

N43RF ERROR SUMMARY
20241008I1_ES

Flight ID: 20241008I1

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/20241008I1

Local Met Data	Takeoff KLAL (0803Z)	Landing KMOB (1655Z)
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.

Pitch and Roll I.3, TTM.3, TDM.3, and TRadU.1 not operational.
Erratic PDAlpha.1 from 0917-0932z, prior to on station. Data stabilized prior to entering storm environment.
TDM.1 spike above 40 deg C at 1022z is unrepresentative.
SFMR data (all channel TB, WS, RAIN RATE) under assessment and should be used with caution.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	17	17	17
Test sondes	0	0	0
AXBTs	9	9	9
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	1	1	0

Flight Director: Englert/Carpenter
Phone #: 863606847

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20241008I1	FLT #:		AC:	Rannanberg	Other Crew:	sUAS		Dropsondes		
From:	KLAL	ETD:	0400L / 0800Z	CP(s):	Palmer	Zhang, Jun (HRD)	Type	Released	Good	Bad	Sent
To:	KMOB	ETA:	1200L / 1600Z		Taraboletti	Wadler (HRD)	S0	1	17	0	17
Block Time		Flight Time		NAV(s):	Utama / Saunders	Fromm (Blackswift)					
Out:	07:52	T/O:	8:04	FE(s):	Ripp		Other Expendables		Dropsonde Charge Codes		
					Dittoe		Type	Released	13 NWS, 4 HRD		
In:	15:08	Land:	14:59	FD(s):	Englert				AXBTs		
					Carpenter				Good	Bad	Sent
Total:	7.3	Total:	6.9	SSA:	Richards				9	0	9
				IFT(s):	Underwood						
Sponsoring Org:		NHC					Pennies		3x CAT4		
Program:		PRX		Storm ID: (i.e., AL072012)			AL142024				
Purpose:	TDR Mission + sUAS			MX:	Spayd		Mission ID: (i.e., NOAA2 2418A SANDY)		NOAA3 1314A MILTON		
					Anello						
AS REQUIRED BY ORM			Y	N	REMARKS		OBSERVATIONS				
VOLCANIC ASH				X			Fix Number	Obs Number	Fix Time	SLP	
SCIENCE MISSION WITHIN BDRY LAYER				X			1	1	1022z	932 mb	
LACK OF PRECIPITATION				X			2	9	1134z	931 mb	
RELATIVE HUMIDITY ≥ 80%			X								
LARGE AIR-SEA TEMP GRADIENT				X			3	17	1259z	932 mb	
HIGH SURFACE WINDS			X								
LONG FETCH / DURATION OF SFC WND				X			4				
SEA SALT ACCRETION FORECAST				X							
SEA SALT ACCRETION OBSERVED											
*Highlighted items must be completed before departure.											

P-3 QC Checklist

Overall Assessment	Minor instrument issue(s) - minimal mission impact.
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Flight ID:	2024100811
Flight Director(s):	Englert/Carpenter
Mission:	Tasked/Operational
UWZ.d mean:	0.42

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1001.6	-
Airfield	1001.4	-

This form uses:
_A.nc

SFMR Serial Unit	1
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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	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1	✓ PitchRatI.1	✓ RollI.1	✓ RollRatI.1	✓ PITCHref	
	✓ PitchI.2	✓ PitchRatI.2	✓ RollI.2	✓ RollRatI.2	✓ ROLLref	
	inop PitchI.3	inop PitchRatI.3	inop RollI.3	inop RollRatI.3		
✓ Temperature, Dewpoint, Radiometers	✓ TTM.1	✗ 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		✓ HUM	
✓ Wind and Pressure		✗ CH 1 TB	✗ CH 4 TB		✓ UWZ.d	✓ WS.d
✗ SFMR	SFMR	✗ CH 2 TB	✗ CH 5 TB		✓ PSURF	✓ 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)	✗
Sensor Inoperative	inop

NOTES:
Pitch and Roll I.3, TTM.3, TDM.3, and TRadU.1 not operational. Erratic PDAlpha.1 from 0917-0932z, prior to on station. Data stabilized prior to entering storm environment. TDM.1 spike above 40 deg C at 1022z is unrepresentative. SFMR data (all channel TB, WS, RAIN RATE) under assessment and should be used with caution.

Dropwindsonde Scientist Log

Storm:	Milton	Flight ID:	20241008I1	Mission ID:	1314A	Takeoff:		Landing:	
Dropsonde Scientist(s):		Kaplan/Dunion			AVAPS Operator:				

Pre-flight

- ✓ Discuss the pattern with the Lead Project Scientist (LPS) and ensure that enough dropsondes are onboard.
- ✓ Complete the appropriate pre-flight set-up of your workstation and ASPEN (see [Dropsonde Processing Guide](#)).

In-flight

- ✓ Ensure the Flight Director is aware of upcoming drops and whether a backup is requested in case of failure.
- ✓ Ensure the AVAPS operator has determined that the dropsonde is (or is not) transmitting a good signal.
- ✓ Prioritize processing of center drops and report MSLP and surface wind speed and direction to the Flight Director.
- ✓ Fill in the Dropwindsonde Scientist log as drops are released and processed.
- ✓ Copy completed ASPEN files (e.g., FRD, netCDF, Skew-t, WMO txt, BUFR) into the “FRD” folder on the workstation desktop for automated transmission to the ground for archival.

Once “science is complete”...

- ✓ Make synoptic map plots in ASPEN and copy them to the “FRD” folder on the workstation desktop for automated transmission to the ground for archival.
- ✓ Ensure ASPEN files have been sent to the ground by locating and verifying all files in the “FLIGHTID” folder within the “FRD” folder on the workstation desktop.
- ✓ Archive ASPEN_DATA and RAW_DATA into a folder named with the FLIGHTID within the “Season Dropsonde Archive” folder on the workstation desktop and upload the same directories into StormName/FLIGHTID/Dropsonde/ folder on Drive.
- ✓ Download this Dropwindsonde Scientist Log as “PDF” and upload completed PDF and Google Doc to the StormName/FLIGHTID/Dropsonde/ folder within the “Mission Reports” directory in the HFP Google Drive.

Storm: <<Milton>>

Flight ID: <<24100811>>

Mission ID: << 1314A

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Lon (°E/W)	Sfc Pressure (mb)	Lowest Wind Direction/Speed (deg/kt)	Lowest Wind Height (m)	AXBT SST (°C)	Eye, Eyewall, Rainband, etc.	Ob #
1	233331473	1000	23.05	90.10	996	22/30	10			2
Couldn't open first version of file. Header issue. Jason D. fixed problem and used version ending with .P										
2	233825125	1012	22.74	89.45	988	32/43	10			3
Set end of drop at 244.										
3	233640670	1022	22.39	88.90	932.2	153/16	10		Center	4
4	233950699	1033	22.00	88.17	992.7	172/40	10			5
5	233541325	1039	21.8	87.79	995.8	172/34	10			6
6	233540553	1110	23.23	87.29	999.7	133/22	10			7
7	233814596	1122	22.85	88.05	994.0	120/40	10			8
8	233560358	1132	22.52	88.67	945.7	37/135	10		NE eyewall	10
Set RH missing 183-189 sec. Very high 10m wind noted and conveyed to Carcah. Sonde was used in part by NHC to estimate storm intensity as noted in their discussion										
9	233950693	1134	22.44	88.8	930.6	290/17	10		center	11
10	233950665	1137	22.34	88.97	972.6	298/90	10		SW eyewall	12
11	233550063	1148	22.02	89.70	994.9	321/31	10			13

Storm: <<Milton>>

Flight ID: <<241008I1>>

Mission ID: << 1314A

[illegible]

Storm: <<Milton>>

Flight ID: <<24100811>>

Mission ID: << 1314A

AVAPS Drop Log

Project: Hx2024

Mission: MILTON

Flight ID: 20241008I1

Take Off: 0200

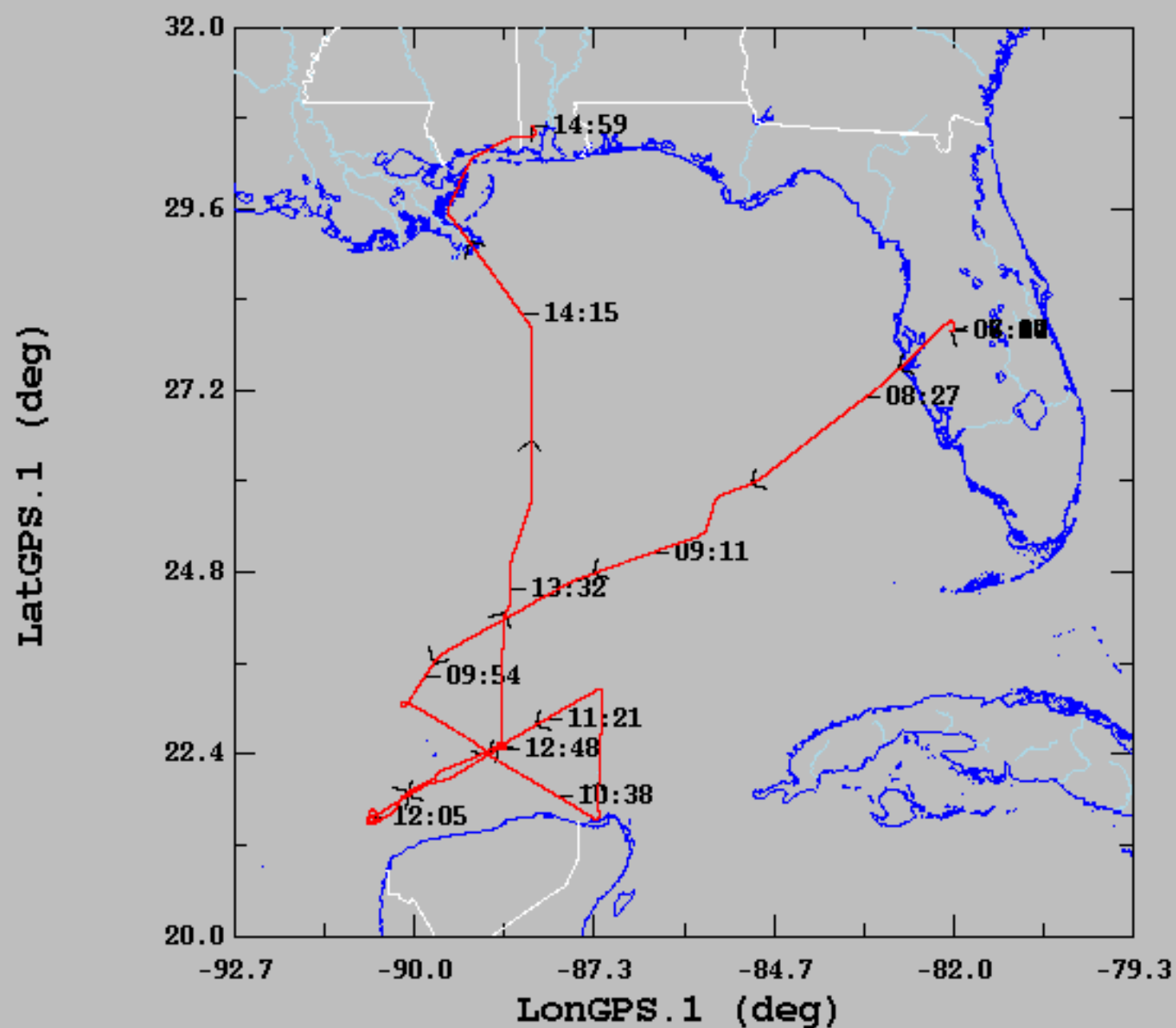
Landing: _____

Flt Dir: _____

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	233331473	1	0.0	1000Z	NGU	NWS	IP1	✓
2	233825125	2	-0.4	1012Z			MP	✓
3	233640670	3	+0.5	1022Z			Center	✓
4	233950699	4	-0.5	1033Z			MP	✓
5	233541325	5	-0.2	1039Z			EP	✓
6	233540553	6	-0.2	1110Z			IP2	✓
7	233814596	7	-1.2	1122Z			MP	✓
8	233560358	8	-0.8	1132Z		HRD	RMW	✓
9	233950693	1	-0.6	1134Z		NWS	Center CPA	✓
10	233950665	2	-0.6	1137Z		HRD	RMW	✓
11	233550063	3	-0.6	1148Z		NWS	MP	✓
12	233640124	4	-0.1	1200Z			EP2	✓
13	233950657	5	-0.8	1246	THB	HRD	RMW @	✓
14	233950650	6	-0.8	1259	THB	NWS	CP3 combo CPA	✓
15	233950669	7	-0.6	1302	THB	HRD	RMW	✓
16	233950683	8	-0.4	1313	THB	NWS	MP combo	✓
17	233814633	1	-0.7	1324	THB	NWS	EP3	✓
18								
19								
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27								
28								
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30								
31								

10/08/2024, 06:17:32-14:59:01



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	25.21	2.69	21.48	30.69
LongGPS.1 (deg), 1 s/sec	-86.78	2.99	-90.70	-81.96