

N49RF ERROR SUMMARY
20210927N1

Flight ID: 20210927N1

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/2021/MET/20210927N1

Local Met Data	Takeoff TISX (1722Z)	Landing TISX (0146Z)
Dynamic Corrections		Yes
AttackAngleIntercept		6.4652
AttackAngleSlope		7.59375
SlipAngleIntercept		0.925
SlipAngleSlope		6.56381
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.

.1 and .2 GPS parameters data "stair step"
TTM.3 oscillates
TDM.1 unrepresentative

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	35	32	32
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Kalen / Flaherty
Phone #: 863-500-3962

ACAT-4 Version = 7.4

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

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20210927N1	FLT #:		AC:	Norman	Scientists:	Pressure		Dropsondes		
From:	TISX	ETD:		CP(s):	DeTriquet		A/C Takeoff		Good	Bad	Sent
To:	TISX	ETA:								32	3
Block Time		Flight Time		NAV:			ASOS Takeoff		BTs		
In:	0146z	Land:	0142z	FE(s):			A/C Land		Good	Bad	Sent
Out:	1715z	T/O:	1722z	FD(s):	Kalen		ASOS Land				
Total:	8.5	Total:	8.3	SSA:	Defeo	Visitors:					
				AVAPS:	Patel						
Sponsoring Org:	NWS			SEB:			Storm Number ID:		AL182021		
Program:	PHS						(ie: AL072012)				
Purpose:	Hurricane Surveillance			MX:			TCPOD/WSPOD Mission		0518A SAM		
						(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:	20210927N1
Flight Director(s)	Kalen / Flaherty
UWZ.d mean:	0.05

Pressure Comparison		
	T/O	Land
Aircraft	1014.5	1013.7
Tower	1012.0	1012.4

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

.1 and .2 GPS parameters data "stair step"
 TTM.3 oscillates
 TDM.1 unrepresentative

AOC GPS Dropwindsonde Log (updated Mar 2019)

32/35

Flight ID: 20210927N1

ASPEN Operator/Flight Director(s): FLAHERTY / KALEN

Mission ID: 0518A SAM

Storm Name/Track: HURR SAM 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	1837	10276	1	16.3	-55.8	FEW BLW	1012.5		1905	
2	2	1848	40580	2	15.1	-55.5	FEW BLW	1011.7		1923	
3	3	1859	40589	3	14.0	-54.6	SCT BLW	1012.2		1938	
4	4	1910	10094	4	13.5	-53.5	SCT BLW	1011.6			
5	5	1920	10089	1	13.5	-52.1	SCT BLW	1011.1	949.25 SEC (POST SPLASH)	2003	
6	6	1931	10445	2	14.0	-57.0	BKN BLW	1011.9		2007	
7	7	1944	10439	3	15.1	-50.0	BKN BLW	1012.3		2009	
8	8	1955	10392	4	16.4	-49.8	OVC BLW	1012.0		2059	
9	9	2007	50783	1			OVC BLW	1013.2		2118	
10	10	2018	10540	2	18.7	-50.9	OVC BLW	1013.6		2024	
11	11	2029	40625	3	19.3	-52.1	OVC BLW	1013.7		2136	
12	12	2039	50589	4	19.4	-53.4	OVC BLW	1013.8		2147	
13	13	2050	20452	1	20.8	-53.3	SCT BLW	1015.1		2149	
14	14	2102	10179	2	22.2	-53.2	SCT BLW	1014.7		2155	
15	15	2116	10173	3	22.4	-51.4	SCT BLW	1014.7		2158	
16	16	2131	31152	4	24.2	-51.4	SCT BLW	1016.7		2159	
17	17	2146	21037	1	24.2	-53.3	SCT BLW	1016.4		2239	
18	18	2210	31110	2	22.2	-55.3	SCT BLW	1016.5		2242	
19	19	2228	50606	3	20.3	-55.3	DARK	1015.2		2307	
20	X			4					FAST FALL		(Y)
21	20	2245	21036	1	18.6	-54.3		1014.0	BACK UP	2316	
22	X			2					FAST FALL		(Y)
23	21	2300	31108	3	17.8	-52.7		1010.6	BACK-UP	2319	
24	X			4					FAST FALL		(Y)
25	22	2311	31148	1	17.2	-57.6		1010.8		2353	
26	23	2319	30589	2	16.4	-50.9		1012.2		2359	
27	24	2332	20979	3	15.3	-51.7		1012.0		0005	
28	25	2341	20946	4	14.9	-52.8		1011.0		0025	
29	26	2350	10271	1	15.3	-53.8		1010.8		0029	
30	27	2359	20981	2	16.4	-54.2		1009.3		0032	
31	28	0008	30592	3	17.4	-54.0		1010.4		0044	
32	29	0020	30911	4	17.7	-55.5		1013.8		0101	
33	30	0035	30079	1	17.4	-57.3		1014.7		0107	
34	31	0050	20057	2	17.4	-59.2		1014.7		0112	
35	32	0103	30347	3	17.5	-60.8		1014.1	LAST	0122	
36											
37											
38											

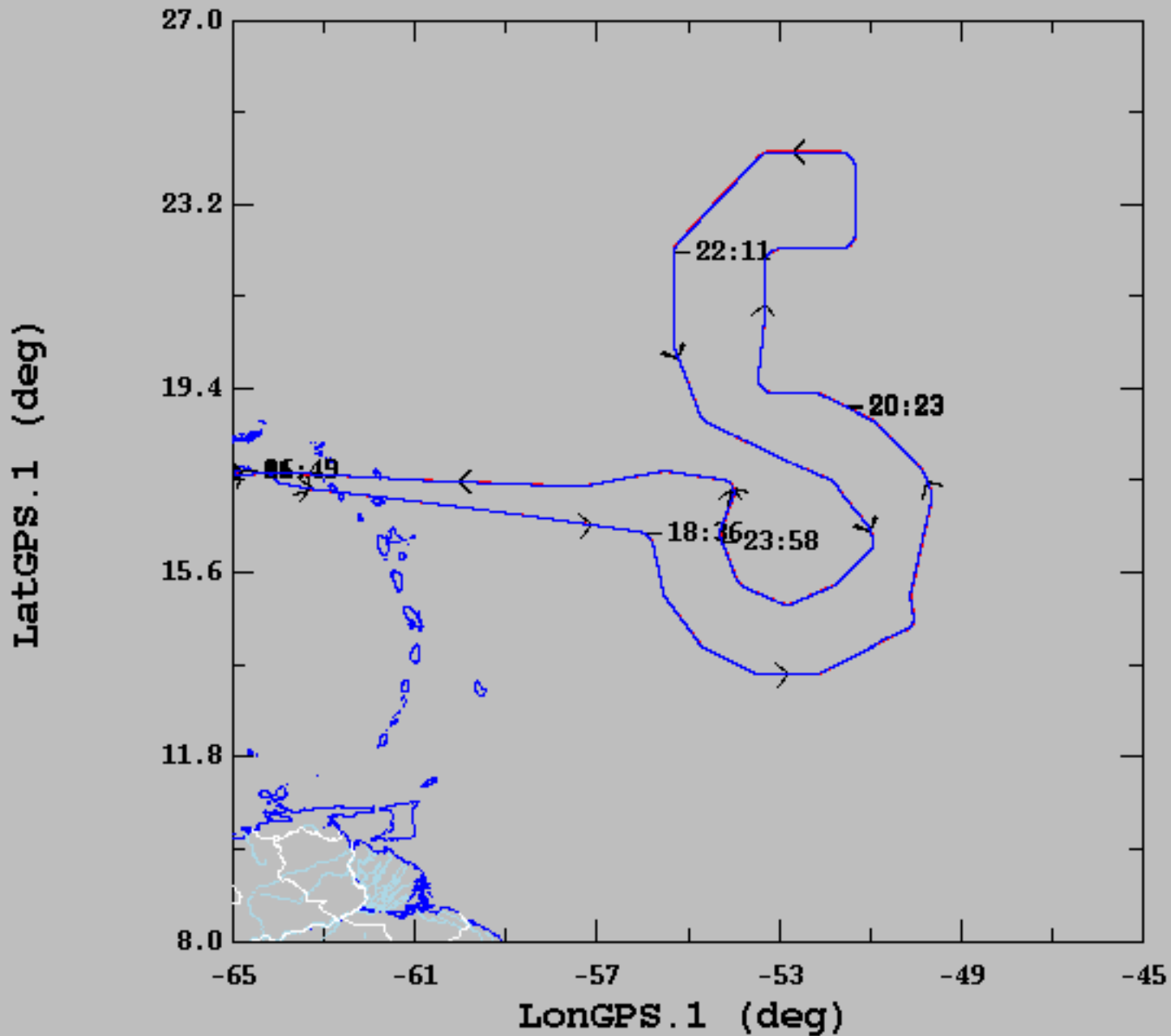
ASPEN Operator will ensure this form is delivered to the AOC Flight Director to be archived

COMMENTS:

LOGOFF
CBL
DEWY

Obs Xmitted: 32
Obs Missed: 0
of sondes launched: 35
of bad sondes: 3

2021-09-27, 16:49:19-25:45:46



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	18.01	2.69	13.48	24.30
— LongGPS.1 (deg), 1 s/sec	-55.87	4.62	-64.93	-49.64
— LatI.1 (deg), 1 s/sec	18.02	2.69	13.48	24.31
— LonI.1 (deg), 1 s/sec	-55.86	4.62	-64.92	-49.63