

N42RF ERROR SUMMARY  
20210811H1

Flight ID: 20210811H1

Sensor or System	Number or Name
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Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.1
Dewpoint Temp. Probe	TDM.1
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/20210811H1

Local Met Data	Takeoff KLAL (1946Z)	Landing KLAL (0314Z)
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

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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.

PQM.1 and PQM.4 possible icing issues during flight. PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. TDM.3 unavailable. TRadU.1 unavailable.

Expendable Type	# deployed	# good	# transmitted
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Dropsondes	22	20	20
Test sondes	0	0	0
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:	20210811H1	FLT #:	21-	AC:	Mitchell	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	2000Z	CP(s):	Rannenberg	Zawislak	A/C Takeoff	<b>1014.2</b>	Good	Bad	Sent
To:	KLAL	ETA:	0400Z		Copare	Sellwood	ASOS Takeoff	<b>KLAL 1950Z 1014.4 mb</b>	<b>20</b>	<b>2</b>	<b>20</b>
Block Time		Flight Time		NAV:	Urato	A/C Land			<b>1014.6</b>	BTs	
In:	<b>3:25</b>	Land:	<b>3:15</b>	FE(s):	Darby		Good	Bad		Sent	
Out:	<b>19:34</b>	T/O:	<b>19:46</b>	FD(s):	Wysinger	ASOS Land	<b>KLAL 0150Z 1015.0 mb</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Total:	<b>7.9</b>	Total:	<b>7.5</b>	SSA:	Mascaro			Visitors:	Storm Number ID:		
Sponsoring Org:	NWS / EMC			AVAPS:	Underwood	(ie: AL072012)		<b>AL062021</b>			
Program:	PRX			SEB:		TCPOD/WSPOD Mission		<b>NOAA2 0406A FRED</b>			
Purpose:	TS Fred Surveillance Mission			MX:		(ie: NOAA2 2418A SANDY)					
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X		<b>1</b>				
SCIENCE MISSION WITHIN BDRY LAYER					X		<b>2</b>				
LACK OF PRECIPITATION					X		<b>3</b>				
RELATIVE HUMIDITY ≥ 80%				X			<b>4</b>				
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		<b>Pennies:</b>	0			

\*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:	20210811H1
Flight Director(s):	Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.13

Pressure Comparison		
	T/O	Land
Aircraft	1014.2 (.1)	1014.6 (.1)
Tower	KLAL 1950Z 1014.4 mb	KLAL 0150Z 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 ✓ AltGPS.4	✓ Alti-GPS.1 ✓ Alti-GPS.2	✓ AltPaADDU.1 ✓ AltBCADDU.1	X AltRA.1 ✓ AltRA.2	✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	X 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	X PQM.1 ✓ PQM.2 ✓ PQM.3 X 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>AltRa INOP until 2230Z.</p> <p>PQM.1 and PQM.4 possible icing issues in-flight.</p> <p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.3 unavailable.</p> <p>TDM.3 inoperative.</p> <p>TRadU.1 unavailable.</p>

# AVAPS Drop Log

Project: Hurricanes 2021

Mission: TS Fred

Flight ID: 20210811 H1

Take Off: \_\_\_\_\_

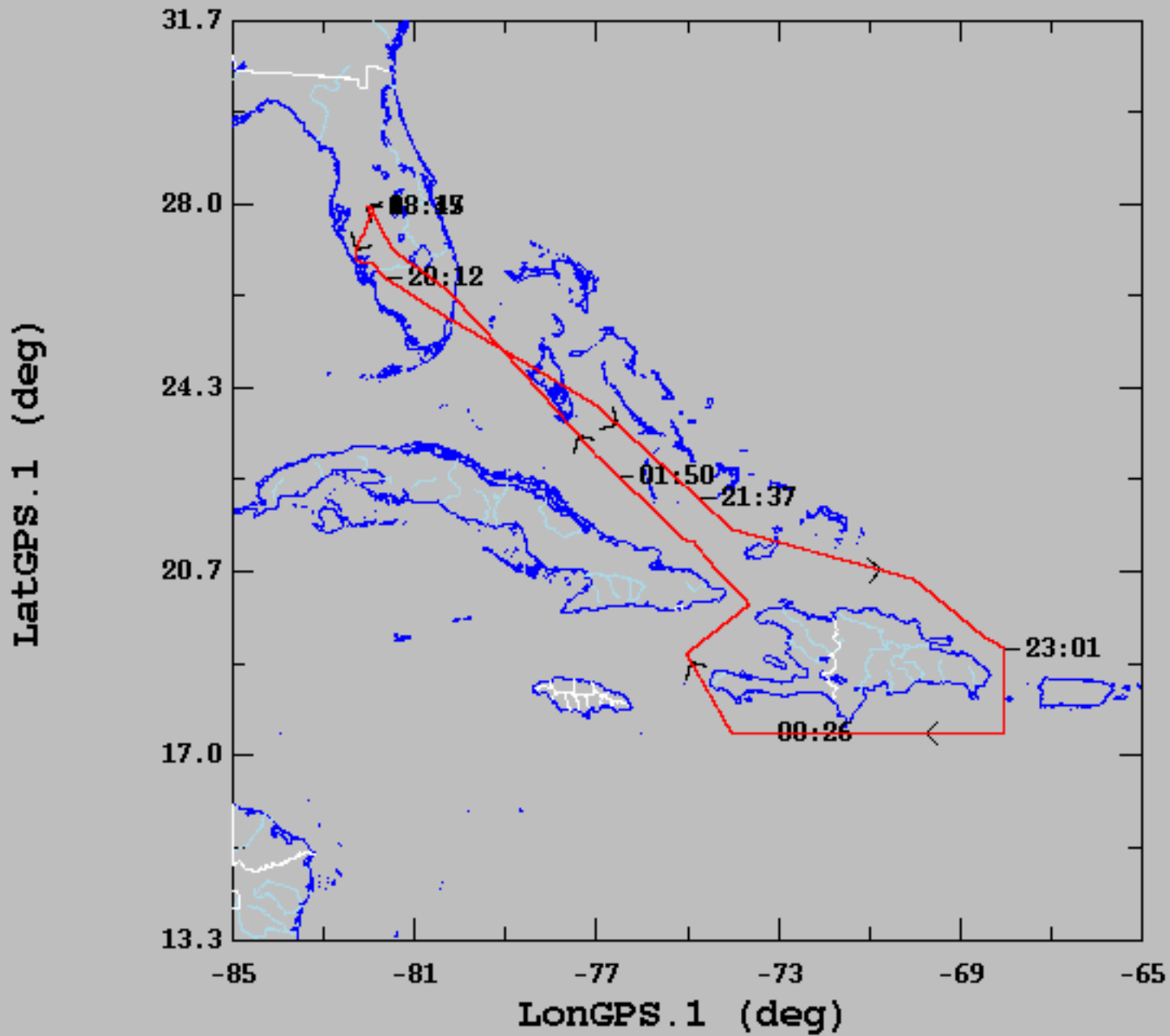
Landing: \_\_\_\_\_

Flt Dir: Carpenter

Launcher S/N: \_\_\_\_\_

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	203350234	1	-0.8	2106Z	NGU	NWS	Point #1, bad winds, tumbling	X
2	202630578	2	0.0	2108Z			Point #1 backup	✓
3	203630327	3	0.0	2120Z			Point #2, no LD	X
4	192950666	4	0.0	2120Z			Point #2, backup	✓
5	203350280	5	-0.5	2133Z			Point #3	✓
6	203520172	6	-0.9	2148Z			Point #4	✓
7	203451432	7	0.0	2201Z			Point #5	✓
8	203150289	8	-0.6	2211Z			Point #6	✓
9	202640073	1	0.0	2222Z			Point #7	✓
10	202640033	2	0.0	2233Z			Point #8	✓
11	201730182	3	0.0	2247Z			Point #9	✓
12	192731141	4	-0.5	2302Z			Point #10	✓
13	195110551	5	0.0	2318Z			Point #11	✓
14	193020244	6	-0.6	2341Z			Point #12	✓
15	203640264	7	0.0	0008Z			Point #13	✓
16	192620167	8	0.0	0032Z			Point #14	✓
17	202520289	1	0.0	0041Z			Point #15	✓
18	202620524	2	-0.8	0053Z			Point #16	✓
19	203820184	3	-0.5	0108Z			Point #17	✓
20	202640071	4	0.0	0125Z			Point #18	✓
21	203451353	5	0.0	0142Z			Point #19	✓
22	202640083	6	0.0	0157Z			Point #20	✓
23								
24								
25								
26								
27								
28								
29								
30								
31								

08/11/2021, 18:47:52-27:15:24



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	22.65	3.69	17.40	27.99
— LongGPS.1 (deg), 1 s/sec	-75.97	4.55	-82.29	-68.00