

N49RF ERROR SUMMARY
20190904N1

Flight ID: 20190904N1

Sensor or System -----	Number or Name -----
Static Pressure Probe	PSM.2
Dynamic Pressure Probe	PQM.2
Total Temperature Probe	TTM.4
Dewpoint Temp. Probe	TDM.1
Vertical Accelerometer	AccZI.2
Altimeter	AltGPS.2
INE Selection	2
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/2019/MET/20190904N1

Local Met Data	Takeoff KLAL (0551Z)	Landing KLAL (1312Z)
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.

GsGPS.3 unavailable. TTM.2 unavailable. Unrealistic RH spikes periodically.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	29	27	27
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Carpenter / Henning
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:	20190904N1	FLT #:	19-106	AC:	Twining	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	05:30Z	CP(s):	Nardi		A/C Takeoff	1002.7	Good	Bad	Sent
To:	KLAL	ETA:	13:30Z		MacIntyre				27	2	27
Block Time		Flight Time		Nav(s):			ASOS Takeoff	KLAL 0550Z 1002.8 mb	BTs		
In:	13:20	Land:	13:12	FE(s)			A/C Land	1005.3	Good	Bad	Sent
Out:	5:44	T/O:	5:52	FD(s):	Carpenter	Visitors:	ASOS Land	KLAL 1245Z 1004.8 mb	0	0	0
Total:	7.60	Total:	7.33		Parrish						
Sponsoring Org:		NWS		SEB:	Paul		Storm Number ID:		AL052019		
					Hartberger		(ie: AL072012)				
Program:		PHS		SSA:	Miller		TCPD/WSPD Mission		NOAA9 4205A Dorian		
							(ie: NOAA2 2418A SANDY)				
Purpose:		Hurricane Dorian Surveillance		AVAPS:	Patel		OBSERVATIONS				
AS REQUIRED BY ORM			Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH				X							
SCIENCE MISSION WITHIN BDRY LAYER				X							
LACK OF PRECIPITATION				X							
RELATIVE HUMIDITY ≥ 80%			X								
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							
Gmax:				Gmin:	*Highlighted items must be completed before departure.						
Remarks:											

G-IV QC Checklist

Flight ID:	20190904N1
Flight Director(s):	Carpenter / Henning

UWZ.d mean:	0.15 post-processing
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Pressure Comparison		
	T/O	Land
Aircraft	1002.7	1005.3
Tower	KLAL 0550Z 1002.8 mb	KLAL 1245Z 1004.8 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	X GsGPS.3		✓ GSZref	
	✓ GsXGPS.1	✓ GsYGPS.1	✓ GsZGPS.1				
	✓ GsXGPS.2	✓ GsYGPS.2	✓ GsZGPS.2				
	X GsXGPS.3	X GsYGPS.3	X 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	✓ PitchRatel.1	✓ RolI.1	✓ RollRatel.1		✓ PITCHref	
	✓ PitchI.2	✓ PitchRatel.2	✓ RolI.2	✓ RollRatel.2		✓ ROLLref	
	✓ PitchI.3	✓ PitchRatel.3	✓ RolI.3	✓ RollRatel.3			
✓ Temp / Dewpt	✓ TTM.1	✓ TTM.4	✓ TDM.1			✓ TD.c	✓ TTMref
	X 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
X	Miscellaneous FD Notes

QC Key	
Not checked	☐
Valid	✓
Errors (note)	X

NOTES:
GsGPS.3 unavailable. TTM.2 unavailable. Unrealistic RH spikes periodically.

AVAPS Drop Log

Project: Hurricane Surveillance

Mission: Dorian

Flight ID: 20190904NI

Take Off: 0130L

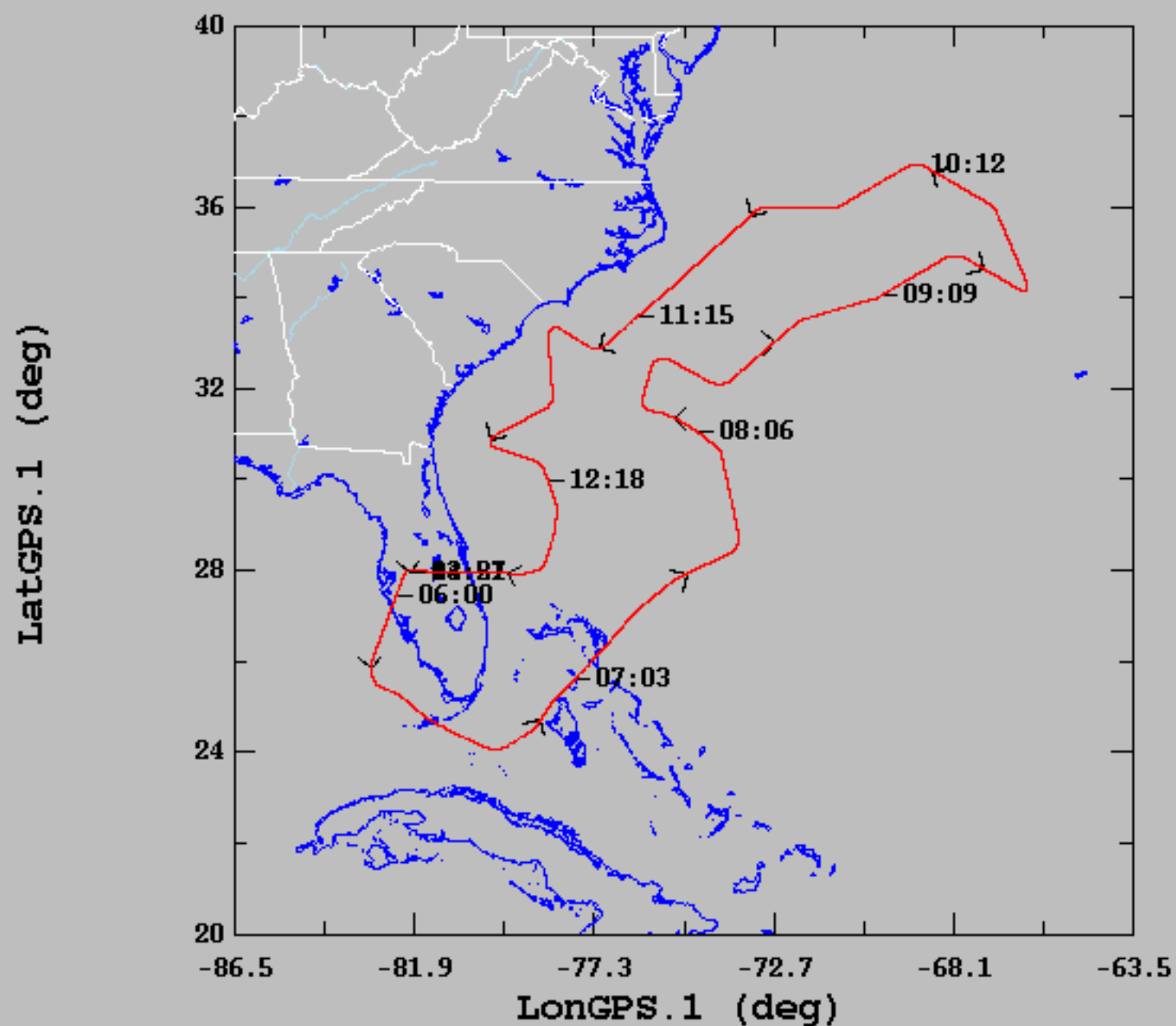
Landing: _____

Flt Dir: Rich H.

Launcher S/N: _____

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$ To	Comments	Good ?
1	185130162	1	0	0613	AJP	NWS		✓
2	191040500	2	-0.4	0617				✓
3	185130160	3	0	0640				✓
4	185130648	4	0	0702			Bad temp Humidity	x
5	185130111	1	0	0703			Back up 4	✓
6	191050237	2	0	0716				✓
7	191020560	3	-0.5	0729				✓
8	184030515	4	-0.5	0743				✓
9	185130859	1	0	0759				✓
10	191040499	2	0	0817				✓
11	185130113	3	0	0826				✓
12	191050060	4	0	0838			Bad Temp Humidity	x
13	191050426	1	0	0838			Back up 12	✓
14	191050477	2	0	0855				✓
15	191020900	3	0	0908				✓
16	185130652	4	-0.4	0923				✓
17	191020899	1	0	0936	RGH			✓
18	190930050	2	-0.5	0953	L			✓
19	191040510	3	-0.3	1010	AJP			✓
20	191020498	4	0	1028				✓
21	191040860	1	0	1043				✓
22	185130157	2	0	1105				✓
23	191050475	3	0	1127				✓
24	191050236	4	0	1135				✓
25	191020515	1	-0.4	1150				✓
26	191050476	2	0	1204				✓
27	191050421	3	0	1214				
28	191050478	4	0	1224				
29	191010648	1	0	1234				
30								
31								

09/04/2019, 04:57:06-13:21:17



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	30.85	3.71	24.07	36.95
LonGPS.1 (deg), 1 s/sec	-75.87	4.71	-83.00	-66.14