

N43RF ERROR SUMMARY  
20231018I1

Flight ID: 20231018I1

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/2023/MET/20231018I1

Local Met Data	Takeoff KLAL (1232Z)	Landing TBPB (1713Z)
Dynamic Corrections		Yes
AttackAngleIntercept		0.050058
AttackAngleSlope		5.32015
SlipAngleIntercept		0.165
SlipAngleSlope		6.66754

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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.

I.3 for Pitch and Roll is not operational

TTM.3 is not operational

TRadU.1 has erroneous data throughout the flight and should not be used  
TDM.2 and TD.c appears somewhat suspicious from ~1240 through 1345 UTC given that it's relatively flatlined, TDM.1 has similar values; the very low coinciding low HUM verifies suspicious

After 1345 UTC, TDM.1 and TDM.2 trace similarly through the remainder of the flight; HUM good; so overall TDM.1, TDM.2, HUM checked good

TDM.3 has erroneous data throughout the flight and should not be used  
PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ\_WSZ are not provided since \_AC file is not produced; all other 'C' file parameters checked are from the \_A file

GPS.3 and GPS.4 drop out at 13:38:55 UTC for the remainder of the flight, impacts AltGPS, LatGPS, LonGPS for .3, .4; ALTref, LATref, LONref checked good as set to GPS.1

AltRa.1, AltRa.2, show some deviations from ATLref, but this is due to flight over islands enroute to Barbados

Expendable Type	# deployed	# good	# transmitted
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Dropsondes	0	0	0
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Zawislak / Lundry  
Phone #: 305-707-4359

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:	20231018I1	FLT #:	FY24-	AC:	Doremus	Scientists:		Pressure		Dropsondes		
From:	KLAL	ETD:	0800L / 1200Z	CP(s):	Wood	Frank Marks (HRD)		A/C Takeoff	1014.5	Good	Bad	Sent
To:	TBPB	ETA:	1300L / 1700Z		Keith	Jun Zhang (HRD)				0	0	0
Block Time		Flight Time		NAV:	Miller	Joe Cione (HRD)		ASOS Takeoff	1015.1	BTs		
Out:	12:16	T/O:	12:32	FE(s):	Tyson	Jack Elston (Blackswift)				Good Bad Sent		
In:	17:18	Land:	17:13	FD(s):	Zawislak	Josh Fromm (Blackswift)		A/C Land		0	0	0
					Lundry							
Total:	5.0	Total:	4.7	SSA:	Richards	Visitors:		ASOS Land	1004.9			
Sponsoring Org:	HX - NHC/EMC			SEB:	Patel (IFT)			Storm Number ID:		N/A		
Program:	PRX				Flaherty (PM)			(ie: AL072012)				
Purpose:	Repo KLAL to Barbados			MX:	Sans Souci (MX)			TCPOD/WSPOD Mission		NOAA3 WXWXA TRAIN		
					Carrion / Ohsiek			(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							
LACK OF PRECIPITATION				x				2				
RELATIVE HUMIDITY ≥ 80%					x							
LARGE AIR-SEA TEMP GRADIENT					x			3				
HIGH SURFACE WINDS					x							
LONG FETCH / DURATION OF SFC WND					x			4				
SEA SALT ACCRETION FORECAST					x							
SEA SALT ACCRETION OBSERVED					x			Pennies:				

\*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:	2023101811
Flight Director(s):	Zawislak / Lundry
Mission:	Ferry
UWZ.d mean:	-0.24

Pressure Comparison		
	T/O	Land
Aircraft	1014.5	No good measurement
Tower	1015.1	1004.9

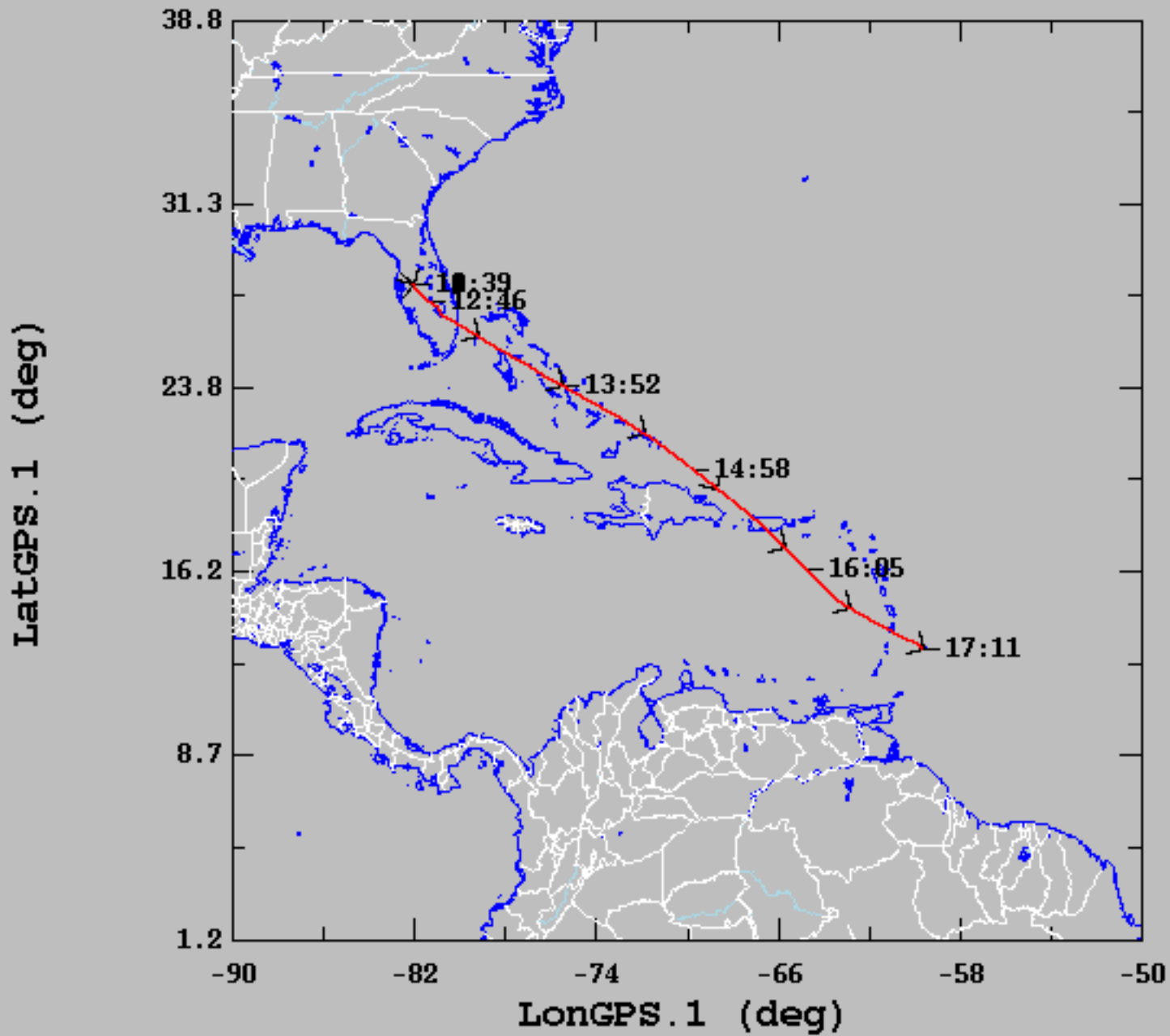
	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2	✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✗ 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>I.3 for Pitch and Roll is not operational</p> <p>TTM.3 is not operational</p> <p>TRadU.1 has erroneous data throughout the flight and should not be used</p> <p>TDM.2 and TD.c appears somewhat suspicious from ~1240 through 1345 UTC given that it's relatively flatlined, TDM.1 has similar values; the very low coinciding low HUM verifies suspicious</p> <p>After 1345 UTC, TDM.1 and TDM.2 trace similarly through the remainder of the flight; HUM good; so overall TDM.1, TDM.2, HUM checked good</p> <p>TDM.3 has erroneous data throughout the flight and should not be used</p> <p>PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ_WSZ are not provided since _AC file is not produced; all other 'C' file parameters checked are from the _A file</p> <p>GPS.3 and GPS.4 drop out at 13:38:55 UTC for the remainder of the flight, impacts AltGPS, LatGPS, LonGPS for .3, 4; ALTref, LATref, LONref checked good as set to GPS.1</p> <p>AltRa.1, AltRa.2 show some deviations from ALTref, but this is due to flight over islands enroute to Barbados</p>

10/18/2023, 10:33:40-17:11:23



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	22.72	5.04	13.05	27.99
— LonGPS.1 (deg), 1 s/sec	-73.98	7.61	-82.03	-59.56