N49RF ERROR SUMMARY
20241008N1

Flight ID: 20241008N1

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.2
Vertical Accelerometer	AccZI.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/20241008N1

Local Met Data Takeoff KLAL (0530Z) Landing KLAL (1119Z)

Dynamic Corrections	Yes
AttackAngleIntercept	4.95911
AttackAngleSlope	5.43613
SlipAngleIntercept	1.06
SlipAngleSlope	6.97813
AttackAngleIntercept2	5.05753
AttackAngleSlope2	5.52397
SlipAngleIntercept2	0.931
SlipAngleSlope2	6.57562

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 _BC file is not produced; all other "C" file parameters checked are from the _B file.
TTM.2 not operational.
.1 & .2 parameter data stair steps throughout mission
AltRa.1 & AltRa.c inop
PDBETA.1 inop
PQBETAs inop due to sensor removal
TDM.1 unrepresentative

Expendable Type	# deployed	# good	# transmitted
Dropsondes	27	25	25
Test sondes	0	0	0

AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

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

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION			
FLT ID:	20241008N1	FLT #:	
From:	KLAL	ETD:	0530Z / 0130L
To:	KLAL	ETA:	1230Z / 0830L
Block Time		Flight Time	
Out:	05:20	T/O:	05:30
In:	11:26	Land:	11:20
Total:	6.1	Total:	5.8
Sponsoring Org:	NWS		
Program:	PHS		
Purpose:	HX MILTON - TDR		

CREW MANIFEST		
AC:	Waddington	Other Crew:
CP(s):	Cozart	
NAV(s):		
FE(s):		
FD(s):	Kalen	
	Timmers	
SSA:	S. Paul	
IFT(s):	Kotz	
	Patel	
MX:		

MISSION INFORMATION				
sUAS		Dropsondes		
Type	Released	Good	Bad	Sent
		25	2	25
Other Expendables		Dropsonde Charge Codes		
Type	Released	nws		
		AXBTs		
		Good	Bad	Sent
Pennies				
Storm ID: (i.e., AL072012)		AL142024		
Mission ID: (i.e., NOAA2 2418A SANDY)		NOAA9 1214A MILTON		

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		

REMARKS
Drop 11 - Weak telemtry - no data
Drop 11 Back up - weak telemetry - died at FL250

OBSERVATIONS			
Fix Number	Obs Number	Fix Time	SLP
1			
2			
3			
4			

*Highlighted items must be completed before departure.

G-IV QC Checklist

Overall Assessment	Minor instrument issue(s) - no mission impact.

Flight ID:	20241008N1
Flight Director(s):	Kalen / Timmers
Mission:	Tasked/Operational
UWZ.d mean:	-0.12

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1004.2	1004.7
Airfield	1002.1	1002.1

This form uses:
_A.nc

Parameters	Raw				Derived, Corrected & Reference	
✓ Acceleration	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1	✓ AccZI.1	✓ AccZref	
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2	✓ AccZI.2		
	✓ AccAXI.3	✓ AccAYI.3	✓ AccAZI.3	✓ AccZI.3		
✓ Altitude	✓ AltGPS.1	✓ AltI.1	✓ AltPaADDU.1	✓ AltBCADDU.1	✓ ALTref	
	✓ AltGPS.2	✓ AltI.2	✓ AltPaADDU.2	✓ AltBCADDU.2	✓ ALTPA.d	
	✓ AltGPS.3	✓ AltI.3	x AltRA.1		✓ ALTGA.d	
✓ Ground Speed	✓ GsXI.1	✓ GsYI.1	✓ GsZI.1	✓ GsGPS.1	✓ GSXref	
	✓ GsXI.2	✓ GsYI.2	✓ GsZI.2	✓ GsGPS.2	✓ GSYref	
	✓ GsXI.3	✓ GsYI.3	✓ GsZI.3		✓ GSZref	
	✓ GsXGPS.1	✓ GsYGPS.1	✓ GsZGPS.1			
	✓ GsXGPS.2	✓ GsYGPS.2	✓ GsZGPS.2			
✓ Location	✓ LatGPS.1	✓ LatI.1	✓ LonGPS.1	✓ LonI.1	✓ LATref	
	✓ LatGPS.2	✓ LatI.2	✓ LonGPS.2	✓ LonI.2	✓ LONref	
	✓ LatGPS.3	✓ LatI.3	✓ LonGPS.3	✓ LonI.3		
✓ Pressure Sensors	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1	✓ PQMref	
	✓ PDALPHA.2	✓ PQALPHA.2	✓ PQM.2	✓ PSM.2	✓ PQ.c	
	x PDBETA.1	x PQBETA.1			✓ PSMref	
	✓ PDBETA.2	x PQBETA.2			✓ PS.c	
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.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	
	✓ PitchI.3	✓ PitchRateI.3	✓ RollI.3	✓ RollRateI.3		
✓ Temperature / Dewpoint	✓ TTM.1	✓ TTM.4	x TDM.1		✓ TD.c	✓ TTMref
	x TTM.2		✓ TDM.2		✓ TDMref	✓ TA.d
	✓ TTM.3				✓ HUM	
✓ Wind					✓ UWZ.d	✓ WS.d
						✓ WD.d

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:
PDALPHAref, PDBETAref, PQALPHAref, PQBETAref, and DPJ_WSZ are not provided since _BC file is not produced; all other "C" file parameters checked are from the _B file.
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PDBETA.1 inop
PQBETAs inop due to sensor removal
TDM.1 unrepresentative

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20241008N1 ASPEN Operator/Flight Director(s): TIMMERS/KALEN

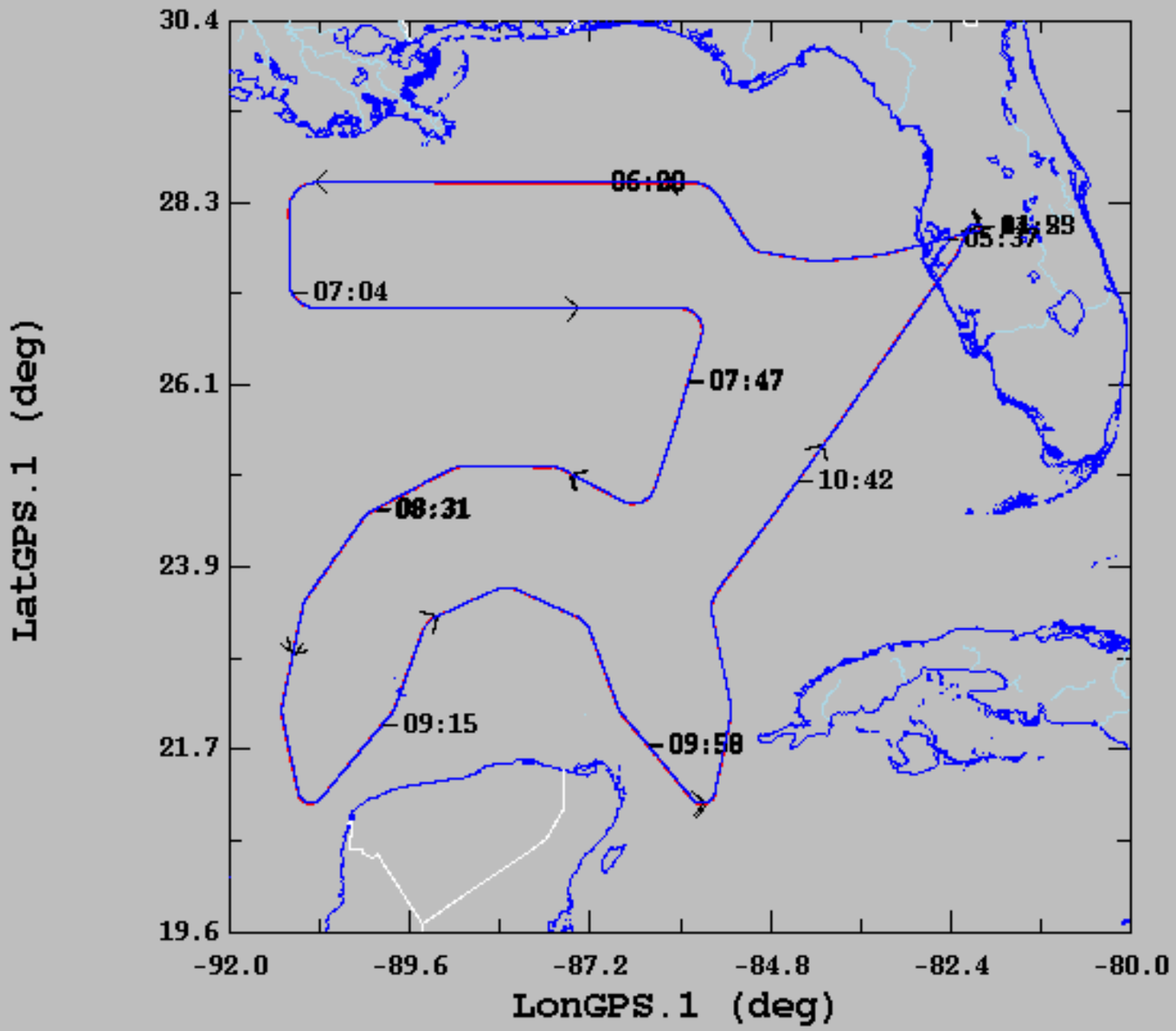
Mission ID: NOAA9 1219A Storm Name/Track: HURRICANE MILTON PG 1 of 1

Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (min last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Prs (mb)	Comments / Issues / QC / ASPEN Edits	KWBC #	Sonde Issues?
1	1	0607 29	67913	1	28.5	-85.6	—	1008.1	055/19	0632	✓✓
2	2	0621 38	54036	2	28.5	-87.3	—	1008.0	050/18	0640	✓✓
3	3	0635 53	41260	3	28.5	-89.0	—	1008.5	035/17	0657	✓✓
4	4	0653 26	10775	4	28.4	-91.1	—	1009.1	355/19	0713	✓✓
5	5	0705 27	30432	1	27.1	-91.1	—	1007.9	045/30	0738	✓✓
6	6	0719 29	69977	2	27.0	-89.0	—	1007.0	045/25	0741	✓✓
7	7	0730 41	20282	3	27.0	-87.3	—	1005.4	065/24	0801	✓✓
8	8	0741 12	54199	4	26.9	-85.7	—	1009.9	040/24	0809	✓✓
9	9	0751 55	20240	1	25.7	-86.0	—	1008.2	075/24	0815	✓✓
10	10	0801 33	10797	2	24.7	-86.5	—	1000.7	090/22	0821	✓✓
11	—	0811		3			—		NO TELEMETRY		
12	—	0812		4			—		LOST SIGNAL 29000 FT		
13	11	0821 53	10815	1	25.1	-89.0	—	1001.6	////	0847	✓✓
14	12	0832 32	54117	2	24.5	-90.2	—	1001.0	020/28	0852	✓✓
15	13	0843 36	10937	3	23.5	-91.0	—	1001.2	020/29	0903	✓✓
16	14	0854 13	20091	4	22.2	-91.3	—	999.7	340/28	0917	✓✓
17	15	0903 52	54092	1	21.9	-90.9	—	999.9	290/25	0924	✓✓
18	16	0914 56	10049	2	22.2	-89.8	—	993.0	350/35	0942	✓✓
19	17	0926 52	31028	3	23.3	-89.3	—	994.8	065/37	0945	✓✓
20	18	0935 45	10829	4	23.7	-88.3	—	996.8	090/31	1002	✓✓
21	19	0944 30	54171	1	23.2	-87.2	—	998.1	135/26	1005	✓✓
22	20	0954 04	30512	2	22.2	-86.8	—	999.4	165/25	1021	✓✓
23	21	1007 46	19623	3	21.1	-85.6	—	1002.2	190/22	1031	✓✓
24	22	1017 02	20094	4	22.2	-85.3	—	1000.8	185/24	1035	✓✓
25	23	1027 58	54094	1	23.5	-85.6	—	1001.2	190/17	1046	✓✓
26	24	1038 59	50128	2	24.6	-84.7	—	1002.6	025/05	1058	✓
27	25	1050 08	54145	3	25.7	-83.8	—	1004.0	055/16	1108	✓
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											

COMMENTS: *ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived*

25 Obs Xmitted | 1 Obs Missed | 27 # of sondes launched | 2 # of bad sondes

10/08/2024, 04:53:37-11:25:44



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	25.71	2.39	21.10	28.50
LonGPS.1 (deg), 1 s/sec	-86.63	3.02	-91.29	-81.98
LatI.1 (deg), 1 s/sec	25.70	2.39	21.08	28.50
LonI.1 (deg), 1 s/sec	-86.64	3.02	-91.30	-81.98