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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:	20201007H1	FLT #:	21-4	AC:	Abitbol	Scientists:	Pressure		Dropsondes			
From:	KLAL	ETD:	1000Z	CP(s):	Mitchell	Zawislak, Jon (HRD)	A/C Takeoff	1009.2	Good	Bad	Sent	
To:	KLAL	ETA:	1800Z		Shaw	Chang, Paul (NESDIS)			ASOS Takeoff	KLAL 0950Z 1009.2 mb	14	0
Block Time		Flight Time		NAV:	Richards/B	Jelenak, Zorana (NESDIS)	ASOS Land	1011.7			BTs	
In:	15:35	Land:	15:30	FE(s):	Darby				A/C Land	1011.7	Good	Bad
Out:	9:35	T/O:	9:42	FD(s):	Heystek		ASOS Land	KLAL 1550Z 1012.0 mb			0	2
Total:	6.0	Total:	5.8	SSA:	Mascaro	Visitors:			Storm Number ID:		AL262020	
Sponsoring Org:		NWS / EMC			SEB:		(ie: AL072012)		NOAA2 0826A DELTA			
Program:		PRX						TCPOD/WSPOD Mission				
Purpose:		Hurricane Delta TDR Mission #1						(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								
LACK OF PRECIPITATION				X								
RELATIVE HUMIDITY ≥ 80%			X				2					
LARGE AIR-SEA TEMP GRADIENT				X								
HIGH SURFACE WINDS			X				3					
LONG FETCH / DURATION OF SFC WND			X									
SEA SALT ACCRETION FORECAST				X			4					
SEA SALT ACCRETION OBSERVED				X								
							Pennies:	N/A				

*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:	20201007H1
Flight Director(s):	Carpenter / Holmes
Mission:	Tasked/Operational
UWZ.d mean:	0.08

Pressure Comparison		
	T/O	Land
Aircraft	1009.2	1011.7
Tower	KLAL 0950Z 1009.2 mb	KLAL 1550Z 1012.0 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:
✓ 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)	X

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

AVAPS Drop Log

Project: Hurr 20

Mission: Hurricane Delta

Flight ID: 20201007411

Take Off: 0942Z

Landing: _____

Flt Dir: Carpenter/Helms

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	201740644	1	-1.6	1058	JW	NWS	Point 13	✓
2	201740737	2	∅	1113			12	✓
3	201740656	3	∅	1130			11	✓
4	201740705	4	-1.5	1147			10	✓
5	201510697	5	∅	1200			9	✓
6	201630221	6	∅	1211			8	✓
7	201450526	7	∅	1222			7	✓
8	201450548	8	∅	1237			6B	✓
9	201440480	1	∅	1251			1	✓
10	201450556	2	∅	1301			2	✓
11	201630255	3	-1.5	1313			BT Carbo 3	✓
12	201630217	4	-1.5	1324			4	✓
13	201630199	5	-1.4	1343			5	✓
14	202330449	6	-1.4	1353			6A	✓
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
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 **AL26/DELTA** Flight ID **20201007HLL** Dropped Scientist **ZAWISWA K** AVAPS Operator **WFRANCEC1** Page# **1 of 2**
 Mission ID **082CA** (exp. 0213A) Dropped Scientist **ZAWISWA K** AVAPS Operator

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (C)	Eye/Ewell, Rainband, etc.	Ob #
						Dir/Spd (deg/kt)	Hgt (m)			
1	201740644	105907	22.66	85.50	1003.7	111	140		PT13 NWS #1	1
Comments Post-sounding data flag, Removed										
2	201740737	111332	22.66	85.50	1002.5	143	130		PT12 NWS #2	2
Comments										
3	201740656	113002	20.69	85.50	1001.6	193	132		PT11 NWS #3	3
Comments										
4	201740705	114748	19.70	85.60	1003.7	217	130		PT10 NWS #4	4
Comments										
5	201510697	120014	19.70	86.51	1002.9	225	128		PT9 NWS #5 MID US RAIN TO SW	5
Comments										
6	201630221 201510697	121118	19.81	87.09	1000.6	234	136		PT8 SW #1	6
Comments										
7	201450526	122258	20.53	86.47	1000.3	196	135		PT7 SW #2	7
Comments										
8	201450548	123706	21.61	86.40	1000.8	120	135		PT6 SW #3	8
Comments										
9	201440490	125121	22.70	86.64	1003.7	087	138		PT1, SW #1	9
Comments										
10	201450556	130126	22.76	87.55	1002.7	066	126		PT2 SW #2	10
Comments Post-Sounding data flag										

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

Storm **AUG/DELTA**
Mission ID **0826A**

Flight ID **2020100711**
(exp. 0213A)

Dropsonde Scientist **Zawisak**
Dropsonde Scientist

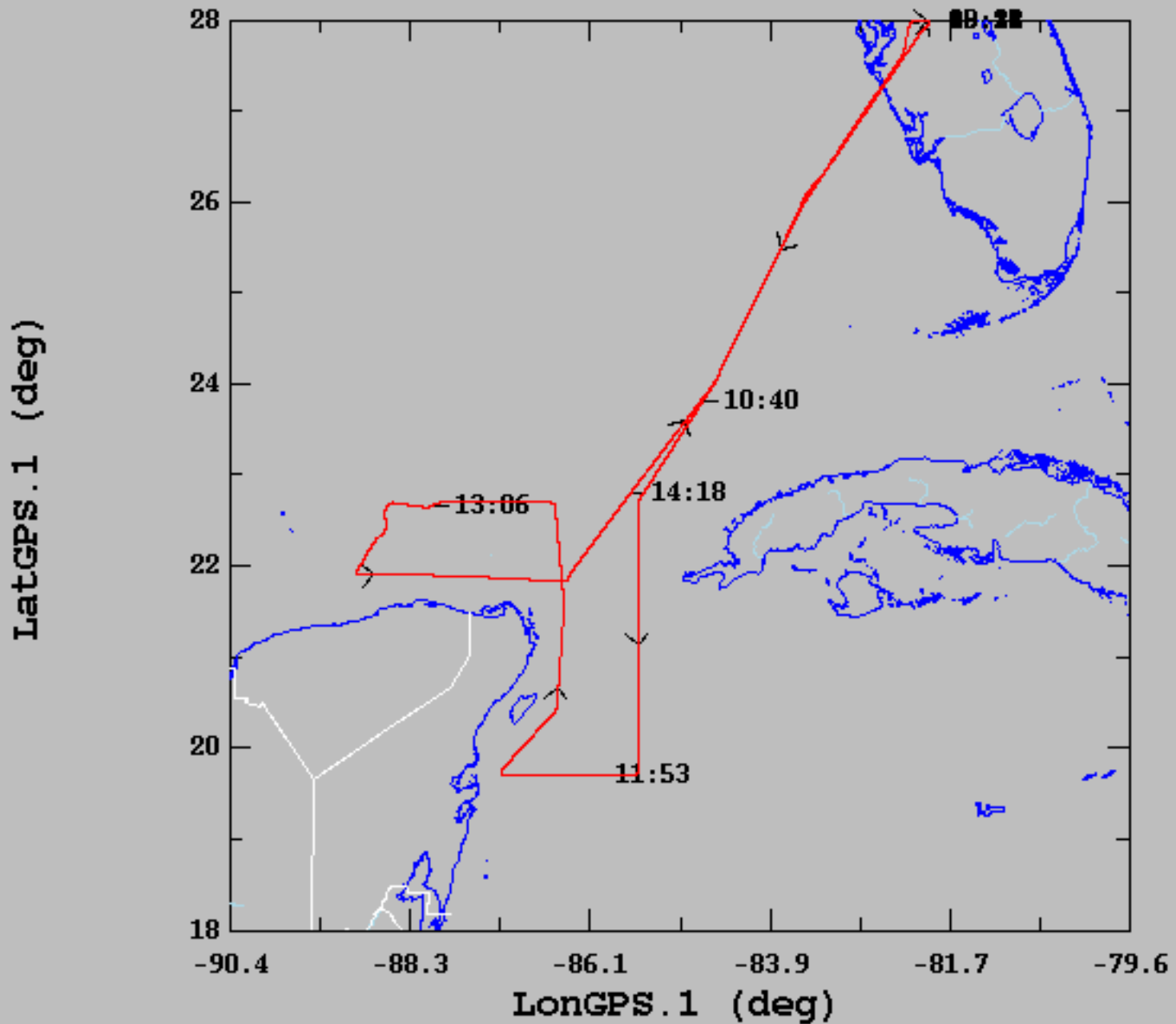
AVAPS Operator **WERNICKI**
AVAPS Operator

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121017
14478
121

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	201630255	131320	22.65	88.56	1008.2	025	128			11
Comments	POST-SPONSOR FUSE IN AIRCRAFT - REMOVE									
12	201630217	132444	21.91	88.81	1002.4	018	126			12
Comments	EJ → EPT 4									
13	201630199	134320	21.89	87.68	995.6	057	142			13
Comments	W → EPT 5									
14	202330449	135320	21.86	87.07	999.6	114	138			14
Comments	W → EPT 6 PROXIMITY OF ORANGE PL									
Comments	END OF SONDAS									
Comments										
Comments										
Comments										
Comments										

10/07/2020, 08:15:47-15:31:11



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	24.13	2.88	19.70	27.99
— LongGPS.1 (deg), 1 s/sec	-84.74	2.11	-88.90	-81.98