

N42RF ERROR SUMMARY  
20210812H2

Flight ID: 20210812H2

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.2
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/20210812H2

Local Met Data	Takeoff KLAL (2003Z)	Landing KLAL (0118Z)
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.1 inoperative until 2245Z. TDM.3 inoperative. TRadU.1 unavailable.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	11	10	10
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:	20210812H2	FLT #:	21-	AC:	Mitchell	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	2000Z	CP(s):	Rannenberg	Zawislak	A/C Takeoff	1012.6	Good	Bad	Sent
To:	KLAL	ETA:	0400Z		Copare	Sellwood	ASOS Takeoff	KLAL 1950Z 1013.0 mb	10	1	10
Block Time		Flight Time		NAV:	Urato	A/C Land			1013.5	BTs	
In:	1:27	Land:	1:19	FE(s):	Darby		ASOS Land	KLAL 0048Z 1014.6 mb		0	0
Out:	19:50	T/O:	20:04	FD(s):	Wysinger	Visitors:			Storm Number ID: (ie: AL072012)	AL062021	
Total:	5.6	Total:	5.3	SSA:	Mascaro		TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA2 0706A FRED			
Sponsoring Org:	NWS / EMC			AVAPS:	Underwood	OBSERVATIONS					
Program:	PRX			SEB:		Fix Number	Obs Number	Fix Time	SLP		
Purpose:	TD Fred TDR Mission			MX:		1					
AS REQUIRED BY ORM				Y	N						REMARKS
VOLCANIC ASH					X	2					
SCIENCE MISSION WITHIN BDRY LAYER					X						
LACK OF PRECIPITATION					X	3					
RELATIVE HUMIDITY ≥ 80%				X							
LARGE AIR-SEA TEMP GRADIENT					X	4					
HIGH SURFACE WINDS					X						
LONG FETCH / DURATION OF SFC WND					X	Pennies:				N/A (Tropical Depression)	
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) - minimal mission impact.
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Flight ID:	20210812H2
Flight Director(s):	Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.2

Pressure Comparison		
	T/O	Land
Aircraft	1012.6	1013.5
Tower	KLAL 1950Z 1013.0 mb	KLAL 0048Z 1014.6 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	✓ lasADDU.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:
PitchI.3 and RollI.3 unavailable. TTM.3 unavailable. TDM.1 inoperative until ~2245Z. TDM.3 inoperative. TRadU.1 unavailable.

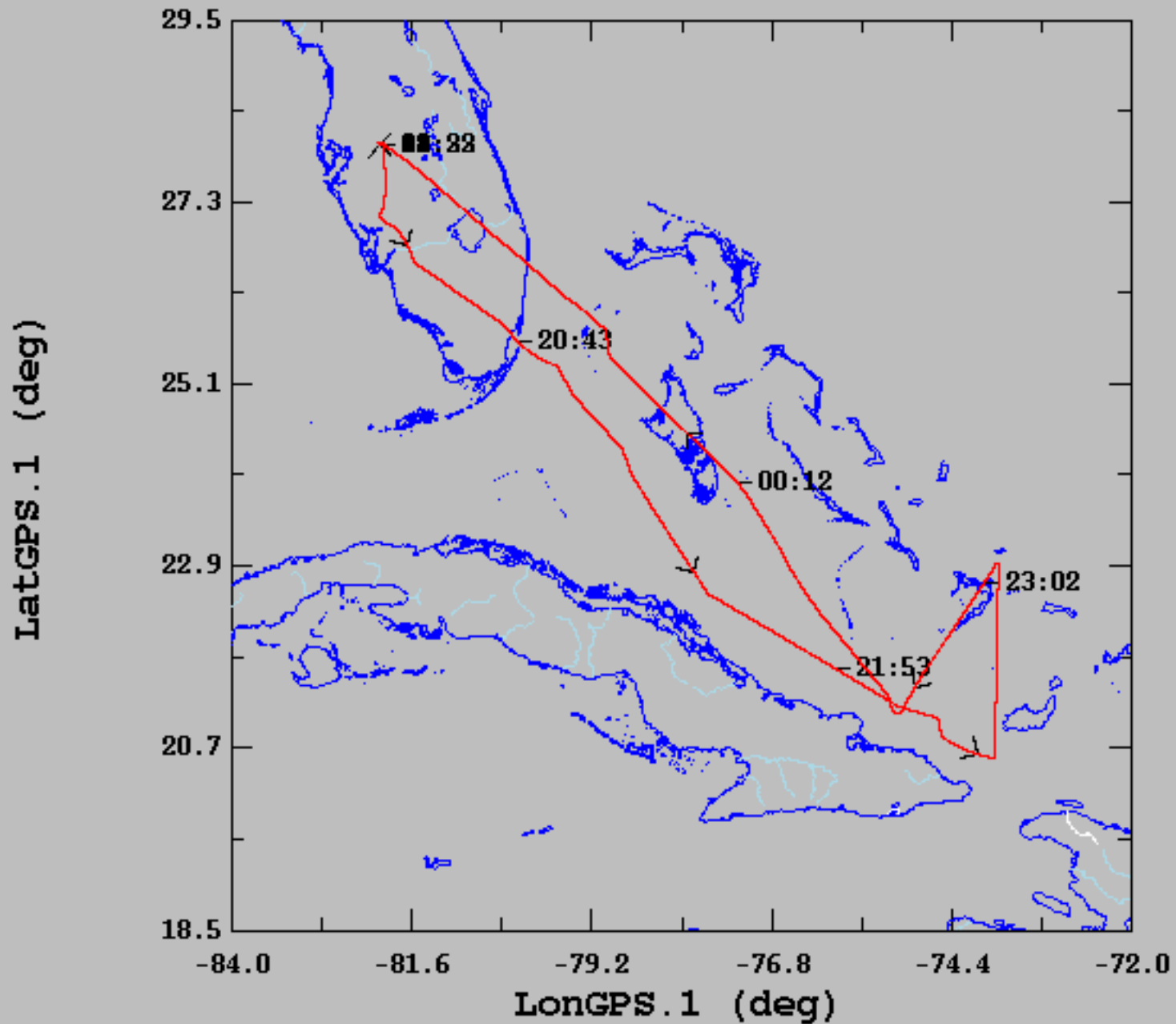
### AVAPS Drop Log

Project: Hurricanes 2021 Mission: TS Fred Flight ID: 20210812H2

Take Off: \_\_\_\_\_ Landing: \_\_\_\_\_ Flt Dir: Carpenter Launcher S/N: \_\_\_\_\_

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	202311639	1	0.0	2128Z	NGU	NWS	IP, inband,	✓
2	202446390	2	0.0	2140Z			MP, IB,	✓
3	202721620	3	0.0	2152Z			Center #1	✓
4	203040284	4	0.0	2205Z			MP, OB	✓
5	202270545	5	0.0	2219Z			EP, OB	✓
6	202721616	6	0.0	2259Z			EP, IB, no LD	X
7	202721608	7	-0.7	2300Z			EP, IB,	✓
8	203040019	8	-0.6	2313Z			MP, IB	✓
9	202721606	1	-0.5	2327Z			EP, IB, near center	✓
10	203040288	2	-0.5	2340Z			MP, OB	✓
11	202910425	3	-1.2	2353Z			EP, OB	✓
12		4						
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08/12/2021, 18:23:53-25:22:14



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	24.77	2.66	20.59	27.99
— LongGPS.1 (deg), 1 s/sec	-78.56	3.05	-82.03	-73.74