

N49RF ERROR SUMMARY
20220924N1

Flight ID: 20220924N1

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/20220924N1

Local Met Data	Takeoff KLAL (1951Z)	Landing KLAL (0137Z)
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.

Several data system restarts. Majority of flight data found in .B and .E files.

Frequent, short lived gaps in many of the data fields.

PQBETA.2 deviates from 22:20 Z to end of flight.

TTM.3 is noisy, particularly during beginning of flight.

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

DPJ_WSZ is missing in .BC file and has frequent, larger gaps of data throughout flight in .EC file.

No LatGPS.3 and LonGPS.3 for the .BC file.

Expendable Type	# deployed	# good	# transmitted
-----	-----	-----	-----
Dropsondes	39	35	35
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Morgan/de Solo

Phone #: 8635003982

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:	20220924N1	FLT #:	0509A IAN	AC:	Mansour	Scientists:		Pressure		Dropsondes				
From:	KLAL	ETD:	1730Z	CP(s):	Waddington			A/C Takeoff	1015.8	Good	Bad	Sent		
To:	KLAL	ETA:		NAV:				ASOS Takeoff		35	4	35		
Block Time		Flight Time		FE(s):				BTs						
In:	0144	Land:	0137Z	FD(s):				A/C Land		Good	Bad	Sent		
Out:	1639 1739	T/O:	1454Z 1754	FD(s):	Morgan De Solo	Visitors:		ASOS Land						
Total:	4.18.1	Total:	8.77.7	SSA:	Mascaro	Parrish		Storm Number ID:		AL092022				
Sponsoring Org:	NWS			AVAPS:	Patel			(ie: AL072012)		TCPOD/WSPOD Mission			0509A IAN	
Program:	INHE			SEB:	Flaherty			(ie: NOAA2 2418A SANDY)						
Purpose:	Surveillance			MX:		OBSERVATIONS								
AS REQUIRED BY ORM			Y	N	REMARKS			Fix Number	Obs Number	Fix Time	SLP			
VOLCANIC ASH				X				1						
SCIENCE MISSION WITHIN BDRY LAYER				X				2						
LACK OF PRECIPITATION				X				3						
RELATIVE HUMIDITY ≥ 80%				X				4						
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										
								Pennies:						

*Highlighted items must be completed before departure.

Remarks:

G-IV QC Checklist

Flight ID:	20220924N1
Flight Director(s)	Morgan/de Solo

UWZ.d mean:	0.1
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Pressure Comparison		
	T/O	Land
Aircraft	1010.4	N/A
Tower	1011.6	1010.6

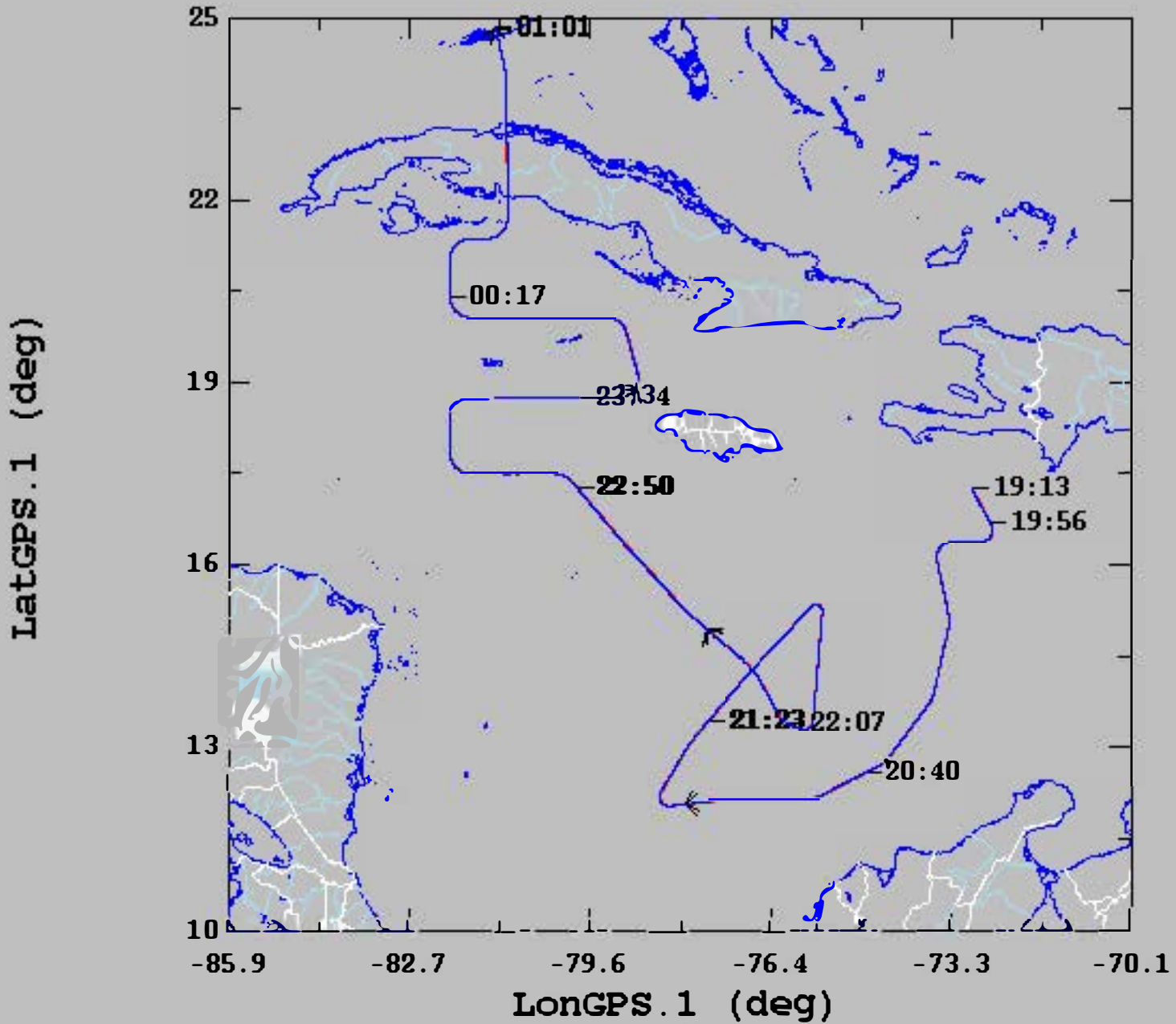
	Raw 1Hz Mean File Parameters					C File Parameters	
<input checked="" type="checkbox"/> Accelerometer	<input checked="" type="checkbox"/> AccAXI.1	<input checked="" type="checkbox"/> AccAYI.1	<input checked="" type="checkbox"/> AccAZI.1			<input checked="" type="checkbox"/> AccZref	
	<input checked="" 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 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 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:
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2022-09-24, 18:30:00-25:01:00



Due to data system restart, the flight track up until 19:13 Z is not shown.

	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	16.72	3.35	12.04	24.84
— LonGPS.1 (deg), 1 s/sec	-78.04	2.82	-82.00	-72.54
— LatI.1 (deg), 1 s/sec	16.72	3.35	12.03	24.84
— LonI.1 (deg), 1 s/sec	-78.03	2.82	-82.01	-72.53