

N49RF ERROR SUMMARY
20200822N2

Flight ID: 20200822N2

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.2
Differential Sideslip Pressure Probe	PDBETA.2
Dynamic Attack Pressure Probe	PQALPHA.2
Dynamic Sideslip Pressure Probe	PQBETA.2

Flight Directory acdata/2020/MET/20200822N2

Local Met Data	Takeoff KLAL (1727Z)	Landing KLAL (0106Z)
Dynamic Corrections		Yes
AttackAngleIntercept		3.97801
AttackAngleSlope		3.86172
SlipAngleIntercept		1.258
SlipAngleSlope		6.69941
AttackAngleIntercept2		5.04641
AttackAngleSlope2		5.41847
SlipAngleIntercept2		0.905
SlipAngleSlope2		6.78464

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.

Intermittent failures on AltRa.1 between 2300-2330Z. GsGPS.3 unavailable. PQBeta.1 possibl icing between 2250-0050Z. Both TDM sensors unreliable. TDM.1 lacks sensitivity. TDM.2 exhibits persistent warm bias. All moisture quantities and derivatives suspect.

Expendable Type	# deployed	# good	# transmitted
-----	-----	-----	-----
Drosondes	30	28	28
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0

AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter / Flaherty
Phone #: 863-500-3901

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:	20200822N2	FLT #:	20-68	AC:	Mansour	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	1730Z	CP(s):	Nardi		A/C Takeoff	1010.8	Good	Bad	Sent
To:	KLAL	ETA:	0130Z							28	2
Block Time		Flight Time		NAV:			ASOS Takeoff	KLAL 1750Z 1010.3 mb	BTs		
In:	1:14	Land:	1:07	FE(s):			A/C Land	1012.3	Good	Bad	Sent
Out:	17:21	T/O:	17:28	FD(s):	Carpenter	Visitors:	ASOS Land	KLAL 0050Z 1011.9 mb	0	0	0
Total:	7.9	Total:	7.7	SSA:	Defeo						
Sponsoring Org:		NWS / NHC		AVAPS:	Patel		Storm Number ID:		AL132020		
Program:		PHS		SEB:			(ie: AL072012)				
Purpose:		TS Laura Surveillance		MX:			TCPOD/WSPOD Mission		NOAA9 0513A LAURA		
							(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

Overall Assessment	Major instrument issue(s) - significant mission impact.
--------------------	---

Flight ID:	20200822N2
Flight Director(s):	Carpenter / Flaherty
Mission:	Tasked/Operational
UWZ.d mean:	0.19

Pressure Comparison		
	T/O	Land
Aircraft	1010.8	1012.3
Tower	KLAL 1750Z 1010.3 mb	KLAL 0050Z 1011.9 mb

	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	✓ LongGPS.1	✓ LonI.1		✓ LATref	
	✓ LatGPS.2	✓ LatI.2	✓ LongGPS.2	✓ LonI.2		✓ LONref	
	✓ LatGPS.3		✓ LongGPS.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	✓ PitchRatel.1	✓ RollI.1	✓ RollRatel.1		✓ PITCHref	
	✓ PitchI.2	✓ PitchRatel.2	✓ RollI.2	✓ RollRatel.2		✓ ROLLref	
	✓ PitchI.3	✓ PitchRatel.3	✓ RollI.3	✓ RollRatel.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	<input type="checkbox"/>
Valid	<input checked="" type="checkbox"/>
Errors (note)	<input checked="" type="checkbox"/>

NOTES:
<p>Intermittent failures AltRa.1 between 2300-2330Z.</p> <p>GsGPS.3 unavailable.</p> <p>PQBeta.1 possible icing between 2250-0050Z.</p> <p>Both TDM sensors unreliable. TDM.1 lacks sensitivity. TDM.2 exhibits persistent warm bias. All moisture quantities and derivatives suspect.</p>

AOC GPS Dropwindsonde Log (updated Mar 2019)

28/30

Flight ID: 20200822N2
 Mission ID: 0513A

ASPEN Operator/Flight Director(s): FLAHERTY / CARPENTER
 Storm Name/Track: TS LAURA SURV

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	182210	30920	1			SCT BLW	1014.8		1909	
2	2	183718	20757	2			↓	1014.7		1919	
3	3	185251	40719	3			↓	1013.5		1921	
4	4	190533	20831	4			↓	1011.4		1938	
5	5	192337	20536	1			BKN BLW	1011.2		1954	
6	6	193924	20572	2			BKN "	1013.2		2018	
7	7	195504	21117	3			SCT BLW	1014.8	ADJ FOR SFC WINDS	2021	
8	8	201029	20538	4			FEW BLW	1014.4	ADJ FOR SFC WINDS	2031	
9	X	202626	11574	1	---	---	SCT BLW	---	FAST FALL	---	✓
10	9	202740	10275	2			"		BACKUP	2138	
11	10	204139	10567	3			"	1014.7		2133	
12	11	205804	31166	4			"	1012.6		2143	
13	12	210624	20833	1			"	1010.6		2159	
14	13	211854	30007	2			BKN BLW	1009.8		2203	
15	14	212904	20328	3			OK BLW	1012.0		2208	
16	15	213910	10362	4			"	1012.7		2212	
17	16	215021	40221	1			"	1010.9		2216	
18	17	215949	40573	2			"	1009.7		2221	
19	18	221255	10595	3			"	1009.3		2248	
20	19	22156	40717	4			"	1009.7		2250	
21	20	223142	40177	1			BKN BLW	1007.8		2254	
22	21	224157	20282	2			"	1007.9		2306	
23	22	225734	21192	3			SCT BLW	1008.1		2340	
24	23	230206	10296	4			"	1007.2		2344	
25	24	231453	40218	1			"	1008.5		2346	
26	X	233629		2	---	---	"	---	NORTH	---	✓
27	25	233718	20814	3			"	1012.1	BACK UP	0005	
28	26	234820	10572	4			DARK	1012.0		0021	
29	27	235720	11572	1			"	1013.5		0025	
30	28	001928	10605	2			"	1014.5	LAST REPORT	0043	
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:

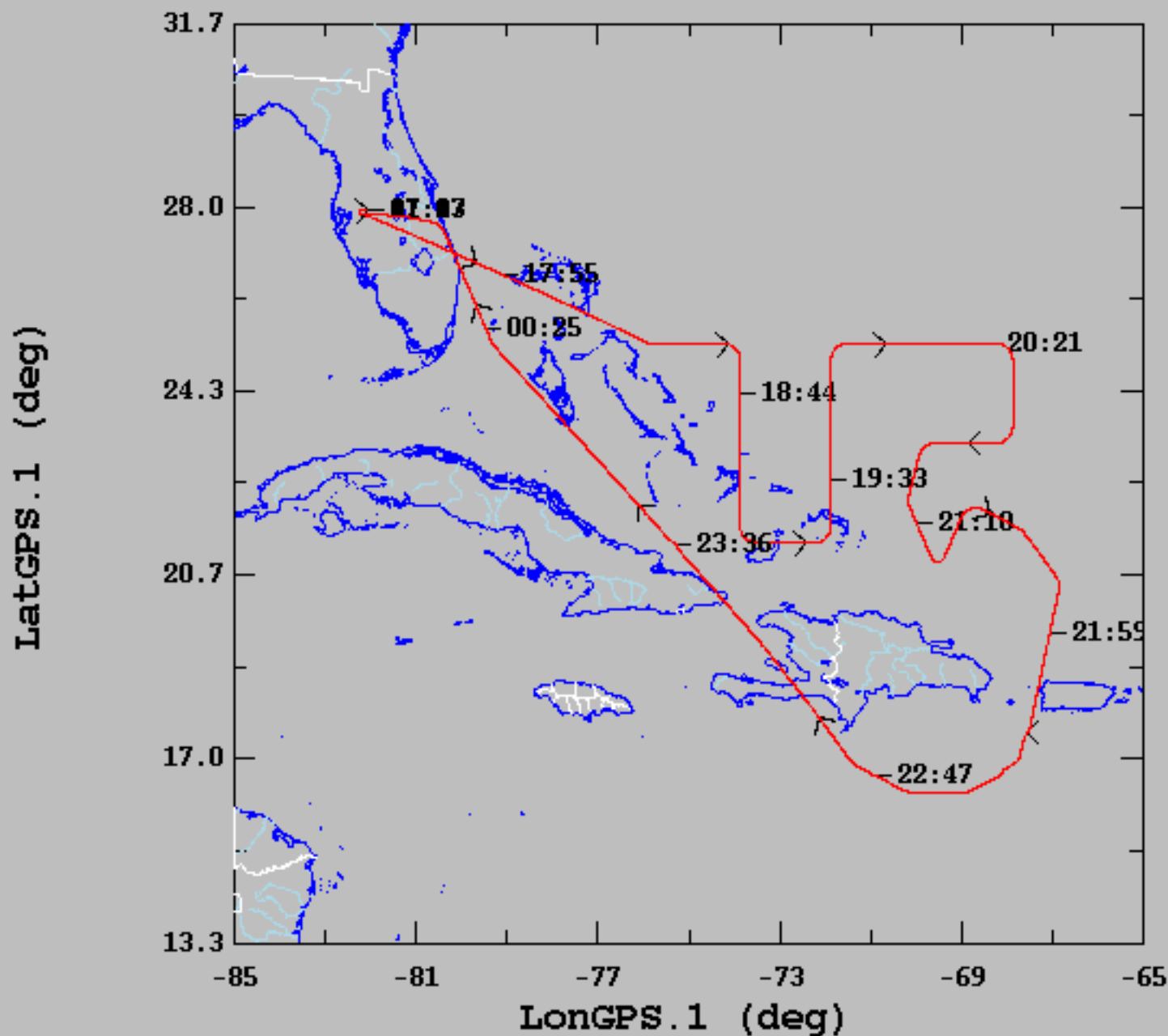
Obs Xmitted 28

Obs Missed

of sondes launched 30

of bad sondes 2

08/22/2020, 17:07:05-25:13:55



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	23.16	3.36	16.28	27.99
— LongGPS.1 (deg), 1 s/sec	-73.82	4.83	-82.24	-66.83