

N42RF ERROR SUMMARY
20190904H1 H. Dorian TDR, Ocean Winds

Flight ID: 20190904H1

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/20190904H1

Local Met Data	Takeoff KLAL (1946Z)	Landing KLAL (0211Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.31252
AttackAngleSlope		6.06758
SlipAngleIntercept		0.4295
SlipAngleSlope		7.17033

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.

No PDAlpha.2 No PDBeta.2
Used TDM.2
6 hurricane penetrations.

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

Flight Director: Parrish
Phone #: 863-500-3985

ACAT-4 Version = 7.2.2

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest												
FLIGHT INFORMATION				CREW MANIFEST				MISSION INFORMATION				
FLT ID:	20190904H1	FLT #:		AC:	Kahn ✓	Scientists:		Pressure		Dropsondes		
From:	KLAL	ETD:	20:00Z	CP(s):		Marks, Frank ✓		A/C Takeoff		Good	Bad	Sent
To:	KLAL	ETA:	04:00Z		Rossi ✓	Zhang, Xuejin ✓						
Block Time		Flight Time		Nav(s):		Sellwood, Kathryn ✓		ASOS Takeoff		BTs		
In:	0221	Land:	0212		Darby ✓	Hartung, Jakob ✓		A/C Land		Good	Bad	Sent
Out:	1940	T/O:	1946	FE(s):	Tuffnel ✓	Zelenak, Zorana ✓						
Total:	0.00	Total:	0.00	FD(s):	Parrish ✓	Sapp, Joe ✓		ASOS Land				
Sponsoring Org:	EMC			SEB:	McAlister ✓	Columbinin, Stephanie ✓		Storm Number ID:	AL072019			
Program:	PRX				Richards, T. ✓	Cook, Jamie ✓		(ie: AL142018)				
Purpose:	TDR Mission Hurricane Dorian			SSA:	Mascaro ✓	Oliver, Ian ✓		TCPOD/WSPOD Mission	NOAA2 4405A DOR			
				AVAPs				(ie: NOAA2 0614A MICHAEL)				
AS REQUIRED BY ORM				Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X			1		204354		
SCIENCE MISSION WITHIN BDRY LAYER					X			2		220119		
LACK OF PRECIPITATION					X			3		232253		
RELATIVE HUMIDITY ≥ 80%				X				4		001853		
LARGE AIR-SEA TEMP GRADIENT					X			5		005229		
HIGH SURFACE WINDS				X	X			6		011522		
LONG FETCH / DURATION OF SFC WND				X								
SEA SALT ACCRETION FORECAST					X							
SEA SALT ACCRETION OBSERVED												
*Highlighted items must be completed before departure.												
Remarks:												

N.D.
6 hurricane pennios

cat 3

N42RF_Crew_1 ▾ N42RF_Crew_2 ▾ N43RF_Crew_1 ▾ N43RF_Crew_2 ▾ N49RF_Crew_1 ▾ N49RF_Crew_2 ▾

APPENDIX 1 – P3 QC Checklist

Flight ID:	20190904H7
Flight Director(s):	Parrish

Pressure Comparison		
	T/O	Land
Aircraft	1005	1006
Tower		

UWZ.d mean: 0.13

T.O. 194615 Land 021139 Date 180353-021240 UWZ 180353!

	Raw 1Hz Mean File Parameters				C File Parameters	
Accelerometer	<input checked="" type="checkbox"/> AccAXI.1	<input checked="" type="checkbox"/> AccAYI.1	<input checked="" type="checkbox"/> AccAZI.1	<input checked="" type="checkbox"/> AccZfilter-GPS.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"/> Acc-Zfilter-GPS.2		
	<input checked="" type="checkbox"/> AccAXI-GPS.1	<input checked="" type="checkbox"/> AccAYI-GPS.1	<input checked="" type="checkbox"/> AccAZI-GPS.1			
	<input checked="" type="checkbox"/> AccAXI-GPS.2	<input checked="" type="checkbox"/> AccAYI-GPS.2	<input checked="" type="checkbox"/> AccAZI-GPS.2			
Altitude	<input checked="" type="checkbox"/> AltGPS.1	<input checked="" type="checkbox"/> AltI-GPS.1	<input checked="" type="checkbox"/> AltPaADDU.1	<input checked="" type="checkbox"/> AltRA.1	<input checked="" type="checkbox"/> ALTref	<input checked="" type="checkbox"/> AltRA1.c
	<input checked="" type="checkbox"/> AltGPS.2	<input checked="" type="checkbox"/> AltI-GPS.2	<input checked="" type="checkbox"/> AltBCADDU.1	<input checked="" type="checkbox"/> AltRA.2	<input checked="" type="checkbox"/> ALTPA.d	<input checked="" type="checkbox"/> AltRA2.c
	<input checked="" type="checkbox"/> AltGPS.3				<input checked="" type="checkbox"/> ALTGA.d	
	<input checked="" type="checkbox"/> AltGPS.4					
Ground Speed	<input checked="" type="checkbox"/> GsXI-GPS.1	<input checked="" type="checkbox"/> GsYI-GPS.1	<input checked="" type="checkbox"/> GsZI-GPS.1		<input checked="" type="checkbox"/> GSXref	
	<input checked="" type="checkbox"/> GsXI-GPS.2	<input checked="" type="checkbox"/> GsYI-GPS.2	<input checked="" type="checkbox"/> GsZI-GPS.2		<input checked="" type="checkbox"/> GSYref	
					<input checked="" type="checkbox"/> GSZref	
Lat/Lon	<input checked="" type="checkbox"/> LatGPS.1	<input checked="" type="checkbox"/> Lati-GPS.1	<input checked="" type="checkbox"/> LonGPS.1	<input checked="" type="checkbox"/> Loni-GPS.1	<input checked="" type="checkbox"/> LATref	
	<input checked="" type="checkbox"/> LatGPS.2	<input checked="" type="checkbox"/> Lati-GPS.2	<input checked="" type="checkbox"/> LonGPS.2	<input checked="" type="checkbox"/> Loni-GPS.2	<input checked="" type="checkbox"/> LONref	
	<input checked="" type="checkbox"/> LatGPS.3		<input checked="" type="checkbox"/> LonGPS.3			
	<input checked="" type="checkbox"/> LatGPS.4		<input checked="" type="checkbox"/> LatGPS.4			
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"/> PDALPHAref	<input checked="" type="checkbox"/> PQMref
	<input checked="" type="checkbox"/> PDALPHA.2	<input checked="" type="checkbox"/> PQBETA.1	<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"/> PQM.3	<input checked="" type="checkbox"/> PTM.1	<input checked="" type="checkbox"/> PQALPHAref	<input checked="" type="checkbox"/> PSMref
	<input checked="" type="checkbox"/> PDBETA.2		<input checked="" type="checkbox"/> PQM.4		<input checked="" type="checkbox"/> PQBETAref	<input checked="" type="checkbox"/> PS.c
Air Speed	<input checked="" type="checkbox"/> CasADDU.1	<input checked="" type="checkbox"/> TasADDU.1	<input checked="" type="checkbox"/> IasADDU.1		<input checked="" type="checkbox"/> IAS.d	<input checked="" type="checkbox"/> TAS.d
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		
Temp/Dewpt	<input checked="" type="checkbox"/> TTM.1	<input checked="" type="checkbox"/> TDM.1	<input checked="" type="checkbox"/> TRadD.1		<input checked="" type="checkbox"/> TD.c	<input checked="" type="checkbox"/> TTMref
	<input checked="" type="checkbox"/> TTM.2	<input checked="" type="checkbox"/> TDM.2	<input checked="" type="checkbox"/> TRadS.1		<input checked="" type="checkbox"/> TDMref	<input checked="" type="checkbox"/> TA.d
	<input checked="" type="checkbox"/> TTM.3	<input checked="" type="checkbox"/> TDM.3	<input checked="" type="checkbox"/> TRadU.1			
Miscellaneous (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:

Error Summary
Crew Manifest
QC checklist
Dropwindsonde Log(s) – AVAPS and FD if completed
Flight Track
Miscellaneous FD notes

NOTES:

TDM.1 & TDM.2 close 215625-215840 TDM.2 had

AVAPS Drop Log

Project: Ocean Winds(S) Mission: Hurr. Dorian Flight ID: 20190904H1
 Take Off: _____ Landing: _____ Fit Dir: Parish Launcher S/N: _____

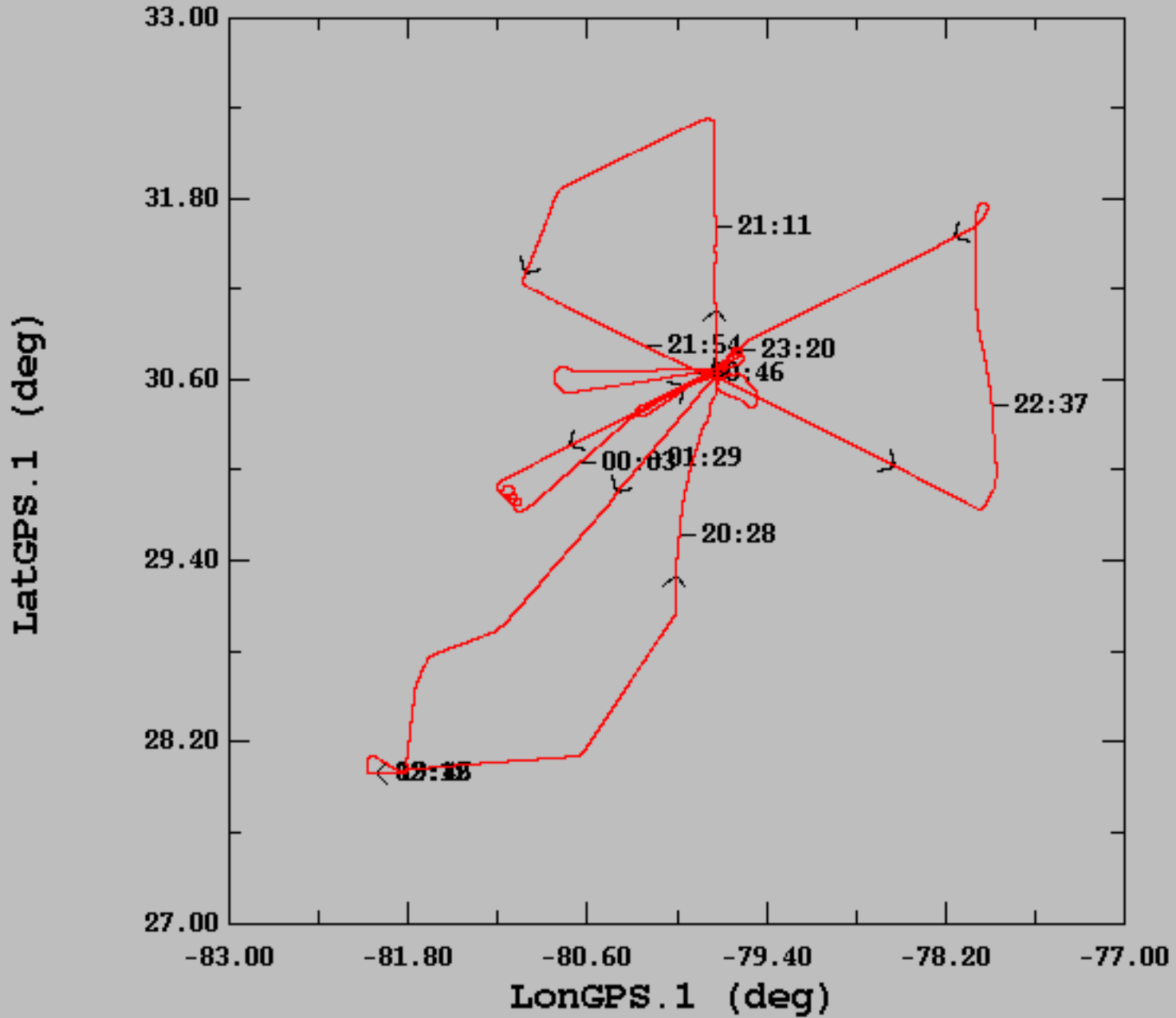
Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	182840475	1	-0.5	2009	Trnr	NWS	IP	✓
2	132355092	2	-0.0	2027			1/4 Pt. combo IR	✓
3	185120872	3	-0.5	2033			Mid Pt. 1	✓
4	185120850	4	-0.8	2036			Rmw	✓
5	191020363	1	-0.8	210006			Rmw	✓
6	185120583	2	-0.6	210050		Nesdis	Rmw	✓
7	182610176	3	-0.3	210220		Nesdis	Rmw	✓
8	185120859	4	-0.6	210838		NWS	Mid Pt. 2	✓
9	182520041	1	-0.6	212147			Turn Pt. 1	✓
10	191050410	2	-0.6	214128			Turn Pt. 2	✓
11	191050399	3	-0.4	214746			Mid Pt. 3	✓
12	185120646	4	-0.7	215607			Rmw eyewall IN	✓
13	182630151	1	-0.5	220829			Rmw eyewall OUT	✓
14	112535048	2	-1.3	220104			IR center Combo	✓
15	183321028	3	-0.6	222704			Turn Pt. 3 combo BT	✓
16	132345017 183330757	12	-1.3	223635			IR/combo	✓
17	112535121	2	-1.1	224314			IR/AXBT	✓
18	132355105	3	-1.6	225041			IR/AXBT	✓
19	183320799	4	0.0	225730			Turn Pt. 4	✓
20	185130880	1	-0.3	230928			Mid Pt 3 rd IN	✓
21	185130863	2	-0.6	231620			Rmw Inner eyewall	✓
22	184030709	3	-0.6	232046			Center 3 rd pass	✓
23	185130896	4	-0.7	232811			Rmw eyewall	✓
24	185120864	5	-0.8	232832		Nesdis	Rmw eyewall	✓
25	185130161	1	-0.5	232858		Nesdis	Rmw eyewall	✓
26	184030512	2	-0.8	233654		NWS	Mid Pt. 3 rd pass OUT	✓
27	183140454	3	-0.9	234158			Turn Pt. 5 end 3 rd pass	✓
28	183330819	1	-1.1			NESDIS	NO Drop lost telemetry	
29	183140456	2	-1.01	004238		NESDIS	Drop 1	✓
30	185130875	3	-0.6	004306			Drop 2	✓
31	185130882	4	-0.8	004266			Drop 3	✓
32	185130647	5	-0.7	004423			Rmw 1	✓
33	185130110	1	-0.5	010651			Drop 4	✓
34	185130881	2	-0.8	010854			Drop 5	✓
35	191050238	3	-0.4	010854			Rmw 2	✓
36	185130691	4	-1.01				NO Drop	
37	18478A434	5	-0.8				NO Drop	

No Burn

No Burn

No Burn
No Burn
No Burn

2019-09-04, 19:46:01-02:12:00



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	30.25	1.04	27.99	32.33
— LonGPS.1 (deg), 1 s/sec	-80.02	1.00	-82.06	-77.85