

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

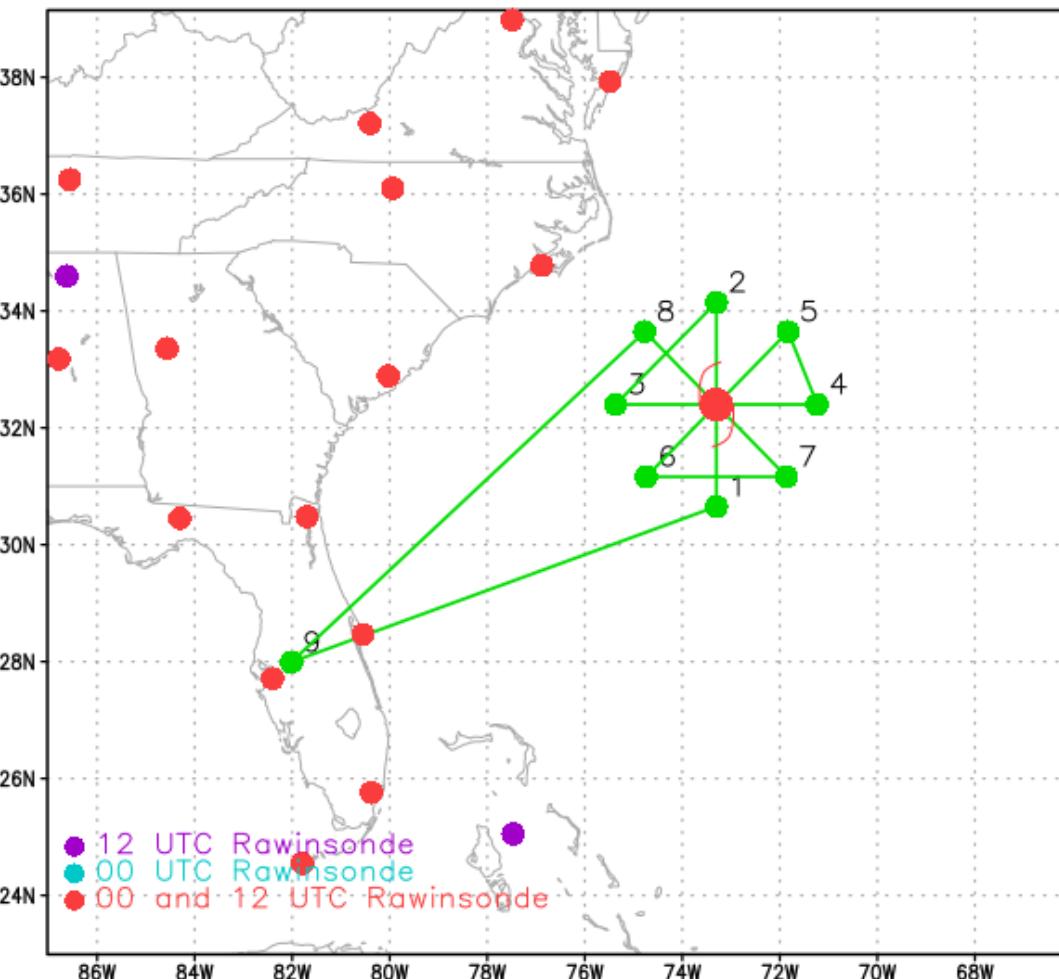
NOAA Aircraft Operations Center - NOAA 42 Flight Manifest												
FLIGHT INFORMATION					CREW MANIFEST			MISSION INFORMATION				
FLT ID:	20170926H1		FLT #:		AC:	Kibbey	Scientists:	Pressure		Dropsondes		
From:	KLAL		ETD:	0500Z	CP(s):	Mitchell		A/C Takeoff	1007.2	Good		
To:	KLAL		ETA:	1300Z		Ruckman				Bad		
Block Time			Flight Time		Nav(s):	Urato		Wx Station Takeoff	1007.5	Sent		
In:	1306		In:	1300	FE(s)	Darby			8	0		
Out:	0437		Out:	0445		Tuffnel				8		
Total:	8.5		Total:	8.3	FD(s):	Belson	Visitors:	A/C Land	1008.5	Good		
Sponsoring Org:	EMC/NHC				SEB:	Sears		Wx Station Land	1009.2	Bad		
Program:	PRX					T. Lynch				Sent		
Purpose:	Hurricane TDR				SSA:	Richards		Storm Number ID: (ie: AL072012)	AL152017			
					AVAPS:	Patel		TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA2 2715A MARIA			
OBSERVATIONS												
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								

20170926H1

KLAL - KLAL

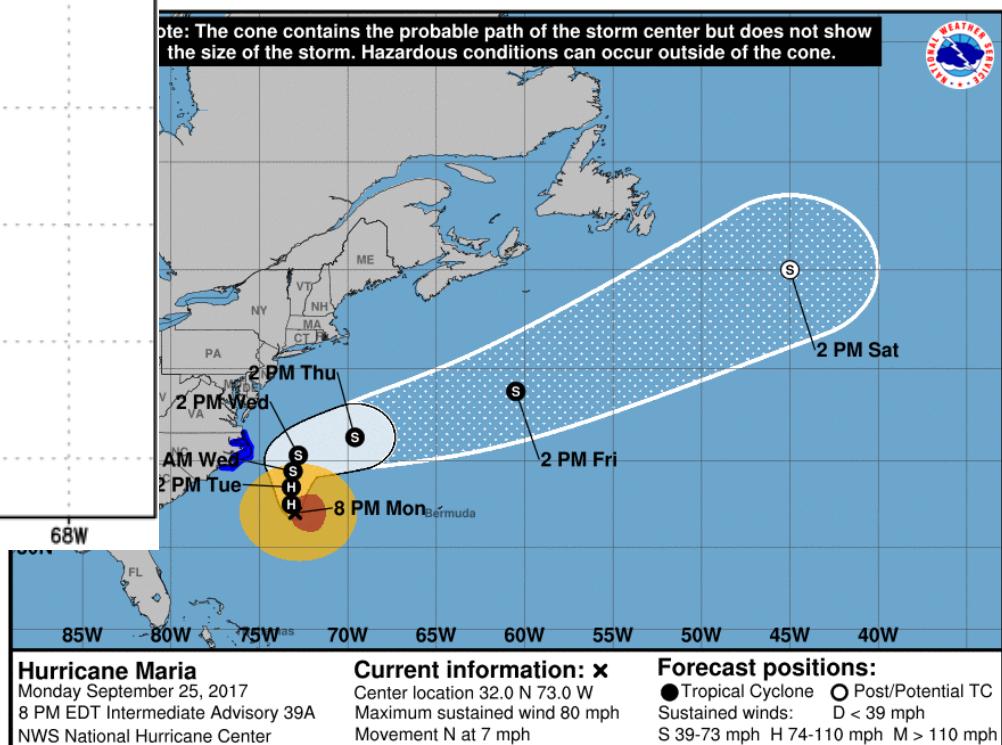
11 AOC
T/O 0500Z
ETE 8+00
NOAA2 2715A MARIA

MISSION OVERVIEW



Tasking: EMC (8-10K' PA)

Expendables: 10 sondes (+ backups
on center drops)

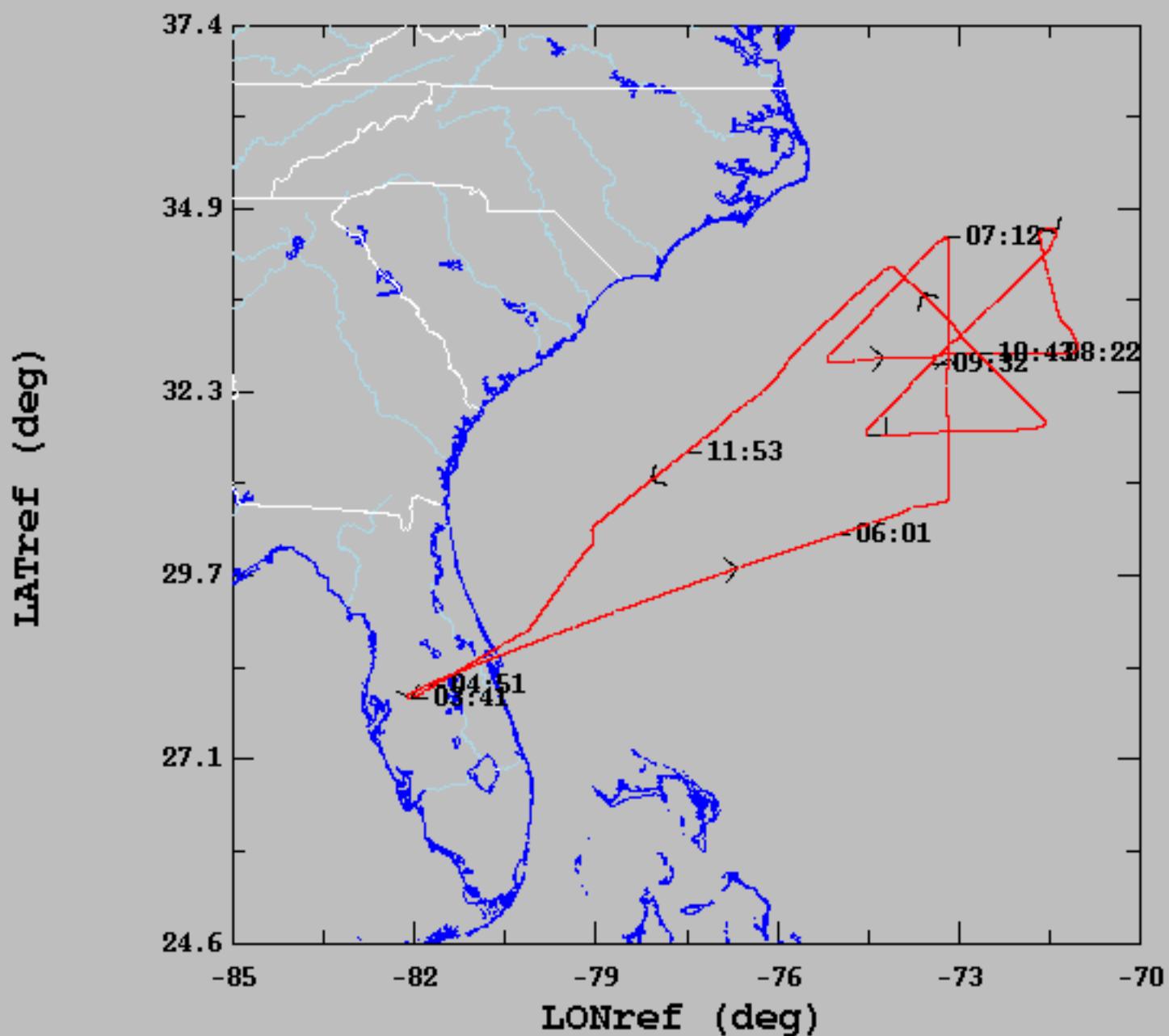


Other Aircraft

Teal 74

- Takeoff at 0915Z
- In storm by 1045Z

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



LATref (deg), 1 s/sec
LONref (deg), 1 s/sec

	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

NOAA • AOC • SED N42RF AVAPS DROP LOG Lead Tech: Mike Mascaro

Project: Hurricane 2017

Mission: Hurricane Maria Flight ID: 20170926H1

Project: Hurricane 2011
Take Off:

Landing: Elt Dir: *[Signature]*

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: _____

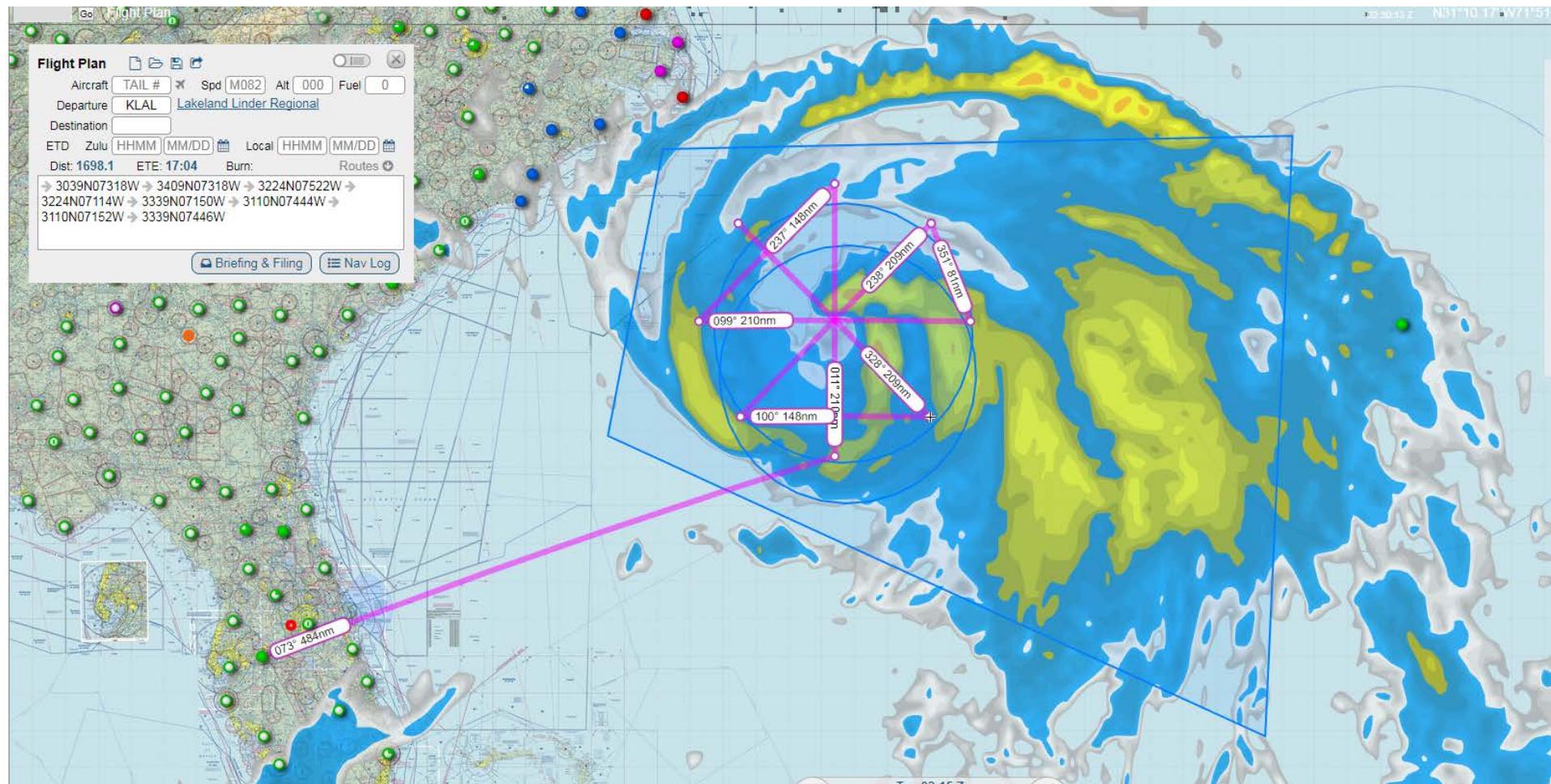
	Raw 1Hz Mean File Parameters					C File Parameters	
<input checked="" type="checkbox"/> Accelerometer	x AccAXI.1	x AccAYI.1	x AccAZI.1	x AccZfilter-GPS.1	x AccZref		
	x AccAXI.2	x AccAYI.2	x AccAZI.2	x Acc-Zfilter-GPS.2			
	x AccAXI-GPS.1	x AccAYI-GPS.1	x AccAZI-GPS.1				
	x AccAXI-GPS.2	x AccAYI-GPS.2	x AccAZI-GPS.2				
<input checked="" type="checkbox"/> Altitude	x AltGPS.1	x AltI-GPS.1	x AltPaADDU.1	x AltRA.1	x ALTrref	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						
<input checked="" type="checkbox"/> 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		
<input checked="" type="checkbox"/> 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				
<input checked="" type="checkbox"/> 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	
<input checked="" type="checkbox"/> Air Speed	x CasADDU.1	x TasADDU.1	x lasADDU.1		x IAS.d	x TAS.d	
<input checked="" type="checkbox"/> 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			
<input checked="" type="checkbox"/> 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				
<input checked="" type="checkbox"/> Miscellaneous (must check)					x UWZ.d	x WS.d	
					x DPJ_WSZ	x WD.d	
					x HUM		

FLID_Mission_Documents.pdf:

<input checked="" type="checkbox"/>	Error Summary
<input checked="" type="checkbox"/>	Crew Manifest
<input checked="" type="checkbox"/>	QC checklist
<input checked="" type="checkbox"/>	Dropwindsonde Log(s) – AVAPS and FD if completed
<input checked="" type="checkbox"/>	Flight Track
<input checked="" type="checkbox"/>	Miscellaneous FD notes

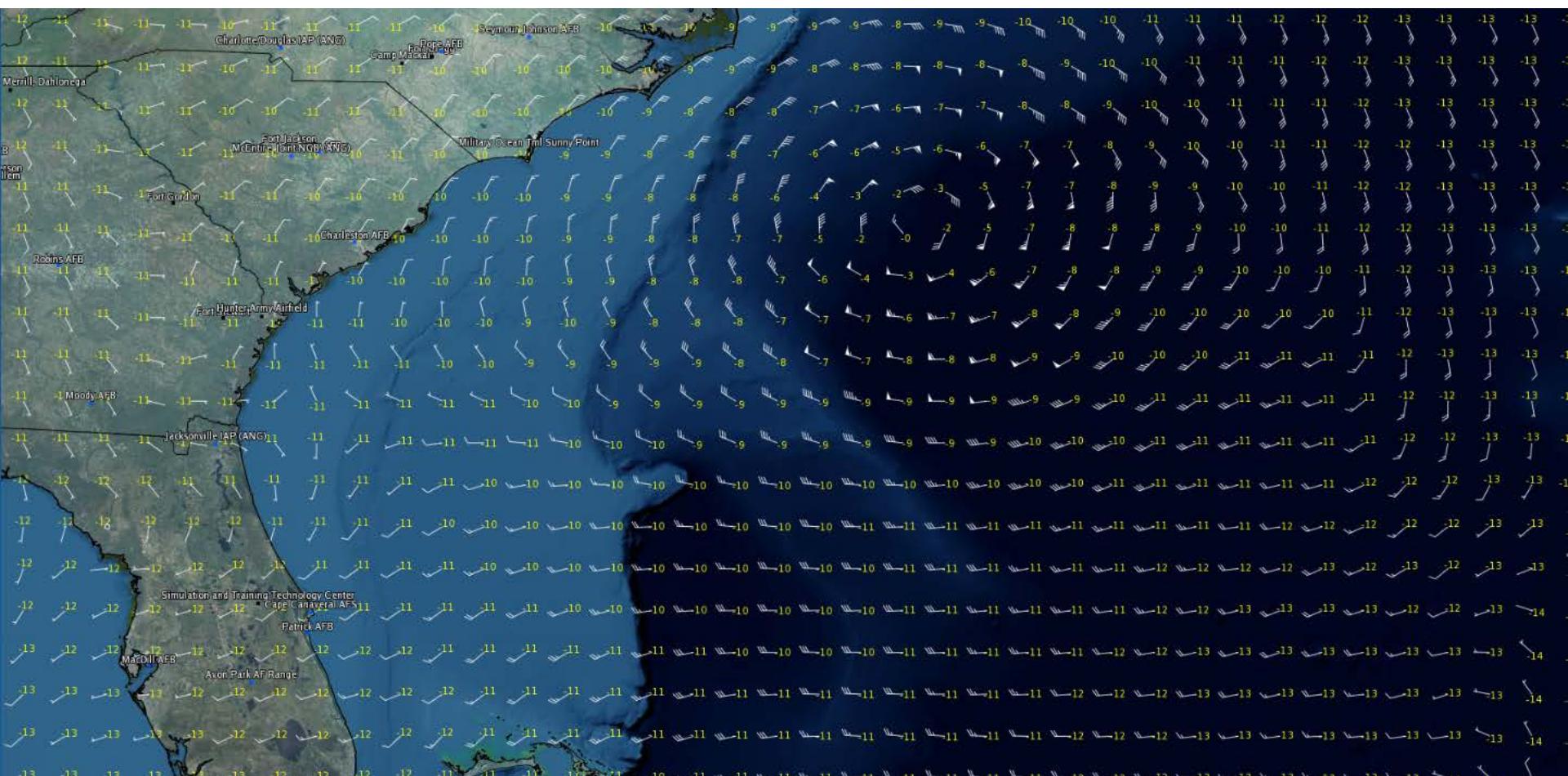
NOTES:

Route with Satellite



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