

N49RF ERROR SUMMARY
20230126N1

Flight ID: 20230126N1

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/2023/MET/20230126N1

Local Met Data	Takeoff PHNL (1947Z)	Landing PHNL (0258Z)
Dynamic Corrections		Yes
AttackAngleIntercept		4.95911
AttackAngleSlope		5.43613
SlipAngleIntercept		1.06
SlipAngleSlope		6.97813
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.

LatGPS.1 & .2 and LonGPS.1 & .2 stair step
TDM.1 trending ~ 50 deg C warm - unrepresentative
TDM.2 trending with TA.d showing saturation - unrepresentative
Moisture and humidity data remains suspect

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	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: Kalen / de Solo
Phone #: 863-500-3962

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:	20230126N1	FLT #:		AC:	Nardi	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	1915Z	CP(s):	de Triquet		A/C Takeoff		Good	Bad	Sent
To:	PHNL	ETA:	0000Z		Bhatnagar						
Block Time		Flight Time		NAV:			ASOS Takeoff		30	1	30
In:	3:04	Land:	2:59	FE(s):					BTs		
Out:	19:39	T/O:	19:45	FD(s):	Kalen		A/C Land		Good	Bad	Sent
					de Solo						
Total:	7.4	Total:	7.2	SSA:	Defeo	Visitors:	ASOS Land				
Sponsoring Org:		OAR		AVAPS:	Hartberger		Storm Number ID:		N/A		
Program:		PAR		SEB:	Weinmann		(ie: AL072012)				
Purpose:		Atmospheric Rivers			Santoni		TCPD/WSPD Mission		NOAA9 16WSC IOP19		
				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:				

*Highlighted items must be completed before departure.

Remarks:

G-IV QC Checklist

Flight ID:	20230126N1
Flight Director(s)	Kalen / de Solo
UWZ.d mean:	0.01

Pressure Comparison		
	T/O	Land
Aircraft	1017.7	1014.3
Tower	1016.8	1014.1

	Raw 1Hz Mean File Parameters					C File Parameters	
☒ Accelerometer	☒ AccAXI.1	☒ AccAYI.1	☒ AccAZI.1			☒ AccZref	
	☒ AccAXI.2	☒ AccAYI.2	☒ AccAZI.2				
	☒ AccAXI.3	☒ AccAYI.3	☒ AccAZI.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	☒ GsGPS.3		☒ GSZref	
	☒ GsXGPS.1	☒ GsYGPS.1	☒ GsZGPS.1				
	☒ GsXGPS.2	☒ GsYGPS.2	☒ GsZGPS.2				
	☐ GsXGPS.3	☐ GsYGPS.3	☐ GsZGPS.3				
☒ Lat / Lon	☒ LatGPS.1	☒ LatI.1	☒ LonGPS.1	☒ LonI.1		☒ LATref	
	☒ LatGPS.2	☒ LatI.2	☒ LonGPS.2	☒ LonI.2		☒ LONref	
	☒ LatGPS.3		☒ LonGPS.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	☒ PitchRateI.1	☒ RolI.1	☒ RollRateI.1		☒ PITCHref	
	☒ PitchI.2	☒ PitchRateI.2	☒ RolI.2	☒ RollRateI.2		☒ ROLLref	
	☒ PitchI.3	☒ PitchRateI.3	☒ RolI.3	☒ RollRateI.3			
☒ Temp / Dewpt	☒ TTM.1	☒ TTM.4	☒ TDM.1			☒ TD.c	☒ TTMref
	☐ TTM.2		☒ 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
☒	Miscellaneous FD Notes

QC Key	
Not checked	☐
Valid	☒
Errors (note)	☒

NOTES:

LatGPS.1 & .2 and LonGPS.1 & .2 stair step
TDM.1 trending ~ 50 deg C warm - unrepresentative
TDM.2 trending with TA.d showing saturation - unrepresentative
Moisture and humidity data remains suspect

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20230126N1

ASPEN Operator/Flight Director(s): Kalen / de Solo

Mission ID: 16WSL TOP19

Storm Name/Track: AR IOP19

PG ____ of ____

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								TEST RECD		
2	2	211936	20034	1	31.0	-154.0	OVC	1015.8	215° @ 15 kts	2140	✓✓
3	3	213100	40315	2	32.5	-153.5	OVC	1015.5	225° @ 16 kts	2149	✓✓
4	4	213857	40806	3	33.1	-152.4	OVC	1014.8	225° @ 15 kts	2157	✓✓
5	5	214704	50765	4	33.7	-151.3	OVC	1016.8	135° @ 22 kts	2211	✓✓
6	6	215512	40318	1	34.3	-150.2	OVC	1016.7	NO SFC WIND	2219	✓✓
7	7	220327	41433	2	34.8	-149.1	OVC	1017.3	125° @ 32 kts	2232	✓✓
8	8	221157	50766	3	35.4	-148.0	OVC	1020.8	120° @ 36 kts	2234	✓✓
9	9	222022	50472	4	35.9	-146.8	OVC	1023.5	115° @ 24 kts	2240	✓✓
10	10	222839	10268	1	36.5	-145.7	BKN	1025.2	115° @ 29 kts	2247	✓✓
11	11	223601	30745	2	37.0	-144.7	CLR	1027.8	110° @ 24 kts	2255	✓✓
12	12	224424	50779	3	37.9	-145.4	CLR	1027.9	120° @ 16 kts	2305	✓✓
13	13	225328	41434	4	38.9	-146.4	BKN	1027.7	110° @ 23 kts	2312	✓✓
14	14	230222	20031	1	39.8	-147.4	SCT	1027.8	110° @ 23 kts	2324	✓✓
15	15	231118	50767	2	40.7	-148.4	SCT	1028.3	110° @ 27 kts	2331	✓✓
16	16	232022	41135	3	41.6	-149.4	BKN	1026.3	105° @ 25 kts	2342	✓✓
17	17	232904	40229	4	42.4	-150.5	BKN	1027.4	110° @ 16 kts	2347	✓✓
18	18	233816	30083	1	42.0	-151.9	OVC	1024.1	110° @ 20 kts	0001	✓✓
19	19	234742	40337	2	41.2	-153.2	OVC	1020.5	110° @ 21 kts	0011	✓✓
20	20	235711	41429	3	40.9	-154.5	OVC	1016.0	115° @ 28 kts	0018	✓✓
21	21	000633	41496	4	40.3	-155.8	OVC	1014.7	100° @ 19 kts	0034	✓✓
22	22	001551	50764	1	39.7	-157.0	OVC	1012.4	125° @ 14 kts	0041	✓✓
23		0024		2					NO PTU		
24	23	002520	41432	3	39.1	-158.4	BKN	1010.1	085° @ 13 kts	0043	✓✓
25	24	003340	40601	4	38.5	-159.4	BKN	1010.0	070° @ 13 kts	0055	✓✓
26	25	004222	41149	1	37.4	-159.3	BKN	1006.3	080° @ 08 kts	0102	✓✓
27	26	005122	21006	2	36.2	-159.2	BKN	1007.0	260° @ 12 kts	0110	✓✓
28	27	010001	50560	3	35.1	-159.0	BKN	1009.2	280° @ 19 kts	0122	✓✓
29	28	010853	50772	4	33.9	-158.9	BKN	1011.7	270° @ 23 kts	0133	✓✓
30	29	011709	60120	1	32.8	-158.8	BKN	1013.8	290° @ 18 kts	0137	✓✓
31	30	012550	50780	2	31.6	-158.6	BKN	1015.8	305° @ 18 kts	0147	✓✓
32	31	013404	41147	3	30.5	-158.5	BKN	1016.2	285° @ 09 kts	0156	✓✓
33											
34											
35											
36											
37											
38											

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

COMMENTS:

Obs
Xmitted31
(1 RECD)Obs
Missed

0

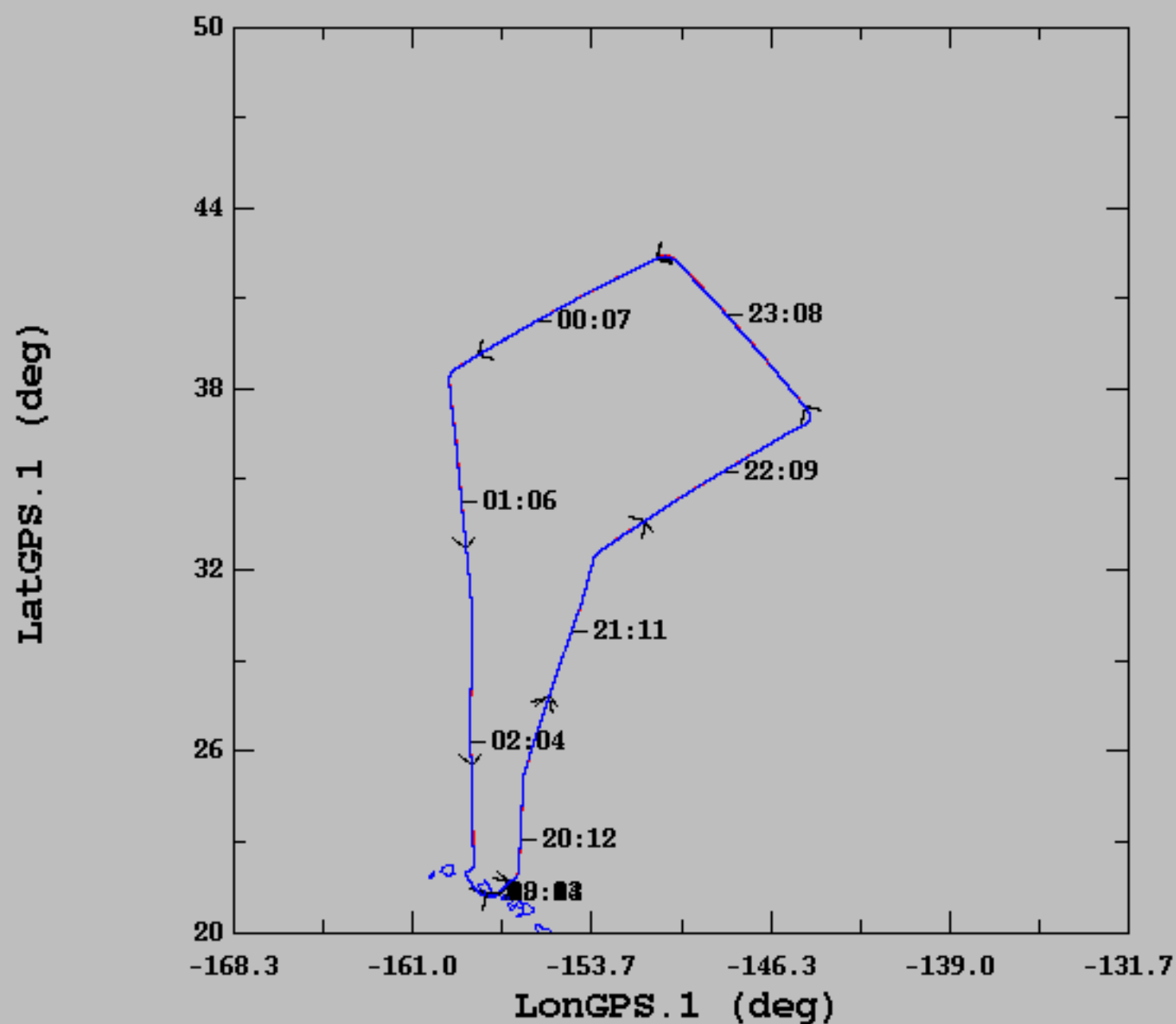
of sondes
launched

31

of bad
sondes

1

2023-01-26, 18:14:53-27:03:39



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	30.27	7.34	21.13	42.39
LonGPS.1 (deg), 1 s/sec	-155.22	4.20	-159.47	-144.68
LatI.1 (deg), 1 s/sec	30.28	7.34	21.13	42.41
LonI.1 (deg), 1 s/sec	-155.21	4.20	-159.46	-144.68