N49RF ERROR SUMMARY
Atmospheric Rivers 2022 IOP-11

Flight ID: 20220224N1

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	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/20220224N1

Local Met Data	Takeoff PHNL (1914Z)	Landing PHNL (0249Z)
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	27	25	25
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

FLT ID:	20220224N1	FLT #:	
From:	PHNL	ETD:	1915Z
To:	PHNL	ETA:	0245Z

Block Time		Flight Time	
In:	0253Z	Land:	0249Z
Out:	1959Z	T/O:	1914Z
Total:	7.9	Total:	7.6

Sponsoring Org:	PAR
Program:	
Purpose:	Atmospheric Rivers

CREW MANIFEST

AC:	Nardi	Scientists:
CP(s):	de Triquet	
NAV:		
FE(s):		
FD(s):	Kalen Henning	
SSA:	DeFeo	Visitors:
AVAPS:	Patel	
SEB:		
MX:		

MISSION INFORMATION

Pressure		Dropsondes		
		Good	Bad	Sent
A/C Takeoff		25	2	27
ASOS Takeoff		BTs		
A/C Land		Good	Bad	Sent
ASOS Land				

Storm Number ID: (ie: AL072012)	
TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA9 06WSC IOP12

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:	20220224N1
Flight Director(s)	Henning / Kalen

UWZ.d mean:	0.08

Pressure Comparison		
	T/O	Land
Aircraft	1019.7	1017.2
Tower	1019.5	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	x 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
	x 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:

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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: 20220224N1 ASPEN Operator/Flight Director(s): KALEN / HENNING

Mission ID: 06WSC 10P12 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	204756	40757	1	27.0	166.5	SCT	1021.2	SURFACE WIND 210/10	2107	✓
2	2	210748	30494	2	28.5	168.0	SCT	1019.6	260/9	2133	✓
3	3	212226	40236	3	30.0	168.3	SCT	1018.6	265/17	2148	✓
4	4	213720	40648	4	31.5	168.7	SCT	1015.1	265/30	2158	✓
5	5	215219	40487	1	33.0	169.0	SCT	1014.4	275/28	2217	✓
6		2206		2			BKN		NO PTH		
7	6	220813	40664	3	34.6	169.4	SCT	1010.6	260/31	2236	✓
8	7	222145	40665	4	36.0	169.7	SCT	1007.3	260/28	2245	✓
9	8	223608	40607	1	37.5	170.2	SCT	1004.9	250/32	2259	✓
10	9	224928	40798	2	39.0	170.5	SCT	1001.0	250/33	2311	✓
11	10	225554	50286	3	39.7	169.8	SCT	998.9	270/34	2317	✓
12	11	230329	40243	4	40.5	168.9	BKN	997.4	260/26	2323	✓
13	12	231401	20232	1	40.7	166.8	BKN	996.6	260/26	2338	✓
14	13	232440	30683	2	40.7	164.7	OVC	996.4	220/17	2350	✓
15	14	233517	30504	3	40.7	162.6	OVC	998.5	250/22	0015	✓
16	15	234606	40734	4	40.6	160.6	SCT	1000.0	230/26	0016	✓
17	16	235642	50287	1	40.4	158.6	BKN	1001.3	230/24	0022	✓
18		0007		2					NO PTH		
19	17	000849	40173	3	39.0	157.9	BKN	1001.9	220/24	0033	✓
20	18	001844	50283	4	37.8	157.4	OVC	1004.8	235/20	0044	✓
21	19	003001	40242	1	36.4	156.9	OVC	1008.8	240/22	0051	✓
22	20	004051	30478	2	35.0	156.4	OVC	1010.4	230/20	0106	✓
23	21	005135	40797	3	33.6	155.9	OVC	1014.0	220/28	0115	✓
24	22	010216	30490	4	32.3	155.4	BKN	1016.7	205/20	0125	✓
25	23	011258	30894	1	30.9	154.9	SCT	1018.7	220/18	0134	✓
26	24	012356	50288	2	29.5	154.5	SCT	1020.7	205/16	0147	✓
27	25	013632	40442	3	28.0	155.0	SCT	1020.7	180/12 LAST RPT	0156	✓
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38											

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

COMMENTS:

Obs Xmitted 25 Obs Missed # of sondes launched 27 # of bad sondes 2

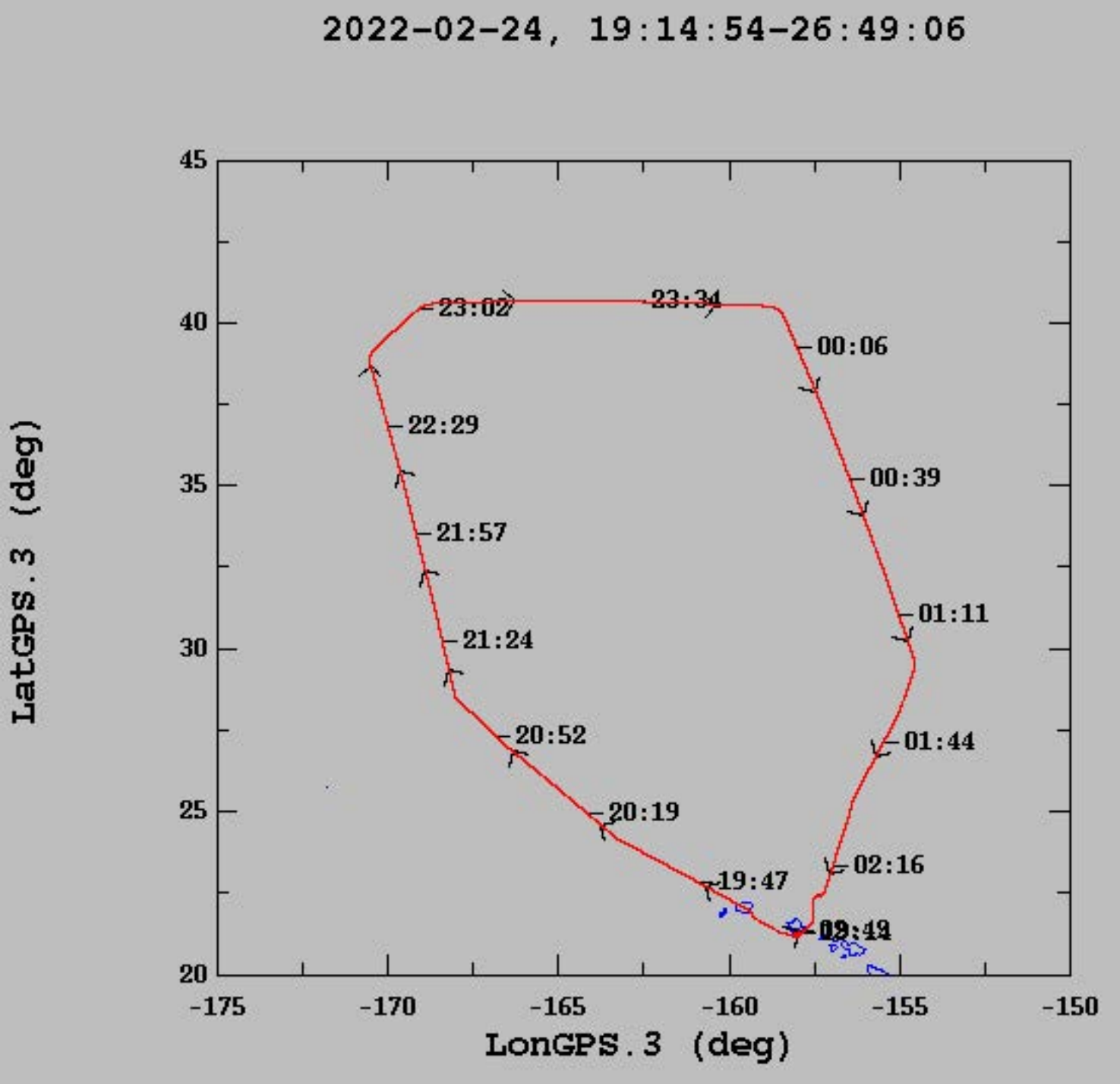
AVAPS Drop Log

Project: ARI 2022 Mission: ARI Flight ID: 20220224N1

Take Off: _____ Landing: _____ Flt Dir: Quinn/Rich Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge $$ To	Comments	Good ?
1	213740757	1	0	2047	AJP	AR		✓
2	211030494	2	0	2107				✓
3	213740236	3	0	2122				✓
4	211440648	4	0	2137				✓
5	211440487	1	0	2152				✓
6	213740170	2	0	2207			No PTU	X
7	211440664	3	0	2208				✓
8	211440665	4	0	2221				✓
9	211440607	1	0	2236				✓
10	213740798	2	0	2249				✓
11	211450286	3	0	2255				✓
12	213740243	4	0	2303				✓
13	213620232	1	0	2314				✓
14	211030683	2	0	2324				✓
15	211030504	3	0	2335				✓
16	213740734	4	0	2346				✓
17	211450287	1	0	2356				✓
18	213740177	2	0	0007			No PTU	X
19	213740173	3	0	0008				✓
20	211450283	4	0	0018				✓
21	213740242	1	0	0030				✓
22	211030478	2	0	0040				✓
23	213740797	3	0	0051				✓
24	211030490	4	-0.5	0102				✓
25	212430894	1	0	0112				✓
26	211450288	2	0	0123				✓
27	211440442	3	0	0136				
28								
29								
30								
31								

25/27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LatGPS.3 (deg)
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