

N49RF ERROR SUMMARY
20220901N1

Flight ID: 20220901N1

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/20220901N1

Local Met Data	Takeoff TBPB (1836Z)	Landing KLAL (0110Z)
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 and TDM.2 are unrepresentative. Consider all flight level humidity to be suspect.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	16	15	15
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Henning/de Solo
Phone #: 8635003982

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

FLIGHT INFORMATION				CREW MANIFEST				MISSION INFORMATION				
FLT ID:	20220901N1	FLT #:		AC:	MANSOUB	Scientists:		Pressure		Dropsondes		
From:	TBPE	ETD:	1830	CP(s):	de TRIGUET			A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	0130	NAV:				ASOS Takeoff		15	1	15
Block Time		Flight Time		FE(s):				A/C Land		BTs		
In:	0115	Land:	0110	FD(s):	HENNING de SOLO			ASOS Land		Good	Bad	Sent
Out:	1830	T/O:	1837	SSA:	DEFE O	Visitors:		Storm Number ID:				
Total:	6.8	Total:	6.6	AVAPS:	LYNCH	MAZOR (AOC PAX)		(ie: AL072012)				
Sponsoring Org:	HRD			SEB:				TCPOD/WSPOD Mission		WHWXA AL91		
Program:	PHX			MX:	ROCHE + NEWNAM			(ie: NOAA2 2418A SANDY)				
Purpose:	Survey 91 then REPO LAL							OBSERVATIONS				
AS REQUIRED BY ORM			Y	N	REMARKS			Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH				x				1				
SCIENCE MISSION WITHIN BDRY LAYER								2				
LACK OF PRECIPITATION								3				
RELATIVE HUMIDITY ≥ 80%								4				
LARGE AIR-SEA TEMP GRADIENT												
HIGH SURFACE WINDS												
LONG FETCH / DURATION OF SFC WND												
SEA SALT ACCRETION FORECAST												
SEA SALT ACCRETION OBSERVED												
								Pennies:				
*Highlighted items must be completed before departure.												
Remarks:												

G-IV QC Checklist

Flight ID:	20220901N1
Flight Director(s)	Henning/de Solo

UWZ.d mean:	0.04
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Pressure Comparison		
	T/O	Land
Aircraft	1003.3	1010.4
Tower	1003.2 (TBPB)	1010.9 (KLAL)

	Raw 1Hz Mean File Parameters				C File Parameters	
<input checked="" type="checkbox"/> Accelerometer	<input checked="" type="checkbox"/> AccAXI.1 <input checked="" type="checkbox"/> AccAXI.2 <input checked="" type="checkbox"/> AccAXI.3	<input checked="" type="checkbox"/> AccAYI.1 <input checked="" type="checkbox"/> AccAYI.2 <input checked="" type="checkbox"/> AccAYI.3	<input checked="" type="checkbox"/> AccAZI.1 <input checked="" type="checkbox"/> AccAZI.2 <input checked="" type="checkbox"/> AccAZI.3		<input checked="" type="checkbox"/> AccZref	
<input checked="" type="checkbox"/> Altitude	<input checked="" type="checkbox"/> AltGPS.1 <input checked="" type="checkbox"/> AltGPS.2 <input checked="" type="checkbox"/> AltGPS.3	<input checked="" type="checkbox"/> AltI.1 <input checked="" type="checkbox"/> AltI.2 <input checked="" type="checkbox"/> AltI.3	<input checked="" type="checkbox"/> AltPaADDU.1 <input checked="" type="checkbox"/> AltPaADDU.2 <input type="checkbox"/> AltRA.1	<input checked="" type="checkbox"/> AltBCADDU.1 <input checked="" type="checkbox"/> AltBCADDU.2	<input checked="" type="checkbox"/> ALTref <input checked="" type="checkbox"/> ALTPA.d <input checked="" type="checkbox"/> ALTGA.d	
<input checked="" type="checkbox"/> Ground Speed	<input checked="" type="checkbox"/> GsXI.1 <input checked="" type="checkbox"/> GsXI.2 <input checked="" type="checkbox"/> GsXI.3 <input checked="" type="checkbox"/> GsXGPS.1 <input checked="" type="checkbox"/> GsXGPS.2 <input type="checkbox"/> GsXGPS.3	<input checked="" type="checkbox"/> GsYI.1 <input checked="" type="checkbox"/> GsYI.2 <input checked="" type="checkbox"/> GsYI.3 <input checked="" type="checkbox"/> GsYGPS.1 <input checked="" type="checkbox"/> GsYGPS.2 <input type="checkbox"/> GsYGPS.3	<input checked="" type="checkbox"/> GsZI.1 <input checked="" type="checkbox"/> GsZI.2 <input checked="" type="checkbox"/> GsZI.3 <input checked="" type="checkbox"/> GsZGPS.1 <input checked="" type="checkbox"/> GsZGPS.2 <input type="checkbox"/> GsZGPS.3	<input checked="" type="checkbox"/> GsGPS.1 <input checked="" type="checkbox"/> GsGPS.2 <input type="checkbox"/> GsGPS.3	<input checked="" type="checkbox"/> GSXref <input checked="" type="checkbox"/> GSYref <input checked="" type="checkbox"/> GSZref	
<input checked="" type="checkbox"/> Lat / Lon	<input checked="" type="checkbox"/> LatGPS.1 <input checked="" type="checkbox"/> LatGPS.2 <input checked="" type="checkbox"/> LatGPS.3	<input checked="" type="checkbox"/> LatI.1 <input checked="" type="checkbox"/> LatI.2	<input checked="" type="checkbox"/> LongGPS.1 <input checked="" type="checkbox"/> LongGPS.2 <input checked="" type="checkbox"/> LongGPS.3	<input checked="" type="checkbox"/> LonI.1 <input checked="" type="checkbox"/> LonI.2	<input checked="" type="checkbox"/> LATref <input checked="" type="checkbox"/> LONref	
<input checked="" type="checkbox"/> Pressure	<input checked="" type="checkbox"/> PDALPHA.1 <input checked="" type="checkbox"/> PDALPHA.2 <input checked="" type="checkbox"/> PDBETA.1 <input checked="" type="checkbox"/> PDBETA.2	<input checked="" type="checkbox"/> PQALPHA.1 <input checked="" type="checkbox"/> PQALPHA.2 <input checked="" type="checkbox"/> PQBETA.1 <input checked="" type="checkbox"/> PQBETA.2	<input checked="" type="checkbox"/> PQM.1 <input checked="" type="checkbox"/> PQM.2	<input checked="" type="checkbox"/> PSM.1 <input checked="" type="checkbox"/> PSM.2	<input checked="" type="checkbox"/> PDLAPHaref <input checked="" type="checkbox"/> PDBETAref <input checked="" type="checkbox"/> PQALPHaref <input checked="" type="checkbox"/> PQBETAref <input checked="" type="checkbox"/> PQMref <input checked="" type="checkbox"/> PQ.c <input checked="" type="checkbox"/> PSMref <input checked="" type="checkbox"/> PS.c	
<input checked="" type="checkbox"/> Air Speed	<input checked="" type="checkbox"/> CasADDU.1	<input checked="" type="checkbox"/> TasADDU.1			<input checked="" type="checkbox"/> IAS.d <input checked="" type="checkbox"/> TAS.d	
<input checked="" type="checkbox"/> Pitch / Roll	<input checked="" type="checkbox"/> PitchI.1 <input checked="" type="checkbox"/> PitchI.2 <input checked="" type="checkbox"/> PitchI.3	<input checked="" type="checkbox"/> PitchRateI.1 <input checked="" type="checkbox"/> PitchRateI.2 <input checked="" type="checkbox"/> PitchRateI.3	<input checked="" type="checkbox"/> RollI.1 <input checked="" type="checkbox"/> RollI.2 <input checked="" type="checkbox"/> RollI.3	<input checked="" type="checkbox"/> RollRateI.1 <input checked="" type="checkbox"/> RollRateI.2 <input checked="" type="checkbox"/> RollRateI.3	<input checked="" type="checkbox"/> PITCHref <input checked="" type="checkbox"/> ROLLref	
<input checked="" type="checkbox"/> Temp / Dewpt	<input checked="" type="checkbox"/> TTM.1 <input type="checkbox"/> TTM.2 <input checked="" type="checkbox"/> TTM.3	<input checked="" type="checkbox"/> TTM.4	<input checked="" type="checkbox"/> TDM.1 <input checked="" type="checkbox"/> TDM.2		<input checked="" type="checkbox"/> TD.c <input checked="" type="checkbox"/> TDMref <input checked="" type="checkbox"/> TTMref <input checked="" type="checkbox"/> TA.d	
<input checked="" type="checkbox"/> Misc. (Must check)					<input checked="" type="checkbox"/> UWZ.d <input checked="" type="checkbox"/> DPJ_WSZ <input checked="" type="checkbox"/> WS.d <input checked="" type="checkbox"/> WD.d <input checked="" type="checkbox"/> HUM	

FLID_Mission_Documents.pdf:	
<input checked="" type="checkbox"/>	Error Summary
<input checked="" type="checkbox"/>	Crew Manifest
<input checked="" type="checkbox"/>	QC Checklist
<input checked="" type="checkbox"/>	Dropwindsonde Log(s) - AVAPS and FD if completed
<input checked="" type="checkbox"/>	Flight Track
<input checked="" type="checkbox"/>	Miscellaneous FD Notes

QC Key	
Not checked	<input type="checkbox"/>
Valid	<input checked="" type="checkbox"/>
Errors (note)	<input checked="" type="checkbox"/>

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: 20220901N1

ASPEN Operator/Flight Director(s):

DE SOLO / HENNING

Mission ID: WHWXA

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	KWBC #	Sonde Issues?
1	1	190010	31078	1	15.4	-59.9	SCT	1009.1	<u>SURFACE WINDS:</u> 025° @ 11 kts	1953	✓✓
2	2	191905	30187	2	15.6	-57.6	SCT	1008.3	030° @ 14 kts	2001	✓✓
3	3	193425	40278	3	17.4	-57.6	SCT	1008.9	060° @ 20 kts	2004	✓✓
4	4	194711	40455	4	17.5	-59.3	SCT	1010.2	065° @ 14 kts	2011	✓✓
5	5	200018	40119	1	17.6	-61.0	SCT	1009.7	045° @ 15 kts	2021	✓✓
6	6	201452	31064	2	19.4	-60.9	SCT	1010.9	050° @ 15 kts	2037	✓✓
7	7	202711	31092	3	19.5	-59.2	SCT	1011.3	075° @ 20 kts	2051	✓✓
8	8	203906	50294	4	19.5	-57.7	SCT	1010.9	065° @ 19 kts	2059	✓✓
9	9	205152	30191	1	19.5	-56.1	OVC	1010.4	065° @ 19 kts	2110	✓✓
10	10	210407	50249	2	19.6	-54.6	OVC	1010.4	075° @ 20 kts	2130	✓✓
11	11	211852	40281	3	21.4	-54.6	OVC	1011.5	070° @ 19 kts	2140	✓✓
12	12	2131	40281	4	21.4	-54.6	OVC	1011.5	NOISY WINDS, BAD GPS	2140	✓✓
13	12	213231	40280	1	21.5	-56.3	SCT	1012.8	090° @ 13 kts	2151	✓✓
14	13	214428	50247	2	21.5	-57.8	SCT	1012.7	070° @ 14 kts	2203	✓✓
15	14	215740	31067	3	21.5	-59.4	SCT	1012.3	055° @ 15 kts	2219	✓✓
16	15	221037	40840	4	21.5	-61.0	SCT	1013.5	070° @ 15 kts	2229	✓✓
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38											

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

Obs Xmitted 15

Obs Missed 0

of sondes launched 16

of bad sondes 1

AVAPS Drop Log

Project: HURR 2022

Mission: ACSI

Flight ID: 20220901N1

Take Off: _____

Landing: _____

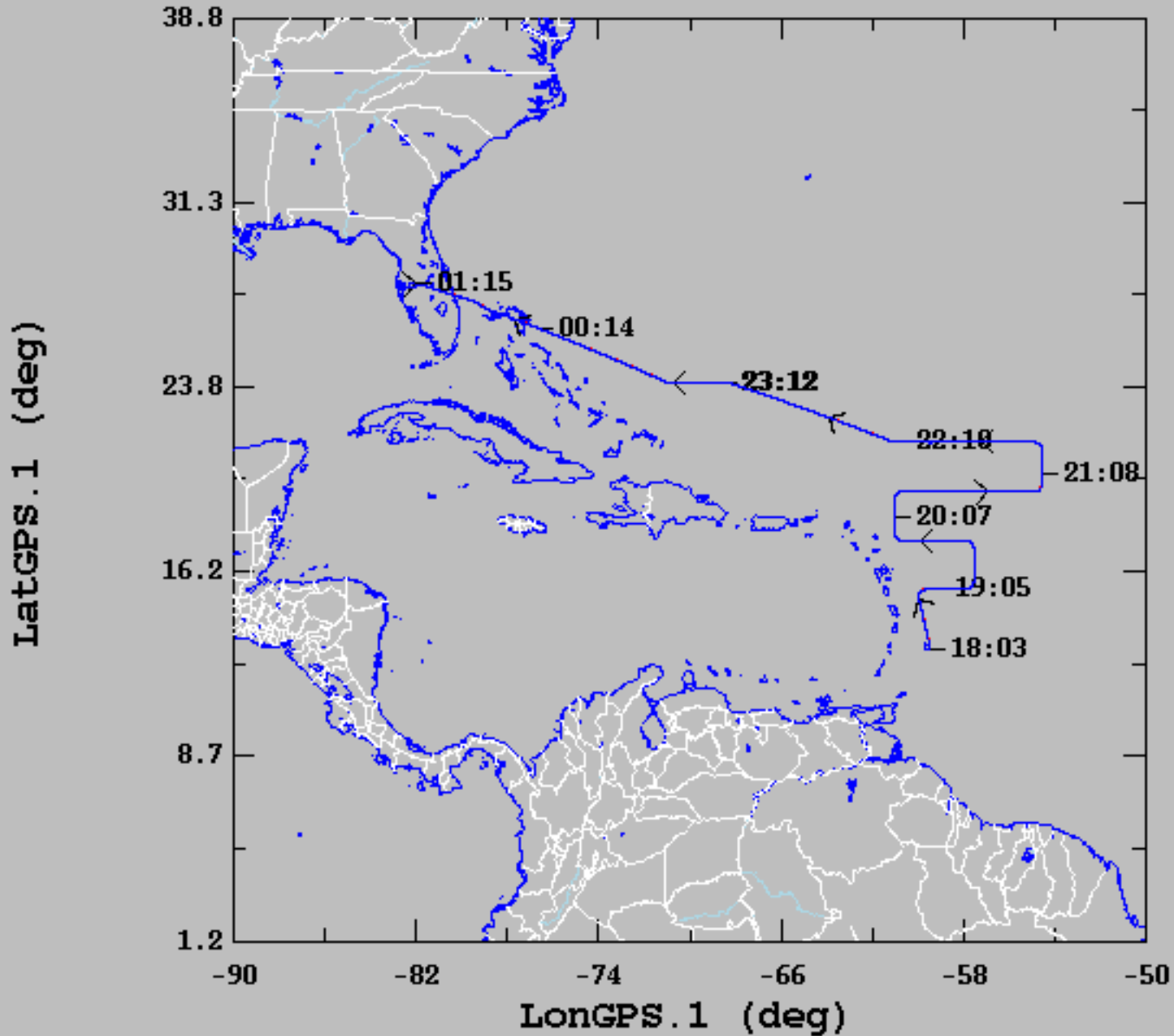
Flt Dir: _____

Launcher S/N: 2

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	210 731 078	1	-1.1	1900	GDS	NWS	1	✓
2	211 330 187	2	-1.7	1919	↓	↓	2	✓
3	210 340 278	3	-1.9	1934	↓	↓	3	✓
4	210 440 455	4	-1.6	1947			4	✓
5	210 440 119	1	-1.6	2000			5	✓
6	210 731 064	2	-1.7	2014			6	✓
7	210 731 092	3	-1.4	2027			7	✓
8	210 850 294	4	-1.5	2039			8	✓
9	211 330 191	1	-1.7	2051			9	✓
10	210 550 249	2	-1.0	2104	CFL		10	✓
11	210 340 281	3	-1.0	2118			11	✓
12	210 820 532	4	-0.5	2131			12 very noisy	X
13	210 340 280	1	-0.6	2132			12b	✓
14	210 550 247	2	-1.5	2144			13	✓
15	210 731 067	3	-0.4	2157			14	✓
16	210 640 840	4	-0.9				15	✓
17	210 520 230	1	-1.0					
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9:14
9:18
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9:57
10:10

2022-09-01, 18:03:45-25:15:47



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	20.92	4.37	13.07	27.99
— LongGPS.1 (deg), 1 s/sec	-64.47	8.38	-82.24	-54.50
— LatI.1 (deg), 1 s/sec	20.93	4.37	13.07	28.00
— LonI.1 (deg), 1 s/sec	-64.46	8.37	-82.23	-54.51