

N42RF ERROR SUMMARY
20210821H2

Flight ID: 20210821H2

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/20210821H2

Local Met Data	Takeoff KLAL (1941Z)	Landing KLAL (0452Z)
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.

PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. TDM.3 inoperative. TRadU.1 unavailable.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	21	21	21
Test sondes	7	7	7
AXBTS	0	0	0
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 - N42RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20210821H2	FLT #:	21-	AC:	Mitchell	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	2000Z	CP(s):	Doremus		A/C Takeoff	1008.9	Good	Bad	Sent
To:	KLAL	ETA:	0400Z		Legidakes / Copare		ASOS Takeoff	KLAL 1948Z 1009.0 mb	21	0	21
Block Time		Flight Time		NAV:	Freeman / Hough		ASOS Land	1010.7	BTs		
In:	4:59	Land:	4:53	FE(s):	Darby		A/C Land	1010.7	Good	Bad	Sent
Out:	19:34	T/O:	19:42	FD(s):	Green		ASOS Land	KLAL 0155Z 1010.6 mb	7	0	7
Total:	9.4	Total:	9.2	SSA:	Mascaro	Visitors:					
Sponsoring Org:		NWS / EMC		AVAPS:	Underwood		Storm Number ID:		AL082021		
Program:		PRX		SEB:			(ie: AL072012)				
Purpose:		TDR mission #2 HENRI		MX:			TCPOD/WSPOD Mission		NOAA2 1208A HENRI		
							(ie: NOAA2 2418A SANDY)				
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		Pennies:				
HIGH SURFACE WINDS				X				3 (Hurricane)			
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:	20210821H2
Flight Director(s):	Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.06

Pressure Comparison		
	T/O	Land
Aircraft	1008.9	1010.7
Tower	KLAL 1948Z 1009.0 mb	KLAL 0155Z 1010.6 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 ✓ 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 ✓ 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	✓ IasADDU.1		✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1 ✓ PitchI.2 ✗ PitchI.3	✓ PitchRateI.1 ✓ PitchRateI.2 ✗ PitchRateI.3	✓ RollI.1 ✓ RollI.2 ✗ RollI.3	✓ RollRateI.1 ✓ RollRateI.2 ✗ RollRateI.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 ✗ TTM.3	✓ TDM.1 ✓ TDM.2 ✗ TDM.3	✓ TRadD.1 ✓ TRadS.1 ✗ TRadU.1		✓ TD.c ✓ TDMref	✓ TTMref ✓ TA.d
✓ Misc. (Must check)					✓ UWZ.d ✓ DPJ_WSZ ✓ HUM	✓ WS.d ✓ WD.d

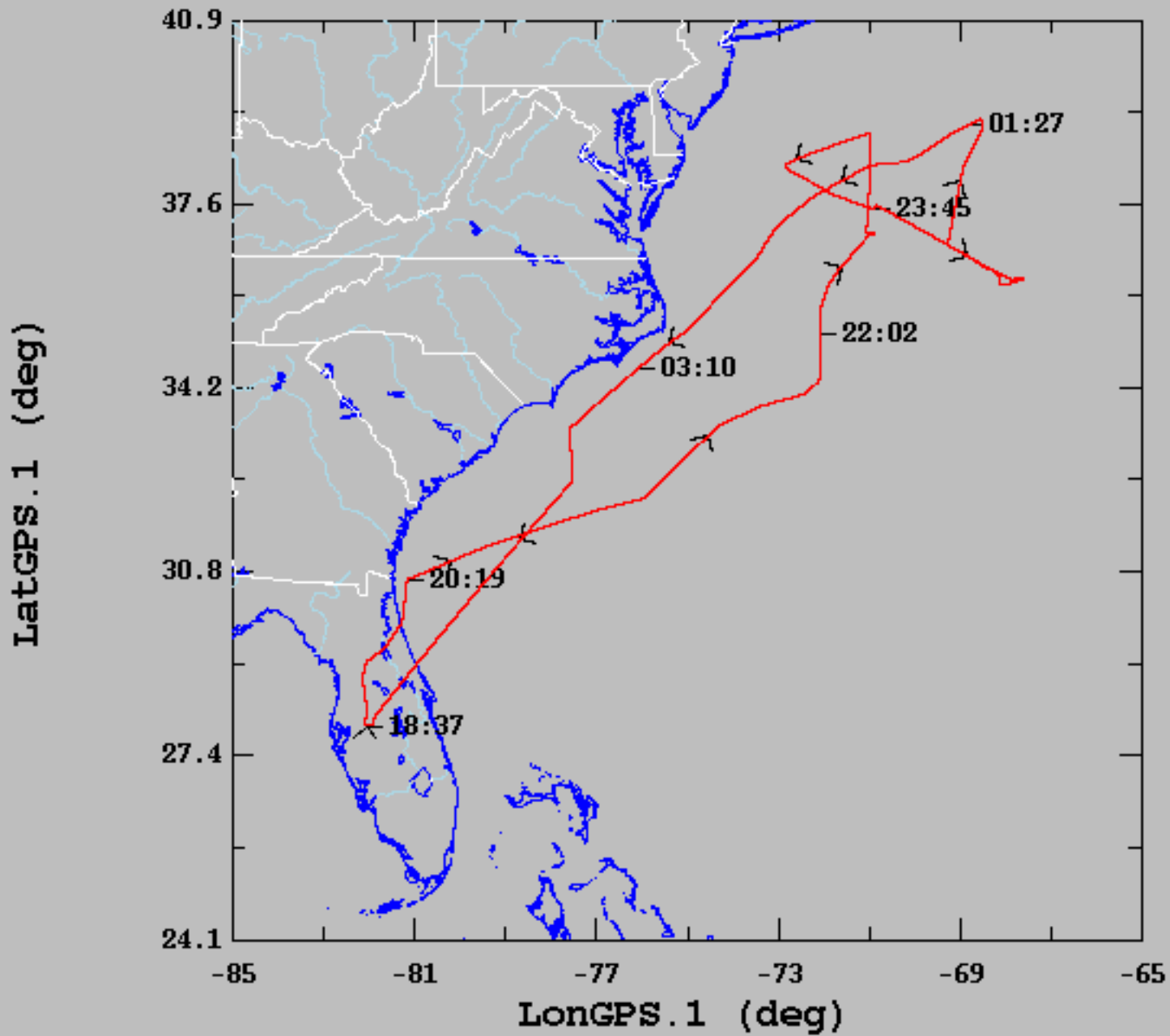
FLID_Mission_Documents.pdf.	
✓	Error Summary
✓	Crew Manifest
✓	QC Checklist
✓	Dropwindsonde Log(s) - AVAPS and FD if completed
✓	Flight Track
✗	Miscellaneous FD Notes

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

NOTES:
<p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.3 unavailable.</p> <p>TDM.3 inoperative.</p> <p>TRadU.1 unavailable.</p>

MISSION: 20210821H2 FLIGHT: 1208A STORM: HENRI			TAKE OFF: 2002 LAKELAND							
DROPSONDE SCIENTIST: SELLWOOD AVAPS OPERATOR: UNDERWOOD										
DROP #	CHANNEL	SONDE ID	TIME(UTC)	LATITUDE	LONGITUDE	SFC PRESS (mb)	SFC WIND (DIR/SPD)	HEIGHT	SST	OB #
1	1	204550285	2157	34.79	72.07	1010	240/34	10		1
IP S (1degree west of plan IP)		No manual QC AXBT combo								
2	2	204610675	2209	35.68	-72.04	1007	245/29	10		2
Midpoint S inbound (IPish)		No manual QC								
3	3	205050298	2219	36.34	-71.65	1004	265/27	12		3
Quarterpoint (50km) inbound		set end 332.75								
4	4	204610669	2235	37.08	-71.04	988	285/06	10		6
Center AXBT combo										
5	5	204270033	2244	37.7	-71	1000	090/27	10		4
Quarterpoint outbound		back on S/N heading								
6	6	204610866	2249	38.15	-70.95	1004	080/31	10		7
Midpoint outbound		No manual QC								
7	7	204260874	2258	38.79	-70.95	1009	090/24	10		8
Endpoint N		No manual QC - very dry throughout								
8	8	204550284	2321	38.2	-72.78	1007	005/11	10		9
Endpoint NW inbound		No manual QC								
9	1	204420098	2332	37.79	-71.91	1003	040/29	10		10
Midpoint inbound		No manual QC								
10	2	204610671	2342	37.53	-71.11	996	325/23	10		11
Quarterpoint inbound		End 285.75 removed a couple of lat/lons at the top GPS dropout								
11	3	204610869	2345	37.5	-70.88	988	205/10	10		13
Center #2		No manual QC								
12	4	20462001	2350	37.4	-70.52	997	180/64	20		14
Quarterpoint outbound		end 254.50 RMW drop								
13	5	204260902	2358	37.11	-69.9	1006	278/30	12		15
Midpoint outbound		end 300.50								
14	6	204260892	11 36.65		-68.9	1011	190/38	10		16
Endpoint SE		end 289.50 AXBT combo								
15	7	204610677	125	38.06	-68.67	1012	130/24	10		17
Endpoint IP NE		end 300.25								
16	8	204840750	139	38.59	-69.63	1008	140/28	10		18
Midpoint inbound		No manual QC								
17	1	204620003	147	38.34	-70.19	1002	145/45	10		19
Quarterpoint inbound		No manual QC								
18	2	204840567	157	38.24	-70.01	989	290/14	10		21

08/21/2021, 18:37:00-28:53:26



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	33.99	3.71	27.98	39.12
— LongGPS.1 (deg), 1 s/sec	-74.99	4.78	-82.12	-67.60