

N49RF ERROR SUMMARY
20221209N1

Flight ID: 20221209N1

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/2022/MET/20221209N1

Local Met Data	Takeoff PHNL (1914Z)	Landing PHNL (0250Z)
Dynamic Corrections		Yes
AttackAngleIntercept		4.95911
AttackAngleSlope		5.43613
SlipAngleIntercept		1.06667
SlipAngleSlope		6.97813
AttackAngleIntercept2		5.01255
AttackAngleSlope2		5.40932
SlipAngleIntercept2		0.72
SlipAngleSlope2		7.0494

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.

AltRa.1 inoperative. TTM.2 unavailable. Both TDM.1 and TDM.2 require calibration. All moisture quantities should be considered suspect.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	36	29	29
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 #: 863-500-3901

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:	20221209N1	FLT #:	23-	AC:	Mansour	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	1915Z	CP(s):	de Triquet		A/C Takeoff	1020.5	Good	Bad	Sent
To:	PHNL	ETA:	0245Z								
Block Time		Flight Time		NAV:			ASOS Takeoff	PHNL 1853Z 1020.9 mb	BTs		
In:	2:56	Land:	2:51	FE(s):			A/C Land	1017.5	Good	Bad	Sent
Out:	19:02	T/O:	19:14	FD(s):	Carpenter		ASOS Land	PHNL 0253Z 1017.2 mb	0	0	0
Total:	7.9	Total:	7.6	SSA:	Paul	Visitors:	Storm Number ID:		N/A		
Sponsoring Org:		NWS / OAR		AVAPS:	Warnecke	Brownrigg	(ie: AL072012)		NOAA9 04WSC IOP04		
Program:		PAR		SEB:			TCPOD/WSPOD Mission				
Purpose:		ARR Mission #2		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:	20221209N1	Pressure Comparison		
Flight Director(s):	Carpenter / Timmers		T/O	Land
Mission:	Tasked/Operational	Aircraft	1020.5	1017.5
UWZ.d mean:	0.1	Tower	PHNL 1853Z 1020.9 mb	PHNL 0253Z 1017.2 mb

	Raw 1Hz Mean File Parameters					C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI.3	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI.3	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI.3	✓ AccZI.1 ✓ AccZI.2 ✓ AccZI.3		✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✓ AltGPS.3	✓ AltI.1 ✓ AltI.2 ✓ AltI.3	✓ AltPaADDU.1 ✓ AltPaADDU.2 X AltRA.1	✓ AltBCADDU.1 ✓ AltBCADDU.2		✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	
✓ Ground Speed	✓ GsXI.1 ✓ GsXI.2 ✓ GsXI.3 ✓ GsXGPS.1 ✓ GsXGPS.2	✓ GsYI.1 ✓ GsYI.2 ✓ GsYI.3 ✓ GsYGPS.1 ✓ GsYGPS.2	✓ GsZI.1 ✓ GsZI.2 ✓ GsZI.3 ✓ GsZGPS.1 ✓ GsZGPS.2	✓ GsGPS.1 ✓ GsGPS.2		✓ GSXref ✓ GSYref ✓ GSZref	
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 ✓ LatGPS.3	✓ LatI.1 ✓ LatI.2 ✓ LatI.3	✓ LonGPS.1 ✓ LonGPS.2 ✓ LonGPS.3	✓ LonI.1 ✓ LonI.2 ✓ LonI.3		✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 ✓ PDALPHA.2 ✓ PDBETA.1 ✓ PDBETA.2	✓ PQALPHA.1 ✓ PQALPHA.2 ✓ PQBETA.1 ✓ PQBETA.2	✓ PQM.1 ✓ PQM.2	✓ PSM.1 ✓ PSM.2		✓ PDLAPHaref ✓ PDBETAref ✓ PQALPHAref ✓ PQBETAref	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1				✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1 ✓ PitchI.2 ✓ PitchI.3	✓ PitchRatel.1 ✓ PitchRatel.2 ✓ PitchRatel.3	✓ RollI.1 ✓ RollI.2 ✓ RollI.3	✓ RollRatel.1 ✓ RollRatel.2 ✓ RollRatel.3		✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 X TTM.2 ✓ TTM.3	✓ TTM.4	X TDM.1 X TDM.2			X TD.c X TDMref	✓ TTMref ✓ TA.d
✓ Misc. (Must check)						✓ UWZ.d ✓ DPJ_WSZ X HUM	✓ WS.d ✓ WD.d

FLID_Mission_Documents.pdf:
✓ Error Summary
✓ Crew Manifest
✓ QC Checklist
✓ Dropwindsonde Log(s) - AVAPS and FD if completed
✓ Flight Track
X Miscellaneous FD Notes

QC Key	
Not checked	☐
Valid	✓
Errors (note)	X

NOTES:
AltRa.1 inoperative. TTM.2 unavailable. Both TDM.1 and TDM.2 require calibration. All moisture quantities should be considered suspect.

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20221209N1ASPEN Operator/Flight Director(s): TIMMERS/CARPENTERMission ID: AWSC IOPOAStorm Name/Track: ATMOSPHERIC RIVERSPG 1 of 1

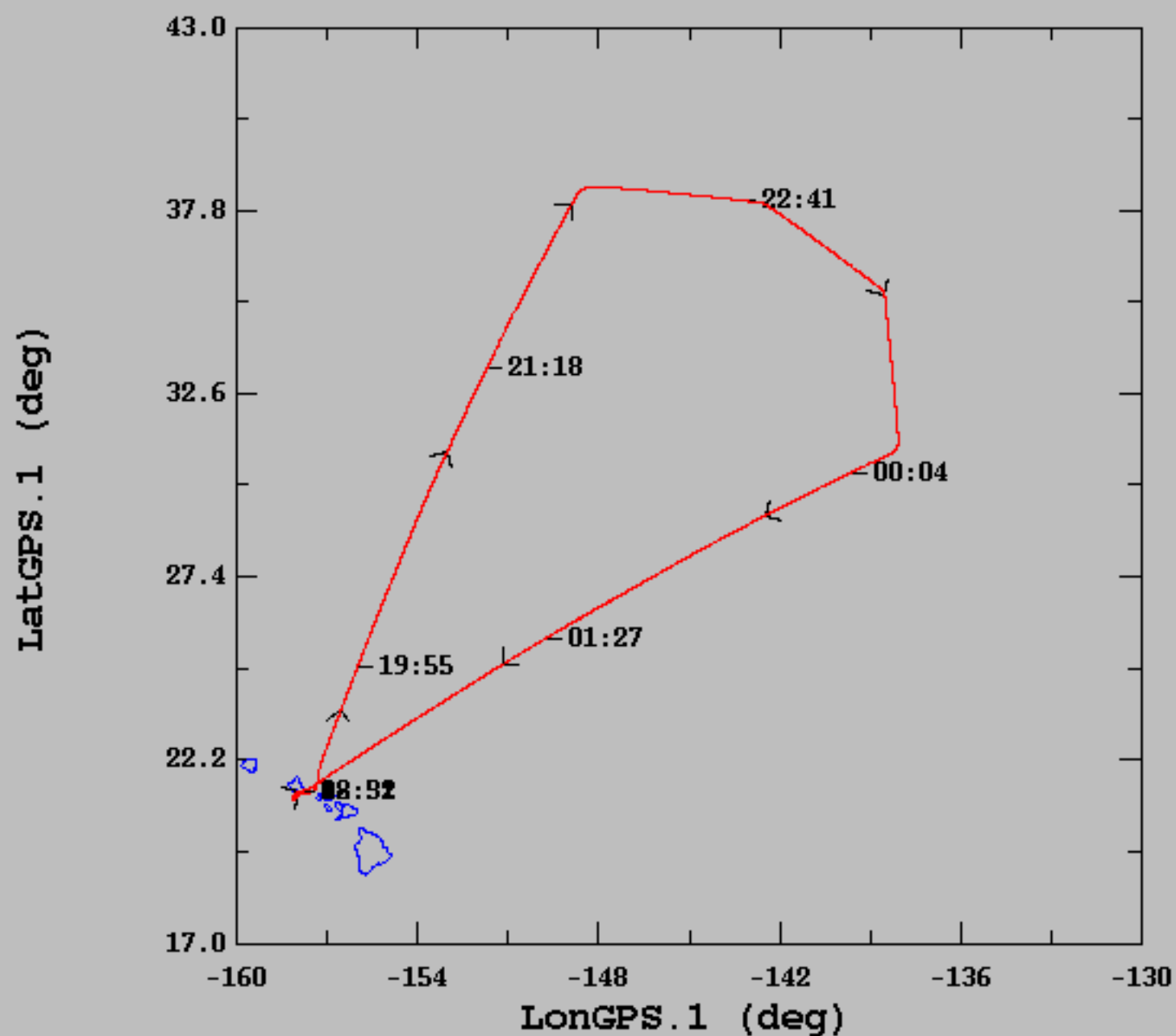
Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (min last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Prs (mb)	Comments / Issues / QC / ASPEN Edits	KWBC #	Sonde Issues?
1		2045		1					NO PTH		
2	1	2046 17	40078	2	30.1	-153.5	BKN/HZ	1029.0	060/14	2108	✓✓
3	2	2054 48	40097	3	31.0	-153.0	UCST	1030.0	030/09	2131	✓✓
4	3	2104 23	70221	4	31.9	-152.5	UCST	1030.2	355/07	2135	✓✓
5	4	2104 28	60402	1	32.9	-151.9	UCST	1029.3	020/08	2142	✓✓
6	5	2123 30	30142	2	33.8	-151.4	UCST	1029.7	305/10	2148	✓✓
FRD 7	6	2133 02	20220	3	34.8	-150.8	UCST	1028.3	305/20	2153	✓✓
8	7	2142 35	60105	4	35.7	-150.3	UCST	1027.6	320/11	2201	✓✓
9	8	2152 16	30007	1	36.6	-149.7	UCST	1026.7	305/26	2212	✓✓
10	9	2201 55	60103	2	37.6	-149.1	BKN	1024.4	315/32	2221	✓✓
FRD 11	10	2211 22	30575	3	38.4	-148.4	BKN	1022.0	315/31	2230	✓✓
12	11	2219 46	10111	4	38.4	-147.0	BKN	1021.1	315/28	2247	✓✓
13		2219		1					NO PTH		
14	12	2229 22	40074	2	38.3	-145.3	BKN	1019.8	340/30	2254	✓✓
FRD 15	13	2237 35	30010	3	38.1	-144.0	SCT	1018.5	320/25	2301	✓✓
16	14	2246 56	60114	1	38.0	-142.4	BKN	1016.2	295/17	2310	✓✓
17	15	2256 34	40073	4	37.2	-141.1	BKN	1016.6	285/24	2320	✓✓
18	16	2306 31	40075	2	36.3	-139.8	BKN	1015.5	290/37	2325	✓✓
19	17	2316 58	30020	3	35.4	-138.5	BKN	1018.0	270/28	2337	✓✓
20		2325		4					NO PTH		
21	18	2325 49	40092	1	34.3	-138.4	SCT	1019.1	275/27	2347	✓✓
FRD 22	19	2334 13	40621	2	33.2	-138.2	BKN	1021.3	265/21	2358	✓✓
23		2343		3					NO PTH		
24				4					NO PTH		
25	20	2352 34	20388	1	31.0	-138.1	BKN	1021.9	310/10	0015	✓
26	21	0000 16	30023	2	30.6	-139.0	BKN	1022.8	295/09	0032	✓
27	22	0008 50	20390	3	30.2	-140.1	BKN	1023.2	030/28	0040	✓
28	23	0017 17	30018	4	29.7	-141.1	SCT	1023.1	010/07	0048	✓
PT25 29	25	0027 20	10336	1	29.2	-142.3	BKN	1023.5	355/13	0132	
30		0034							NO PTH		
PT26 31	24	0034 46	30101	3	28.8	-143.2	BKN	1023.7	015/13	0055	✓
32		0042		4					NO PTH		
PT27 33	26	0043	20599	2	28.3	-144.3	BKN	1024.6	035/12	0137	✓
PT28 34	27	0050	30102	1	27.9	-145.1	SCT	1023.9	025/20	0141	✓
PT29 35	28	0053	40500	3	27.7	-145.6	BKN	1023.9	030/17	0146	✓
PT30 36	29	0102	20384	4	27.2	-146.6	BKN	1024.2	035/16	0150	✓
37											
38											

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

COMMENTS:

Obs
XmittedObs
Missed# of sondes
launched# of bad
sondes

2022-12-09, 18:32:13-26:51:07



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	28.98	5.67	21.09	38.48
LongGPS.1 (deg), 1 s/sec	-149.67	6.55	-158.10	-138.03