

N42RF ERROR SUMMARY
20170926H1

Flight ID: 20170926H1

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	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/2017/MET/20170926H1

Local Met Data	Takeoff KLAL (0345Z)	Landing KLAL (1201Z)
Dynamic Corrections		Yes
AttackAngleIntercept		2.35256
AttackAngleSlope		6.11627
SlipAngleIntercept		0.23
SlipAngleSlope		6.9614

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.

PSM.1 ~1.5mb higher than PSM.2, PTM.1 ~70mb higher than PSM.1/2
AccAX.2 lower than AccAX.1, AccAY.2 higher than AccAY.1
PDALPHA.2 appears erroneous
PQM.1 has several (-) spikes at 0503, 1104, 1229. TDM.3 ~10C high, TDM.2 has spike at 0857

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	8	8	8
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Belson/Sears
Phone #: 863-500-3981

ACAT-4 Version = 7.1

NOAA Aircraft Operations Center - NOAA 42 Flight Manifest

FLIGHT INFORMATION				CREW MANIFEST				MISSION INFORMATION				
FLT ID:	20170926H1	FLT #:		AC:	Kibbey	Scientists:		Pressure		Dropsondes		
From:	KLAL	ETD:	0500Z	CP(s):	Mitchell			A/C Takeoff	1007.2	Good	Bad	Sent
To:	KLAL	ETA:	1300Z		Ruckman					8	0	8
Block Time		Flight Time		Nav(s):	Urato			Wx Station Takeoff	1007.5	BTs		
In:	1306	In:	1300	FE(s):	Darby			A/C Land	1008.5	Good	Bad	Sent
Out:	0437	Out:	0445		Tuffnel			Wx Station Land	1009.2	0	0	0
Total:	8.5	Total:	8.3	FD(s):	Belson	Visitors:						
					Sears							
Sponsoring Org:	EMC/NHC			SEB:	T. Lynch			Storm Number ID:		AL152017		
Program:	PRX							(ie: AL072012)				
Purpose:	Hurricane TDR			SSA:	Richards			TCPOD/WSPOD Mission		NOAA2 2715A MARIA		
				AVAPS:	Patel			(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM				Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X			1	7	0646	970	
SCIENCE MISSION WITHIN BDRY LAYER					X			2	13	0804	970	
LACK OF PRECIPITATION					X			3	16	0925	970	
RELATIVE HUMIDITY ≥ 80%				X				4	21	1050	970	
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							
Additional Remarks:								*Highlighted items must be completed before departure.				
Cockpit Gmax: 1.3				Gmin: 0.9								

APPENDIX 1 – P3 QC Checklist

Flight ID:	20170926H1
Flight Director(s):	Belson, Sears

Pressure Comparison		
	T/O	Land
Aircraft	1007.2	1008.5
Tower	1007.5	1009.2

UWZ.d mean: _____

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

FLID_Mission_Documents.pdf:

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

NOTES:

NOAA • AOC • SED N42RF AVAPS DROP LOG

Lead Tech: Mike Mascaro

Project: Hurricane 2017

Mission: Hurricane Maria

Flight ID: 20170926H1

Take Off: _____

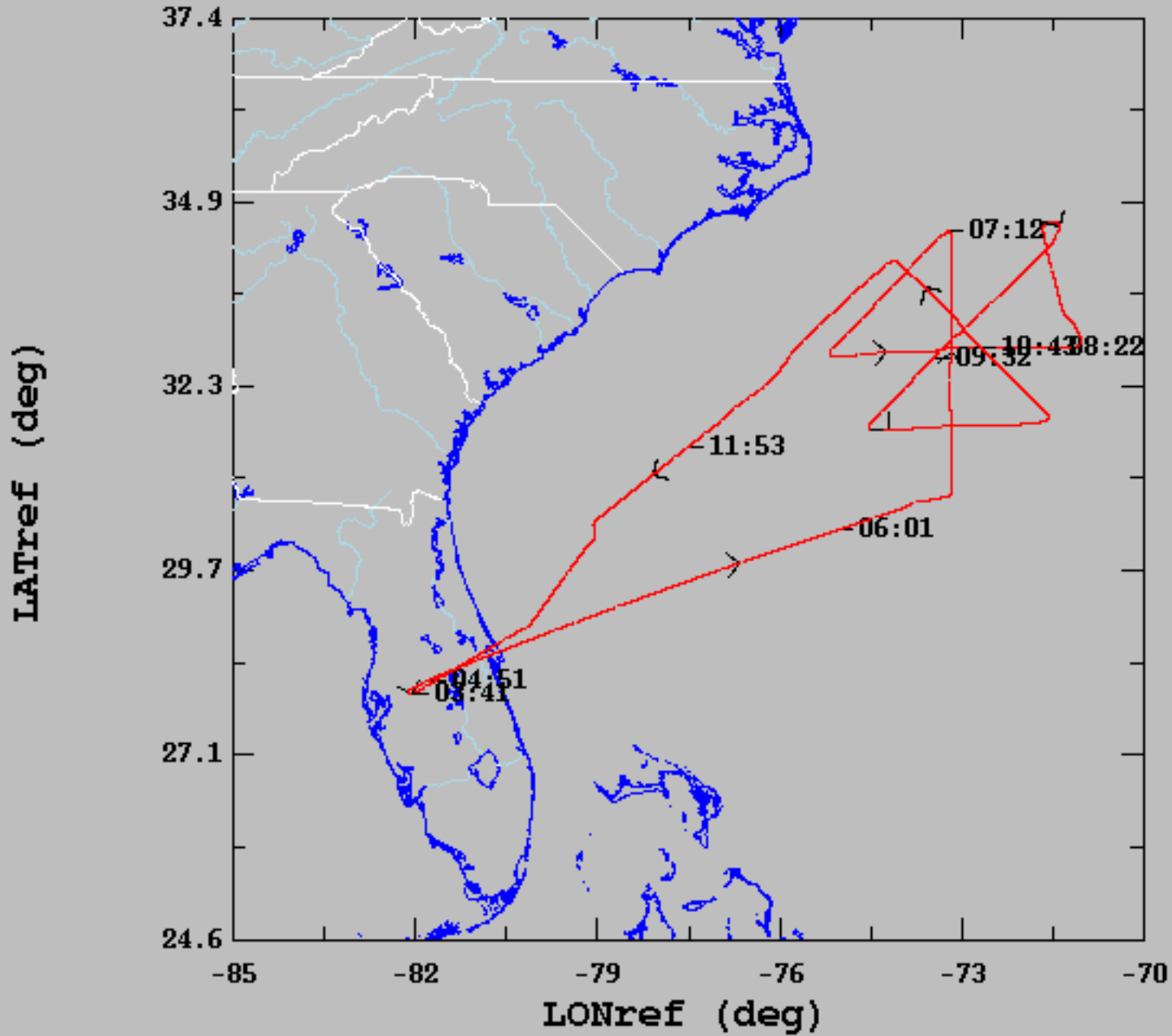
Landing: _____

Flt Dir: Brian/Tan

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge \$\$ To	Comments	Good ?
1	162745111	1	+0.5	0623	AJP	HFIP	IP	✓
2	143245078	2	-0.5	0646		NHC	Center fix 1st pass	✓
3	142715048	3	-0.8	0710		HFIP	End point 1st pass	✓
4	162715318	4	-0.6	0738	WAD	HFIP	Entry Point 2nd pass	✓
5	163615017	1	-0.6	0804		NHC	Center fix 2nd pass	✓
6	143425081	2	-0.3	0828	WAD	HFIP	End point 2nd pass	✓
7	163335077	3	-0.6	0925		NHC	Center fix 3rd pass	✓
8	163935031	4	-0.7	1050		NHC	Center fix 4th pass	✓
9								
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HFIP sondes charged to HFIP due to HFIP sondes all expended

2017-09-26, 03:41:09-13:03:46



	mean	sigma	min	max
— LATref (deg), 1 s/sec	31.71	1.87	27.98	34.59
— LONref (deg), 1 s/sec	-75.21	3.16	-82.09	-71.02

20170926H1

KLAL - KLAL

11 AOC

T/O 0500Z

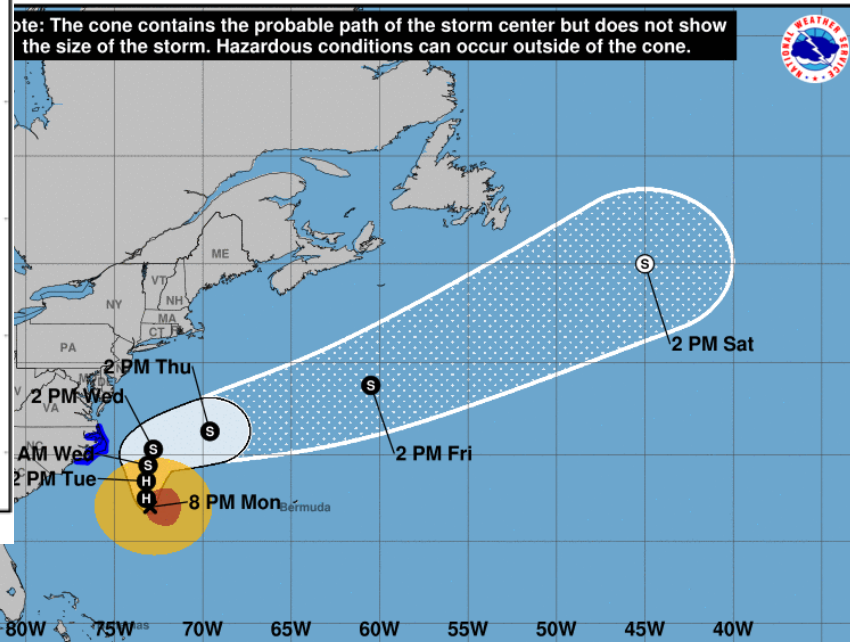
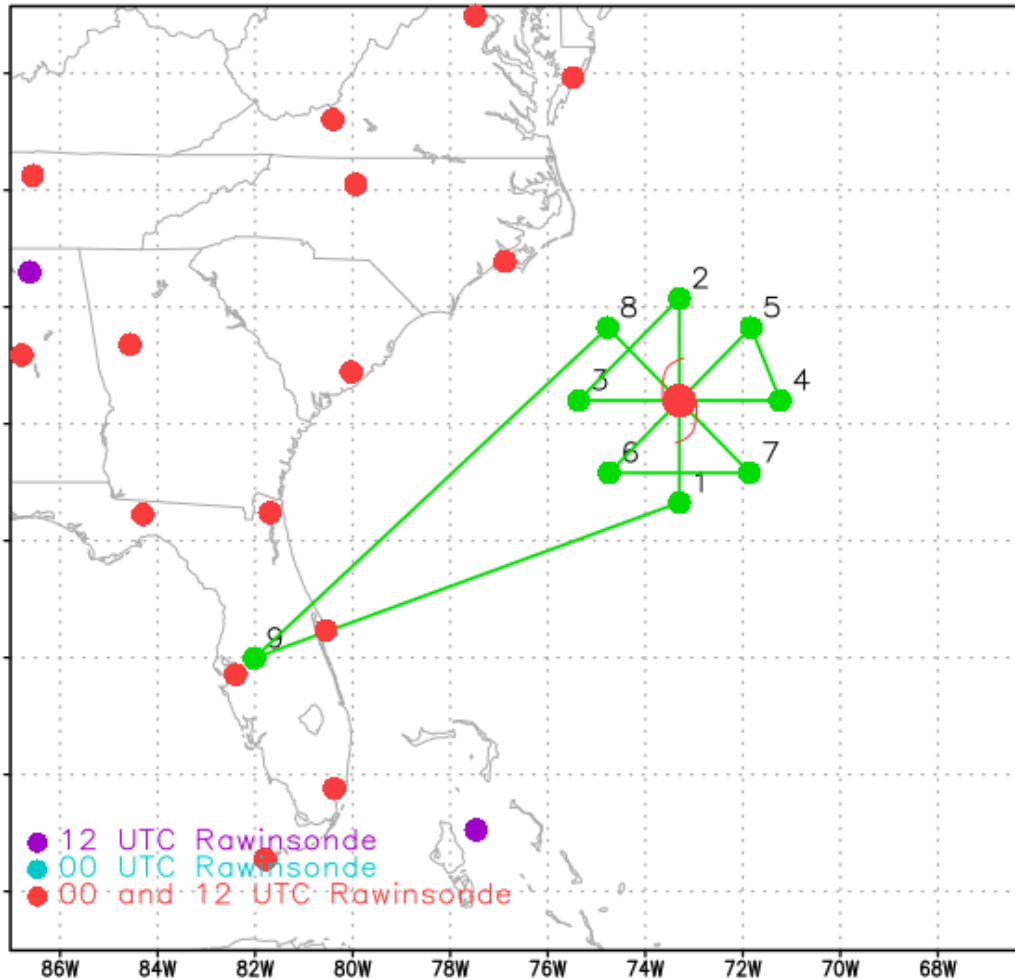
ETE 8+00

NOAA2 2715A MARIA

MISSION OVERVIEW

Tasking: EMC (8-10K' PA)

Expendables: 10 sondes (+ backups on center drops)

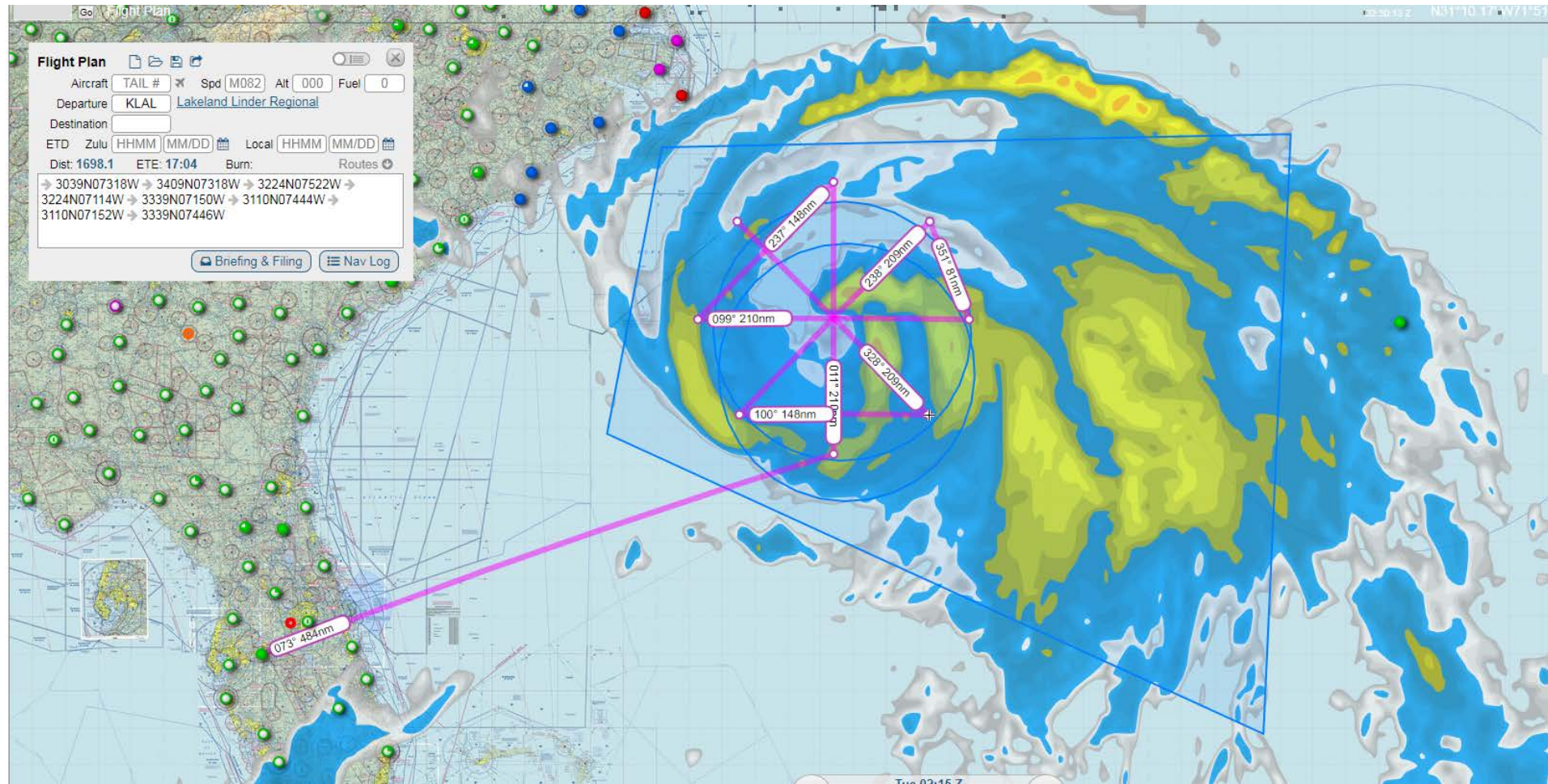


Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



<p>Hurricane Maria Monday September 25, 2017 8 PM EDT Intermediate Advisory 39A NWS National Hurricane Center</p>	<p>Current information: x Center location 32.0 N 73.0 W Maximum sustained wind 80 mph Movement N at 7 mph</p>	<p>Forecast positions: ● Tropical Cyclone ○ Post/Potential TC Sustained winds: D < 39 mph S 39-73 mph H 74-110 mph M > 110 mph</p>
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Route with Satellite



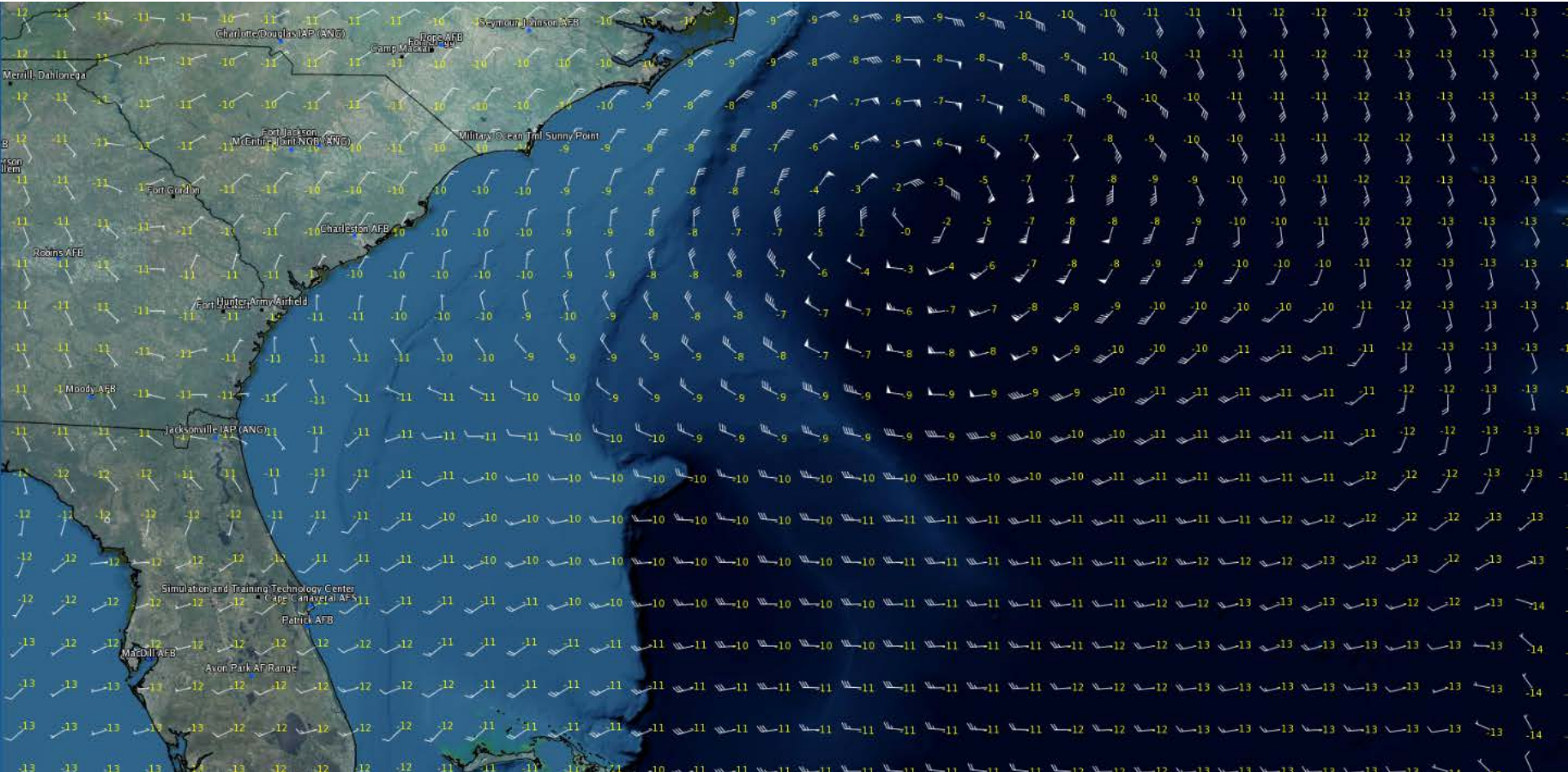
Other Aircraft

Teal 74

- Takeoff at 0915Z
- In storm by 1045Z

Transit FL210

VT 26/09



Airfield Wx

- KLAL 260215Z AUTO 00000KT 10SM OVC060 26/21 A2990 RMK AO2
- KLAL 252335Z 2600/2624 VRB03KT P6SM SCT050
FM260200 VRB03KT P6SM FEW030 FEW250
FM261700 29006KT P6SM SCT040 SCT080 BKN250 AMD NOT SKED 2602/2611

Hazards

- Icing – 180-240 in near-storm environment
 - Freezing / Melting Altitude ~16,000'
- Turbulence – in convection
- Volcanic Ash - Negative
- HD - yes
- Rapid Intensification – No
- Sea Salt Accretion Forecast – Negative
 - Boundary Layer - No
 - Lack of Precip - No
 - RH > 80% - Yes
 - Large sea surface / air temperature gradient - No
 - High Surface Winds - Yes
 - Long fetch / duration - No