N42RF ERROR SUMMARY
20210813H1

Flight ID: 20210813H1

Sensor or System	Number or Name
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.1
Dewpoint Temp. Probe	TDM.2
Vertical Accelerometer	AccZfilterI-GPS.1
Altimeter	AltGPS.3
INE Selection	1
Differential Attack Pressure Probe	PDALPHA.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1
Flight Directory	acdata/2021/MET/20210813H1

Local Met Data	Takeoff KLAL (0807Z)	Landing KLAL (0000Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.307
AttackAngleSlope		6.07515
SlipAngleIntercept		0.237
SlipAngleSlope		7.04607
AttackAngleIntercept2		2.06219
AttackAngleSlope2		5.99068
SlipAngleIntercept2		0.125
SlipAngleSlope2		6.9873

Notes:
There were no edits made in the measured parameters used to calculate meteorological and navigational parameters.

Takeoff/Landing data: Data during landing and takeoff are potentially suspect. It is recommended that ground data not be used for scientific analysis.

Expendable Type	# deployed	# good	# transmitted	
Dropsondes	11	11	11	
Test sondes	0	0	0	
AXBTs	0	0	0	
AXCPs	0	0	0	
AXCTDs	0	0	0	
UAS	0	0	0	

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

FLT ID:	20210813H1	**FLT #:**	4
From:	KLAL	**ETD:**	0800Z
To:	KLAL	**ETA:**	1600Z
Block Time		**Flight Time**	
In:	12:53	Land:	12:48
Out:	7:59	T/O:	8:07
Total:	4.9	Total:	4.7
Sponsoring Org:	EMC / NHC		
Program:	PRX		
Purpose:	TDR Flight		

CREW MANIFEST

AC:	Abitbol	**Scientists:**
CP(s):	Stateler	Aberson
	Shaw	Zhang
NAV:	Richards, Brian	Utama
FE(s):	Sanchez	Greene
	Stokes	
FD(s):	Lundry	
	Hathaway	
SSA:	Richards, Todd	**Visitors:**
AVAPS:	Warnecke	
SEB:		
MX:		

MISSION INFORMATION

Pressure		**Dropsondes**		
		Good	Bad	Sent
A/C Takeoff		11	0	11
ASOS Takeoff				
		BTs		
A/C Land		Good	Bad	Sent
ASOS Land		0	0	0
Storm Number ID: (ie: AL072012)		AL062021		
TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)		0906A FRED		

AS REQUIRED BY ORM

	Y	N
VOLCANIC ASH		X
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		

REMARK

OBSERVATIONS

Fix Number	Obs Number	Fix Time	SLP
1			
2			
3			
4			
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	☑ AccAYI.1	☑ AccAZI.1	☑ AccZfilter-GPS.1	☑ AccZref	
	☑ AccAXI.2	☑ AccAYI.2	☑ AccAZI.2	☑ AccZfilter-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		☑ LonGPS.4			
☑ Pressure	☑ PDALPHA.1	☑ PQALPHA.1	☑ PQM.1	☑ PSM.1	☑ PDLAPHAref	☑ 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	X TDM.1	☑ TRadD.1		☑ TD.c	☑ TTMref
	☑ TTM.2	☑ TDM.2	☑ TRadS.1		☑ TDMref	☑ TA.d
	X TTM.3	☑ TDM.3	☐ TRadU.1			
☑ Misc. (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

QC Key	
Not checked	☐
Valid	☑
Errors (note)	X

NOTES:
- TDM.1 is unrepresentative with unusual oscilaltions for most of flight. TDM.2 is reference.

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

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 tbe 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 202108131 Dropsonde Scientist Xueqin Zhang AVAPS Operator Warnecke

Mission ID 0906AFred (ex. 0101A) Take Off 080257 Landing 124800

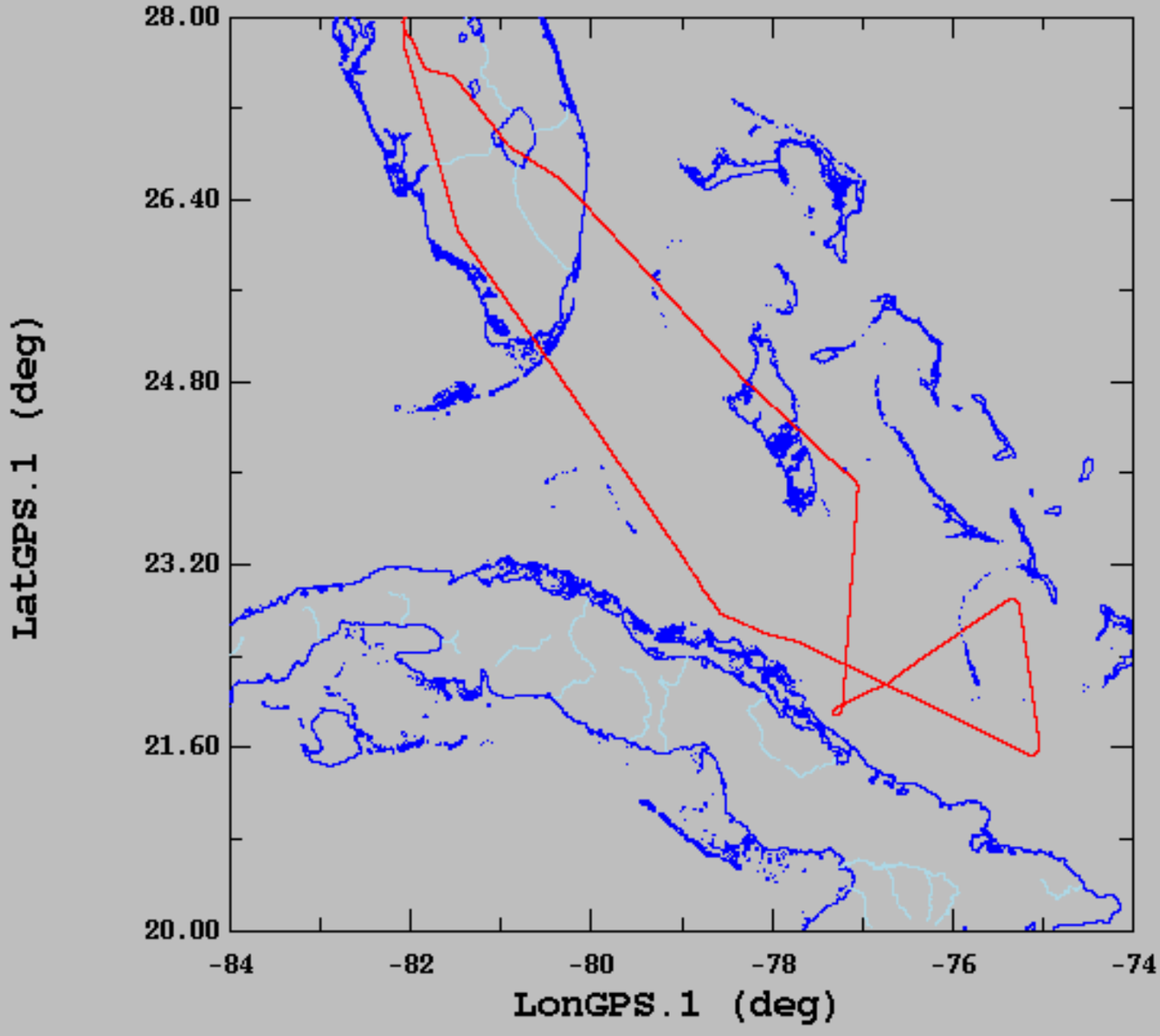
Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Dir/Spd (deg/kt)	Lowest Wind Hgt (m)	SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
	20291037B	092407	22.78	-78.56	1012.8	86.8/75.15	10		~~post-splash~~	1
Comments	post-splash									
	20231 1650	093608	22.78	-77.75	1017.9	278/19	10			2
Comments										
	20324 0923	095148	22.16	-76.73	1013.0	165/18	10		~~post-splash~~	3
Comments	post-splash									
	2029 40302	100158	21.91	-76.08	1013.2	160/20	10			4
Comments										
	20291037B	100754	21.75	-75.69	1014.1	155/27	12			5
Comments										
	20291040 4	101628	21.53	-75.12	1013.7	145/11	10			6
Comments										
	20291039 3	103558	22.89	-75.30	1015.4	140/19	10			7
Comments										
	2027216 07	104750	22.50 ~~22.99~~	-76.11	1014.7	115/16	10			8
Comments										
	20331048 3	110519	21.89	-77.30	1012.6	185/11	10			9
Comments										
	20304092 4	112300	23.10	-77.11	1014.5	100/20	10			10
Comments										

Storm Fred Flight ID 20210813H1 Dropsonde Scientist Xuejin Zhang AVAPS Operator Warneke

Mission ID 0906A Fred (ex. 0101A) Take Off 080757 Landing 122800

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 #
	20272160S	113411	23.91	-77.05	1015.3	070/21	10			
Comments	Last Sond.									
Comments										
Comments										
Comments										
Comments										
Comments										
Comments										
Comments										
Comments										
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