N49RF ERROR SUMMARY
20220828N1

Flight ID: 20220828N1

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.1
Differential Sideslip Pressure Probe	PDBETA.1
Dynamic Attack Pressure Probe	PQALPHA.1
Dynamic Sideslip Pressure Probe	PQBETA.1

Flight Directory acdata/2022/MET/20220828N1

Local Met Data Takeoff KLAL (1517Z) Landing TBPB (2250Z)

Dynamic Corrections	Yes
AttackAngleIntercept	4.95911
AttackAngleSlope	5.43613
SlipAngleIntercept	1.06667
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 & TDM.2 are unrepresentative. Consider humidity values suspect.

Expendable Type	# deployed	# good	# transmitted
Dropsondes	30	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: Hennings/de Solo
Phone #: 8635003982

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION

FLT ID:	20220828N1	FLT #:	
From:	TBPB	ETD:	1500
To:	TBPB	ETA:	2300

Block Time		Flight Time	
In:	2253	Land:	2250
Out:	1510	T/O:	1518
Total:	7.7	Total:	7.5

Sponsoring Org:	HRD
Program:	PHX
Purpose:	Survey AL91

CREW MANIFEST

AC:	MANSOUR	Scientists:
CP(s):	DeTriquet	
NAV:		
FE(s):		
FD(s):	HENNING DESOLD	
SSA:	DEFEO	Visitors:
AVAPS:	LYNCH	
SEB:		
MX:		

MISSION INFORMATION

Pressure		Dropsondes		
		Good	Bad	Sent
A/C Takeoff		30	∅	~~34~~ 30
ASOS Takeoff				
		BTs		
A/C Land		Good	Bad	Sent
ASOS Land				

Storm Number ID: (ie: AL072012)	
TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA9 WAWXA AL91

OBSERVATIONS

Fix Number	Obs Number	Fix Time	SLP
1			
2			
3			
4			
Pennies:			

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

REMARKS

*Highlighted items must be completed before departure.

Remarks: 45

G-IV QC Checklist

Flight ID:	20220828N1
Flight Director(s)	Henning/de Solo

UWZ.d mean:	-0.12

Pressure Comparison		
	T/O	Land
Aircraft	1007.6	1005.3
Tower	1008.0	1004.9

	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:

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

AOC GPS Dropwindsonde Log (updated Mar 2019)

Flight ID: 20220828 N1 ASPEN Operator/Flight Director(s): DE SOLO / HENNING

Mission ID: WAWXA AL91 Storm Name/Track: HRD Research AL91 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 SURFACE WINDS	KWBC #	Sonde Issues?
1	1	160532	20147	1	12.5	-54.0	SCT	1013.5	080°@ 08 kts	1626	✓✓
2	2	161938	40700	2	12.4	-52.2	SCT	1012.0	045°@ 05 kts	1642	✓✓
3	3	163340	20028	3	12.2	-50.4	SCT	1012.3	360°@ 09 kts	1663	✓✓
4	4	164730	50948	4	12.1	-48.7	SCT	1011.2	335°@ 09 kts	1712	✓✓
5	5	170219	50275	1	12.0	-47.0	SCT	1010.5	345°@ 17 kts	1725	✓✓
6	6	171513	40698	2	12.0	-45.5	SCT	1008.9	260°@ 17 kts	1742	✓✓
7	7	172758	30509	3	12.0	-44.0	SCT	1009.3	225°@ 21 kts	1748	✓✓
8	8	174015	20457	4	12.1	-42.6	SCT	1009.2	225°@ 19kts	1803	✓✓
9	9	174800	50205	1	13.0	-42.4	SCT	1009.0	200°@ 18 kts	1811	✓✓
10	10	175522	50235	2	13.9	-42.6	SCT	1008.9	190°@ 14 kts	1818	✓✓
11	11	180635	40536	3	14.0	-44.0	SCT	1007.3	195°@ 15kts	1831	✓✓
12	12	181836	40322	4	14.0	-45.5	OVC	1007.8	090°@ 06 kts	1840	✓✓
13	13	182947	30481	1	14.1	-47.0	OVC	1009.0	010°@ 17 kts	1855	✓✓
14	14	183714	40412	2	15.0	-47.0	OVC	1008.7	035°@ 25 kts	1900	✓✓
15	15	184436	40287	3	15.9	-46.9	OVC	1009.0	040°@ 27 kts	1912	✓✓
16	16	185654	50372	4	16.0	-45.3	OVC	1009.3	080°@ 30 kts	1916	✓✓
17	17	190952	30403	1	16.0	-43.8	OVC	1009.4	065°@ 20 kts	1932	✓✓
18	18	192412	40133	2	16.0	-42.1	SCT	1010.9	085°@ 13 kts	1944	✓✓
19	19	193720	30402	3	16.1	-40.6	OVC	1011.3	100°@ 14 kts	1957	✓✓
20	20	194428	40279	4	17.0	-40.5	OVC	1012.6	080°@ 16kts	2004	✓✓
21	21	195154	30477	1	17.9	-40.6	OVC	1013.0	060°@ 16 kts	2011	✓✓
22	22	200414	30591	2	18.0	-42.2	OVC	1013.0	065°@ 25 kts	2025	✓✓
23	23	201716	40582	3	18.0	-43.8	OVC	1013.1	070°@ 20 kts	2036	✓✓
24	24	203054	50594	4	18.0	-45.5	OVC	1012.4	065°@ 20 kts	2052	✓✓
25	25	204313	30508	1	18.0	-47.0	OVC	1013.1	055°@ 26 kts	2103	✓✓
26	26	205520	40134	2	17.0	-48.0	OVC	1012.3	035°@ 20 kts	2115	✓✓
27	27	210738	40135	3	16.0	-49.0	OVC	1012.3	035°@ 19 kts	2131	✓✓
28	28	211929	30476	4	15.0	-50.0	OVC	1011.7	035°@ 20 kts	2143	✓✓
29	29	214025	30506	1	14.5	-52.6	SCT	1011.8	045°@ 19 kts	2200	✓✓
30	30	220150	40288	2	14.0	-55.0	SCT	1012.8	065°@ 15kts	2221	✓✓
31											
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 30 # of bad sondes 0

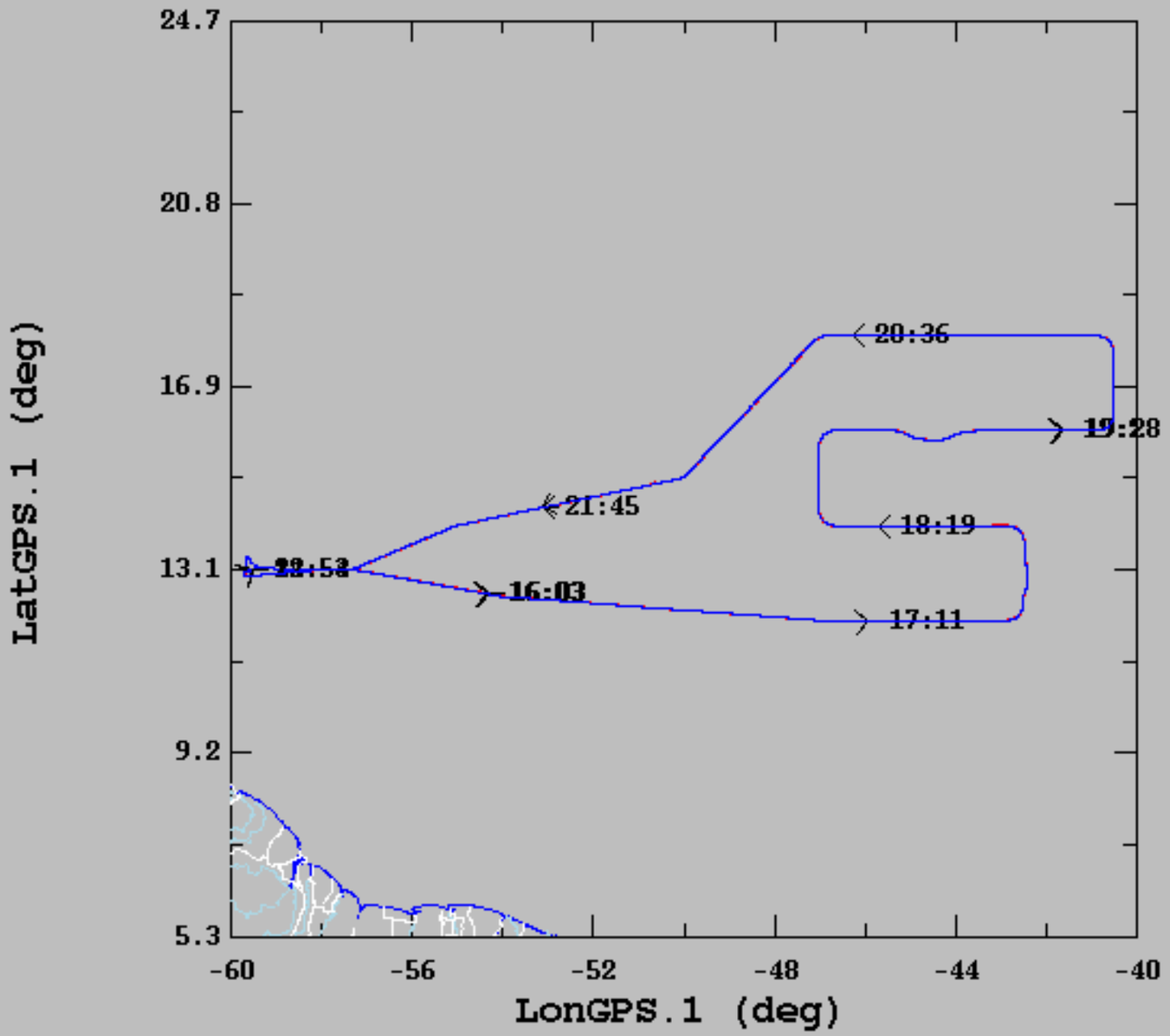
AVAPS Drop Log

Project: HURR22 Mission: AC 91 BARBADOS Flight ID: 20220828N4

Take Off: YES Landing: YES Flt Dir: RICH Launcher S/N: 2

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge $$ To	Comments	Good ?
1	210520147	1	-1.7	1605	GD	NWS		✓
2	212 340 700	2	-.2	1619				✓
3	210 620 028	3	-.4	1633				✓
4	210 550 948	4	-1.3	1647				✓
5	212 250 275	1	0	1702				✓
6	212 340 690	2	0	1715				✓
7	210 330 509	3	-.4	1727				✓
8	212 720 457	4	-.8	1740				✓
9	204 850 205	1	-.4	1748				✓
10	211 850 235	2	-.1	1755				✓
11	210 340 536	3	-.7	1806				✓
12	210 540 322	4	-.9	1818				✓
13	210 330 481	1	-.3	1829				✓
14	210 940 412	2	0	1837				✓
15	210 340 287	3	-.5	1844				✓
16	212 750 372	4	-.5	1856				✓
17	210 330 403	1	-.4	1909	CFL		p17	✓
1923 18	210 340 133	2	-1.1	1924				✓
1937 19	210 330 402	3	-0.7	1937				✓
1944 20	210 340 279	4	-1.4	1944				✓
1951 21	210 330 477	1	-0.8	1951				✓
2003 22	211 930 591	2	-0.5	2004				✓
2016 23	212 340 582	3	0	2017				✓
2029 24	212 350 594	4	0	2030				✓
2042 25	210 330 508	1	-0.4	2043				✓
2054 26	210 340 134	2	-0.4	2055				✓
2107 27	210 340 135	3	-1.2	2107				✓
2119 28	210 330 476	4	-0.5	2119				✓
2140 29	210 330 506	1	-0.6	2140				✓
2201 30	210 340 288	2	-0.9	2201				✓
31	~~210 330 510~~	~~3~~	~~-0.6~~					

08/28/2022, 14:54:35-22:53:47



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	14.37	1.96	12.00	18.00
LonGPS.1 (deg), 1 s/sec	-49.37	5.97	-59.68	-40.50
LatI.1 (deg), 1 s/sec	14.37	1.96	12.00	18.00
LonI.1 (deg), 1 s/sec	-49.37	5.97	-59.68	-40.50