

N43RF ERROR SUMMARY
20240704I1

Flight ID: 20240704I1

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/20240704I1

Local Met Data	Takeoff KLAL (0759Z)	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.
PQM.1 trending ~5 mb high
TDM.1 has a large spike on the first pass - TD.c effected - no other parameters show loss of data and remain 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				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	2024070411	FLT #:		AC:	RANNENBERG	Scientists:	Pressure		Drosondes		
From:	KLAL	ETD:	0800Z	CP(s):	WOOD	ZHANG, J.	A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	1600Z		TARABOLETTI	SELLWOOD			20	1	20
Block Time		Flight Time		NAV:	SCHAEFER / MEIER		ASOS Takeoff		BTs		
In:	14:55	Land:	14:49	FE(s):	TYSON		A/C Land		Good	Bad	Sent
Out:	7:52	T/O:	8:00	FD(s):	WYSINGER						
Total:	7.1	Total:	6.8	SSA:	RICHARDS, T.	Visitors:	ASOS Land		-	-	-
Sponsoring Org:	NWS			AVAPS:	PATEL / SANTONI		Storm Number ID:		AL022024		
Program:	PRX						(ie: AL072012)				
Purpose:	HURRICANE BERYL TDR			SEB:			TCPOD/WSPOD Mission		NOAA3 1902A BERYL		
				MX:			(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X		1	12	1109Z	970 MB	
SCIENCE MISSION WITHIN BDRY LAYER					X						
LACK OF PRECIPITATION					X		2	21	1233Z	972 MB	
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:	3, CAT 3			
							*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:	2024070411
Flight Director(s):	Kalen
Mission:	Tasked/Operational
UWZ.d mean:	0.01

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1012.4	1014.5
Airfield	1011.9	1012.3

This form uses:	
_A.nc	

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

FLID_Mission_Documents.pdf:
<input checked="" type="checkbox"/> Error Summary <input checked="" type="checkbox"/> Crew Manifest <input checked="" type="checkbox"/> QC Checklist <input checked="" type="checkbox"/> Dropwindsonde Log(s) - AVAPS and FD, if completed <input checked="" type="checkbox"/> Flight Track

QC Key:	
Valid	<input checked="" type="checkbox"/>
Errors (see NOTES)	<input style="background-color: #ccccff;" type="checkbox"/>
Sensor Inoperative	<input style="background-color: #ccccff;" type="checkbox"/>

NOTES:

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TRadU.1 has erroneous data throughout the flight and should not be used.

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PQM.1 trending ~5 mb high

TDM.1 has a large spike on the first pass - TD.c effected - no other parameters show loss of data and remain representative

AVAPS Drop Log

Project: Hurricane

Mission: Hx. Beryl

Flight ID: 20240704I1

Take Off: _____

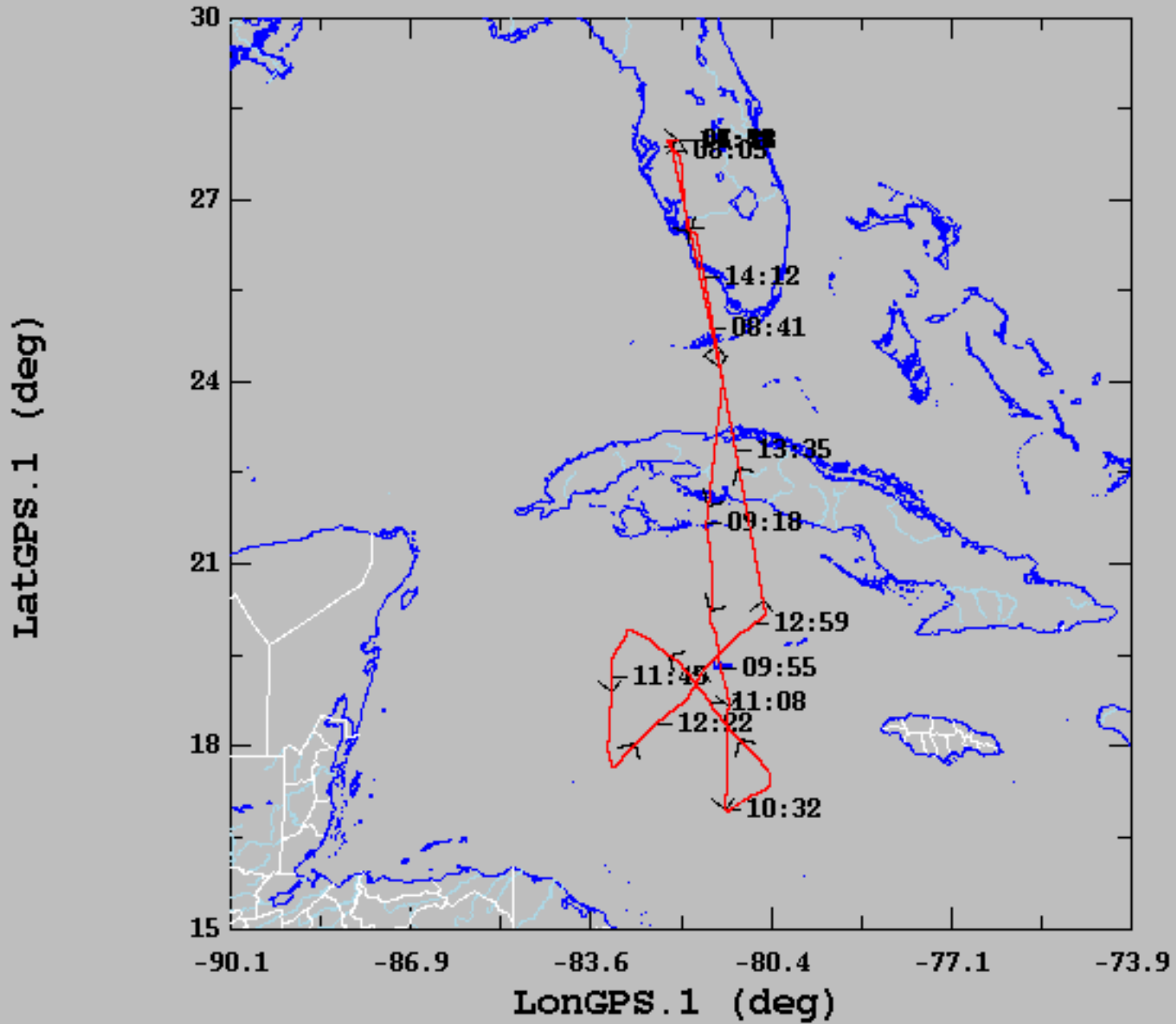
Landing: _____

Flt Dir: Quinn

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	222030364	1	-0.9	938	ASR		EP1	✓
2	222060066	2	-0.8	/			No launch. Detekt	✓
3	222030381	3	-1.2	1004			EW1	✓
4	222010813	4	-0.9	1007			C	✓
5	222030375	5	-1.1	1009			EW1	
6	222030334	6	-0.8	1020			MP1	
7	222050545	7	-0.5	1031			EP1	
8	222060087	8	-0.1	1046			IP2	
9	222010088	1	-0.8	1057			MP2	
10	222050555	2	-0.6	1106			EW2	✗
11	222030341	3	-0.7	1108			C	
12	222010045	4	-0.7	1114			EW2	
13	222050551	5	-0.8	1121			MP2	
14	222060061	6	-0.8	1133			EP2	
15	222010089	7	-1.1	1207			IP3	
16	222010055	8	-1.0	1219			MP3	
17	222030277	1	-1.2	1231			EW3	
18	222050086	2	-1.1	1233			C	
19	222030368	3	-0.9	1236			EW2	
20	221530950	4	-1.2	1240			MP3	
21	222030366	5	-1.1	1300			EP3	
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

07/04/2024, 06:15:07-14:49:09



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	22.81	3.95	16.93	27.99
— LongGPS.1 (deg), 1 s/sec	-81.69	0.66	-83.30	-80.36