

Phone #: 863-500-3901

ACAT-4 Version = 7.3

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N43RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	2020091511	FLT #:	20-78	AC:	Rossi	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1300Z	CP(s):	Legidakes	Dunion, Jason	A/C Takeoff	1011.7	Good	Bad	Sent
To:	KLAL	ETA:	2000Z		Doremus		ASOS Takeoff	KLAL 1250Z 1012.3 mb	26	1	26
Block Time		Flight Time		NAV:	Freeman	Visitors:	A/C Land	1009.7	BTs		
In:	21:31	Land:	21:24	FE(s):	Heystek		ASOS Land	KLAL 2150Z 1010.0 mb	0	0	0
Out:	12:33	T/O:	12:42	FD(s):	Sanchez	Storm Number ID: (ie: AL072012)	AL192020				
Total:	9.0	Total:	8.7	SSA:	Richards/T		TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA3 1119A SALLY			
Sponsoring Org:		NWS / NHC			AVAPS:	McAlister	OBSERVATIONS				
Program:		PRX			SEB:		Fix Number	Obs Number	Fix Time	SLP	
Purpose:		Hurricane Sally fix mission.			MX:		1				
AS REQUIRED BY ORM			Y	N	REMARKS		2	3	4	Pennies:	
VOLCANIC ASH				X						6 Hurricane Pennies	
SCIENCE MISSION WITHIN BDRY LAYER				X							
LACK OF PRECIPITATION				X							
RELATIVE HUMIDITY ≥ 80%			X								
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							

*Highlighted items must be completed before departure.

Remarks: 5 HRD sondes, 22 NWS sondes.

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
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Flight ID:	2020091511
Flight Director(s):	Carpenter / Parrish
Mission:	Tasked/Operational
UWZ.d mean:	0.09

Pressure Comparison		
	T/O	Land
Aircraft	1011.7	1009.7
Tower	KLAL 1250Z 1012.3 mb	KLAL 2150Z 1010.0 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 X 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 X LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 ✓ LonGPS.3 X LonGPS.4	✓ LonI-GPS.1 ✓ LonI-GPS.2	✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 ✓ PDALPHA.2 ✓ PDBETA.1 ✓ 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	✓ IasADDU.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	X 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)	<input checked="" type="checkbox"/>

NOTES:
<p>GPS.4 unavailable.</p> <p>5-10 mb difference between PSM.1 and PSM.2, most pronounced at higher altitudes.</p> <p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.3 inoperative.</p> <p>TDM.1 and TDM.3 inoperative.</p> <p>TRadU.1 inoperative.</p>

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
54								
55								
56								
57								

Drop Station Operator Notes

Charge \$\$ To Options: AOC, NWS, HFIP, NESDIS, ONR, HRD, IR/SST or HRD ONLY – Do not use funding codes!!!

AVAPS Pre-Flight Check:

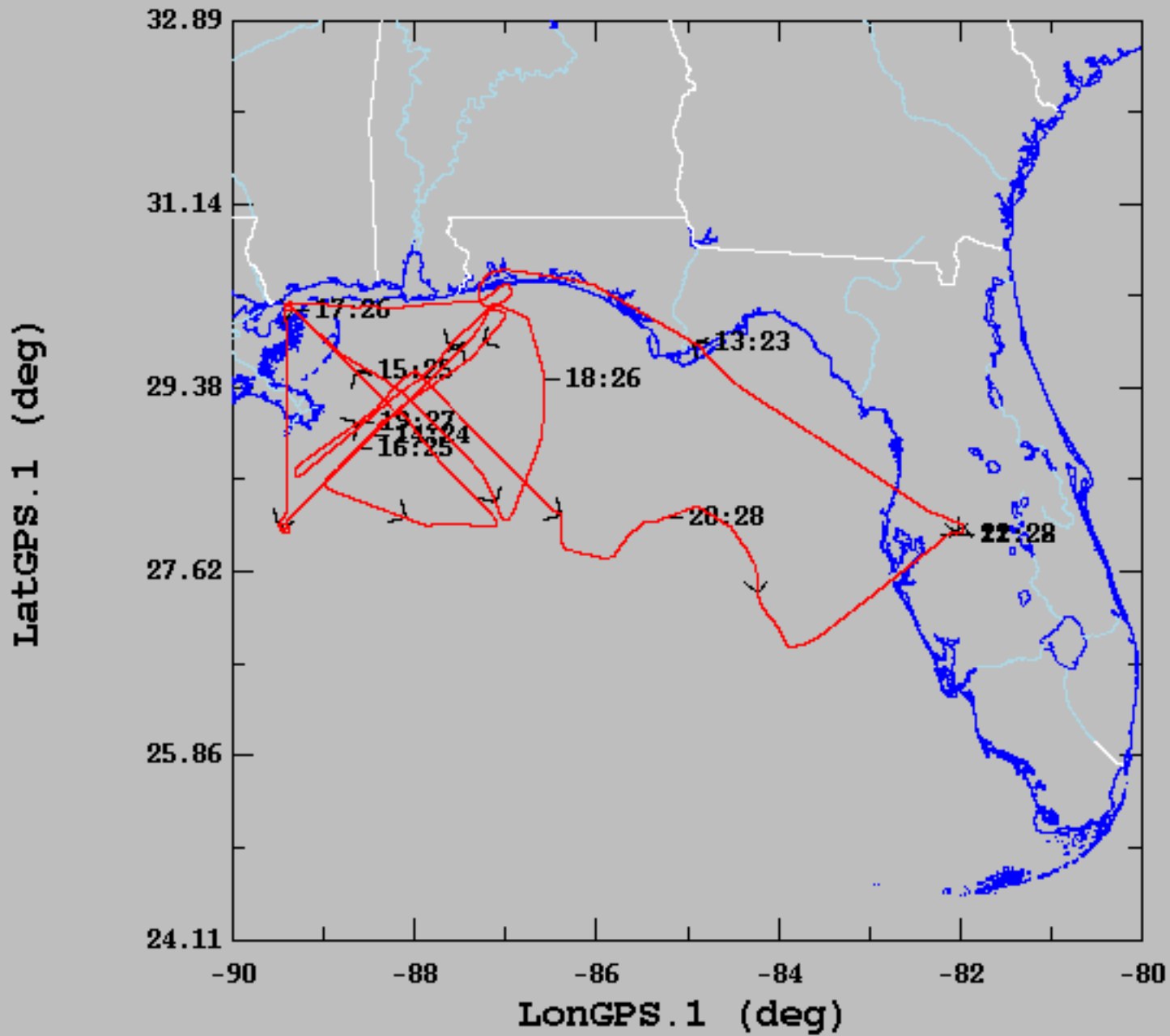
- If time-permits, verify cabin pressure sensor w/ lab standard
- Start AVAPS., then start Soundings and set the Project Name and full Flight ID (example 20110823h2).
- Update the Frequency band allocation as required:
Band A - W53rd, Band B - N42RF, Band C - N43RF, Band D - N49RF, Band E - not allocated
- 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**

NOTE: HRD RESEARCH MAY REQUIRE USING "IR SONDES", WHICH ALSO HAVE SLOW FALL CHUTES. DO NOT SHORTEN THE RIBBON ON THE SLOW FALL CHUTE SONDES.

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 – **only if cabin pressure sensor has been fixed and re-calibrated**
- Select "begin data collection" and verify good data (including Winds) prior to putting sonde in launch tube
- **Cut off about ½ of ribbon, Unwind ribbon and flip the screen, Re-wind ribbon, Use orange tape to make a pocket at end 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**

09/15/2020, 11:22:44-21:28:47



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	28.86	0.87	26.90	30.50
— LongGPS.1 (deg), 1 s/sec	-86.35	2.50	-89.48	-81.96