

N42RF ERROR SUMMARY
20190826H1

Flight ID: 20190826H1

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	AccZfilterI-
GPS.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/2019/MET/20190826H1

Local Met Data	Takeoff KLAL (1938Z)	Landing TISX (0000Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.27641
AttackAngleSlope		6.01899
SlipAngleIntercept		0.232
SlipAngleSlope		7.17429
AttackAngleIntercept2		2.06387
AttackAngleSlope2		6.01177
SlipAngleIntercept2		0.195
SlipAngleSlope2		6.67434

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.

PDAlpha.2 and PDBeta.2 inoperative. Pitch and Roll 3 unavailable. TTM.3 unavailable. Intermittent failures on TDM.1. TRadU.1 unavailable.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	17	17	11
Test sondes	0	0	0
AXBTS	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0

UAS	0	0	0
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Flight Director: Carpenter / Parrish

Phone #: 863-500-3901

ACAT-4 Version = 7.3

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest

FLIGHT INFORMATION				CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20190826H1	FLT #:	19-91	AC:	Kahn	Scientists:	Pressure		Dropsondes		
From:	KLAL	ETD:	18:00Z	CP(s):	Abitbol	Zawislak, Jon	A/C Takeoff	1008.5	Good	Bad	Sent
To:	TISX	ETA:	03:00Z		Rossi	Zhang, Jun	ASOS Takeoff	KLAL 1951Z 1008.0 mb	17	0	11
Block Time		Flight Time		Nav(s):	Urato	Hazelton, Andy			A/C Land	1014.7	BTs
In:	3:54	Land:	3:49	FE(s)	Darby	Chang, Paul	ASOS Land	TISX 0350Z 1013.9 mb			Good
Out:	19:29	T/O:	19:39		Sanchez	Sapp, Joe			0	0	0
Total:	8.42	Total:	8.17	FD(s):	Parrish	Visitors:	Storm Number ID: (ie: AL072012)				
Sponsoring Org:		EMC		SEB:	McAlister						
Program:		PRX		SSA:	Mascaro	Sans Souci	TCPD/WSPD Mission		AL052019		
Purpose:		TDR Mission TS Dorian					AVAPS:	Richards/T.			
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						
*Highlighted items must be completed before departure.											
Remarks:											

P-3 QC Checklist

Flight ID:	20190826H1
Flight Director(s):	Parrish / Carpenter
UWZ.d mean:	-0.02

Pressure Comparison		
	T/O	Land
Aircraft	1008.5	1014.7
Tower	KLAL 1951Z 1008.0 mb	TISX 0350Z 1013.9 mb

	Raw 1Hz Mean File Parameters				C File Parameters	
✓ Accelerometer	✓ AccAXI.1 ✓ AccAXI.2 ✓ AccAXI-GPS.1 ✓ AccAXI-GPS.2	✓ AccAYI.1 ✓ AccAYI.2 ✓ AccAYI-GPS.1 ✓ AccAYI-GPS.2	✓ AccAZI.1 ✓ AccAZI.2 ✓ AccAZI-GPS.1 ✓ AccAZI-GPS.2	✓ AccZfilter-GPS.1 ✓ AccZfilter-GPS.2	✓ AccZref	
✓ Altitude	✓ AltGPS.1 ✓ AltGPS.2 ✓ AltGPS.3 ✓ AltGPS.4	✓ AltI-GPS.1 ✓ AltI-GPS.2	✓ AltPaADDU.1 ✓ AltBCADDU.1	✓ AltRA.1 ✓ AltRA.2	✓ ALTref ✓ ALTPA.d ✓ ALTGA.d	✓ AltRA1.c ✓ AltRA2.c
✓ Ground Speed	✓ GsXI-GPS.1 ✓ GsXI-GPS.2	✓ GsYI-GPS.1 ✓ GsYI-GPS.2	✓ GsZI-GPS.1 ✓ GsZI-GPS.2		✓ GSXref ✓ GSYref ✓ GSZref	
✓ Lat / Lon	✓ LatGPS.1 ✓ LatGPS.2 ✓ LatGPS.3 ✓ LatGPS.4	✓ LatI-GPS.1 ✓ LatI-GPS.2	✓ LonGPS.1 ✓ LonGPS.2 ✓ LonGPS.3 ✓ LonGPS.4	✓ LonI-GPS.1 ✓ LonI-GPS.2	✓ LATref ✓ LONref	
✓ Pressure	✓ PDALPHA.1 ✗ PDALPHA.2 ✓ PDBETA.1 ✗ PDBETA.2	✓ PQALPHA.1 ✓ PQBETA.1	✓ PQM.1 ✓ PQM.2 ✓ PQM.3 ✓ PQM.4	✓ PSM.1 ✓ PSM.2 ✓ PTM.1	✓ PDLAPHaref ✓ PDBETAref ✓ PQALPHAref ✓ PQBETAref	✓ PQMref ✓ PQ.c ✓ PSMref ✓ PS.c
✓ Air Speed	✓ CasADDU.1	✓ TasADDU.1	✓ IasADDU.1		✓ IAS.d	✓ TAS.d
✓ Pitch / Roll	✓ PitchI.1 ✓ PitchI.2 ✗ PitchI.3	✓ PitchRateI.1 ✓ PitchRateI.2 ✗ PitchRateI.3	✓ RollI.1 ✓ RollI.2 ✗ RollI.3	✓ RollRateI.1 ✓ RollRateI.2 ✗ RollRateI.3	✓ PITCHref ✓ ROLLref	
✓ Temp / Dewpt	✓ TTM.1 ✓ TTM.2 ✗ TTM.3	✗ TDM.1 ✓ TDM.2 ✓ TDM.3	✓ TRadD.1 ✓ TRadS.1 ✗ TRadU.1		✓ TD.c ✓ TDMref	✓ TTMref ✓ TA.d
✓ Misc. (Must check)					✓ UWZ.d ✓ DPJ_WSZ ✓ HUM	✓ WS.d ✓ WD.d

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	☐
Valid	☒
Errors (note)	✗

NOTES:

PDApha.2 and PDBeta.2 inoperative.
 Pitch.3 and Roll.3 unavailable.
 TTM.3 unavailable.
 Intermittent failures TDM.1
 TRadU.1 unavailable.

NOAA • AOC • SED N42RF AVAPS DROP LOG

Lead Tech: Mike Mascaro

Project: Hurricane 2019

Mission:

TS Dorian St. John

Flight ID: 20180826H1

Take Off: _____

Landing: _____

Flt Dir: Parrish / Carpenter

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	182310357	1	-0.8	2213	TimR	NWS	DP 1 enroute	✓
2	161635115	5	-0.8	2213		AOC	Mini DP1 enroute	✓
3	182530334	2	-0.5	2234		NWS	DP 2 enroute	✓
4	182310547	1	-0.3	0040			IP 1st Pass	✓
5	182340109	2	-0.4	0050		NWS	Mid Pt. INBD	✓
6	151255005	5	-0.9	0051		AOC	Mini Mid Pt. INBD	✓
7	182740540	3	-0.8	0101		NWS	Center 1st Pass	✓
8	151325159	6	-1.1	0102		AOC	Mini Center	✓
9	182630153	1	-0.6	0113		NWS	Mid Pt. OTBD	✓
10	161635111	7	-1.0	0114		AOC	Mini Mid Pt. OTBD	✓
11	182221088	1	-0.5	0124		NWS	End Pt 1st Pass	✓
12	182530411	1	-0.5	0155		NWS	IP 2nd Pass	✓
13	182340124	2	-0.8	020632		NWS	Mid Pt 2nd INBD	✓
14	160745033	5	-1.1	020649		AOC	Mini Mid. Pt. INBD	✓
15	182630061	3	-0.6	022705		NWS	Mid Pt. OTBD	✓
16	151255039	5	-1.4	022720		AOC	Mini Mid Pt. OTBD	✓
17	182340103	1	-0.7	023752		NWS	End Pt. 2nd Pass	✓
18								
19								
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31								
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33								
34								

Storm Dorian Flight ID 20190826H1 Dropsonde Scientist Jun Zhang AVAPS Operator Ted Richards Page# 1
Mission ID 0305A (exp. 0213A) Dropsonde Scientist AVAPS Operator

Storm *Dorian*
Mission ID *0305A*

Flight ID 20190826H1

Dropsonde Scientist Jun Zhang

AVAPS Operator

Toad Richard

Page# /

(Exp. 0213A)

Dropsonde Scientist

AVAPS Operator

Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (°C)	Eye/Eyewall, Rainband, etc,	Obs #
						Dir/Spd (deg/kts) h/k	Hgt (m)			
1	182310557	221312	21.2	-69.975	1014.2	88/5.7	10			01
Comments	PD									
2	161635115	221333	21.01	-69.94	1015.0	86.8/5.5	10			
Comments	mini sonde did not send									
3	182530334	223437	22.28	-67.98	1015.1	104/17.1	10			02
Comments										
4	182310557	004049	13.99	-58.10	1012.4	93/13.2	10			04
Comments	IP									
5	182340109	005056	13.50	-58.60	1011.8	94.4/12.7	10			05
Comments										
6	151255008	005114	13.45	-58.61	1011.3	102/12.6	10			
Comments	mini sonde no sent									
7	182740540	010159	13.01	-59.11	1011.2	103/11.8	10			06
Comments	center sonde									
8	151345159	010249	13.00	-59.13	1008.4	145/12.3	10			
Comments	mini sonde - no send									
9	182630153	011356	12.45	-59.20	1010.8	4.4/4.2				08
Comments										
10	161635111	011412	12.44	-59.71	1011.6	9.6/3.6	12			
Comments	mini sonde - no send									

(revised March 2019)

Storm **Dorian**
Mission ID **0305A**

Flight ID
(exp. 0213A)

Flight ID
(exp. 0213A)

Dropsonde Scientist
Dropsonde Scientist

Dropsonde Scientist
Dropsonde Scientist

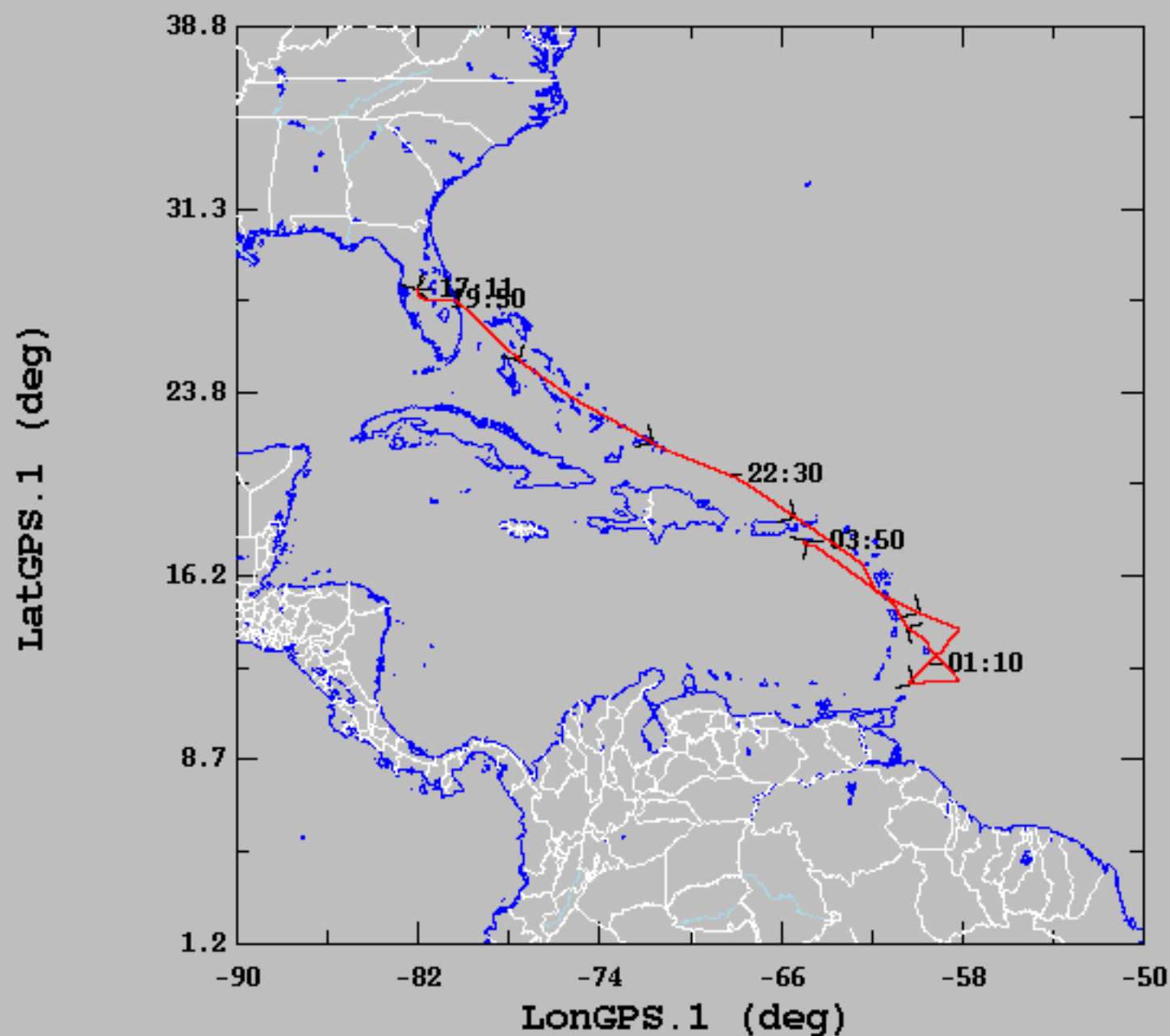
AVAPS Operator
AVAPS Operator

AVAPS Operator
AVAPS Operator

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Drop #	Sonde ID	Time UTC	Lat (°N/S)	Long (°E/W)	Sfc Pressure (mb)	Wind closest to		SST (°C)	Eye/Eyewall, Rainband, etc.	Obs #
						Dir/Spd (deg/kts)	Hgt (m)			
11	182221088	012428	11.93	-60.25	1012.3	349/1.9	10			09
Comments										
12	182530411	015520	11.93	-58.14	1012.8	170/7.9	10			11
Comments										
13	18234024	020632	12.52	-58.64	1012.0	158/9.5	10			12
Comments										
14	160745033	020649	12.53	-58.65	1011.7	167/10.2	10			
Comments Within 5 miles no land										
15	182630061	022705	13.64	-59.64	1010.8	74/14.3	10			14
Comments										
16	151255039	022720	13.65	-59.66	1011.8	81/17.5	10			
Comments Within 5 miles no land										
17	182340903	023152	14.08	-60.34	1012.9	65/11.4	10			15
Comments Large swell										
Comments										
Comments										
Comments										

08/26/2019, 17:11:00-27:50:03



	mean	sigma	min	max
LatGPS.1 (deg), 1 s/sec	20.59	5.90	11.85	27.99
LongGPS.1 (deg), 1 s/sec	-70.06	9.25	-82.03	-58.08