

Flight Director: Hathaway
Phone #: 863-500-3911

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20210813H1	FLT #:	4	AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	0800Z	CP(s):	Stateler	Aberson	A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1600Z		Shaw	Zhang			11	0	11
Block Time		Flight Time		NAV:	Richards, Brian	Utama	ASOS Takeoff		BTs		
In:	12:53	Land:	12:48	FE(s):	Sanchez	Greene			Good	Bad	Sent
Out:	7:59	T/O:	8:07	FD(s):	Lundry		A/C Land		0	0	0
Total:	4.9	Total:	4.7		SSA:	Richards, Todd					
Sponsoring Org:	EMC / NHC			SEB:			Storm Number ID:		AL062021		
Program:	PRX						(ie: AL072012)				
Purpose:	TDR Flight				MX:			TCPOD/WSPOD Mission		0906A FRED	
							(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMARK	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X		1				
SCIENCE MISSION WITHIN BDRY LAYER					X						
LACK OF PRECIPITATION					X		2				
RELATIVE HUMIDITY ≥ 80%				X							
LARGE AIR-SEA TEMP GRADIENT					X		3				
HIGH SURFACE WINDS					X						
LONG FETCH / DURATION OF SFC WND					X		4				
SEA SALT ACCRETION FORECAST					X						
SEA SALT ACCRETION OBSERVED							Pennies:	N/A			

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
--------------------	-----------------------------------------------------

Flight ID:	20210813H1
Flight Director(s):	Hathaway / Lundry
Mission:	Tasked/Operational
UWZ.d mean:	0.11

Pressure Comparison		
	T/O	Land
Aircraft	1014.2	N/A
Tower	KLAL - N/A	KLAL - 1014.7

	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 <input type="checkbox"/> 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			
✓ 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 ✓ 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	✓ lasADDU.1	✓ IAS.d ✓ TAS.d		
✓ Pitch / Roll	✓ PitchI.1 ✓ PitchI.2 <input type="checkbox"/> PitchI.3	✓ PitchRatel.1 ✓ PitchRatel.2 <input type="checkbox"/> PitchRatel.3	✓ RollI.1 ✓ RollI.2 <input type="checkbox"/> RollI.3	✓ RollRatel.1 ✓ RollRatel.2 <input type="checkbox"/> RollRatel.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 <input checked="" type="checkbox"/> TTM.3	<input checked="" type="checkbox"/> TDM.1 ✓ TDM.2 ✓ TDM.3	✓ TRadD.1 ✓ TRadS.1 <input type="checkbox"/> 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 ✓ Miscellaneous FD Notes

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

NOTES:
<p>- TDM.1 is unrepresentative with unusual oscillations for most of flight. TDM.2 is reference.</p>

Flight ID 20210609H1 Storm Ana Dropsonde Scientist Sellwood

The lead project scientist (LPS) on the P3 is responsible for determining the distribution patterns for dropwindsonde releases. Predetermined desired data collection patterns are illustrated on the flight patterns. However, these patterns often are required to be altered because of clearance problems, etc. Operational procedures are contained in the operator's manual. On the G-IV the sole HRD person is designated the LPS. The following list contains more general supplementary procedures to be followed. (Check off or initial.)

Preflight

- 1. Determine the status of the AVAPS and HAPS or workstation. Report results to the LPS.
- 2. Confirm the mission and pattern selection with the LPS and assure that enough dropsondes are on board the aircraft.
- 3. Modify the flight pattern or drop locations if requested by AOC to accommodate changes in storm location or closeness to land.
- 4. Complete the appropriate preflight set-up and checklists.

In-Flight

- 1. Operate the system as specified in the operator's manual.
- 2. Ensure the AOC flight director is aware of upcoming drops.
- 3. Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal. Recommend if a backup dropsonde should be launched in case of failure.
- 4. Report the transmission of each drop and fill in the Dropwindsonde Scientist Log.

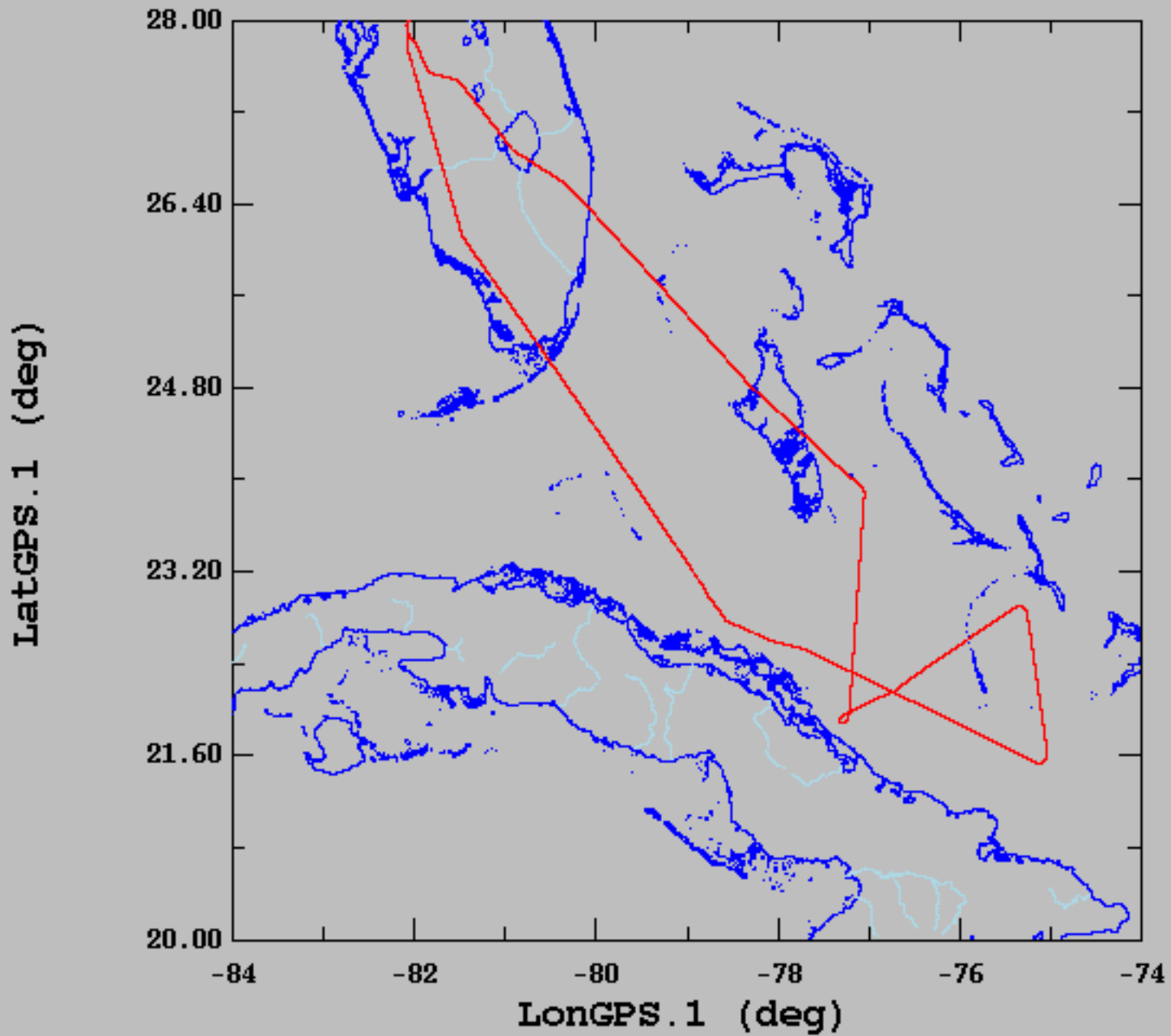
Post flight

- 1. Complete Dropwindsonde Scientist Log.
- 2. Brief the LPS on equipment status and turn in completed forms, dropwindsonde data tapes, DVDs, or CDs.
[Note: all data removed from the aircraft by HRD personnel should be cleared with the AOC flight director.]
- 4. Debrief at the base of operations.
- 5. Determine the status of future missions and notify MGOc as to where you can be contacted.

Storm Fred Flight ID 20210813H1 Dropsonde Scientist Xuejin Zhang AVAPS Operator Warnecke
 Mission ID 09t6AFed (el, 0101A) Take Off D 0257 Landing 12<f, o,-

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Dir/Spd (deg/kt)	Lowest Wind Hgt (m)	SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
	202910378	092407	22.78	-78.56	1012.8	86.8/15	10		post-splash	1
Comments <u>post-splashes</u>										
	202311650	093608	22.75	-77.75	1017.9	71.8/19	10			2
Comments										
	202910404.3	095148	22.16	-76.73	1013.0	165/18	10		post-splashes	3
Comments <u>post-splashes</u>										
	203040302	100158	21.91	-76.08	1013.2	160/20	10			4
Comments										
	202910376	100754	21.75	-75.69	1014.1	155/27	12			5
Comments										
	202910404	101628	21.53	-75.12	1013.7	145/11	10			6
Comments										
	202910393	103558	22.89	-75.30	1015.4	140/19	10			7
Comments										
	202721607	104750	22.50 22.499	-76.11	1014.7	115/16	10			8
Comments										
	203310483	110519	21.89	-77.30	1012.6	185/11	10			9
Comments										
	203040924	112300	23.10	-77.11	1014.5	100/20	10			10
Comments										

2021-08-13, 08:07:00-12:47:42



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	24.16	1.99	21.53	27.99
— LonGPS.1 (deg), 1 s/sec	-78.49	2.20	-82.08	-75.03