

N42RF ERROR SUMMARY  
20190902H2 H Dorian TDR

Flight ID: 20190902H2

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/20190902H2

Local Met Data	Takeoff KLAL (2002Z)	Landing KLAL (0250Z)
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.

Used TDM.2. Several anomalous high spikes.  
No PDAlpha.2. No PDBeta.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

U.S. Department of Commerce / NOAA / OMAO / Aircraft Operations Center - N42RF Manifest													
FLIGHT INFORMATION				CREW MANIFEST				MISSION INFORMATION					
FLT ID:	20190902HZ	FLT #:		AC:	Kibbey ✓	Scientists:	Pressure	Dropsondes					
From:	KLAL	ETD:	20:00Z	CP(s):	Abitbol ✓	Marks, Frank ✓	A/C Takeoff	Good	Bad	Sent			
To:	KLAL	ETA:	04:00Z		Rossi ✓	Zhang, Xuejin ✓							
Block Time		Flight Time		Nav(s):	Urato ✓	Sellwood, Kathryn ✓	ASOS Takeoff	BTs					
In:	0257	Land:	0251		Darby ✓	Sapp, Joe ✓	A/C Land	Good	Bad	Sent			
Out:	1955	T/O:	2003	FE(s):	Tuffnel ✓	JC Clark ✓							
Total:	0.00	Total:	0.00	FD(s):	Parrish ✓	CAPT Tim Gallagher ✓	ASOS Land						
Sponsoring Org:	EMC			SEB:	McAlister ✓	Rep Ralph Abraham ✓	Storm Number ID:	AL052019					
Program:	PRX			SSA:	Mascaro ✓		TCPOD/WSPOD Mission	NOAA2 3405A Dori					
Purpose:	TDR Mission Hurricane Dorian			AVAPS:	Richards/T ✓		(ie: NOAA2 0614A MICHAEL)						
AS REQUIRED BY ORM				Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP		
VOLCANIC ASH					X			1		210007	942		
SCIENCE MISSION WITHIN BDRY LAYER					X			2		221945	943		
LACK OF PRECIPITATION					X			3		231315	944		
RELATIVE HUMIDITY ≥ 80%				X				4			946		
LARGE AIR-SEA TEMP GRADIENT					X			5		011033	947		
HIGH SURFACE WINDS				X				6		015601	947		
LONG FETCH / DURATION OF SFC WND				X									
SEA SALT ACCRETION FORECAST					X								
SEA SALT ACCRETION OBSERVED													
*Highlighted items must be completed before departure.													
Remarks:													

NID.  
6 hurricane pennies

cat 4

N42RF\_Crew\_1 ▾ N42RF\_Crew\_2 ▾ N43RF\_Crew\_1 ▾ N43RF\_Crew\_2 ▾ N49RF\_Crew\_1 ▾ N49RF\_Crew\_2 ▾

## APPENDIX 1 – P3 QC Checklist

<b>Flight ID:</b>	20190902H2
<b>Flight Director(s):</b>	Parrish

Pressure Comparison		
	T/O	Land
<b>Aircraft</b>	1003.5	1005.5
<b>Tower</b>		

UWZ.d mean: 0.14

T.O. 200305 Land 264629 1102-190.042

	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"/> AccZfilter-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	
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"/> JAS.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 use	<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:**

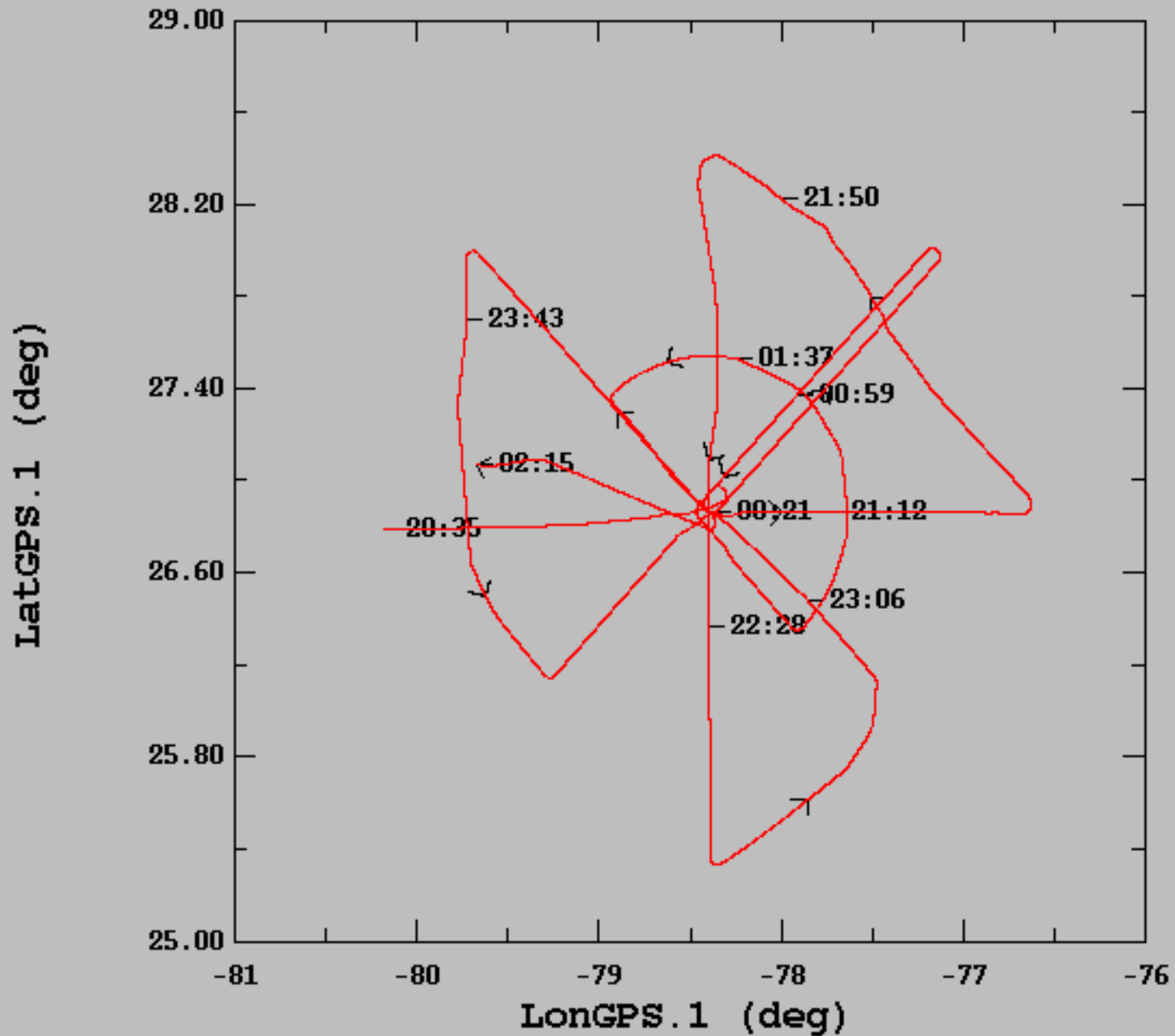
	Error Summary
	Crew Manifest
	QC checklist
	Dropwindsonde Log(s) – AVAPS and FD if completed
	Flight Track
	Miscellaneous FD notes

**NOTES:**

TDM.1 - smooth signal, too warm.  
 TDM.2 - Good sig & response, a few very positive spots.  
 221825-221925, 010825-011015, 023750-023955.  
 No PDALPHA.2, PDBETA.2  
 6 hurricane penetrations.



2019-09-02, 20:35:00-26:15:00



	mean	sigma	min	max
— LatGPS.1 (deg), 1 s/sec	27.01	0.62	25.33	28.41
— LonGPS.1 (deg), 1 s/sec	-78.35	0.76	-80.17	-76.62