

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:	20210812H1	FLT #:	3	AC:	Abitbol	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	0800Z	CP(s):	Stateler	Marks F.	A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1600Z		Shaw	Wadler J.			14	0	14
Block Time		Flight Time		NAV:	Richards, Brian	Utama	ASOS Takeoff	BTs			
In:	14:56	Land:	14:48	FE(s):	Sanchez		A/C Land		Good	Bad	Sent
Out:	7:58	T/O:	8:05	FD(s):	Stokes				0	0	0
Total:	7.0	Total:	6.7	SSA:	Richards, Todd	Visitors:	ASOS Land				
Sponsoring Org:	EMC / NHC			AVAPS:	Warnecke		Storm Number ID:		AL062021		
Program:	PRX			SEB:			(ie: AL072012)				
Purpose:	TDR Flight			MX:			TCPOD/WSPOD Mission		0506A FRED		
							(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMAR	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							Pennies:	N/A			

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
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Flight ID:	20210812H1
Flight Director(s):	Hathaway / Lundry
Mission:	Tasked/Operational
UWZ.d mean:	0.17

Pressure Comparison		
	T/O	Land
Aircraft	1014.9	N/A
Tower	KLAL - N/A	KLAL - 1015.7

	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	<input checked="" type="checkbox"/> 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 <input type="checkbox"/> PitchI.3	✓ PitchRateI.1 ✓ PitchRateI.2 <input type="checkbox"/> PitchRateI.3	✓ RollI.1 ✓ RollI.2 <input type="checkbox"/> RollI.3	✓ RollRateI.1 ✓ RollRateI.2 <input type="checkbox"/> RollRateI.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:
<ul style="list-style-type: none"> - PQM.1 diverges from other PQM sensors towards the end of flight, and becomes unrepresentative. - TDM.1 is unrepresentative for first half of flight. TDM.2 is reference.

Dropsonde Scientist

Flight ID 2012 081244 Storm Fred Mission ID 0506A Fred

Dropsonde Scientists Wadler

AVAPS Operators Warneke

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 are often 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 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

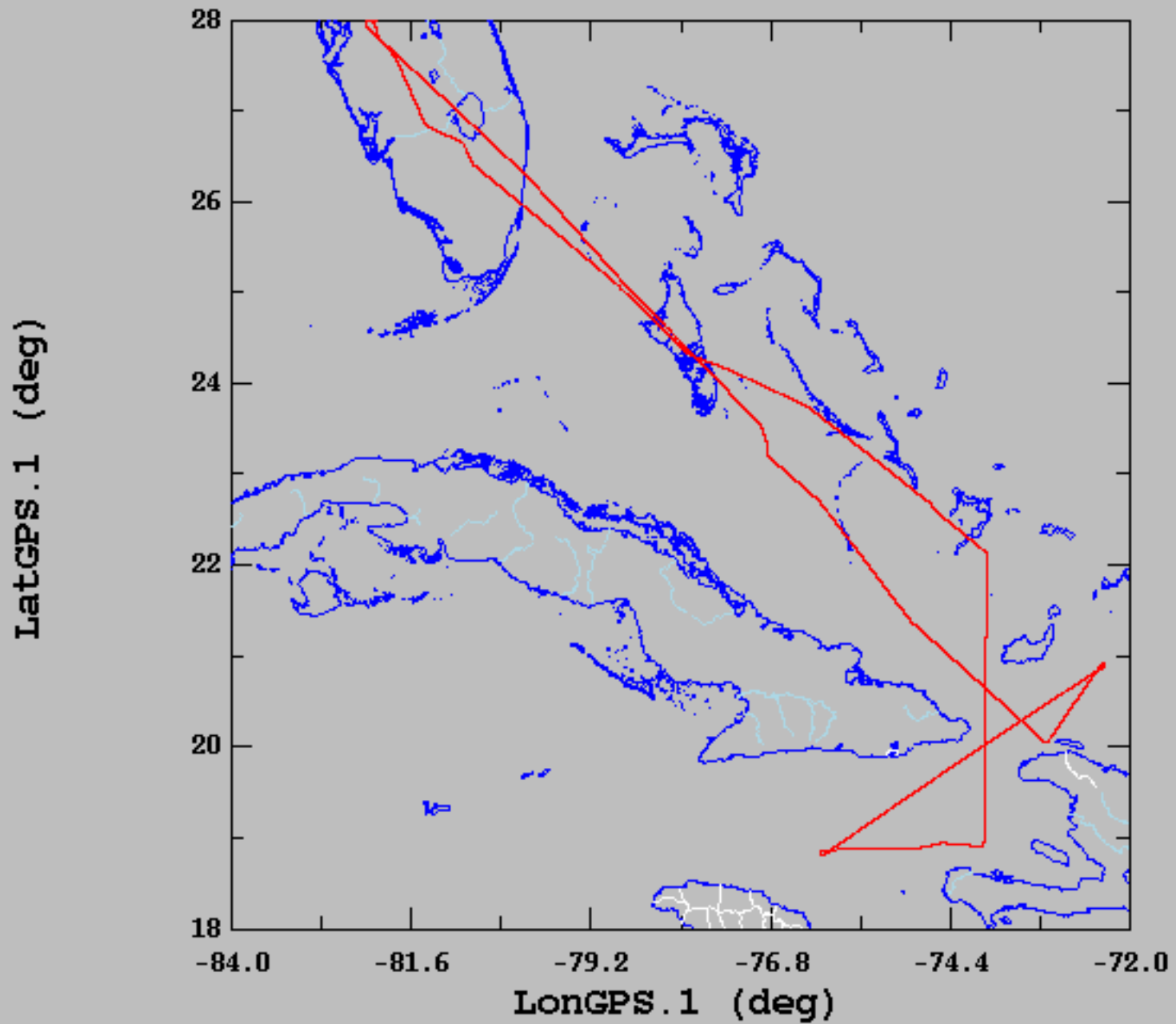
- 1. Complete Dropwindsonde Scientist Log.
- 2. Download all raw and processed AVAPS files to thumbdrive
- 3. Brief the LPS on equipment status and turn in completed forms and thumbdrive.
- 4. Debrief at the base of operations.
- 5. Determine the status of future missions and notify Field Program Director as to where you can be contacted.

NOAA P-3 GPS Dropwindsonde Scientist Log (MS Word version 2020)

Storm FRED Flight ID 20210812H1 Dropsonde Scientist Wadler AVAPS Operator Wagner PO I
 Mission ID 0506A FRED (ex. 0101A) Take Off 0905 Z Landing _____

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 #
1	203240046	1002	21.3765	74.9060	1013.4	065/15	10	—	Inband JP	
Comments	cut off last 1/2 sec, eliminated some questionable lat/lon at top, also equilibrium on RH sensor @ top									
2	202640031	1015	20.8213	74.1535	1011.8	050/09	10	—	Inband MP	
Comments	net end to 301.50,									
3	202640088	1027	20.3432	73.5122	1012.0	150/16	10	—	Center	
Comments	good sonde too MP									
4	203350223	1033	20.0698	73.1488	1011.7	150/22	10	—	substant EP	
Comments	removed questionable RH and wind direction in upper 7.5m (possible equilibrium)									
5	202640032	1052	20.8290	77.4395	1014.1	135/19	10	—	EP leg 2	
Comments	removed 1 sec st 6 sec of lat/lon, 21 sec of RH									
6	203810235	1110	20.1439	73.7015	1013.4	160/04	10	—	MP leg 2	
Comments	cut off last 1/2 sec, cut off 2 nd 9 sec of lat/lon									
7	203810250	1117	19.8545	74.2283	1012.5	025/06	10	—	Center	
Comments	cut off 12 sec of lat/lon, 6 sec of RH									
8	203350257	1133	19.2655	75.2795	1012.7	030/06	10	—	MP or	
Comments	Removed 2 nd 6 sec of lat/lon, good sonde									
9	203810238	1143	18.8619	75.9903	1013.3	070/16	12	—	EP leg 2	
Comments	cut off 1/2 sec of bottom, 7 sec of lat/lon									
10	202640036	1214	18.9242	73.4465	1012.8	135/15	10	—	EP leg 3	
Comments	net end to 354.25, removed 8.5 sec of lat/lon at top									

2021-08-12, 08:05:00-14:47:37



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	22.78	2.83	18.81	27.99
— LonGPS.1 (deg), 1 s/sec	-76.53	2.87	-82.19	-72.31