

N43RF ERROR SUMMARY
20240716I1

Flight ID: 20240716I1

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.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/2024/MET/20240716I1

Local Met Data	Takeoff TBPB (1458Z)	Landing KLAL (2050Z)
Dynamic Corrections		Yes
AttackAngleIntercept		0.179211
AttackAngleSlope		5.88163
SlipAngleIntercept		0.15
SlipAngleSlope		6.89472

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, RollI.33 not installed therefore no PitchRateI.3 / RollRateI.3 produced.

TTM.3, TDM.3, TRadU.1 inoperable.

PQM.1 trends on average of 16mb higher than PQM.2- throughout flight.

TDM.1 (as set to the reference), and TDMref erroneously spike between 1932-1935Z.

TD.c data also spikes during the time of TDM.1 spike, and drops out data from 1933-1935Z.

TA.d, WS.d, WD.D, and PSURF data also drop out between 1933-1935Z.

SFMR INOP as it was turned off for transit flight.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	0	0	0
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0

Flight Director: Zawislak/Englert
Phone #: 863-606-6847

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:	20240716I1	FLT #:	FY24-	AC:	Rannenberg	Scientists:	Pressure		Dropsondes		
From:	TBPB	ETD:	1100L / 1500Z	CP(s):	Wood	Dunion	A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1600L / 2000Z		Ellis	Hazelton			0	0	0
Block Time		Flight Time		NAV:	Utama/Dunford		ASOS Takeoff		BTs		
In:	20:16	Land:	19:47	FE(s):	Stokes				Good	Bad	Sent
Out:	14:43	T/O:	14:59	FD(s):	Zawislak		A/C Land		0	0	0
					Englert		ASOS Land				
Total:	5.6	Total:	4.8	SSA:	Richards	Visitors:	Storm Number ID:		N/A		
Sponsoring Org:		HRD		AVAPS:	Dykeman/Santoni		(ie: AL072012)				
Program:		PHX		SEB:	Grimes (MX)		TCPD/WSPD Mission		WXWXA TRAIN		
Purpose:		REPO to KLAL			Anello (MX)		(ie: NOAA2 2418A SANDY)				
MX:					Carrion (MX)		OBSERVATIONS				
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) - no mission impact.
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Flight ID:	20240716I1
Flight Director(s):	Zawislak / Englert
Mission:	Ferry
UWZ.d mean:	-0.04

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1010.0	
Airfield	1010.9	

This form uses:
_C.nc

SFMR Serial Unit	3
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Parameters	Raw				Derived, Corrected & Reference	
✓ Acceleration	✓ 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 ✓ ALTPA.d ✓ ALTGA.d	✓ ALTref ✓ 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	
✓ Location	✓ 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 Sensors	✓ 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	✓ 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	✓ PitchRatI.1 ✓ PitchRatI.2 ✓ PitchRatI.3	✓ RollI.1 ✓ RollI.2 ✓ RollI.3	✓ RollRatI.1 ✓ RollRatI.2 ✓ RollRatI.3	✓ PITCHref ✓ ROLLref	
✓ Temperature, Dewpoint, Radiometers	✓ TTM.1 ✓ TTM.2 inop TTM.3	✗ TDM.1 ✓ TDM.2 inop TDM.3	✓ TRadD.1 ✓ TRadS.1 inop TRadU.1		✗ TD.c ✗ TDMref ✓ HUM	✓ TTMref ✓ TA.d
✓ Wind and Pressure		inop CH 1 TB	inop CH 4 TB		✓ UWZ.d ✓ PSURF inop WS SFMR	✗ WS.d ✗ WD.d inop RAIN RATE SFMR
✓ SFMR	SFMR	inop CH 2 TB inop CH 3 TB	inop CH 5 TB inop CH 6 TB			

FLID_Mission_Documents.pdf:
✓ Error Summary
✓ Crew Manifest
✓ QC Checklist
✓ Dropwindsonde Log(s) - AVAPS and FD, if completed
✓ Flight Track

QC Key:	
Valid	✓
Errors (see NOTES)	✗
Sensor Inoperative	inop

NOTES:

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PQM.1 trends on average of 16mb higher than PQM.2- throughout flight.

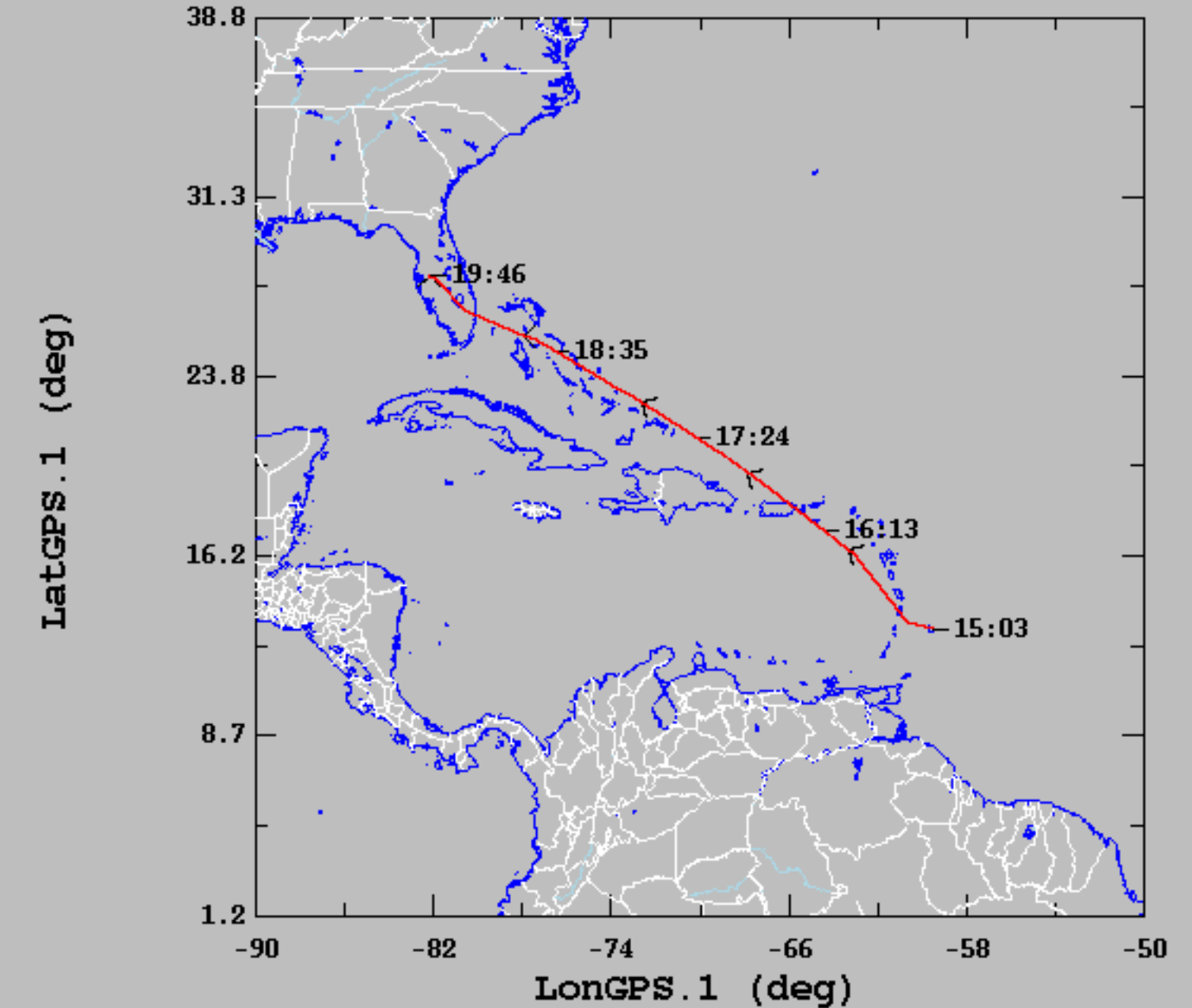
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07/16/2024, 15:03:01-19:46:42



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	20.96	4.42	13.20	27.99
LongGPS.1 (deg), 1 s/sec	-70.55	6.92	-82.20	-59.43