

N42RF ERROR SUMMARY
20210818H1

Flight ID: 20210818H1

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/20210818H1

Local Met Data	Takeoff KLAL (1953Z)	Landing KLAL (0217Z)
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 2025Z. TDM.3 inoperative. TRadU.1 unavailable.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	26	25	25
Test sondes	0	0	0
AXBTS	5	3	3
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:	20210818H1	FLT #:	21-	AC:	Mitchell	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	2000Z	CP(s):	Legidakes	Zawislak	A/C Takeoff	1014.1	Good	Bad	Sent
To:	KLAL	ETA:	0400Z		Rannenberg / Copare	Sellwood	ASOS Takeoff	KLAL 1950Z 1014.4 mb	25	1	25
Block Time		Flight Time		NAV:	Freeman / Hough	A/C Land					
In:	2:24	Land:	2:17	FE(s):	Darby		ASOS Land	KLAL 0150Z 1015.6 mb	Good	Bad	Sent
Out:	19:41	T/O:	19:54	FD(s):	Wysinger	3			2	3	
Total:	6.7	Total:	6.4	SSA:	Mascaro		Visitors:				Storm Number ID:
Sponsoring Org:		NWS / EMC			AVAPS:	Underwood	(ie: AL072012)		AL072021		
Program:		PRX			SEB:		TCPOD/WSPOD Mission		NOAA2 1407A GRACE		
Purpose:		TDR mission #2 GRACE			MX:		(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.
--------------------	--

Flight ID:	20210818H1
Flight Director(s):	Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.09

Pressure Comparison		
	T/O	Land
Aircraft	1014.1	1015.7
Tower	KLAL 1950Z 1014.4 mb	KLAL 0150Z 1015.6 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"/>

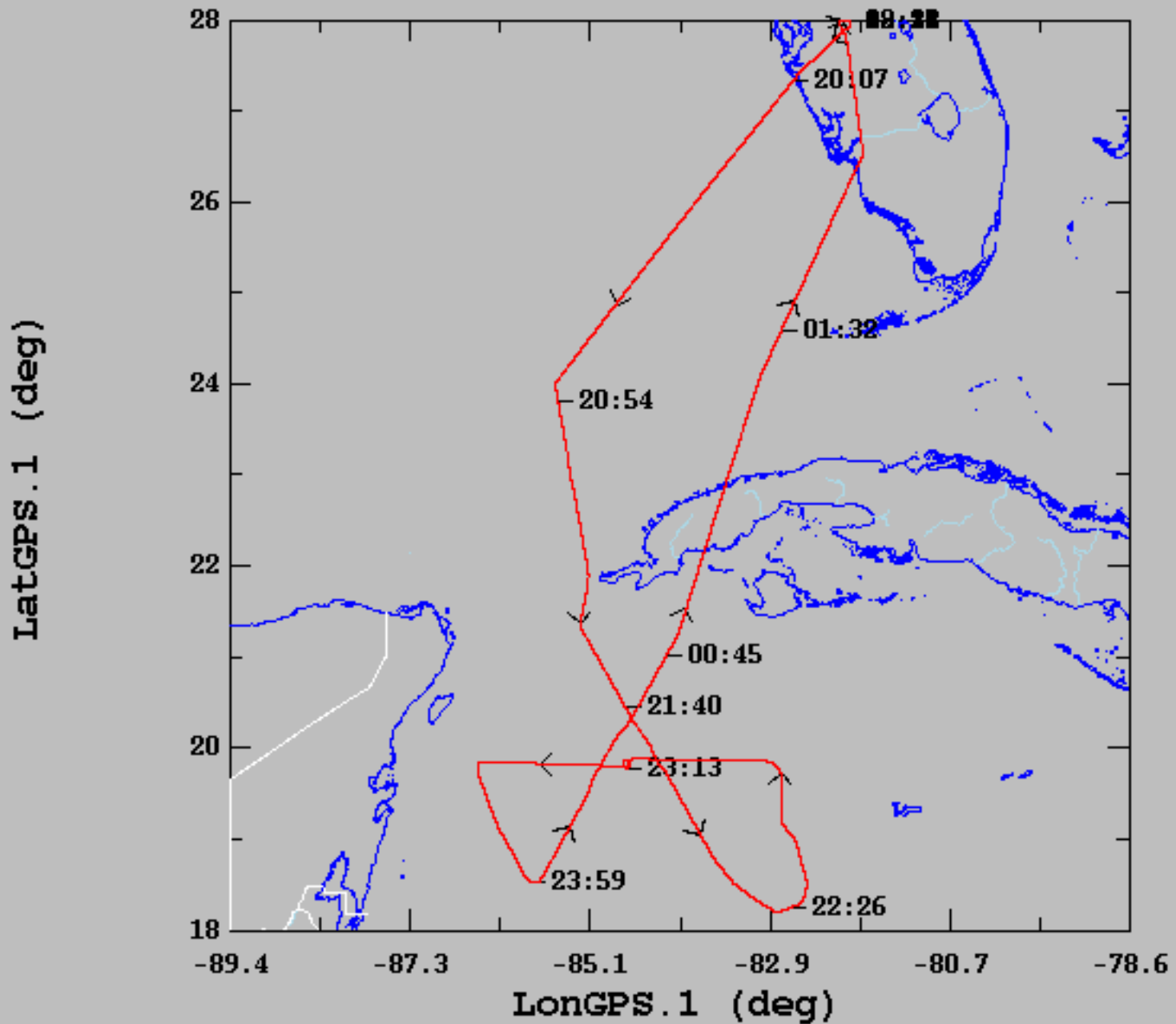
NOTES:
<p>PitchI.3 and RollI.3 unavailable.</p> <p>TTM.3 unavailable.</p> <p>TDM.1 inoperative until 2025Z. TDM.3 inoperative.</p> <p>TRadU.1 unavailable.</p>

AVAPS Drop Log

Project: Hurricanes 2021 Mission: Hurricane Grace Flight ID: 20210818HI
 Take Off: _____ Landing: _____ Flt Dir: Carpenter Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	203520290	1	-0.8	2128Z	NGU	NWS	IP, IB, combo	✓
2	203431514	2	-1.0	2136Z		1	MP, IB	✓
3	203451374	3	-1.0	2145Z		ONR	QP, IB	✓
4	202630410	4	0.0	2152Z		NWS	Center #1	✓
5	202640068	5	0.0	2201Z		ONR	QP, OB	✓
6	203350226	6	-0.5	2208Z		NWS	MP, OB	✓
7	203350235	7	-1.0	2224Z		1	EP, OB	✓
8	203440003	8	-0.5	2248Z			EP, IB	✓
9	202610578	1	0.0	2257Z			MP, IB	✓
10	203431524	2	0.0	2304Z		ONR	QP, IB	✓
11	203350260	3	-0.8	2306Z		1	RMW	✓
12	203451386	4	-0.6	2314Z		NWS	Center #2, combo	✓
13	203420233	5	-0.8	2320Z		ONR	RMW, late ^{OK} winds	✓
14	203631771	6	0.0	2323Z		1	QP, OB	✓
15	203451383	7	-0.7	2327Z		NWS	MP, OB	✓
16	203451272	8	-0.7	2338Z		1	EP, OB, combo	✓
17	203431520	1	-0.6	0001Z		1	EP, IB, combo	✓
18	203451418	2	-0.8	0010Z		1	MP, IB	✓
19	203520505	3	-0.6	0018Z		ONR	QP, IB	✓
20	202620571	4	0.0	0021Z		1	RMW	✓
21	202610673	5	0.0	0022Z		NWS	Center #3 CPA	✓
22	203451381	6	-0.8	0026Z		ONR	RMW, no LD	✗
23	203820052	7	0.0	0026Z		1	" backup	✓
24	203631821	8	-0.5	0029Z		ONR	QP, OB	✓
25	204420101	1	0.0	0037Z		NWS	MP, OB	✓
26	197610976	2	-0.6	0049Z		1	EP, OB, combo	✓
27								
28								
29								
30								
31								

08/18/2021, 18:35:01-26:18:27



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	23.04	3.52	18.20	27.99
— LongGPS.1 (deg), 1 s/sec	-83.66	1.36	-86.43	-81.78