

N49RF ERROR SUMMARY
Atmospheric Rivers 2022 IOP-21

Flight ID: 20220310N1

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.1
Vertical Accelerometer	AccZI.1
Altimeter	AltGPS.3
INE Selection	2
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/20220310N1
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Local Met Data	Takeoff PHNL (1917Z)	Landing PHNL (0303Z)
Dynamic Corrections		Yes
AttackAngleIntercept		3.97801
AttackAngleSlope		3.86172
SlipAngleIntercept		1.258
SlipAngleSlope		6.69941
AttackAngleIntercept2		5.01255
AttackAngleSlope2		5.40932
SlipAngleIntercept2		0.72
SlipAngleSlope2		7.0494

Notes:

TDM.1 and TDM.2 are unrepresentative. Consider all flight level humidity to be suspect.

TTM.3 displays oscillations of multiple periods superimposed on each other and should not be used

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.

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 / Henning
Phone #: (863) 500-3982

ACAT-4 Version = 7.3

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N49RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20220310N1	FLT #:		AC:	Nardi	Scientists:	Pressure		Dropsondes		
From:	PHNL	ETD:	1915Z	CP(s):	de Triquet		A/C Takeoff		Good	Bad	Sent
To:	PHNL	ETA:	0315Z						30	1	30
Block Time		Flight Time		NAV:			ASOS Takeoff		BTs		
In:	0309Z	Land:	0303Z	FE(s):			A/C Land		Good	Bad	Sent
Out:	1901Z	T/O:	1917Z	FD(s):	Henning Kalen		ASOS Land				
Total:	8.1	Total:	7.8	SSA:	DeFeo	Visitors:		Storm Number ID:			
Sponsoring Org:	PA2			AVAPS:	Patel		(ie: AL072012)				
Program:				SEB:			TCP00/WSP00 Mission		NOAA AOWSC 10P21		
Purpose:	Atmospheric Rivers			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:	20220310N1
Flight Director(s)	Henning / Kalen
UWZ.d mean:	-0.02

Pressure Comparison		
	T/O	Land
Aircraft	1018.9	1017.5
Tower	1018.8	1017.1

	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	☒ 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	☒ 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:

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There were no edits made in the measured parameters used to calculate meteorological and navigational parameters.

Takeoff/Landing data: Data during landing and takeoff should be considered suspect

It is recommended that data collected on the ground not be used for scientific analysis.

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20220310N1ASPEN Operator/Flight Director(s): Kalen/HemmingMission ID: 07W56 50P21Storm Name/Track: Atmospheric RiversPG 1 of 1

Sonde #	Ob #	Launch Time HHMMSS (Z)	Sonde ID (mm last 5)	Ch # used	Lat (°N)	Lon (°E)	Prominent Wx Cond.	SFC Pts (mb)	Comments / Issues / QC / ASPEN Edits	KWBC #	Sonde Issues?
1	1	205813	20342	1	30.0	-159.5	Ovcst	1020.2 03010		02121	N
2	2	210820	40674	2	31.1	-159.6		1019.4 07010		02129	N
3	3	211833	20639	3	32.2	-159.7		1020.1 06506		02136	N
4	4	212822	20646	4	33.3	-159.9		1020.2 07005		02150	N
5	5	213805	40250	1	34.4	-160.0		1020.3 23505		02157	N
6	6	214806	10853	2	35.5	-160.1		1018.9 19011		02206	N
7	—	215754	41148	3	—	—	Clr	— No PTH		—	Y
8	7	215843	40794	4	36.7	-160.3	Clr	1018.0 18013		02216	N
9	8	220729	40689	1	37.7	-160.4	Ovcst	1017.8 17008		02235	N
10	9	221647	41118	2	38.9	-160.5	Ovcst	1016.2 19515		02237	N
11	10	222549	11016	3	39.8	-160.7	Few	1016.4 19516		02245	N
12	11	223444	41166	4	41.0	-160.9	Ovcst	1014.9 20014		02253	N
13	12	224247	50946	1	41.5	-161.7		1013.1 20016		02304	N
14	13	225112	41171	2	42.1	-161.7		1011.4 20020		02317	N
15	14	230237	41122	3	42.3	-164.4		1010.2 22521		02329	N
16	15	231413	41119	4	42.4	-166.1	Brkn	1010.1 24518		02336	N
17	16	232544	41168	1	42.4	-167.8	Sct	1009.2 26017		02344	N
18	17	233254	41117	2	41.9	-168.7	Sct	1010.1 26012		02353	N
19	18	234032	40248	3	41.4	-169.5	Sct	1010.7 25515		10005	N
20	19	234919	40678	4	40.4	-169.5	Clr	1012.2 30006		10009	N
21	20	235817	41424	1	39.3	-169.5	Ovcst	1012.1 32512		10021	N
22	21	000723	40644	2	38.2	-169.5		1012.1 28010		10028	N
23	22	001636	41120	3	37.1	-169.5		1011.5 35016		10037	N
24	23	002546	41127	4	36.0	-169.5		1009.1 07019 / Weird Sfc Win!		10047	N
25	24	003502	40676	1	35.0	-169.5		1008.5 26519		10056	N
26	25	004432	50209	2	33.9	-169.6		1010.5 25523		10105	N
27	26	005356	40541	3	32.6	-168.6		1012.4 25028		10113	N
28	27	010213	41157	4	31.8	-169.2		1013.9 23021		10121	N
29	28	011127	40249	1	30.6	-167.8	Clr	1016.6 23520		10131	N
30	29	011524	40677	2	29.6	-167.4	Clr	1017.8 23012		10139	N
31	30	012750	40566	3	28.5	-167.0	Clr	1017.4 24013 / Last Report		10146	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 30Obs
Missed 6# of sondes
launched 31# of bad
sondes 1

AVAPS Drop Log

Project: ARR 2022

Mission: ARR

Flight ID: 20220310NI

Take Off: _____

Landing: _____

Flt Dir: Rich/Quinn

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	213520342	1	0	2058	AR	AR		✓
2	213740674	2	0	2108				✓
3	213620639	3	0	2118				✓
4	213620646	4	0	2128				✓
5	213620646	1	0	2138				✓
6	211010853	2	0	2148				✓
7	213741148	3	0	2157			No PTH	X
8	213740794	4	0	2158				✓
9	213740689	1	0	2207				✓
10	213741118	2	0	2216				✓
11	211011016	3	0	2225				✓
12	213741166	4	0	2234				✓
13	213550946	1	0	2242				✓
14	213741171	2	0	2251				✓
15	213741122	3	0	2302				✓
16	213741119	4	0	2314				✓
17	213741168	1	0	2325				✓
18	213741117	2	0	2332				✓
19	213740248	3	0	2340				✓
20	213740678	4	0	2349				✓
21	213341424	1	0	2358				✓
22	211440644	2	0	0007				✓
23	213741120	3	0	0016				✓
24	213741127	4	0	0025				✓
25	213740676	1	0	0035				✓
26	213750209	2	0	0044				✓
27	213740541	3	0	0053				✓
28	213741157	4	0	0102				✓
29	213740249	1	0	0111				✓
30	213740677	2	0	0119				✓
31	213740566	3	0	0127				✓

30/31

