

N42RF ERROR SUMMARY  
20170925H1

Flight ID: 20170925H1

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/2017/MET/20170925H1

Local Met Data	Takeoff KLAL (0319Z)	Landing KLAL (1128Z)
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  
TDM.3 ~10C high. TDM.1 seems unnaturally noisy from 0554-0610, 0733-0829, 0925-1122, 1206-1243 (changed default to TDM.2 for calculations)

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	10	10	10
Test sondes	5	5	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

### NOAA Aircraft Operations Center - NOAA 42 Flight Manifest

FLIGHT INFORMATION				CREW MANIFEST				MISSION INFORMATION				
FLT ID:	20170925H1	FLT #:		AC:	Kibbey	Scientists:		Pressure		Dropsondes		
From:	KLAL	ETD:	0500Z	CP(s):	Mitchell			A/C Takeoff	1007.3	Good	Bad	Sent
To:	KLAL	ETA:	1300Z		Ruckman					15	0	10
Block Time		Flight Time		Nav(s):	Urato			Wx Station Takeoff	1007.3	BTs		
In:	1259	In:	1254	FE(s):	Darby			A/C Land	1007.9	Good	Bad	Sent
Out:	0437	Out:	0445		Tuffnel			Wx Station Land	1008.5	0	0	0
Total:	8.4	Total:	8.2	FD(s):	Belson	Visitors:		Storm Number ID:		AL152017		
Sponsoring Org:	EMC/NHC			SEB:	T. Lynch	Mills, William		(ie: AL072012)				
Program:	PRX					Becker, Nathan		TCPOD/WSPOD Mission	NOAA2 2115A MARIA			
Purpose:	Hurricane TDR			SSA:	Richards	Neu, John		(ie: NOAA2 2418A SANDY)				
				AVAPS:	Patel			<b>OBSERVATIONS</b>				
AS REQUIRED BY ORM				Y	N	REMARKS		Fix Number	Obs Number	Fix Time	SLP	
VOLCANIC ASH					X			1	6	0647	956	
SCIENCE MISSION WITHIN BDYR LAYER					X			2	14	0804	958	
LACK OF PRECIPITATION					X			3	19	0922	960	
RELATIVE HUMIDITY ≥ 80%				X				4	23	1047	960	
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: 1.6				Gmin: 0.4								

## APPENDIX 1 – P3 QC Checklist

<b>Flight ID:</b>	20170925H1
<b>Flight Director(s):</b>	Belson/Sears

Pressure Comparison		
	T/O	Land
<b>Aircraft</b>	<b>1007.3</b>	<b>1007.9</b>
<b>Tower</b>	<b>1007.3</b>	<b>1008.5</b>

UWZ.d mean: 0.22

	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	x TDM.3	o TRadU.1			
x Miscellaneous (must check)					x UWZ.d	x WS.d
					x DPJ_WSZ	x WD.d
					x HUM	

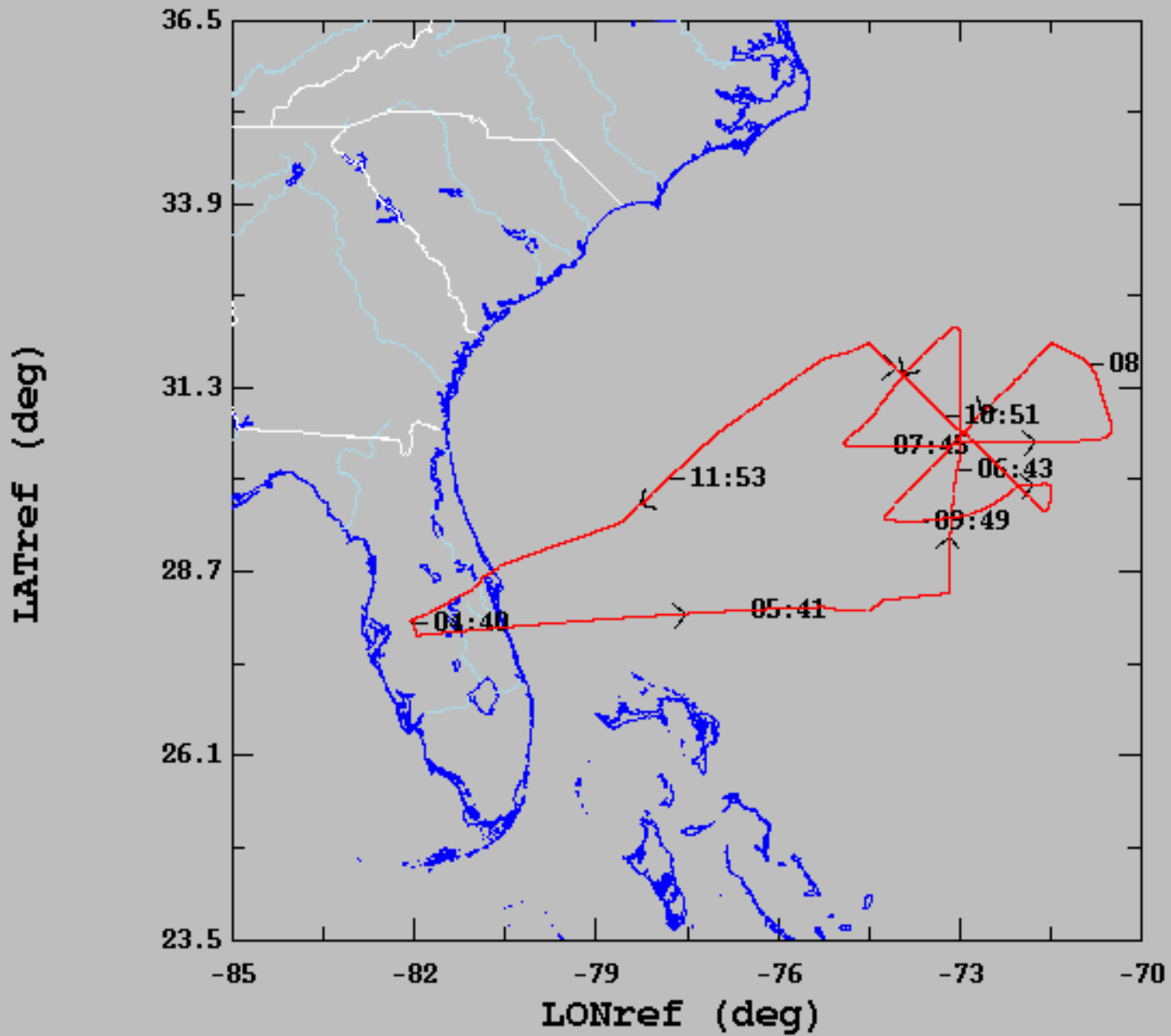
**FLID\_Mission\_Documents.pdf:**

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:**



2017-09-25, 04:40:00-12:55:52



	mean	sigma	min	max
— LATref (deg), 1 s/sec	29.90	1.28	27.80	32.16
— LONref (deg), 1 s/sec	-75.03	3.23	-82.06	-70.48

20170925H1

KLAL - KLAL

11 AOC

3 VISITORS

T/O 0500Z

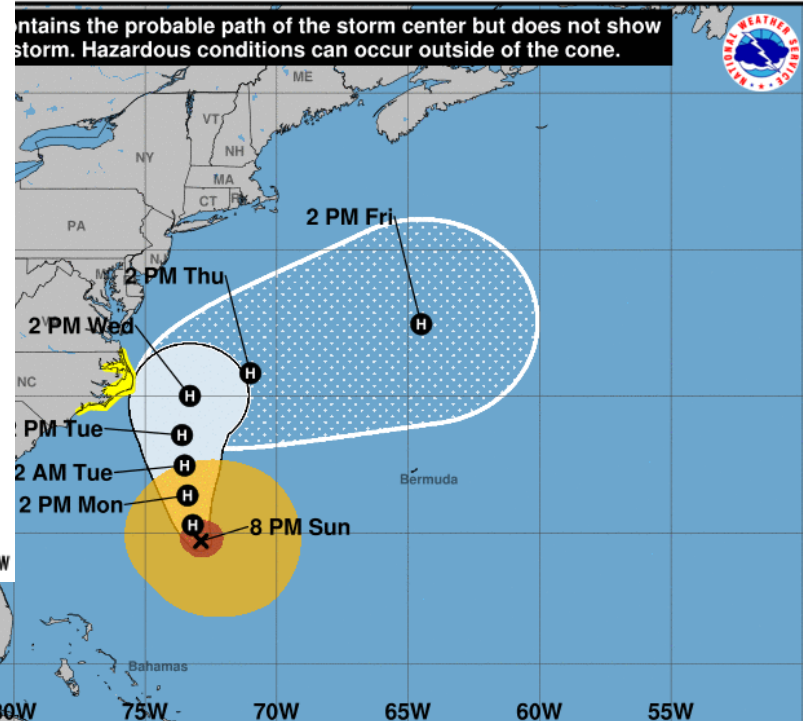
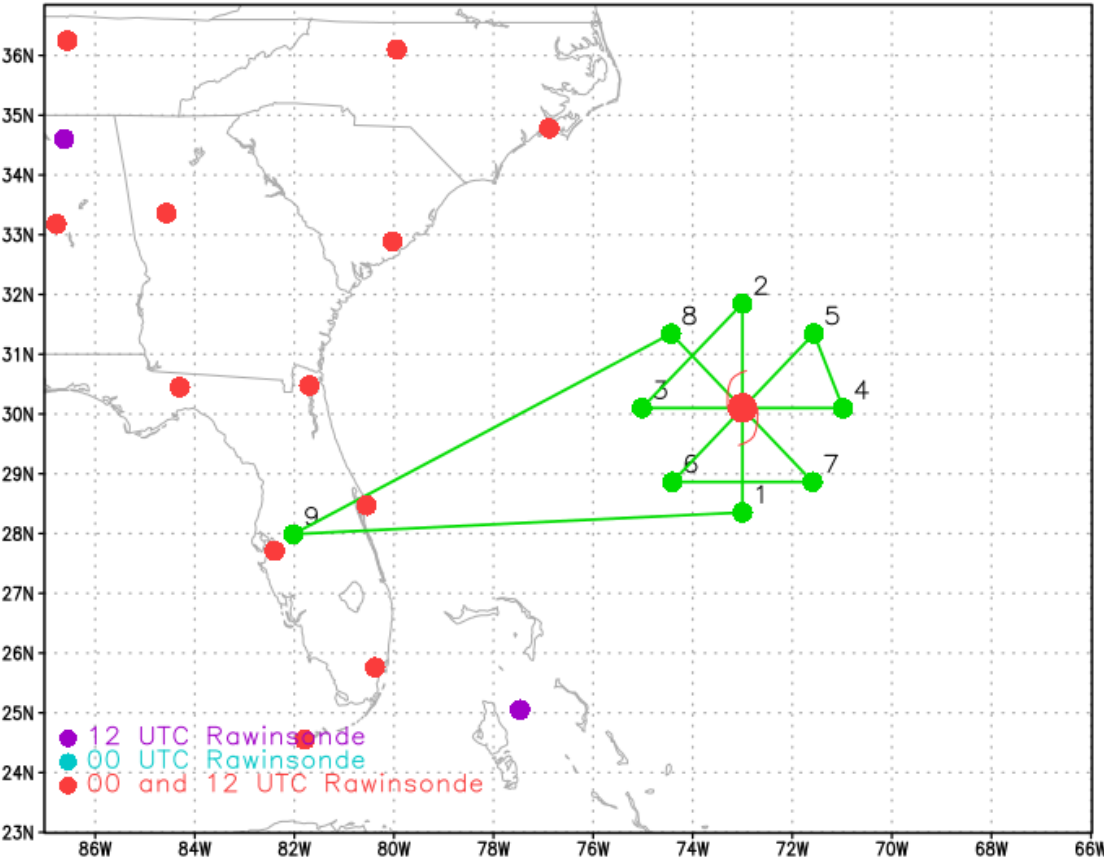
ETE 8+00

NOAA2 2115A MARIA

# MISSION OVERVIEW

Tasking: EMC (8-10K' PA)

Expendables: 11 sondes (+ backups on center/eyewall drops)



**Hurricane Maria**  
 Sunday September 24, 2017  
 8 PM EDT Intermediate Advisory 35A  
 NWS National Hurricane Center

**Current information: x**  
 Center location 29.7 N 72.9 W  
 Maximum sustained wind 105 mph  
 Movement N at 9 mph

**Forecast positions:**  
 ● Tropical Cyclone ○ Post/Potential TC  
 Sustained winds: D < 39 mph  
 S 39-73 mph H 74-110 mph M > 110 mph

**Potential track area:** Day 1-2, Day 3-5  
**Watches:** Tropical Storm, Hurricane  
**Warnings:** Tropical Storm, Hurricane  
**Current wind extent:** Tropical Storm, Hurricane

# Other Aircraft

FLIGHT FIVE -- NOAA 49

A. 25/1200Z

B. NOAA9 2315A MARIA

C. 25/0530Z

D. NA

E. NA

F. 41,000 TO 45,000 FT

FLIGHT SIX --TEAL 73

A. 25/1130Z,1730Z

B. AFXXX 2415A MARIA

C. 25/0915Z

D. 30.5N 74.3W

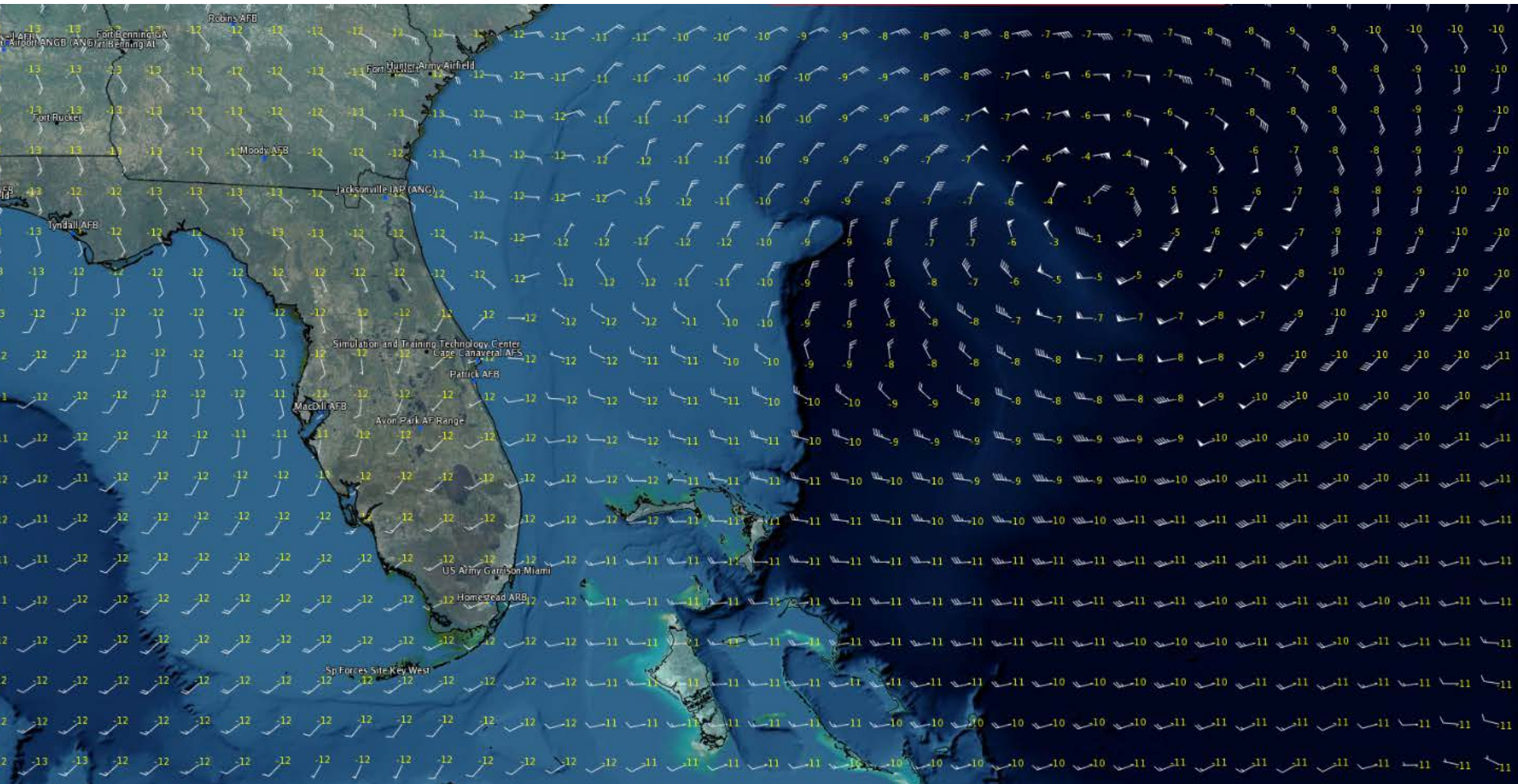
E. 25/1100Z TO 25/1730Z

F. SFC TO 15,000 FT



# Transit FL210

## VT 25/09



# Airfield Wx

- KLAL 250053Z 09004KT 10SM OVC050 27/22 A2990
- KLAL 242335Z 2500/2524 VRB03KT P6SM SCT120  
FM251600 34005KT P6SM SCT035 BKN100 AMD NOT SKED 2502/2511

# Hazards

- Icing – similar to yesterday
  - 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