

N49RF ERROR SUMMARY
20221217N1

Flight ID: 20221217N1

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/2022/MET/20221217N1

Local Met Data	Takeoff PHNL (1941Z)	Landing PHNL (0312Z)
Dynamic Corrections		Yes
AttackAngleIntercept		4.95911
AttackAngleSlope		5.43613
SlipAngleIntercept		1.06
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.

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

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	32	30	30
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter / Timmers
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:	20221217N1	FLT #:	23-	AC:	Mansour	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	1945Z	CP(s):	de Triquet		A/C Takeoff	1014.7	Good	Bad	Sent
To:	PHNL	ETA:	0345Z								
Block Time		Flight Time		NAV:			ASOS Takeoff	PHNL 1953Z 1014.5 mb	BTs		
In:	3:18	Land:	3:12	FE(s):			A/C Land	1011.0	Good	Bad	Sent
Out:	19:30	T/O:	19:42	FD(s):	Carpenter		ASOS Land	PHNL 0253Z 1011.1 mb	0	0	0
					Timmers						
Total:	7.8	Total:	7.5	SSA:	Paul	Visitors:					
Sponsoring Org:		NWS / OAR		AVAPS:	Mascaro	LTJG Nicolas Osborne	Storm Number ID:		N/A		
Program:		PAR		SEB:			(ie: AL072012)				
Purpose:		ARR Mission #3		MX:			TCPD/WSPD Mission		NOAA9 05WSC IOP05		
							(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:	20221217N1	Pressure Comparison		
Flight Director(s):	Carpenter / Timmers		T/O	Land
Mission:	Tasked/Operational	Aircraft	1014.7	1011.0
UWZ.d mean:	0.04	Tower	PHNL 1953Z 1014.5 mb	PHNL 0253Z 1011.1 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 ✓ 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 ✗ TTM.2 ✓ TTM.3	✓ TTM.4	✗ TDM.1 ✗ TDM.2			✓ TD.c ✓ TDMref	✓ TTMref ✓ TA.d
✓ Misc. (Must check)						✓ UWZ.d ✓ DPJ_WSZ ✗ 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
✗ Miscellaneous FD Notes

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

NOTES:
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: 20221217N1ASPEN Operator/Flight Director(s): TIMMERS/CARPENTERMission ID: 05WSC IOPDSStorm Name/Track: ATMOSPHERIC RIVERSPG 1 of 1

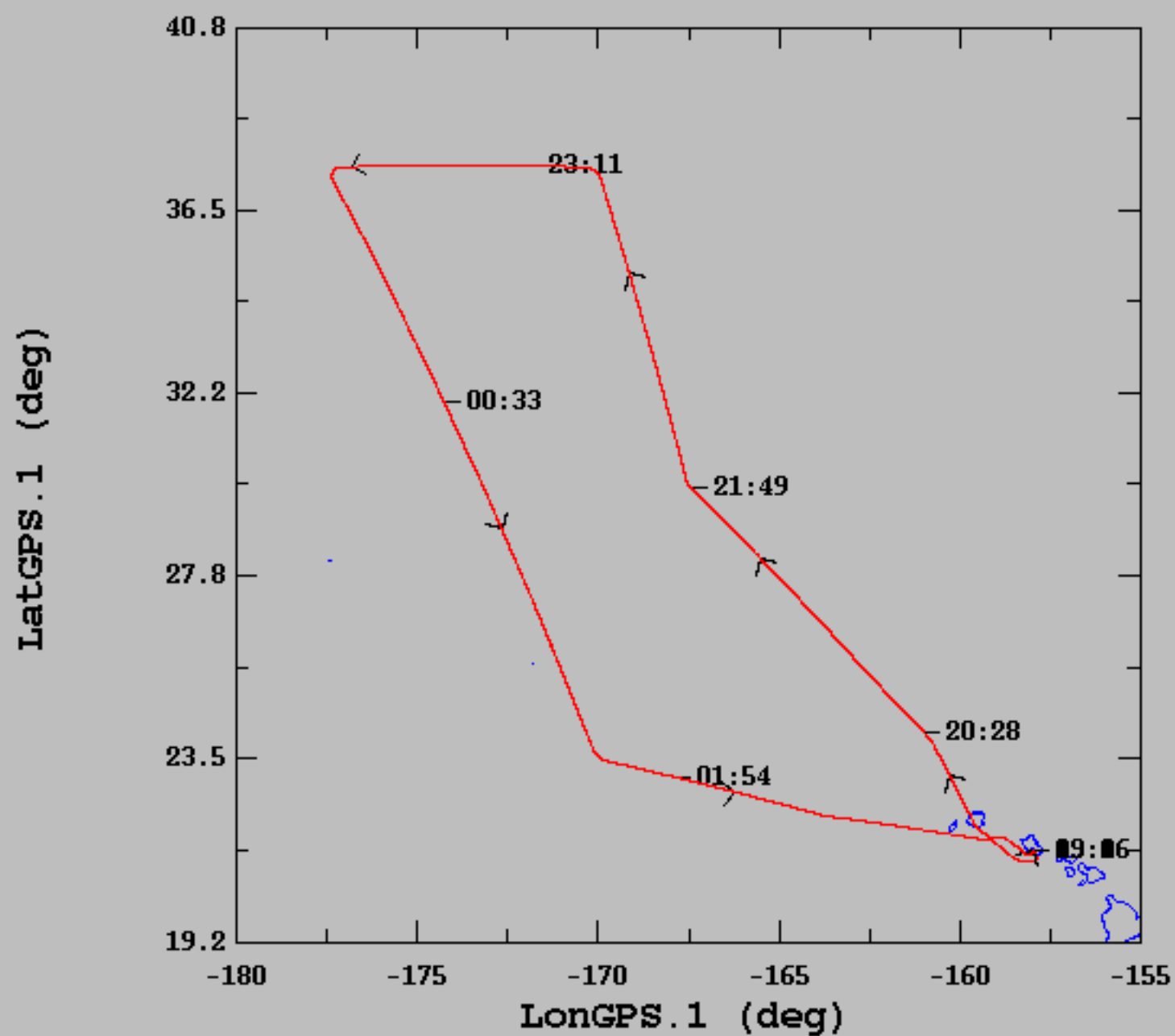
	Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (min last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Prs (mb)	Comments / Issues / QC / ASPEN Edits	KWBC #	Sonde Issues?
	1	1	2047 44	50720	1	25.5	-162.5	SCT	104.1	260/09	2104	✓✓
	2	2	2100 06	20205	2	26.4	-163.5	SCT	104.9	235/08	2117	✓✓
	3		2112		4					NO PTH		
FRD	4	3	2113 31	20232	3	27.4	-164.5	FEW	104.4	////	2134	✓✓
	5	4	2125 44	50724	1	28.2	-165.5	BKN	1011.5	230/28	2148	✓✓
	6	5	2136 28	50715	2	29.1	-166.5	UCST	1011.2	260/24	2158	✓✓
	7	6	2151 04	50716	3	30.0	-167.5	UCST	1009.3	240/37	2210	✓✓
	8	7	2203 26	10185	4	31.3	-167.9	SCT	1007.4	270/19	2222	✓✓
	9	8	2214 40	20381	1	32.5	-168.3	CLR	1006.0	270/25	2232	✓✓
CCA	10	9	2226 00	10076	2	33.8	-168.7	SCT	1001.7	240/23	2247	✓✓
FRD	11	10	2236 49	10045	3	35.0	-169.1	UCST	999.9	240/20	2259	✓✓
CCA	12	11	2247 22	50710	4	36.3	-169.6	BKN	999.0	285/26	2309	✓✓
CCA	13	12	2257 58	30081	1	37.5	-170.1	BKN	995.0	185/13	2320	✓✓
	14	13	2308 16	40501	2	37.5	-171.5	UCST	—	///	2332	✓✓
	15	14	2319 09	40297	3	37.6	-173.0	UCST	994.6	280/21	0011	✓✓
	16	15	2330 10	50522	4	37.6	-174.5	SCT	994.7	300/32	0018	✓✓
	17	16	2340 55	20332	1	37.5	-176.0	SCT	994.6	290/23	0030	✓✓
	18	17	2351 20	10186	2	37.3	-177.3	BKN	997.6	305/30	0036	✓✓
	19	18	2358 30	20230	3	36.4	-176.8	BKN	999.9	300/44	0043	✓✓
	20	19	0006 39	40504	4	35.4	-176.2	BKN	—	///	0046	✓✓
FRD	21	20	0015 32	50721	1	34.2	-175.5	BKN	1001.5	270/34	0050	✓✓
	22	21	0023 15	50520	2	33.2	-174.9	SCT	1003.1	295/47	0054	✓✓
	23		0031		3					NO PTH		
	24	22	0032 23	50218	4	32.0	-174.3	SCT	1005.5	270/41	0057	✓✓
	25	23	0039 46	60142	1	31.1	-173.8	SCT	1006.7	265/25	0109	✓✓
	26	24	0048 20	20369	2	30.0	-173.2	SCT	1008.5	245/20	0116	✓✓
FRD	27	25	0056 35	10180	3	28.9	-172.6	SCT	1009.0	275/22	0118	✓✓
	28	26	0104 53	50712	4	27.8	-172.1	BKN	1008.9	235/20	0131	✓✓
	29	27	0113 30	20389	1	26.8	-171.5	BKN	1010.5	255/20	0134	✓✓
	30	28	0122 24	10403	2	25.7	-171.0	SCT	1010.4	250/14	0202	✓✓
	31	29	0131 28	10183	3	24.6	-170.5	SCT	1011.8	255/08	0204	✓✓
	32	30	0140 50	30075	4	23.5	-169.9	SCT	1010.0	320/04	0207	✓✓
	33											
	34											
	35											
	36											
	37											
	38											

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

COMMENTS:

30/30
Obs
Xmitted0
Obs
Missed32 # of sondes
launched2 # of bad
sondes

12/17/2022, 19:06:18-27:16:39



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	28.03	5.79	21.10	37.57
LongGPS.1 (deg), 1 s/sec	-166.82	5.94	-177.34	-157.85