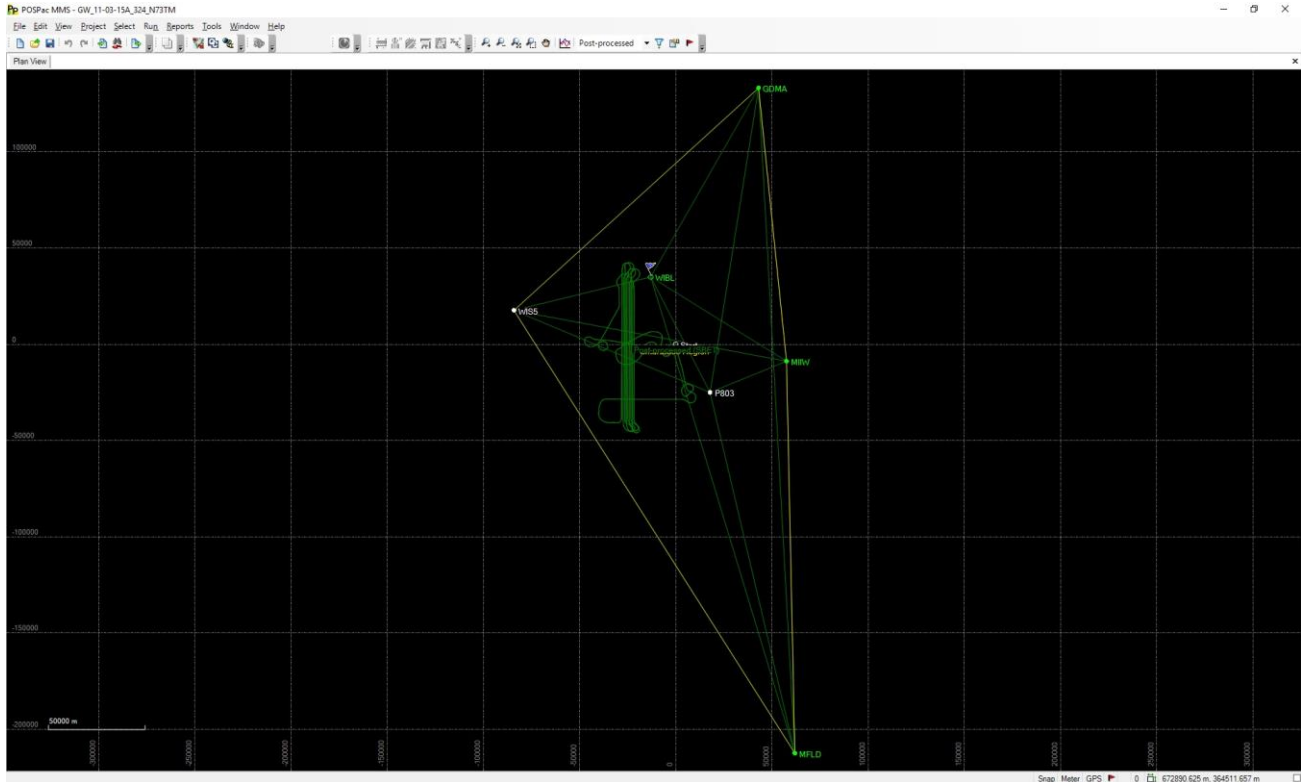
OPERATORS FLIGHT LOG										
MISSION: 03112015A Bayfield					DATE: 11/3/2015					
PILOT: Black					OPERATOR: Rolles					
PROJECT NUMBER AND NAME					AIRCRAFT: 300LF					
26947					Orion H SV: 135EN329					
Avres Soil					SENSOR:					
Bayfield AOI					REMARKS:					
LINE No.	Lni	Hdg	FREQ Hz	SCAN ANGLE	PRF KHz	FIXED GAIN	Flying Ht. (m)	TIME START	TIME STOP	MM70 DRIVE
115	0	140	52	38	225	N/A	1952	14:46	14:51	3
114	0	180					1952	14:54		
113	0	148					1957	15:42	15:51	
112	0	180					1960	15:54	16:04	
111	0	140					1965	16:07	16:15	
110	0	180					1962	16:18	16:29	
109	0	142					1958	16:32	16:40	
108	0	180					1980	16:43	16:55	
107	0	144					1948	16:57	17:06	
106	0	180					1948	17:09	17:21	
105	0	145					1951	17:23	17:32	
104	0	180					1952	17:36	17:49	
103	0	138					1953	17:51	18:00	
116	270	122					1977	18:10	18:22	
<p>← see north end of line (last mi) - prob over H2O ← over northern part of line → moving in over land over last 3mi on east end of line land Static Stop</p>										
<p>NOTES: Used IRRI + ASND WISCONSIN stations. Lower on high power setting</p>										
<p>STATUS: 26947</p>										
<p>STATUS: 26947</p>										
<p>STATUS: 26947</p>										
<p>STATUS: 26947</p>										
<p>STATUS: 26947</p>										
<p>STATUS: 26947</p>										

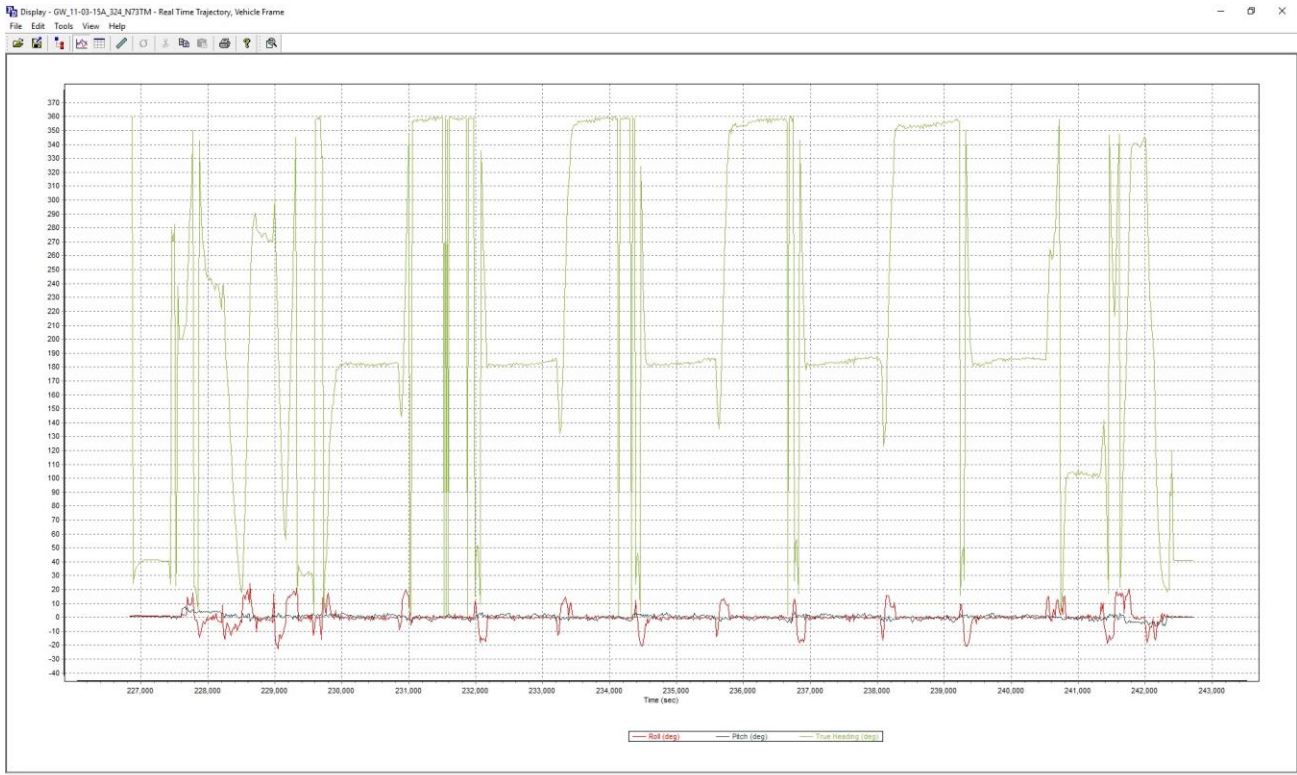
Quantum Spatial N 6216 Resource Drive Sheboygan Falls, WI 53085 E-Mail: flight-log-distribution-list@quantumspatial.com

Scanned by CamScanner

Nov 3, 2015-A (N73TM, SN324)







Coordinate Manager

Station Information

Station ID: WIBL

Coordinates

Latitude: N 46 51 58.80345000

Longitude: W 91 5 8.72582000

Altitude: 201.7100 m

Decimal Degrees

Antenna Reference Point (ARP) coordinates Apply Changes

Antenna Frame

Height: 0.000 m

Method: Bottom of antenna mount

Manufacturer: Trimble

Type: Zephyr Geodetic 2 RoHS

Offset from Measured Point to APC: 0.085 m

Station Database

Station ID: WIBL Station Fullname: WIBL

Primary Service ID: Edit

Secondary Service ID: Edit

Coordinate Accuracy: UNKNOWN_ACC

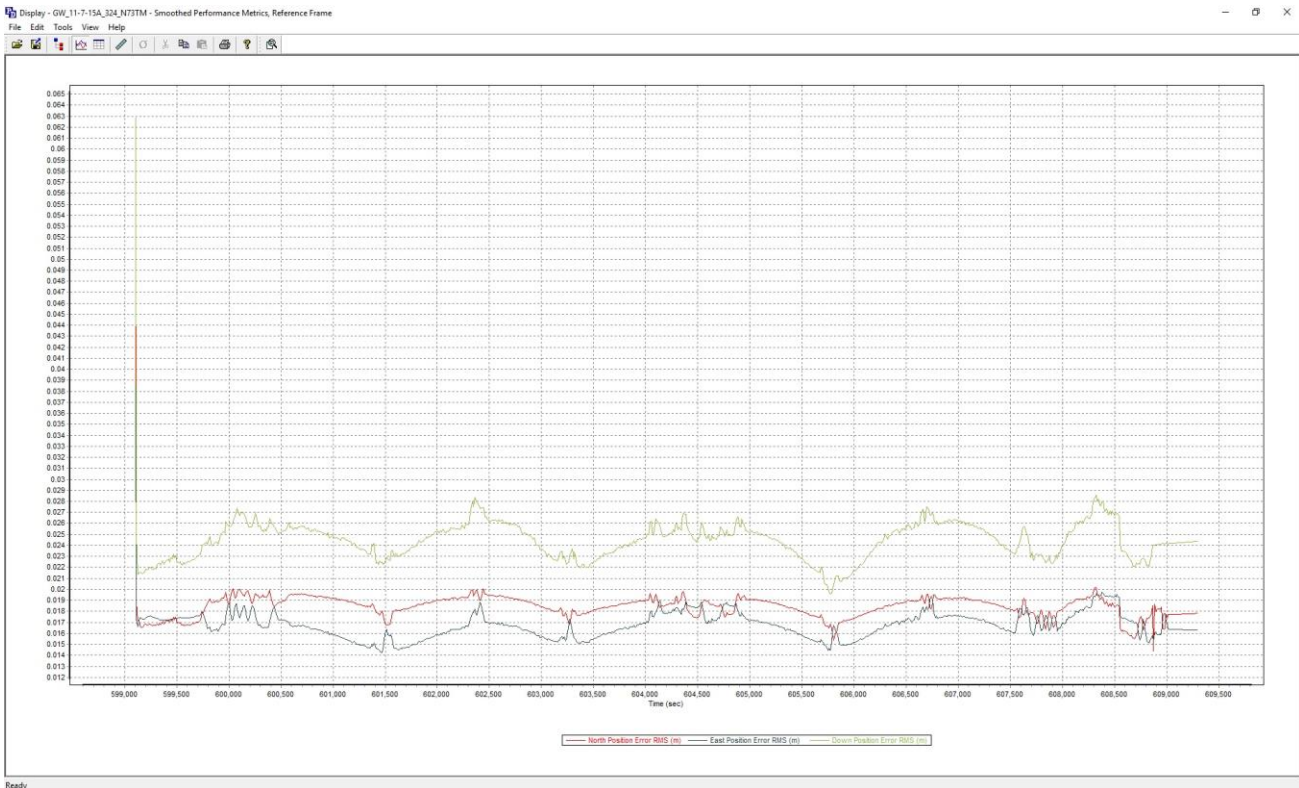
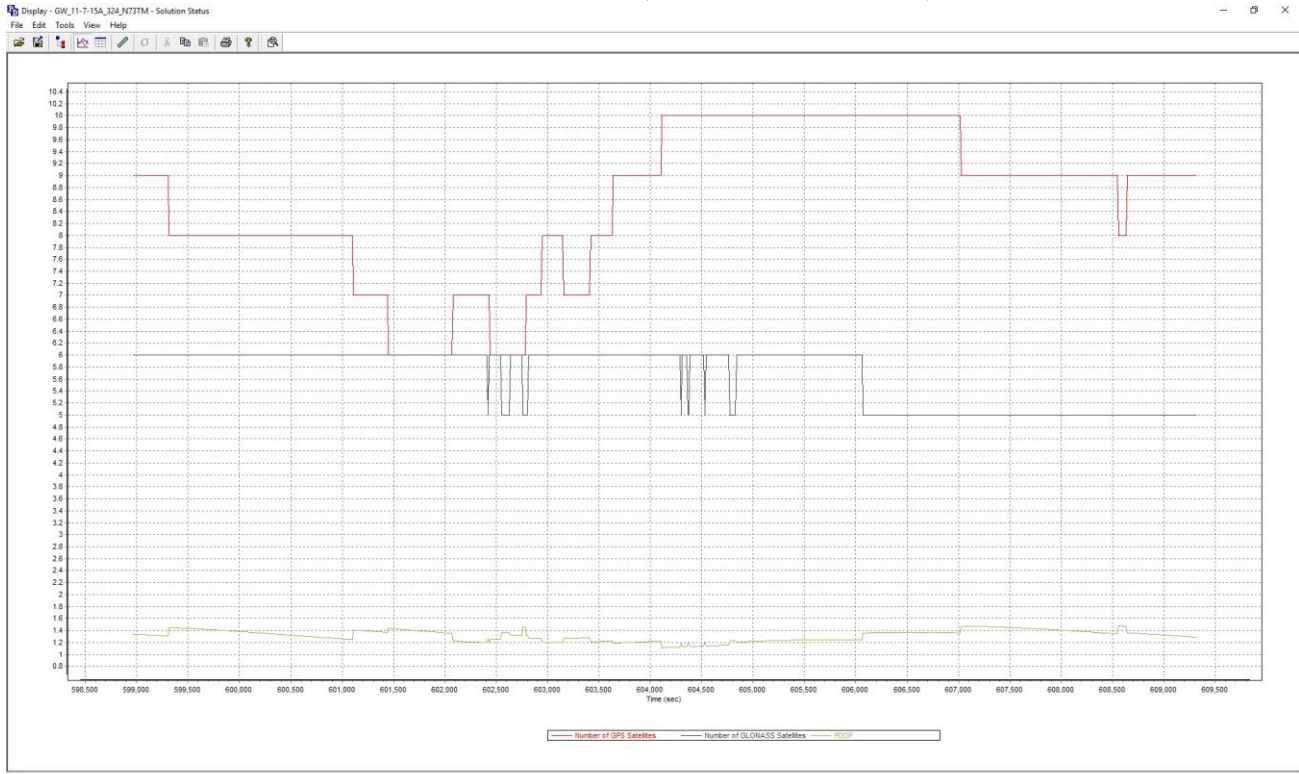
Add Delete Update

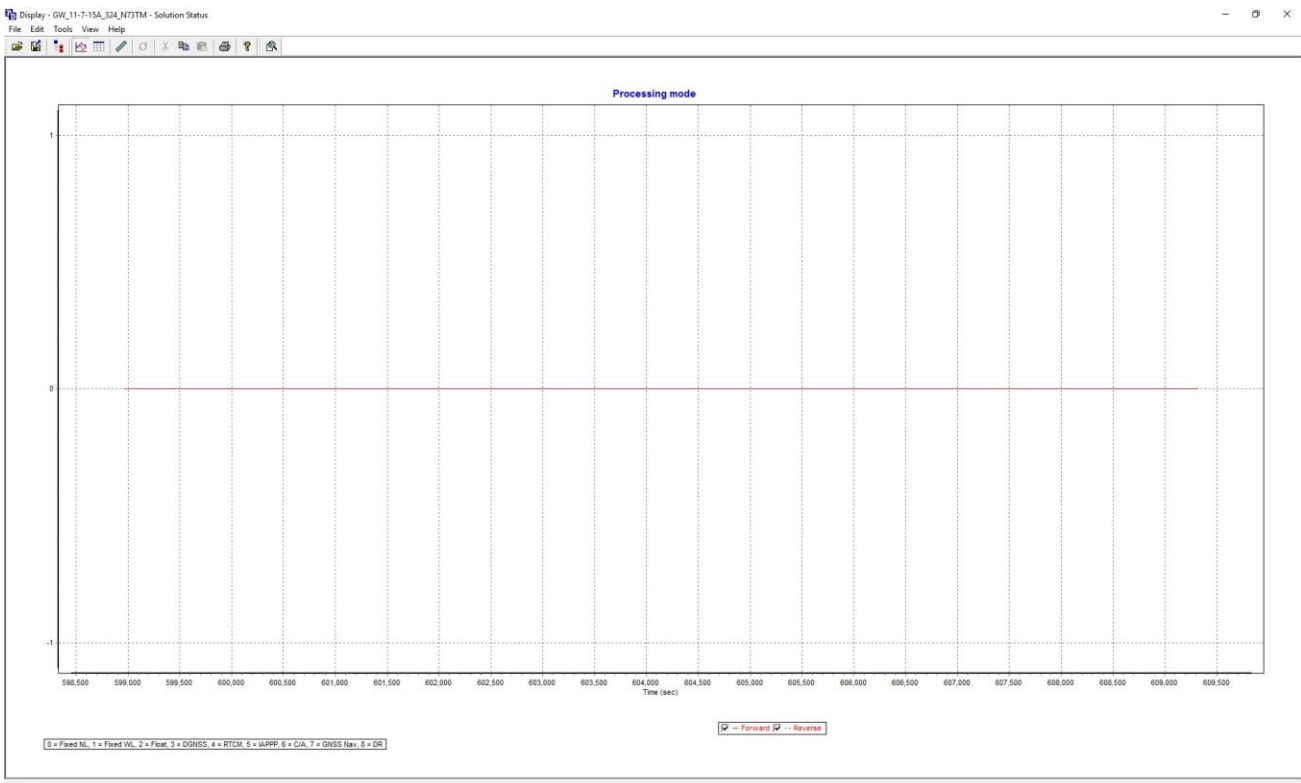
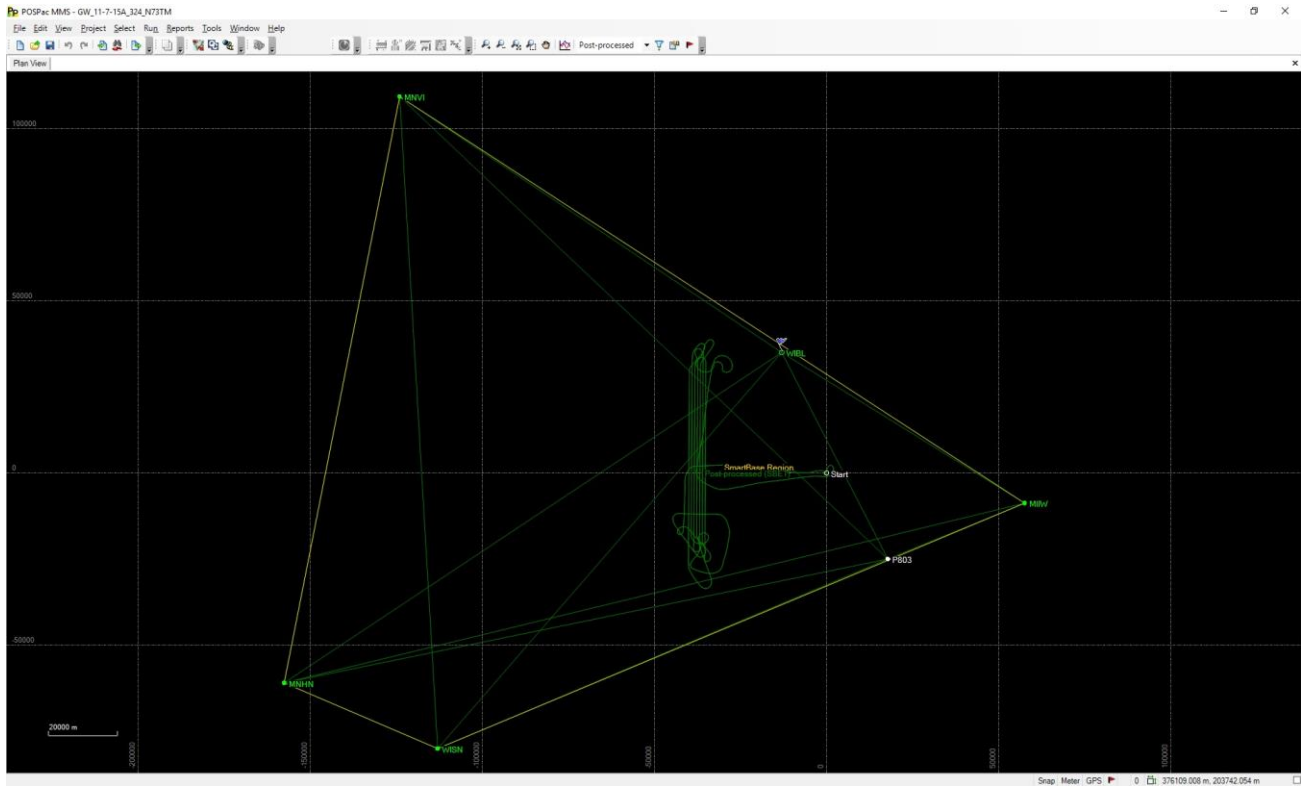
Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc
[Empty Table]								

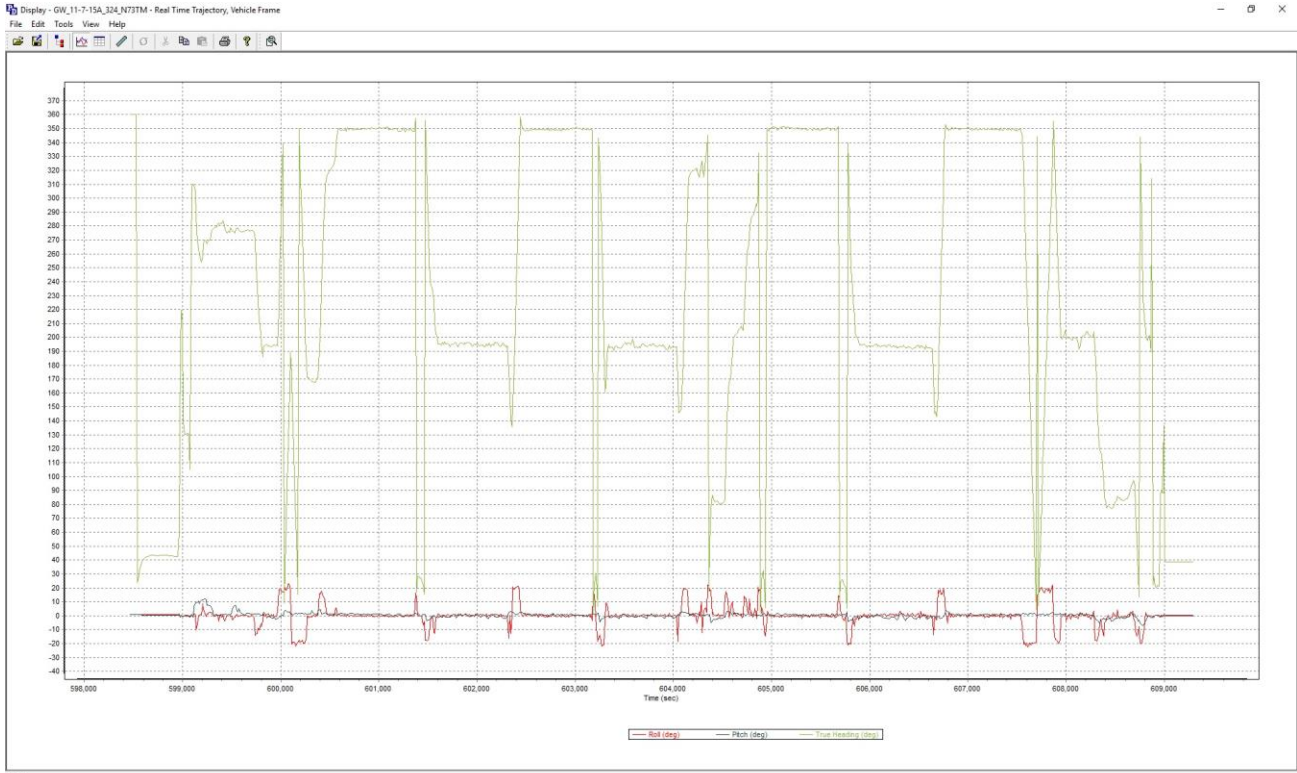
Import Coordinates Export Coordinates

Close

Nov 7, 2015-A (N73TM, SN324)







Coordinate Manager

Station Information

Station ID:

Coordinates

Latitude:

Longitude:

Altitude: m

Decimal Degrees

Antenna **Frame**

Height: m

Method:

Manufacturer:

Type:

Offset from Measured Point to APC: m

Antenna Reference Point (ARP) coordinates

Station Database

Station ID: Station Fullname:

Primary Service ID: Coordinate Accuracy:

Secondary Service ID:

Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc
[Empty Table]								

LIDAR FLIGHT LOG											
MISSION: 20151107A				DATE: 11/7/15				AIRCRAFT: N73TM			
PILOT: CAM				OPERATOR: NELSON				13 SEN324			
PROJECT NUMBER	LINE NO. & Hdg	GROUND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	LAZER TIME	TZPK	REMARKS
26947			52	19	225	1650	2225				KASX → SITE 5906.3 THRETEST PERES (3)
BAYFIELD											
	103 0	140	52	19	225	1650	2252	2303			
	102 180	140				1655	2307	2317			
	101 0	140				1650	2321	2333			
	100 180	140				1655	2335	2347			
	XRAE 155					1650	2355	2355			CROSSFLIGHT
	99 0	140				1650	0:03	0:14			
	98 180	135				1655	0:18	0:30			
	97 0	135				1655	0:34	0:46			
											SITE → KASX 5909.0
STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	FERRY	STATIC START	STOP	NOTES:			
0	26947	7	11	1.9	0.8	22:15	23:16	WISCOR DRRR 22:35; 0:57			
0						WX CLR					
0											

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GPS OBSERVATION LOG

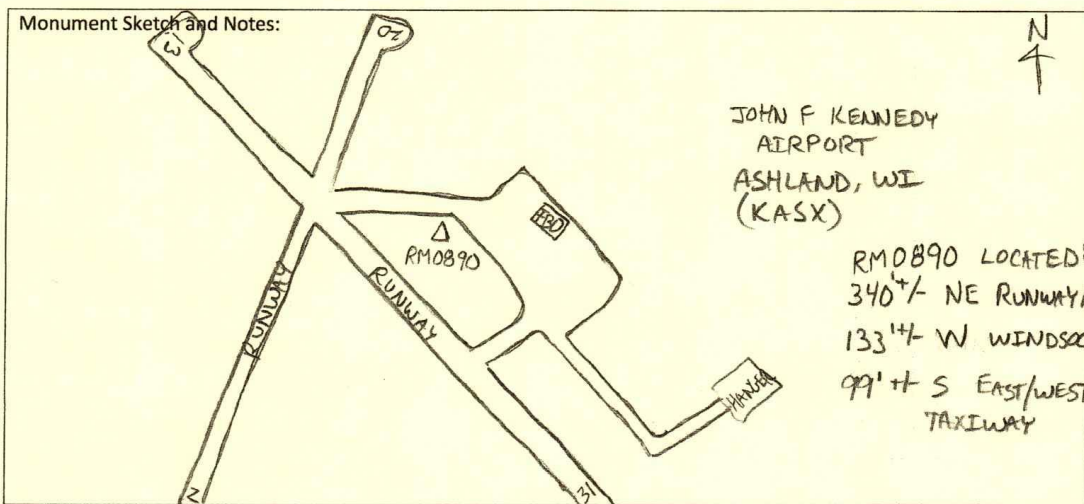
Station ID	<u>ASHLAND GPS</u> <u>RED: RMO890</u>	Date	<u>11 17 15</u>
Project Number	<u>26947</u>	Julian Date	<u>311 / 312</u>
Project Name	<u>BAYFIELD CO.</u>	Start Time	<u>22:04: :</u>
Rcvr. Type	<u>Trimble R7 GNSS</u>	Stop Time	<u>25:20: :</u>
Rcvr. S/N	<u>5033K17587</u>	Rcvr. File Name	<u>75873110.T01</u>
Antenna Type	<u>Trimble Zephyr Geodetic Model 2</u>	Observer	<u>BDN</u>
Antenna S/N	<u>1441101329</u>		

New or Existing Mon. New Existing
 Photo Taken: Yes No
 Monument Type: DISK IN CONCRETE
 Spike PK Nail AM Washer
 Other _____

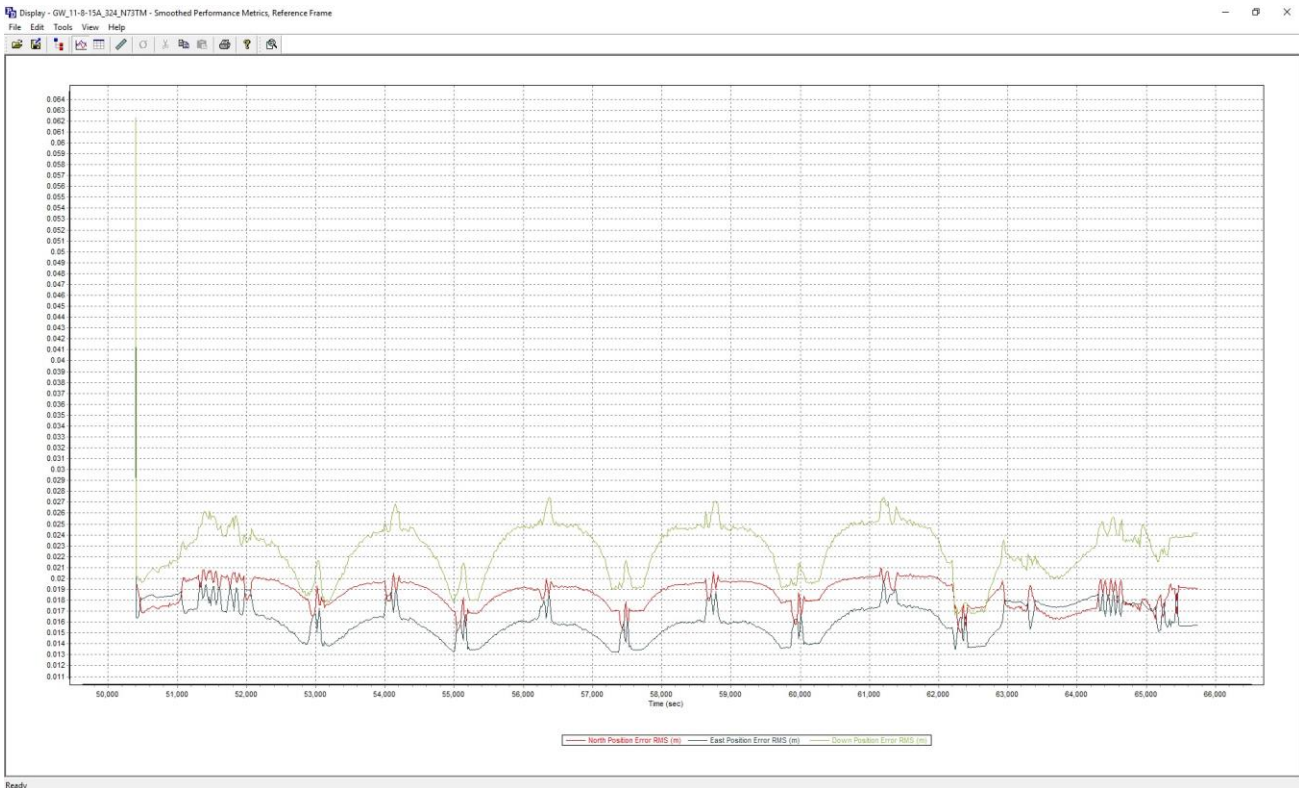
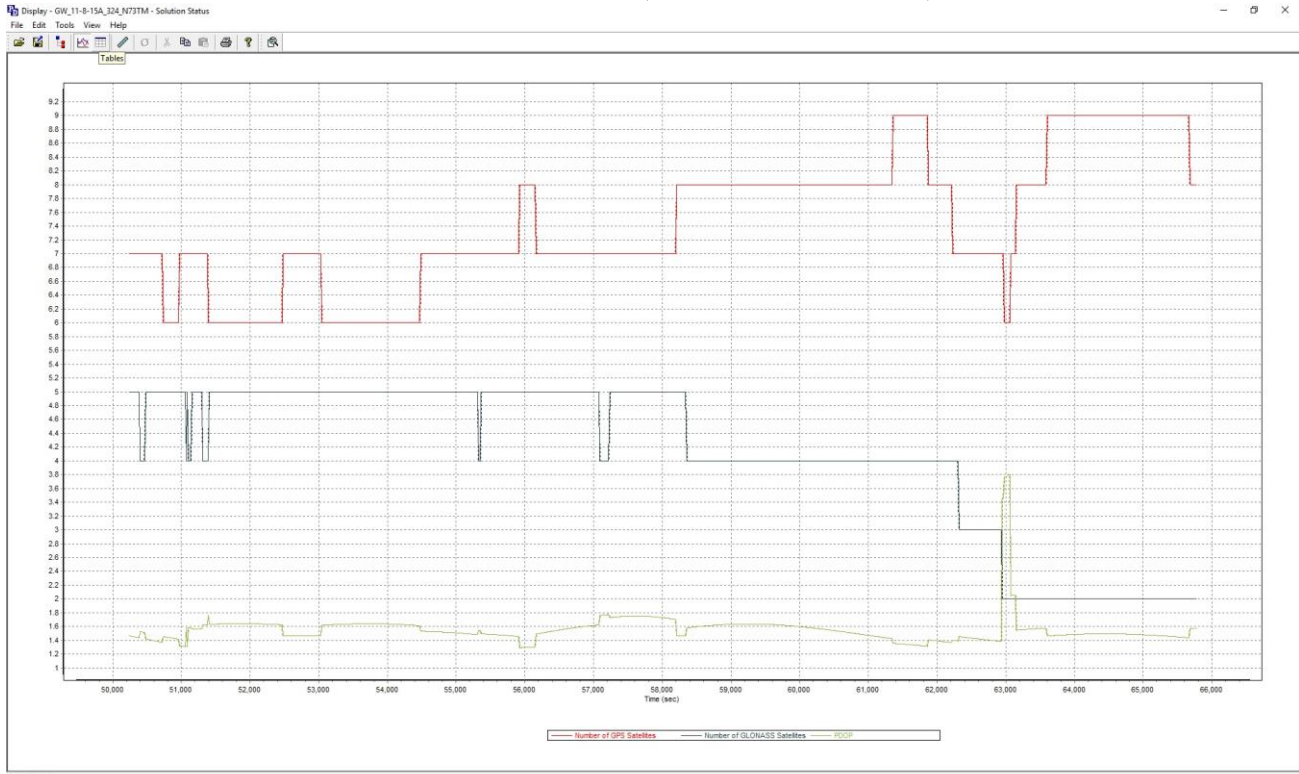
Height Readings:

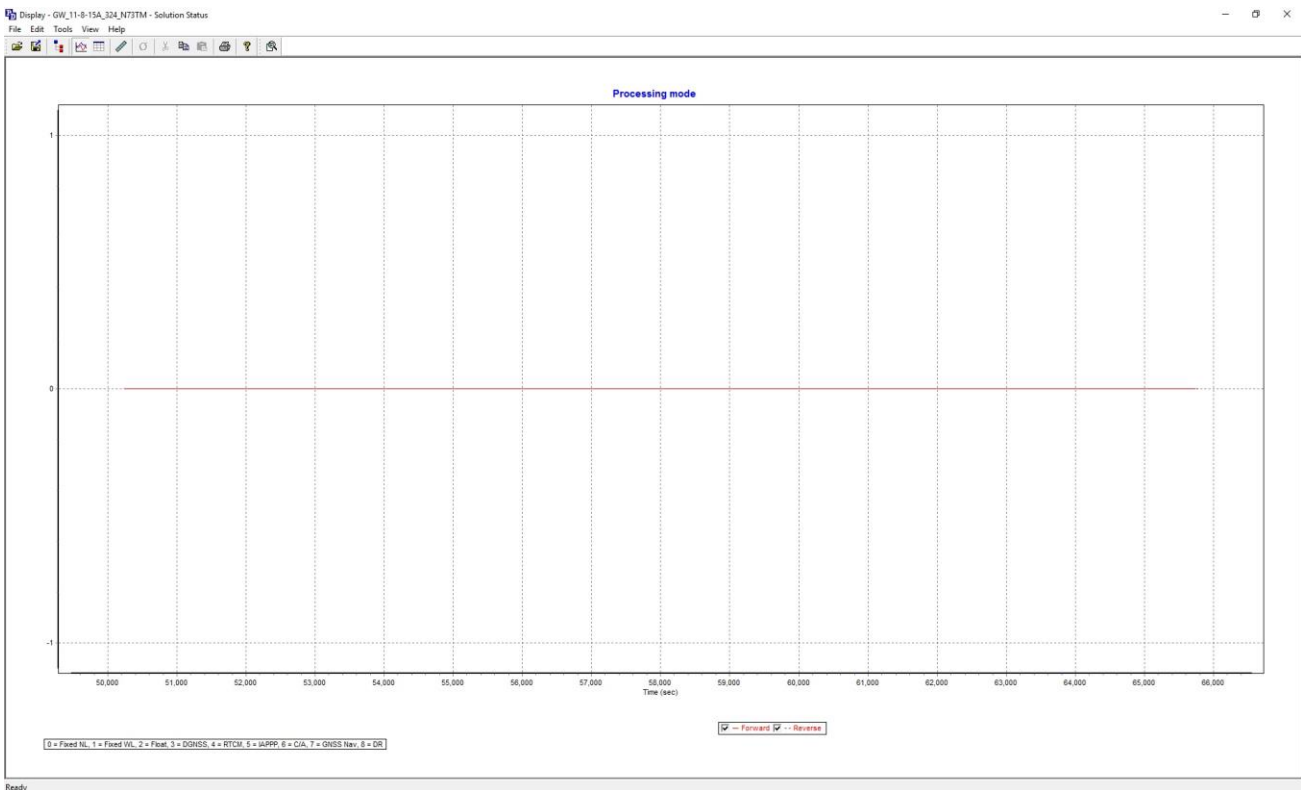
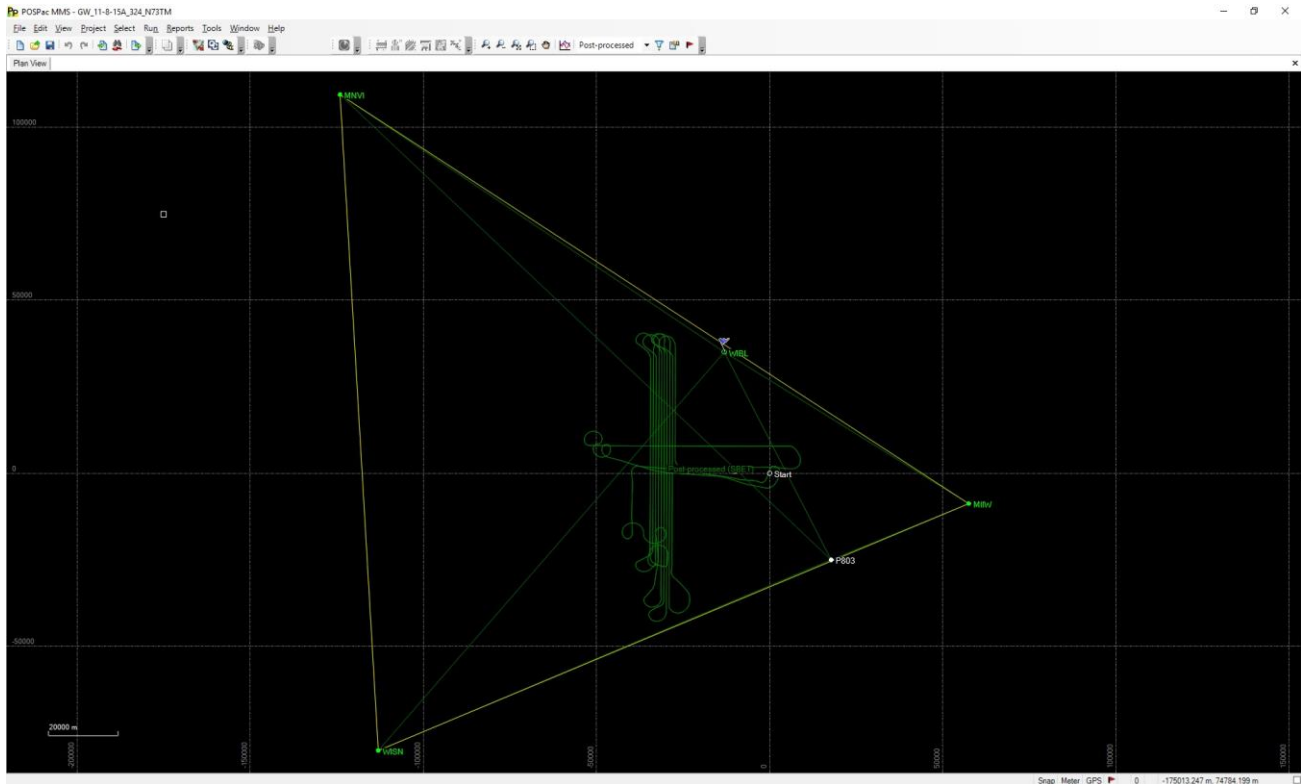
(Top of Monument to Bottom of Ground Plane)

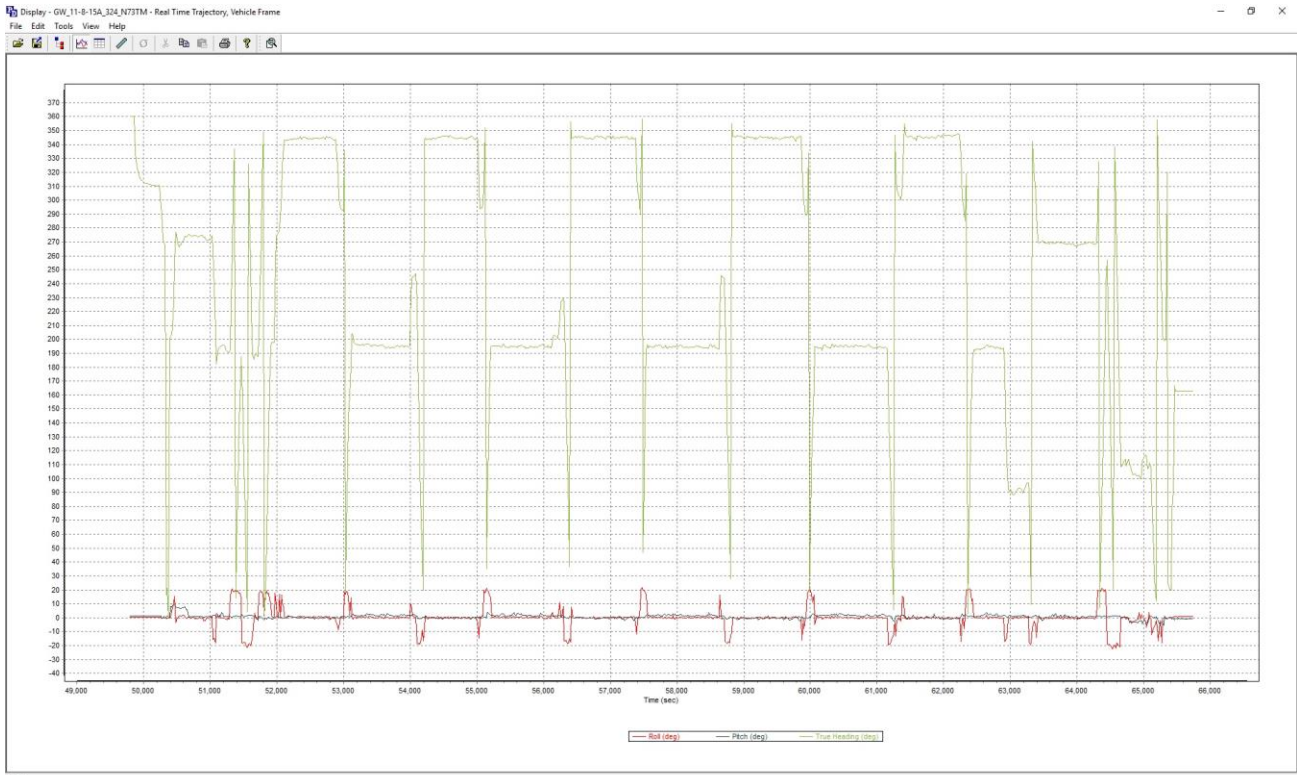
Start 1.502 M. ✓ 4.93 Ft. **READ TO BOTTOM OF NOTCH**
 Stop 1.502 M. ✓ 4.93 Ft.
 Mean (1.502) M. (4.93) Ft.



Nov 8, 2015-A (N73TM, SN324)







Ready

Coordinate Manager

Station Information

Station ID:

Coordinates

Latitude:

Longitude:

Altitude: m

Decimal Degrees

Antenna **Frame**

Height: m

Method:

Manufacturer:

Type:

Offset from Measured Point to APC: m

Antenna Reference Point (ARP) coordinates

Station Database

Station ID: Station Fullname:

Primary Service ID: Coordinate Accuracy:

Secondary Service ID:

Station ID	Station Full...	Frame	Epoch	Ellipsoid	Latitude	Longitude	Altitude	Coord Acc

GPS OBSERVATION LOG

Station ID	<u>ASHLAND GPS</u> <u>PID: RM0890</u>	Date	<u>11 / 8 / 15</u>
Project Number	<u>26947</u>	Julian Date	<u>312</u>
Project Name	<u>BAYFIELD CO.</u>	Start Time	<u>13 : 28 (2) :</u>
Rcvr. Type	<u>Trimble R7 GNSS</u>	Stop Time	<u>18 : 24 (2) :</u>
Rcvr. S/N	<u>5033K17587</u>	Rcvr. File Name	<u>75873120.T01</u>
Antenna Type	<u>Trimble Zephyr</u> <u>Geodetic Model 2</u>	Observer	<u>BDN</u>
Antenna S/N	<u>1441101329</u>		

New or Existing Mon. New Existing
 Photo Taken: Yes No
 Monument Type: DISK IN CONCRETE
 Spike PK Nail AM Washer
 Other _____

Height Readings:
 (Top of Monument to Bottom of Ground Plane)
 Start READ 1.512 M. CHECK 4.959 Ft.
 Stop 1.512 M. 4.959 Ft.
 Mean (1.512) M. _____ Ft.

* READ TO BOTTOM OF NOTCH "

Monument Sketch and Notes:

