

N49RF ERROR SUMMARY
20221208N1

Flight ID: 20221208N1

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/20221208N1

Local Met Data	Takeoff PHNL (1937Z)	Landing PHNL (0000Z)
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.

Multiple data system restarts resulted in some loss of data. The majority of the mission flight level data resides in the _A suite of files. 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 -----
Drosondes	33	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:	20221208N1	FLT #:	23-	AC:	Mansour	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	1930Z	CP(s):	de Triquet		A/C Takeoff	1020.6	Good	Bad	Sent
To:	PHNL	ETA:	0300Z								
Block Time		Flight Time		NAV:			ASOS Takeoff	PHNL 1953Z 1020.9 mb	29	4	29
In:	3:31	Land:	3:26	FE(s):					BTs		
Out:	19:17	T/O:	19:38	FD(s):	Carpenter		A/C Land	1019.7	Good	Bad	Sent
Total:	8.2	Total:	7.8	SSA:	Paul	Visitors:	ASOS Land	PHNL 0353Z 1019.9 mb	0	0	0
				AVAPS:	Warnecke						
Sponsoring Org:		NWS / OAR		SEB:	Keller		Storm Number ID:		N/A		
Program:		PAR					(ie: AL072012)				
Purpose:		ARR Mission #1						TCPD/WSPD Mission		NOAA9 03WSC IOP03	
				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:	20221208N1	Pressure Comparison		
Flight Director(s):	Carpenter / Timmers		T/O	Land
Mission:	Tasked/Operational	Aircraft	1020.6	1019.7
UWZ.d mean:	0.11	Tower	PHNL 1953Z 1020.9 mb	PHNL 0353Z 1019.9 mb

	Raw 1Hz Mean File Parameters					C File Parameters	
✓ Accelerometer	✓ 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				
✓ Lat / Lon	✓ 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	✓ PDALPHA.1	✓ PQALPHA.1	✓ PQM.1	✓ PSM.1		✓ PDLAPHaref	✓ PQMref
	✓ PDALPHA.2	✓ PQALPHA.2	✓ PQM.2	✓ PSM.2		✓ PDBETAref	✓ PQ.c
	✓ PDBETA.1	✓ PQBETA.1				✓ PQALPHaref	✓ PSMref
	✓ PDBETA.2	✓ PQBETA.2				✓ PQBETAref	✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1				✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1	✓ PitchRatel.1	✓ RollI.1	✓ RollRatel.1		✓ PITCHref	
	✓ PitchI.2	✓ PitchRatel.2	✓ RollI.2	✓ RollRatel.2		✓ ROLLref	
	✓ PitchI.3	✓ PitchRatel.3	✓ RollI.3	✓ RollRatel.3			
✓ Temp / Dewpt	✓ TTM.1	✓ TTM.4	X TDM.1			X TD.c	✓ TTMref
	X TTM.2		X TDM.2			X TDMref	✓ TA.d
	✓ TTM.3						
✓ Misc. (Must check)						✓ UWZ.d	✓ WS.d
						✓ DPJ_WSZ	✓ WD.d
						X HUM	

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:
Multiple data system restarts resulted in some loss of data. The majority of the mission flight level data resides in the _A files. 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: CBWSC IDPO3Storm 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	1	2052 05	20758	1	26.4	-162.2	OVCST	1025.3	105/27	2112	✓✓
2	2	2059 38	40645	2	26.4	-163.1	OVCST	1023.6	105/25	2124	✓✓
3		2108		3			OVCST	NO	LAUNCH DETECT		
4	3	2109 26	20897	4	26.2	-164.4	OVCST	1023.9	110/28	2135	✓✓
5	4	2117 27	31059	1	26.1	-165.4	OVCST	1023.2	080/14	2156	✓✓
6	5	2126 10	30088	2	25.9	-166.5	VCST	1021.8	105/15	2204	✓✓
7	6	2134 36	31053	3	25.7	-167.6	VCST	1020.7	130/22	2213	✓✓
8	7	2143 13	30226	4	25.6	-168.7	VCST	1020.3	140/16	2222	✓✓
9		2152 01	40640	1	25.4	-169.8	VCST	1019.4	MISSING DATA		
10	8	2200 42	30225	2	25.2	-170.9	VCST	1019.2	135/17	2244	✓✓
11	9	2208 28	40729	3	25.1	-171.8	SCT	1019.5	115/12	2252	✓✓
12	10	2216 22	10080	4	26.1	-172.0	SCT	1017.9	130/19	2256	✓✓
13	11	2224 26	40658	1	27.2	-171.9		1019.4	105/19	2300	✓✓
14	12	2232 40	10327	2	28.3	-171.8		1020.0	115/18	2305	✓✓
15	13	2240 47	10078	3	29.4	-171.8		1020.6	110/24	2311	✓✓
16	14	2249 17	30008	4	30.6	-171.7		1020.8	115/16	2315	✓✓
17	15	2257 33	11063	1	31.7	-171.7	VCST	1021.5	105/11	2322	✓✓
18	16	2306 04	41180	2	32.8	-171.6	BKN	1022.3	115/19	2327	✓✓
19	17	2314 23	40730	3	34.0	-171.6	VCST	1023.9	145/16	2336	✓✓
20	18	2322 58	20281	4	35.0	-171.4	VCST	1024.9	120/10	2347	✓✓
21	19	2331 10	30098	1	35.5	-170.3	VCST	1024.7	170/09	2353	✓✓
22	20	2339 49	11068	2	36.0	-169.0	VCST	1026.1	170/12	0004	✓✓
23	21	2348 30	10079	3	36.5	-167.8	VCST	1027.0	165/14	0020	✓✓
24	22	2357 12	11032	4	36.9	-166.5	VCST	1026.2	160/24	0033	✓✓
25	23	0005 33	40522	1	37.4	-165.3	VCST	1028.5	165/11	0040	✓✓
26	24	0013 57	30045	2	37.8	-164.0	VCST	1026.5	205/18	0044	✓✓
27				3					NO PTH		
28	25	0023 21	20800	4	38.3	-162.6	VCST	1029.7	200/08	0056	✓✓
29	26	0031 18	30017	1	38.6	-161.3	VCST	1030.9	220/15	0108	✓✓
30	27	0039 19	40728	2	38.8	-160.1	VCST	1029.8	240/17	0126	✓✓
31		0051		3					NO LAUNCH DETECT		
32	28	0052 11	11067	4	37.4	-159.7	VCST	1031.1	215/10	0132	✓✓
33	29	0104 03	30089	1	36.0	-159.5	VCST	1032.1	125/05	0139	✓✓
34											
35											
36											
37											
38											

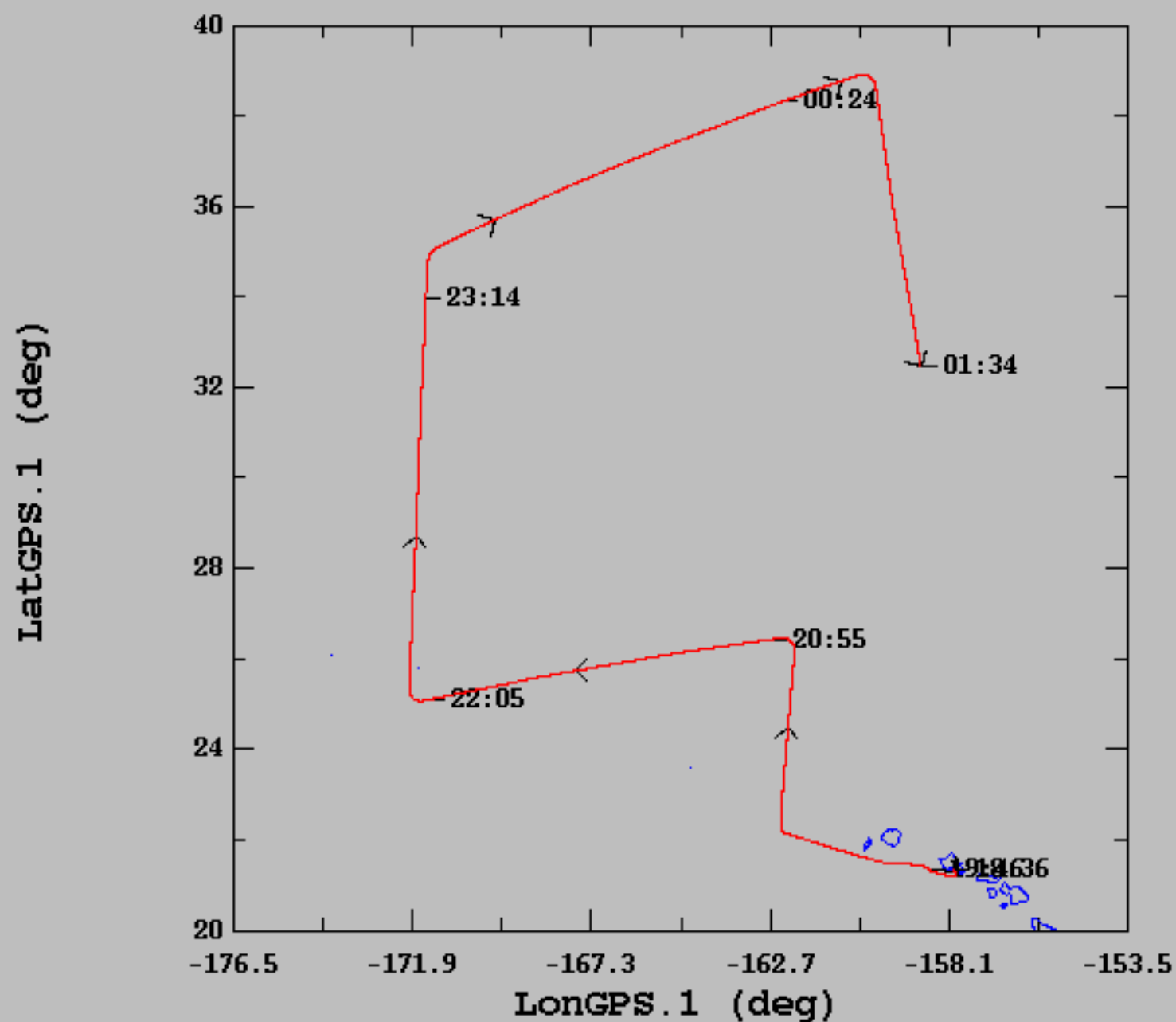
COMMENTS: ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived. 29/30 Obs Transmitted

1 Obs Missed

33 # of sondes launched

4 # of bad sondes

12/08/2022, 18:36:35-25:34:12



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	28.81	6.13	21.19	38.90
LonGPS.1 (deg), 1 s/sec	-164.31	5.14	-171.99	-157.89