

N43RF ERROR SUMMARY
20210814I1

Flight ID: 20210814I1

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.1
Vertical Accelerometer	AccZfilterI-
GPS.1	
Altimeter	AltGPS.1
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/20210814I1
Local Met Data	Takeoff TNCA (1441Z) Landing TNCA (2108Z)
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.3 fails in-flight. GPS.4 unavailable. Possible icing PDBeta.2 1925-2005Z. 10-20 mb difference between PSM.1 and PSM.2. PSM.2 appears more stable. TTM.3 inoperative. Pronounced electrical/interference issue with TDM.1, but mean values most representative at flight level. TDM.2 significant low bias. TDM.3 inoperative. TRadU.1 inoperative.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	7	7	7
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 - N43RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	2021081411	FLT #:	21-	AC:	Mitchell	Scientists:	Pressure		Dropsondes		
From:	TNCA	ETD:	1500Z	CP(s):	Rannenberg	Zawislak	A/C Takeoff	1013.3	Good	Bad	Sent
To:	TNCA	ETA:	2300Z		Legidakes / Copare	Sellwood	ASOS Takeoff		TNCA 1500Z 1015 mb	7	0
Block Time		Flight Time		NAV:	Urato					BTs	
In:	21:15	Land:	21:09	FE(s):	Darby		A/C Land	1010.2	Good	Bad	Sent
Out:	14:34	T/O:	14:42	FD(s):	Wysinger		ASOS Land		TNCA 2100Z 1012 mb	0	0
Total:	6.7	Total:	6.5	SSA:	Mascaro	Visitors:					
Sponsoring Org:		NWS / NHC		AVAPS:	Underwood		Storm Number ID:		AL072021		
Program:		PRX		SEB:			(ie: AL072012)				
Purpose:		18Z Fix Mission #1 TS Grace		MX:			TCPOD/WSPOD Mission		NOAA3 0107A GRACE		
							(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						
HIGH SURFACE WINDS					X						
LONG FETCH / DURATION OF SFC WND					X						
SEA SALT ACCRETION FORECAST					X						
SEA SALT ACCRETION OBSERVED					X		Pennies:	N/A (Open Wave - Unable to close.)			
							*Highlighted items must be completed before departure.				
Remarks:											

P-3 QC Checklist

Overall Assessment	Major instrument issue(s) - significant mission impact.
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Flight ID:	20210814I1
Flight Director(s):	Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.01

Pressure Comparison		
	T/O	Land
Aircraft	1013.3	1010.2
Tower	TNCA 1500Z 1015 mb	TNCA 2100Z 1012 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 X 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			
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 X LatGPS.3 X LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 X LonGPS.3 X LonGPS.4	✓ LonI-GPS.1 ✓ LonI-GPS.2	✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 ✓ PDALPHA.2 ✓ PDBETA.1 X 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 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	X TDM.1 X TDM.2 X TDM.3	✓ TRadD.1 ✓ TRadS.1 X TRadU.1	X TD.c X TDMref ✓ TTMref ✓ TA.d		
✓ Misc. (Must check)					✓ UWZ.d ✓ DPJ_WSZ X 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"/>

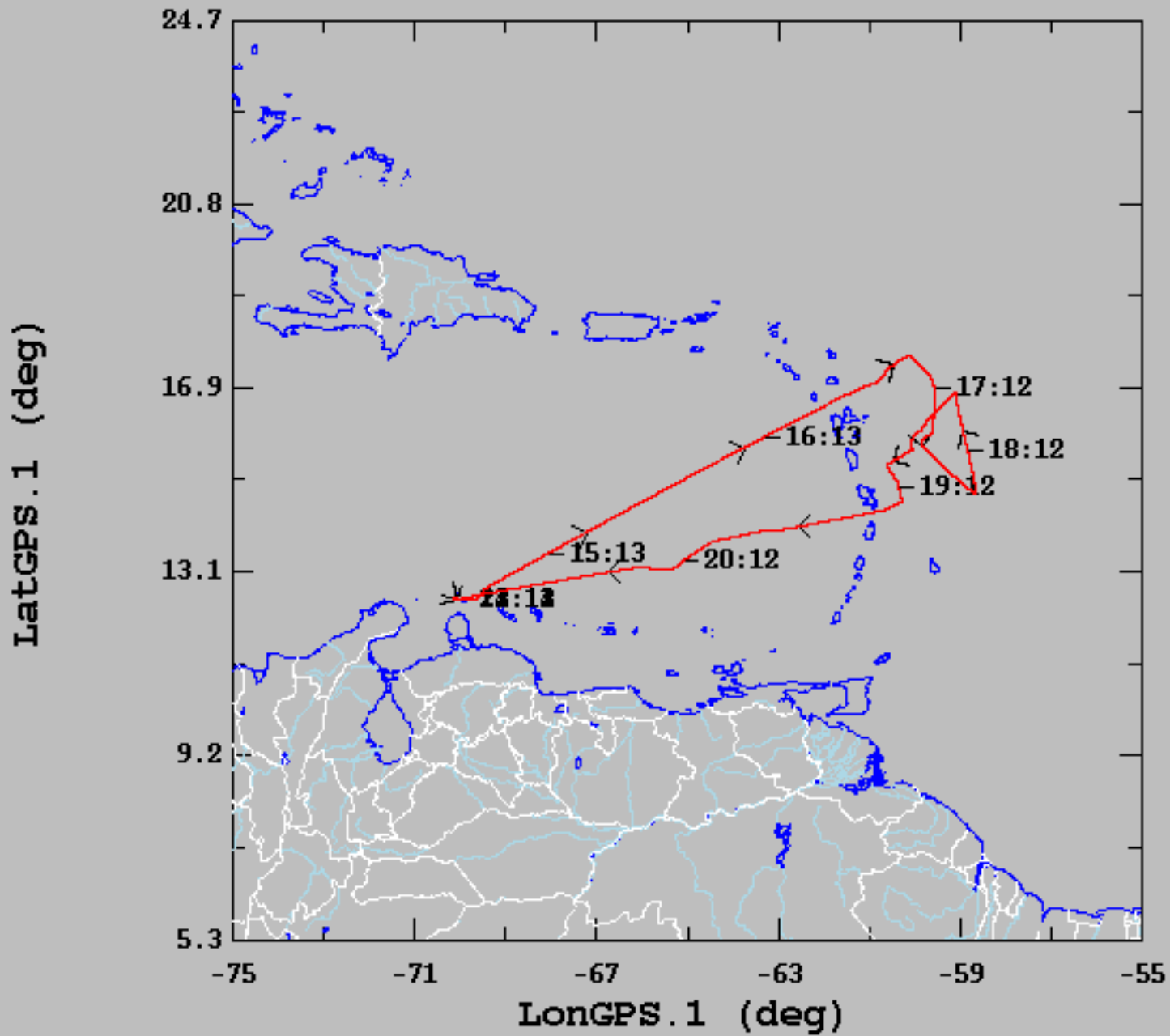
NOTES:
<p>GPS.3 fails in-flight. GPS.4 unavailable.</p> <p>Possible icing PDBeta.2 1925-2005Z.</p> <p>10-20 mb difference between PSM.1 and PSM.2. PSM.2 appears more stable.</p> <p>TTM.3 inoperative.</p> <p>Pronounced electrical/interference issue with TDM.1.</p> <p>TDM.2 low bias. TDM.3 inoperative.</p> <p>TRadU.1 inoperative.</p>

AVAPS Drop Log

Project: Hurricanes 2021 Mission: TS Grace Flight ID: 20210814JI
 Take Off: _____ Landing: _____ Flt Dir: Carpenter Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	202620554	1	-0.5	1702Z	NGU	N41S	IP, IB	✓
2	202730070	2	-0.6	1734Z			Center #1	✓
3	203520174	3	-0.7	1758Z			EP, OB	✓
4	202721728	4	-0.5	1831Z			EP, IB	✓
5	202721621	5	-0.5	1852Z			Center #2 CPA	✓
6	202730013	6	-1.2	1853Z			Center #2 CPA	✓
7	202730073	7	-0.7	1915Z			EP, OB	✓
8		8						
9								
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31								

08/14/2021, 13:14:02-21:11:49



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	14.41	1.62	12.46	17.60
— LongGPS.1 (deg), 1 s/sec	-64.43	4.25	-70.12	-58.61