

N49RF ERROR SUMMARY
20240823N1

Flight ID: 20240823N1

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.2
Differential Sideslip Pressure Probe	PDBETA.2
Dynamic Attack Pressure Probe	PQALPHA.2
Dynamic Sideslip Pressure Probe	PQBETA.2

Flight Directory acdata/2024/MET/20240823N1

Local Met Data	Takeoff PHNL (2121Z)	Landing PHNL (0355Z)
Dynamic Corrections		Yes
AttackAngleIntercept		6.4652
AttackAngleSlope		7.59375
SlipAngleIntercept		0.925
SlipAngleSlope		6.56381
AttackAngleIntercept2		4.97461
AttackAngleSlope2		5.40351
SlipAngleIntercept2		0.71
SlipAngleSlope2		6.22549

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.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	30	28	28
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter
Phone #: 8635003901

ACAT-4 Version = 7.4

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N49RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20240823N1	FLT #:	24-	AC:	Varwig	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	0930L / 1930Z	CP(s):	Mayo		A/C Takeoff	1018.5	Good	Bad	Sent
To:	PHNL	ETA:	1630L / 0230Z		Pawlenko		ASOS Takeoff	PHNL 2053Z 1016.8 mb	28	2	28
Block Time		Flight Time		NAV:			ASOS Land	1016.7	BTs		
Out:	21:06	T/O:	21:22	FE(s):					Good	Bad	Sent
In:	4:00	Land:	3:56	FD(s):	Carpenter		ASOS Land	PHNL 0353Z 1014.8 mb	0	0	0
					de Solo						
Total:	6.9	Total:	6.6	SSA:	Defeo	Visitors:	Storm Number ID:		CP012024		
Sponsoring Org:	NWS / CPHC			AVAPS:	Brannigan	(ie: AL072012)					
Program:	PHS			SEB:	Kotz	TCPD/WSPD Mission		NOAA9 0301C CYCLONE			
Purpose:	Surveillance mission #2 Hone				MX:		(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMARKS	Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X		1				
SCIENCE MISSION WITHIN BDRY LAYER					X						
LACK OF PRECIPITATION				X			2				
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:	N/A			

*Highlighted items must be completed before departure.

Remarks:

G-IV QC Checklist

Overall Assessment	Major instrument issue(s) - significant mission impact.
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Flight ID:	20240823N1
Flight Director(s):	Carpenter / de Solo
Mission:	Tasked/Operational
UWZ.d mean:	-0.01

Pressure Comparison		
	Pre-flight	Post-flight
Aircraft	1018.5	1016.7
Airfield	1016.8	1014.8

This form uses:
_A.nc

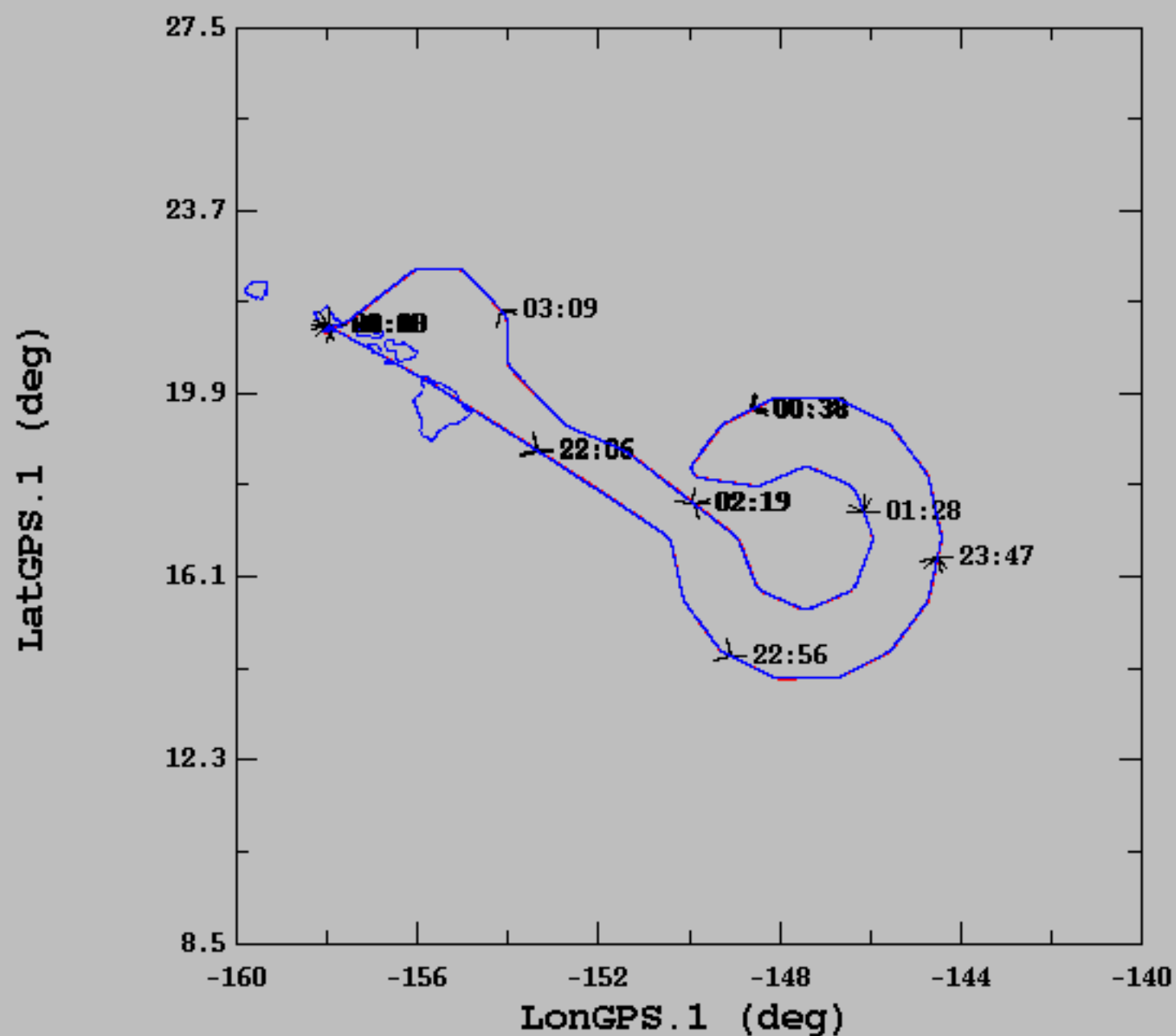
Parameters	Raw				Derived, Corrected & Reference	
✓ Acceleration	✓ AccAXI.1	✓ AccAYI.1	✓ AccAZI.1	✓ AccZI.1	✓ AccZref	
	✓ AccAXI.2	✓ AccAYI.2	✓ AccAZI.2	✓ AccZI.2		
	✓ AccAXI.3	✓ AccAYI.3	✓ AccAZI.3	✓ AccZI.3		
✓ Altitude	✓ AltGPS.1	✓ AltI.1	✓ AltPaADDU.1	✓ AltBCADDU.1	✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	
	✓ AltGPS.2	✓ AltI.2	✓ AltPaADDU.2	✓ AltBCADDU.2		
	✓ AltGPS.3	✓ AltI.3	X AltRA.1			
✓ Ground Speed	✓ GsXI.1	✓ GsYI.1	✓ GsZI.1	✓ GsGPS.1	✓ GSXref ✓ GSYref ✓ GSZref	
	✓ GsXI.2	✓ GsYI.2	✓ GsZI.2	✓ GsGPS.2		
	✓ GsXI.3	✓ GsYI.3	✓ GsZI.3			
	✓ GsXGPS.1	✓ GsYGPS.1	✓ GsZGPS.1			
	✓ GsXGPS.2	✓ GsYGPS.2	✓ GsZGPS.2			
✓ Location	✓ LatGPS.1	✓ LatI.1	✓ LonGPS.1	✓ LonI.1	✓ LATref ✓ LONref	
	✓ LatGPS.2	✓ LatI.2	✓ LonGPS.2	✓ LonI.2		
	✓ LatGPS.3	✓ LatI.3	✓ LonGPS.3	✓ LonI.3		
✓ Pressure Sensors	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c	
	✓ PDALPHA.2	✓ PQALPHA.2	✓ PQM.2	✓ PSM.2		
	✓ PDBETA.1	✓ PQBETA.1				
	✓ PDBETA.2	✓ PQBETA.2				
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1			✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1	✓ PitchRatel.1	✓ RollI.1	✓ RollRatel.1	✓ PITCHref ✓ ROLLref	
	✓ PitchI.2	✓ PitchRatel.2	✓ RollI.2	✓ RollRatel.2		
	✓ PitchI.3	✓ PitchRatel.3	✓ RollI.3	✓ RollRatel.3		
✓ Temperature / Dewpoint	✓ TTM.1	✓ TTM.4	X TDM.1		X TD.c	✓ TTMref
	inop TTM.2		X TDM.2		X TDMref	✓ TA.d
	✓ TTM.3				X HUM	
X Wind					✓ UWZ.d	X WS.d X 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:
AltRa.1 failure. TDM.1 and TDM.2 are biased low and require calibration, but TDM.2 is more representative. All moisture quantities and derivatives should be considered suspect. Wind calibration needed. All flight level wind quantities and derivatives should be considered suspect.

08/23/2024, 20:25:07-28:00:23



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	18.63	2.39	13.98	22.50
LongGPS.1 (deg), 1 s/sec	-151.30	4.50	-158.06	-144.41
LatI.1 (deg), 1 s/sec	18.62	2.39	13.98	22.49
LonI.1 (deg), 1 s/sec	-151.29	4.50	-158.03	-144.40

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20240823N1ASPEN Operator/Flight Director(s): Carpenter / de SoloMission ID: NOAA9 0301C HONEStorm Name/Track: CP012024 / TS HonePG 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	2233	20050	1	16.9	-150.4		1010.3	030/19	2251	
2	2	2244	10519	2	15.6	-150.1		1009.2	015/16	2302	
3	3	2255	10134	3	14.5	-149.2		1010.1	025/03	2313	
4	4	2305	40696	4	14.0	-148.0		1010.2	225/08	2323	
5	5	2317	15055	1	14.0	-146.7		1010.3	180/19	2337	
6	6	2328	30777	2	14.6	-145.5		1011.1	175/16	2348	
7	7	2339	40176	3	15.6	-144.7		1011.5	165/18	0001	
8	8	2350	60216	4	16.9	-144.4		1012.7	140/13	0012	
9	9	0002	20819	1	18.2	-144.7		1012.7	095/23	0022	
10	—	0012	20081	2	—	—	—	—	bad winds	—	
11	10	0014	20067	3	19.4	-145.8		1013.4	backup for Pt 10 075/24	0035	
12	11	0023	10525	4	19.8	-146.6		1013.8	070/28	0043	
13	12	0033	10521	1	19.8	-148.1		1012.9	070/27	0051	
14	13	0043	20166	2	19.2	-149.3		1010.8	050/27	0101	
15	14	0053	60168	3	18.3	-149.9		1009.7	025/28	0111	
16	15	0105	20122	4	18.0	-148.4		1007.6	070/33	0129	
17	16	0115	20085	1	18.4	-147.4		1010.2	095/28	0132	
18	17	0124	20183	2	17.9	-146.3		1011.3	105/20	0143	
19	18	0133	20083	3	16.9	-145.9		1010.3	130/18	0151	
20	19	0142	30370	4	15.8	-146.4		1010.2	175/13	0201	
21	20	0151	10534	1	15.4	-147.4		1008.3	180/23	0211	
22	21	0200	10877	2	15.9	-148.5		1006.1	195/16	0217	
23	22	0209	50246	3	16.9	-148.9		1000.1	240/24	0227	
24	23	0234	10530	4	18.7	-151.4		1010.5	045/28	0258	
25	24	0245	50245	1	19.2	-152.7		1012.5	055/24	0304	
26	25	0259	10538	2	20.5	-154.0		1014.2	065/21	0319	
27	—	0308	20154	3	—	—	—	—	no GPS	—	
28	26	0308	14828	4	21.6	-154.1		1015.0	backup 075/19	0328	
29	27	0320	20277	1	22.5	-155.0		1016.1	080/21	0337	
30	28	0328	10517	2	22.5	-156.0		1015.9	070/26	0346	
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38											

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

COMMENTS:

Obs
Xmitted 28Obs
Missed 0# of sondes
launched 30# of bad
sondes 2