

N49RF ERROR SUMMARY
20220127N1

Flight ID: 20220127N1

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/20220127N1

Local Met Data	Takeoff PHNL (1848Z)	Landing PHNL (0144Z)
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:	20220127N1	FLT #:	22-	AC:	Waddington	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	1845Z	CP(s):	Varwig		A/C Takeoff	1018.7	Good	Bad	Sent
To:	PHNL	ETA:	0215Z		de Triquet		ASOS Takeoff	PHNL 1850Z 1018.5 mb	30	1	30
Block Time		Flight Time		NAV:			ASOS Land	1015.8	BTs		
In:	1:49	Land:	1:44	FE(s):					Good	Bad	Sent
Out:	18:28	T/O:	18:49	FD(s):	Carpenter		ASOS Land	PHNL 0145Z 1015.5 mb	0	0	0
Total:	7.4	Total:	6.9	SSA:	Miller	Visitors:					
				AVAPS:	Paul						
Sponsoring Org:		NWS / OAR		SEB:	Andrews		Storm Number ID:		N/A		
Program:		PAR					(ie: AL072012)				
Purpose:		A.R. Mission 2 - IOP05			MX:			TCPOD/WSP0D Mission		NOAA9 02WSC 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:	20220127N1	Pressure Comparison		
Flight Director(s):	Carpenter / Kalen		T/O	Land
Mission:	Tasked/Operational	Aircraft	1018.7	1015.8
UWZ.d mean:	0.14	Tower	PHNL 1850Z 1018.5 mb	PHNL 0145Z 1015.5 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.
TDM.1 and TDM.2 require calibration. All moisture quantities unreliable.

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20220127N1

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

Mission ID: 02WSC IOPOS 1

Storm Name/Track: Atmospheric Rivers

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	203954	50524	1	25.1	-169.9	Ovcst	1016.0	21506	2058	N
2	2	204755	20126	2	26.0	-170.0		1015.0	01520	2104	N
3	3	205557	50289	3	27.0	-170.0		1015.5	01006	2116	N
4	4	210420	30325	4	28.0	-170.0		1017.8	03014	2123	N
5	5	211242	50540	1	29.0	-170.0	Ovcst	1016.8	03016	2131	N
6	6	212101	50862	2	30.0	-170.0		1017.7	35008	2140	N
7	7	212904	30070	3	31.0	-170.0		1017.4	32015	2148	N
8	8	213605	20924	4	31.8	-169.8		1016.3	33013	2153	N
9	9	214214	20370	1	31.4	-169.0		1017.1	31013	2200	N
10	10	214900	21401	2	30.9	-168.1	Ovcst	1016.7	33508	2208	N
11	11	215612	41110	3	30.3	-167.2		1016.0	34016	2216	N
12	12	220330	20938	4	29.8	-166.2		1016.3	36019	2221	N
13	13	221054	20497	1	29.2	-165.3		1014.4	33520	2230	N
14	14	221819	30391	2	28.6	-164.4		1015.1	34614	2238	N
15	15	222455	20024	3	28.2	-163.5	Ovcst	1015.9	21011	2243	N
16	16	223144	50854	4	29.0	-163.3		1014.1	34508	2249	N
17	17	224006	20413	1	30.1	-163.2		1013.5	33019	2300	N
18	18	224829	20033	2	31.1	-163.0		1012.9	32519	2307	N
19	19	225514	30657	3	32.0	-162.8		1013.5	31517	2315	N
20	20	230301	50881	4	33.0	-162.7	Ovcst	1013.6	33027	2321	N
21	21	231040	50963	1	34.0	-162.4		1012.5	31021	2329	N
22	22	231709	50868	2	34.4	-161.4		1011.3	32026	2335	N
23	—	232359	50960	3	34.8	-160.3		1009.1	FF	—	Y
24	23	232526	50959	4	34.9	-160.0		1009.0	26514	2345	N
25	24	233059	20919	1	35.1	-159.1		1009.7	26010	2352	N
26	25	233738	30491	2	35.3	-158.0	Ovcst	1009.2	22015	0000	N
27	26	234517	21000	3	34.4	-157.9		1009.9	22017	0005	N
28	27	235424	20006	4	33.3	-157.8		1010.5	21526	0014	N
29	28	000331	20222	1	32.2	-157.7		1013.4	20018	0024	N
30	29	001243	20935	2	31.1	-157.6		1014.2	20516	0031	N
31	30	002141	20931	3	30.0	-157.5	Ovcst	1016.0	19516 / Last Report	0041	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:

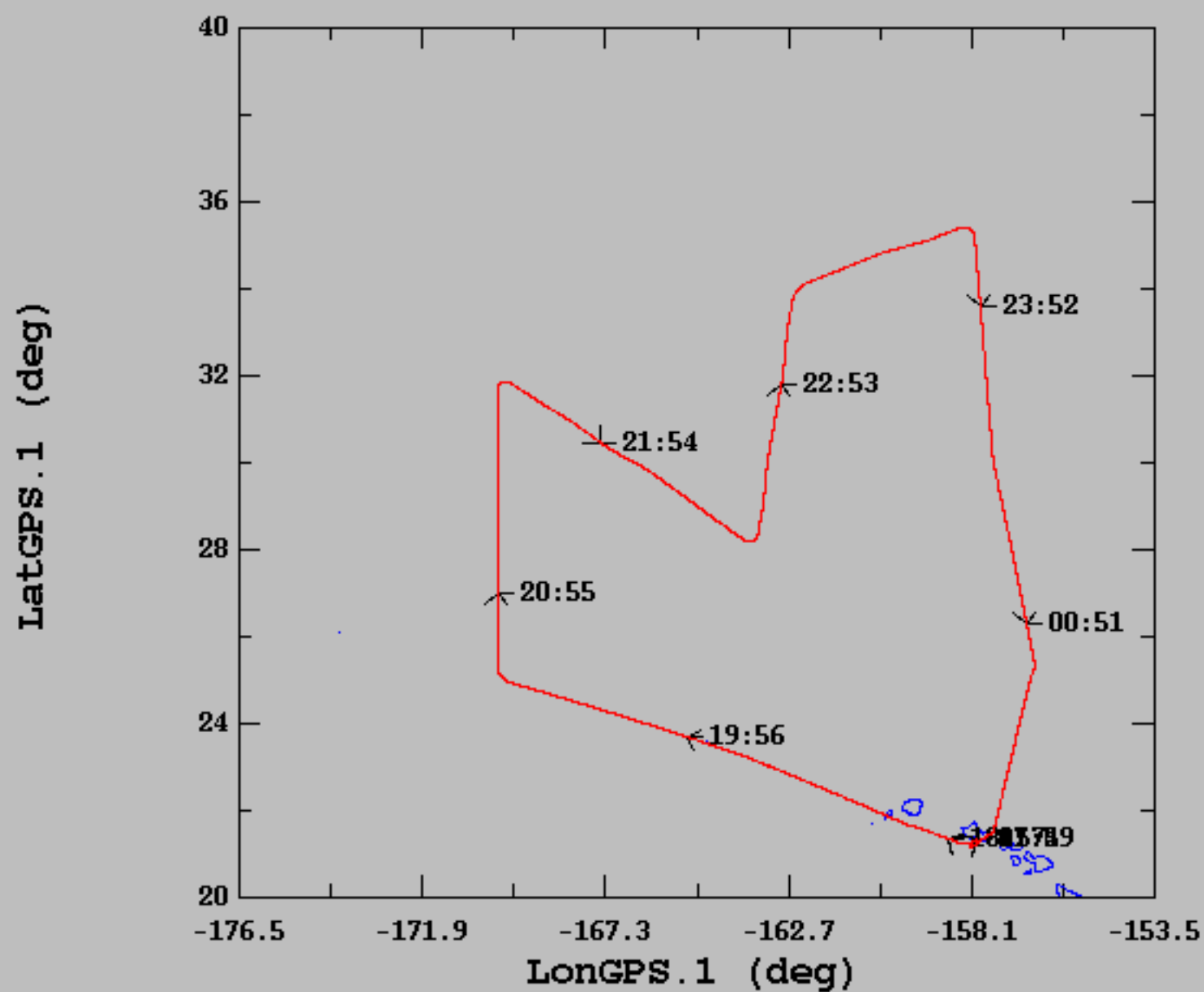
Obs Xmitted 30

Obs Missed 0

of sondes launched 31

of bad sondes 1

2022-01-27, 17:59:09-25:49:56



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	26.92	4.48	21.14	35.39
LonGPS.1 (deg), 1 s/sec	-162.14	4.70	-170.00	-156.46