N49RF ERROR SUMMARY
20230129N1

Flight ID: 20230129N1

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/20230129N1

Local Met Data	Takeoff PHNL (1915Z)	Landing PHNL (0239Z)
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.

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

FLT ID:	20230129N1	**FLT #:**	
From:	PHNL	**ETD:**	0915Z
To:	PHNL	**ETA:**	0215Z
Block Time		**Flight Time**	
In:	2:37	Land:	2:32
Out:	19:03	T/O:	19:15
Total:	7.6	Total:	7.3
Sponsoring Org:	OAR		
Program:	PAR		
Purpose:	Atmospheric Rivers		

CREW MANIFEST

AC:	Nardi	**Scientists:**
CP(s):	de Triquet	
	Bhatnagar	
NAV:		
FE(s):		
FD(s):	Kalen	
	de Solo	
SSA:	Defeo	**Visitors:**
AVAPS:	Hartberger	
SEB:	Weinmann	
	Santoni	
MX:		

MISSION INFORMATION

Pressure		Dropsondes		
A/C Takeoff		Good	Bad	Sent
ASOS Takeoff		30	1	30
		BTs		
A/C Land		Good	Bad	Sent
ASOS Land				

Storm Number ID: (ie: AL072012)	N/A
TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA9 18WSC IOP21

AS REQUIRED BY ORM

	Y	N
VOLCANIC ASH		x
SCIENCE MISSION WITHIN BDRY LAYER		x
LACK OF PRECIPITATION	x	
RELATIVE HUMIDITY ≥ 80%		x
LARGE AIR-SEA TEMP GRADIENT		x
HIGH SURFACE WINDS		x
LONG FETCH / DURATION OF SFC WND		x
SEA SALT ACCRETION FORECAST		x
SEA SALT ACCRETION OBSERVED		x

REMARKS

OBSERVATIONS

Fix Number	Obs Number	Fix Time	SLP
1			
2			
3			
4			
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

Pressure Comparison		
	T/O	Land
Aircraft	10186.0	1013.9
Tower	1017.8	1013.8

	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	☑ RollI.1	☑ RollRateI.1	☑ PITCHref	
	☑ PitchI.2	☑ PitchRateI.2	☑ RollI.2	☑ RollRateI.2	☑ ROLLref	
	☑ PitchI.3	☑ PitchRateI.3	☑ RollI.3	☑ RollRateI.3		
☑ Temp / Dewpt	☑ TTM.1	☑ TTM.4	x TDM.1		x TD.c	☑ TTMref
	☐ 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
☑	Miscellaneous FD Notes

QC Key	
Not checked	☐
Valid	☑
Errors (note)	x

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: 20230129N1 ASPEN Operator/Flight Director(s): KALEN / de SOLO

Mission ID: 18WSC IOP21 Storm Name/Track: AR IOP21 PG ___ of ___

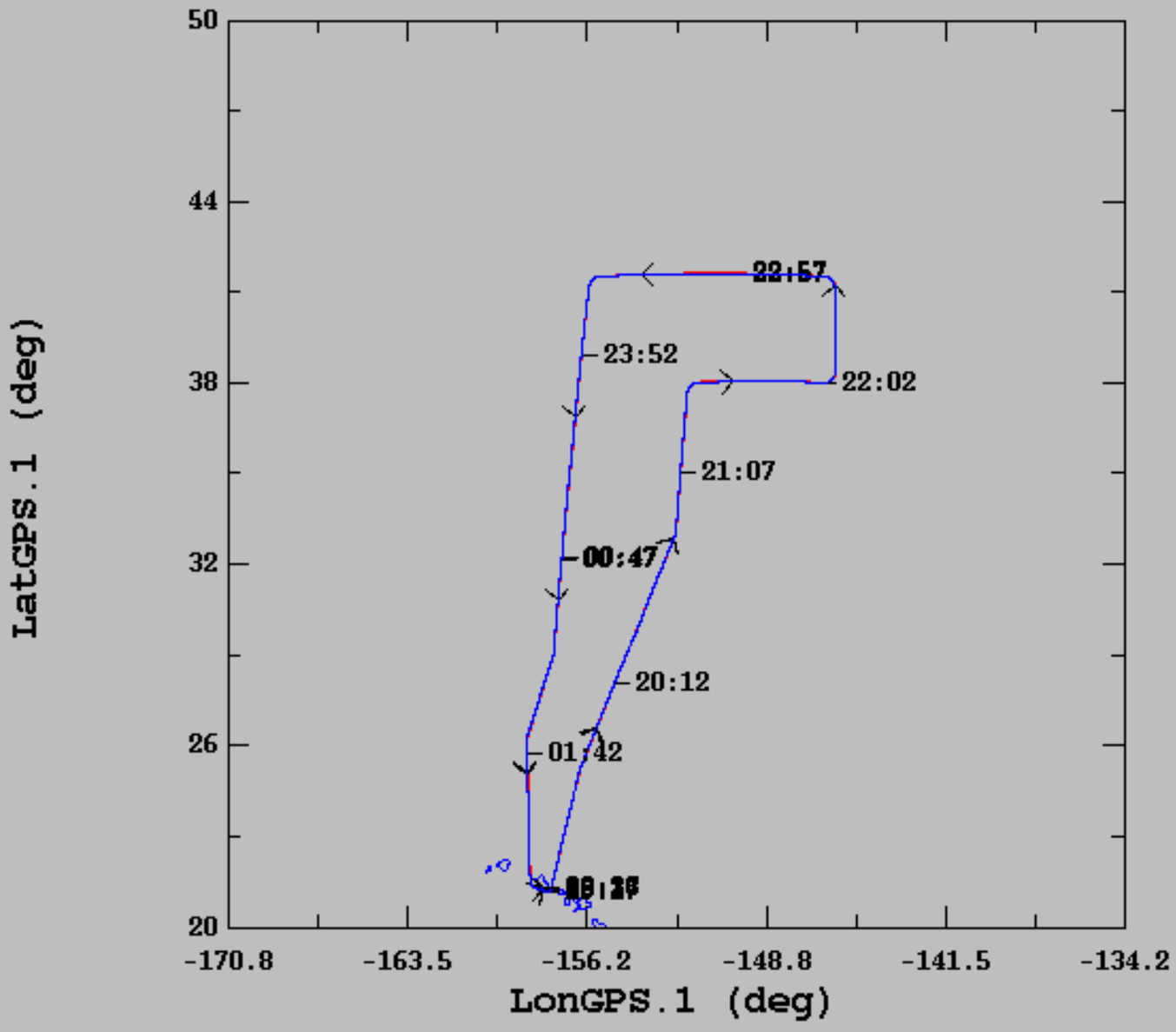
Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (min last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Prs (mb)	Comments / Issues / QC / ASPEN Edits	KWBC #	Sonde Issues?
1	1	002801	30781	1	30.0	-154.0	OVC	1025.3	360° @ 18 kts	2049	✓✓
2	2	204014	50614	2	31.5	-154.3	OVC	1024.7	010° @ 16 kts	2104	✓✓
3	3	205240	50465	3	33.1	-152.5	OVC	1024.7	010° @ 08 kts	2113	✓✓
4	4	2101	40894	4	34.3	-152.4	OVC	1024.4	325° @ 03 kts	2123	✓✓
5	5	211120	20106	1	35.5	-152.3	OVC	1024.7	225° @ 02 kts	2132	✓✓
6	6	212100	50288	2	36.8	-152.1	OVC	1023.1	205° @ 05 kts	2141	✓✓
7	7	212952	20428	3	37.9	-151.9	OVC	1022.6	170° @ 11 kts	2150	✓✓
8	8	213835	20988	4	38.0	-150.0	OVC	1022.7	16507	2202	N
9	9	214750	10477	1	38.0	-148.9	CLR	1024.8	14017	2211	N
10	10	215659	60607	2	38.0	-147.9	CLR	1025.7	15019	2219	N
11	11	220538	10480	3	38.1	-146.1	CLR	1027.4	17034	2226	N
12	12	221816	60584	4	39.8	-146.0	OVC	1028.0	13508	2238	N
13	—	223122	21008	1	—	—	OVC	—	No PTH	—	Y
14	13	223209	10479	2	41.5	-146.2	OVC	1028.3	13515	2251	N
15	14	224114	50563	3	41.5	-147.7	OVC	1026.3	15516	2302	N
16	15	225143	31034	4	41.6	-149.3	OVC	1023.2	15016	2312	N
17	16	230156	30196	1	41.6	-151.0	OVC	1022.0	16014	2320	N
18	17	231155	50559	2	41.6	-152.7	CLR	1019.3	18019		✓✓
19	18	232201	60591	3	41.6	-154.3	CLR	1018.0	165° @ 14 kts	2345	✓✓
20	19	233146	70012	4	41.4	-155.9	CLR	1015.8	145° @ 11 kts	2351	✓✓
21	20	234029	40939	1	40.4	-156.2	SCT	1015.4	155° @ 10 kts	0002	✓✓
22	21	234935	31232	2	39.2	-156.3	SCT	1016.0	275° @ 25 kts	0011	✓✓
23	22	235847	40889	3	38.1	-156.5	SCT	1018.9	275° @ 25 kts	0019	✓✓
24	23	000753	10151	4	36.9	-156.6	SCT	1021.2	290° @ 14 kts	0029	✓✓
25	24	001700	41498	1	35.8	-156.7	SCT	1023.1	325° @ 15 kts	0039	✓✓
26	25	002608	40340	2	34.7	-156.9	SCT	1024.1	NO SFC WIND	0045	✓✓
27	26	003532	40149	3	33.5	-157.0	SCT	1024.2	320° @ 08 kts	0056	✓✓
28	27	004456	21007	4	32.4	-157.1	SCT	1024.1	325° @ 09 kts	0109	✓✓
29	28	005431	30747	1	31.3	-157.3	SCT	1024.8	340° @ 13 kts	0116	✓✓
30	29	010353	20986	2	30.1	-157.4	SCT	1023.8	015° @ 11 kts	0124	✓✓
31	30	0113	60051	3	29.0	-157.5	SCT	1023.9	015° @ 10 kts	0132	✓✓
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

2023-01-29, 18:23:02-26:36:56



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	31.52	7.30	21.14	41.62
LonGPS.1 (deg), 1 s/sec	-154.72	3.81	-158.61	-146.00
LatI.1 (deg), 1 s/sec	31.54	7.30	21.14	41.63
LonI.1 (deg), 1 s/sec	-154.70	3.81	-158.59	-145.99