

Appendix A

GPS / IMU Processing Statistics Flight Logs

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

March 21, 2017-A (N262AS, SN7161) Page 2
 Flight Log Page 10

March 21, 2017-B (N262AS, SN7161) Page 11
 Flight Log Page 19

March 21, 2017-C (N262AS, SN7161) Page 20
 Flight Log Page 28

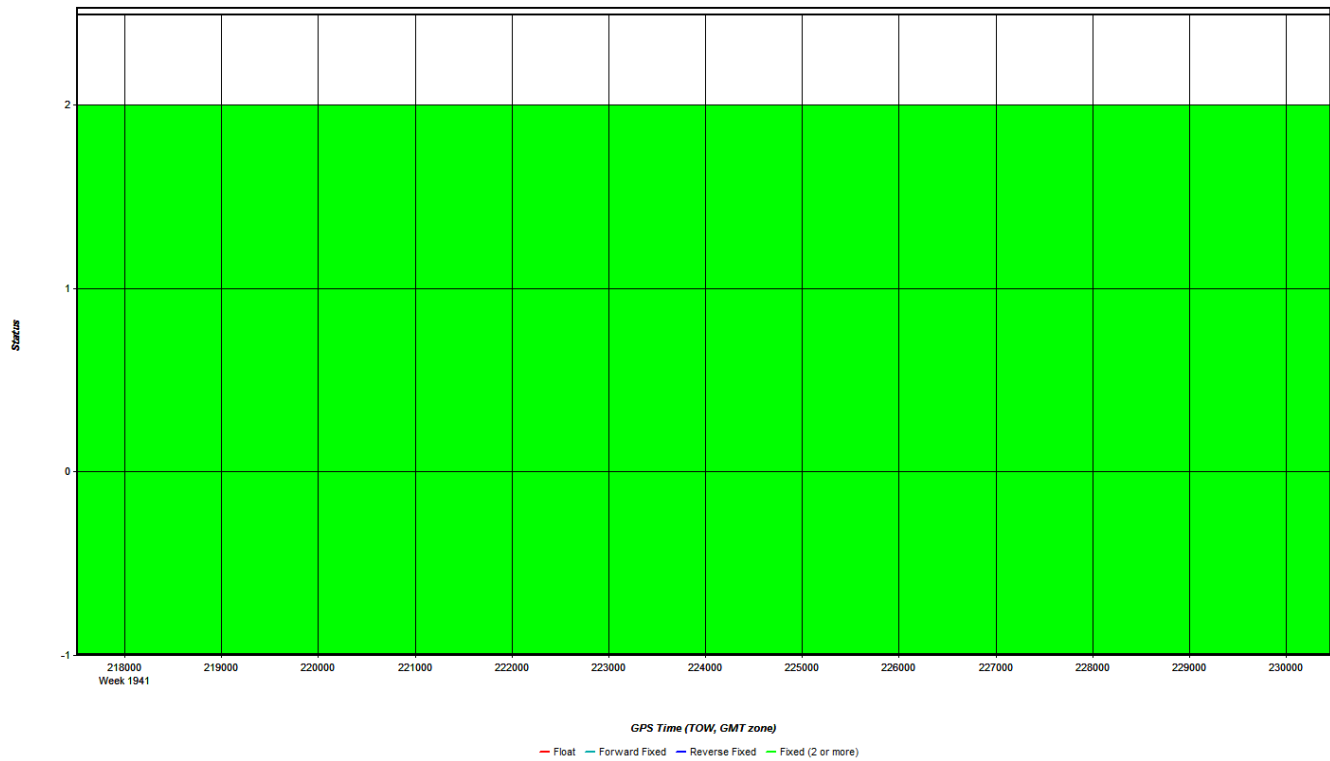
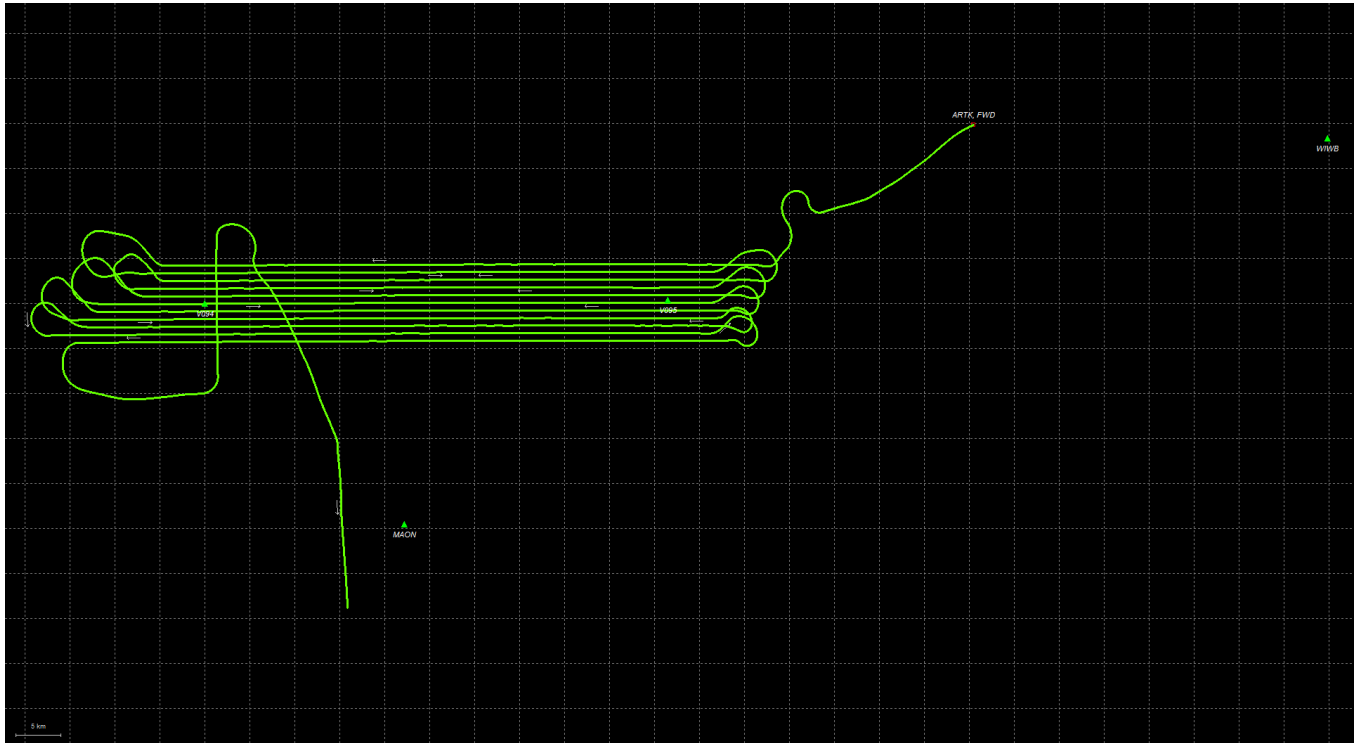
March 21, 2017-D (N262AS, SN7161) Page 29
 Flight Log Page 37

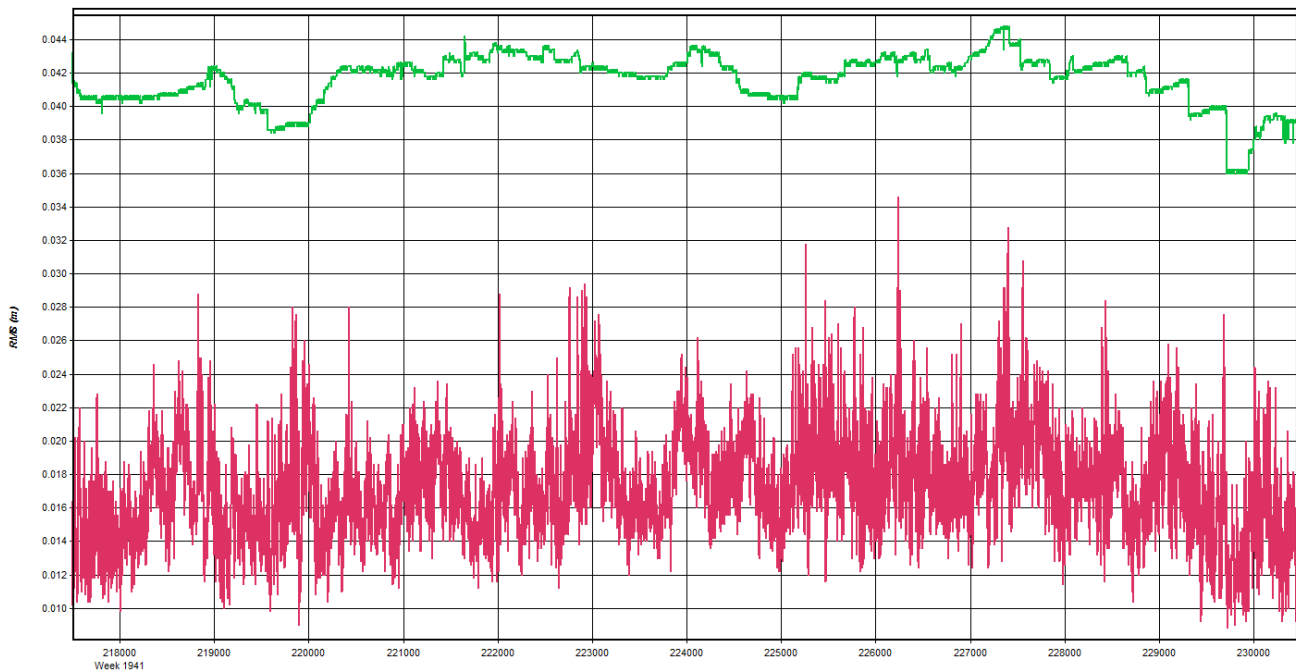
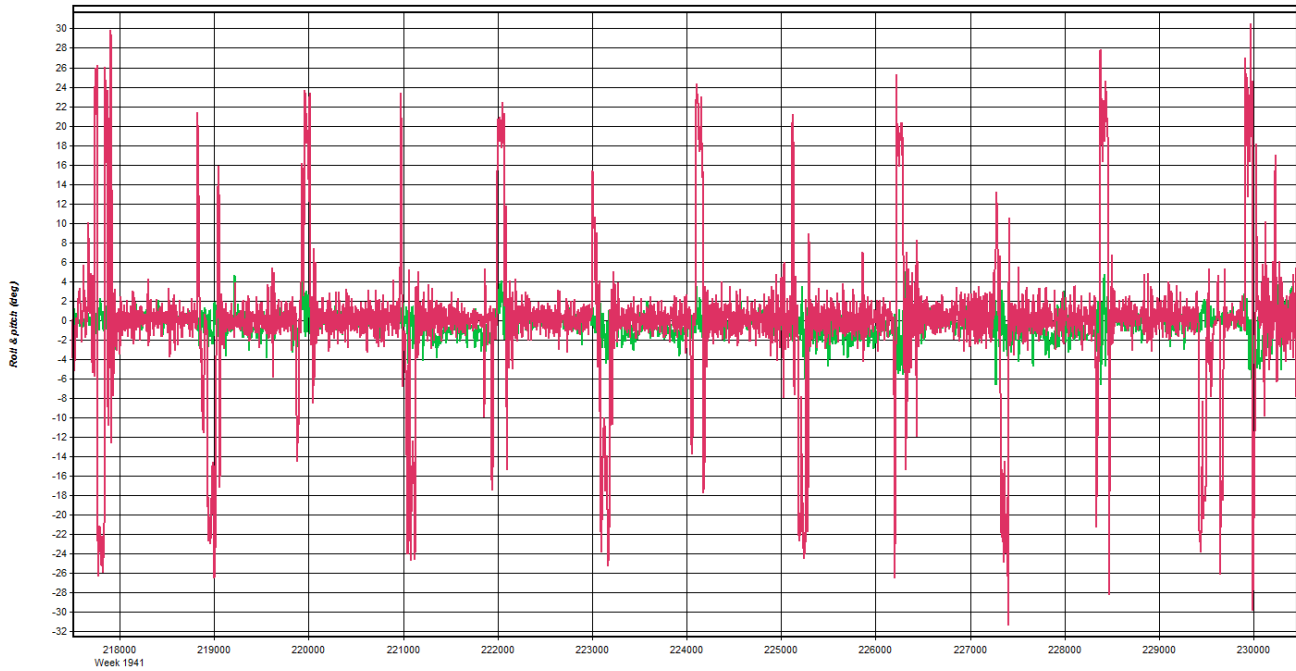
March 22, 2017-A (N262AS, SN7161) Page 38
 Flight Log Page 46

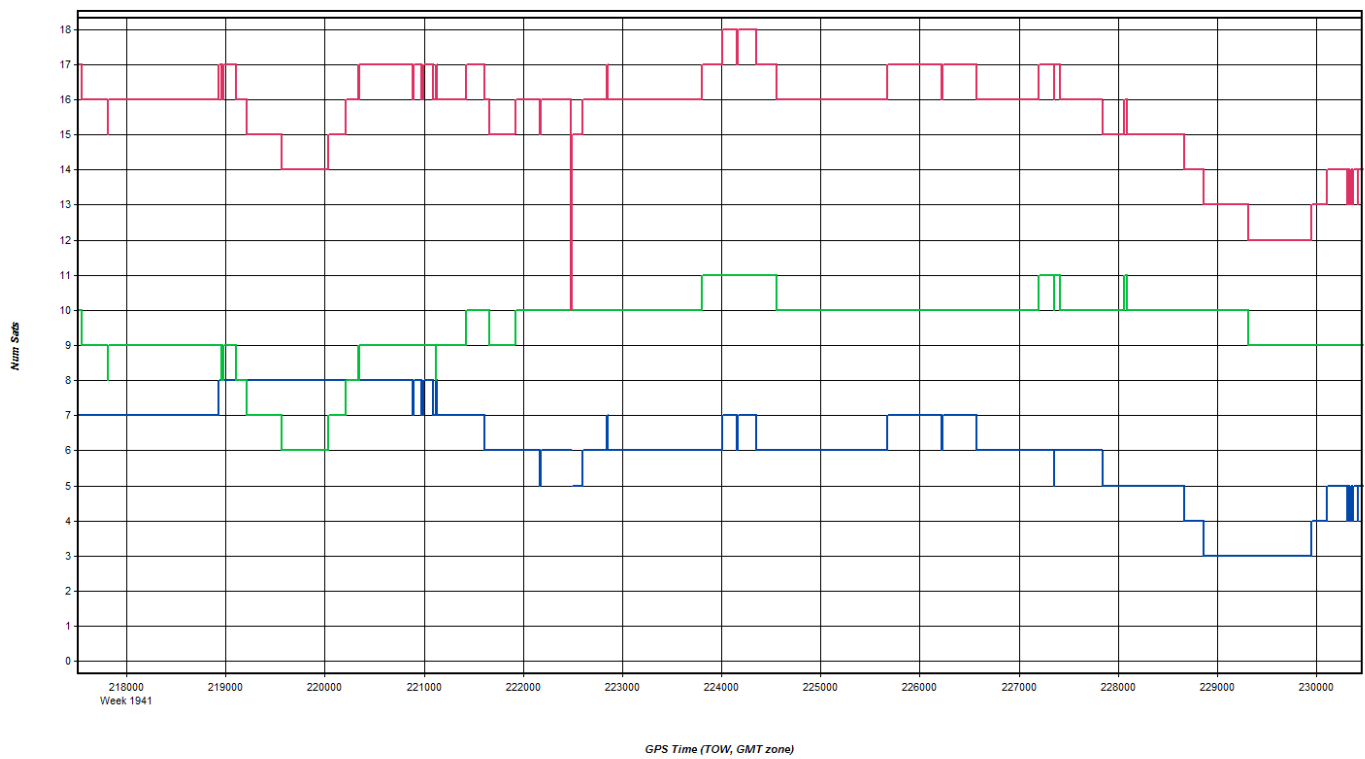
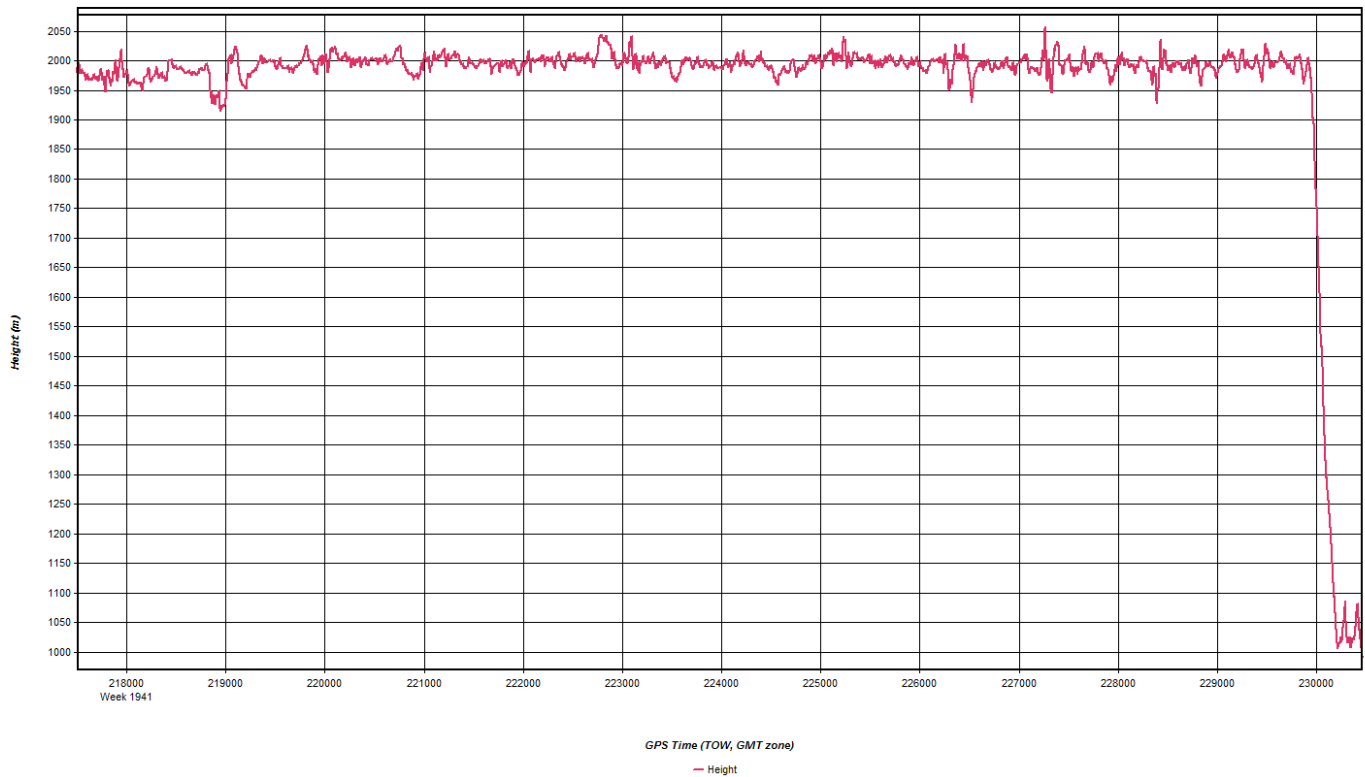
March 22, 2017-B (N262AS, SN7161) Page 47
 Flight Log Page 55

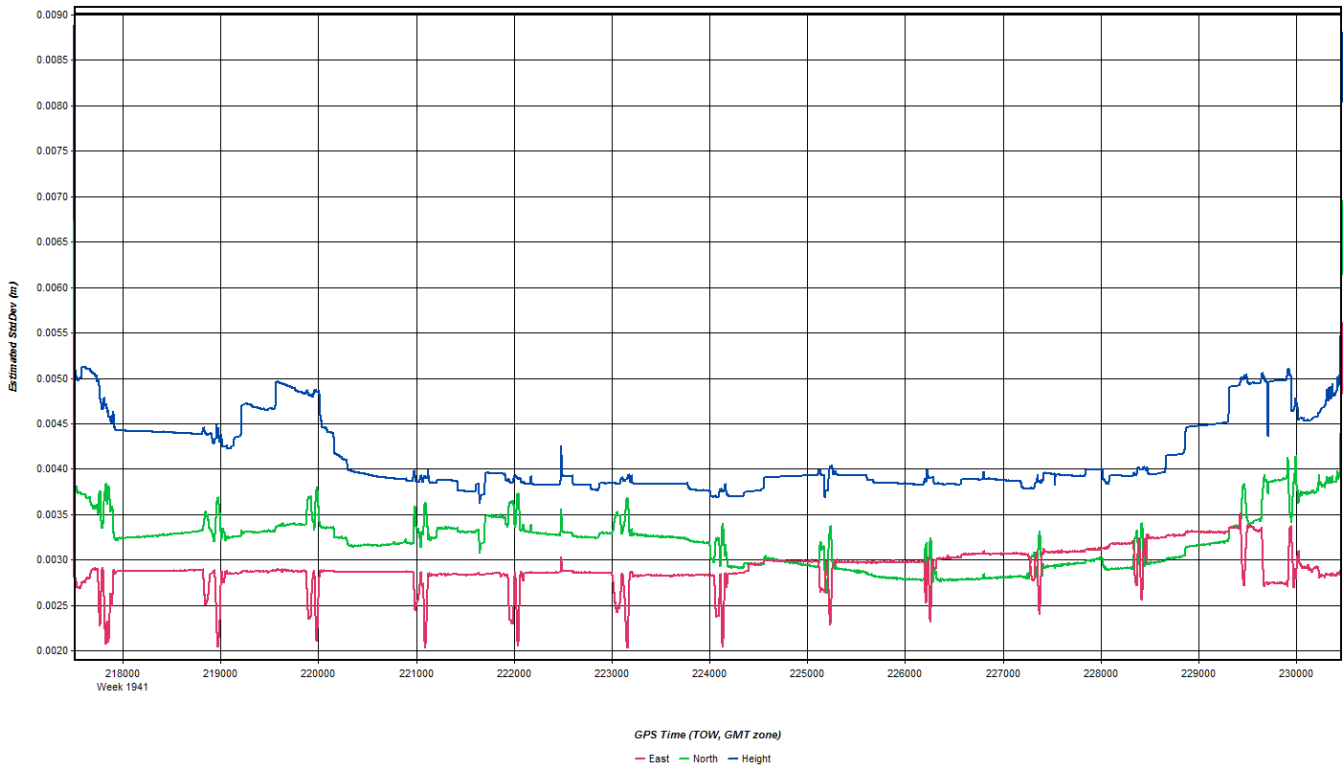
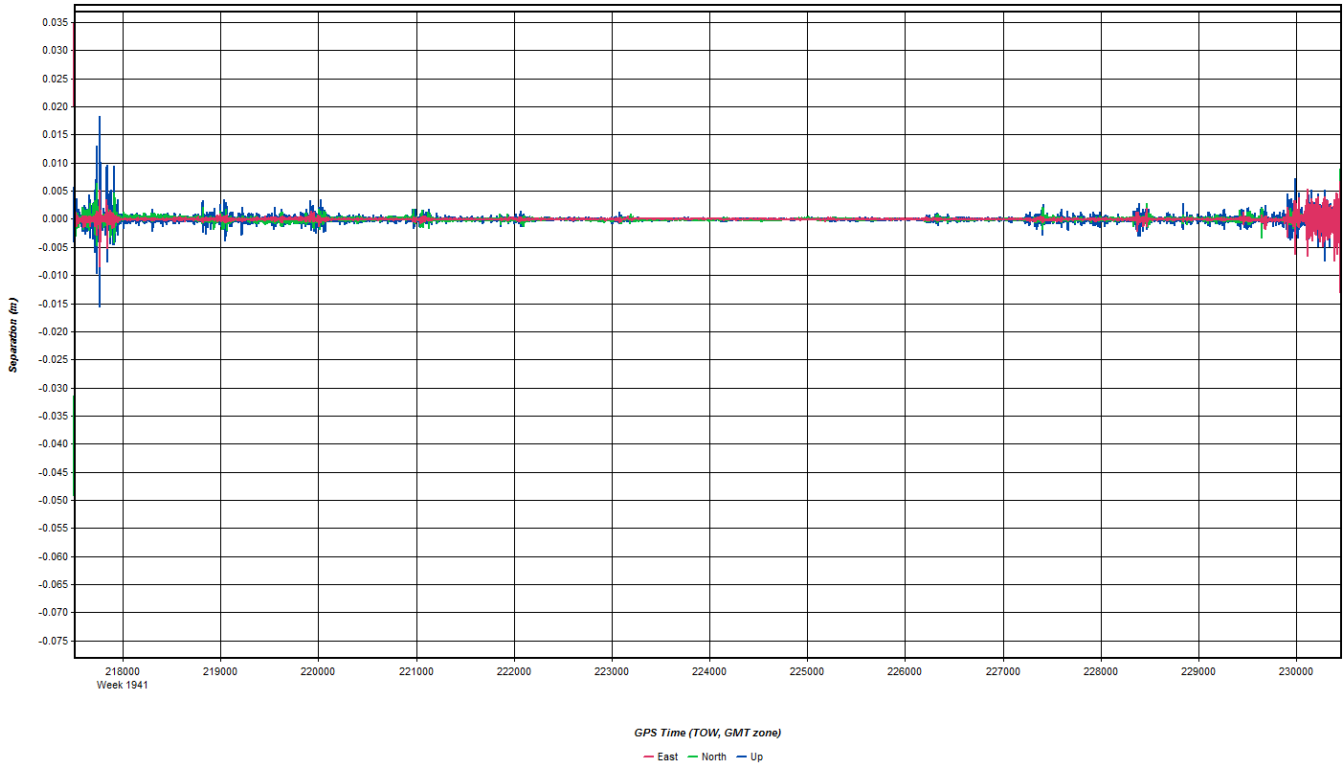
March 22, 2017-C (N262AS, SN7161) Page 56
 Flight Log Page 64

Mar 21, 2017-A N262AS, SN7161)









Coordinate/Antenna Settings ? X

Master Remote

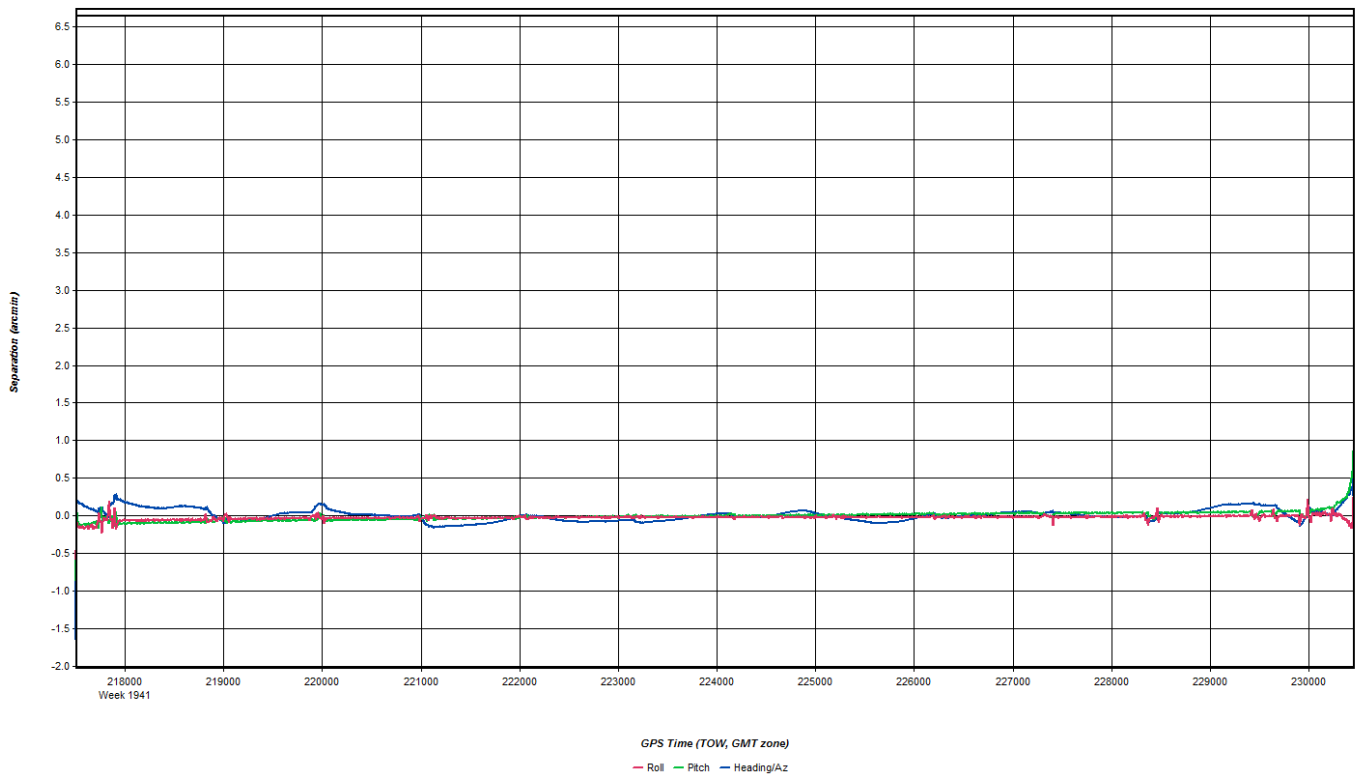
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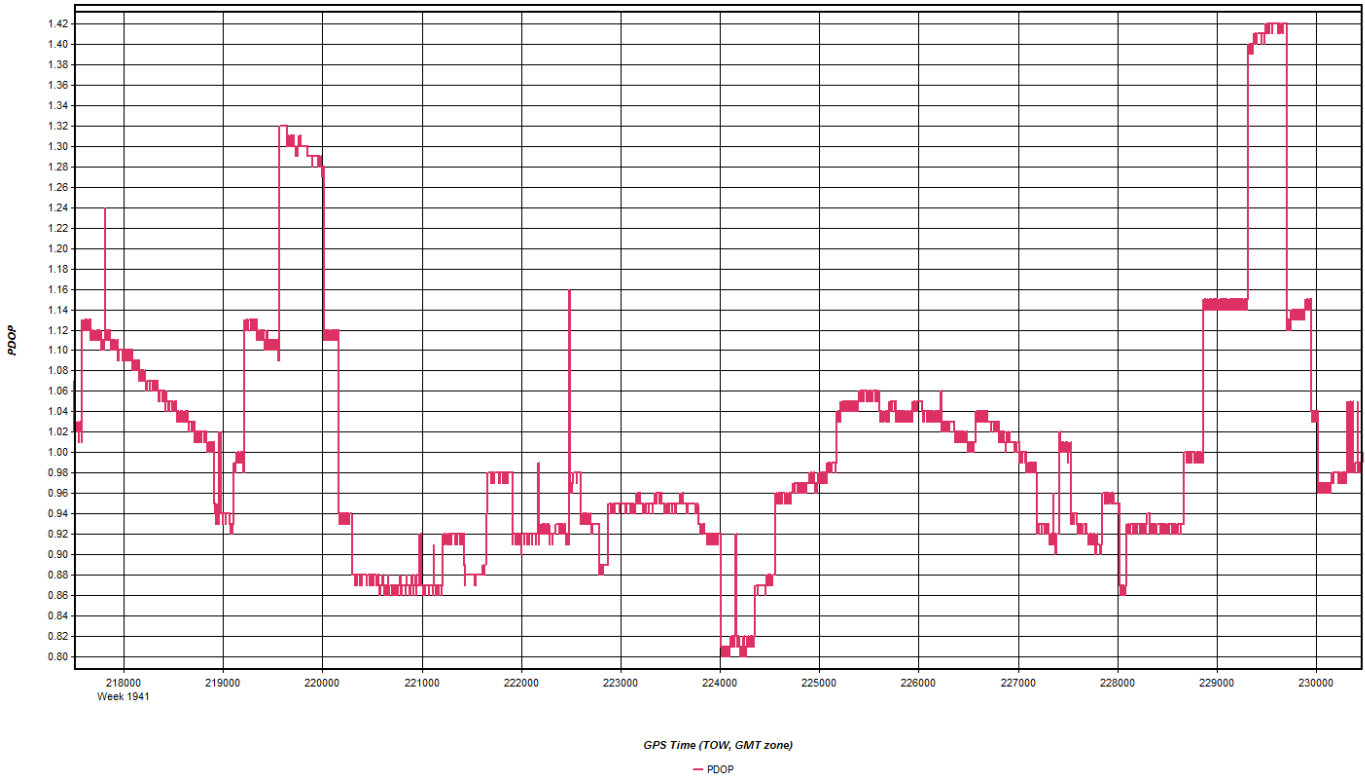
Coordinates
 Latitude: North 43 02 12.78293 Coord. options
 Longitude: West 89 24 34.27001 Save to Favorites
 Ellipsoidal height: 248.654 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m

Measured to
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel





? X

Coordinate/Antenna Settings

Master Remote

Base Station

1: V094 Name: V094 Disabled

File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V094080\

Coordinates

Latitude: North 43 15 22.97004 Coord. options

Longitude: West 89 40 56.93005 Save to Favorites

Ellipsoidal height: 99.988 m

Datum: WGS84 Proc Datum: WGS84

Epoch: year

Antenna Height

From station file: TRM57971.00, NONE View STA File

Antenna profile: TRM57971.00 Info

Measured height: 0.000 m

ARP to L1 offset: 0.067 m

Applied height: 0.067 m

Measured to

ARP

L1 Phase Centre

Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 2: V095 Name: V095 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V095080

Coordinates
 Latitude: North 43 15 36.51004 Coord. options
 Longitude: West 89 02 59.33996 Save to Favorites
 Ellipsoidal height: 99.981 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 3: WIWB Name: WIWB Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\wiwb0800

Coordinates
 Latitude: North 43 25 13.96922 Coord. options
 Longitude: West 88 08 55.47090 Save to Favorites
 Ellipsoidal height: 235.140 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Flight Log

Date: **3-21-17**
Lift: A B C D E Pg. of

Airborne LiDAR Data Collection Log Sheet :: Quantum Spatial, Inc
(email Log daily to flight_log_distribution_list@quantumspatial.com)

Project: **WROC - DANE CO.** Proj #: **29050** Flight Mgmt File: **20170321_114830**

Aircraft: **N262AS** Begin Hobbs: **483.5** End Hobbs: **6487.6** Total: **4.1** Pilot: **WAGNER** Co-Pilot: **CAREY**

Dep Apt: **KSBN** Dep Time (Lcl): **7:12 Z** Arr Apt: **KMSN** Arr Time (Local): **11:19 Z** Tot Time Aloft: **4.1**

CORS: **Y/N** Sta 1: **MSN** Flyovers: **Y/N** IF Y, times: **Sta1** Sta 2: **Sta2**

GPS Unit: **Y/N** Sta 1: **Sta 2:**

Gd Temp beg: °C End: **7.6** OAT beg: °C End:

Type	Serial #	Alt AGL	Alt MSL	Avg Temp	Max Gndsp	Avg Pt Spacing
LIDAR	ALS 70	53	43	1070	150	150
FOV	40	MPIA	Y/N	Pulses In Air	Power	PSM
		53	Y/N	299	100%	100%

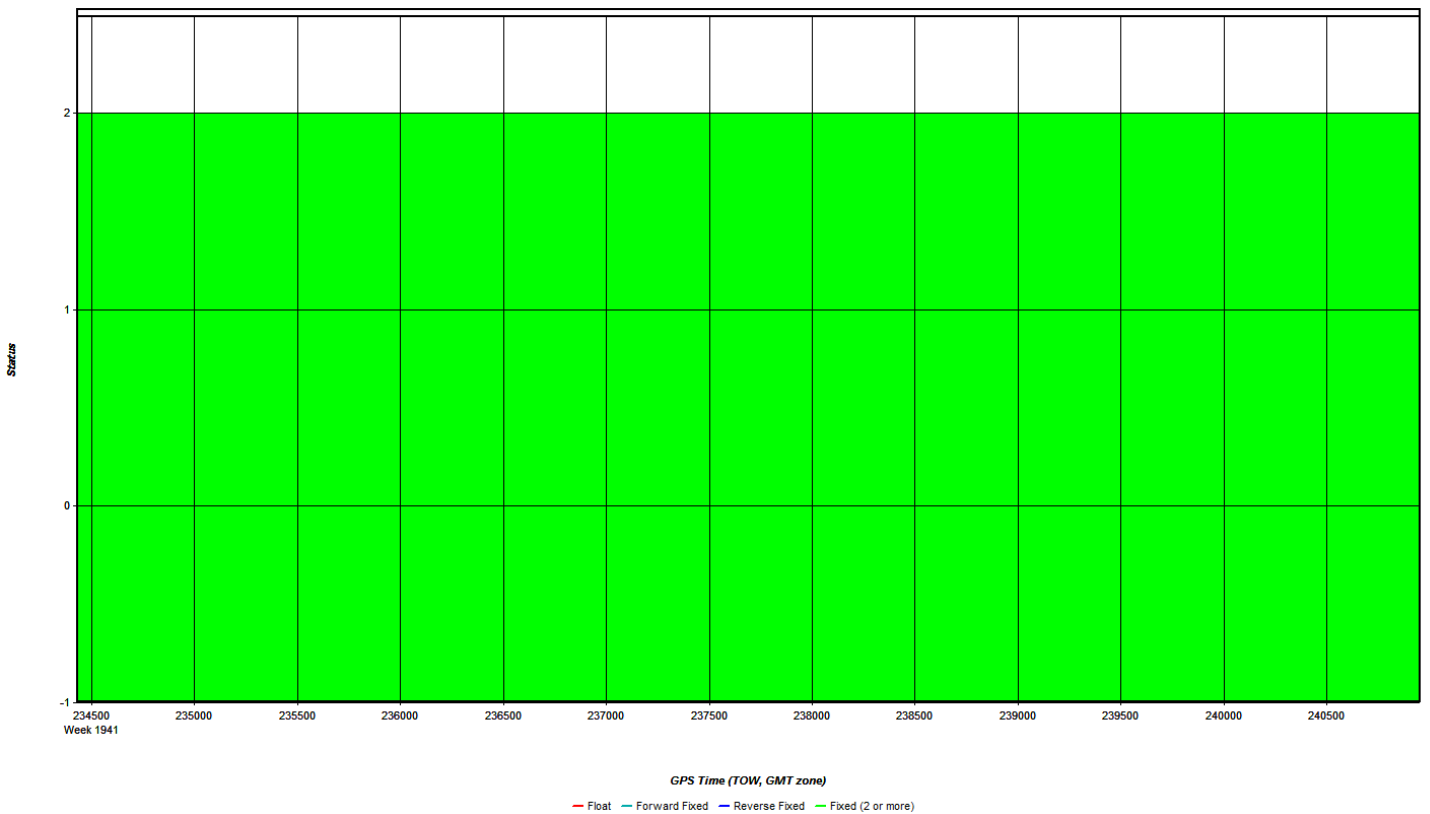
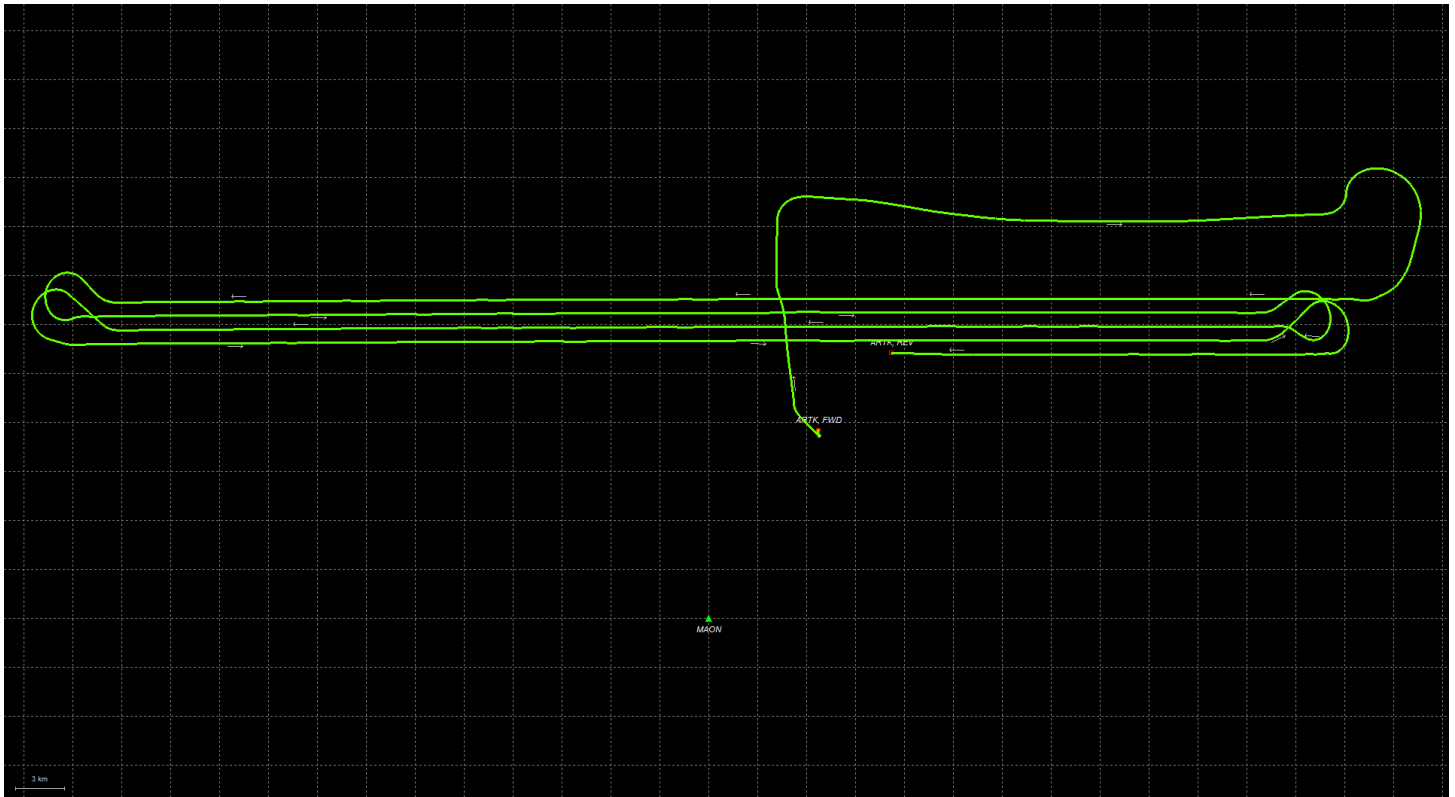
Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	POF/s	GPS Altitude	Crab	Tip (0,5,3)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
1	273	1232	1246	7150	1.1	6512	1	0	SBM → SITE → FIG/S
2	92	1251	1304		1.2	6529			set 20k / -ovc @ 20k
3	273	1308	1322		1.0	6529			
4	92	1325	1338		1.1	6529			
5	273	1342	1356		1.1	6515			
6	92	1400	1413	7150	1.1	6512	1	0	
7	273	1417	1431		1.1	6515			
8	92	1435	1449		1.2	6515			
9	273	1452	1507		1.2	6519			
10	92	1510	1525		1.0	6509			
11	273	1528	1543		1.0	6509			
XFLT	2	1547	1551		1.1	6506			

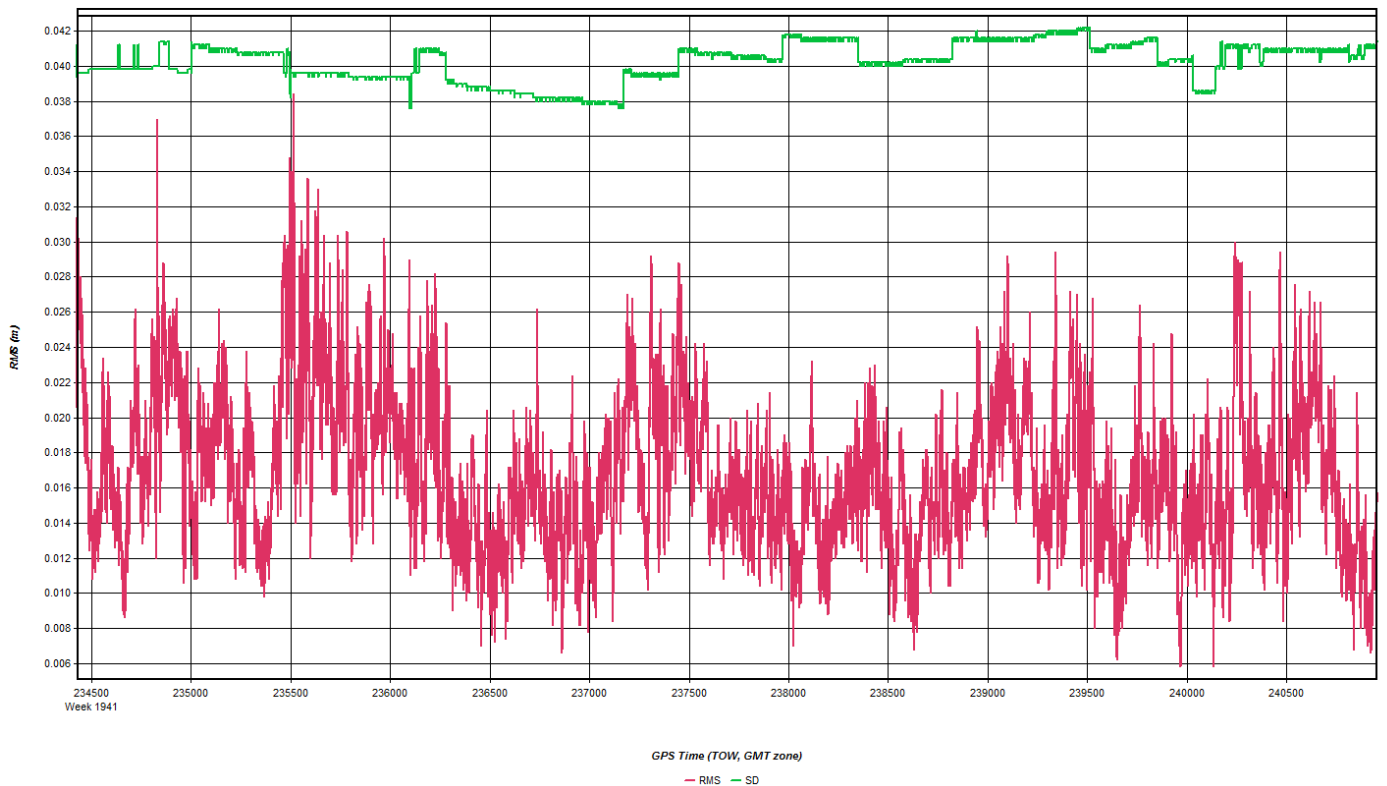
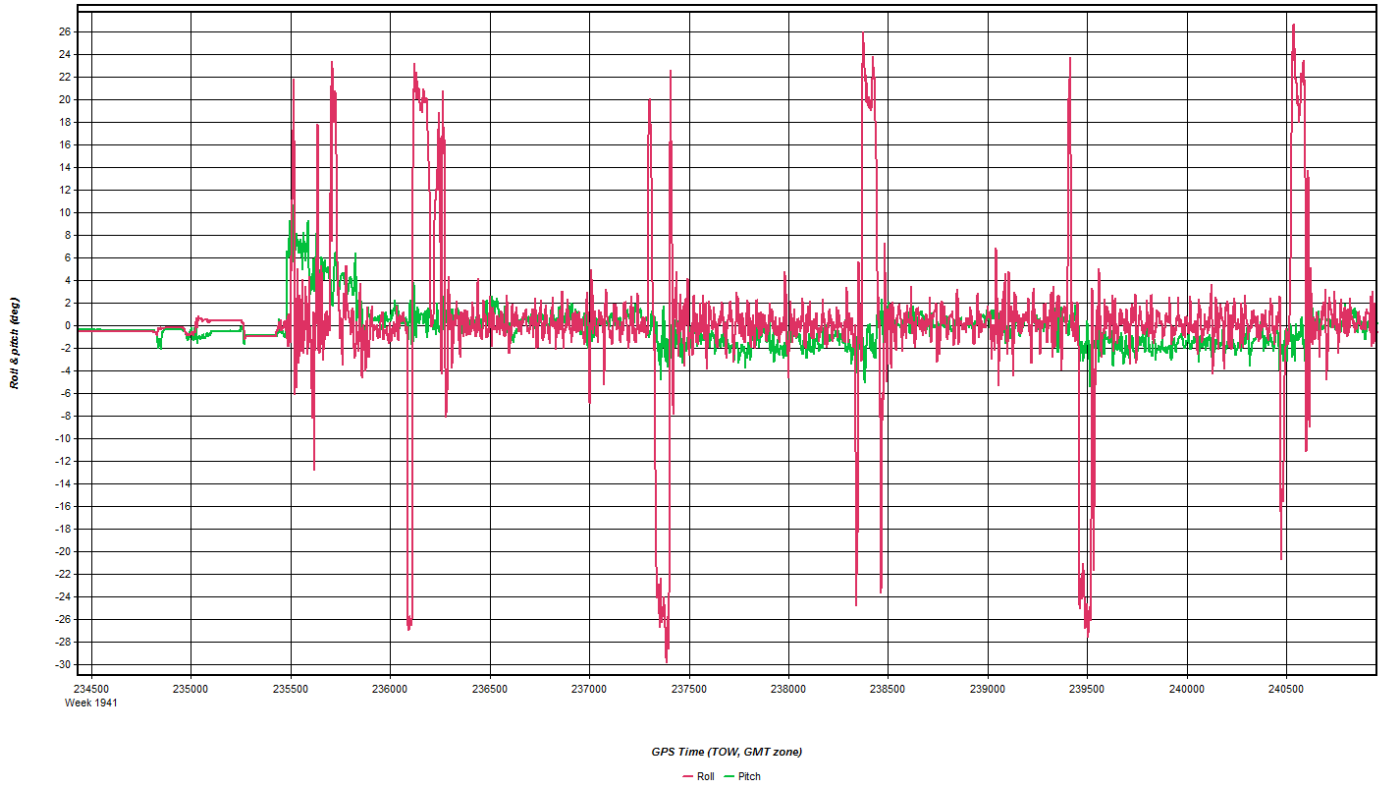
Storage Name: **0**
End GB: **64**
For GB: **64**

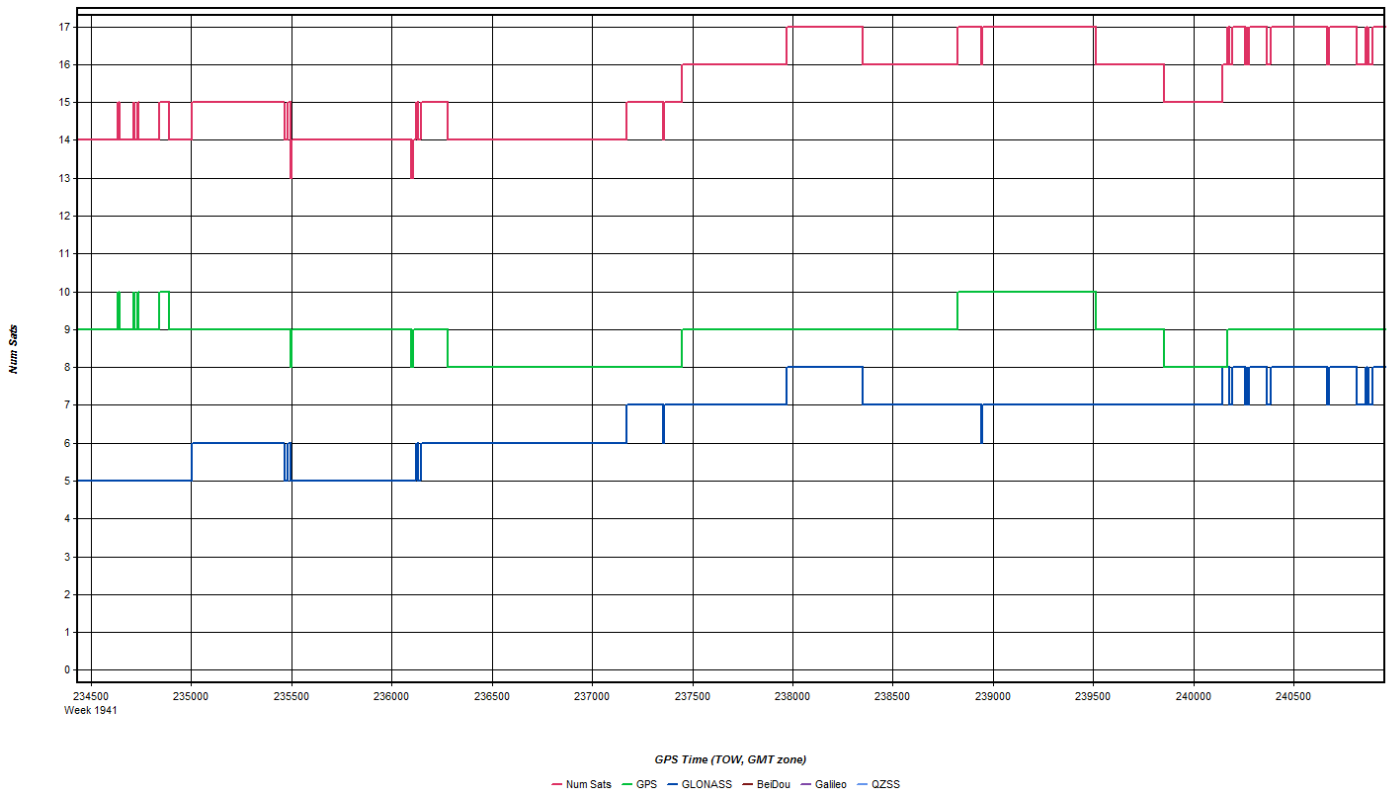
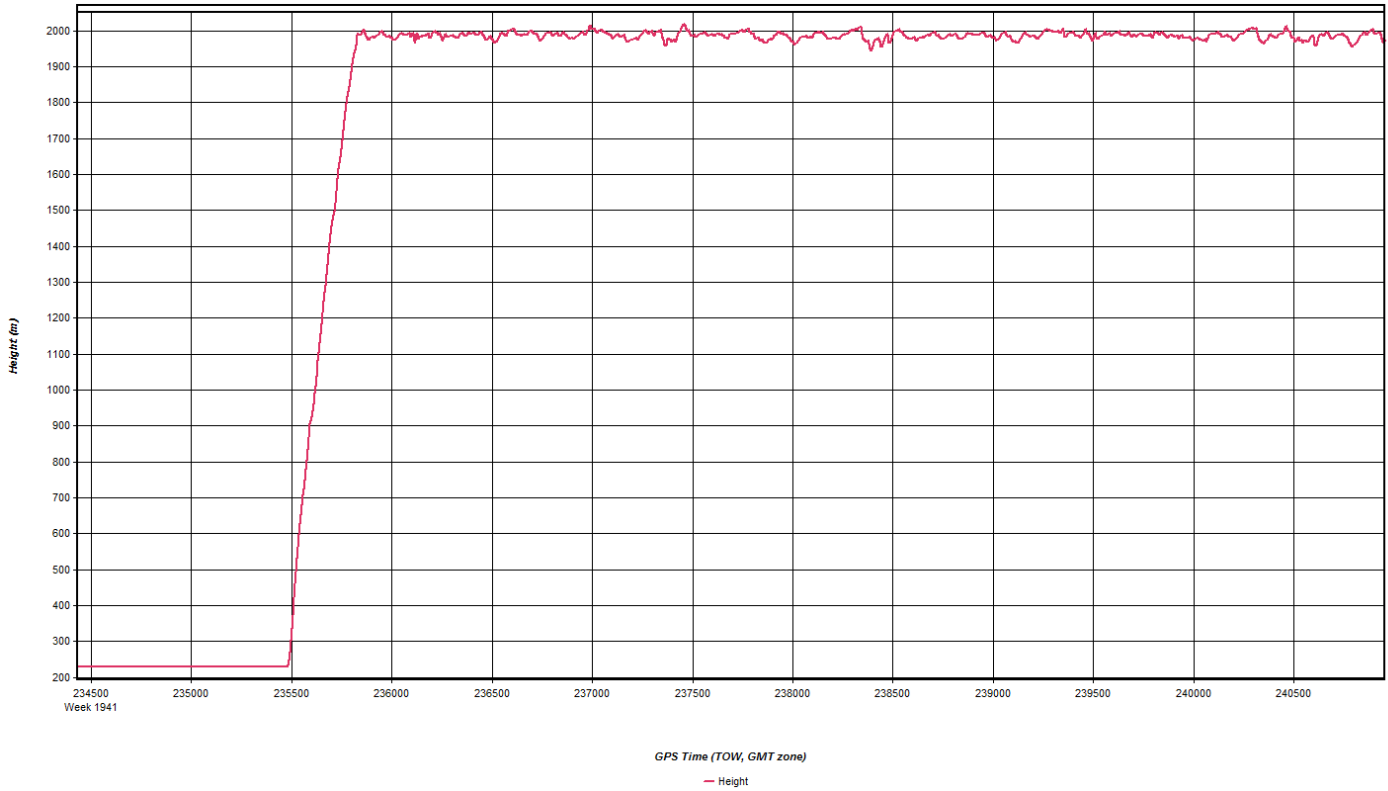
Total Proj Lines: **62** Lines Flown: **51** Online Time: **7** Min Mesh Time: **7** Min

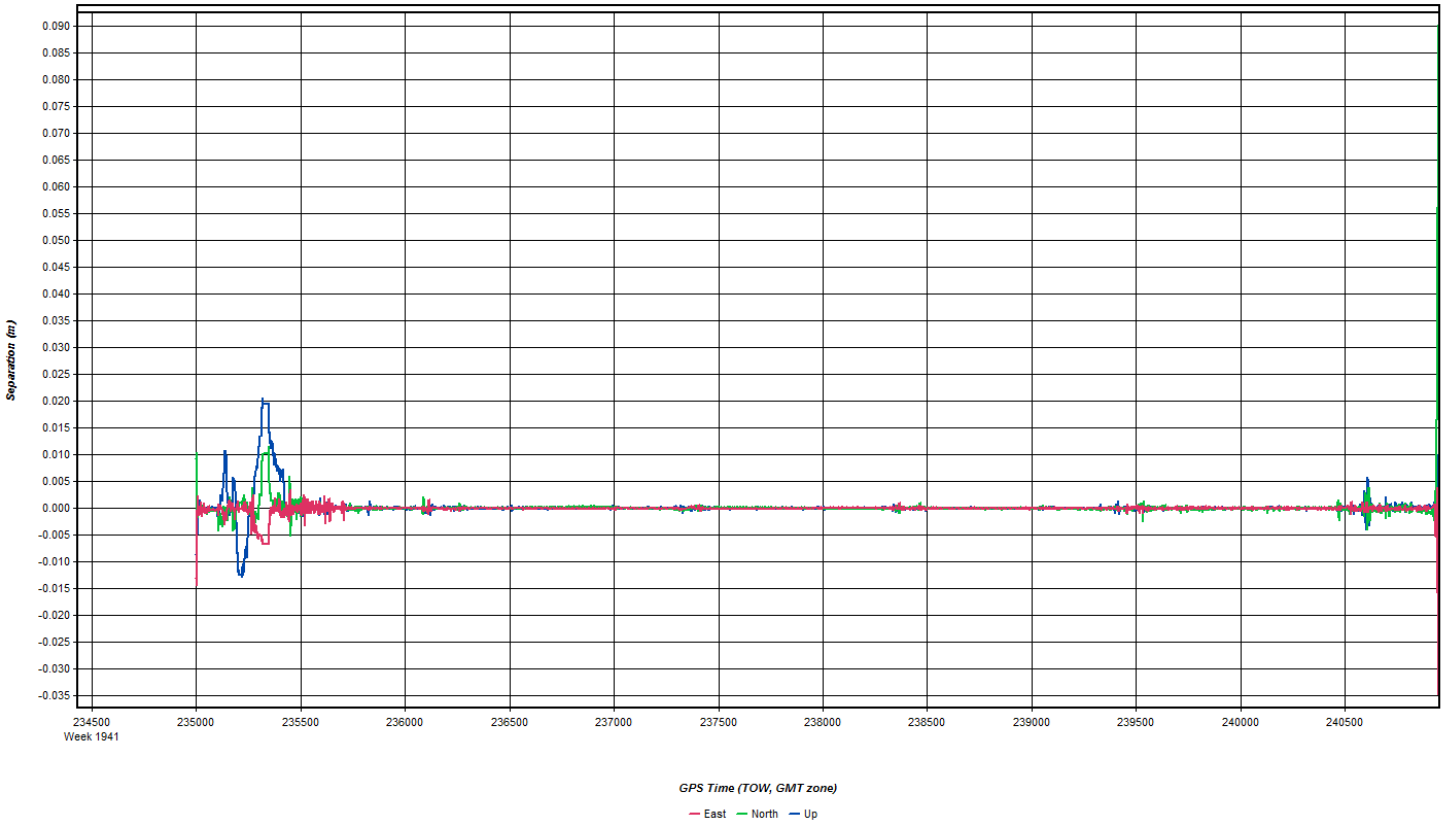
Generated by CamScanner from intsig.com

Mar 21, 2017-B (N262AS, SN7161)









Coordinate/Antenna Settings ? X

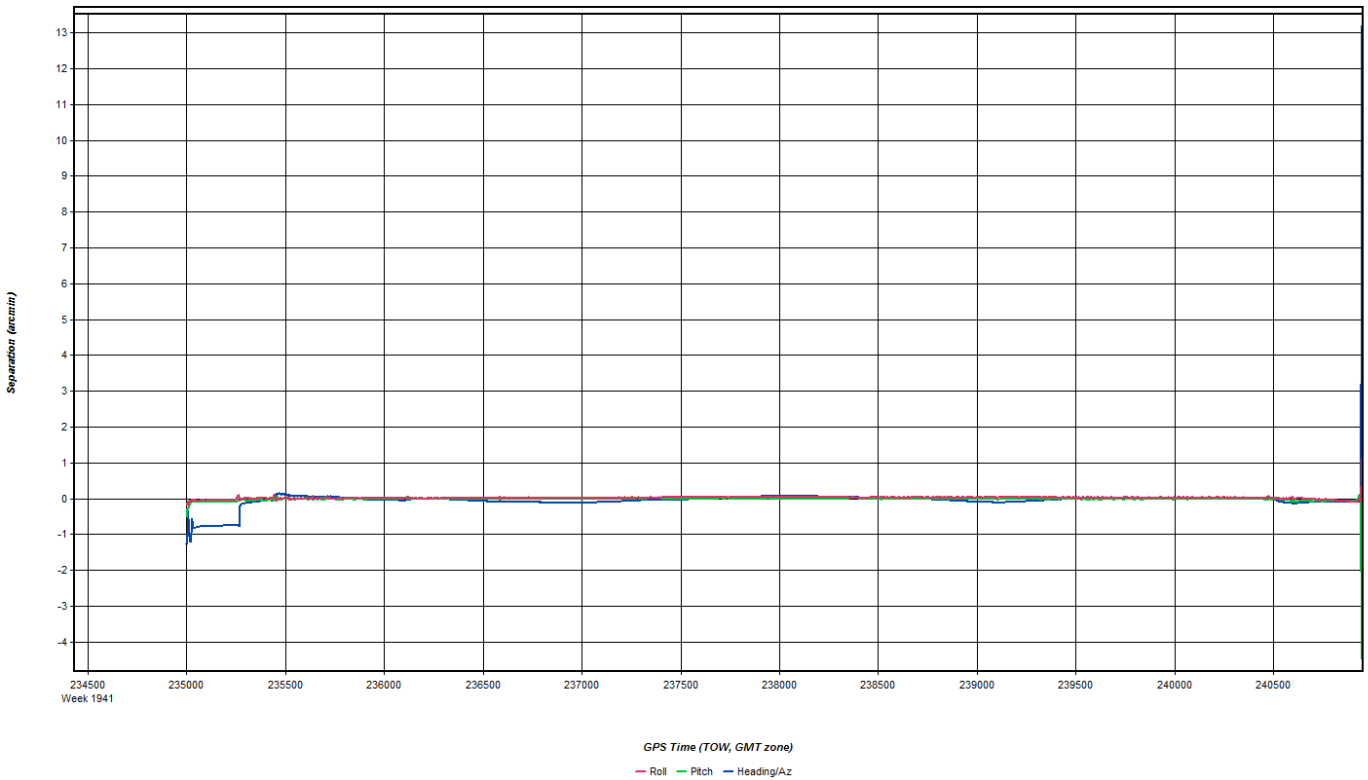
Master Remote

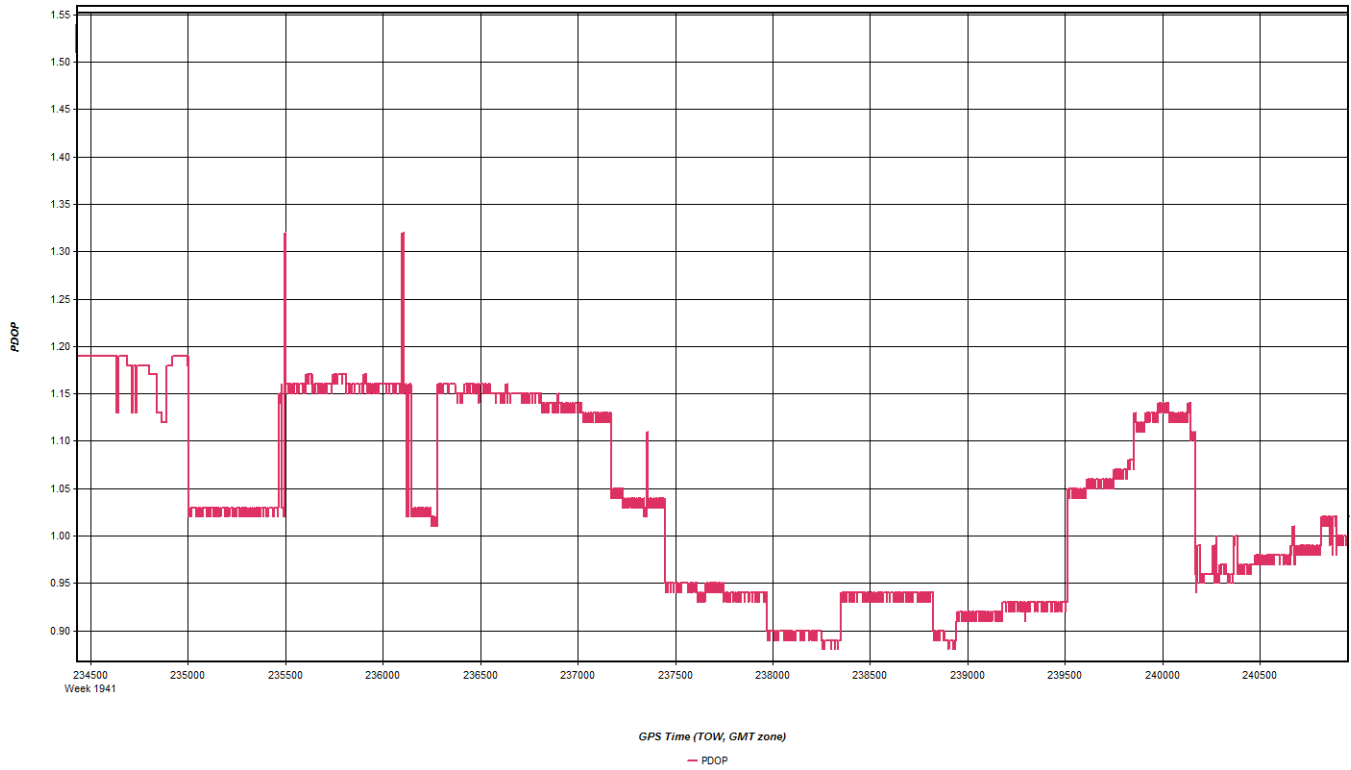
Base Station
 1: MAON Name: MAON Disabled
 File: E:\29050_WROC_Dane_Co\20170321_170541\WISCORS\MAONI

Coordinates
 Latitude: North 43 02 12.78293 Coord. options
 Longitude: West 89 24 34.27001 Save to Favorites
 Ellipsoidal height: 248.654 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel





Coordinate/Antenna Settings ? X

Master Remote

Base Station
 1: V094 Name: V094 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V094080\

Coordinates
 Latitude: North 43 15 22.97004 Coord. options
 Longitude: West 89 40 56.93005 Save to Favorites
 Ellipsoidal height: 99.988 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM57971.00, NONE View STA File
 Antenna profile: TRM57971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 2: V095 Name: V095 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V095080\

Coordinates
 Latitude: North 43 15 36.51004 Coord. options
 Longitude: West 89 02 59.33996 Save to Favorites
 Ellipsoidal height: 99.981 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 3: WIWB Name: WIWB Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\wiwb0800\

Coordinates
 Latitude: North 43 25 13.96922 Coord. options
 Longitude: West 88 08 55.47090 Save to Favorites
 Ellipsoidal height: 235.140 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
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 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Flight Log

Date: 3-21-17

Pg. of

(email Log daily to flight_Log_distribution_list@quantumspatial.com)

Project: WROC - DANE County **Proj #:** 29050 **Flight Mgmt File:** 20170321-185657

Aircraft: N222AS **Begin Hobbs:** 6487.6 **End Hobbs:** 6491.4 **Total:** 3.8 **Pilot:** WAGNER **Co-Pilot:** — **Tech:** CAREY

Dep Apt: KMSN **Dep Time (Lcl):** 1226 (Z): 1726 **Arr Apt:** KSBM **Arr Time (Local):** 1618 (Z): 2118 **Tot Time Aloft:** 3.8

CORS: ~~D/N~~ **Sta 1:** MASN **Flyovers:** Y / ~~N~~ **IF Y, times: Sta1)** **Sta2)**

GPS Unit: Y / N **Sta 1:** **Flyovers:** Y / N **IF Y, times: Sta1)** **Sta2)**

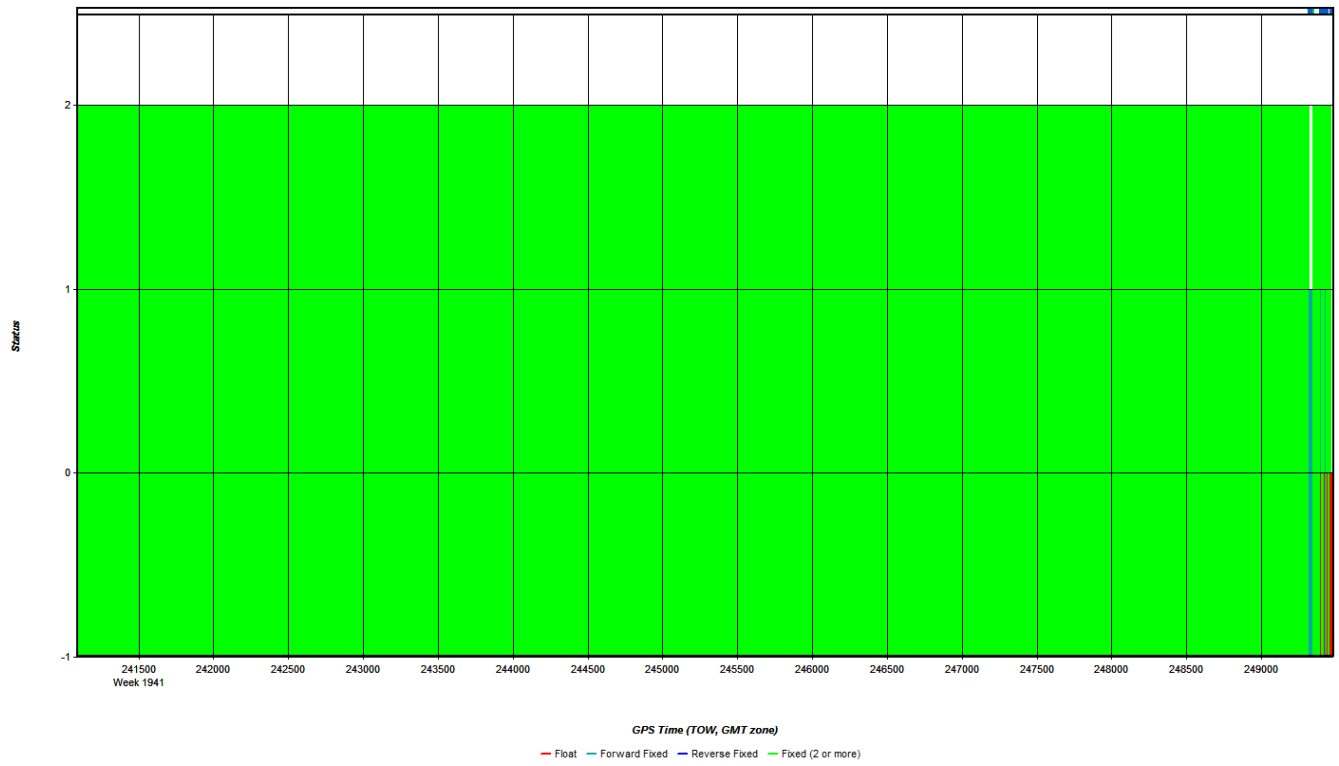
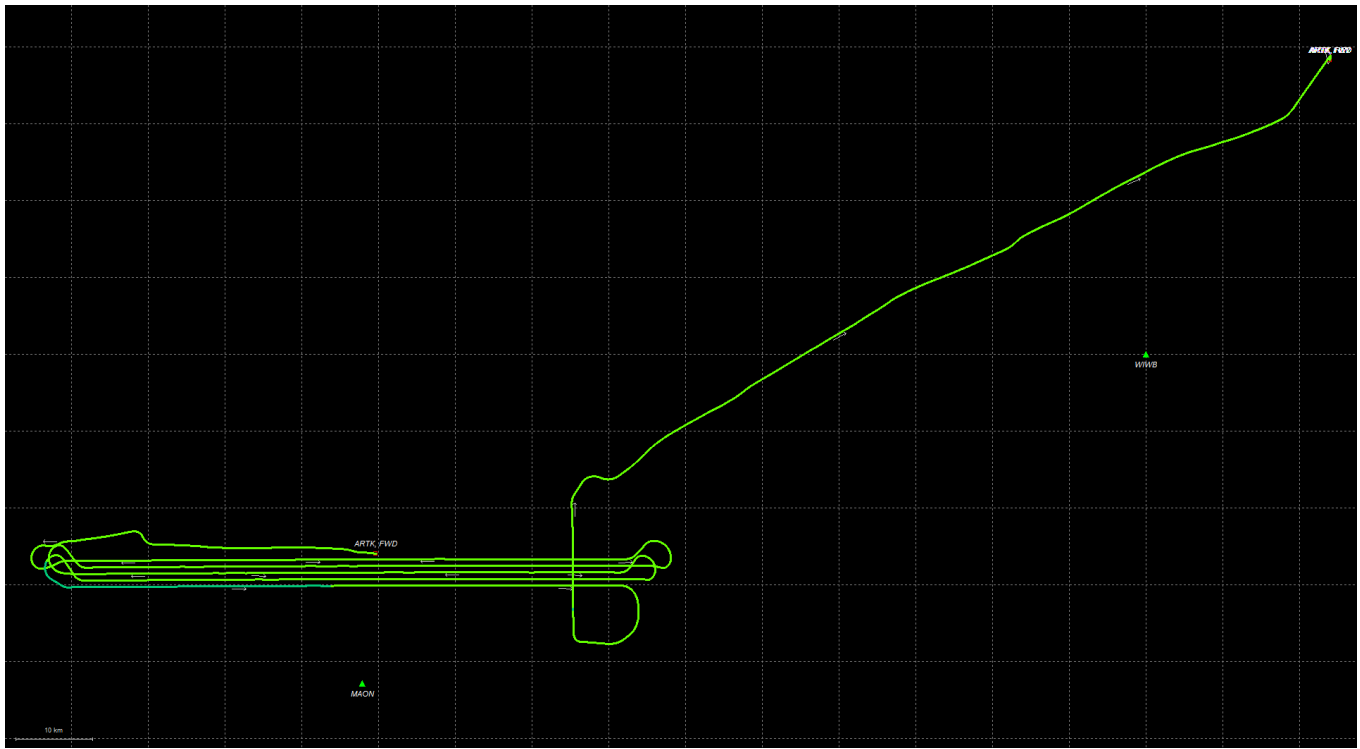
Gd Temp beg:		°C		End:		°C		OAT beg:		°C		End:		°C		Altimeter begin:		end:	
Type	Serial #	Alt AGL	Alt AMSL	Pulses In/Air	Alt AMSL	Avg Terr Ht	Max Gdspld	Pulse Rate	Power	Power	AVG Pt Spacing	PPSM	PPSM	PPSM	PPSM	PPSM	PPSM	PPSM	PPSM
LIDAR	ALS 70	7161	5381	6506	6506	1070	150	299	100%	100%									
	FOV 40	53	MPIA Y/N	2															

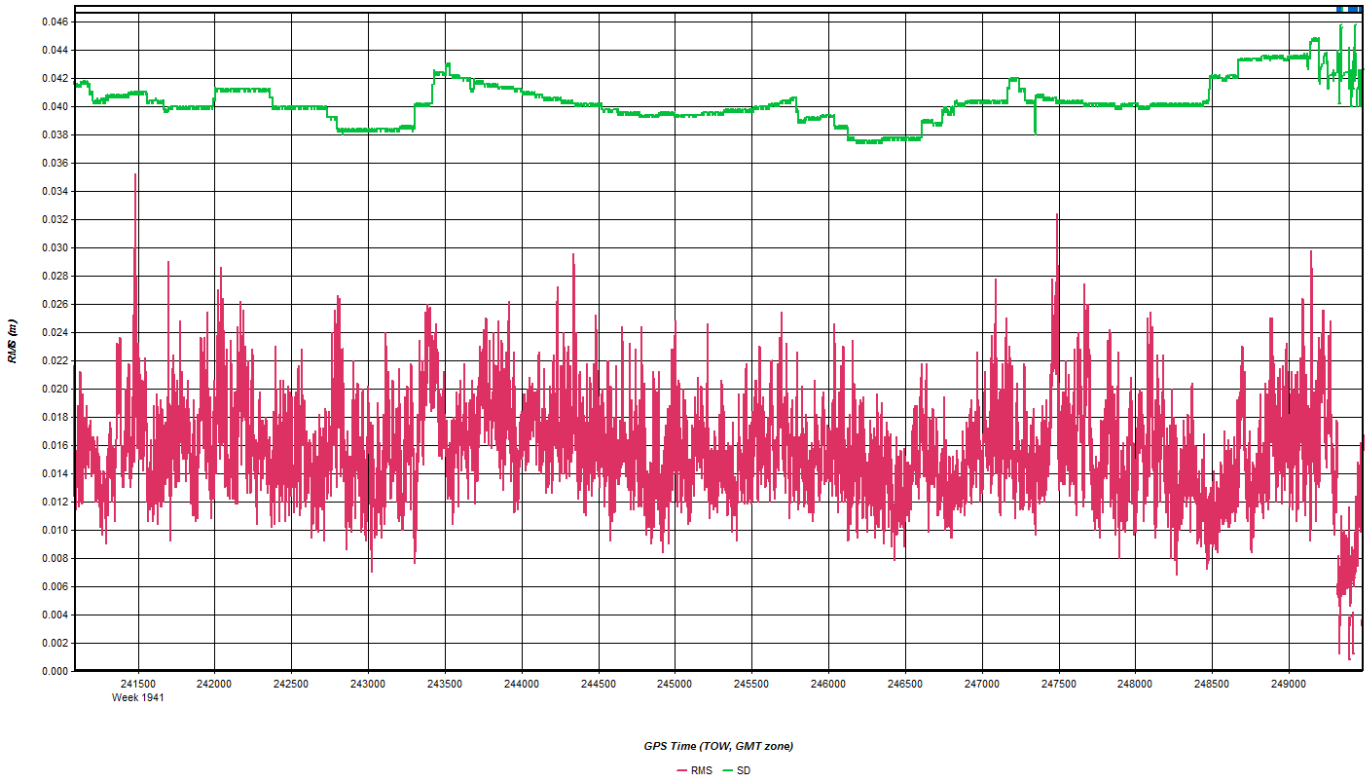
Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PPOP/sats	GPS Altitude	Crab	Turb (0-4)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
12	273	1739	1754	150	1.2	6506	1	0	MSN → SITE → S/FIG
13	92	1757	1811		1.3	6506			OVC 20K / SCT 17K / SCT 13K
14	273	1814	1830		1.2	6515			Light smoke? End of line / small brush fire
15	92	1832	1847		1.1	6516			Flight Pro crash / System crash After end of line
16	92	1910	1924	150	1.2	6531		0	In Air Restart - 6min + S/FIG
17	273	1928	1944		1.1	6535			SKC
18	92	1946	2001		1.2	6529			
19	273	2004	2020		1.4	6555			
20	92	2023	2037		1.2	6552			
XFLT 0		2041	2045		1.3	6555			XFLT (unplanned)
									S/FIG → KSBM

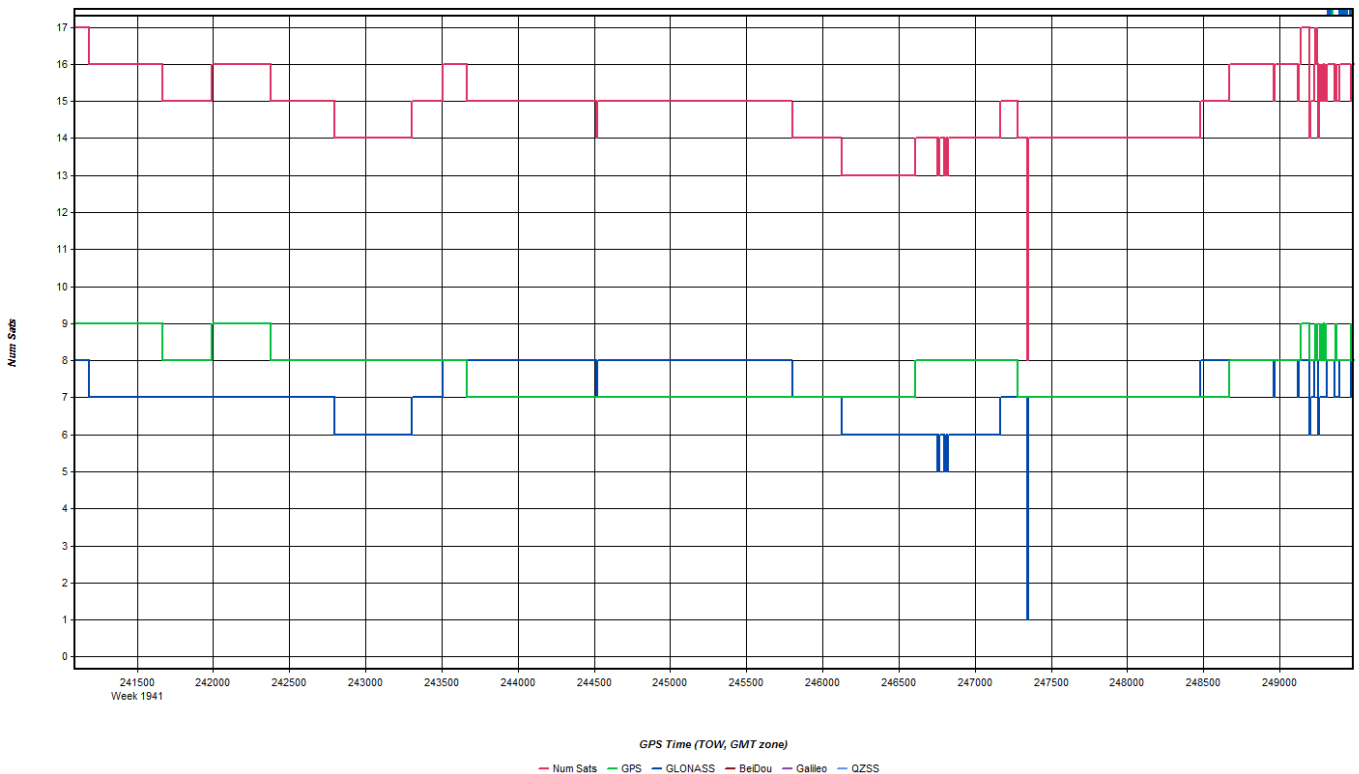
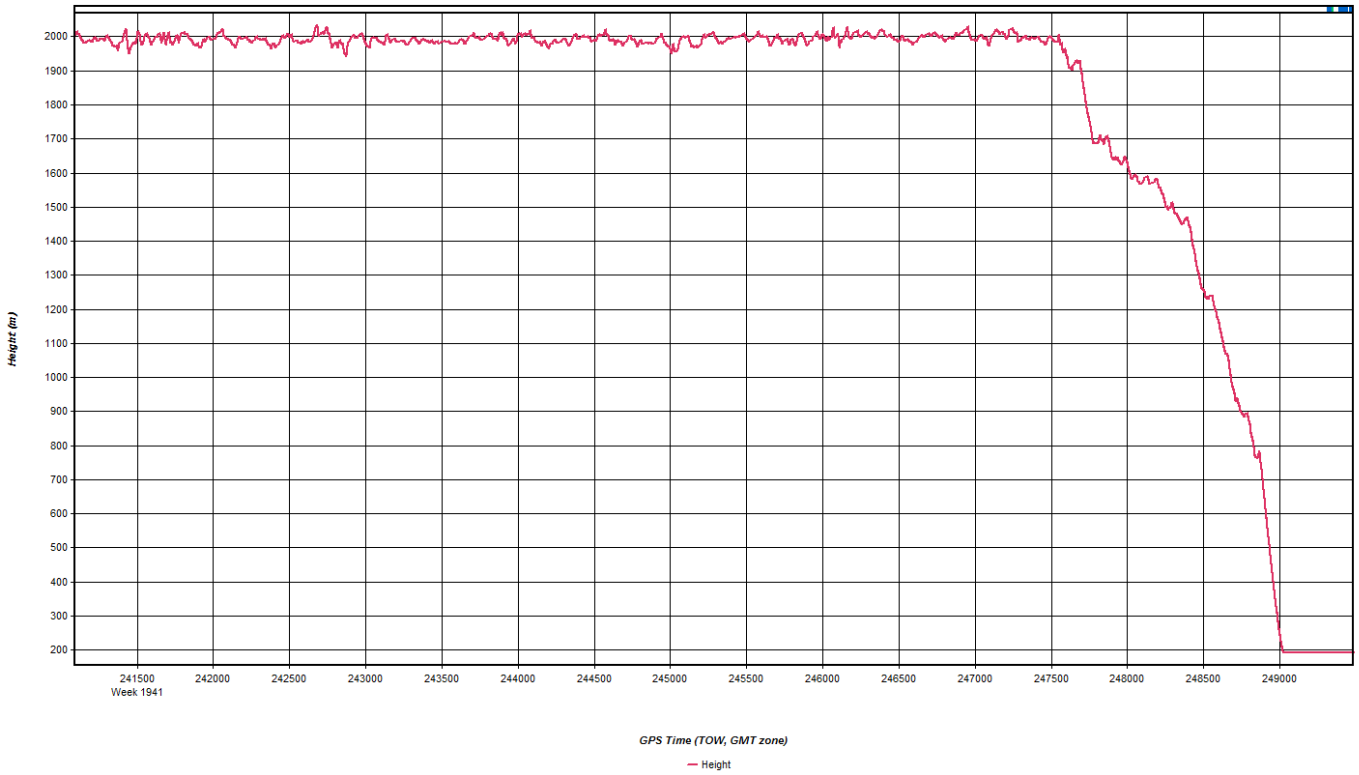
Total Proj Lines: 51/62	Lines Flown: 9	Lines Remain: 42	Online Time: 3.1	Job Time: 1.7	Notes:
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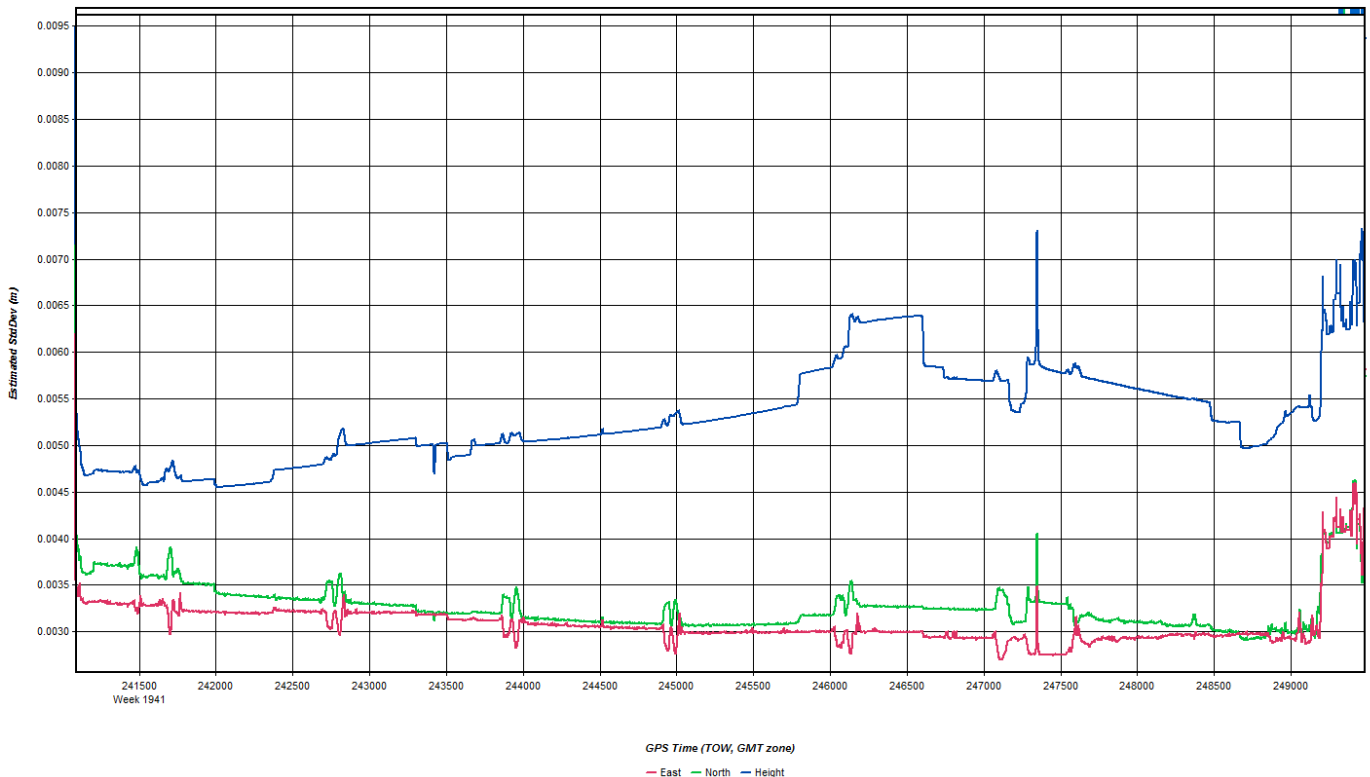
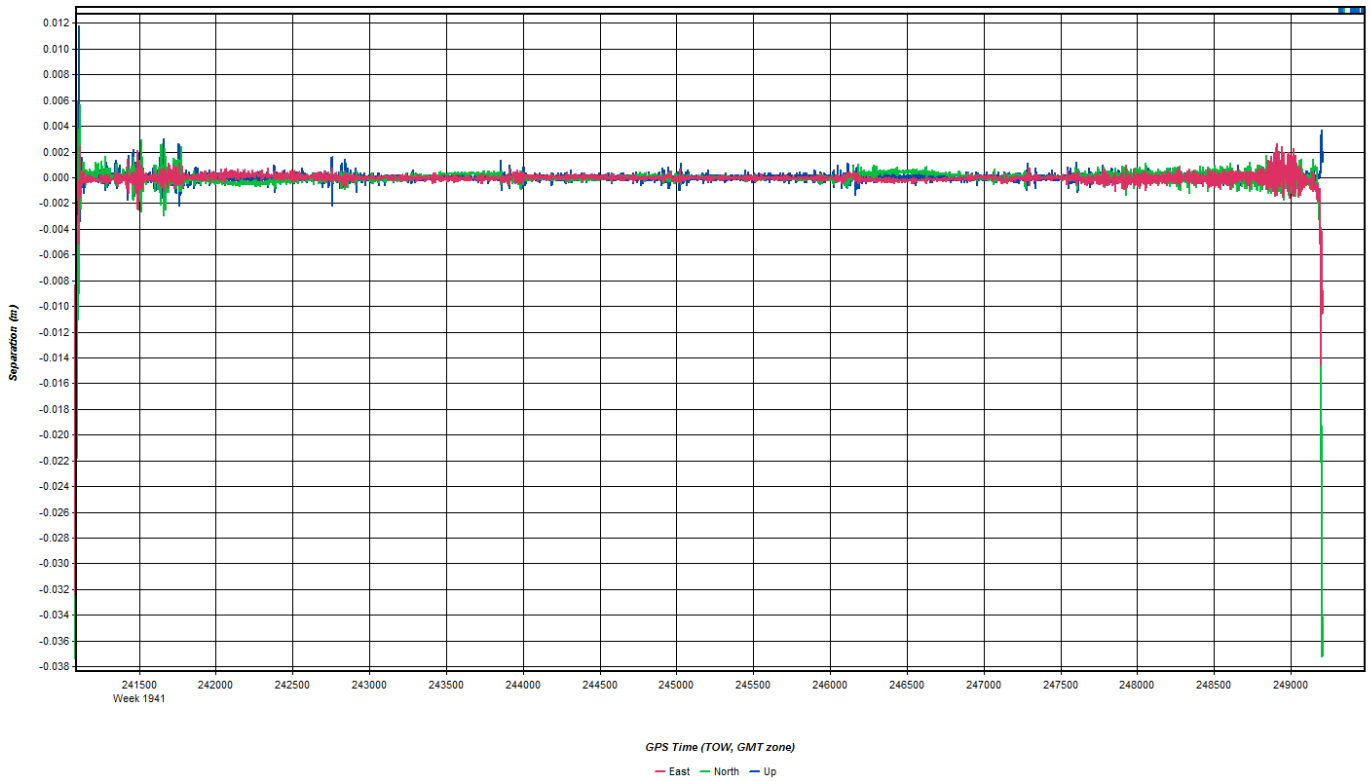
generated by CamScanner from intsig.com

Mar 21, 2017-C (N262AS, SN7161)









Coordinate/Antenna Settings

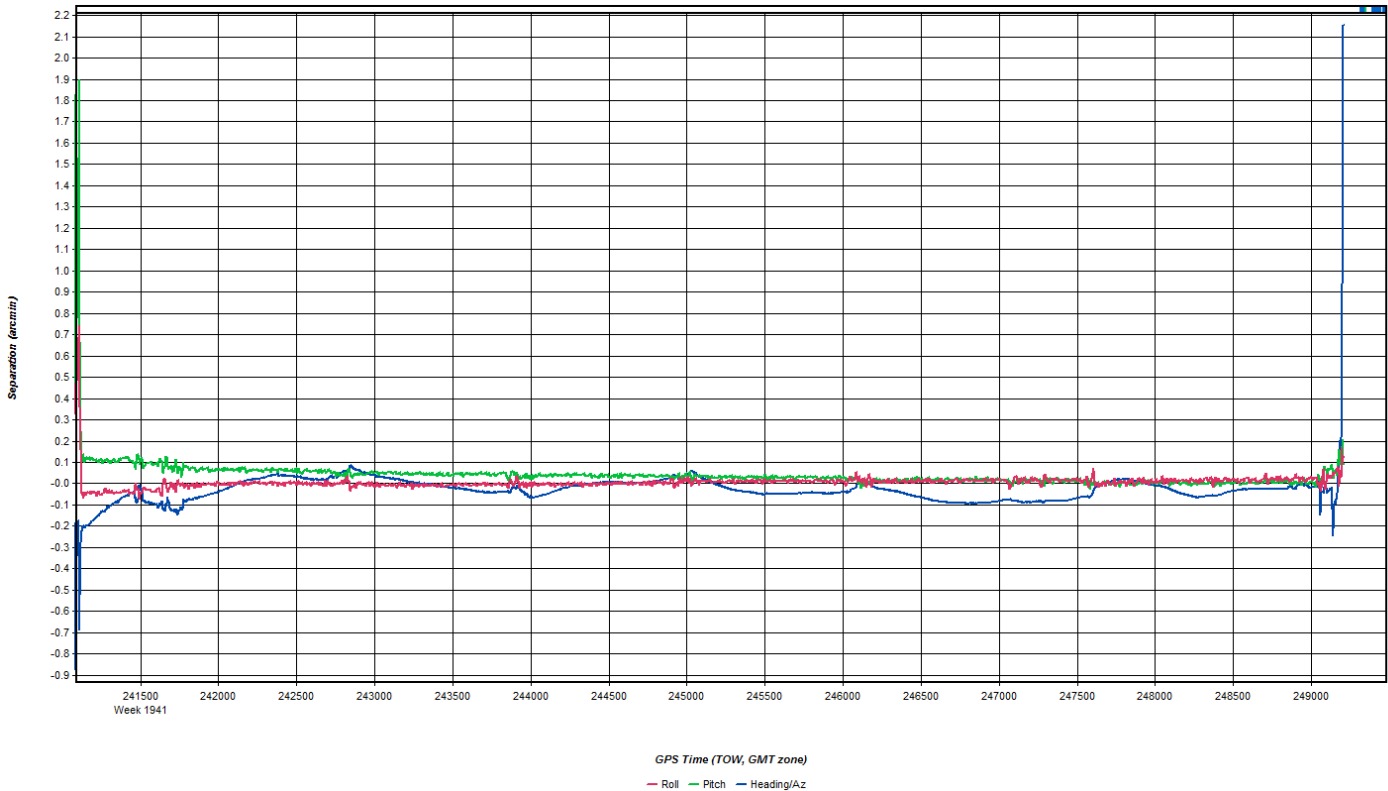
Master Remote

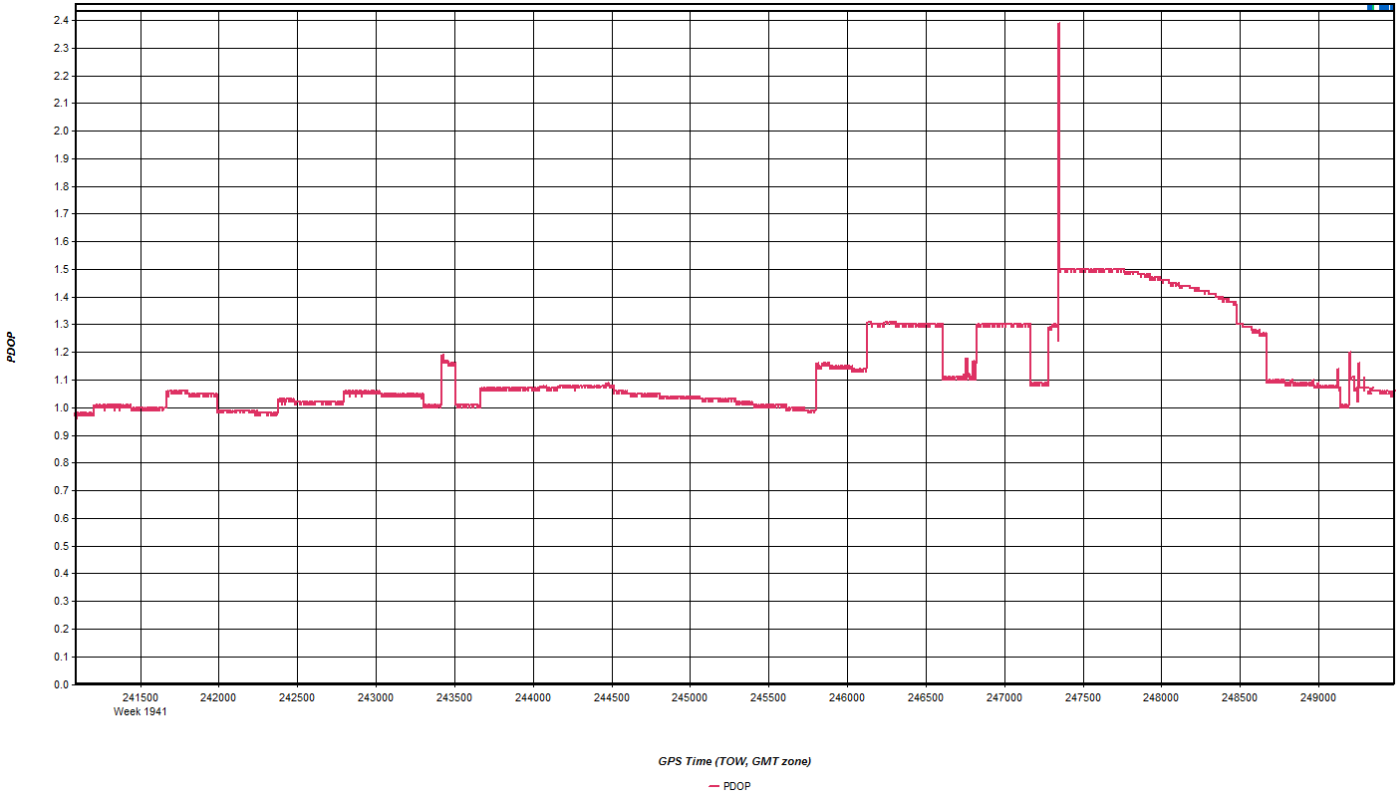
Base Station
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Coordinates
 Latitude: North 43 02 12.78293 Coord. options
 Longitude: West 89 24 34.27001 Save to Favorites
 Ellipsoidal height: 248.654 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel





? X

Coordinate/Antenna Settings

Master Remote

Base Station

1: WIWB Name: WIWB Disabled

File: E:\29050_WROC_Dane_Co\20170321_185657\wiwb0800.gpb

Coordinates

Latitude: North 43 25 13.96922 Coord. options

Longitude: West 88 08 55.47090 Save to Favorites

Ellipsoidal height: 235.140 m

Datum: WGS84 Proc Datum: WGS84

Epoch: year

Antenna Height

From station file: TRM55971.00, NONE View STA File

Antenna profile: TRM55971.00 Info

Measured height: 0.000 m

ARP to L1 offset: 0.067 m

Applied height: 0.067 m

Measured to

ARP

L1 Phase Centre

Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 1: V094 Name: V094 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V094080A

Coordinates
 Latitude: North 43 15 22.97004 Coord. options
 Longitude: West 89 40 56.93005 Save to Favorites
 Ellipsoidal height: 99.988 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
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 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

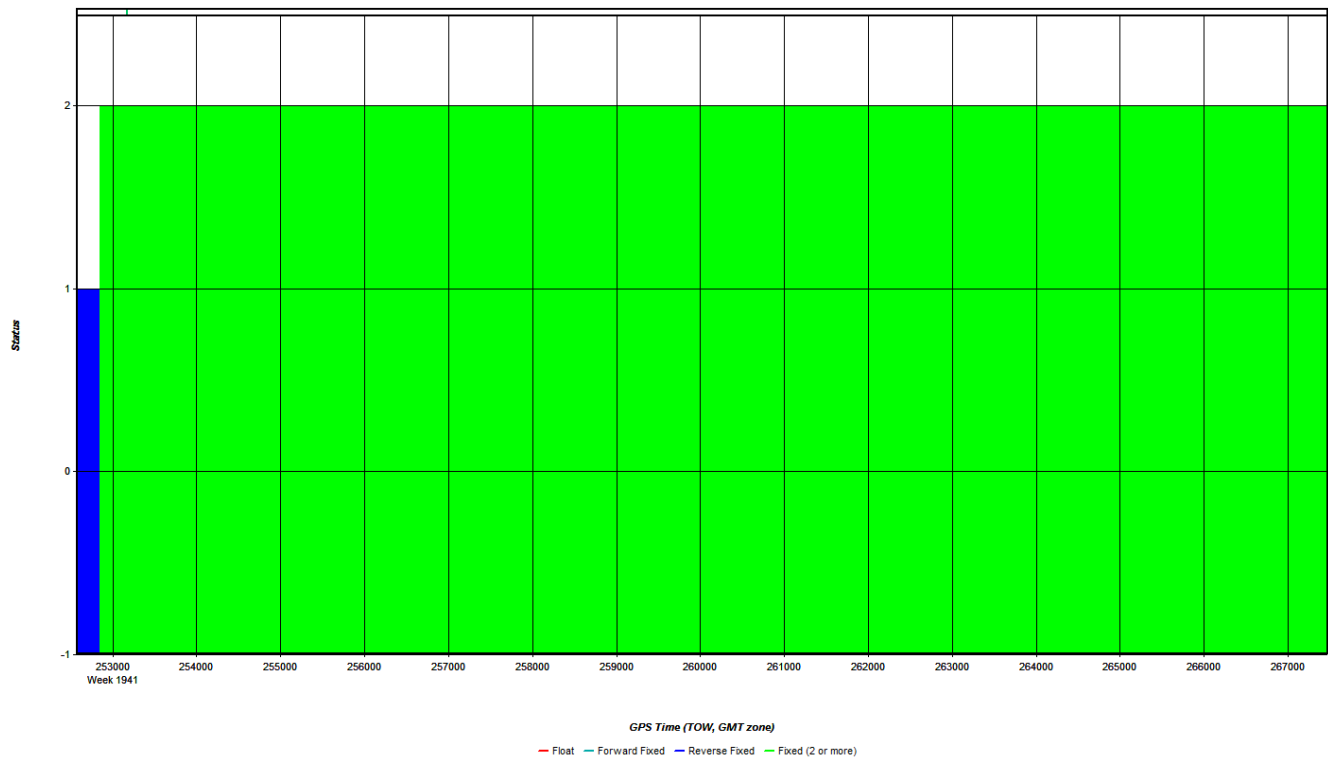
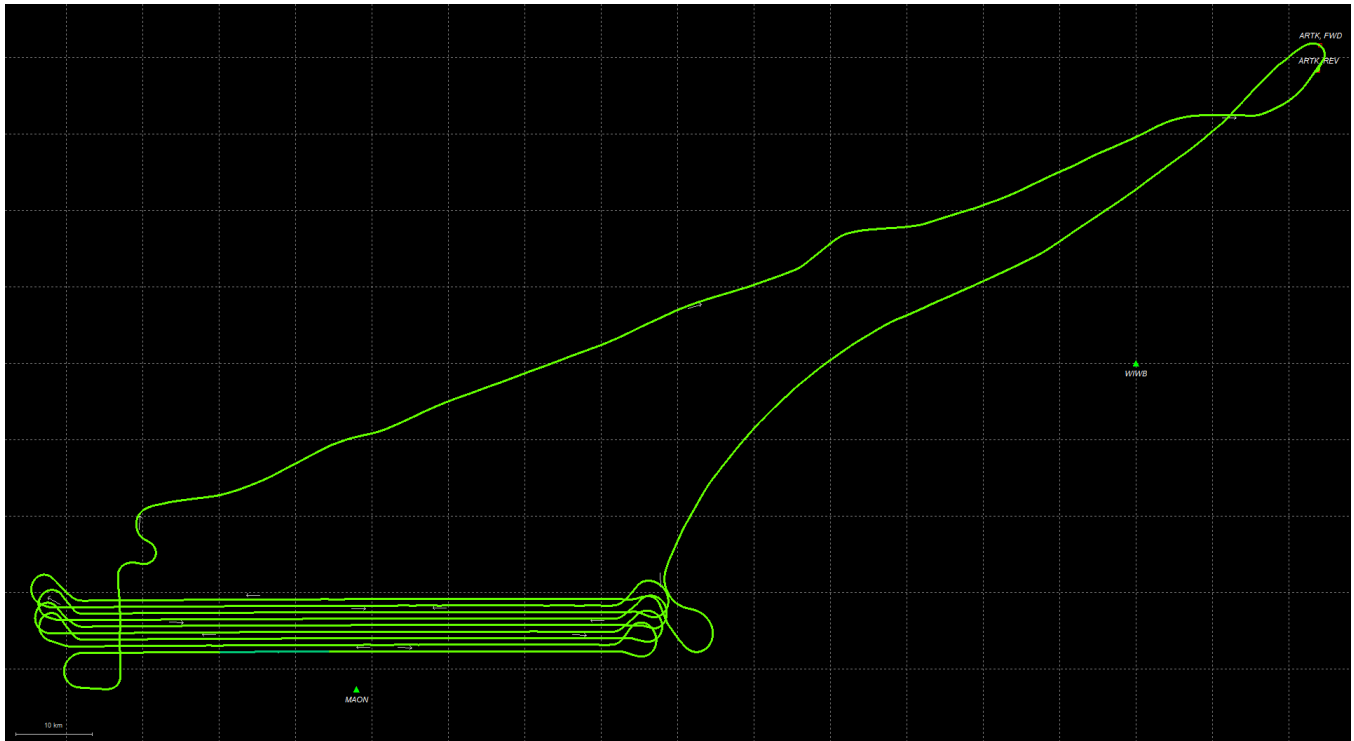
Base Station
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 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V095080A

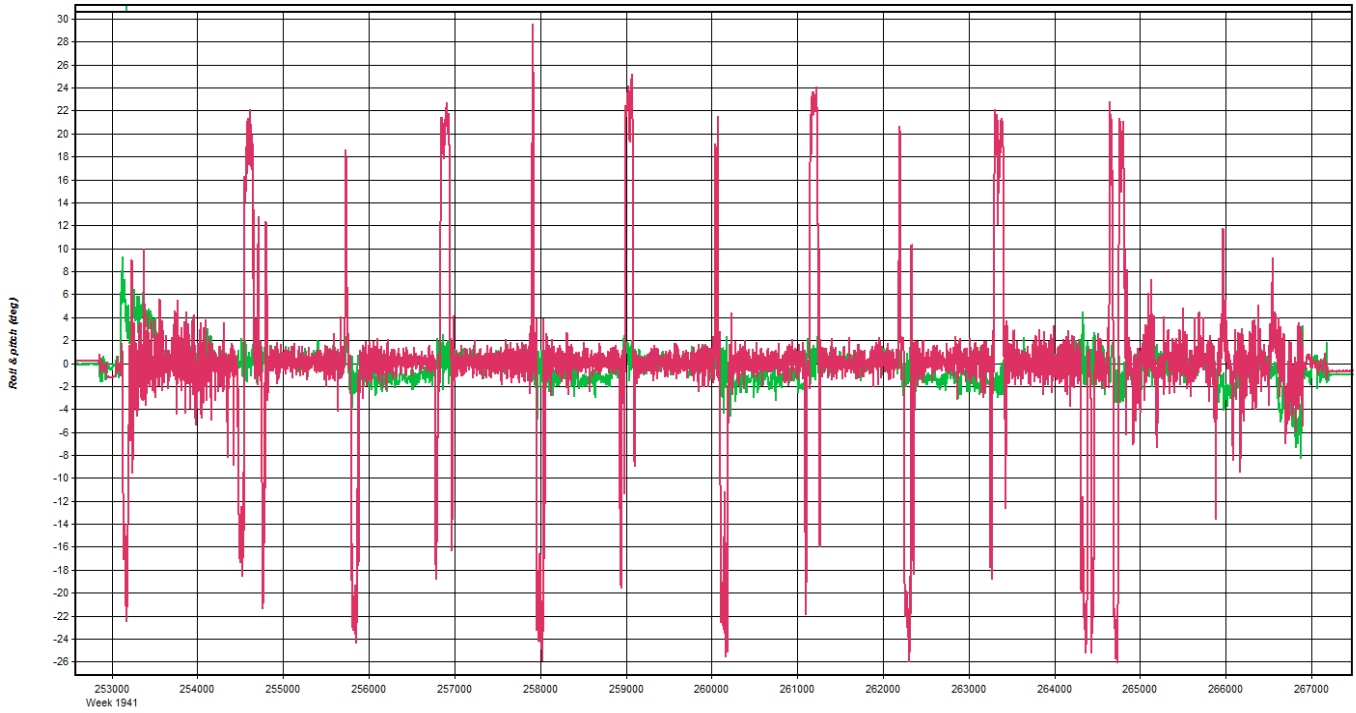
Coordinates
 Latitude: North 43 15 36.51004 Coord. options
 Longitude: West 89 02 59.33996 Save to Favorites
 Ellipsoidal height: 99.981 m
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 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

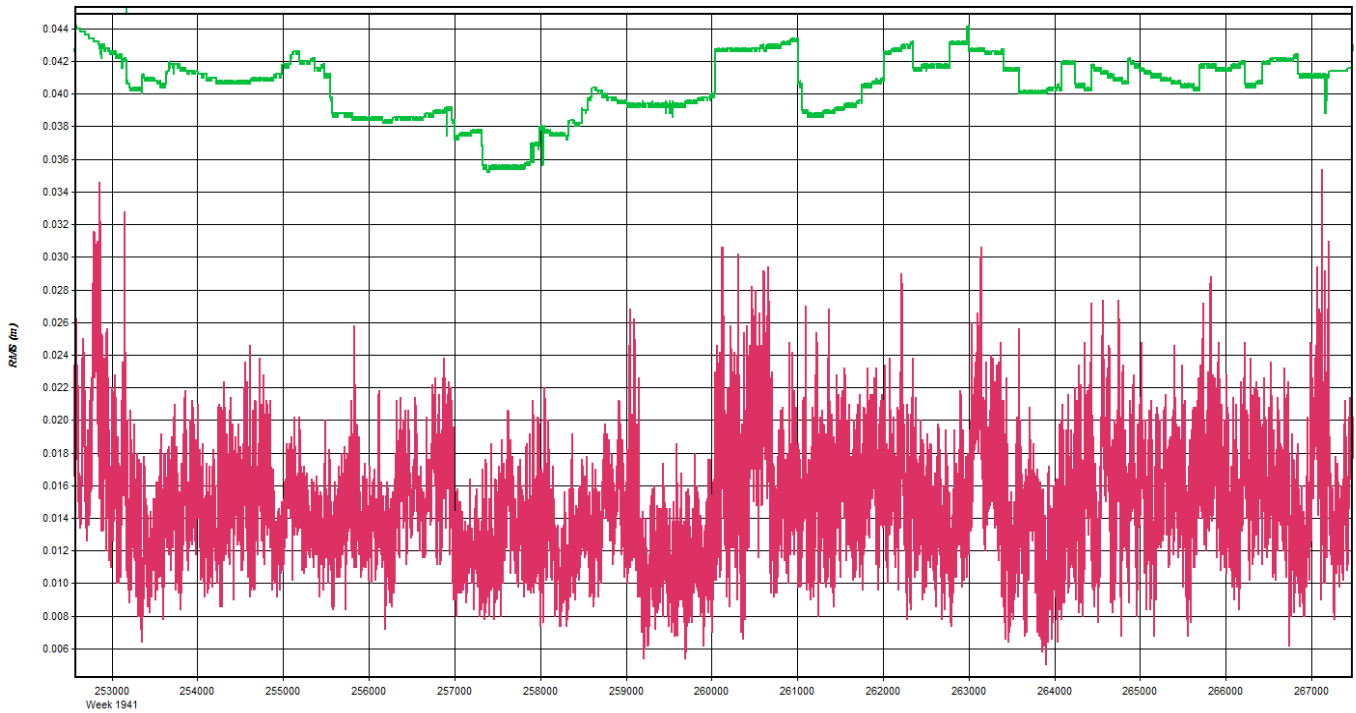
OK Cancel

Mar 21, 2017-D (N262AS, SN7161)

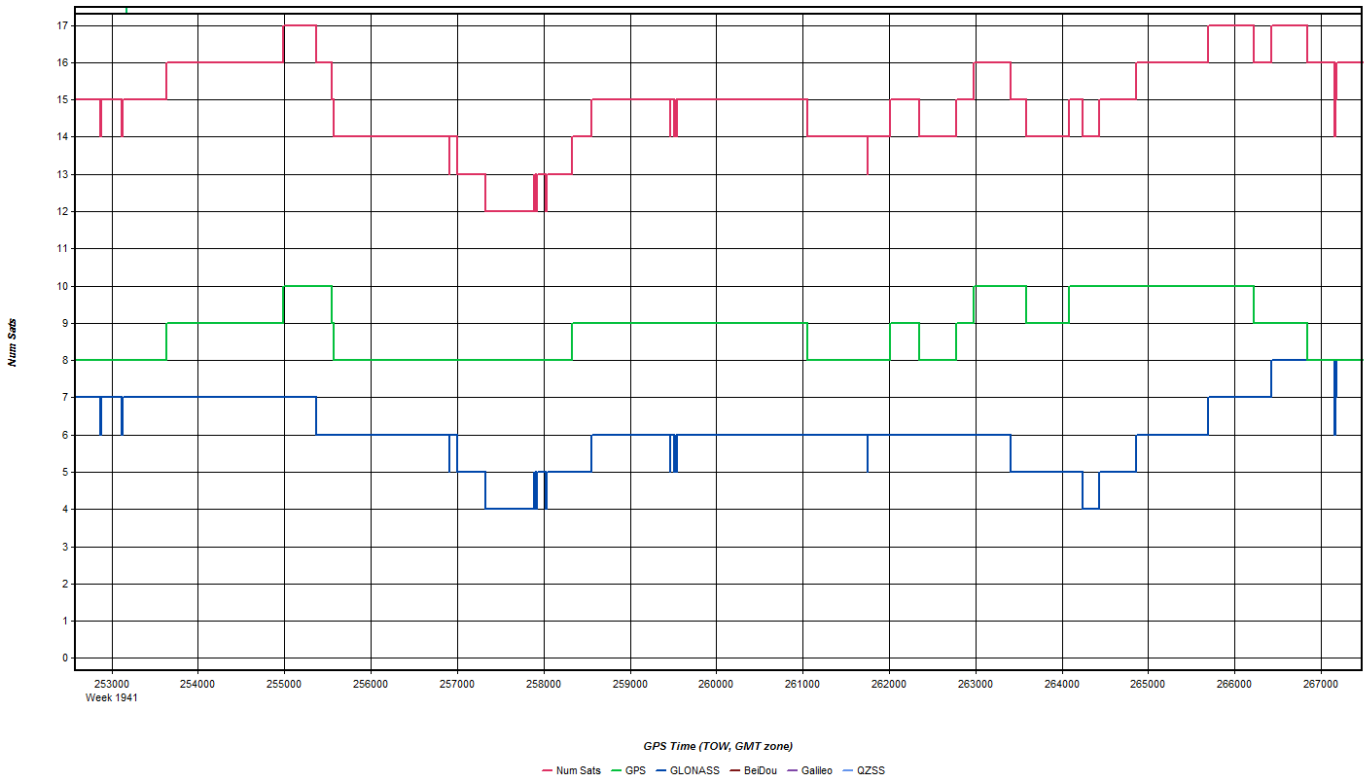
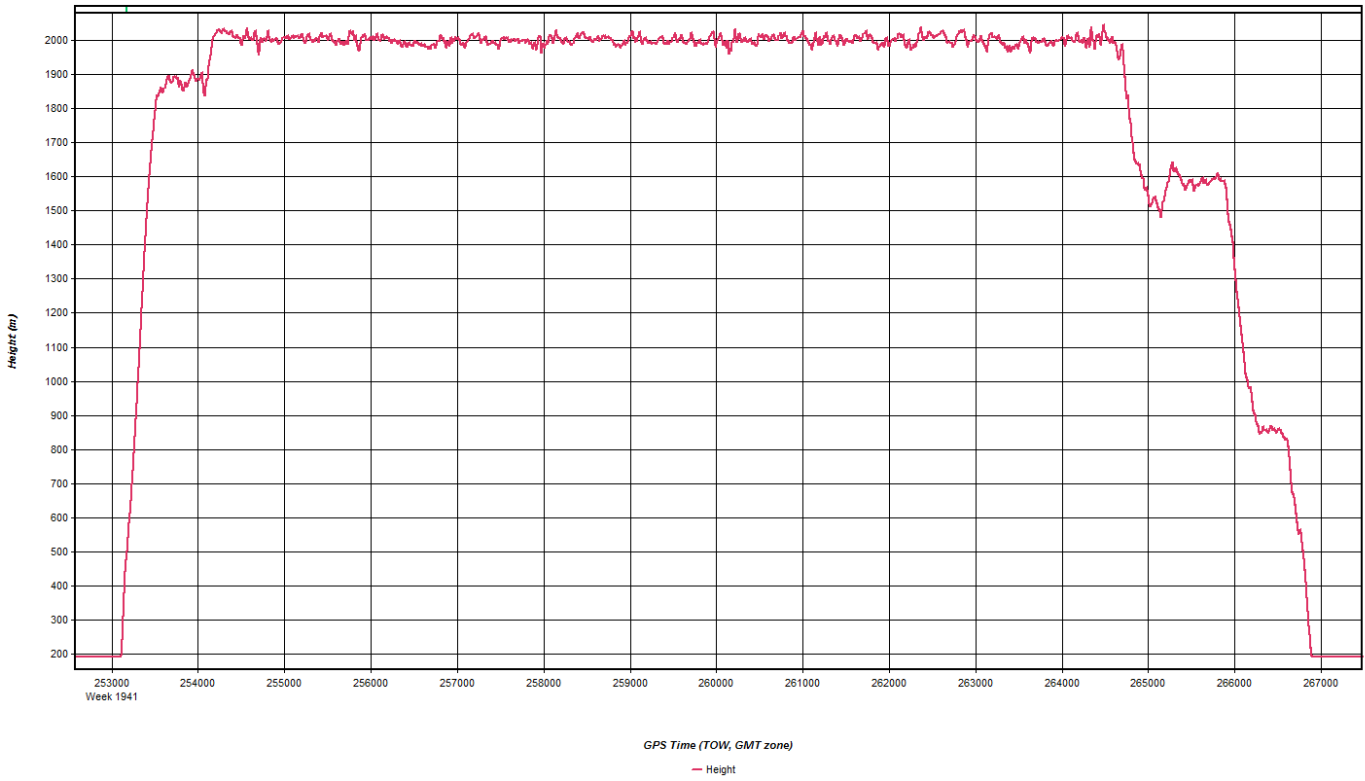


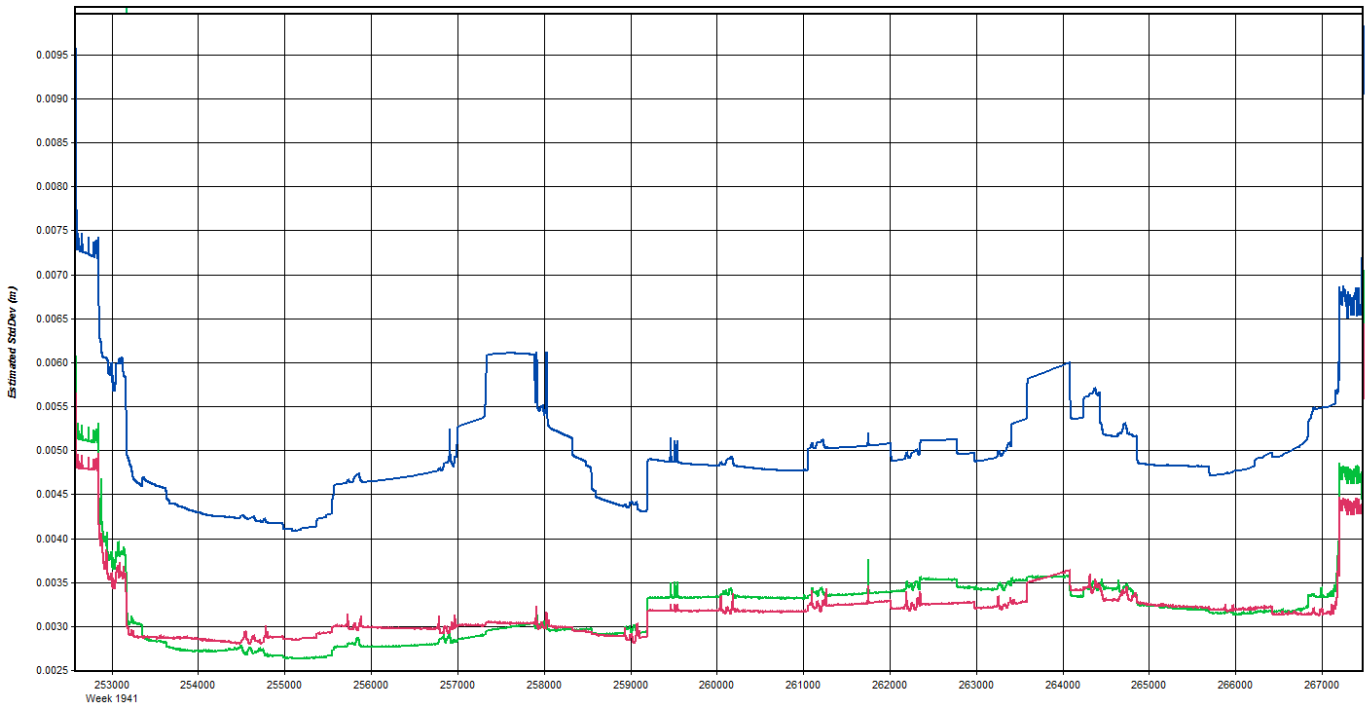
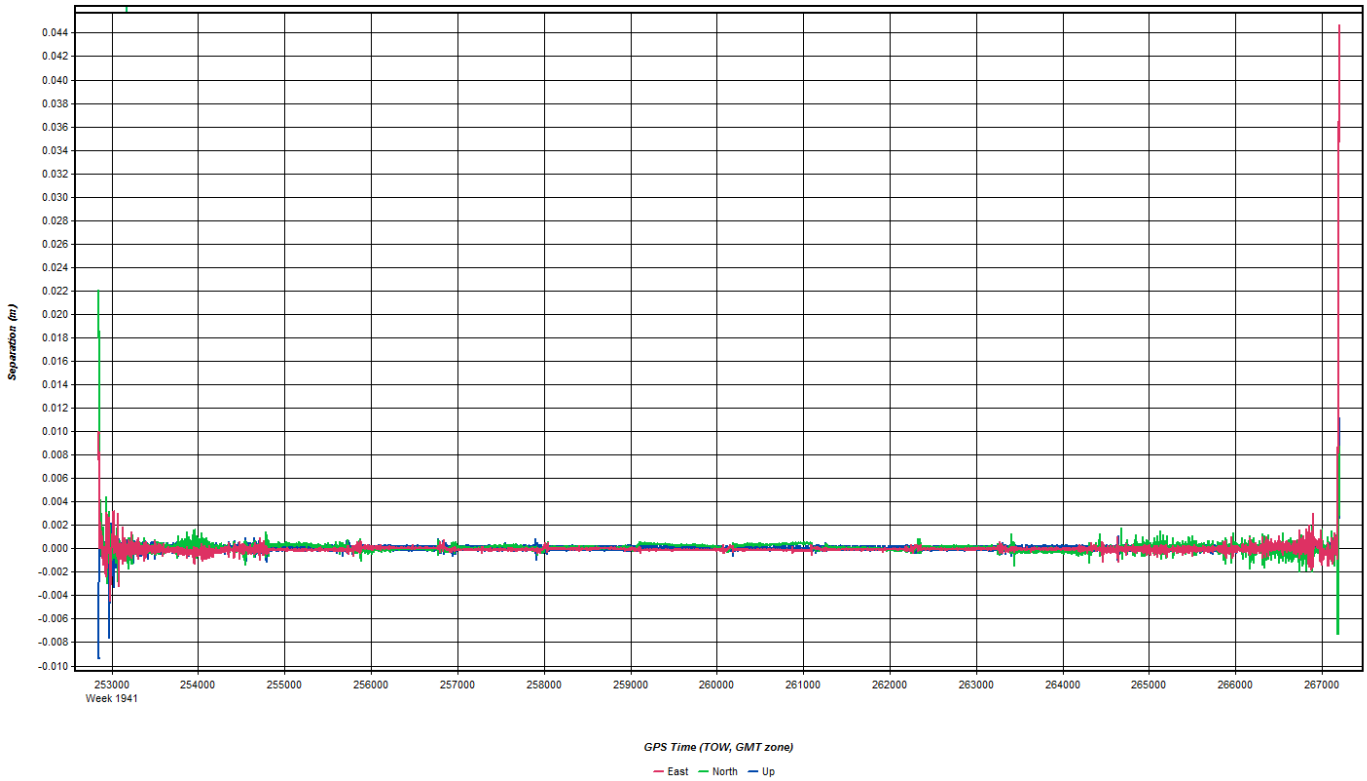


GPS Time (TOW, GMT zone)
— Roll — Pitch



GPS Time (TOW, GMT zone)
— RMS — SD





Coordinate/Antenna Settings

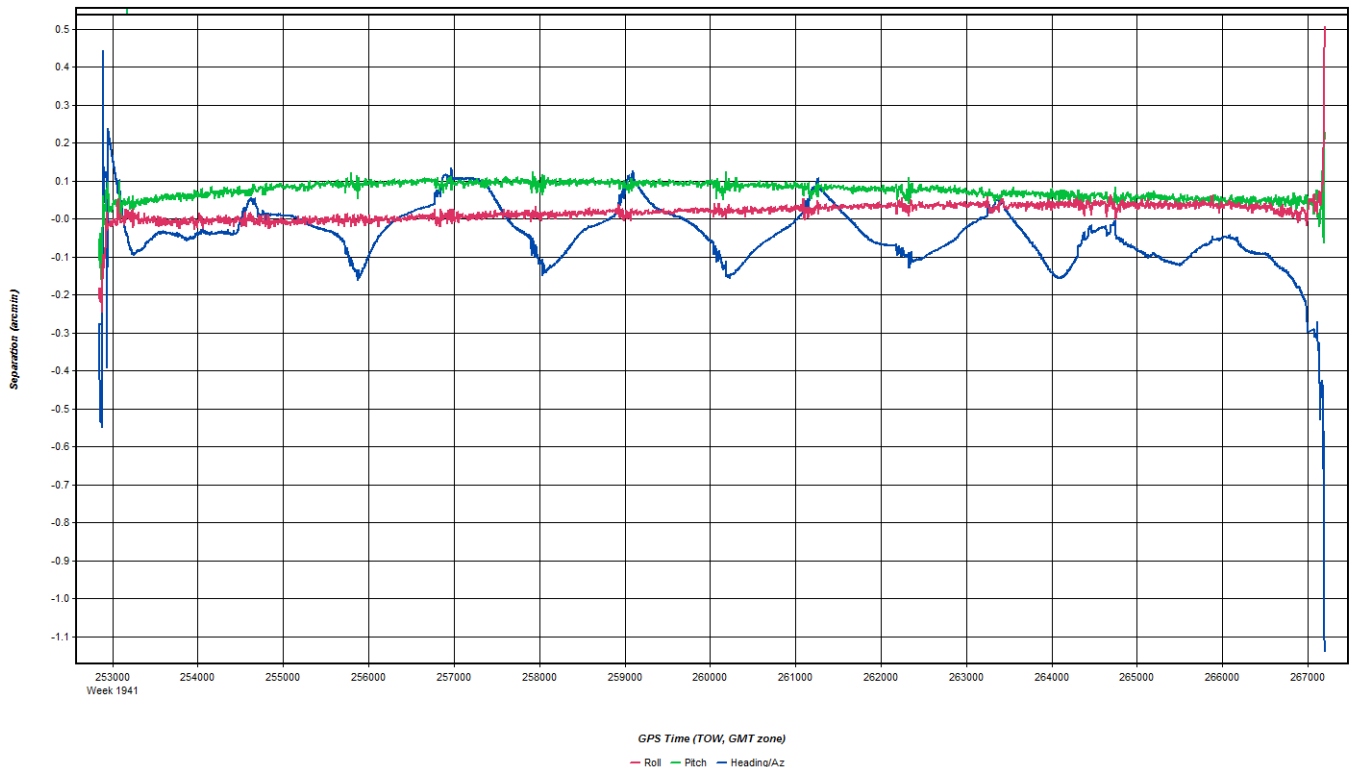
Master Remote

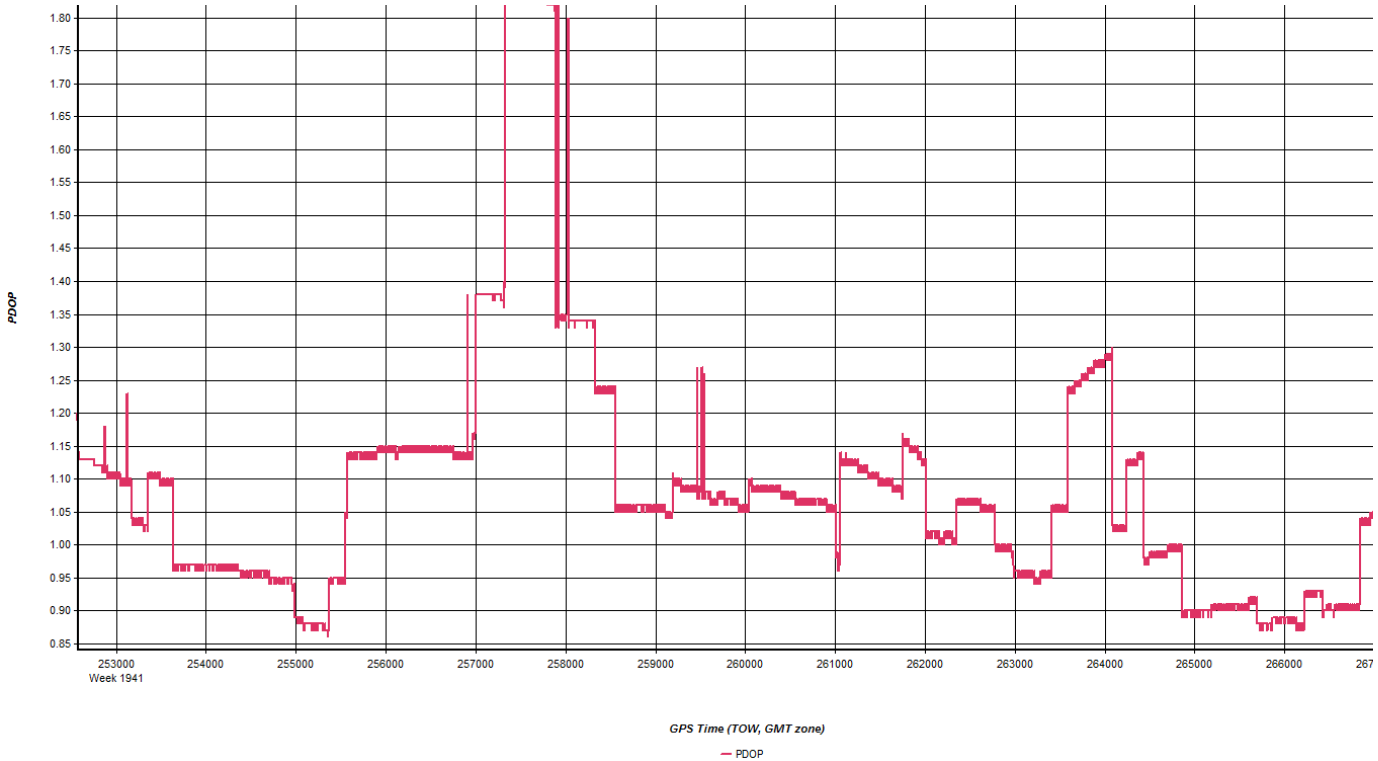
Base Station
 2: MAON Name: MAON Disabled
 File: E:\29050_WROC_Dane_Co\20170321_220755\WISCORS\MAON\

Coordinates
 Latitude: North 43 02 12.78293 Coord. options
 Longitude: West 89 24 34.27001 Save to Favorites
 Ellipsoidal height: 248.654 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
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 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel





Coordinate/Antenna Settings ? X

Master Remote

Base Station
 1: WIWB Name: WIWB Disabled
 File: E:\29050_WROC_Dane_Co\20170321_220755\wiwb0800.gpb

Coordinates
 Latitude: North 43 25 13.96922 Coord. options
 Longitude: West 88 08 55.47090 Save to Favorites
 Ellipsoidal height: 235.140 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 1: V094 Name: V094 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V094080\

Coordinates
 Latitude: North 43 15 22.97004 Coord. options
 Longitude: West 89 40 56.93005 Save to Favorites
 Ellipsoidal height: 99.988 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM57971.00, NONE View STA File
 Antenna profile: TRM57971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 2: V095 Name: V095 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V095080\

Coordinates
 Latitude: North 43 15 36.51004 Coord. options
 Longitude: West 89 02 59.33996 Save to Favorites
 Ellipsoidal height: 99.981 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Flight Log

Scanned by CamScanner

Project: DANE COUNTY - AYRES WROC **Proj #:** 20050 **Date:** 3-21-17 **Page:** 1 of 1

Flight Mgmt File: 20170321_220755 **UIC:** (A) B C D E

Aircraft: N262AS **Begin Hobbs:** 6491.4 **End Hobbs:** 6955.7 **Total:** 3.9 **Pilot:** RABTKE **Co-Pilot:** - **Tech:** SCHAEUE

Dep Apt: K58M **Dep Time (Local):** 22:11 **Arr Apt:** K58M **Arr Time (Local):** 21:16 **Tot Time Aloft:** -

CORS: Y/N **Sta 1:** MSN **Sta 2:** - **Flyovers:** Y/N **IF Y, times:** Sta1) - Sta2) -

GPS UNITS: Y/N **Sta 1:** - **Sta 2:** - **Flyovers:** Y/N **IF Y, times:** Sta1) - Sta2) -

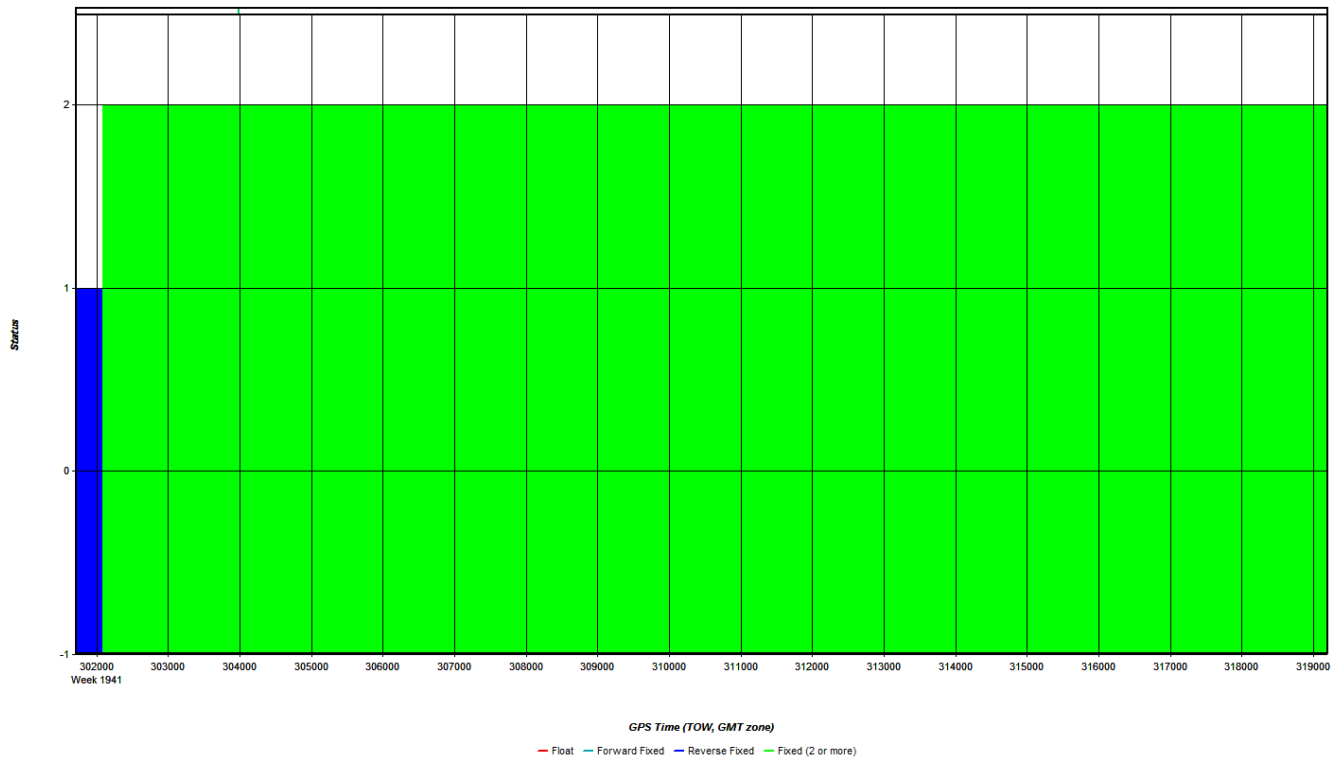
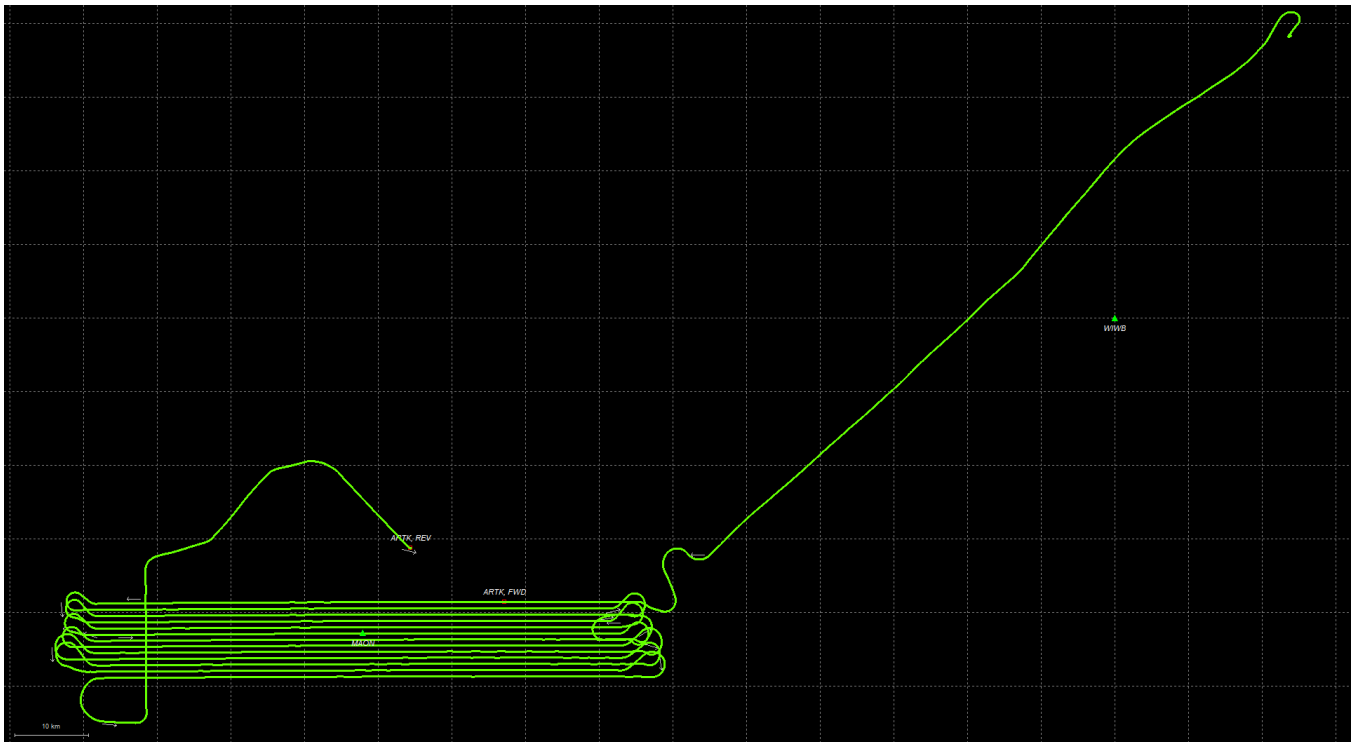
Gd Temp beg: 1 °C **End:** -1 °C **OAT beg:** -6 °C **End:** -8 °C **Altimeter begin:** 30.82 **end:** 30.36

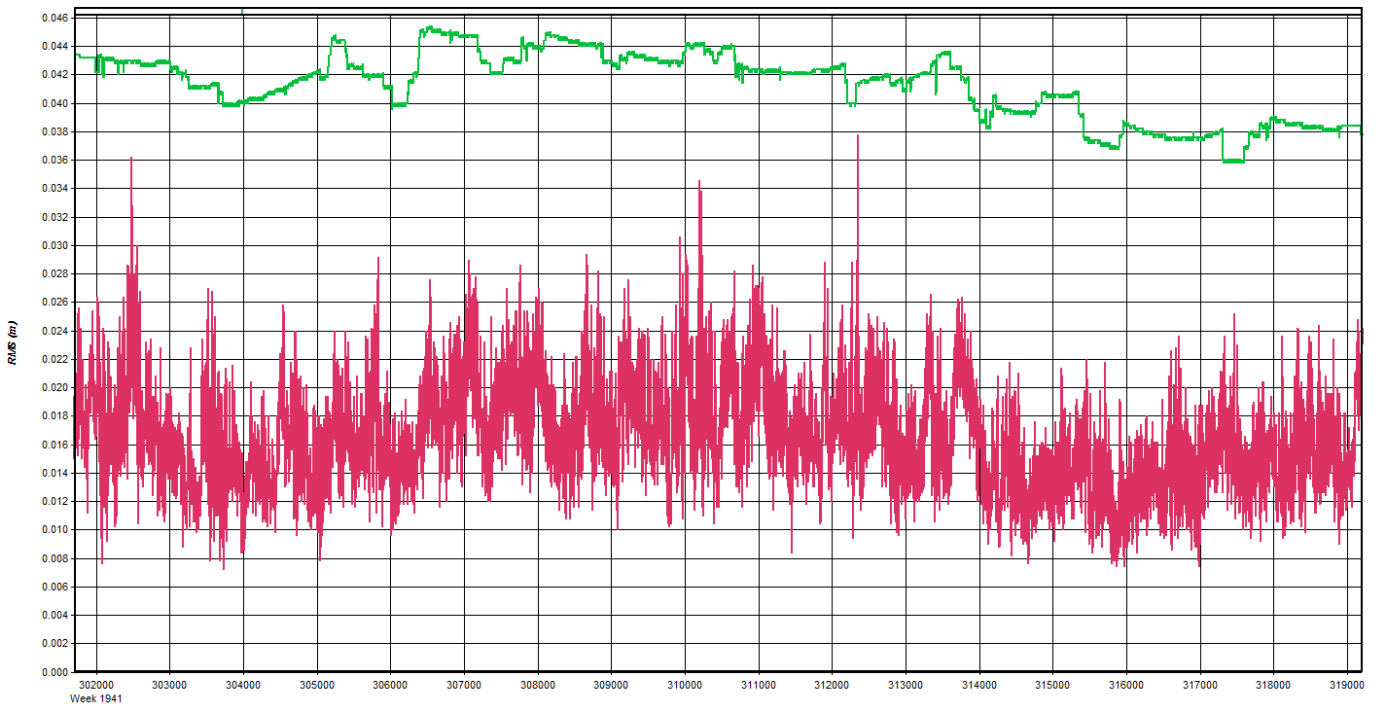
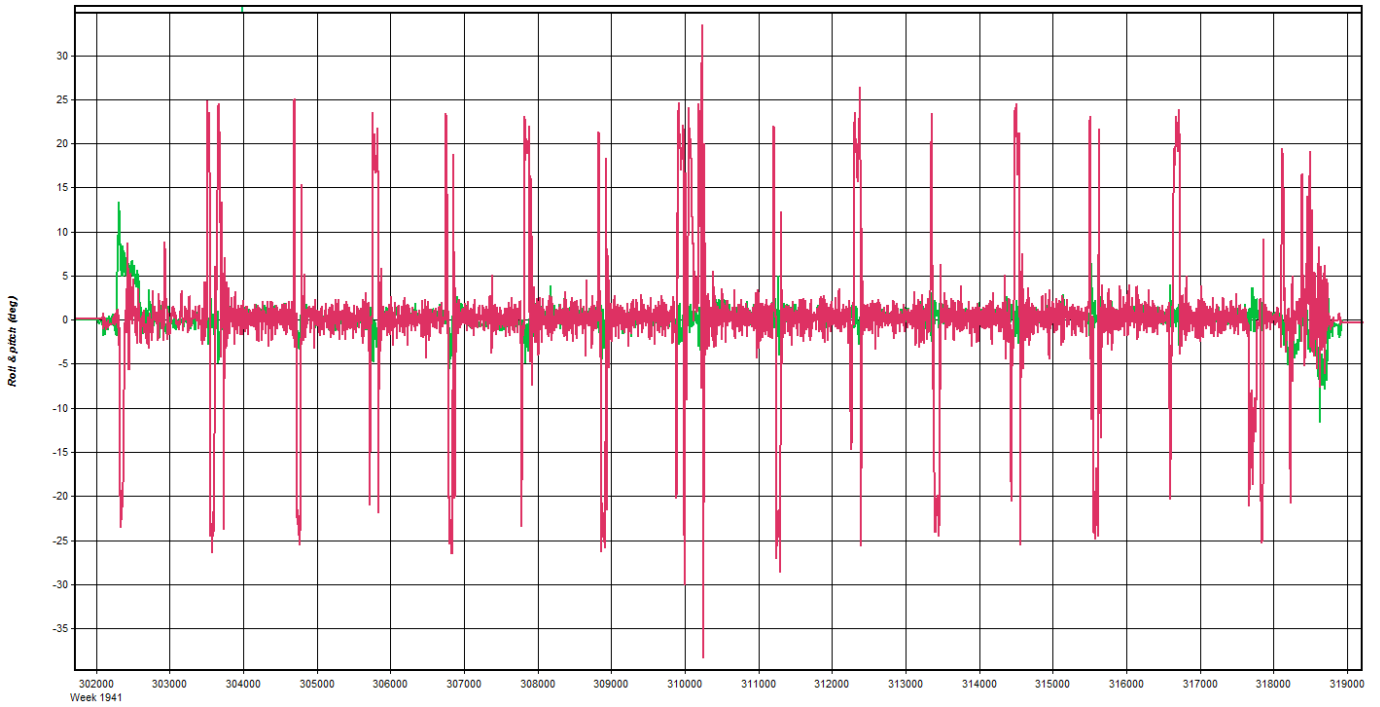
LIDAR	Type	Serial #	Alt AGL	Alt AMSL	Avg Terr Ht	Min. Cloud	Max. Cloud	Avg Pt spacing	Storage Name/ID
	FOV	Sum Freq	Mpi/Sec	Pulses In Air	Pulse Rate	Power	PSM	End CB	End CB
01	271	23:47	23:01	147	1.1/13	6555	+10		248
02	92	23:05	23:18	157	1.0/18	6538	+7		301
03	073	23:23	23:37	149	1.2/15	6555	+9		53
04	92	23:41	23:55	157	1.2/17	6545	-7		
05	073	23:59	00:13	148	1.3/16	6548	+9		
06	92	00:17	00:31	161	1.3/16	6558	-9		
07	073	00:34	00:49	158	1.1/17	6561	+8		
08	92	00:52	01:07	159	1.0/18	6562	-7		
09	073	01:10	01:24	154	1.1/17	6574	+5		
0055	N	01:27	01:30	144	1.0/19	6640	-		

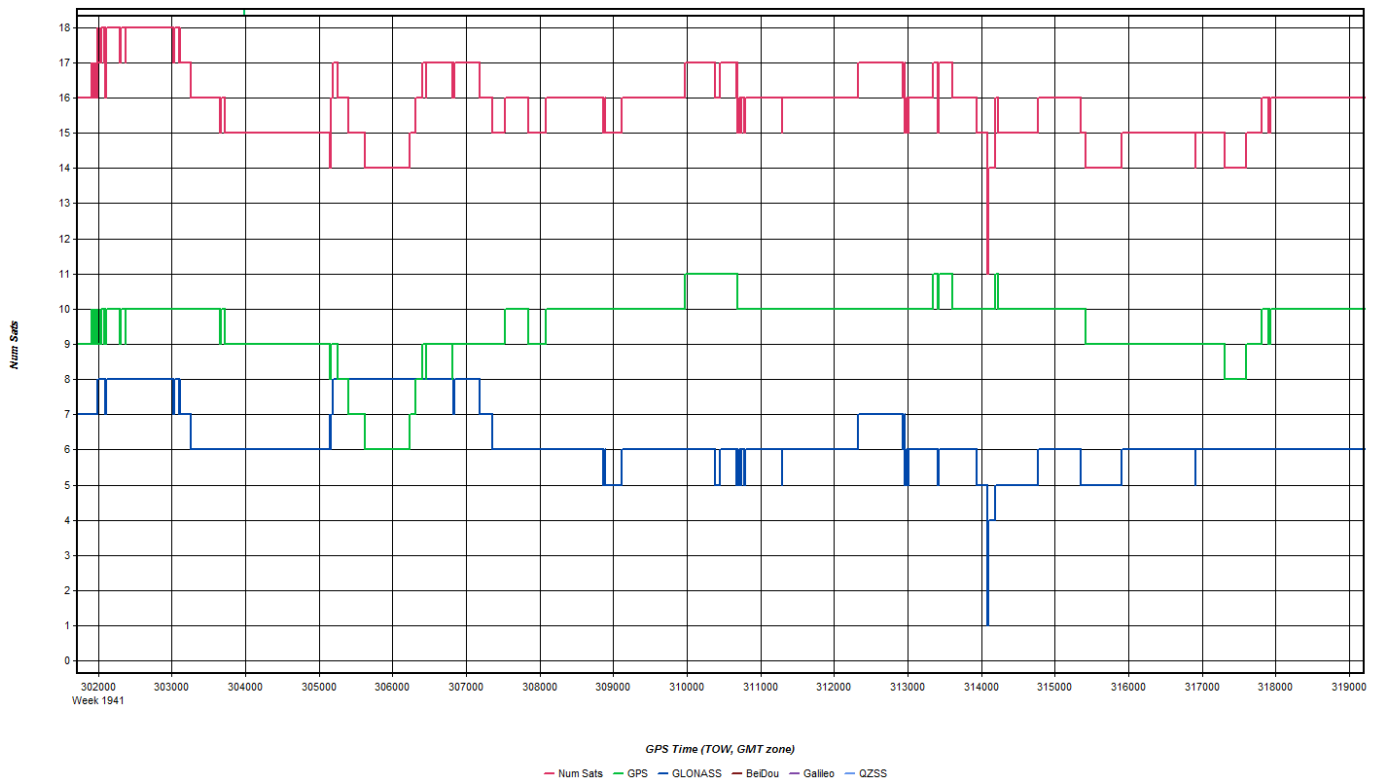
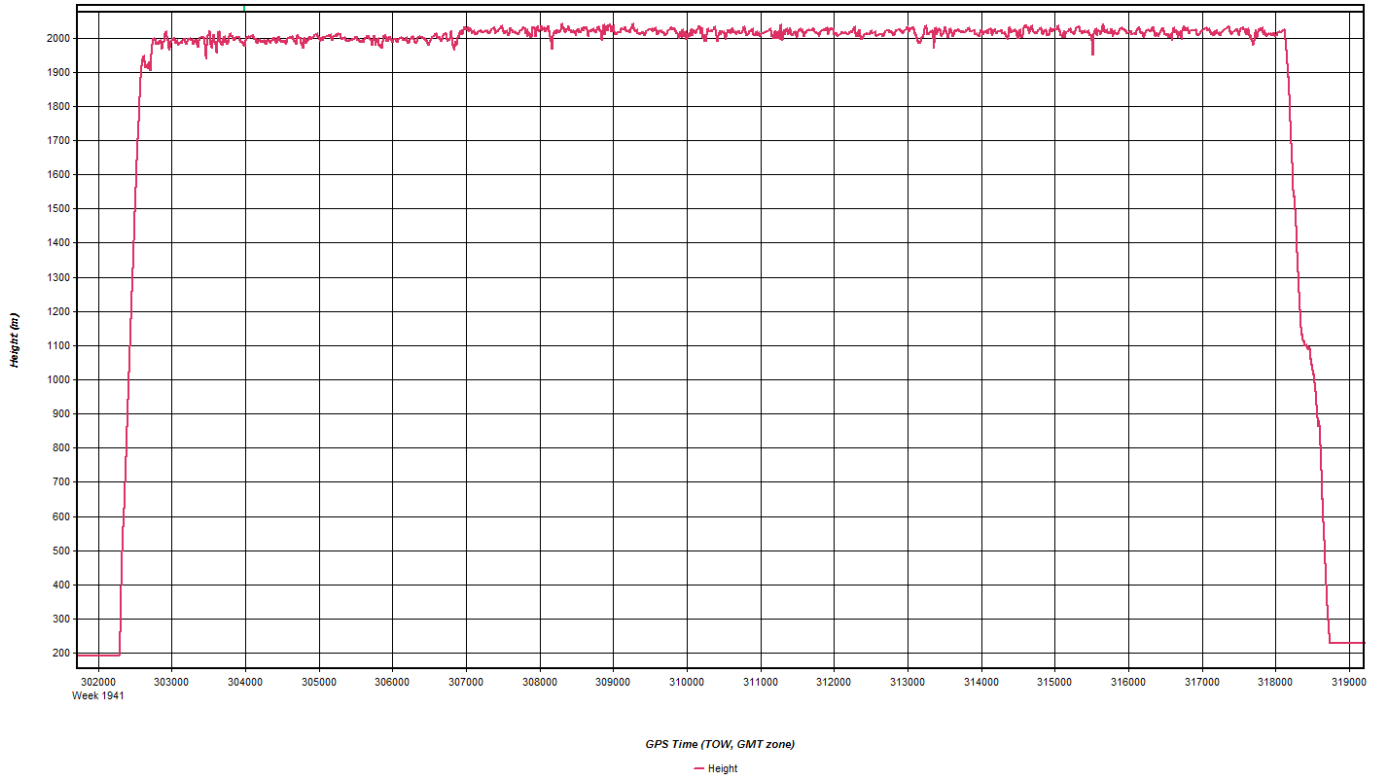
FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
 SKC VIS 7-8
 MILD TURBULANCE WEST END
 CLOUDS AT ALT. MOVING SW FROM THE NORTH

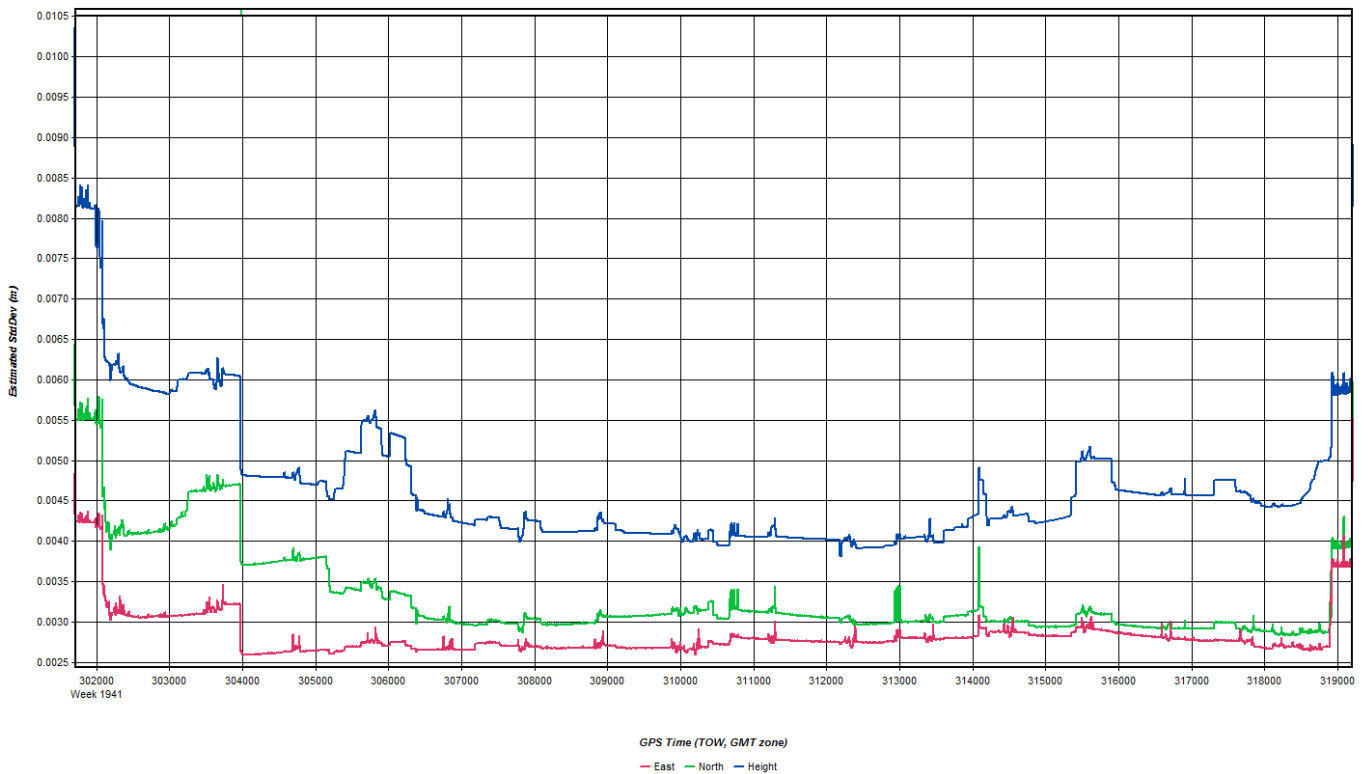
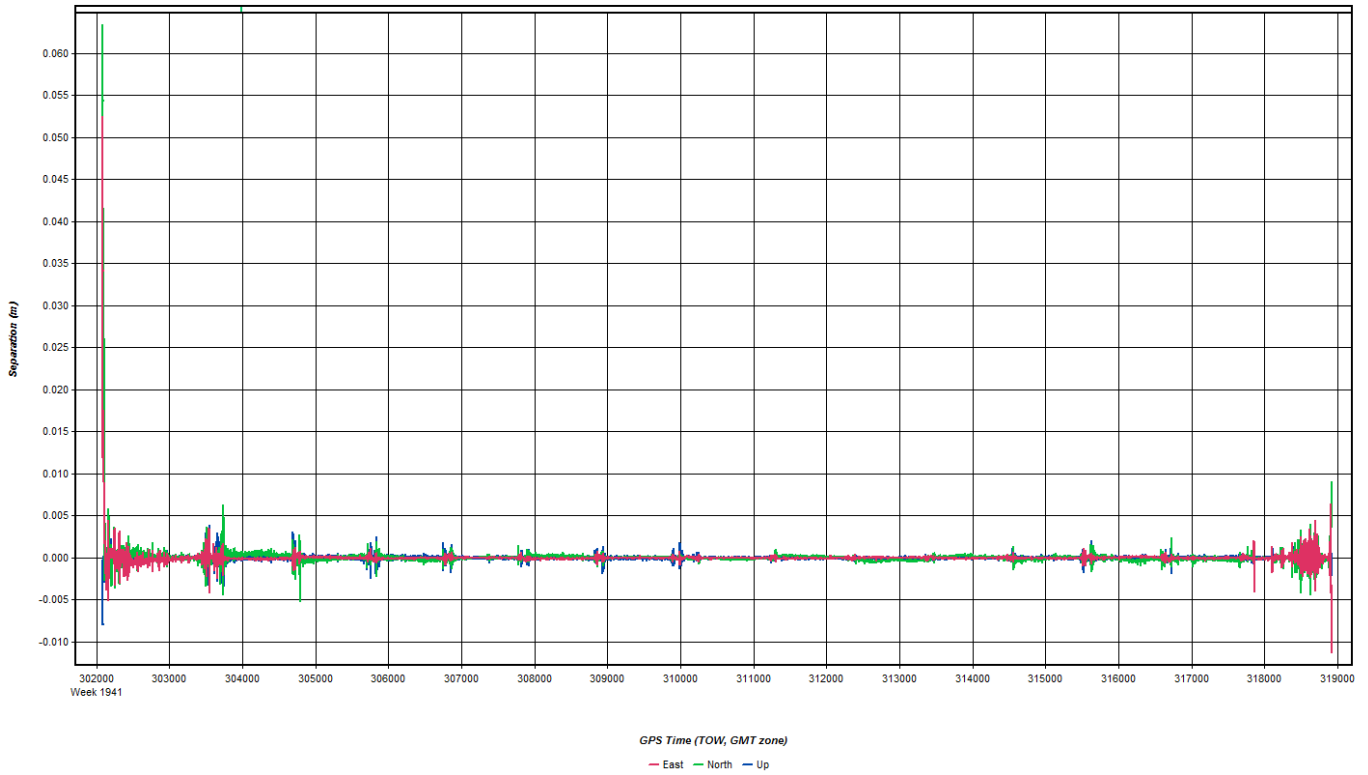
Total Proj Lines: 6.2 **Lines Flown:** 20/9 **Lines Remain:** 33 **Online Time:** 2:7 **Job Time:** 1:8 **Notes:**

Mar 22, 2017-A (N262AS, SN7161)









Coordinate/Antenna Settings

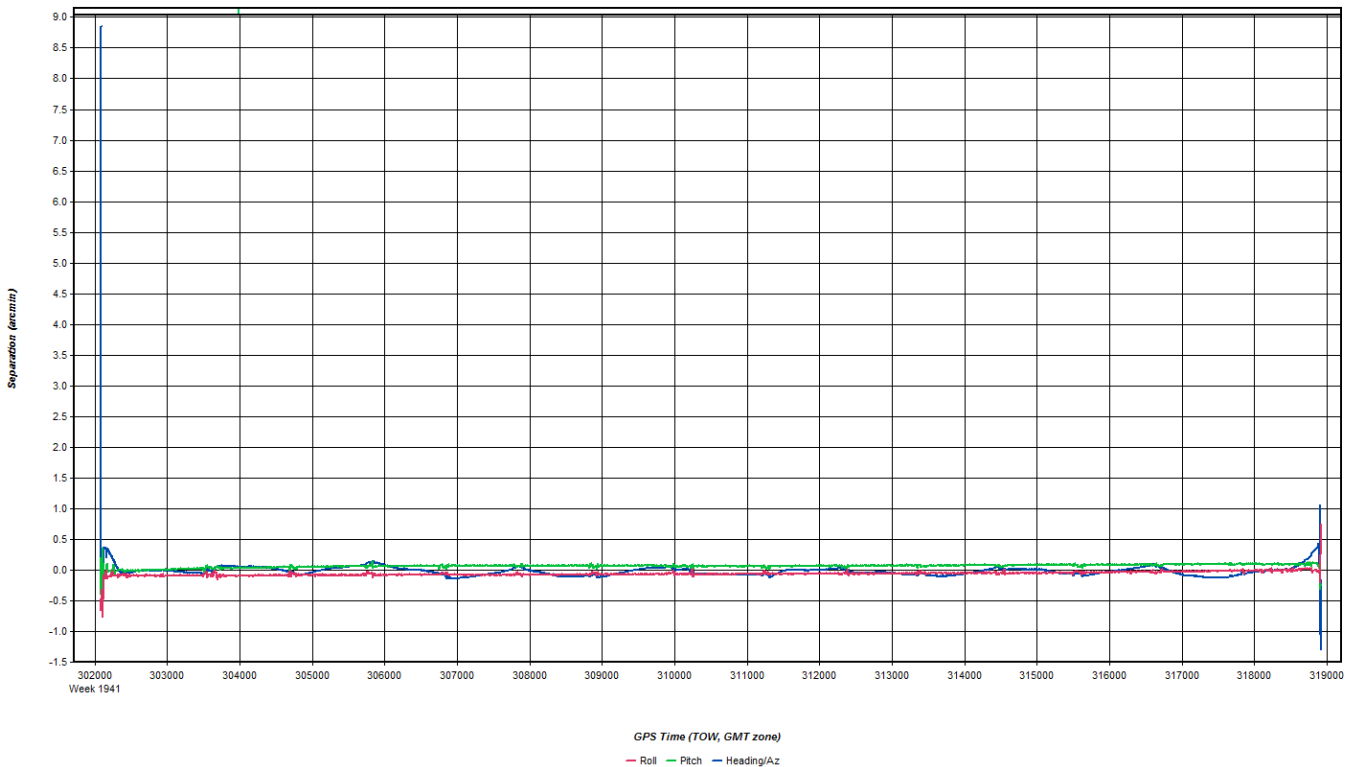
Master Remote

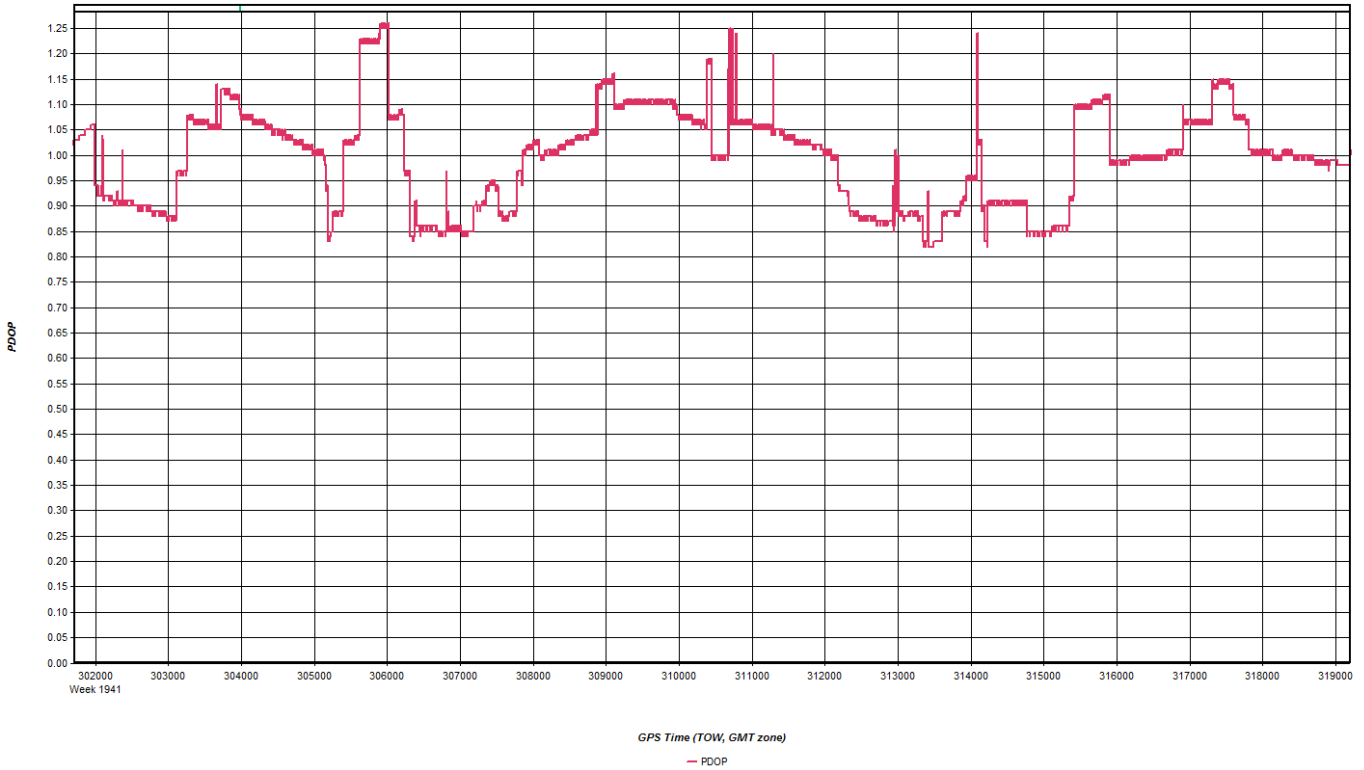
Base Station
 2: MAON Name: MAON Disabled
 File: E:\29050_WROC_Dane_Co\20170322_114640\Wiscors\MAON08

Coordinates
 Latitude: North 43 02 12.78293 Coord. options
 Longitude: West 89 24 34.27001 Save to Favorites
 Ellipsoidal height: 248.654 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel





Coordinate/Antenna Settings ? X

Master Remote

Base Station

1: WIWB Name: WIWB Disabled

File: E:\29050_WROC_Dane_Co\20170322_114640\wiiwb0810.gpb

Coordinates

Latitude: North 13.96922 Coord. options ▼

Longitude: West 55.47090 Save to Favorites

Ellipsoidal height: m

Datum: WGS84 Proc Datum: WGS84

Epoch: year

Antenna Height

From station file: TRM55971.00, NONE View STA File

Antenna profile: TRM55971.00 Info

Measured height: m

ARP to L1 offset: m

Applied height: m

Measured to

ARP

L1 Phase Centre

Compute From Slant

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 1: V094 Name: V094 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V094080F

Coordinates
 Latitude: North 43 15 22.97004 Coord. options
 Longitude: West 89 40 56.93005 Save to Favorites
 Ellipsoidal height: 99.988 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM57971.00, NONE View STA File
 Antenna profile: TRM57971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 2: V095 Name: V095 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V095080F

Coordinates
 Latitude: North 43 15 36.51004 Coord. options
 Longitude: West 89 02 59.33996 Save to Favorites
 Ellipsoidal height: 99.981 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Flight Log

A

Project: WROC-DANE County Proj #: 29050 Flight Mgmt File: 20170322-114640
(email Log only to flight_log_distribution_list@quantumspatial.com)

Aircraft: N262AS Begin Hobbs: 6495.3 End Hobbs: 6499.8 Total: 4.5 Pilot: WAGNER Co-Pilot: Tech: CAREY

Dep Apt: KSBM Dep Time (Lcl): 700 (Z): 1200 Arr Apt: KMSN Arr Time (Local): 1130 (Z): 1630 Tot Time Aloft: 4.5

COR: KJN Sea 1: M5W Sea 2: Flyovers: Y (N) If Y, stream: Sea 1) Sea 2)

GPS Units: Y/N Sea 1: Sea 2: Flyovers: Y/N If Y, stream: Sea 1) Sea 2)

Col Temp beg	°C	End:	°C	OAT beg	°C	End:	°C	Altimeter begin:	end:
Type	ALS 70	Serial #	7161	ALS	5381	ALS	6506	Asst Ther	150
LIDAR	FOI	Scan	40	MPIA	Y/N	In Air	2	Max Comp	100%
		Rate	40				297	Power	100%

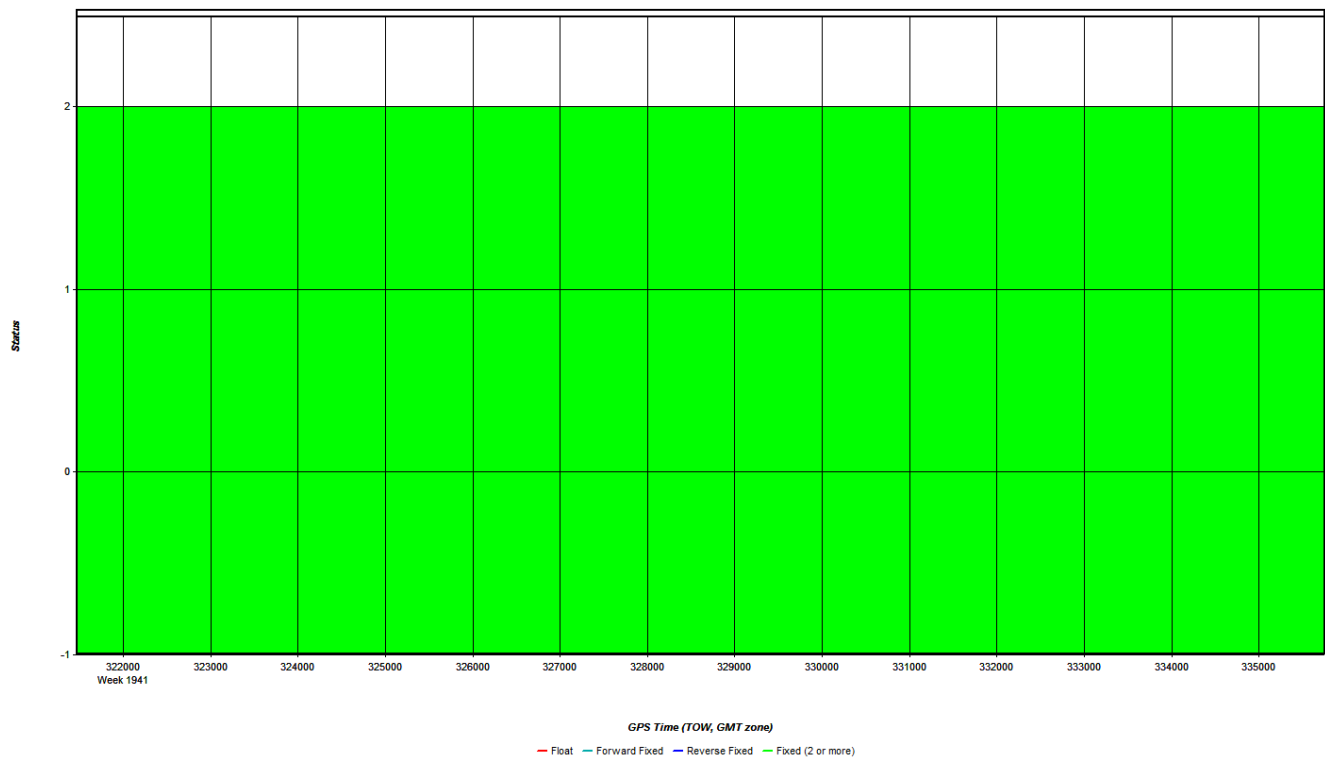
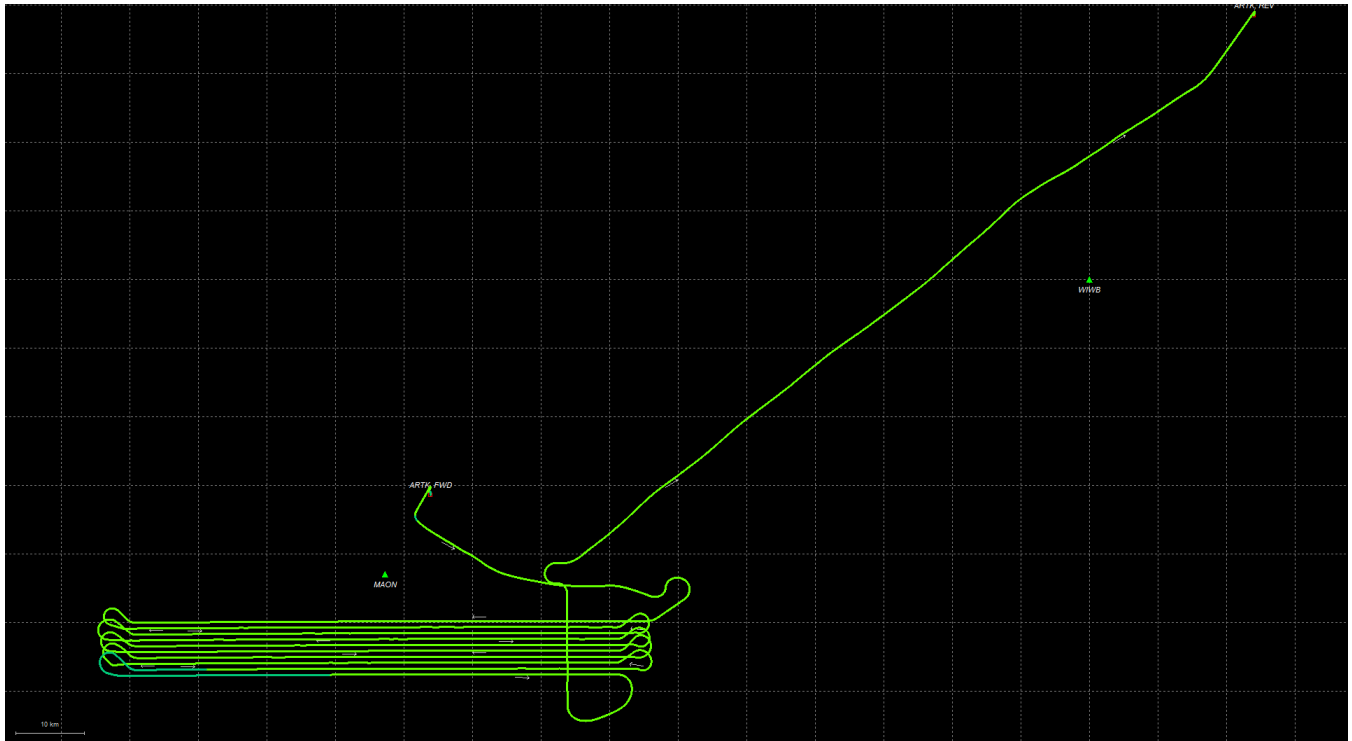
Line #	Hq	Start/End	Start/End	Col/Sec	Exp/Min	GPS Altitude	Corr	Temp	Bar	Wind	Dir	Remarks
30	273	1223	1237	7.145	1.3	6578						
31	92	1240	1254		1.1	6588						
32	273	1257	1312		0.9	6594						
33	92	1314	1329		1.0	6621						
34	273	1332	1346		1.0	6630						
35	92	1349	1403	7.145	1.2	6627						
36	273	1411	1426		1.2	6608						
37	92	1428	1444		1.3	6608						
38	273	1447	1501		1.2	6611						
39	92	1504	1520	7.145	1.1	6614						
40	273	1523	1537		1.0	6611						
41	92	1540	1556		1.1	6604						
42	273	1559	1614		1.5	6604						
XFLT	0	1617	1621		1.3	6604						XFLT (unplanned) S/FIG → KMSN

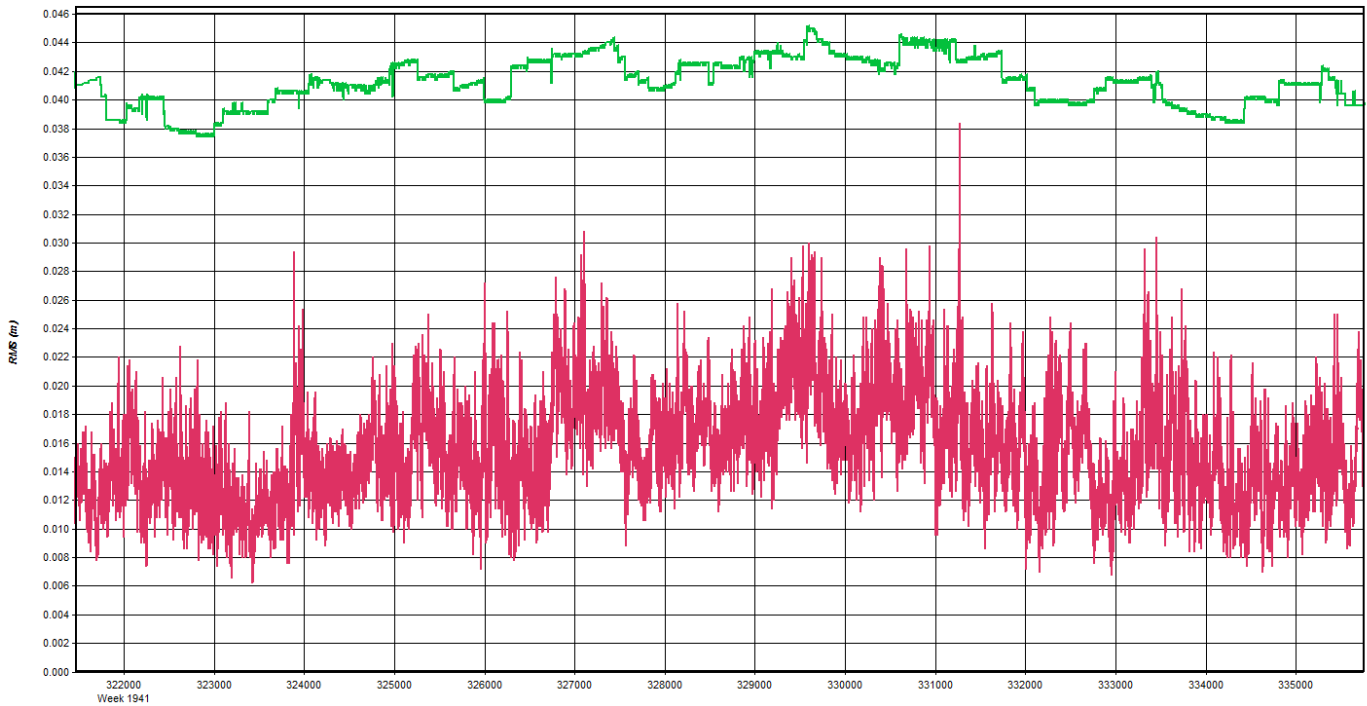
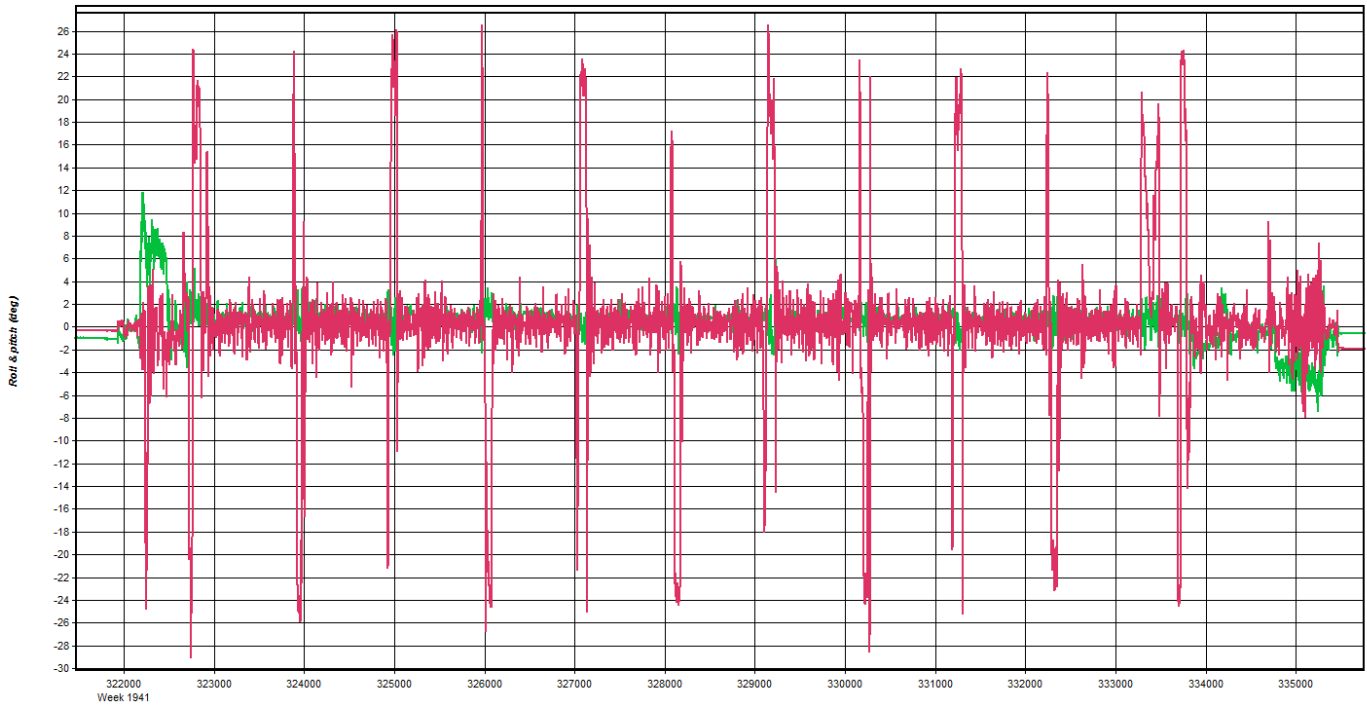
FLIGHT REMARKS: - visibility, clouds, winds, serial, etc.
 SBM → SITE → S/FIG
 SKC

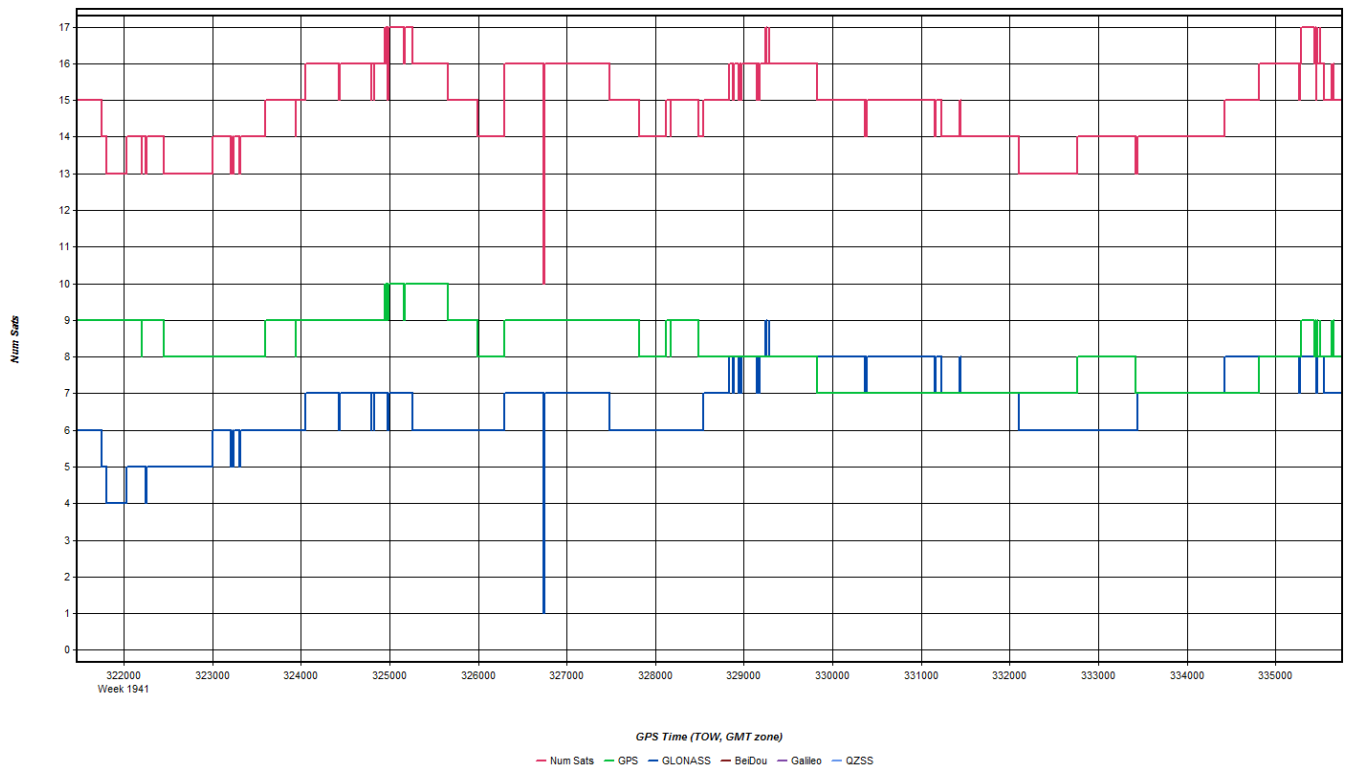
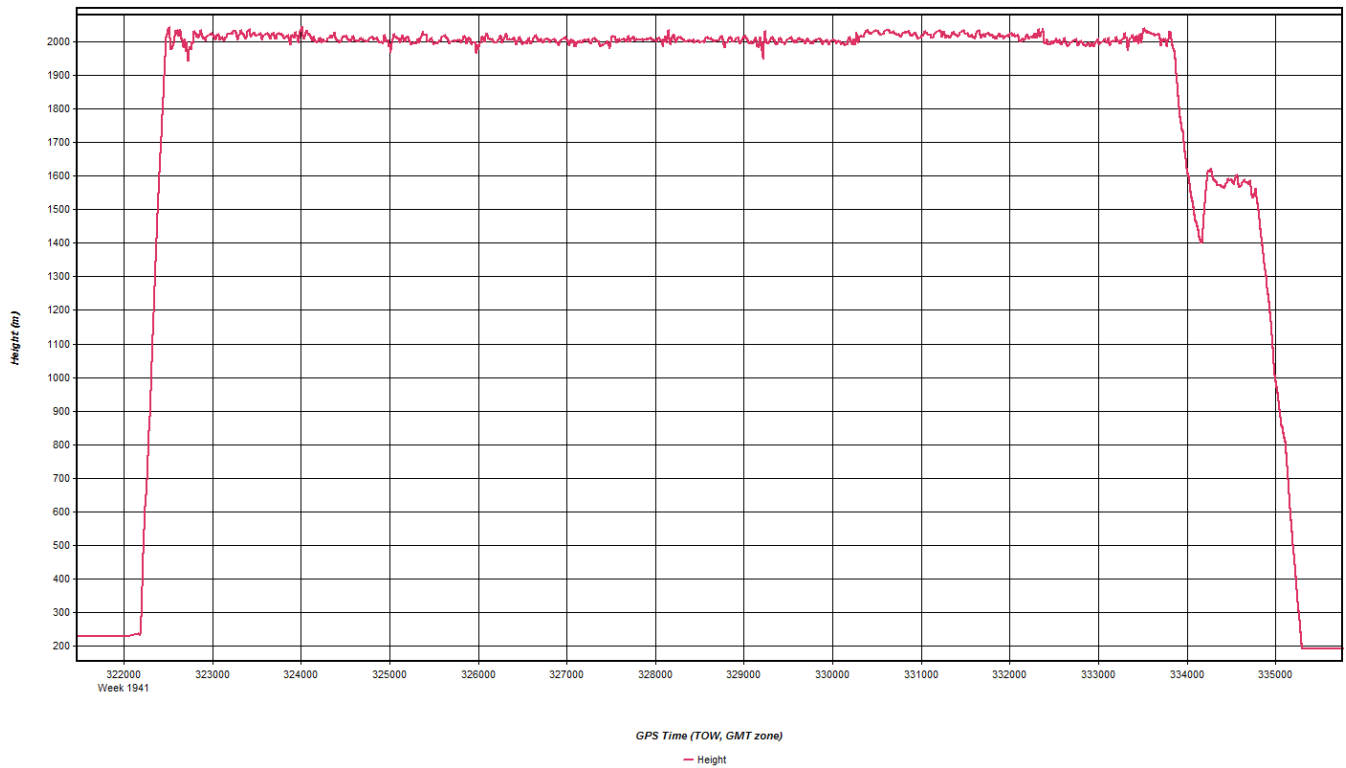
Total Proj Lines: 33/62 **Lines Flown:** 13 **Lines Remaining:** 20 **Online Time:** 4.0 **Job Time:** 1.5 **Invoice:**

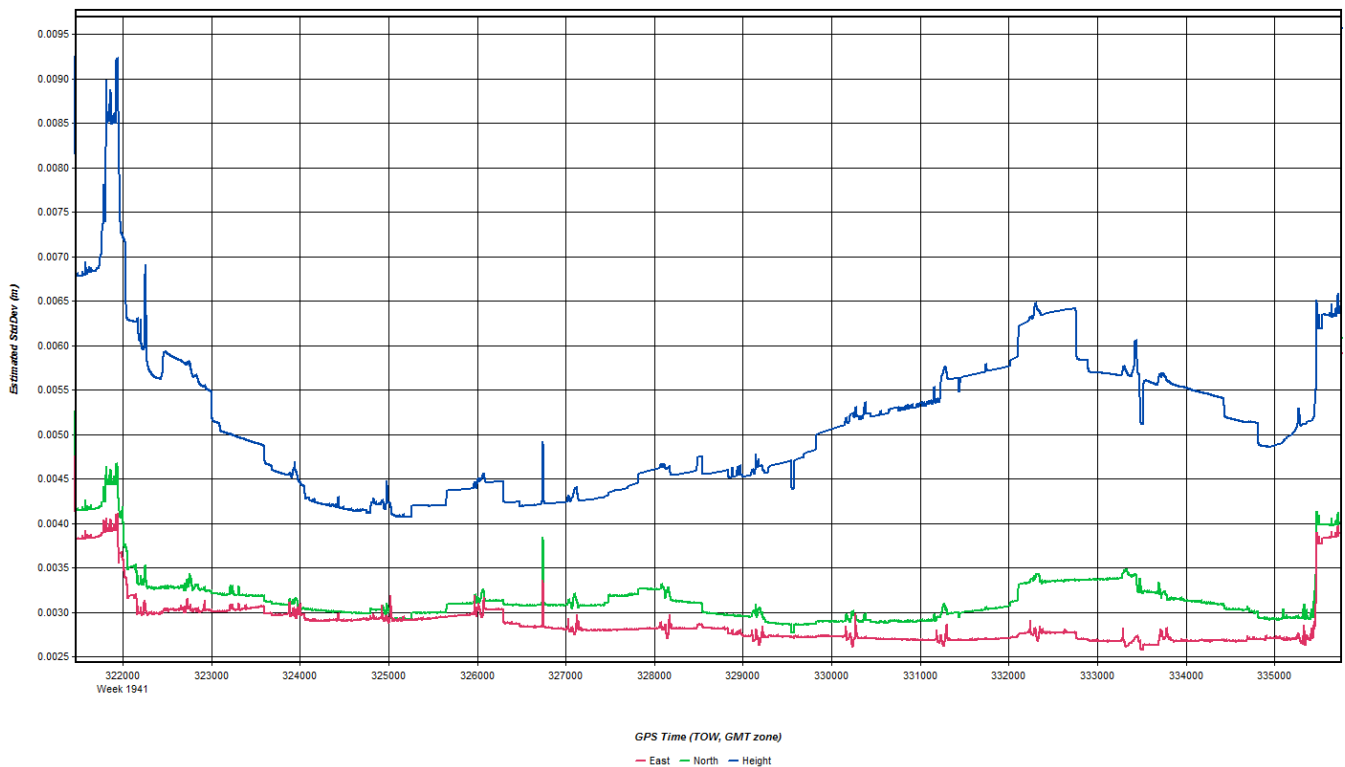
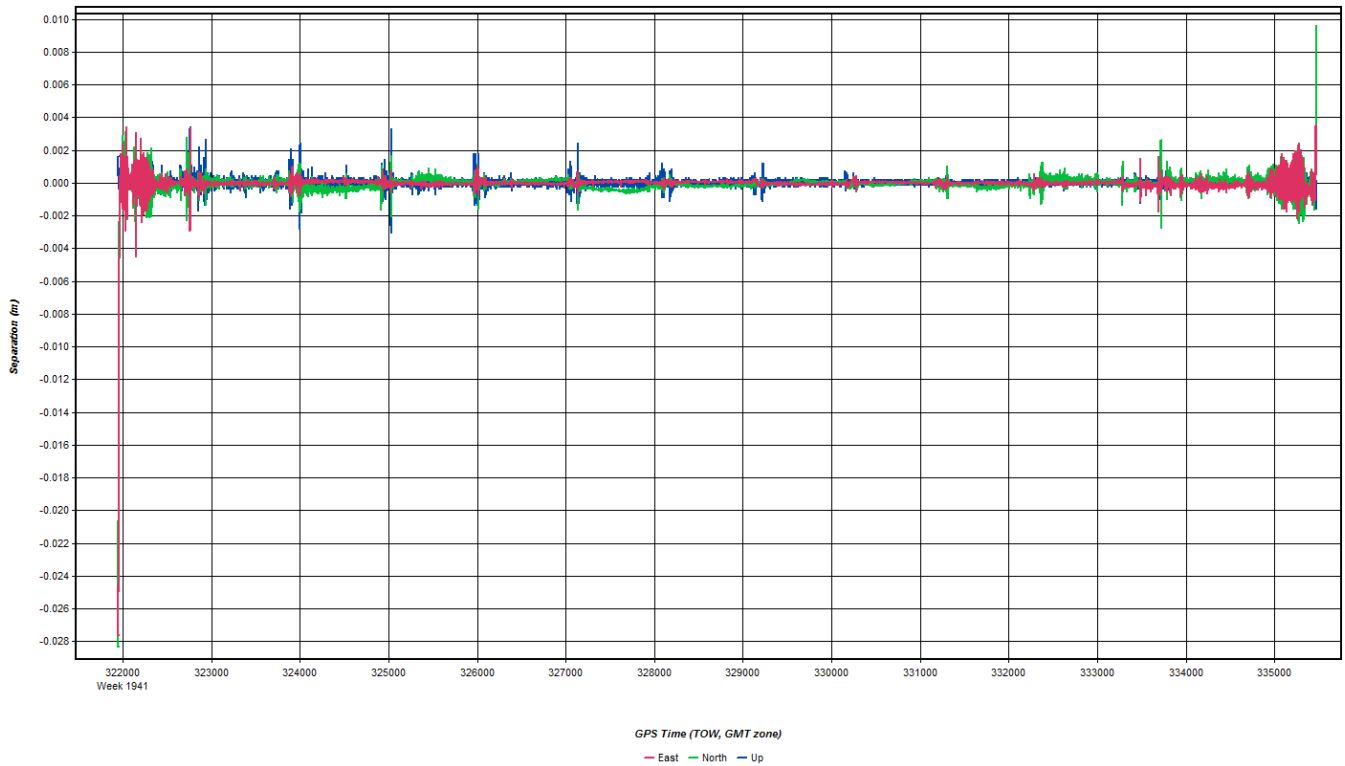
Generated by CamScanner from intsig.com

Mar 22, 2017-B (N262AS, SN7161)









Coordinate/Antenna Settings

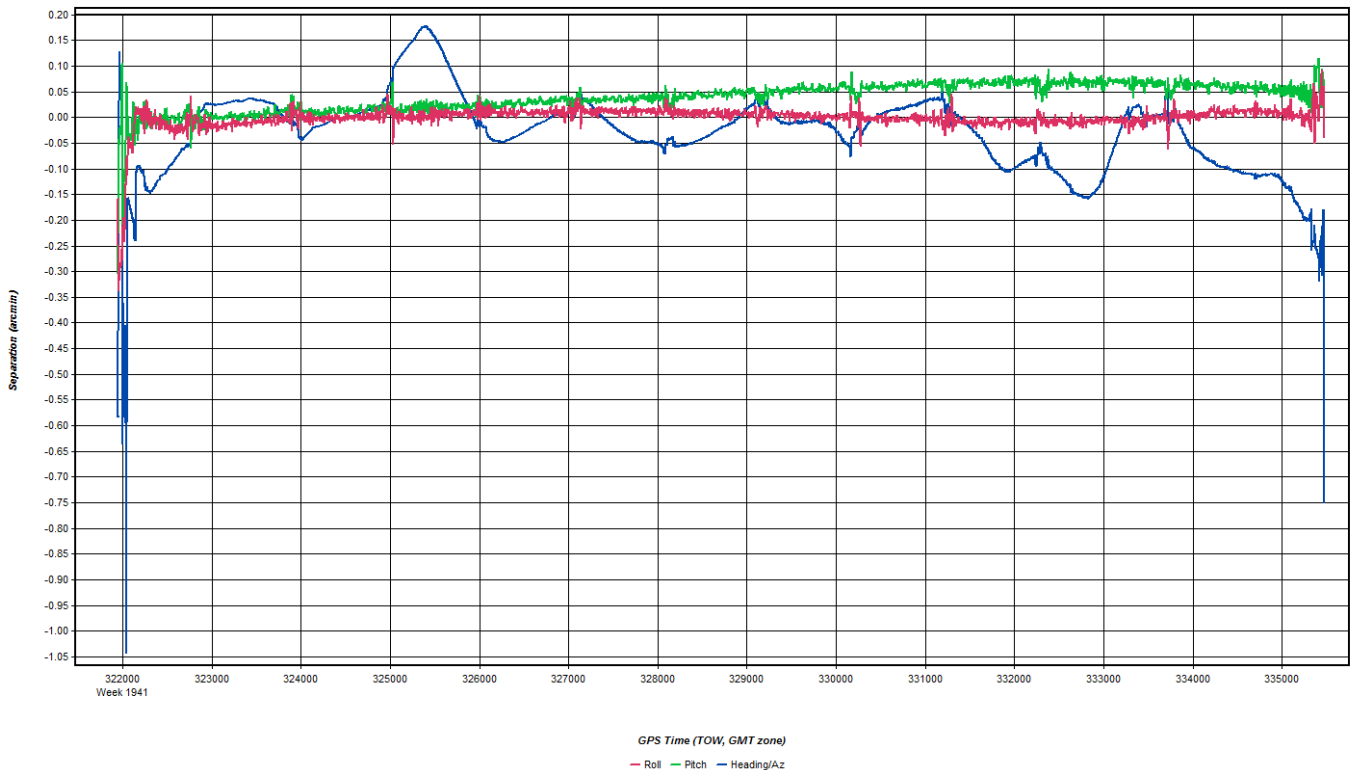
Master Remote

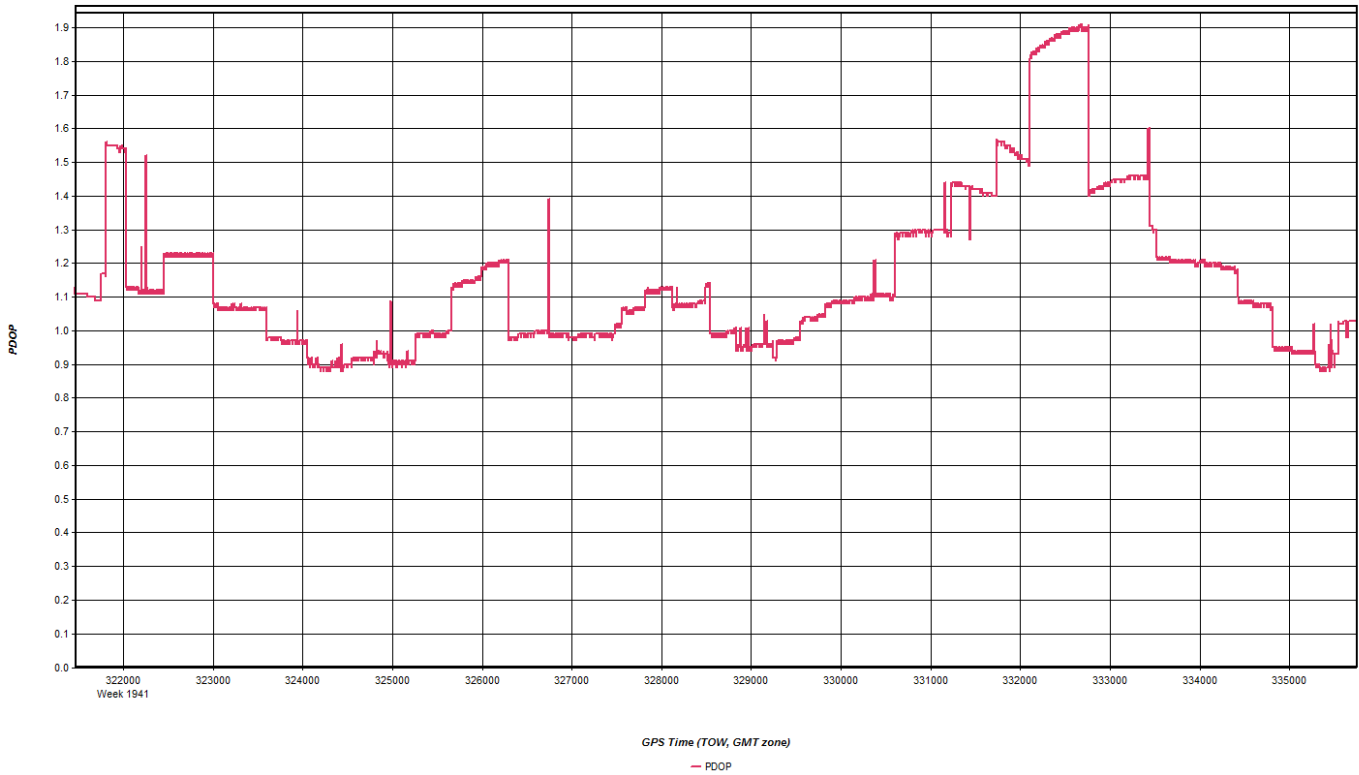
Base Station
 2: MAON Name: MAON Disabled
 File: E:\29050_WROC_Dane_Co\20170322_171619\Wiscors\MAON08

Coordinates
 Latitude: North 43 02 12.78293 Coord. options
 Longitude: West 89 24 34.27001 Save to Favorites
 Ellipsoidal height: 248.654 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel





Coordinate/Antenna Settings ? X

Master Remote

Base Station

1: WIWB Name: WIWB Disabled

File: E:\29050_WROC_Dane_Co\20170322_171619\wiiwb0810.gpb

Coordinates

Latitude: North 43 25 13.96922 Coord. options

Longitude: West 88 08 55.47090 Save to Favorites

Ellipsoidal height: 235.140 m

Datum: WGS84 Proc Datum: WGS84

Epoch: year

Antenna Height

From station file: TRM55971.00, NONE View STA File

Antenna profile: TRM55971.00 Info

Measured height: 0.000 m

ARP to L1 offset: 0.067 m

Applied height: 0.067 m

Measured to

ARP

L1 Phase Centre

Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 1: V094 Name: V094 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V094080F

Coordinates
 Latitude: North 43 15 22.97004 Coord. options
 Longitude: West 89 40 56.93005 Save to Favorites
 Ellipsoidal height: 99.988 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM57971.00, NONE View STA File
 Antenna profile: TRM57971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 2: V095 Name: V095 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V095080F

Coordinates
 Latitude: North 43 15 36.51004 Coord. options
 Longitude: West 89 02 59.33996 Save to Favorites
 Ellipsoidal height: 99.981 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Flight Log

Date: 3-22-17
LH: A B C D E Pg. 1 of 1

Airborne LiDAR Data Collection Log Sheet :: Quantum Spatial, Inc
(email log daily to flight_log_distribution_user@quantumspatial.com)

Project: WROC - DANE COUNTY Proj #: 27050 Flight Mgmt File: 20170322-171619
Aircraft: N262AS Begin Hobbs: 6499.8 End Hobbs: 6503.5 Total: 3.7 Pilot: WAGNER Co-Pilot: — Tech: CAREY
Dep Apt: KMSN Dep Time (Lcl): 1230 (Z): 1730 Arr Apt: KSBM Arr Time (Local): 410 (Z): 2110 Tot Time Aloft: 3.7
CORS: DIN Sta 1: MSLN Sta 2: Flyovers: Y (X) IF Y, times: Sta1) Sta2)
GPS Unit: Y/LN Sta 1: Sta 2: Flyovers: Y/N IF Y, times: Sta1) Sta2)

Gd Temp beg:	°C	End:	°C	OAT beg:	°C	End:	°C	Altimeter begin:	end:
LIDAR	Type ALS 70	Serial # 7161	Alt AGL 5381	Alt AMSL 6506	Avg Terr Ht 1070	Max Gdspd 150	Avg Pt Spacing	Mag CB 200	Storage Name# 18
	FOV 40	Scan Freq 53	MplA Y/N	Pulses In Air 2	Pulse Rate 299	Power 100%	PPSM	End CB	Tot CB

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	POB/Sats	GPS Altitude	Crab	Turb (0..*)
43	273	1742	1757	150	1.2	6604		
44	92	1800	1815		1.2	6598		
45	273	1817	1832		1.1	6598		
46	92	1835	1850		1.0	6591		
47	273	1853	1907	150	1.3	6591		
48	92	1910	1924		1.1	6588		
49	273	1927	1942		1.1	6591		
50	92	1945	1954		1.2	6591		
51	273	2002	2017	150	1.4	6581		
52	92	2020	2034		1.3	6591		
XFLT		2038	2041		1.2	6600		

FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc

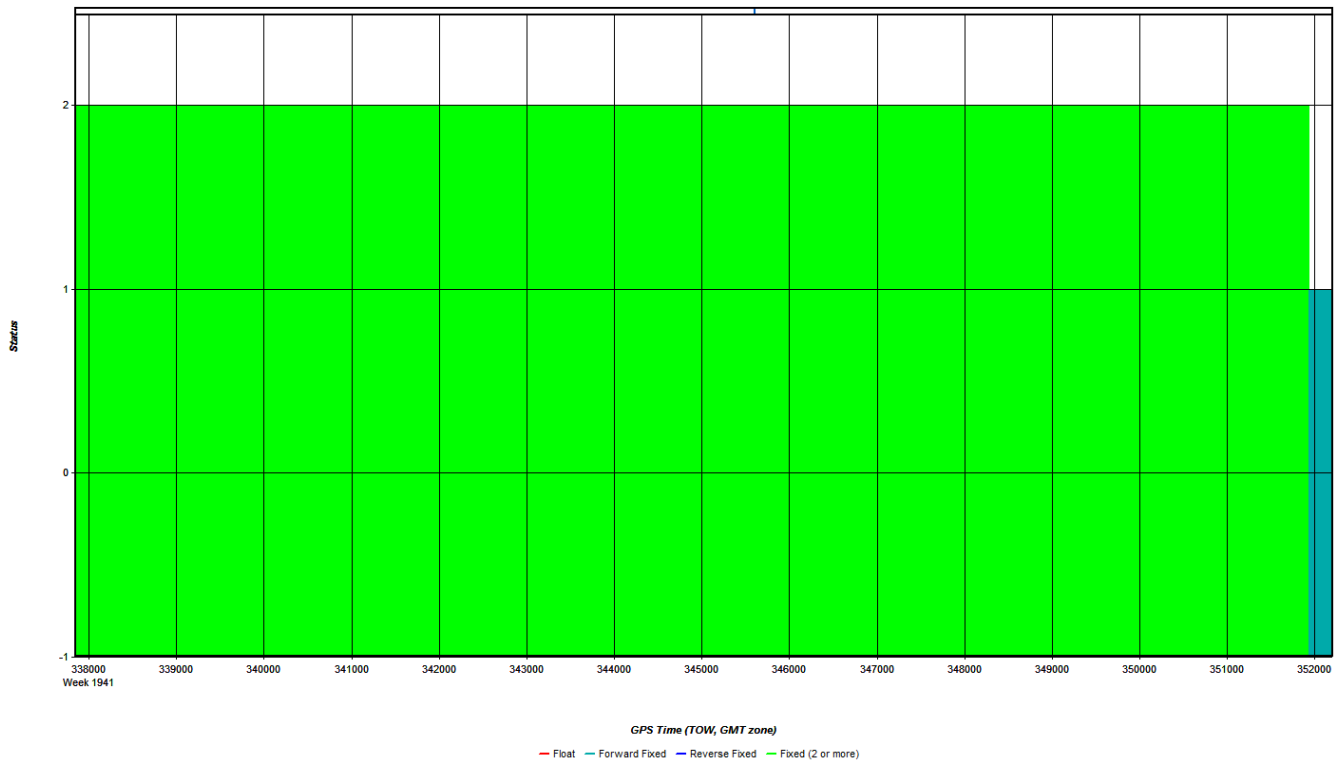
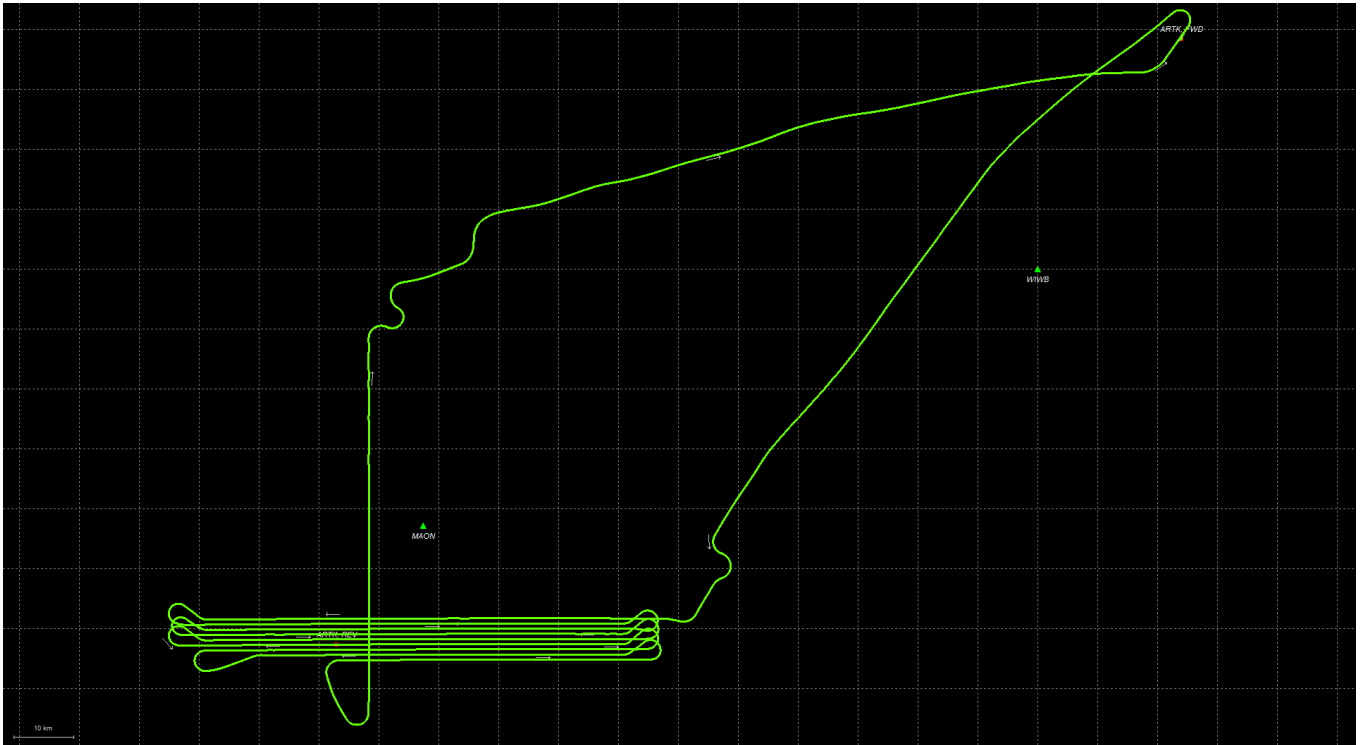
KMSN → SITE → S/FIG
SKC over SITE / cu forming East of Project
CLR

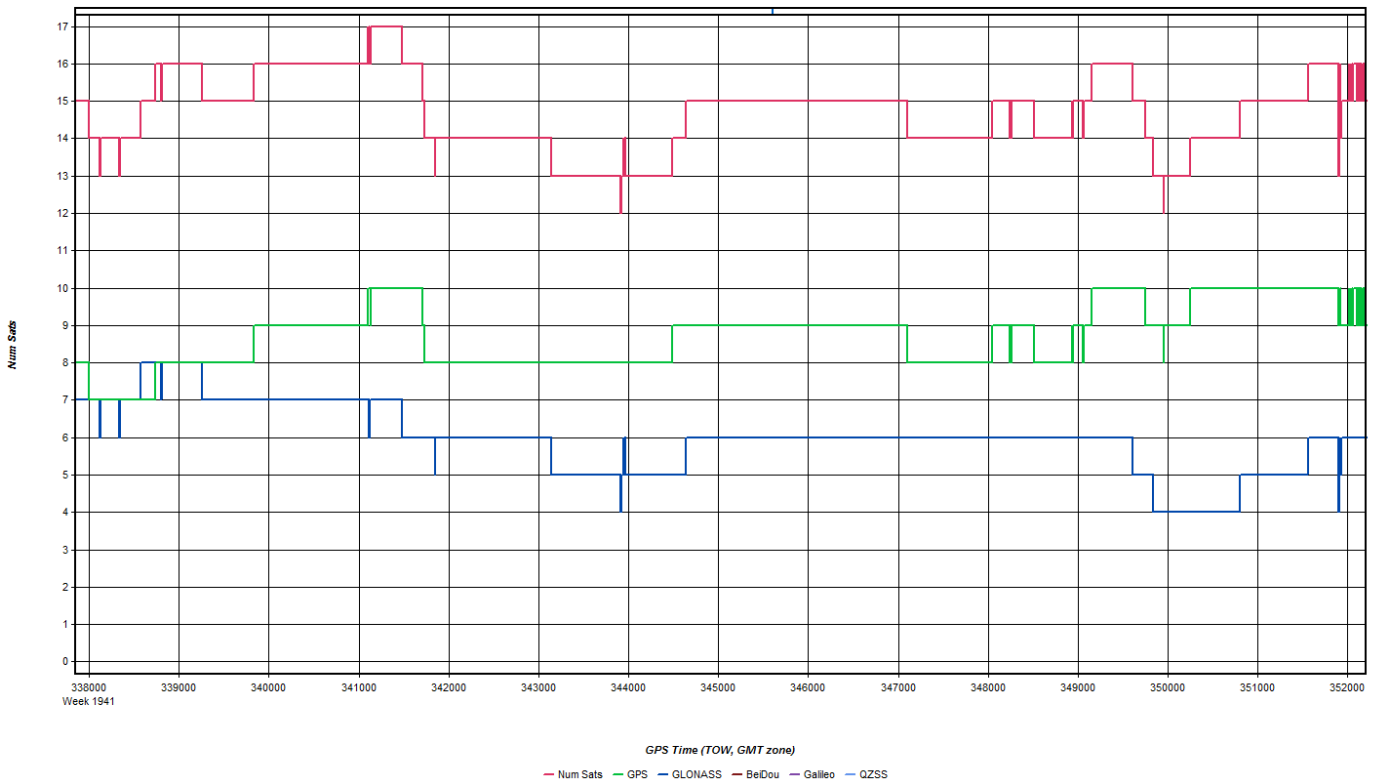
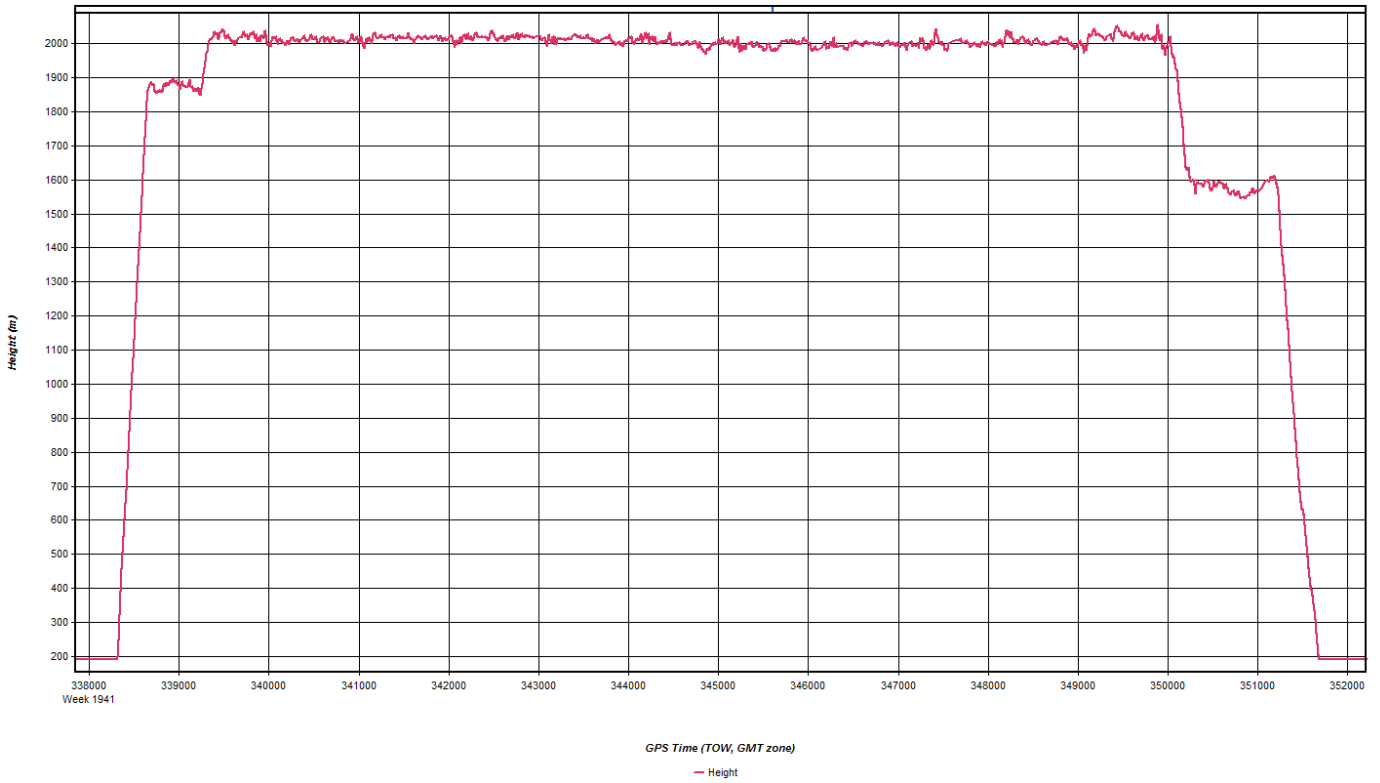
XFLT (UNPLANNED) → KSBM
S/FIG → KSBM

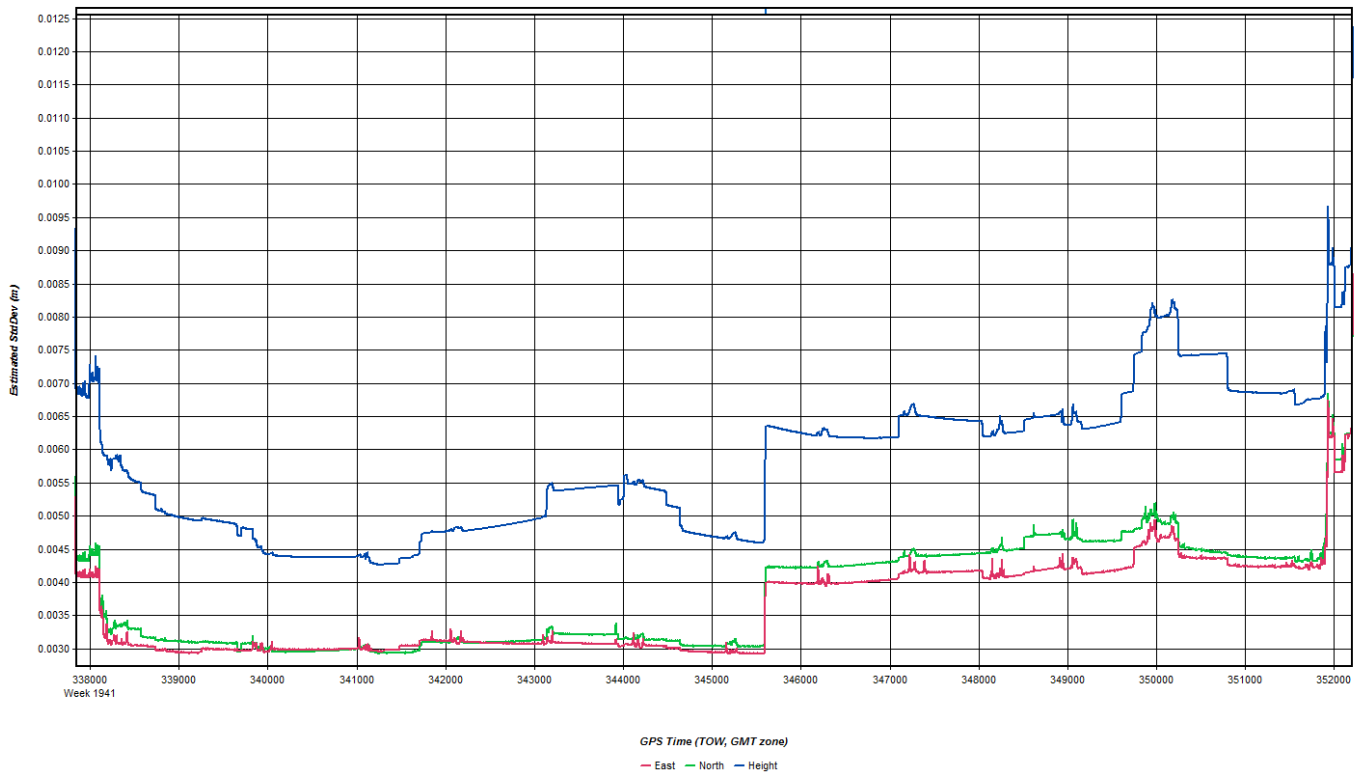
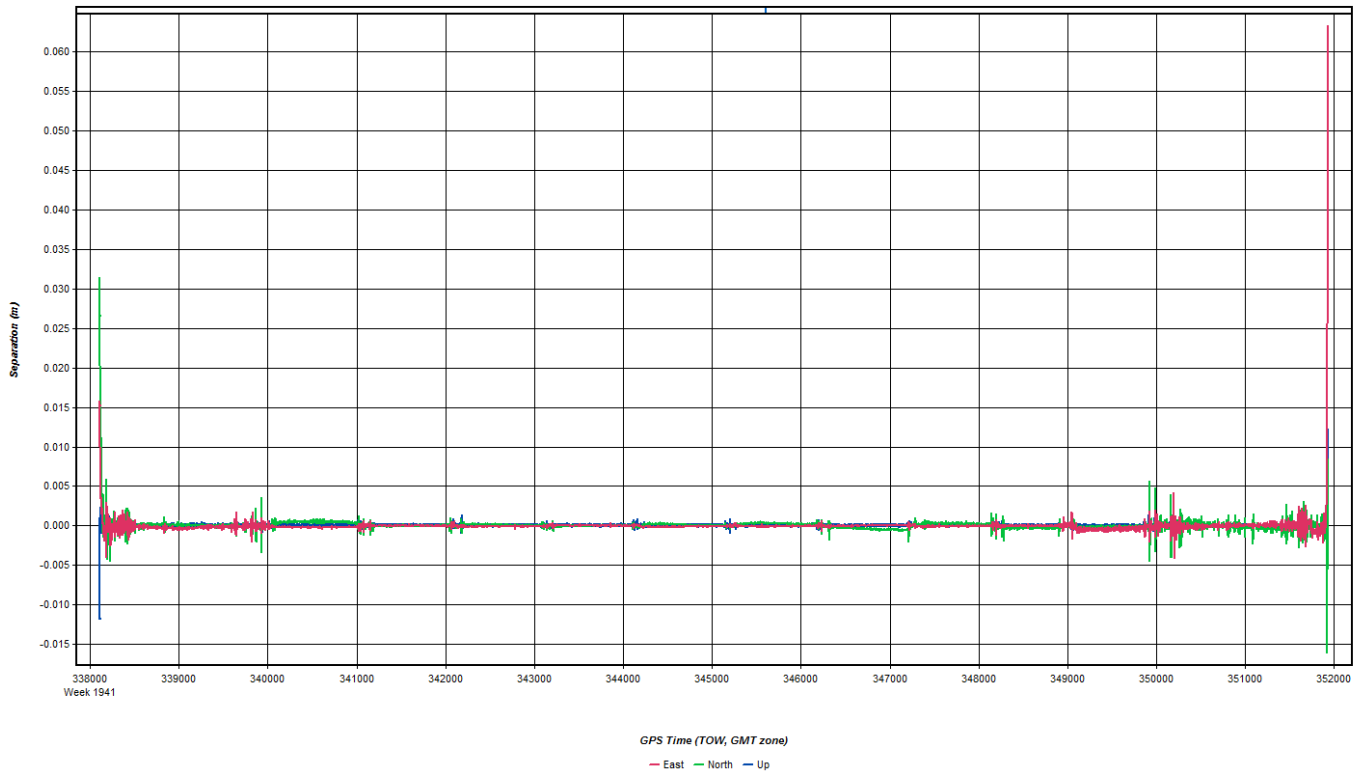
Total Proj Lines: 30/12 Lines Flown: 10 Lines Remain: 10 Online Time: 3.0 Mob Time: 1.7 Notes:

Generated by CamScanner from intsig.com

Mar 22, 2017-C (N262AS, SN7161)







Coordinate/Antenna Settings

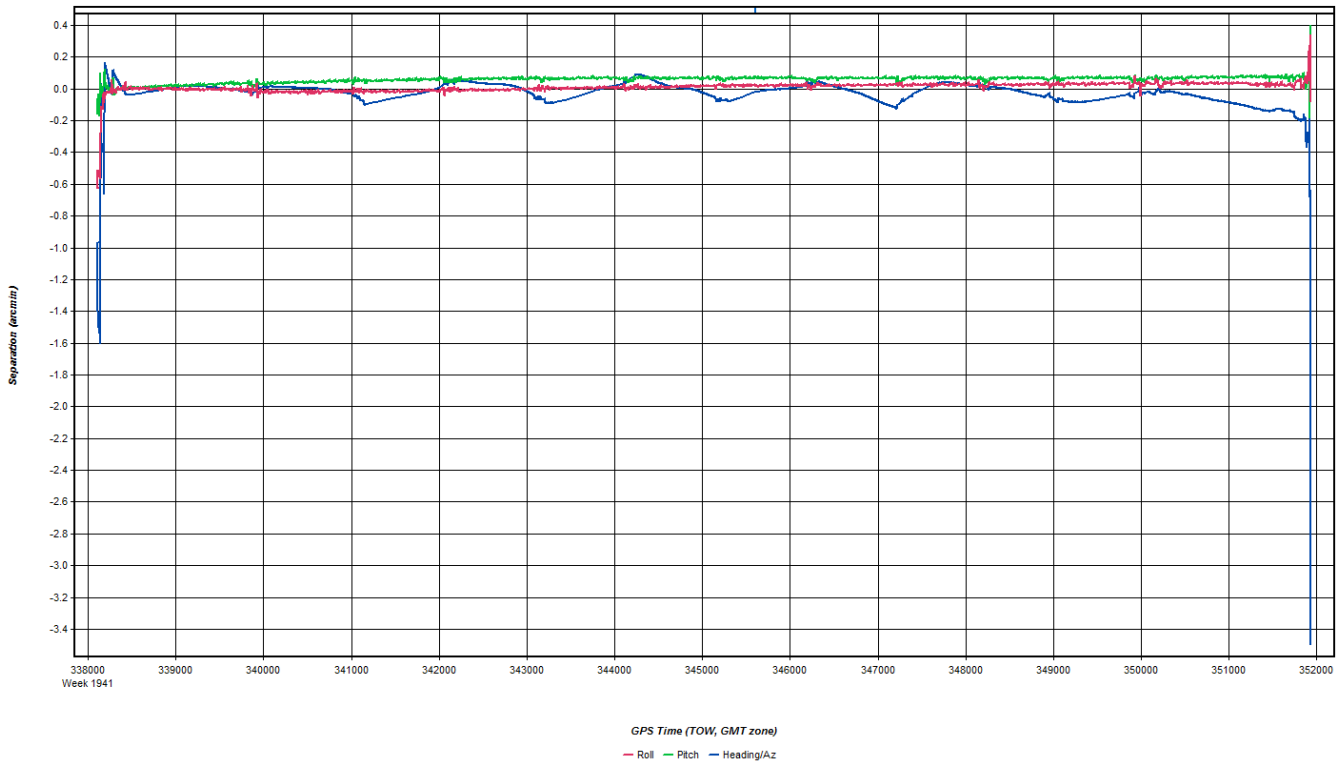
Master Remote

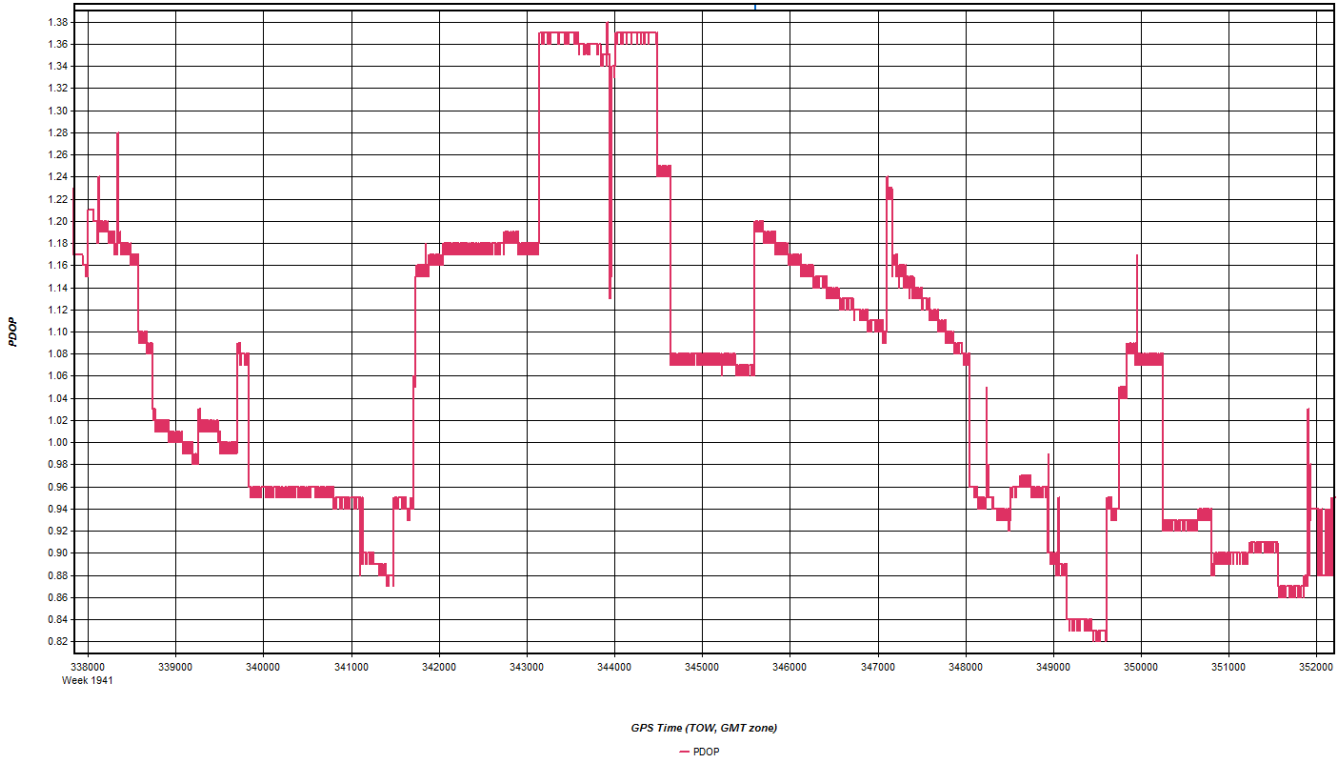
Base Station
 2: MAON Name: MAON Disabled
 File: E:\29050_WROC_Dane_Co\20170322_214904\Wiscors\MAON08

Coordinates
 Latitude: North 43 02 12.78293 Coord. options
 Longitude: West 89 24 34.27001 Save to Favorites
 Ellipsoidal height: 248.654 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel





Coordinate/Antenna Settings ? X

Master Remote

Base Station
 1: WIWB Name: WIWB Disabled
 File: E:\29050_WROC_Dane_Co\20170322_214904\wiwb0810.gpb

Coordinates
 Latitude: North 43 25 13.96922 Coord. options
 Longitude: West 88 08 55.47090 Save to Favorites
 Ellipsoidal height: 235.140 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
 Antenna profile: TRM55971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 1: V094 Name: V094 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V094080A

Coordinates
 Latitude: North 43 15 22.97004 Coord. options
 Longitude: West 89 40 56.93005 Save to Favorites
 Ellipsoidal height: 99.988 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM57971.00, NONE View STA File
 Antenna profile: TRM57971.00 Info
 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

Coordinate/Antenna Settings ? X

Master Remote

Base Station
 2: V095 Name: V095 Disabled
 File: E:\29050_WROC_Dane_Co\20170321_114830\Wiscors\V095080A

Coordinates
 Latitude: North 43 15 36.51004 Coord. options
 Longitude: West 89 02 59.33996 Save to Favorites
 Ellipsoidal height: 99.981 m
 Datum: WGS84 Proc Datum: WGS84
 Epoch: year

Antenna Height
 From station file: TRM55971.00, NONE View STA File
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 Measured height: 0.000 m
 ARP to L1 offset: 0.067 m
 Applied height: 0.067 m
 Measured to:
 ARP
 L1 Phase Centre
 Compute From Slant

OK Cancel

