

NOAA Aircraft Operations Center - NOAA 42 Flight Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20180910H1	FLT #:	4	AC:	Kibbey	Scientists:	Pressure		Dropsondes		
From:	TXKF	ETD:	1200Z	CP(s):	Abitbol	Paul Change (NESDIS)	A/C Takeoff		Good	Bad	Sent
To:	TXKF	ETA:	1800Z		Rossi		Zorana Jelenak (NESDIS)			42	1
Block Time		Flight Time		Nav(s):	Urato	Joe Sapp (NESDIS)	Wx Station Takeoff		BTs		
In:	2247	In:	2242		Richards	Jon Zawislak (HRD)	A/C Land		Good	Bad	Sent
Out:	1315	Out:	1323	FE(s):	Darby	Heather Holbach (HRD)	Wx Station Land		Ø	4	Ø
Total:	9.5	Total:	9.3		Lalonde		Visitors:				
Sponsoring Org:		NESDIS / HRD / NWS		SEB:	Greene	Carrion	Storm Number ID:		AL062018		
Program:		PHX		SSA:	Mascaro	Newnam	(ie: AL072012)				
Purpose:		FLORENCE		AVAPS:	Underwood		TCPOD/WSPOD Mission		WC06A FLORENCE		
							OBSERVATIONS				
AS REQUIRED BY ORM			Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH				X							
SCIENCE MISSION WITHIN BDRY LAYER				X							
LACK OF PRECIPITATION				X							
RELATIVE HUMIDITY ≥ 80%			X		9X (LAT IV) Penny's						
LARGE AIR-SEA TEMP GRADIENT				X	*3 TDR						
HIGH SURFACE WINDS				X	• 6 NESDIS						
LONG FETCH / DURATION OF SFC WND				X							
SEA SALT ACCRETION FORECAST				X							
SEA SALT ACCRETION OBSERVED				X							

Additional Remarks:

Cockpit Gmax:

Gmin:

*Highlighted items must be completed before departure.

APPENDIX 1 – P3 QC Checklist

Flight ID:	20180910 H1
Flight Director(s):	Holmes

Pressure Comparison		
	T/O	Land
Aircraft	1017	✓
Tower	1016	✓

UWZ.d mean: 0.12 m/s

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

FLID_Mission Documents.pdf:

Error Summary
Crew Manifest
QC checklist
Dropwindsonde Log(s) – AVAPS and FD if completed
Flight Track
Miscellaneous FD notes

NOTES:

PDAlpha.2 Inop
 PAM.1 failed after 2136Z

A • AOC • SED N42RF AVAPS DROP LOG

Lead Tech: Mike Mascaro

2018

Mission: Hurricane Florence Flight ID: 20180910H1

Landing: _____ Fit Dir: Holmes

Good ?

onde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
163615101	1	-0.6	1512	NEW	HRD	IP, inbound (IB)	✓
163525175	2	-0.3	1526	↓	HRD	Midpoint, IB	✓
163335065	3	-1.0	1533	↓	NESDIS	RMW, combo, IB	✓
163525173	4	-0.3	1535		NWS	Center, CPA	✓
163525077	5	+0.4	1537		NESDIS	RMW, combo, ^{outbound} OB	✓
164015089	6	+0.4	1538		NESDIS	2nd RMW, OB	✓
144315067	7	-1.5	1546		HRD	Midpoint, OB	✓
144315064	8	-0.5	1559		HRD	Endpoint, OB	✓
163525040	1	-0.2	1620		HRD	Endpoint (EP), IB	✓
163525170	2	+0.1	1628		HRD	Midpoint (MP), IB	✓
163615107	3	+0.2	1640		NESDIS	RMW, IB	✓
163525079	4	+0.5	1642		NWS	Center, no. PTH	✗
163525188	5	-0.9	1644		NESDIS	RMW, OB	✓
164625057	6	+0.1	1654		HRD	MP, OB	✓
164625062	7	-0.9	1703		HRD	EP, OB	✓
163625013	8	+0.3	1716		HRD	EP, IR	✓
164625063	1	+0.4	1727		HRD	MP, IB	✓
163525182	2	-0.4	1734		NESDIS	RMW, combo, IB	✓
164445086	3	-1.6	1736		NWS	Center	✓
163525189	4	+0.1	1738		NESDIS	RMW, combo, OB	✓
164625061	5	-0.2	1748		HRD	MP, OB	✓
164625052	6	0.0	1757		HRD	EP, OB	✓
163955086	7	-0.7	1816		NESDIS	RMW, IB	✓
144545087	8	-0.7	1818		NWS	Center	✓
164445064	1	+0.4	1829		NESDIS	RMW, OB	✓
163615104	2	-0.2	1916		NESDIS	RMW, IB	✓
164345028	3	-0.9	1918		NWS	Center	✓
163525179	4	0.0	1922		NESDIS	RMW, OB	✓
164445166	5	-0.4	1923		NESDIS	RMW#2, OB	✓
164015075	6	0.0	1928		NESDIS	RMW, IB	✓
143315049	7	-0.7	1932		NESDIS	RMW, OB	✓
164345026	8	-0.7	1933		NESDIS	RMW, OB, #2	✓
163615103	1	-0.4	1957		NESDIS	RMW, IB	✓
163525183	2	-0.7	2000		NWS	Center	✗

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	G
35	144535077	3	-0.8	2002	NGM	NESDIS	RMW, OB	✓
36	163525089	4	+0.2	2022	↓	NESDIS	RMW, IR	✓
37	163525191	5	-0.5	2024		NWS	Center, CPA	✓
38	164345134	6	-0.2	2027		NESDIS	RMW, OB	✓
39	163615058	7	-0.1	2028		NESDIS	RMW, OB	✓
40	164015159	8	-0.3	2055		NESDIS	RMW, IR	✓
41	163615115	1	-0.2	2058		NWS	Center	✓
42	164345041	2	-1.2	2100		NESDIS	RMW, OB	✓
43	163845107	3	-0.3	2101		NESDIS	RMW, OB	✓
44								
45								
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Drop Station Operator Notes

Charge \$\$ To Options: AOC, NWS, **NESDIS**, SAT (Special NESDIS/HRD), IR/SST or HRD ONLY – Do not use funding codes!!!

AVAPS Pre-Flight Check:

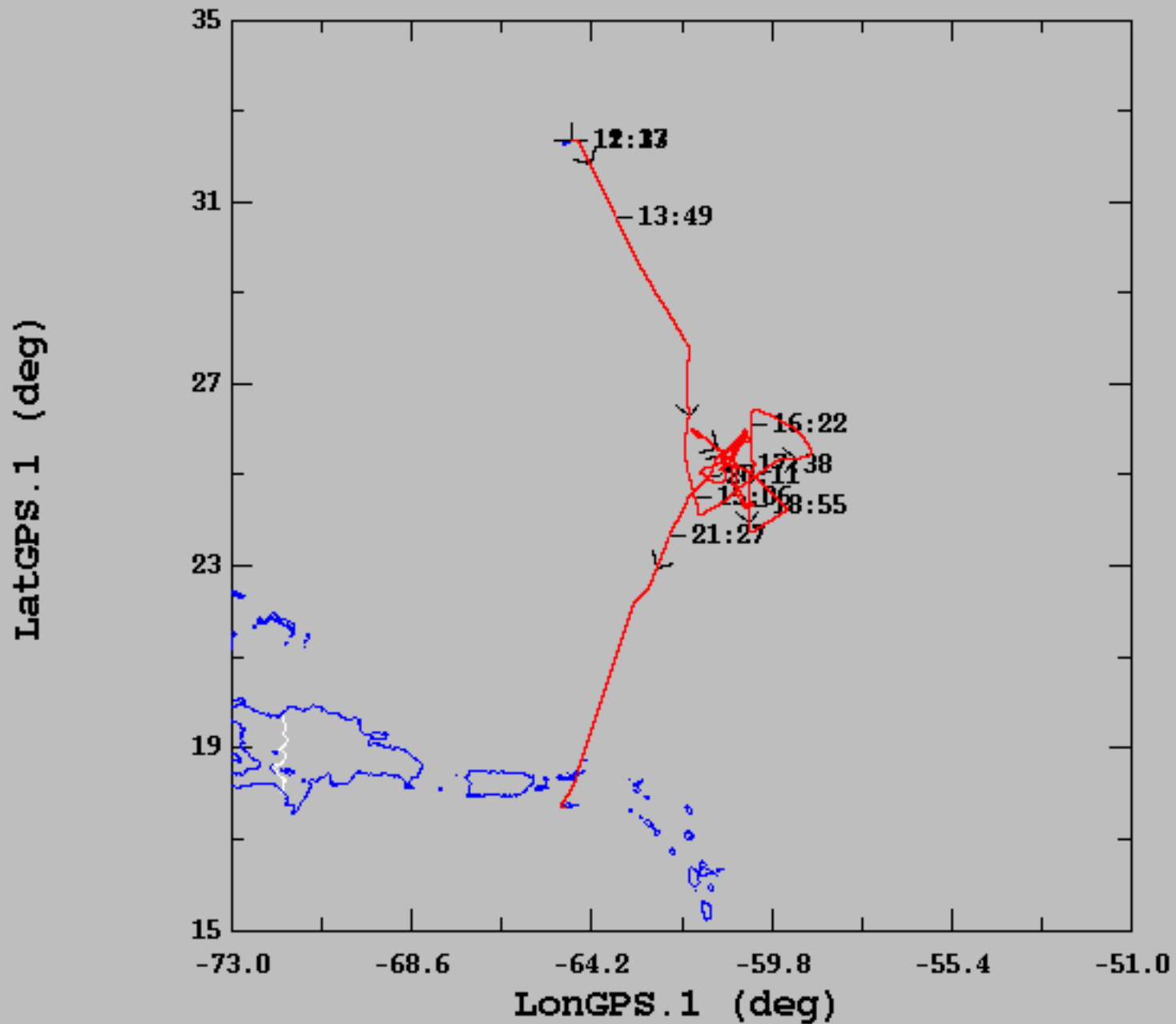
- If time-permits, verify cabin pressure sensor w/ lab standard
- Start AVAPS., then start Soundings and set the Project Name and full Flight ID (example 2015011811).
- Update the Frequency band allocation as required:
Band A - W53rd, Band B - N42RF, Band C - N43RF, Band D - N49RF, Band E - not allocated
- Perform a prelaunch check on each channel, look for reasonable data and no CRC error status lights. Verify data is available on Remote AVAPS at the FD Station, then terminate the sonde by selecting **Abort** to cancel the sonde initialization. Verify the AVAPS Data mission folder has been created.
- Verify AVAPS PC Time is correct
- Early launch detects are caused usually by remanufactured sondes with the chute riser line not properly coiled between the PCB ears. This may also cause fast falls. If this is suspected, repack the riser line as time permits
- Eyewall drop performance is improved when using sondes manufactured after 7/2016
- Perform RH Regeneration on all sondes – this must be done prior to sonde initialization -

AVAPS Launch:

- Select a sonde frequency in the Green band and away from other sondes
- Enter sonde pressure error offset. The latest AVAPS inserts a default offset value. Adjust if pressure offset is 0.4 mB or greater
- If the Cal lab pressure standard and the cabin pressure standard match, apply pressure offset +/- 0.1 mB
- Select "begin data collection" and verify good data (including Winds) prior to putting sonde in launch tube
- Failure to keep good lock on GPS is likely due to the GPS antenna connector on the sonde PCB needing to be rotated away from surface mount components – do this if needed.
- Cut off about 1/2 of ribbon, loosen ribbon and extend end of ribbon to near, but not over, the sensor end of the sonde
- Place the sonde in the launch tube, sensor arm up, with the power pin socket facing starboard
- Verify the sonde is actively tracking GPS data prior to launch and no Early Launch detect

20180910H1 Flight Track

09/10/2018, 11:17:14-22:43:55



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	26.43	3.70	17.69	32.37
— LongGPS.1 (deg), 1 s/sec	-62.00	1.82	-64.95	-58.83