N42RF ERROR SUMMARY
20240707H1

Flight ID: 20240707H1

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/20240707H1

Local Met Data Takeoff KLAL (0759Z) Landing KLAL (2050Z)

Dynamic Corrections	Yes
AttackAngleIntercept	2.32804
AttackAngleSlope	6.09319
SlipAngleIntercept	0.25
SlipAngleSlope	6.641
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.

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.
PTM.1 has significant drop out 08:03-08:37
TDM.1 is not representative and is the referenced TDM sensor, this effects TDMref and TD.c; TDM.2 should be used for any analysis
PSURF parameters "noisy"
Humidity parameters suspect/unrepresentative
SFMR is not representative due to over land and near land proximity
THIS FLIGHT SHOULD NOT BE USED FOR RESEARCH PURPOSES - #3 ENGINE OIL LEAK RESULTED IN TERMINATION OF MISSION AND CREW TO RTB

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
UAS	0	0	0

Flight Director: KALEN
Phone #: 863-500-3962

ACAT-4 Version = 7.4

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest

FLIGHT INFORMATION

FLT ID:	20240707H1	FLT #:	
From:	KLAL	ETD:	0800Z
To:	KLAL	ETA:	1600Z

Block Time		Flight Time	
In:	9:10	Land:	8:56
Out:	7:50	T/O:	7:59
Total:	1.3	Total:	1.0

Sponsoring Org:	NWS
Program:	PRX
Purpose:	TROPICAL STORM BERYL TDR

CREW MANIFEST

AC:	RANNENBERG	Scientists:
CP(s):	WOOD	ZHANG, J
	TARABOLETTI	SELLWOOD
NAV:	SCHAEFER / MEIER	
FE(s):	TYSON	
	WYSINGER	
FD(s):	KALEN	
SSA:	RICHARDS, T.	Visitors:
AVAPS:	PATEL / SANTONI	
SEB:		
MX:		

MISSION INFORMATION

Pressure		Dropsondes		
		Good	Bad	Sent
A/C Takeoff		0	0	0
ASOS Takeoff		BTs		
		Good	Bad	Sent
A/C Land		-	-	-
ASOS Land				

Storm Number ID: (ie: AL072012)	AL020224
TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA3 2902A BERYL

AS REQUIRED BY ORM

	Y	N
VOLCANIC ASH		X
SCIENCE MISSION WITHIN BDRY LAYER		X
LACK OF PRECIPITATION		X
RELATIVE HUMIDITY ≥ 80%	X	
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

REMARKS

#3 ENGINE OIL LEAK / MISSION ABORTED / RTB

OBSERVATIONS

Fix Number	Obs Number	Fix Time	SLP
1			
2			
3			
4			
Pennies:	0		

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Major instrument issue(s) - significant mission impact.

Flight ID:	20240707H1
Flight Director(s):	Kalen
Mission:	Tasked/Operational
UWZ.d mean:	0.81

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1010.6	-
Airfield	1009.9	1009.9

This form uses:
_A.nc

SFMR Serial Unit	1

Parameters	Raw				Derived, Corrected & Reference	
✓ Acceleration	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1	✓ AccZfilter-GPS.1	✓ AccZref	
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2	✓ AccZfilter-GPS.2		
	✓ AccAXI-GPS.1	✓ AccAYI-GPS.1	✓ AccAZI-GPS.1			
	✓ AccAXI-GPS.2	✓ AccAYI-GPS.2	✓ AccAZI-GPS.2			
✓ Altitude	✓ AltGPS.1	✓ AltI-GPS.1	✓ AltPaADDU.1	✓ AltRA.1	✓ ALTref	✓ AltRA1.c
	✓ AltGPS.2	✓ AltI-GPS.2	✓ AltBCADDU.1	✓ AltRA.2	✓ ALTPA.d	✓ AltRA2.c
	✓ AltGPS.3				✓ ALTGA.d	
	✓ AltGPS.4					
✓ Ground Speed	✓ GsXI-GPS.1	✓ GsYI-GPS.1	✓ GsZI-GPS.1		✓ GSXref	
	✓ GsXI-GPS.2	✓ GsYI-GPS.2	✓ GsZI-GPS.2		✓ GSYref	
					✓ GSZref	
✓ Location	✓ LatGPS.1	✓ LatI-GPS.1	✓ LonGPS.1	✓ LonI-GPS.1	✓ LATref	
	✓ LatGPS.2	✓ LatI-GPS.2	✓ LonGPS.2	✓ LonI-GPS.2	✓ LONref	
	✓ LatGPS.3		✓ LonGPS.3			
	✓ LatGPS.4		✓ LonGPS.4			
✓ Pressure Sensors	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1	✓ PQMref	
	✓ PDALPHA.2	✓ PQBETA.1	✓ PQM.2	✓ PSM.2	✓ PQ.c	
	✓ PDBETA.1		✓ PQM.3	x PTM.1	✓ PSMref	
	✓ PDBETA.2		✓ PQM.4		✓ PS.c	
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ IasADDU.1		✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1	✓ PitchRateI.1	✓ RollI.1	✓ RollRateI.1	✓ PITCHref	
	✓ PitchI.2	✓ PitchRateI.2	✓ RollI.2	✓ RollRateI.2	✓ ROLLref	
	inop PitchI.3	inop PitchRateI.3	inop RollI.3	inop RollRateI.3		
✓ Temperature, Dewpoint, Radiometers	✓ TTM.1	x TDM.1	✓ TRadD.1		✓ TD.c	✓ TTMref
	✓ TTM.2	✓ TDM.2	✓ TRadS.1		✓ TDMref	✓ TA.d
	inop TTM.3	inop TDM.3	inop TRadU.1		x HUM	
✓ Wind and Pressure		x CH 1 TB	x CH 4 TB		✓ UWZ.d	✓ WS.d
✓ SFMR	SFMR	x CH 2 TB	x CH 5 TB		x PSURF	✓ WD.d
		x CH 3 TB	x CH 6 TB		x WS SFMR	x RAIN RATE SFMR

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)	X
Sensor Inoperative	inop

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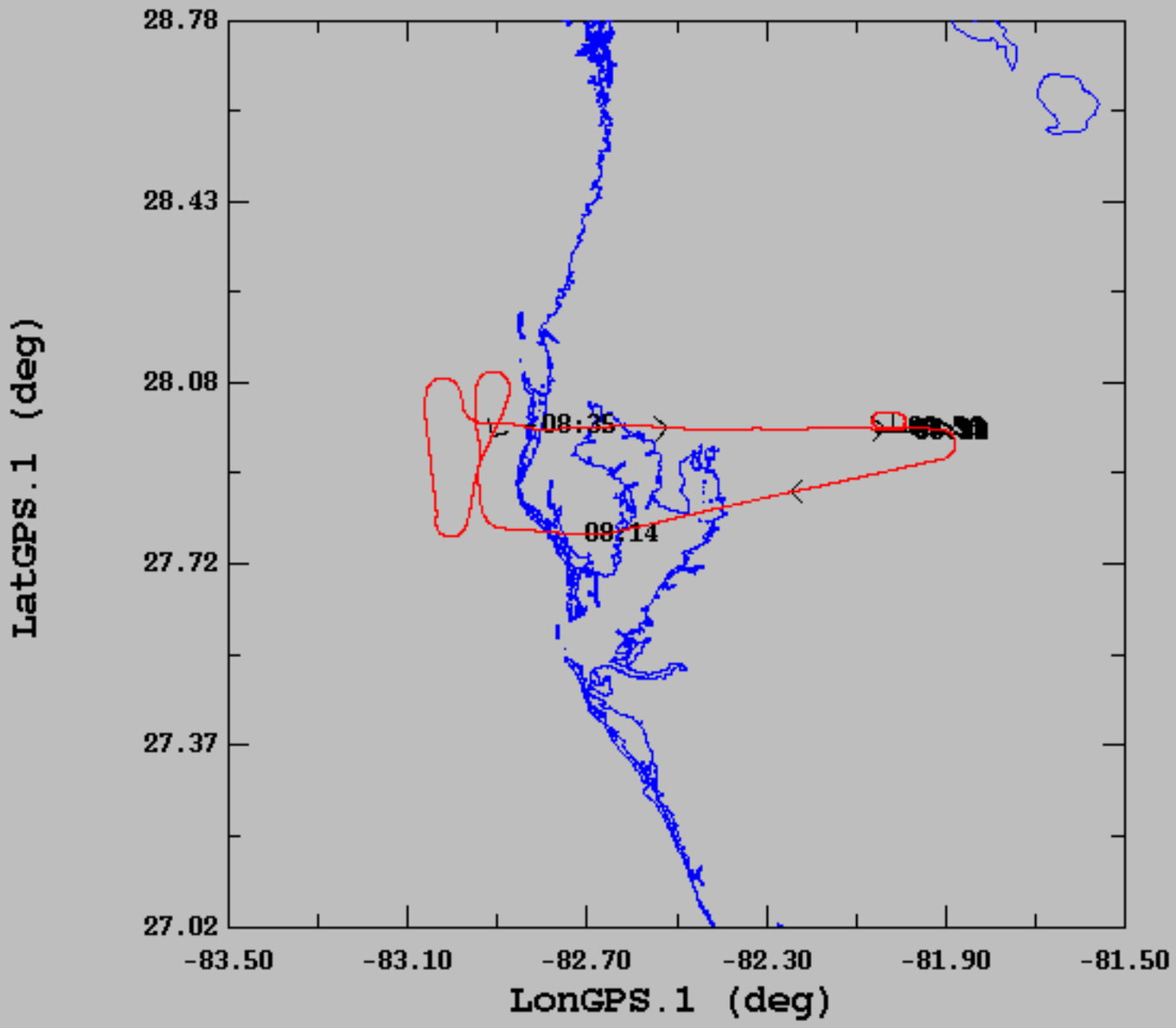
07/07/2024, 06:30:56-08:56:06



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	27.97	0.06	27.78	28.10
LonGPS.1 (deg), 1 s/sec	-82.21	0.35	-83.06	-81.88