

N43RF ERROR SUMMARY
20210829I1

Flight ID: 20210829I1

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/20210829I1
Local Met Data	Takeoff KLAL (0737Z) Landing KLAL (1604Z)
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. PQM.1 continual drift away from baseline during mission. PSM.1 and PSM.2 exhibit 10-20 mb difference, most pronounced at higher altitudes. PSM.2 appears more stable. PitchI.3 and RollI.3 unavailable. TTM.3 inoperative. TDM.3 trends with TDM.1 and TDM.2 but is an outlier. TRadU.1 inoperative.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	35	32	32
Test sondes	0	0	0
AXBTS	11	8	8
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:	20210829I1	FLT #:	21-	AC:	Mitchell	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	0800Z	CP(s):	Doremus	Chang, Paul	A/C Takeoff	1012.9	Good	Bad	Sent
To:	KLAL	ETA:	1600Z		Copare	Jelenak, Zorana			ASOS Takeoff	KLAL 0950Z 1011.9 mb	32
Block Time		Flight Time		NAV:	Hough	Sapp, Joe	A/C Land	1013.5			BTs
In:	16:10	Land:	16:04	FE(s):	Darby	Alaka, Gus			ASOS Land	KLAL 1550Z 1015.0 mb	Good
Out:	7:31	T/O:	7:38	FD(s):	Green	Hazelton, Andy	8	3			8
Total:	8.7	Total:	8.4	SSA:	Mascaro	Freeman (NAV)			Storm Number ID: (ie: AL072012)		
Sponsoring Org:		NESDIS		AVAPS:	Warnecke	Bennet (FE)	NOAA3 WB09A IDA				
Program:		PND		SEB:							
Purpose:		Research Mission #2 Hurricane IDA		MX:			OBSERVATIONS				
AS REQUIRED BY ORM			Y	N	REMARKS						
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				X			Pennies:	9 (Hurricane)			

*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:	2021082911
Flight Director(s):	Carpenter
Mission:	Non-tasked Science Collection/Research
UWZ.d mean:	0

Pressure Comparison		
	T/O	Land
Aircraft	1012.9	1013.5
Tower	KLAL 0950Z 1011.9 mb	KLAL 1550Z 1015.0 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	X 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	✓ 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"/>

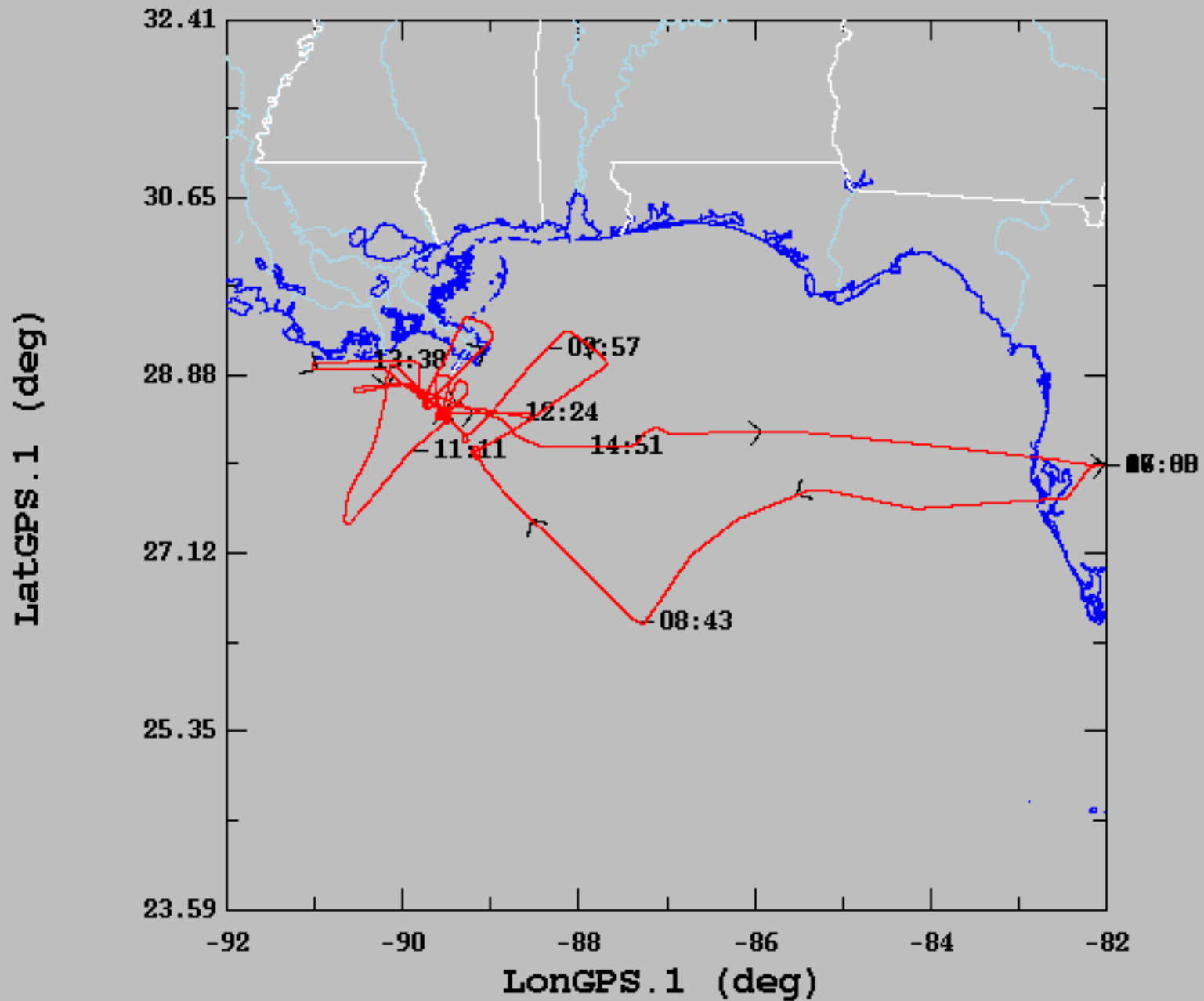
NOTES:
<p>GPS.4 unavailable.</p> <p>PQM.1 continually drifting away from baseline during mission.</p> <p>PSM.1 and PSM.2 exhibit 10-20 mb difference. PSM.2 more stable.</p> <p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.3 inoperative.</p> <p>TDM.3 trends with TDM.1 and TDM.2 but is an outlier.</p> <p>TRadU.1 inoperative.</p>

AVAPS Drop Log

Project: Hurr 21 Mission: IDA Flight ID: 2021082911
 Take Off: 0738Z Landing: _____ Flt Dir: Carpenter Launcher S/N: 001

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	204521905	1	-5	0852	JW	HRD	IPSE C	✓
2	204520777	2	-5	0903		HRD	Midpoint C	✓
3	203040058	3	0	0914		ONR	Rmw	✓
4	203040036	4	0	0914		ONR	Rmw	✓
5	203040062	5	0	0914		ONR	Rmw	✓
6	203040061	6	0	0917		ONR	CTR C	✓
7	203040067	7	0	0926		ONR	Rmw	✓
8	203040031	8	0	0926		ONR	Rmw	✓
9	203310044	1	0	0926		ONR	Rmw	✓
10	204850520	2	0	0935		HRD	Midpot C	✓
11	203031071	3	0	0946		HRD	Endpoint C	✓
12	203040081	4	0	1014		NWS	Rmw	✓
13	203031073	5	0	1018		NWS	CTR	✓
14	204650326	6	0	—		ONR	NO GPS/LD	X
15	203040066	7	0	1022		ONR	Rmw	✓
16	203040086	8	0	1023		ONR	Rmw	✓
17	203040032	1	0	1029		HRD		✓
18	2046502631	2	0	1033		HRD		✓
19	204530472	3	0	1048		HRD		✓
20	204650329	4	0	1058		HRD		✓
21	203310043	5	0	1107		HRD		✓
22	204650327	6	0	1116		ONR	Rmw	✓
23	204640125	7	0	1114		ONR	Rmw	✓
24	204640092	8	0	1116		ONR	Rmw	✓
25	203040057	1	0	1118		ONR	CTR	✓
26	204530487	2	0	—		HRD	NO L/D	X
27	204530392	3	0	1141		HRD		✓
28	204530388	4	0	1233		HRD	Rmw	✓
29	204640462	5	0	1234		HRD	Rmw	✓
30	204530501	6	0	1236		HRD		✓
31	204530474	1	0	1316		HRD		✓
32	203250852	2	0	1317		HRD		✓
33	203310161	3	0	1344		HRD		✓
34	204640123	4	0	1358		HRD		✓
35	203250854	5	0	1359	JW	HRD		✓

2021-08-29, 07:30:22-16:05:22



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	28.31	0.59	26.42	29.45
— LongGPS.1 (deg), 1 s/sec	-88.05	2.41	-91.02	-82.01