

N49RF ERROR SUMMARY
20220128N1

Flight ID: 20220128N1

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/20220128N1

Local Met Data	Takeoff PHNL (1929Z)	Landing PHNL (0313Z)
Dynamic Corrections		Yes
AttackAngleIntercept		6.4652
AttackAngleSlope		7.59375
SlipAngleIntercept		0.925
SlipAngleSlope		6.56381
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.

TTM.2 unavailable. TDMs require calibration, all moisture quantities should be considered unreliable.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Drosondes	31	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 / Kalen
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:	20220128N1	FLT #:	22-	AC:	Waddington	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	1930Z	CP(s):	Varwig		A/C Takeoff	1020.9	Good	Bad	Sent
To:	PHNL	ETA:	0300Z		de Triquet		ASOS Takeoff	PHNL 1930Z 1020.2 mb	30	1	30
Block Time		Flight Time		NAV:			ASOS Land	1016.8	BTs		
In:	3:18	Land:	3:13	FE(s):			A/C Land	1016.8	Good	Bad	Sent
Out:	19:17	T/O:	19:30	FD(s):	Carpenter	Visitors:	ASOS Land	PHNL 0315Z 1016.5 mb	0	0	0
Total:	8.0	Total:	7.7	SSA:	Miller		Storm Number ID:	N/A			
Sponsoring Org:		NWS / OAR			AVAPS:	Paul	(ie: AL072012)		NOAA9 03WSC IOP06		
Program:		PAR			SEB:		TCPOD/WSP0D Mission				
Purpose:		A.R. Mission 3 - IOP06			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:	20220128N1	Pressure Comparison		
Flight Director(s):	Carpenter / Kalen		T/O	Land
Mission:	Tasked/Operational	Aircraft	1020.9	1016.8
UWZ.d mean:	0.18	Tower	PHNL 1930Z 1020.2 mb	PHNL 0315Z 1016.5 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	✓ 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			✓ TD.c	✓ TTMref
	X TTM.2		X TDM.2			✓ TDMref	✓ TA.d
	✓ TTM.3						
✓ Misc. (Must check)						✓ UWZ.d	✓ WS.d
						✓ DPJ_WSZ	✓ WD.d
						✓ 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:
TTM.2 unavailable.
TDM.1 and TDM.2 require calibration. All moisture quantities unreliable.

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20220128N1

ASPEN Operator/Flight Director(s): Kalen / Carpenter

Mission ID: 03WSC IOP06

Storm Name/Track: Atmospheric Rivers mission 3

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	203955	20997	1	27.5	-159.9	SCT	1021.3		2103	N
2	2	204742	50983	2	27.9	-158.8	BKN	1021.8	05016	2115	N
3	3	205458	50863	3	28.2	-157.7	BKN	1021.1	05016 psbl late chute	2129	N
4	4	210218	20514	4	28.5	-156.5	OVC	1022.3	01021	2138	N
5	5	210950	30171	1	28.9	-155.4	OVC	1021.5	03521	2145	N
6	6	211721	20943	2	29.2	-154.2	OVC	1021.5	34025	2154	N
7	7	212428	50740	3	29.6	-153.1	OVC	1021.6	35522	2200	N
8	8	213157	60002	4	30.4	-153.3	OVC	1021.3	00513	2210	N
9	9	214016	60004	1	31.3	-153.6	OVC	1020.5	28004	2219	N
10	10	214816	60003	2	32.2	-153.9	OVC	1021.2	34020	2230	N
11	11	215610	30173	3	33.1	-154.3	OVC	1021.1	32516	2237	N
12	12	220344	50854	4	34.0	-154.6	OVC	1021.3	32518	2242	N
13	13	221112	60001	1	34.8	-154.9	SCT	1020.3	32517	2244	N
14	14	221840	50968	2	35.7	-155.3	SCT	1021.2	31017	2251	N
15	15	222602	30170	3	36.6	-155.6	SCT	1021.2	20502 floater	2256	Y
16	16	223218	40653	4	37.4	-155.8	SCT	1019.5	32017	2304	N
17	17	223827	50979	1	37.2	-154.8	BKN	1019.7	30518	2306	N
18	18	224540	50851	2	37.0	-153.7	BKN	1018.1	29017	2315	N
19	19	225258	50962	3	36.7	-152.5	BKN	1017.4	31518	2322	N
20	20	230014	50984	4	36.4	-151.4	BKN	1017.1	30521	2330	N
21	21	230734	30180	1	36.1	-150.3	BKN	1015.8	29519	2342	N
22	22	231452	50969	2	35.8	-149.1	OVC	1014.2	31526	2347	N
23	23	232202	50970	3	35.5	-148.0	OVC	1013.5	29017 psbl fast	2357	N
24	24	232936	30169	4	35.1	-146.9	OVC	1014.4	24520	0004	N
25	25	233625	10537	1	34.8	-145.8	OVC	1014.1	20523	0008	N
26	26	234335	20948	2	34.5	-144.7	OVC	1016.4	20024	0011	N
27	—	235041	50980	3	—	—	OVC	—	no GPS	—	—
28	27	235133	20922	4	34.1	-143.5	OVC	1018.5	21516 backup	0018	N
29	28	235754	20923	1	33.7	-142.6	OVC	1018.7	21516	0028	N
30	29	000438	50330	2	33.4	-141.5	OVC	1019.9	20514	0031	N
31	30	001137	20941	3	33.0	-140.5	OVC	1020.6	28007 "LAST"	0037	N
32											
33											
34											
35											
36											
37											
38											

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

COMMENTS:

ASPEN v. 3.4.6

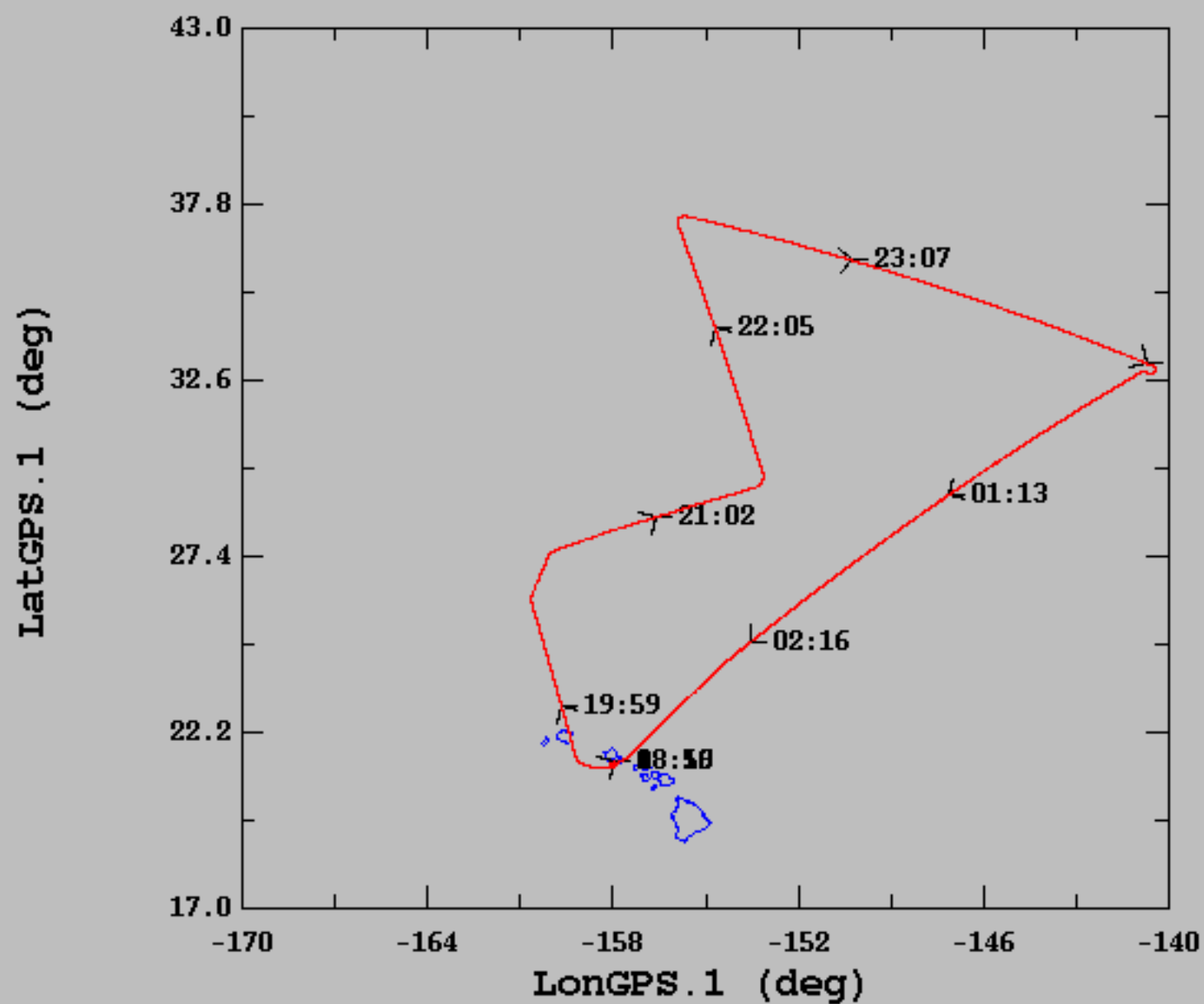
Obs
Xmitted 30

Obs
Missed 0

of sondes
launched 31

of bad
sondes 1

2022-01-28, 18:56:40-27:19:02



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	28.83	5.17	21.13	37.42
LonGPS.1 (deg), 1 s/sec	-152.70	5.67	-160.60	-140.39