N43RF ERROR SUMMARY
20240703I1

Flight ID: 20240703I1

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/20240703I1

Local Met Data Takeoff TISX (0942Z) Landing KLAL (1605Z)

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.

I.3 for Pitch and Roll, TTM.3, and TDM.3 not operational.
TRadU.1 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.
Navigational software issues during transit to storm; all storm environment data valid
All GPS.1 & .2 parameters have a large spike at 09:31
PQM.1 trending ~10 mb high
TDM.1 and TDM.2 have a large spike in the first pass - derived and corrected parameters effected - subsequent passes representative

Expendable Type	# deployed	# good	# transmitted
Dropsondes	21	20	20
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 - N43RF Manifest

FLIGHT INFORMATION			
FLT ID:	20240703I1	FLT #:	
From:	TISX	ETD:	0800Z
To:	KLAL	ETA:	1600Z
Block Time		Flight Time	
In:	16:12	Land:	16:05
Out:	7:59	T/O:	8:06
Total:	8.2	Total:	8.0
Sponsoring Org:	NWS		
Program:	PRX		
Purpose:	TAC REPO HURRICANE BERYL TDR		

CREW MANIFEST		
AC:	RANNENBERG	Scientists:
CP(s):	WOOD	ZHANG, J.
	TARABOLETTI	SELLWOOD
NAV:	SCHAEFER / MEIER	
FE(s):	WYSINGER	
	TYSON / RIPP	
FD(s):	KALEN	
SSA:	RICHARDS, T.	Visitors:
AVAPS:	PATEL / SANTONI	HATHAWAY (OBS)
SEB:	CARRION (MX)	
	GRIMES (MX)	
	ANELLO (MX)	
MX:	MORENO (MX)	

MISSION INFORMATION				
Pressure		Dropsondes		
		Good	Bad	Sent
A/C Takeoff		20 (2 SKYFORA)	1	20
ASOS Takeoff		BTs		
		Good	Bad	Sent
A/C Land				
ASOS Land		-	-	-
Storm Number ID: (ie: AL072012)		AL022024		
TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)		NOAA3 1302A 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

OBSERVATIONS			
Fix Number	Obs Number	Fix Time	SLP
1	7	1118Z	953 MB
2	13	1212Z	953 MB
3			
4			
Pennies:	3, CAT 4		

*Highlighted items must be completed before departure.

Remarks:

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.

Flight ID:	20240703I1
Flight Director(s):	Kalen
Mission:	Tasked/Operational
UWZ.d mean:	-0.1

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1012.1	-
Airfield	1011.2	1015.4

This form uses:
_A.nc

SFMR Serial Unit	3

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	✓ PTM.1	✓ PSMref	
	✓ PDBETA.2		✓ PQM.4		✓ PS.c	
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ IasADDU.1		✓ IAS.d	x 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,	✓ TTM.1	x TDM.1	✓ TRadD.1		x TD.c	✓ TTMref
Radiometers	✓ TTM.2	x TDM.2	✓ TRadS.1		x TDMref	x TA.d
	inop TTM.3	inop TDM.3	inop TRadU.1		✓ HUM	
✓ Wind and Pressure		✓ CH 1 TB	✓ CH 4 TB		✓ UWZ.d	x WS.d
✓ SFMR	SFMR	✓ CH 2 TB	✓ CH 5 TB		x PSURF	x WD.d
		✓ CH 3 TB	✓ CH 6 TB		✓ WS SFMR	✓ 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

NOTES:

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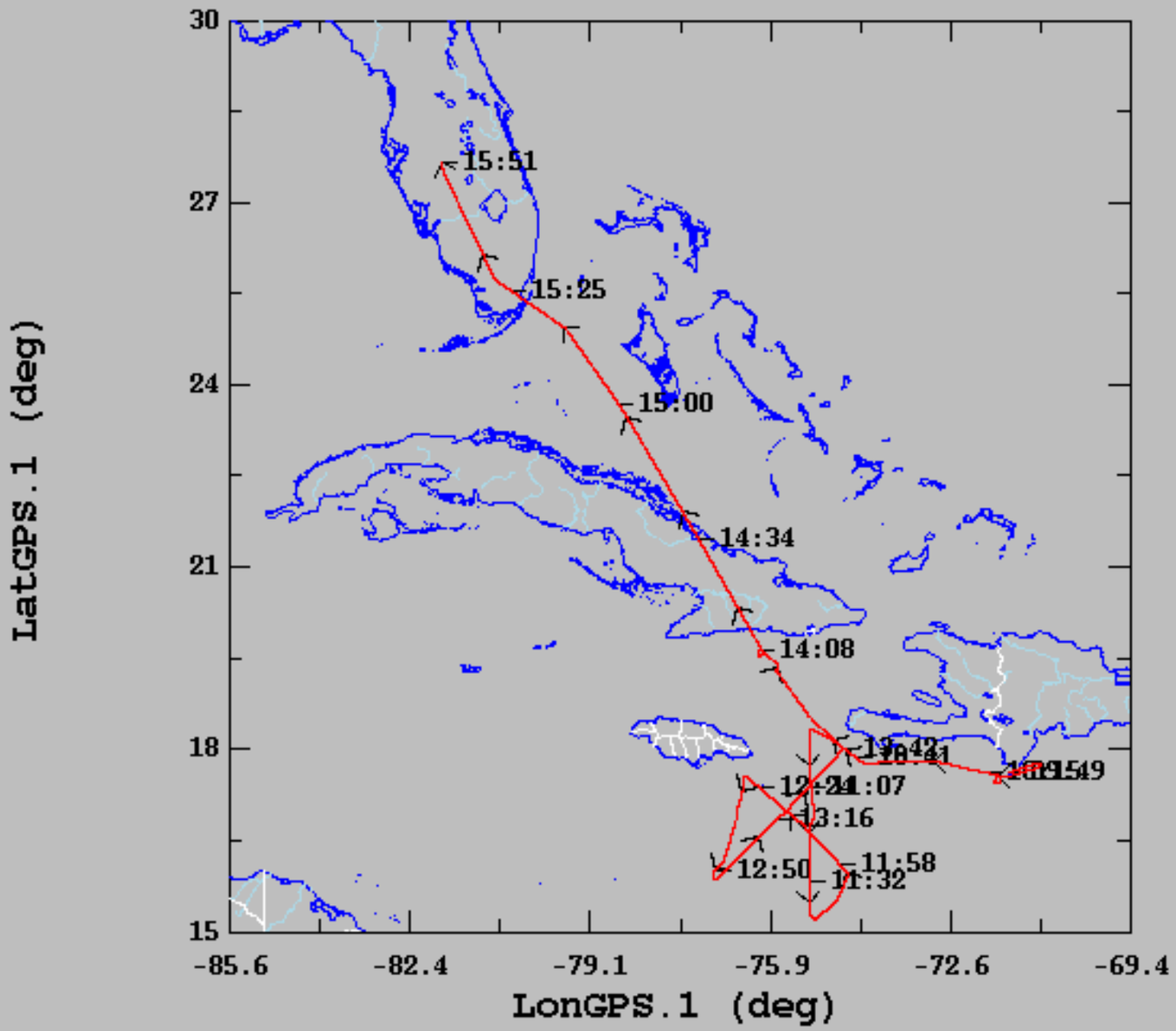
AVAPS Drop Log

Project: HURRICANE Mission: H. Beryl Flight ID: 07/03

Take Off: _____ Landing: _____ Flt Dir: Quinn Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge $$ To	Comments	Good ?
1	22181117	1	-0.5	1652	ASR			
2	22201097	2	-0.4	1704				
3	22203037	3	-0.7	1115				
4	22203033	4	-0.5	1118				
5	22201064	5	-0.7	1121				
6	22182001	6	-0.5	1129				
7	22203036	7	-0.5	1141				
8	22201010	8	-1.2	1156				
9	22175063	1	-0.4	1201				
10	22172117	2	-0.5	1210				
11	22173034	3	-0.5	1212				
12	22173063	4	-0.6	1215				
13	22172128	5	-0.8	1220				
14	22173063	6	-0.9	1225				
15	22203034	7	-0.4	1254				
16	22201005	8	-0.6	1304				
17	22173000	1	-0.5	1316				
18	60000750	2	-0.7	1318				
19	22202099	3	-1.0	1320				
20	22203036	4	-0.9	1329				
21	22205053	5	-0.5	1341				
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

07/03/2024, 09:49:24-15:51:52



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	19.01	3.26	15.20	27.65
LonGPS.1 (deg), 1 s/sec	-75.95	2.38	-81.80	-70.99