

UAS 0 0 0

Flight Director: Carpenter / Holmes
Phone #: 863-500-3901

ACAT-4 Version = 7.3

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20201008H1	FLT #:	21-5	AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	0900Z	CP(s):	Mitchell	Zawislak, Jon (HRD)	A/C Takeoff	1010.9	Good	Bad	Sent
To:	KLAL	ETA:	1700Z		Shaw	Chang, Paul (NESDIS)			ASOS Takeoff	KLAL 0950Z 1011.2 mb	24
Block Time		Flight Time		NAV:	Richards/B	Jelenak, Zorana (NESDIS)	ASOS Land	1012.6			BTs
In:	17:04	Land:	17:00	FE(s):	Darby				A/C Land	1012.6	Good
Out:	8:40	T/O:	8:46	FD(s):	Heystek		ASOS Land	KLAL 1650Z 1012.3 mb			1
Total:	8.4	Total:	8.2	SSA:	Mascaro	Visitors:			Storm Number ID:		AL262020
Sponsoring Org:		NWS / EMC			SEB:		(ie: AL072012)		NOAA2 1426A DELTA		
Program:		PRX					TCPOD/WSPOD Mission				
Purpose:		Hurricane Delta TDR Mission #2					(ie: NOAA2 2418A SANDY)				
					MX:		OBSERVATIONS				
AS REQUIRED BY ORM			Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH				X			1				
SCIENCE MISSION WITHIN BDRY LAYER				X			2				
LACK OF PRECIPITATION				X			3				
RELATIVE HUMIDITY ≥ 80%			X				4				
LARGE AIR-SEA TEMP GRADIENT				X							
HIGH SURFACE WINDS			X								
LONG FETCH / DURATION OF SFC WND			X								
SEA SALT ACCRETION FORECAST				X							
SEA SALT ACCRETION OBSERVED				X			Pennies:	4 Hurricane Pennies			

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - no mission impact.
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Flight ID:	20201008H1
Flight Director(s):	Carpenter / Holmes
Mission:	Tasked/Operational
UWZ.d mean:	0.14

Pressure Comparison		
	T/O	Land
Aircraft	1010.9	1012.6
Tower	KLAL 0950Z 1011.2 mb	KLAL 1650Z 1012.3 mb

	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2	✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✓ AltGPS.3 ✓ AltGPS.4	✓ AltI-GPS.1 ✓ AltI-GPS.2	✓ AltPaADDU.1 ✓ AltBCADDU.1	✓ AltRA.1 ✓ AltRA.2	✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	✓ AltRA1.c ✓ AltRA2.c
✓ Ground Speed	✓ GsXI-GPS.1 ✓ GsXI-GPS.2	✓ GsYI-GPS.1 ✓ GsYI-GPS.2	✓ GsZI-GPS.1 ✓ GsZI-GPS.2		✓ GSXref ✓ GSYref ✓ GSZref	
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 ✓ LatGPS.3 ✓ LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 ✓ LonGPS.3 ✓ LonGPS.4	✓ LonI-GPS.1 ✓ LonI-GPS.2	✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 X PDALPHA.2 ✓ PDBETA.1 X PDBETA.2	✓ PQALPHA.1 ✓ PQBETA.1	✓ PQM.1 ✓ PQM.2 ✓ PQM.3 ✓ PQM.4	✓ PSM.1 ✓ PSM.2 ✓ PTM.1	✓ PDLAPHaref ✓ PDBETAref ✓ PQALPHaref ✓ PQBETAref	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ lasADDU.1		✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1 ✓ PitchI.2 X PitchI.3	✓ PitchRateI.1 ✓ PitchRateI.2 X PitchRateI.3	✓ RollI.1 ✓ RollI.2 X RollI.3	✓ RollRateI.1 ✓ RollRateI.2 X RollRateI.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 X TTM.3	✓ TDM.1 ✓ TDM.2 X TDM.3	✓ TRadD.1 ✓ TRadS.1 X TRadU.1		✓ TD.c ✓ TDMref	✓ TTMref ✓ TA.d
✓ Misc. (Must check)					✓ UWZ.d ✓ DPJ_WSZ ✓ HUM	✓ WS.d ✓ WD.d

FLID_Mission_Documents.pdf:
<ul style="list-style-type: none"> ✓ Error Summary ✓ Crew Manifest ✓ QC Checklist ✓ Dropwindsonde Log(s) - AVAPS and FD if completed ✓ Flight Track X Miscellaneous FD Notes

QC Key
Not checked <input type="checkbox"/>
Valid <input checked="" type="checkbox"/>
Errors (note) <input checked="" type="checkbox"/>

NOTES:
<p>PDApha.2 and PDBeta.2 inoperative.</p> <p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.3 unavailable.</p> <p>TDM.1 data spike during descent. TDM.3 inoperative.</p> <p>TRadU.1 unavailable.</p>

AVAPS Drop Log

Project: Aure 20

Mission: Hurricane Delta

Flight ID: 20201008 #1

Take Off: 0846 Z

Landing: _____

Flt Dir: Carp / Holmes

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	201450555	1	-.6	1032	JW	NWS	Carbo IP	✓
2	201350960	2	∅	1051		NWS	Mid #1	✓
3	201630206	3	∅	1101		ONR	Rmw	✓
4	201630229	4	∅	1107		NWS	Center #1	✓
5	201510644	5	∅	1111		ONR	Rmw	✓
6	201630253	6	∅	1119		NWS	Mid #2	✓
7	201740653	7	∅	1125		NWS	End #1	✓
8	201740101	8	-.6	1154		NWS	IP #2	✓
9	201440489	1	-.7	1207		NWS	Mid #3	✓
10	201440411	2	∅	1211		ONR	Rmw	✓
11	201510638	3	∅	1226		ONR	Rmw	✓
12	201740651	4	∅	1234		NWS	Mid #4	✓
13	201630171	5	∅	1244		NWS	End #2	✓
14	201630241	6	∅	1301		NWS	IP #3	✓
15	201630205	7	-.4	1307		NWS	Mid #5	✓
16	202330422	8	-.6	1316		NWS	Rmw	X
17	201630202	1	-.5	1316		NWS	Rmw backup	✓
18	201630219	2	-.5	1324		NWS	Rmw	✓
19	201620129	3	-.5	1332		NWS	Medpoint #6	✓
20	201740097	4	∅	1342		NWS	End #3	✓
21	201740647	5	∅	1416		NWS	IP #4	✓
22	201730156	6	-.5	1431		NWS	Mid #7	✓
23	201740685	7	-.6	1434		NWS	Rmw	✓
24	201740138	8	-.5	1440		NWS	Center	✓
25	201620341	1	-.6	1445		NWS	Rmw	✓
26	201450500	2	-.5	1453		NWS	Mid #8	✓
27	201510678	3	-.5	1503		NWS	End #4	✓
28								
29								
30								
31								

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								

Drop Station Operator Notes

Charge \$\$ To Options **(DO NOT USE FUNDING CODES):**
AOC, NWS, HRD, NESDIS, IR/SST, AR, STAN (Stanford), SAT (JPSS/NESDIS/HRD)

AVAPS Pre-Flight Check:

- If time-permits, verify cabin pressure sensor w/ lab standard
- Start AVAPS., then start Soundings and set the Project Name and Full Flight ID (example: 20120823N2).
- Verify the Frequency band allocation as required:
Band A: 53rd WRS - Band B: N42RF - Band C: N43RF - Band D: N49RF - Band E: Unallocated
- Select the **GPS Reference** tab from the **Soundings Displays** page and verify good GPS data
- Perform a prelaunch check on each channel, look for reasonable data and no CRC error status lights.
- Verify data is available on Remote AVAPS, then terminate the sonde.
- Verify the AVAPS Data mission folder has been created
- **Verify AVAPS PC Time is correct – if time is off by >4sec, no data will display**
- **Early launch detects are caused usually by remanufactured sondes with the chute riser line not properly coiled below the PCB ear. This may also cause fast falls. If this is suspected, repack the riser line as time permits**
- **Perform RH Regeneration on all sondes – Multiple RD41 sondes may be processed at once**

AVAPS Launch:

- Select a sonde frequency in the Green band and away from other sondes
- Enter sonde pressure error offset if 0.4mB or greater using cabin pressure sensor – warning, this can not be used during a climb
- **If the Cal lab pressure standard and the cabin pressure standard match, apply pressure offset +/- 0.1 mB**
- **Wait until GPS available (green) on the pre-launch screen before continuing.**
- Select “begin data collection” and verify good data with winds prior to putting sonde in launch tube
- On N42 & N43, remove about ½ of the ribbon. Do not shorten the ribbon on N49. Loosen ribbon and extend end of ribbon to near, but not over, the sensor end of the sonde. Place excess orange tape on end of ribbon to form a pocket.
- Place the sonde in the launch tube, sensor arm up, with the power pin socket facing right
- Verify the sonde is actively tracking GPS data prior to launch and **no early launch detect**

NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm **AL26106ETA**
Mission ID **1426A**

Flight ID **2020100811**
(exp. 0213A)

Dropsonde Scientist **Zawadzka**
Dropsonde Scientist

AVAPS Operator **WAWARCK1**
AVAPS Operator

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Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (°C)	Eye/Eyewall, Rainband, etc.	Obs #
						Dir/Spd (deg/kt)	Hgt (m)			
1	201450555	103221	25.60	92.38	1004.1	072/32			10 N COMBO w/2 BTs	1
Comments: INITIAL NORM WINDS BUT ESCURVARY GUT GOOD DATA BELOW 900										
2	201350960	105128	24.59	92.22	997.6	050/46			MO N	2
Comments										
3	201630206	110107	23.97	92.19	981.6	059/24			RMW N	3
Comments										
4	201630229	110328	23.57	92.16	969.5	120/19			CTR W	4
Comments										
5	201510644	111148	23.29	92.14	978.2	236/60			RMW S	5
Comments										
6	201630253	111925	22.79	92.14	994.3	245/31			MO S	6
Comments: LATE COUNCIL DETECT. OBSERVED 11:19:21.5, WIND 11:19:25.0 POST-SPURRY RAIN END										
7	2017410653	112551	22.40	92.24	998.0	-1-			ET S	7
Comments: COUNCIL GET SRC WIND										
8	2017410101	115656	23.83	90.81	1000.6	131/40			IP E	8
Comments										
9	201440499	120719	23.80	91.63	990.1	118/60			MO E	9
Comments										
10	201440411	121132	23.76	91.95	981.2	-1-			RMW W E	10
Comments: ALL WINDS TO RFG BUT 010 NOT GOOD. LOWEST WIND 9dier										

NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm **AC26/06CTA** Flight ID **20160909H1** Dropsonde Scientist **ZAWJSCW** AVAPS Operator **WRAWECCL** Page# **2 of 3**
 Mission ID **1426A** (exp. 0213A) Dropsonde Scientist **ZAWJSCW** AVAPS Operator **WRAWECCL**

TWO DIFFERENT CRUISES
 THIS IS ONE
 PLUMMER
 BUT
 20 FIVE
 13X 135

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (°C)	Eye/Eyewall, Rainband, etc.	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
11	201510639	122631	23.64	92.73	978.7	322	184		RW W	11
12	201740651	123434	23.65	93.31	994.6	347	146		MW W	12
13	201630131	124413	23.53	94.05	1001.4	337	132		EPW	13
14	201630241	130115	22.93	93.43	999.5	302	128		1P SW	14
15	201630205	130754	23.23	93.11	995.5	298	148		MW SW	15
16	201630202	131645	23.61	92.62	971.2	297	156		RW SW H1	16
17	202330422	131646	23.61	92.62	?	?	?		RW SW H2	17
18	201630219	132414	23.98	92.26	—	—	—		RW NE 1	18
19	201620129	133246	24.35	91.85	994.6	102	160		MP NE	19
20	201740097	134208	24.78	91.38	1001.9	111	135		EP NE	20

Comments: Post-SOUND DATA FUDGE - ASSET HAD TO REMOVE DATA

Comments: AND SUPERSTORM DID NOT GET TRANSMIT TO SEC & STRAGGED AT 4580 M, RH IS ALSO SEVERELY NOISY -

Comments: AND THAT THERE ARE NO CLS IN THE SURFACE IS ONLY 53 SECONDS / TURN NOT GOING TO SCAP

Comments: POST-SOUND DATA FUDGE - ASSET DIDN'T FUDGE AS FUDGE I THINK THE WAS THE 201

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Comments: POST-SOUND DATA FUDGE - ASSET HAD TO REMOVE DATA

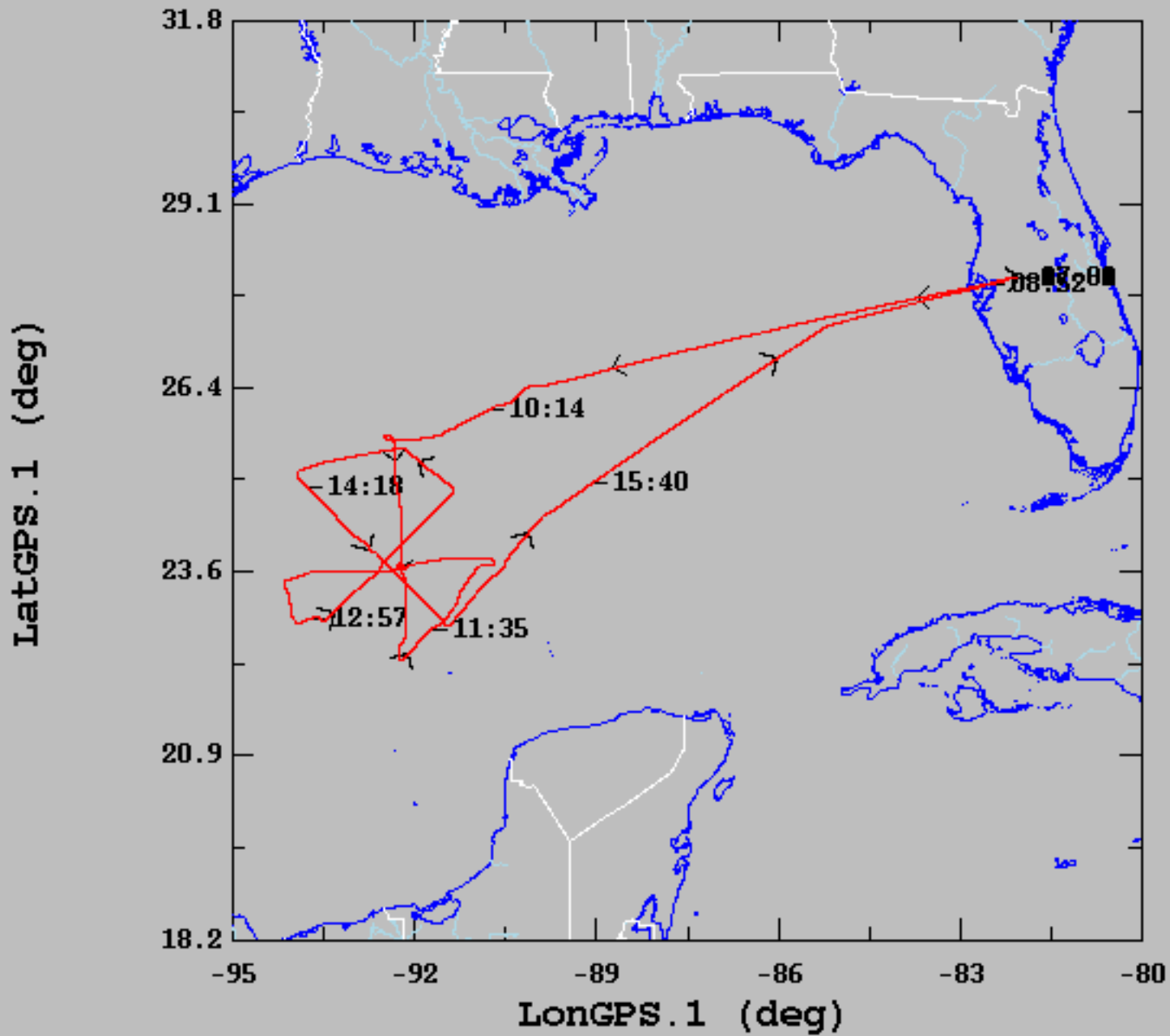
Comments: AND SUPERSTORM DID NOT GET TRANSMIT TO SEC & STRAGGED AT 4580 M, RH IS ALSO SEVERELY NOISY -

NOAA P-3 GPS Dropwindsonde Scientist Log (revised March 2019)

Storm *Atze / orca* Flight ID *20201008H1* Dropsonde Scientist *Zaworski* AVAPS Operator *WRAVACC1* Page# *3 of 3*
 Mission ID *1426A* (exp. 0213A) Dropsonde Scientist *Zaworski* AVAPS Operator

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (C)	Eye/Eyewall, Rainband, etc.	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
21	201740647	141654	24.97	93.84	1008.4		← 021/42			18
Comments										
22	201730156	143145	24.28	93.10	992.8		015/51			19
Comments										
23	201740647 201740645	143630	24.09	92.85	978.3		007/66			21
Comments										
24	201740738	144022	23.93	92.65	969		115/11			20
Comments										
25	201620341	144535	23.69	92.38	977.7		176/86			22
Comments										
26	201450500	145310	23.37	92.02	996.1		190/46			23
Comments										
27	201510678	150336	22.89	91.51	1002.3		179/40			24
Comments										
Comments										
Comments										
Comments										

10/08/2020, 07:30:57-17:01:50



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	25.42	1.82	22.34	27.99
— LongGPS.1 (deg), 1 s/sec	-88.97	4.16	-94.14	-82.01