

N42RF ERROR SUMMARY
20170909H1

Flight ID: 20170909H1

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/20170909H1

Local Met Data	Takeoff KLAL (1532Z)	Landing KLAL (0000Z)
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 ~2mb 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.1 about 1.5C higher than TDM.2, TDM.3 ~10C high.

Expendable Type	# deployed	# good	# transmitted
Dropsondes	6	6	6
Test sondes	0	0	0
AXBTs	0	0	0
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

Flight Director: Belson/Parrish

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:	20170909H1		FLT #:		AC:	Price	Scientists:	Pressure		Dropsondes			
From:	KLAL		ETD:	1700Z	CP(s):	Ruckman		A/C Takeoff	1005.5	Good			
To:	KLAL		ETA:	0100Z		Mitchell				Bad			
Block Time		Flight Time			Nav(s):	Urato		Wx Station Takeoff	1006.5	Sent			
In:	0032		In:	0026		Sloan			6	0			
Out:	1702		Out:	1711	FE(s)	Darby				6			
Total:	7.5		Total:	7.3	FD(s):	Tuffnel, Todd		A/C Land	1003.3	Good			
Sponsoring Org:	NHC					Belson				Bad			
Program:	PRX					Parrish	Visitors:	Wx Station Land	1004.0	Sent			
Purpose:	Hurricane Recon				SEB:	Warnecke	Calabretta, Jason	Storm Number ID: (ie: AL072012)	AL112017				
							Barnes, David	TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA2 2711A IRMA				
					SSA:	Mascaro			OBSERVATIONS				
					AVAPS:	McAlister							
AS REQUIRED BY ORM					Y	N	REMARKS			Fix Number	Obs Number	Fix Time	SLP
VOLCANIC ASH						X				1	3	1831	939
SCIENCE MISSION WITHIN BDRY LAYER						X				2	6	2007	935
LACK OF PRECIPITATION						X				3	13	2143	934
RELATIVE HUMIDITY ≥ 80%						X				4	16	2306	934
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: 0.5								

APPENDIX 1 – P3 QC Checklist

Flight ID:	20170909H1
Flight Director(s):	Belson/Parrish

Pressure Comparison		
	T/O	Land
Aircraft	1005.5	1003.3
Tower	1006.5	1004.0

UWZ.d mean: 0.21

	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 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								
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	LATref				
	x LatGPS.2	x Lati-GPS.2	x LonGPS.2	x Loni-GPS.2	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 PTM.1	x PQALPHAref	x PSMref			
	e PDBETA.2			x PQM.4	x PQBETAref	x PS.c			
x Air Speed	x CasADDU.1	x TasADDU.1	x lasADDU.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					
	o TTM.1	x TDM.1	x TRadD.1			x TD.c	x TTMref		
x Temp/Dewpt	x TTM.2	x TDM.2	x TRadS.1			x TDMref	x TA.d		
	o TTM.3	e TDM.3	o TRadU.1						
						x UWZ.d	x WS.d		
x Miscellaneous (must check)						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: Ocean Winds Winter 2017

Mission: Hurricane Irma

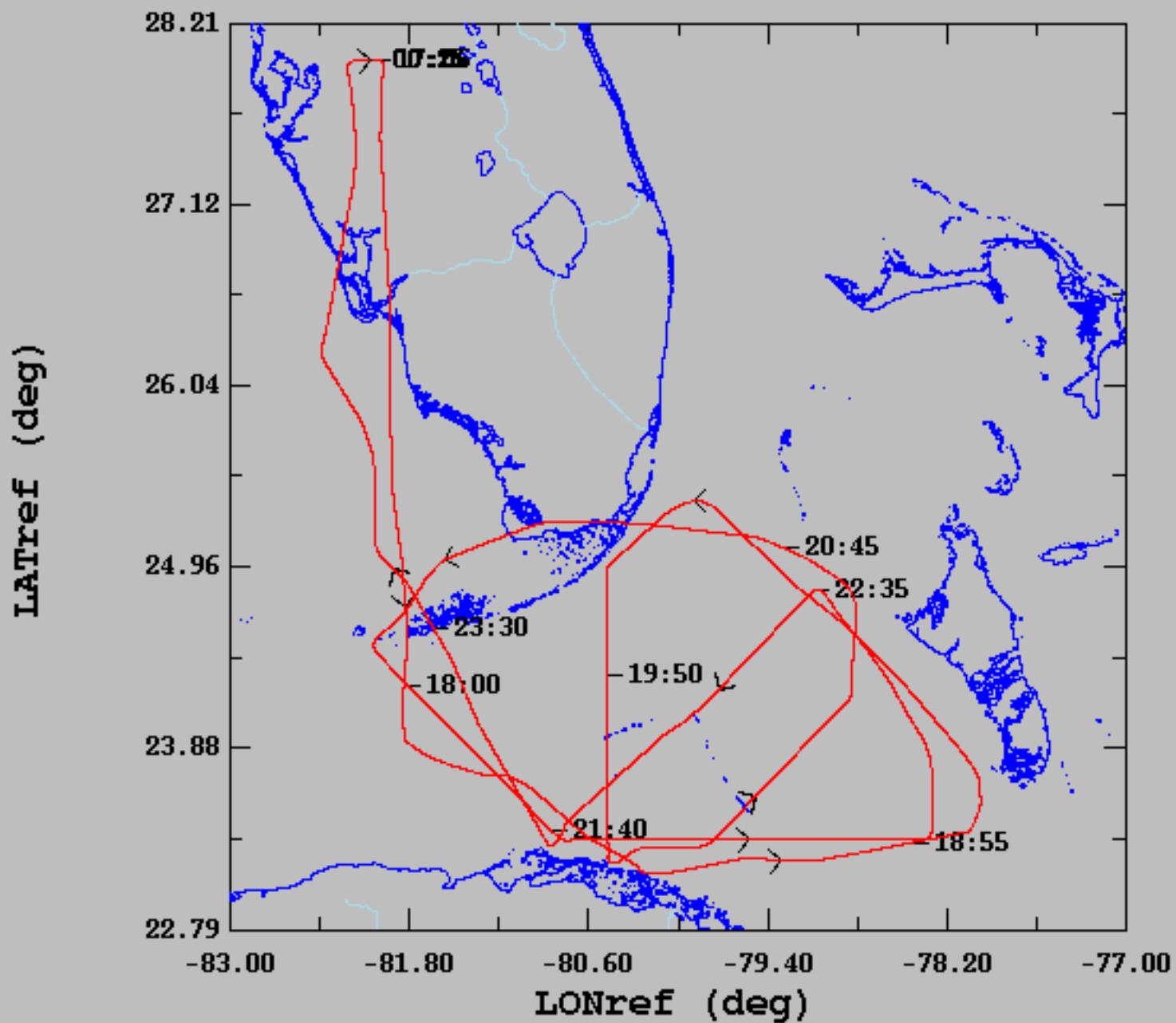
Flight ID: 20170909H1

Project: Ocean Wind
Take Off: 1700Z

Landing:

Flt Dir: Belson / Parnish

2017-09-09, 17:06:00-24:25:20



	mean	sigma	min	max
LATref (deg), 1 s/sec	24.60	1.30	23.13	27.99
LONref (deg), 1 s/sec	-80.50	1.28	-82.38	-77.97

20170909H1

KLAL - KLAL

13 AOC
3 Observers
T/O 1700Z
ETE 8+00
NOAA2 2711A IRMA

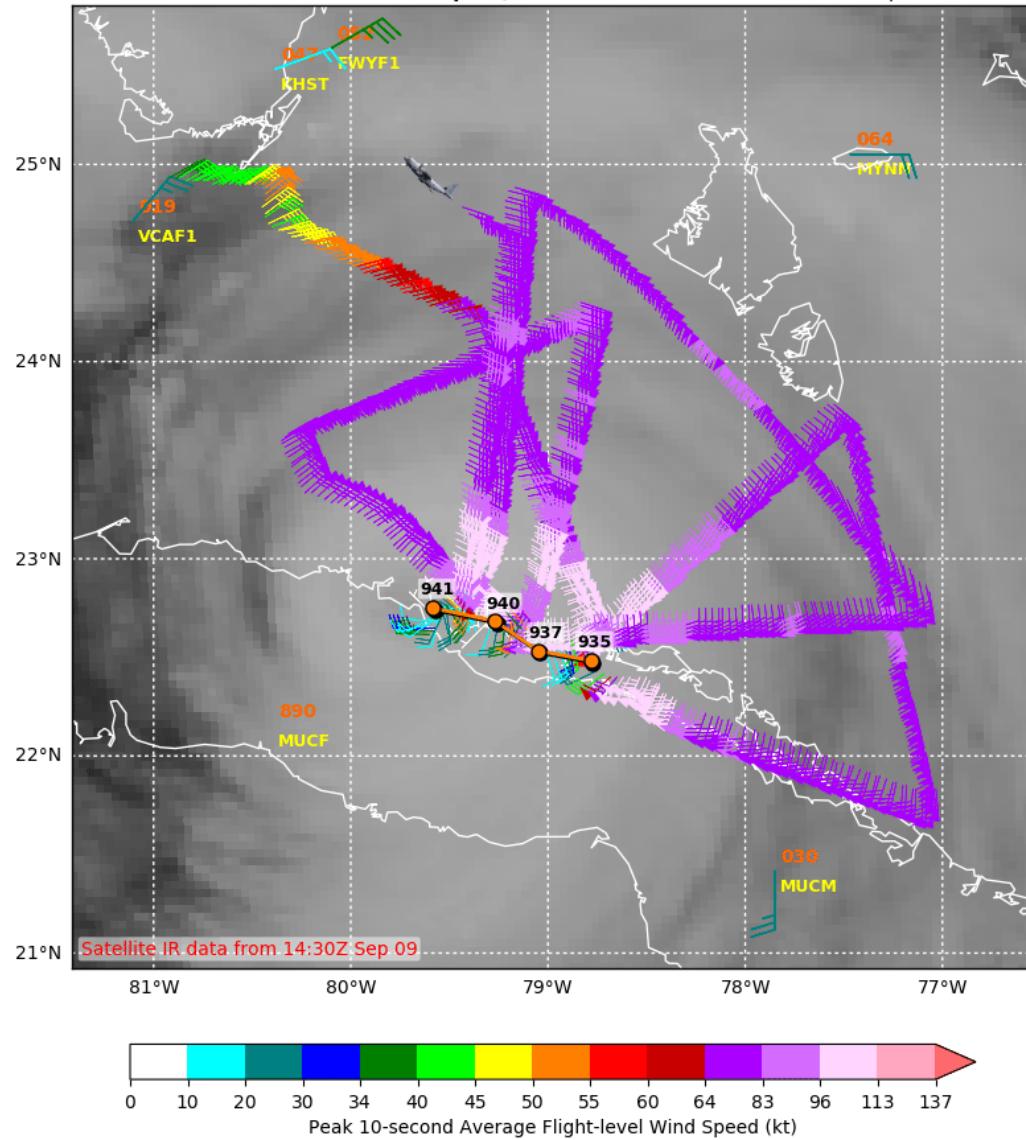
Mission

- FL100 Pressure
- 105nm legs
- IP will be 105 nm NW of center, outbound likely to E
- Last fix must be after 23Z
- Max wind drops on first pass (if possible)
- Center drops on all passes

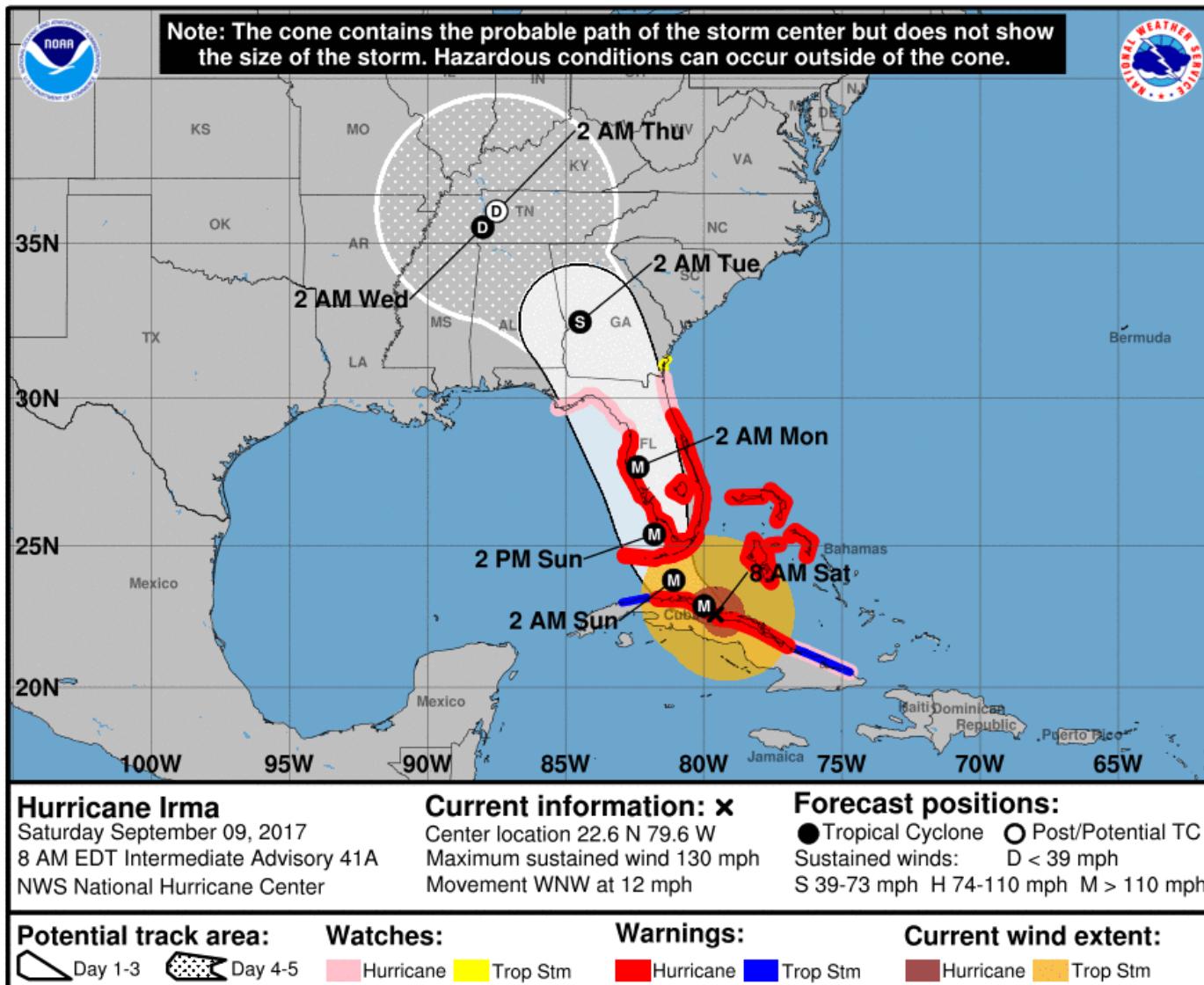
Last AF track

AF307 Recon Obs as of 14:37Z Sep 09, 2017

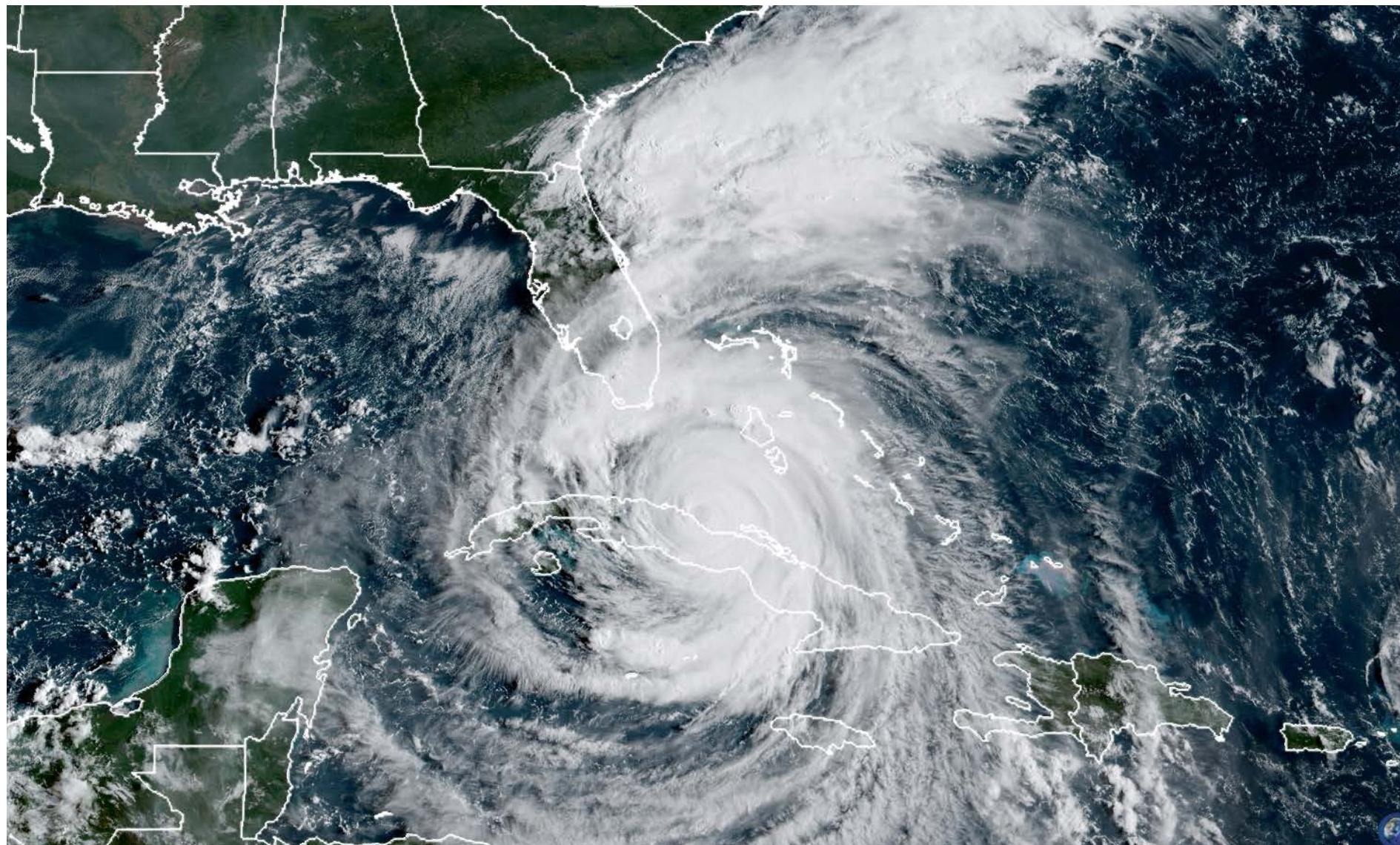
Levi Cowan - tropicaltidbits.com



STORM FORECAST

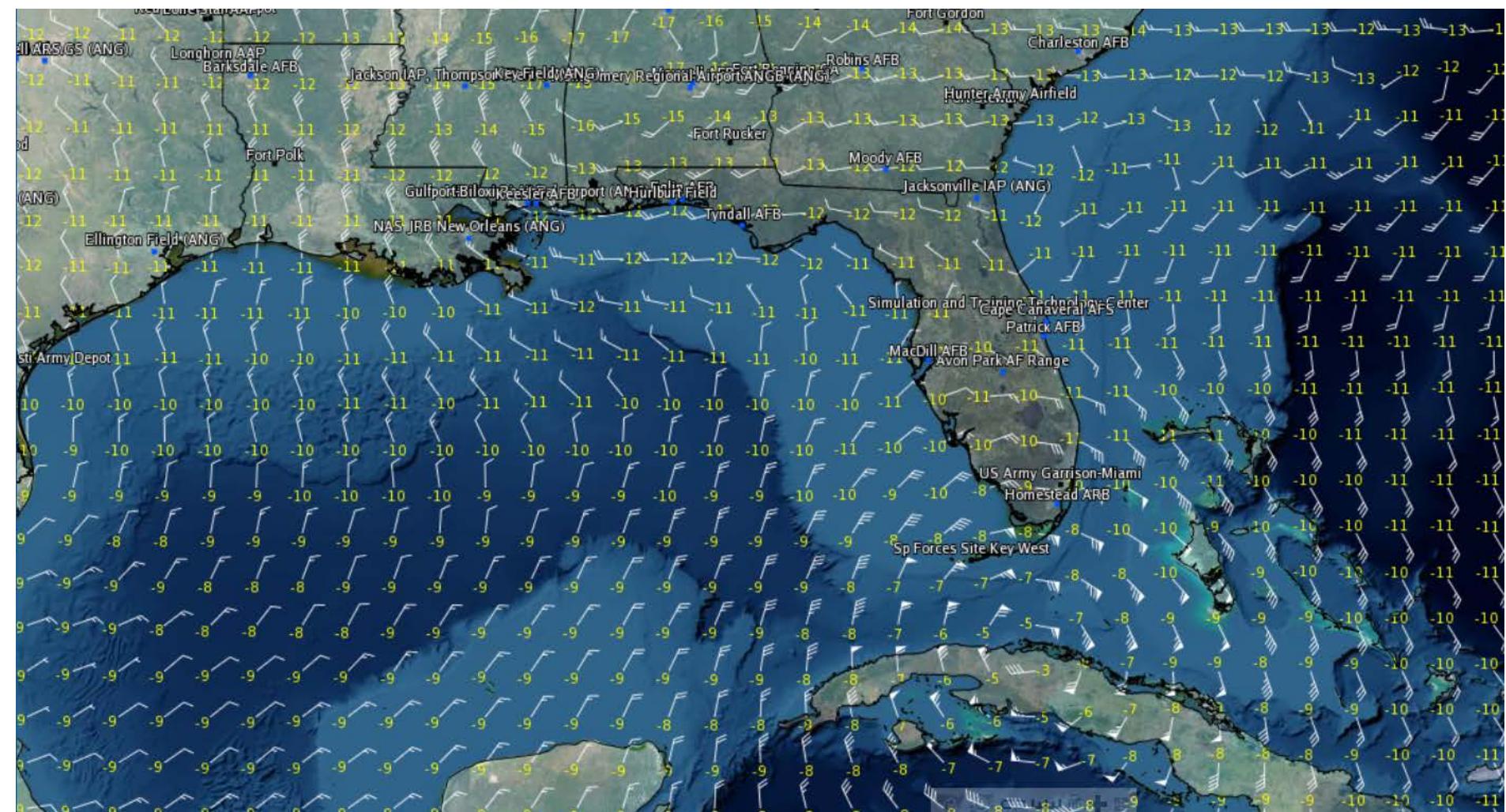


SATELLITE



Transit FL210

VT 10/00



Airfield Wx

- KLAL 091345Z 05012G17KT 10SM SCT013 27/24 A2990
- KLAL 091128Z 0912/1012 02010KT P6SM SCT010 BKN250
TEMPO 0912/0914 BKN010
FM091500 06015G22KT P6SM VCSH SCT020 BKN100
FM091800 05017G27KT P6SM VCTS SCT025CB BKN050
FM100100 02011G19KT P6SM FEW020 BKN050
- KMSY 091353Z 05011G16KT 10SM FEW050 24/17 A3006 RMK AO2 SLP180 T02390167
- KMSY 091226Z 0912/1012 05010G20KT P6SM SKC

Hazards

- Icing – Negative
 - Freezing / Melting Altitude 16,000+ ft
- 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