

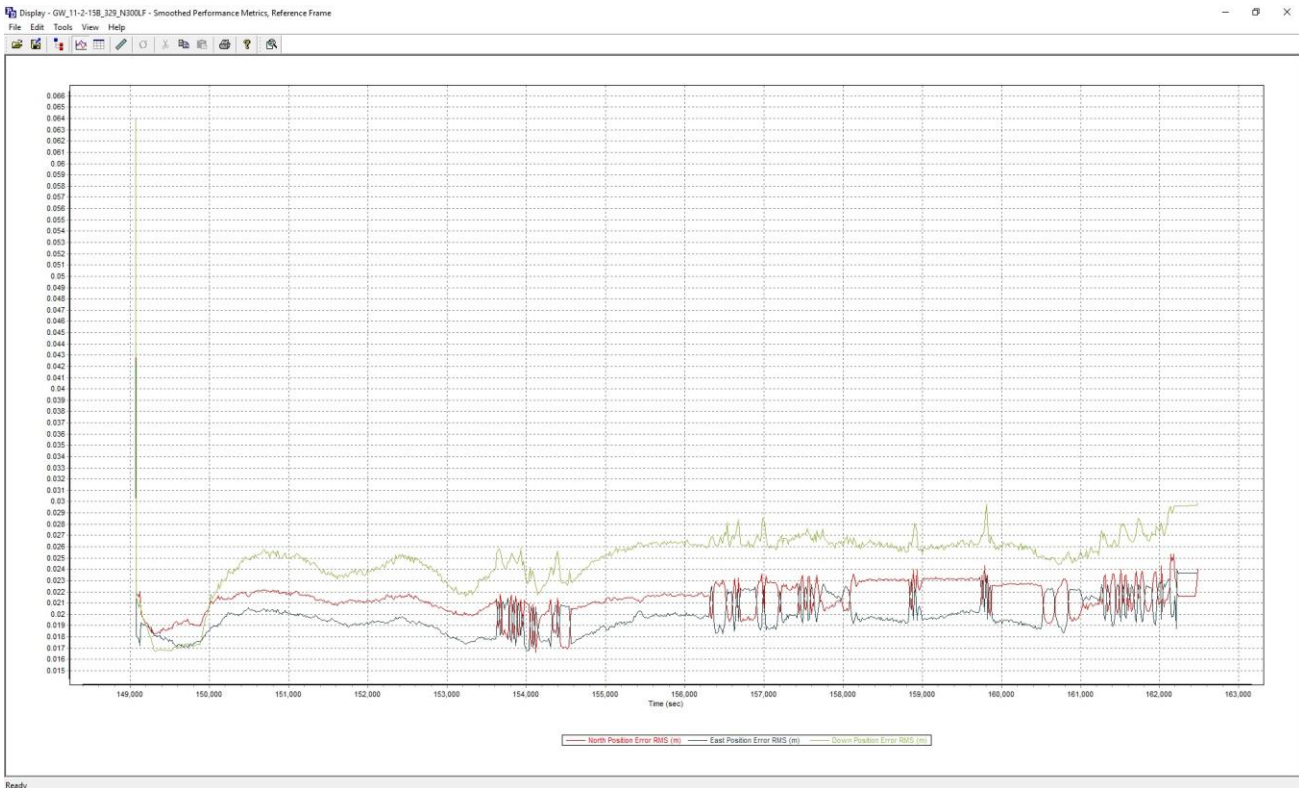
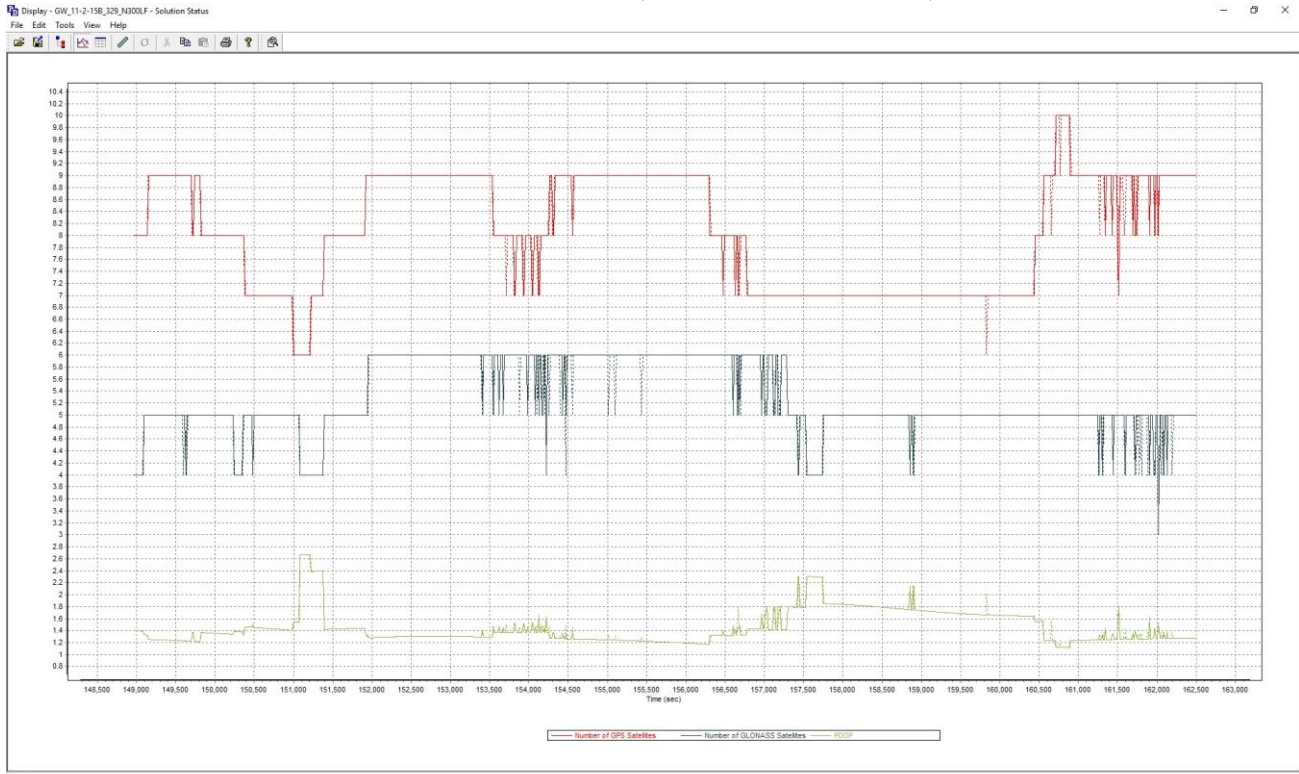
Appendix A:

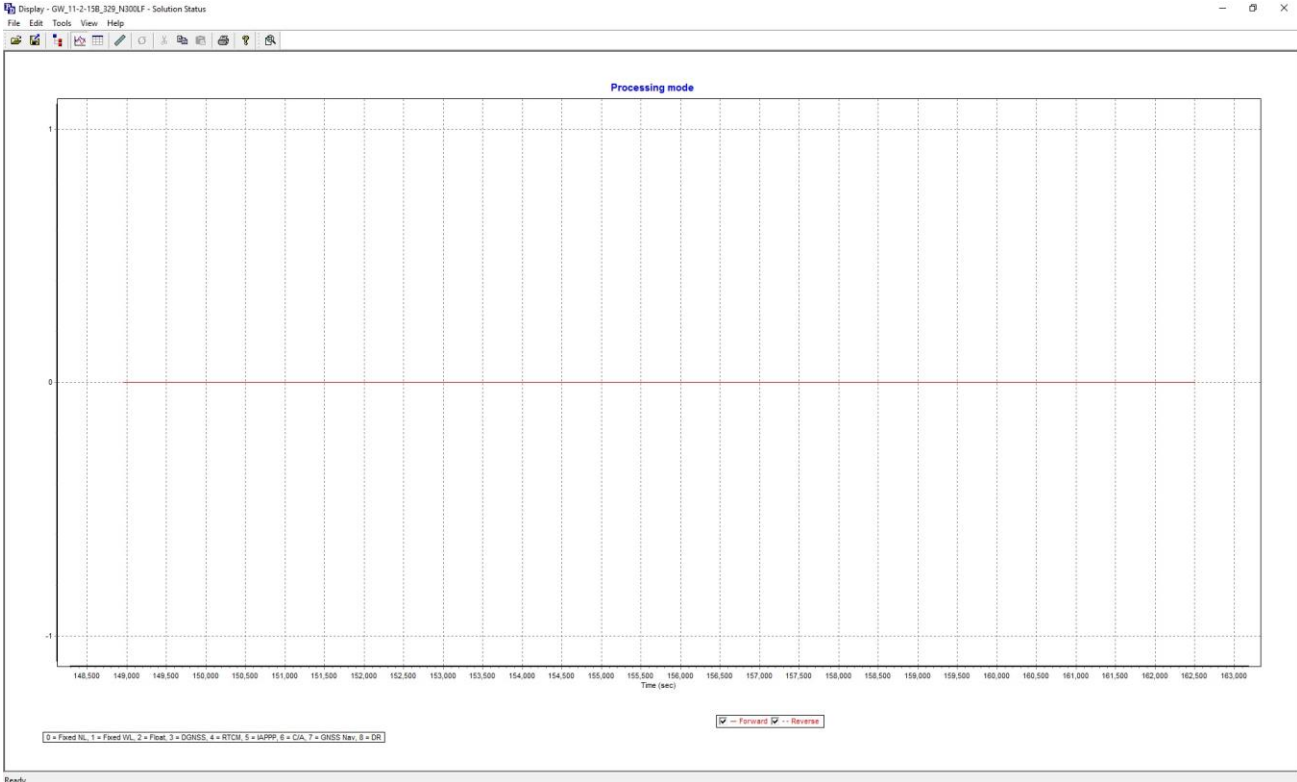
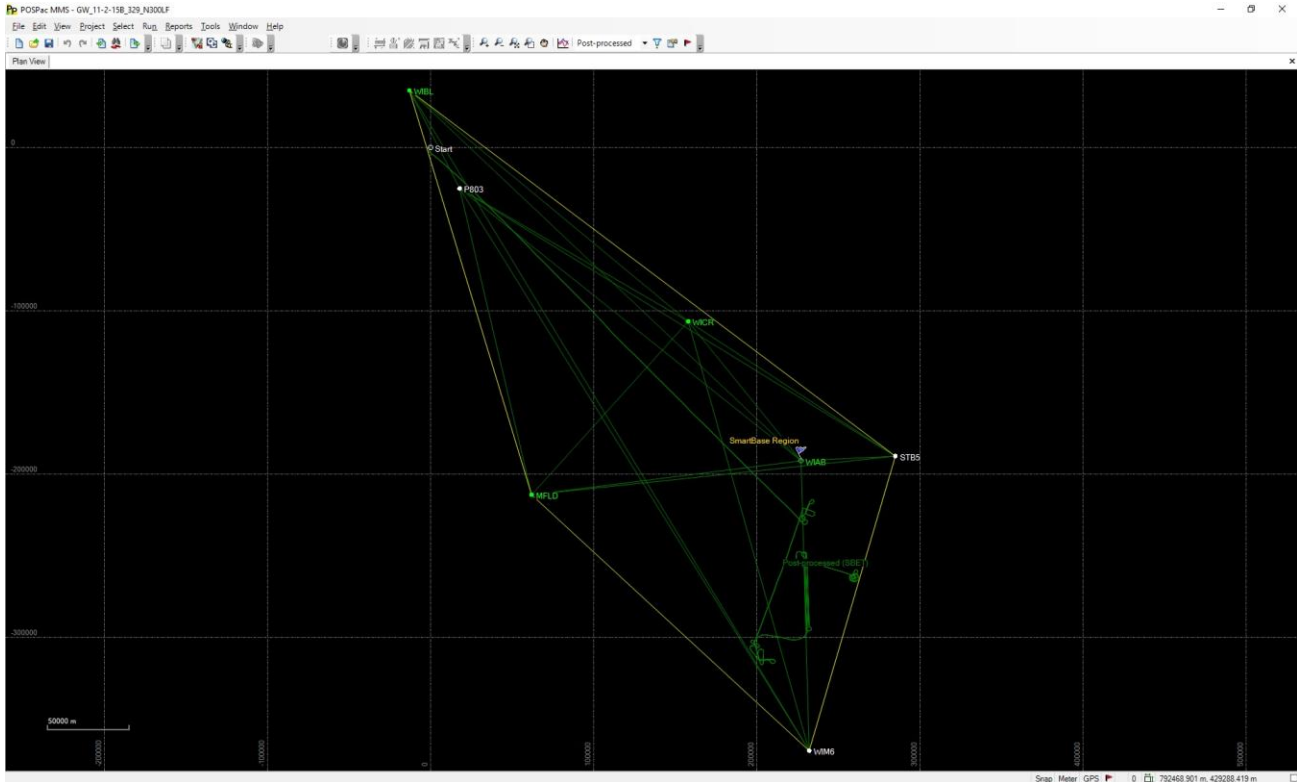
GPS/IMU Statistics, Flight Logs, and Base Station Logs

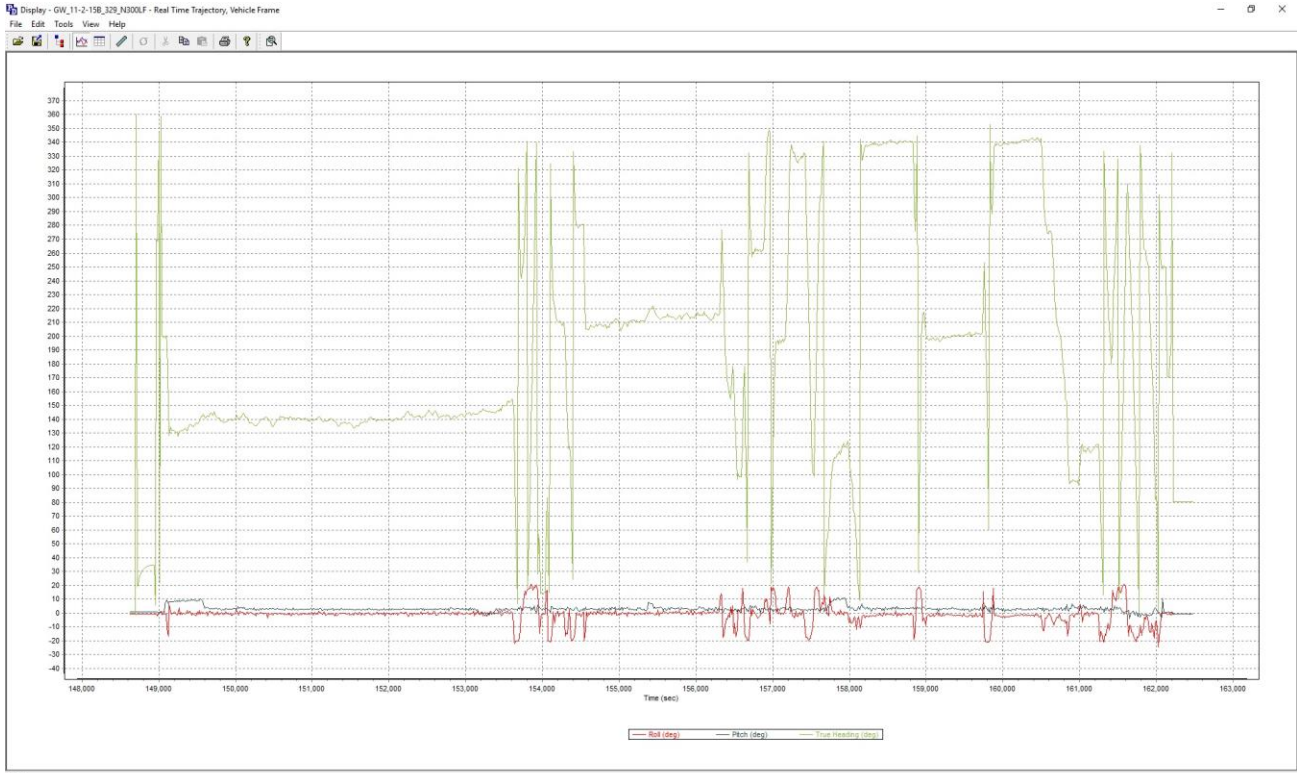
There were five total lifts. Graph reports generated from processing software, flight logs, and base station logs are found on the following pages.

Nov 2, 2015-B (N300LF, SN329)	2
Nov 9, 2015-A (N73TM, SN324)	5
Nov 9, 2015-B (N73TM, SN324)	10
Nov 10, 2015-A (N73TM, SN324)	14
Nov 10, 2015-B (N73TM, SN324)	20

Nov 2, 2015-B (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

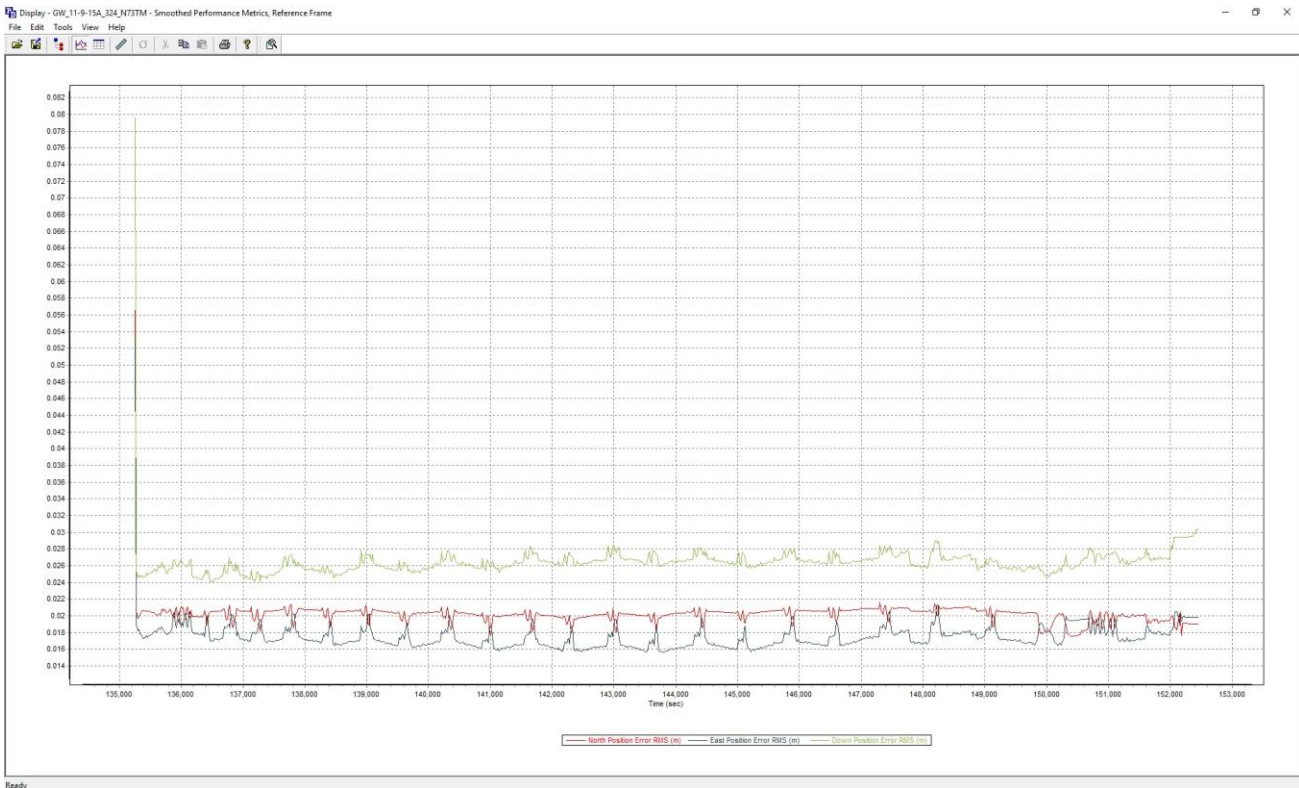
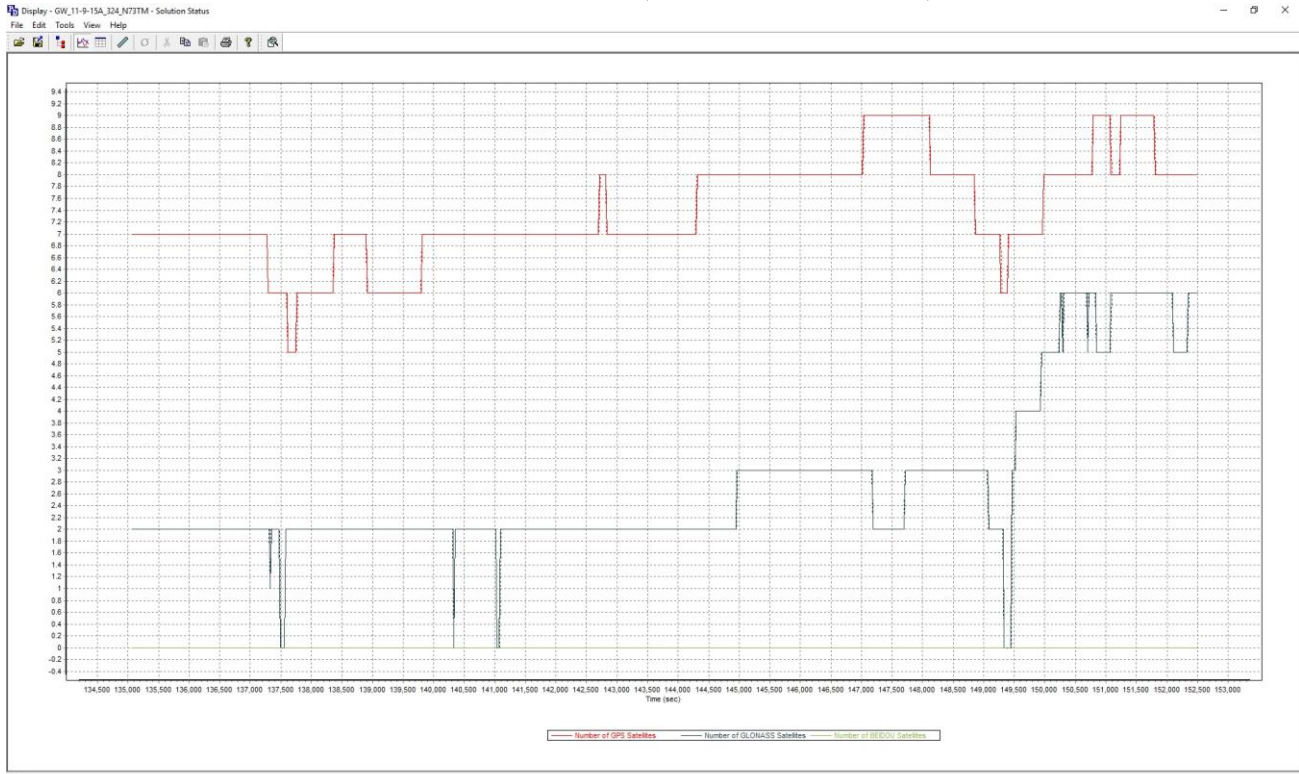
Station ID: Station Fullname:

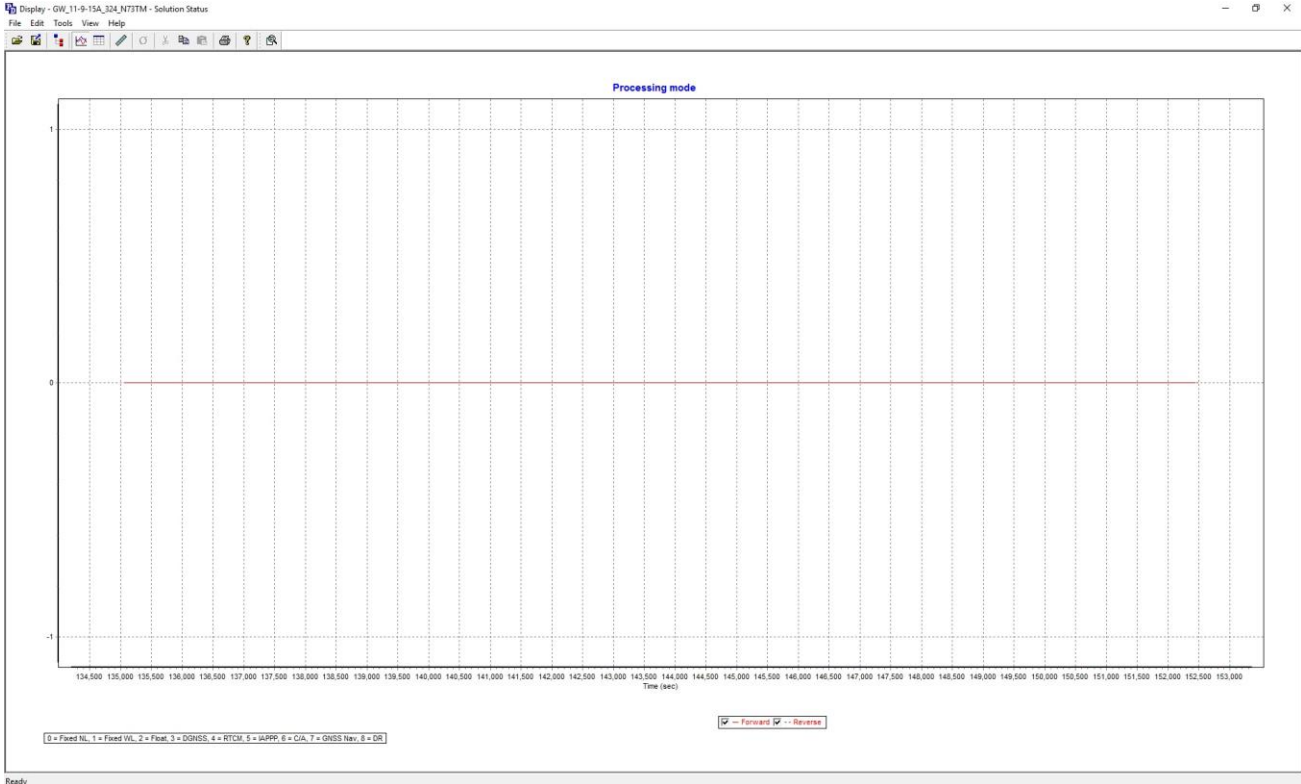
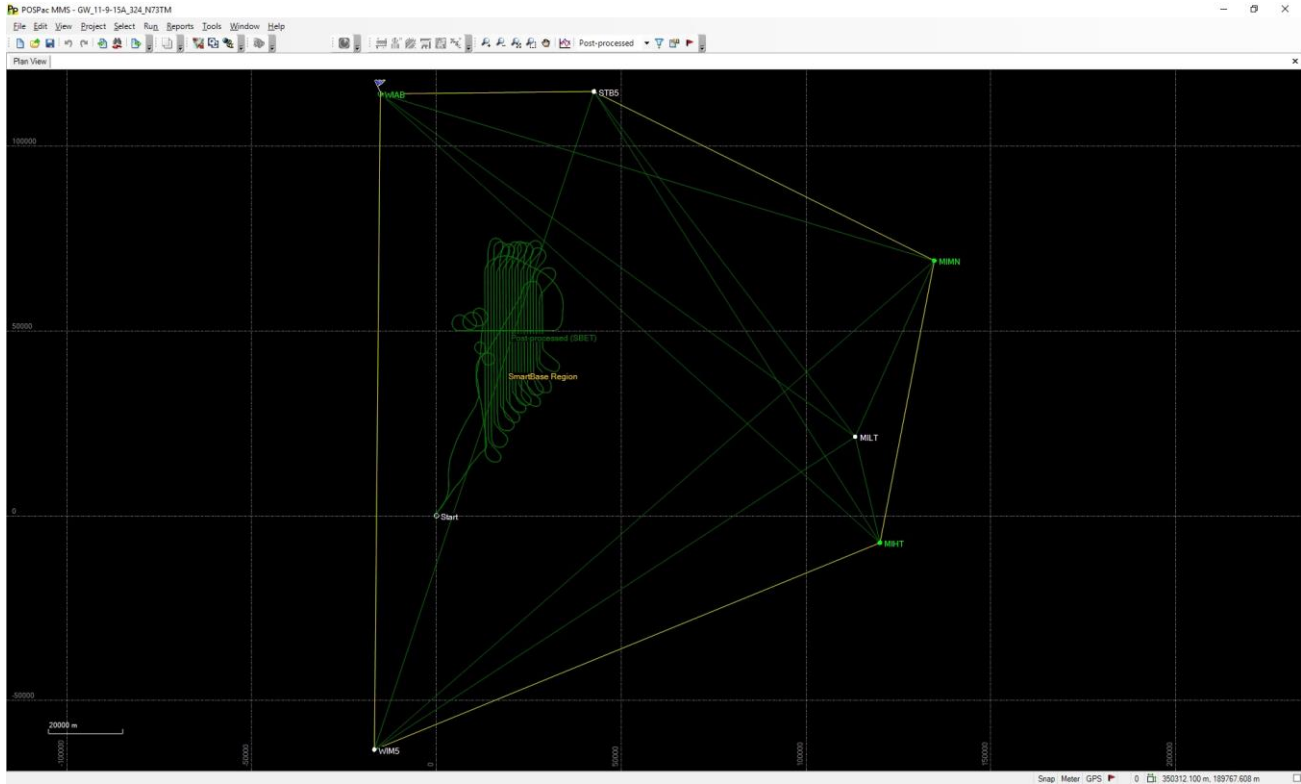
Primary Service ID: Coordinate Accuracy:

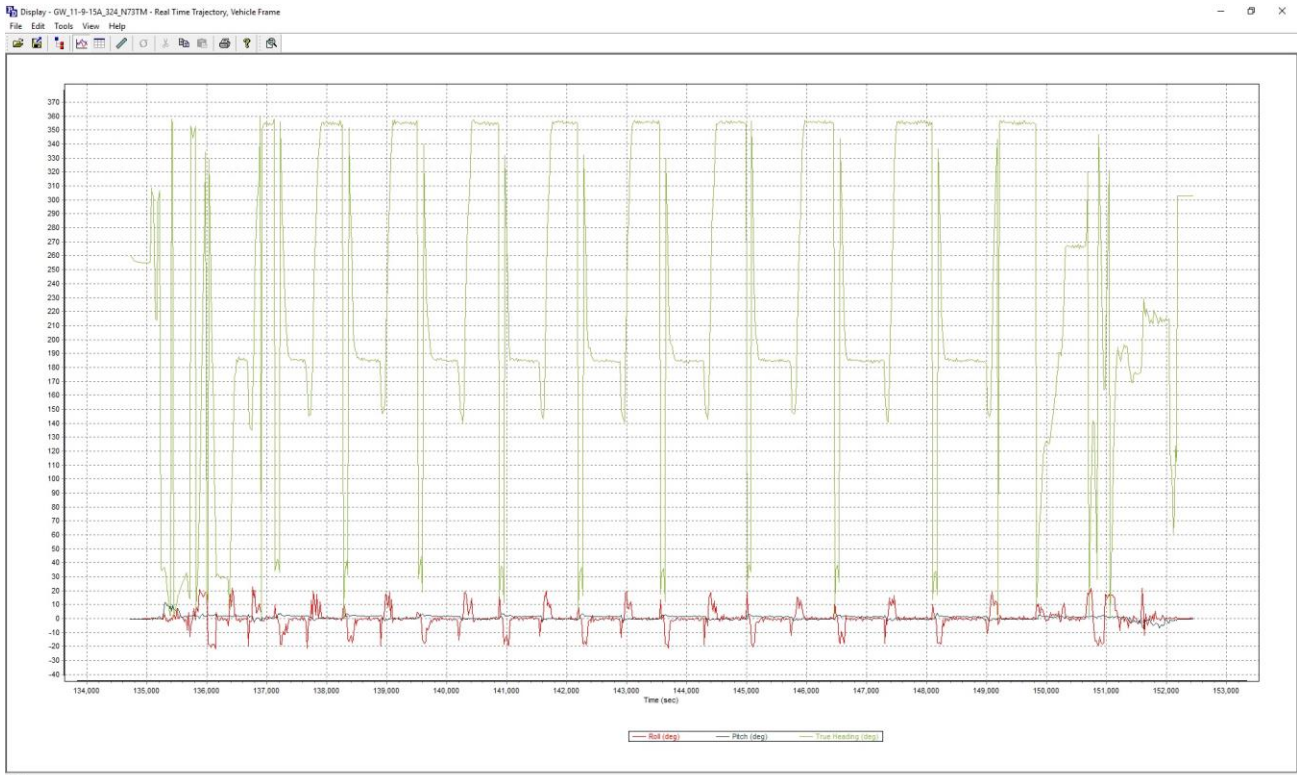
Secondary Service ID:

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

Nov 9, 2015-A (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

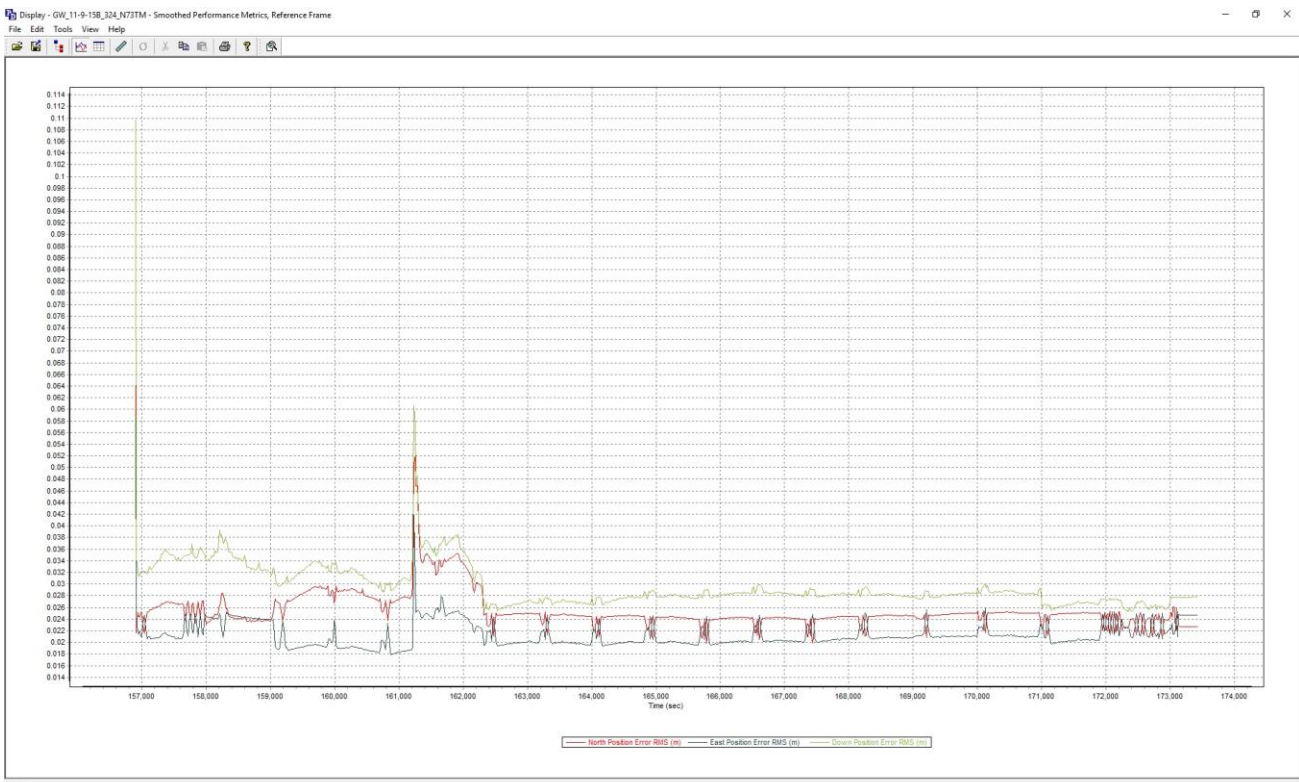
LIDAR FLIGHT LOG

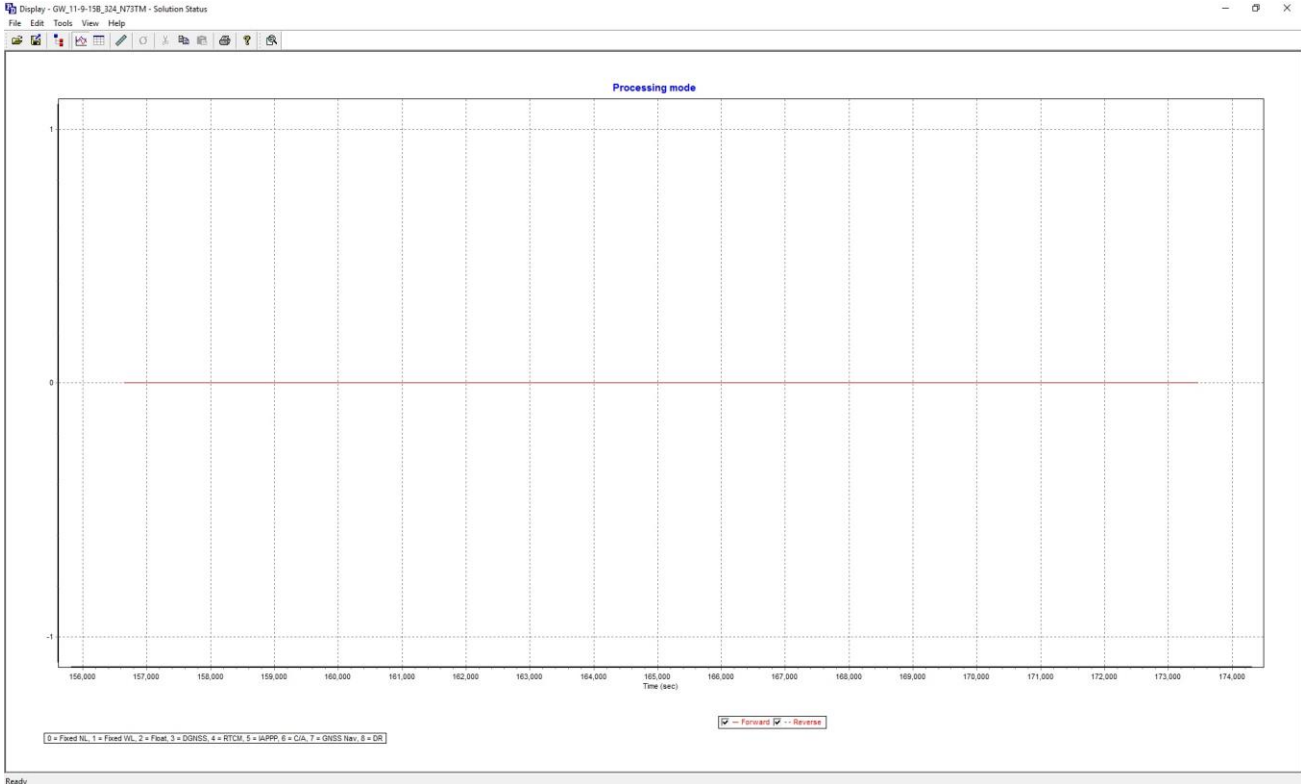
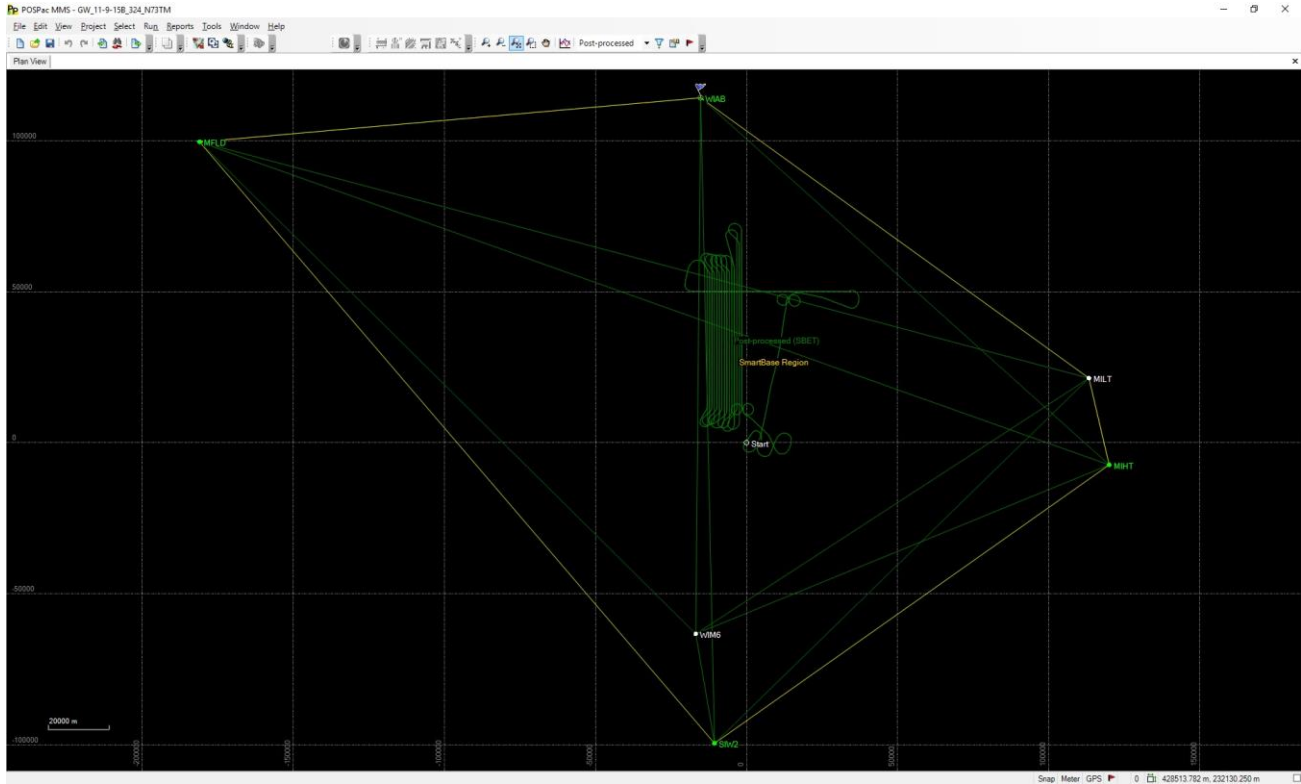
MISSION: 20151109A DATE: 11/9/15 AIRCRAFT: N73TM 10F2
 PILOT: WAGNER/CAM OPERATOR: NELSON
 PROJECT NUMBER: 26947
 MANITOWOC

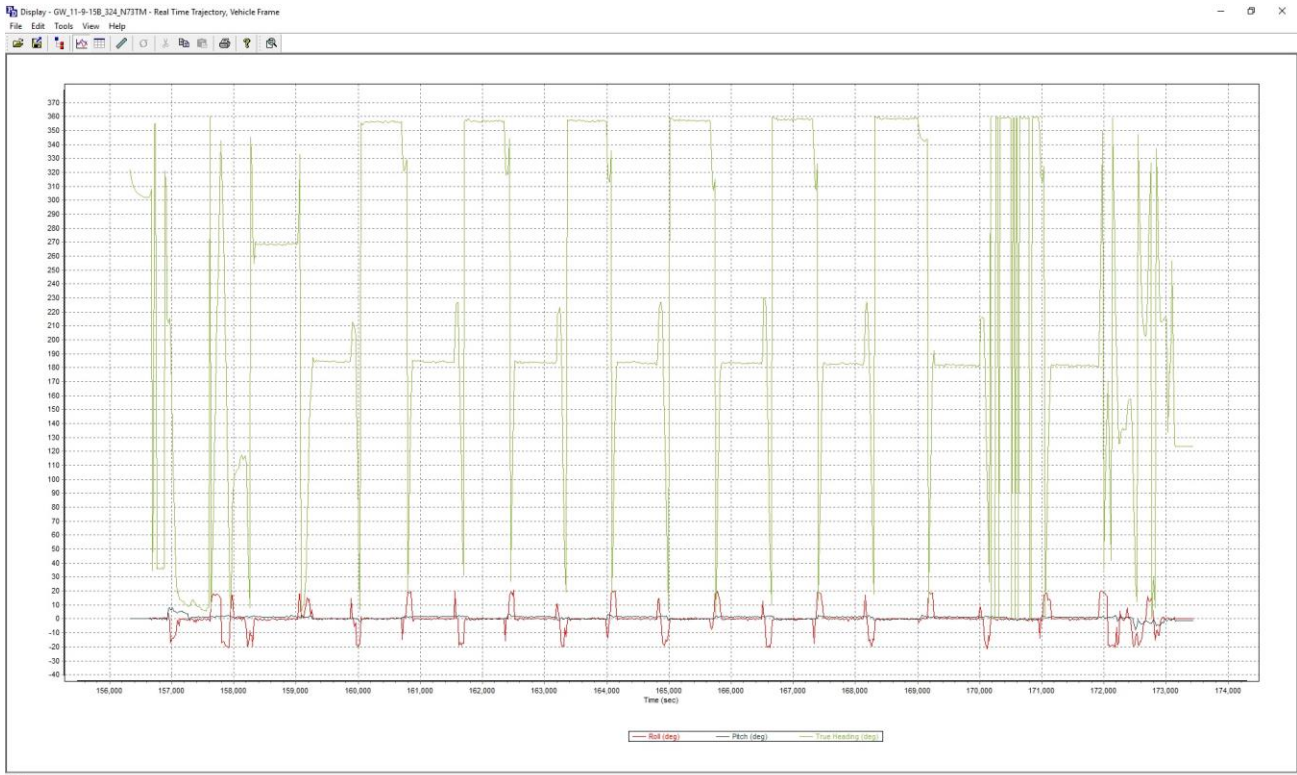
PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME		Laser Time	TZPK	REMARKS
							START	STOP			
			52	19	225	1700	13:35				KSBM → SITE 5914.5
	1	180	52	19	225	1720	13:56	13:58			TWO TEST FIRES
	2	0				1720	14:01	14:05			
	3	180				1730	14:09	14:14			
	4	0				1700	14:18	14:24			
	5	180				1695	14:28	14:34			
	6	0				1700	14:38	14:45			
	7	180				1680	14:49	14:56			
	8	0				1690	15:01	15:08			
	9	180				1680	15:12	15:19			
	10	0				1690	15:22	15:30			
	11	180				1680	15:34	15:41			
	12	0				1680	15:45	15:52			
	13	180				1680	15:56	16:04			
	14	0				1685	16:08	16:16			
	15	180				1685	16:20	16:29			
	16	0				1685	16:32	16:41			
	17	180				1685	16:45	16:55			
	18	0				1690	16:58	17:08			
STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	FERRY	STATIC START:	STOP:	NOTES:			
26947	57	20	34	3.9	0.7	13:25	13:25	WX SKC	WISOR MAOC 13:44, 18:01		

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

Nov 9, 2015-B (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

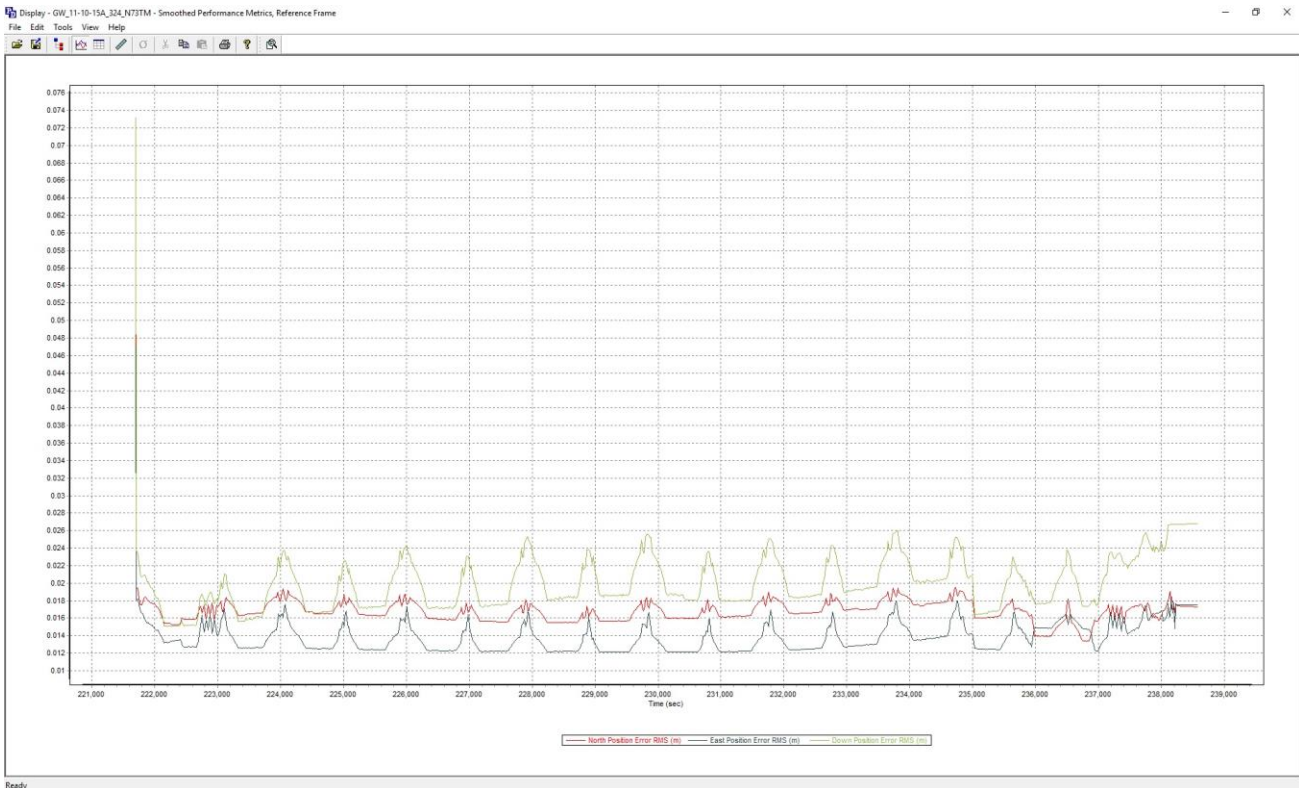
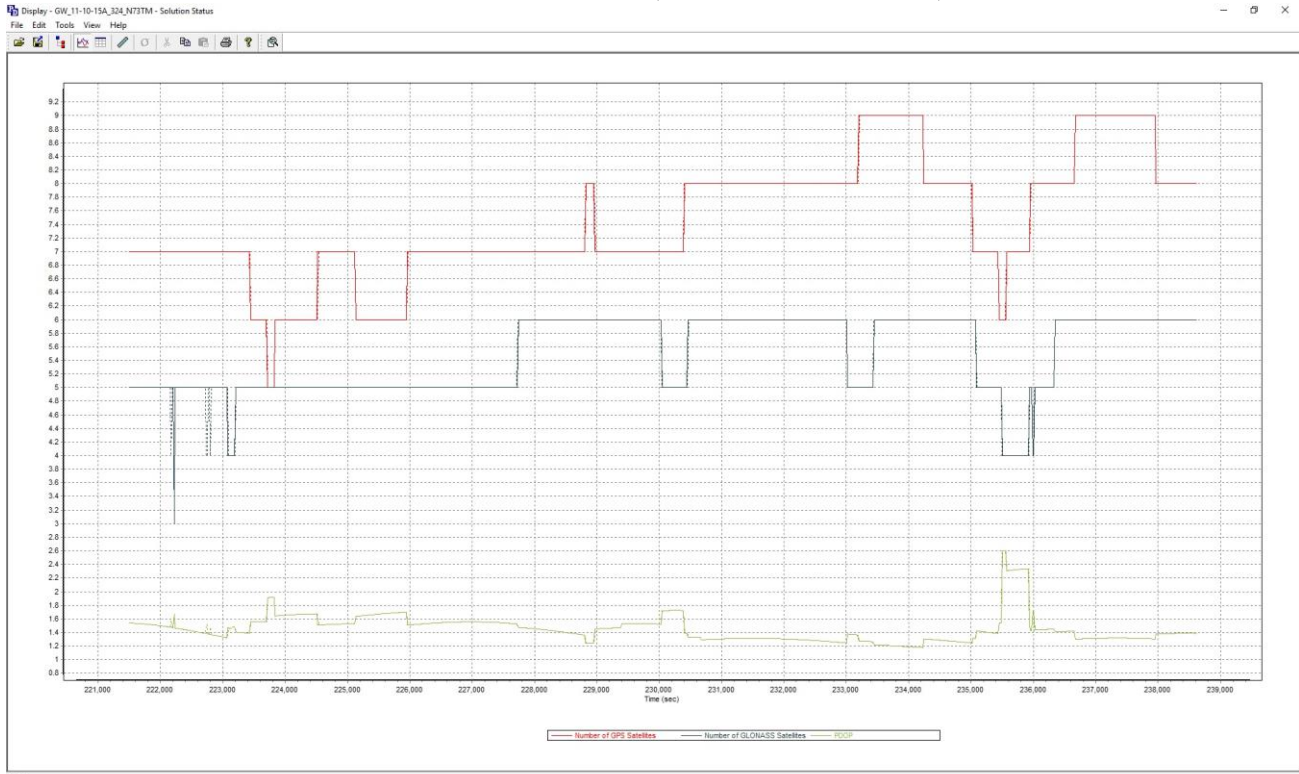
MISSION: 20151098 DATE: 11/9/15 13 SEN324 10E1

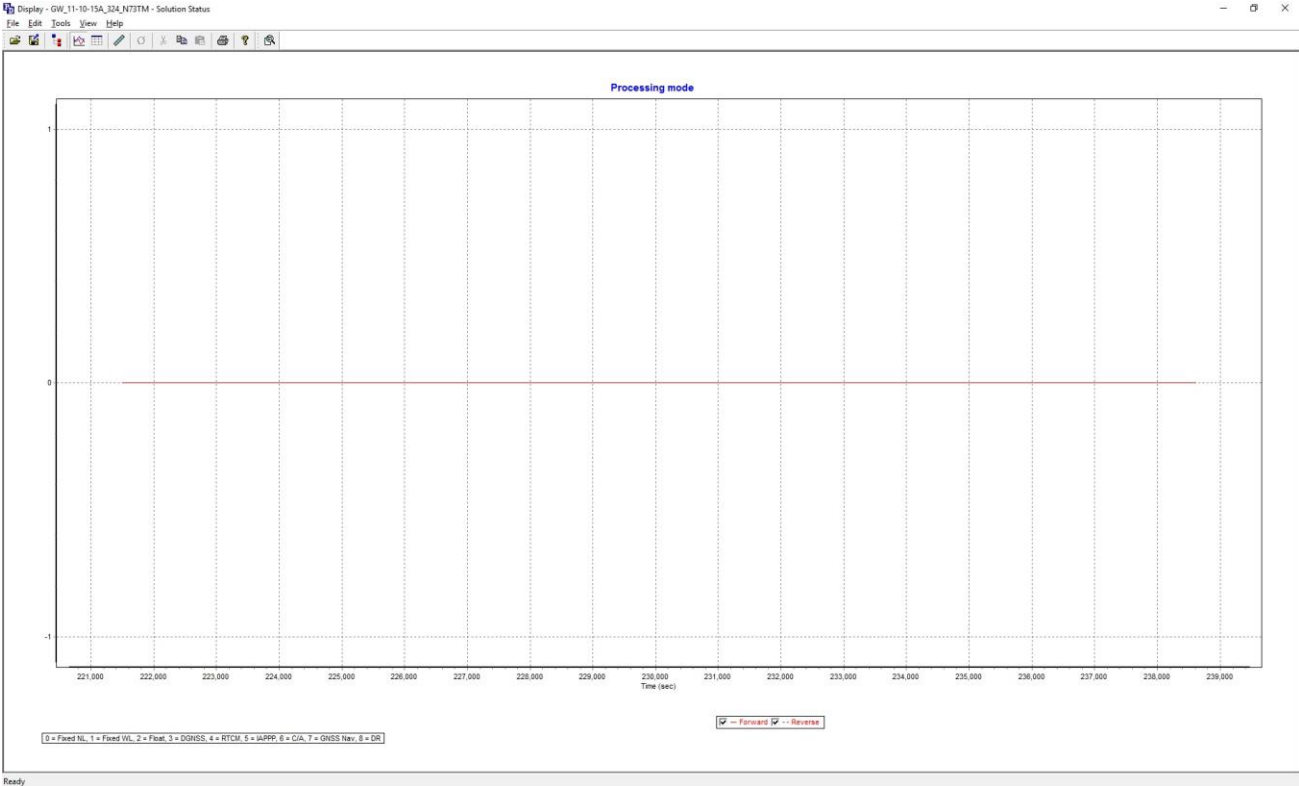
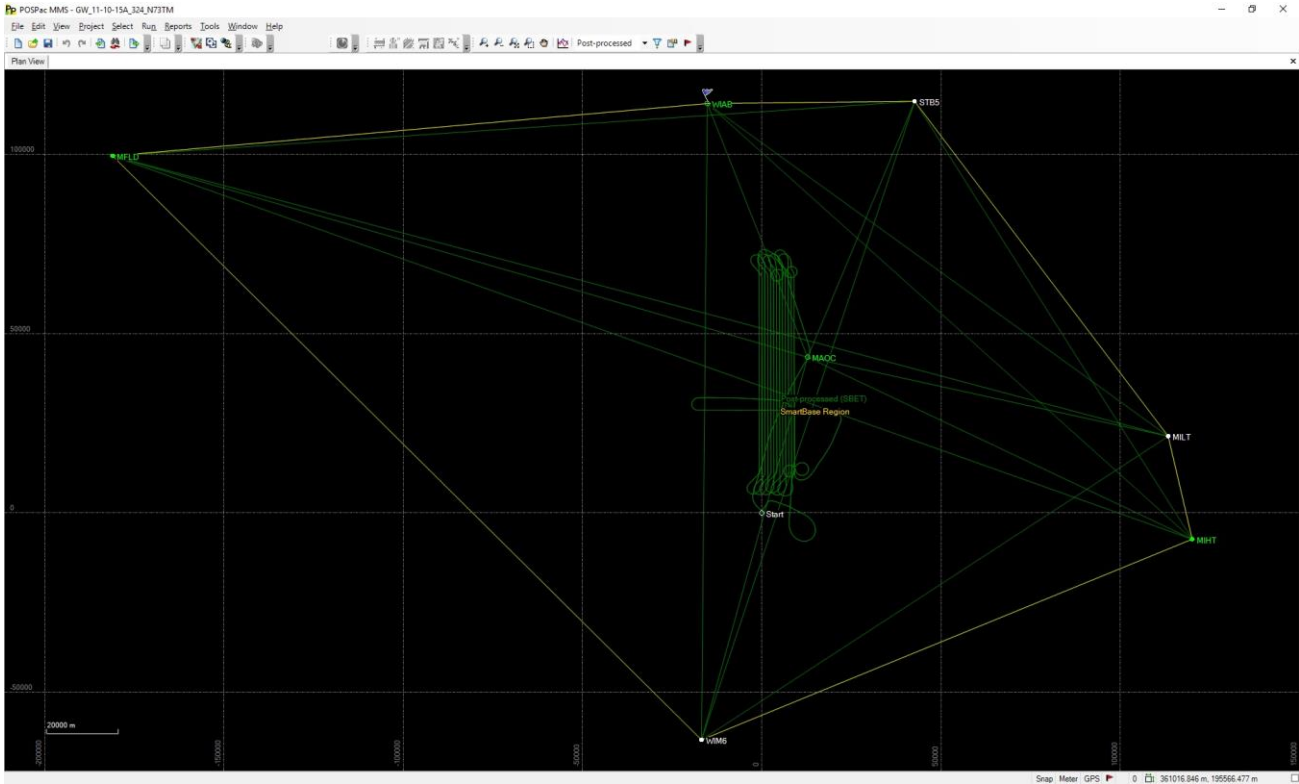
PILOT: CAM OPERATOR: NELSON AIRCRAFT: N73TM

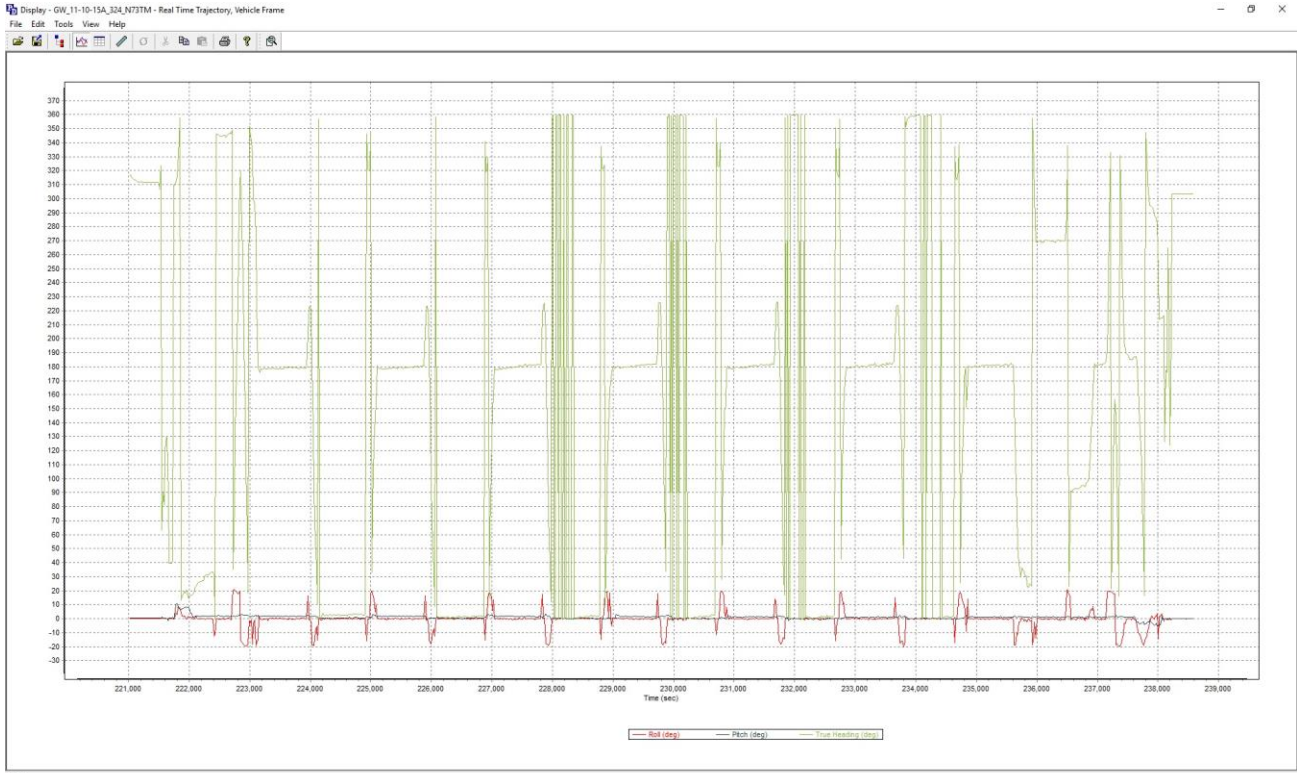
PROJECT NUMBER	LINE NO. & Hdg	GND SPEED (KTS)	SCAN FREQ	SCAN ANGLE	PRF	ALT (m)	TIME START	TIME STOP	Laser Time	TZPK	REMARKS	
26947			52	19	225	1700	19:35				SBM → SITE 599.1	
MANITOWOC											TWO TEST FBRES	
											CROSSELIGHT	
	56	270	140	52	19	225	1690	19:59	20:10			
	52	180	140				1700	20:14	20:24			
	51	0	135				1700	20:28	20:38			
	50	180	140				1690	20:42	20:52			
	49	0	140				1700	20:55	21:05			
	48	180	140				1700	21:09	21:19			
	47	0	145				1695	21:23	21:33			
	46	180	140				1700	21:36	21:47			
	45	0	140				1695	21:50	22:01			
	44	180	140				1695	22:04	22:15			
	43	0	140				1690	22:18	22:28			
	42	180	140				1700	22:32	22:43			
	41	0	140				1700	22:46	22:56			
	40	180	145				1700	23:01	23:13			
	39	0	140				1700	23:16	23:29			
	38	180	145				1700	23:33	23:46			
									0:05		SITE → KSGM 59236	
STATUS	TOTAL LINES	FLOWN	LEFT	AIRCRAFT SITE	FERRY	STATIC START:	STOP:	NOTES:				
26947	57	16	18	3.8	0.7	19:25	0:11	MADC				
MANITOWOC						WKS	SKC	WPSOR				
								SHAN				
								23:55				

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Nov 10, 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

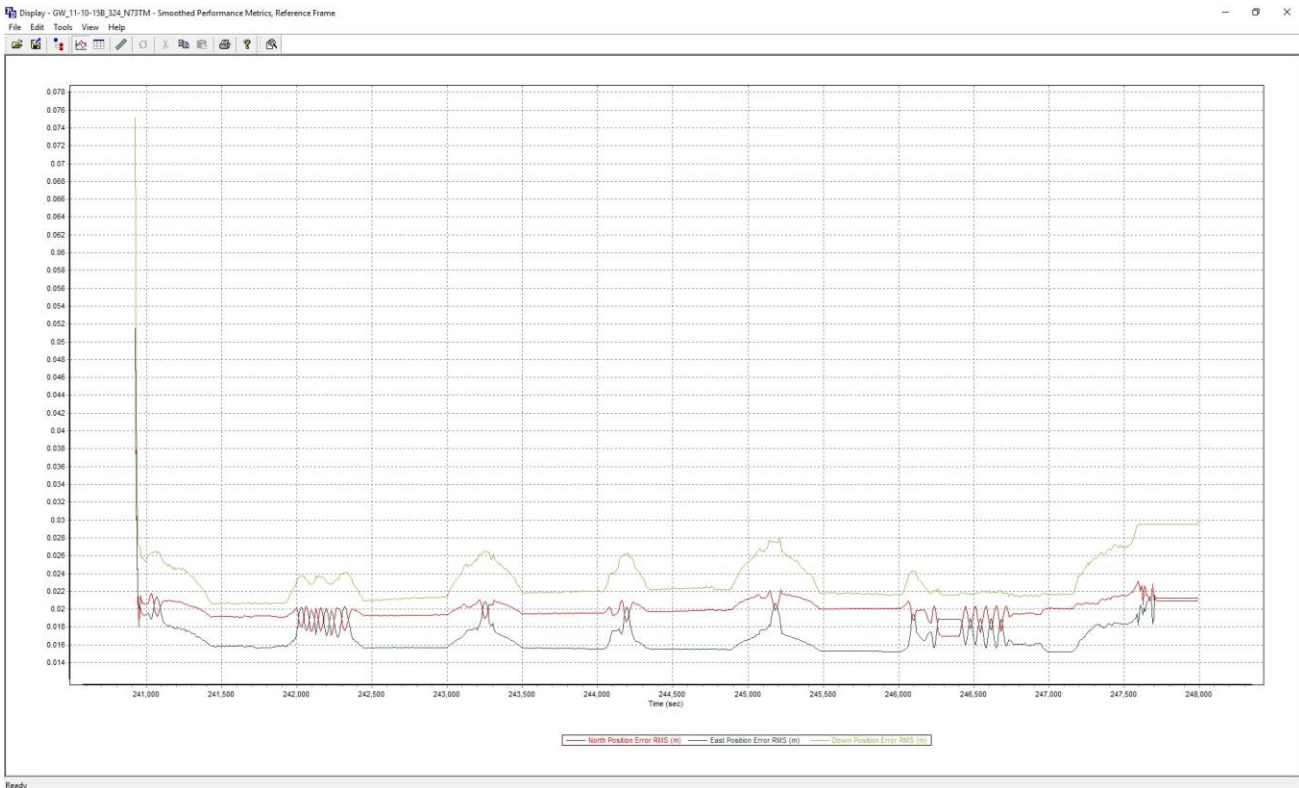
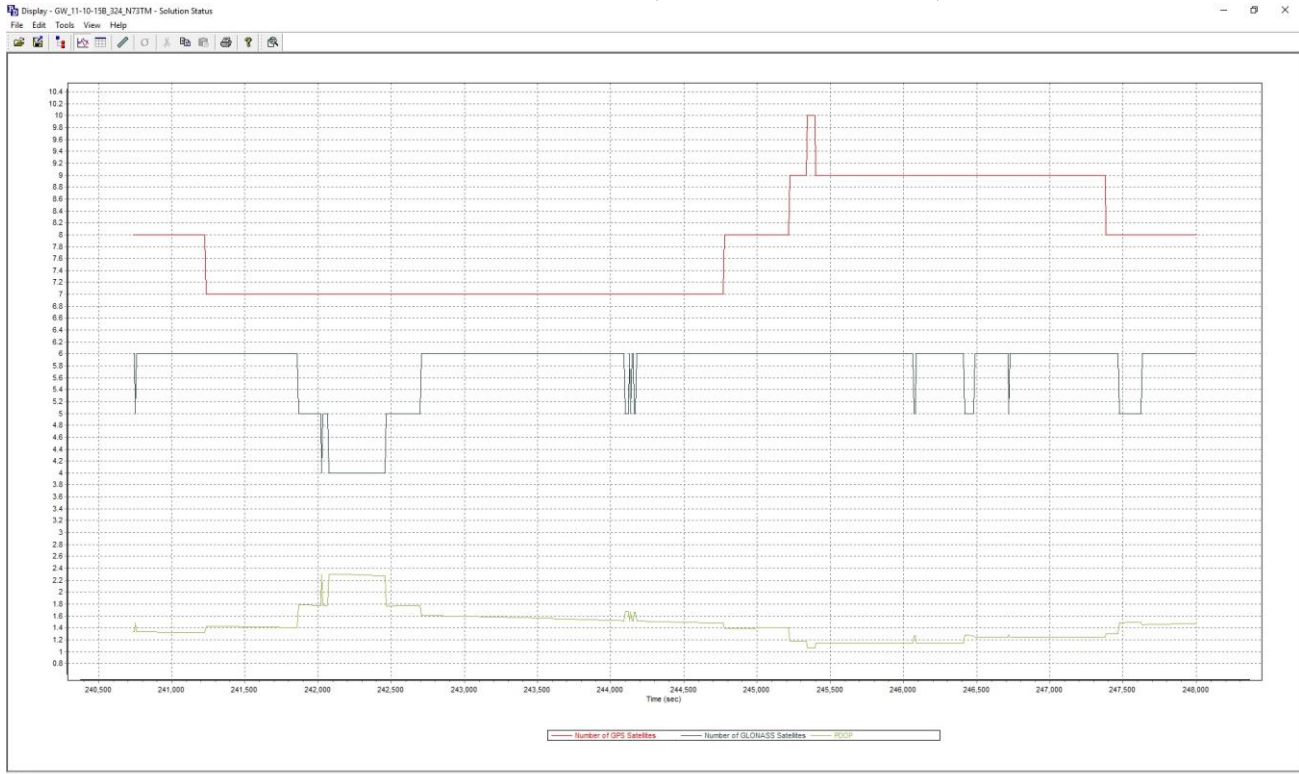
OPERATORS FLIGHT LOG

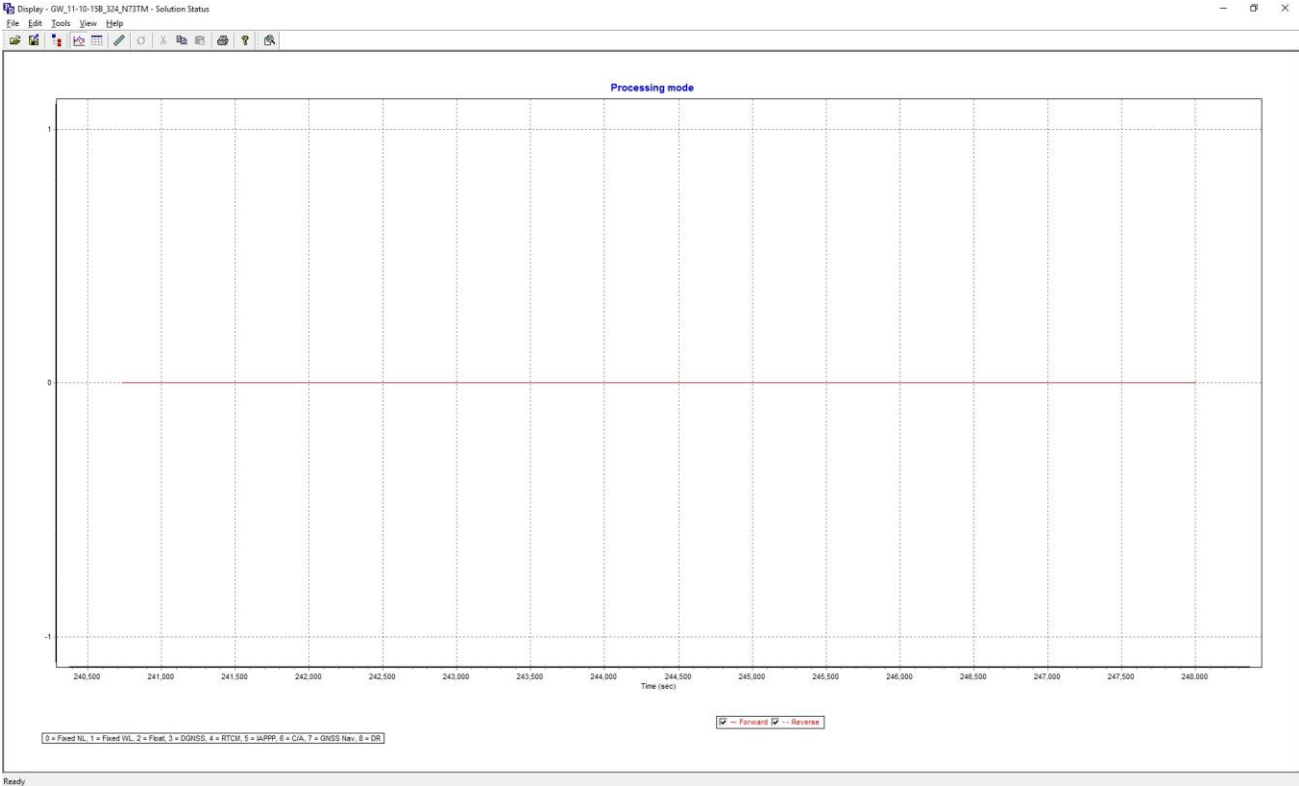
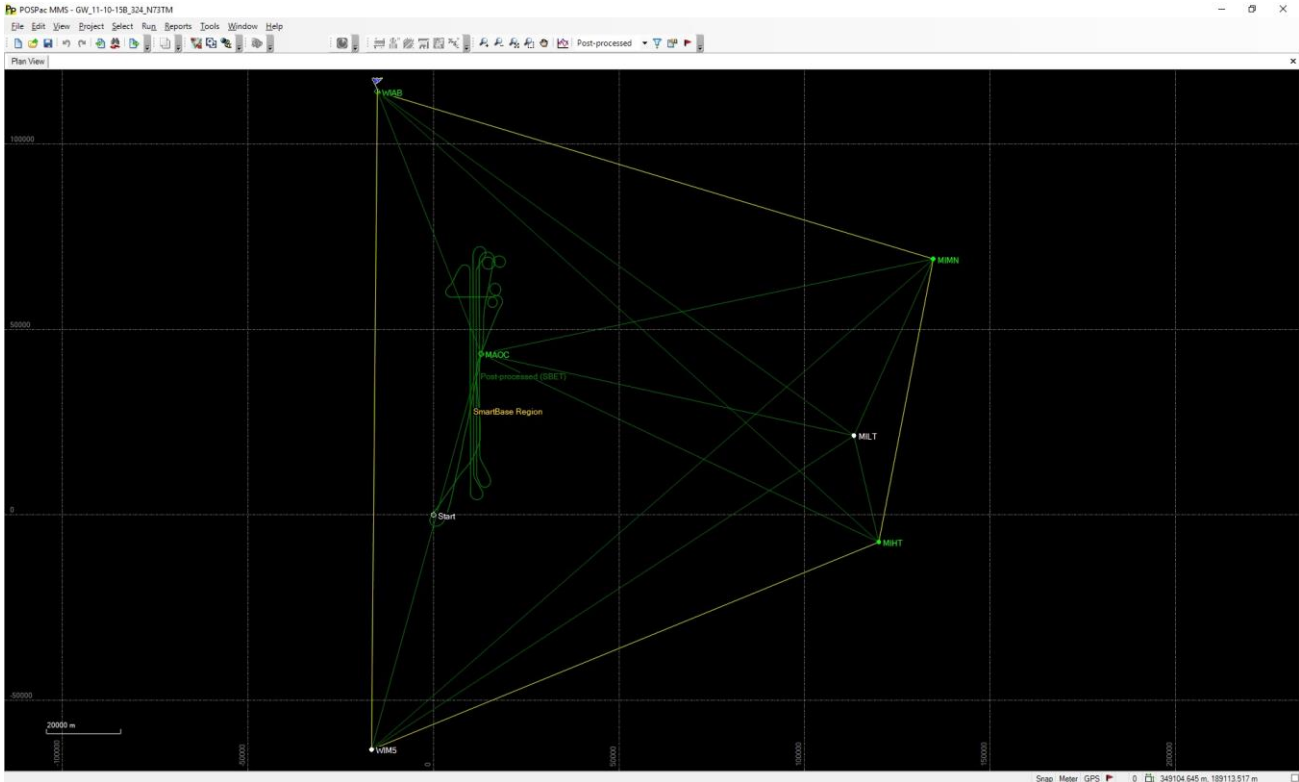
MISSION: 20151110 A DATE: 11/10/2015 OPERATOR: GORP
PILOT: GORP AIRCRAFT: Orion H SENSOR: H1324
PROJECT NUMBER AND NAME: 26947 UNIT: AYRES

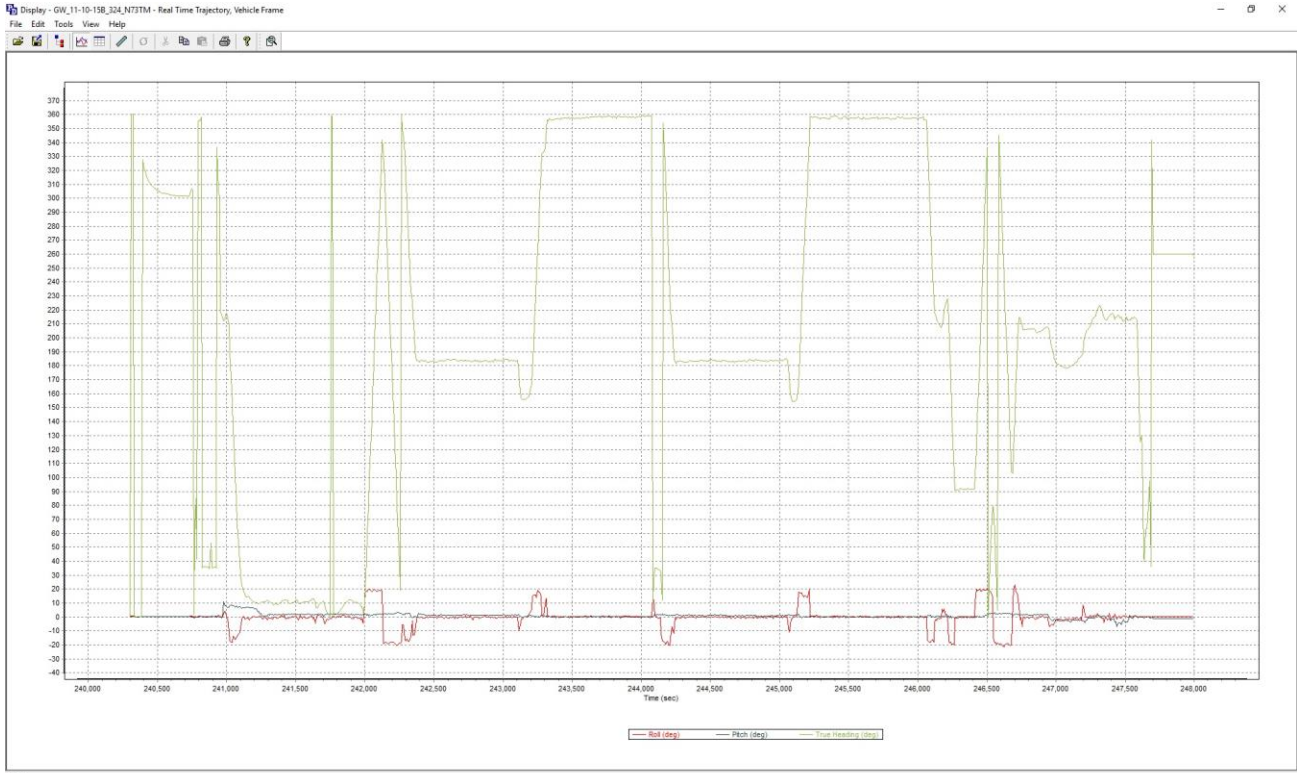
LINE No.	Lbi	Hdg	GND SPEED	FREQ Hz	SCAN ANGLE	PRF KHz	FIXED GAIN	Flying HL (m)	TIME START	TIME STOP	MMTO DRIVE	REMARKS
37	37	S	112	52	38°	225		1902	14:13			
38	38	N	100					1428	14:29			
39	39	S	112					1432	14:44			
40	40	N	110					1448	15:00			
41	41	S	112					1504	15:17			
42	42	N	110					1521	15:33			
43	43	S	112					1536	15:49			
44	44	N	110					1551	16:05			
45	45	S	112					1608	16:21			
46	46	N	110					1625	16:38			
47	47	S	112					1641	16:54			
48	48	N	110					1657	17:11			
49	49	S	112					1714	17:28			
50	50	N	110					1723	17:43			
51	51	S	112					1749	17:53			
also used as (KASSIE) reflying to the adjacent land of line previously, lakes edge												
26947	57		14	4	3.9	.6			13:27	17:53		
WIX Orchard Breaker												
KSM 592316-5928.1												
15:36up - 15:07down												
13:23on - 17:20 off												

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Nov 10, 2015-B (N73TM, SN324)







Ready

Coordinate Manager

Station Information

Station ID:

Coordinates

Latitude:

Longitude:

Altitude: m

Decimal Degrees

Antenna Reference Point (ARP) coordinates Apply Changes

Antenna

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

OPERATORS FLIGHT LOG

YYYYMMDD_TIME(GPS)

MISSION:	20151110 b		OPERATOR: Gary E		DATE: 11/10/2015		AIRCRAFT: M3TM		SENSOR: H 324				
	PROJECT NUMBER AND NAME	LINE No.	Lt	Hdg	GND SPEED	FREQ HZ	SCAN ANGLE	PRF KHZ	FIXED GAIN	Flying Ht (m)	TIME START	TIME STOP	REMARKS
MANITOWOC											19:06	19:10	Flower Hill
AVES											19:13	19:18	Fig 2
	21	21	S		138	52	38°	22.5		1920m	19:20	19:21	
	22	22	N		136						19:35	19:43	
	23	23	S		138						19:51	20:04	
	24	24	N		138						20:08	20:21	
	25	25	E		142						20:24	20:27	Cross IE
											20:28	20:32	Closest Fig 2
											20:34	20:37	Flower of Madk
STATUS	TOTAL LINES	FLOWN	LEFT	SITE	AIRCRAFT	FERRY	STATIC	START	STOP	NOTES: k5M 5928.1 - 5930.0			
26947	57	4	0	1.0		.9				19:42 on 20:46 down			
							WX	overhead braker		19:56 up 20:55 off			

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