

N43RF ERROR SUMMARY
20210827I1

Flight ID: 20210827I1

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/20210827I1
Local Met Data	Takeoff KLAL (0746Z) Landing KLAL (0000Z)
Dynamic Corrections	Yes
AttackAngleIntercept	0.131251
AttackAngleSlope	6.02327
SlipAngleIntercept	0.23
SlipAngleSlope	7.02537

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.

GPS.4 unavailable. PDBeta.2 spikes noted 1440-1500Z. Approximately 20 mb differential between PSM.1 and PSM.2 at higher altitude. PSM.2 appears more stable. Possible wetbulb effect noted on TTM.2 1440-1450Z. TTM.3 inoperative. TDM.1 unrealistic spikes during descent/landing. TDM.3 trends with other TDMs but is an outlier. TRadU.1 inoperative.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	28	27	27
Test sondes	0	0	0
AXBTS	6	5	5
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter
Phone #: 863-500-3901

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION								
FLT ID:	2021082711	FLT #:	21-	AC:	Mitchell	Scientists:	Pressure		Dropsondes						
From:	KLAL	ETD:	0800Z	CP(s):	Doremus	Alaka, Gus	A/C Takeoff	1010.7	Good	Bad	Sent				
To:	KLAL	ETA:	1600Z		Copare	Hazelton, Andy			ASOS Takeoff	KLAL 0950Z 1010.9 mb	27	1	27		
Block Time		Flight Time		NAV:	Hough	Chang, Paul	A/C Land	1010.9			BTs				
In:	15:58	Land:	15:50	FE(s):	Darby	Freeman (NAV)			ASOS Land	KLAL 1550Z 1012.0 mb	Good	Bad	Sent		
Out:	7:39	T/O:	7:47	FD(s):	Green		Visitors:	Storm Number ID: (ie: AL072012)			5	1	5		
Total:	8.3	Total:	8.1	SSA:	Mascaro	NOAA3 0309A IDA			TCPOD/WSP0D Mission (ie: NOAA2 2418A SANDY)	AL092021					
Sponsoring Org:	NWS / EMC			AVAPS:	Warnecke		OBSERVATIONS	Fix Number			Obs Number	Fix Time	SLP		
Program:	PRX			SEB:		Pennies:			4 (Tropical Storm)						
Purpose:	TDR Mission #1 IDA (TS)			MX:											
AS REQUIRED BY ORM			Y	N	REMARKS		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				X											

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - no mission impact.
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Flight ID:	2021082711
Flight Director(s):	Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.01

Pressure Comparison		
	T/O	Land
Aircraft	1010.7	1010.9
Tower	KLAL 0950Z 1010.9 mb	KLAL 1550Z 1012.0 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 X 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 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	✓ 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)	X

NOTES:
<p>GPS.4 unavailable.</p> <p>PDBeta.2 spikes noted 1440-1500Z.</p> <p>~20 mb difference between PSM.1 and PSM.2 at altitude. PSM.2 appears more stable.</p> <p>Possible wetbulb effect TTM.2 1440-1450Z.</p> <p>TTM.3 inoperative.</p> <p>TDM.1 unrealistic spikes during descent/landing. TDM.3 trends with other TDMs but is an outlier.</p> <p>TRadU.1 inoperative.</p>

AVAPS Drop Log

Project: Hurri 21

Mission: TS Ida

Flight ID: 20210827JL

Take Off: _____

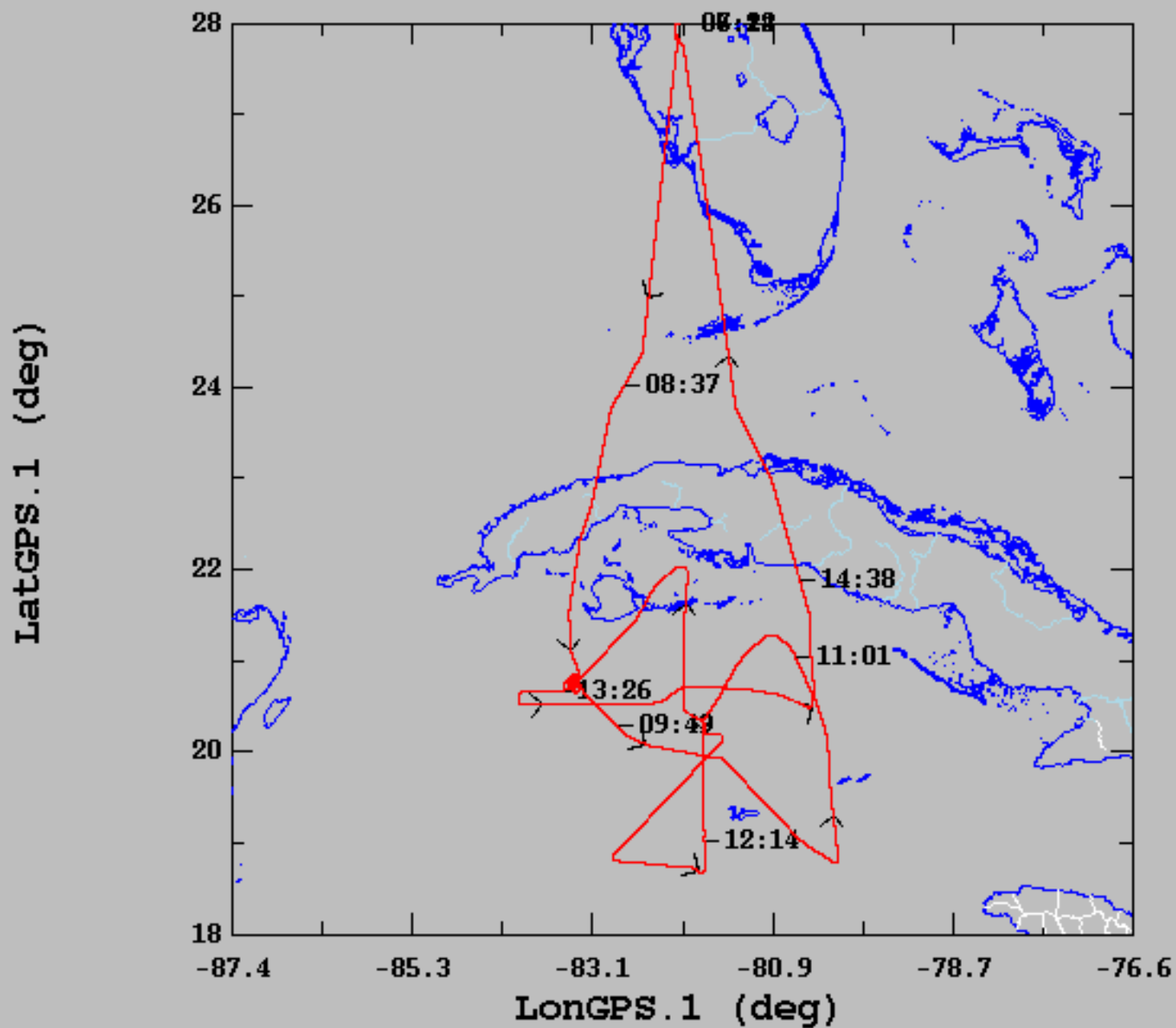
Landing: _____

Flt Dir: Carpenter

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	203810276	1	0	0941	JW	NWR	END 1	✓
2	203630325	2	-5	0952		NWS	Midpoint	✓
3	203810264	3	0	0958		ONR	1/4 Point	✓
4	202520487	4	0	1007		NWS	CTR 1	✓
5	203630323	5	0	1014		ONR	1/4 Point	✓
6	202630526	6	0	1020		NWS	Midpoint	✓
7	202630342	7	0	1031			END 2	✓
8	203810262	8	0	1110			END 3	✓
9	203350229	1	0	1113			Midpoint	✓
10	202630498	2	0	1119		ONR	1/4 Point	✓
11	202610676	3	0	1137		ONR	1/4 Point	✓
12	203420252	4	0	1141		NWS	Midpoint	✓
13	203510303	5	0	1154			END 4	✓
14	203631817	6	0	1210			END 5	✓
15	202630523	7	0	1221			Midpoint	✓
16	203350232	8	-8	1228		ONR	1/4 Point	✓
17	203350240	1	-5	1232		NWS	CTR	✓
18	203520169	2	0	1242		ONR	1/4 Point	✓
19	203630324	3	0	1247		NWS	Midpoint	✓
20	203350231	4	0	—			late L/D	X
21	203350225	5	0	1259			- Back up -	✓
22	202610685	6	0	1335			END Point 6	✓
23	202610686	7	0	1347			END Point 7	✓
24	203810259	8	0	1353		ONR	1/4 Point	✓
25	204521419	1	0	1400		NWS	CTR	✓
26	204530816	2	0	1407		ONR	1/4 Point	✓
27	203420276	3	0	1413		NWS	Midpoint	✓
28	203530370	4	0	1420		NWS	END Point 8	✓
29								
30								
31								

08/27/2021, 06:12:41-15:50:50



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	22.81	3.24	18.67	27.99
— LongGPS.1 (deg), 1 s/sec	-81.97	0.86	-83.96	-80.11