N42RF ERROR SUMMARY
20170825H1

Flight ID: 20170825H1

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/20170825H1

Local Met Data	Takeoff KLAL (0025Z)	Landing KLAL (0724Z)
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 ~2 mb higher than PSM.2, PTM.1 ~90 mb higher; PDALPHA.2 sawtooth from 0721-0752.
TDM.1 spikes at 0231, 0344, 0417,0515, TDM.2 spikes at 1548, TDM.3 has 10C high bias.

Expendable Type	# deployed	# good	# transmitted
Dropsondes	10	9	9
Test sondes	0	0	0
AXBTs	6	2	2
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			
FLT ID:	20170825H1	FLT #:	
From:	KLAL	ETD:	0200Z
To:	KLAL	ETA:	0900Z
Block Time		Flight Time	
In:	0853	In:	0845
Out	0133	Out:	0146
Total:	7.3	Total:	7.0
Sponsoring Org:	NHC		
Program:	PRX		
Purpose:	Hurricane recon		

CREW MANIFEST		
AC:	Price	Scientists:
CP(s):	Rossi	Rob Rogers (PI)
	Mitchell	Sellwood, Kathryn
Nav(s):	Gallagher	Zhang, Jun
	Urato	Holbach, Heather
FE(s)	Darby	Alsweiss, Suleiman
	Sanchez	
FD(s):	Belson	
	Parrish	Visitors:
SEB:	Peek	
	Patel	
SSA:	Mascaro	
AVAPS:	Richards	

MISSION INFORMATION				
Pressure		Dropsondes		
		Good	Bad	Sent
A/C Takeoff	1007.0	9	1	9
Wx Station Takeoff	1007.2	BTs		
		Good	Bad	Sent
A/C Land	1005.4	2	4	2
Wx Station Land	1006.5			
Storm Number ID:		AL092017		
(ie: AL072012)				
TCPOD/WSPOD Mission				
(ie: NOAA2 2418A SANDY)		NOAA2 1609A HARVEY		

AS REQUIRED BY ORM	Y	N	REMARKS
VOLCANIC ASH		X	
SCIENCE MISSION WITHIN BDRY LAYER		X	
LACK OF PRECIPITATION		X	
RELATIVE HUMIDITY ≥ 80%	X		
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	

OBSERVATIONS

Fix Number	Obs Number	Fix Time	SLP
1	9	0420	967
2	13	0504	968
3	20	0604	967

Additional Remarks:

*Highlighted items must be completed before departure.

Cockpit Gmax: 2.0 Gmin: 0.3

20170825H1
KLAL - KLAL

13 AOC
4 HRD
1 NESDIS
T/O 0200Z
ETE 7+00
NOAA2 1609A HARVEY

Other Aircraft

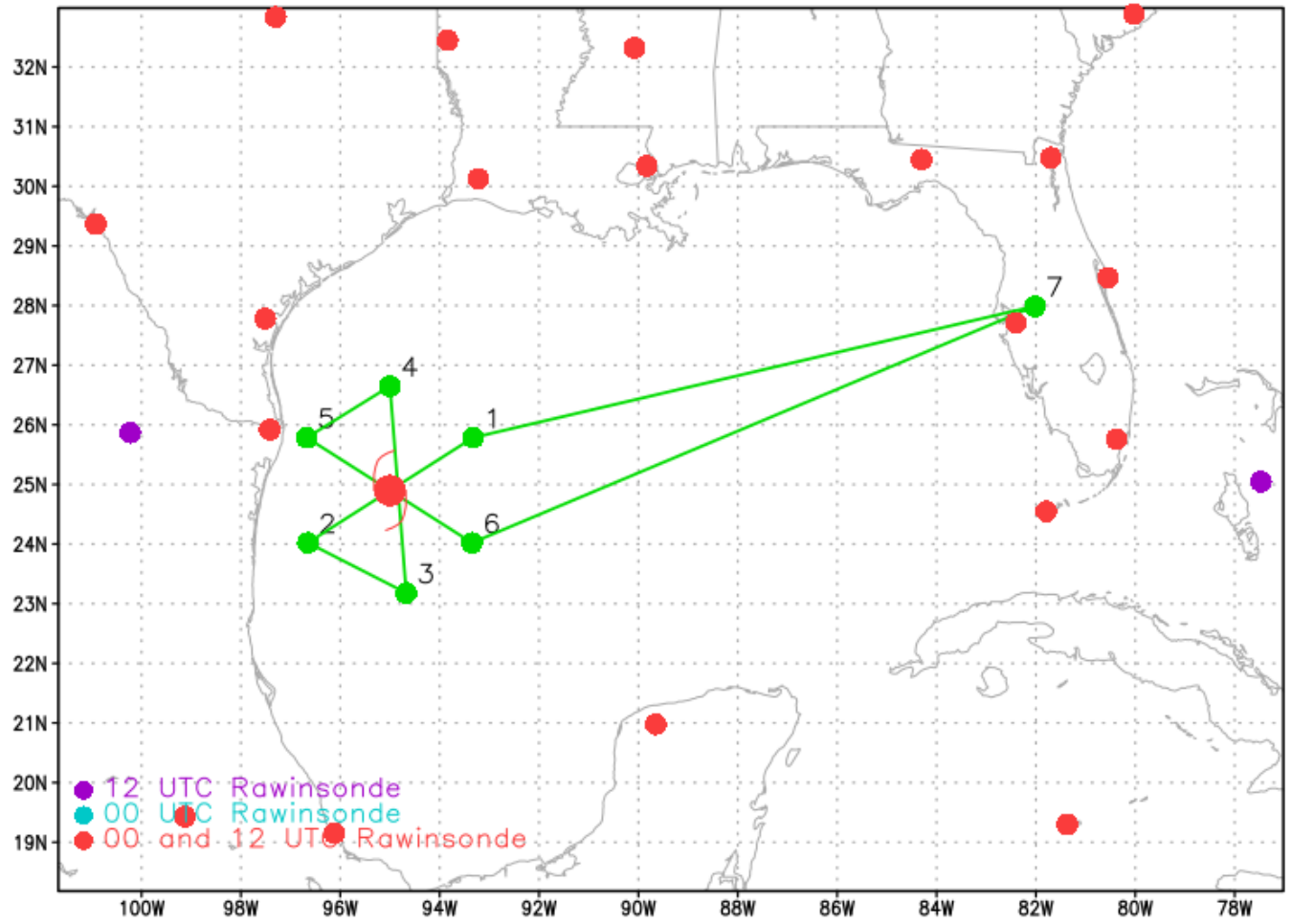
FLIGHT THREE -- TEAL 71

- A. 25/2330Z, 0530Z
- B. AFXXX 1509A HARVEY
- C. 24/2130Z
- D. 25.2N, 94.9W
- E. 24/2300Z TO 25/0530Z
- F. SFC TO 10,000 FT

FLIGHT FIVE – NOAA 49

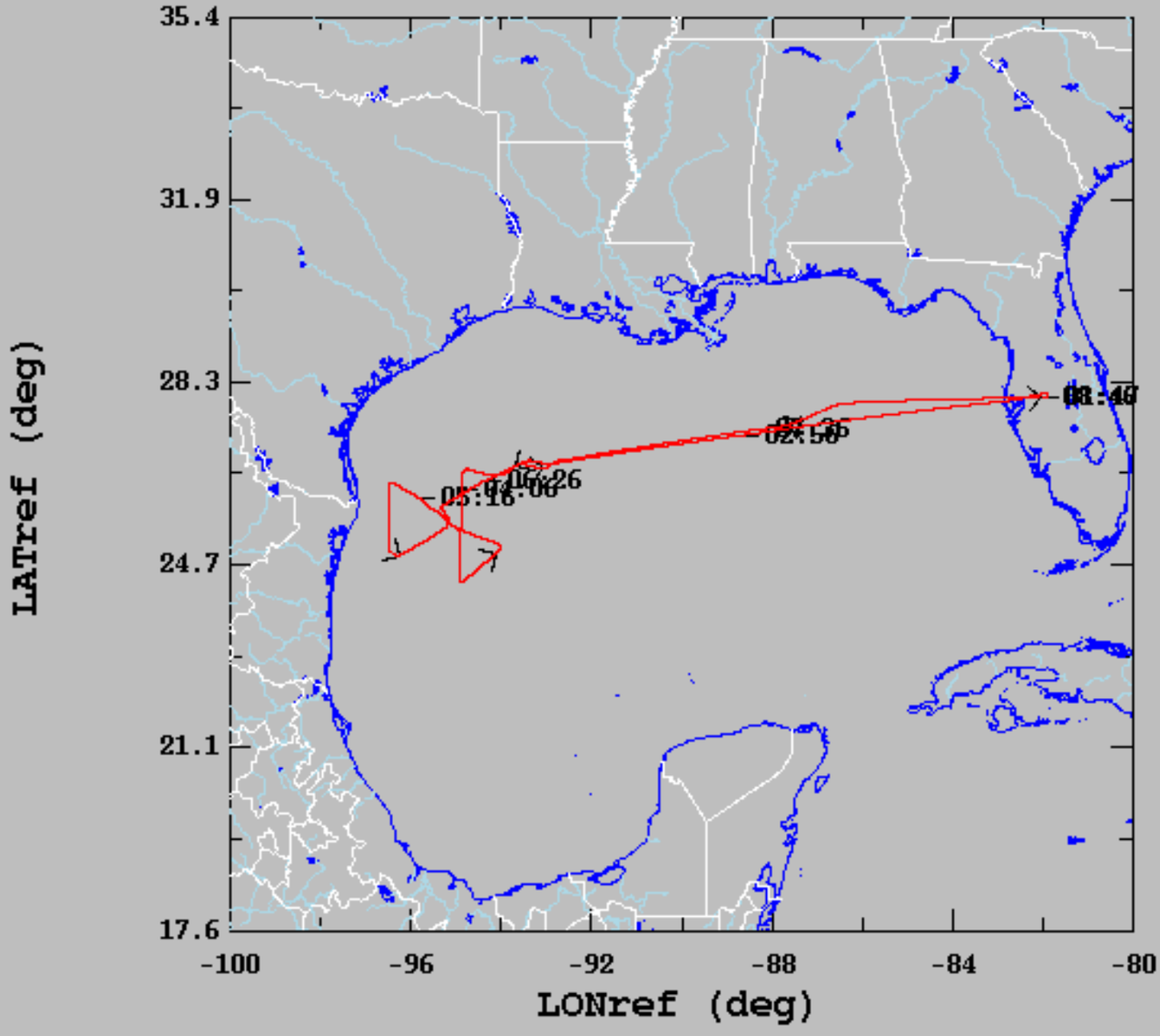
- A. 25/0000Z
- B. NOAA9 1509A HARVEY
- C. 24/1730Z
- D. NA
- E. NA
- F. 41,000 TO 45,000 FT

Mission



- Rotate IP to N of center
- Sondes/BTs on endpoints (HFIP), sonde in center (NHC) – backups
- 105nm legs, FL100

2017-08-25, 01:47:00-08:46:00



	mean	sigma	min	max
LATref (deg), 1 s/sec	26.69	1.01	24.36	28.06
LONref (deg), 1 s/sec	-90.70	4.58	-96.47	-81.89

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

Project: Hurricane 2017 Mission: Hur. Harvey Flight ID: 20170825H1

Take Off : 0146 Z Landing: 0845 Z Flt Dir : Belson / Parrish

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge $$ To	Comments	Good ?
1	143215097	1	-1.0	0400	AP	HFIP	IP, combo drop	✓
2	160625144	2	-1.5	0420		NWS	Center fix	✓
3	162845028	3	-0.7	0434		HFIP	Gnt Point combo	✓
4	143245049	4	-0.6	0450		HFIP	Gnt Point combo - sonde BAD	?
5	162655034	1	-0.7	0505		NWS	center fix	✓
6	162845032	3	-0.6	0529		HFIP	Gnt Point, combo	✓
7	160215177	4	-0.9	0547		HFIP	Gnt Point, combo (37 Gnd)	✓
8	143215165	1	0.8	0604		NWS	Center Fix	✓
9	143345047	2	-0.9	0606		NESDIS	Max Wind eye wall	✓
10	160625062	3	-1.8	0640		HFIP	Gnt Point Combo (good)	✓
11								
12								
13								
14								
15								
16								
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AXBT Log

Mission Hur. Harvey Takeoff Time 0146

Flight ID 20170825H1 Landing Time

Drop	Ch	Drop Time HHMM	PMD560 Track #	Log File Name	SST	Notes
1	12	0400	001	log00000.dat	—	IP drop – BAD
2	12	0434	002	log00001.dat	—	Ent drop – BAD
3	12	0450	003	log00002.dat	26°C	Ent drop (325 deep)
4	12	0529	003	log00003.dat		Ent drop – BAD
5	12	0547	004	log00004.dat	—	Ent drop – BAD
6	12	0640	005	log00005.dat	30°C	Good

APPENDIX 1 – P3 QC Checklist

Flight ID:	20170825H1
Flight Director(s):	Parrish, Belson

Pressure Comparison		
	T/O	**Land**
Aircraft	**1007.0**	**1005.4**
Tower	**1007.2**	**1006.5**

UWZ.d mean: ___0.17_____

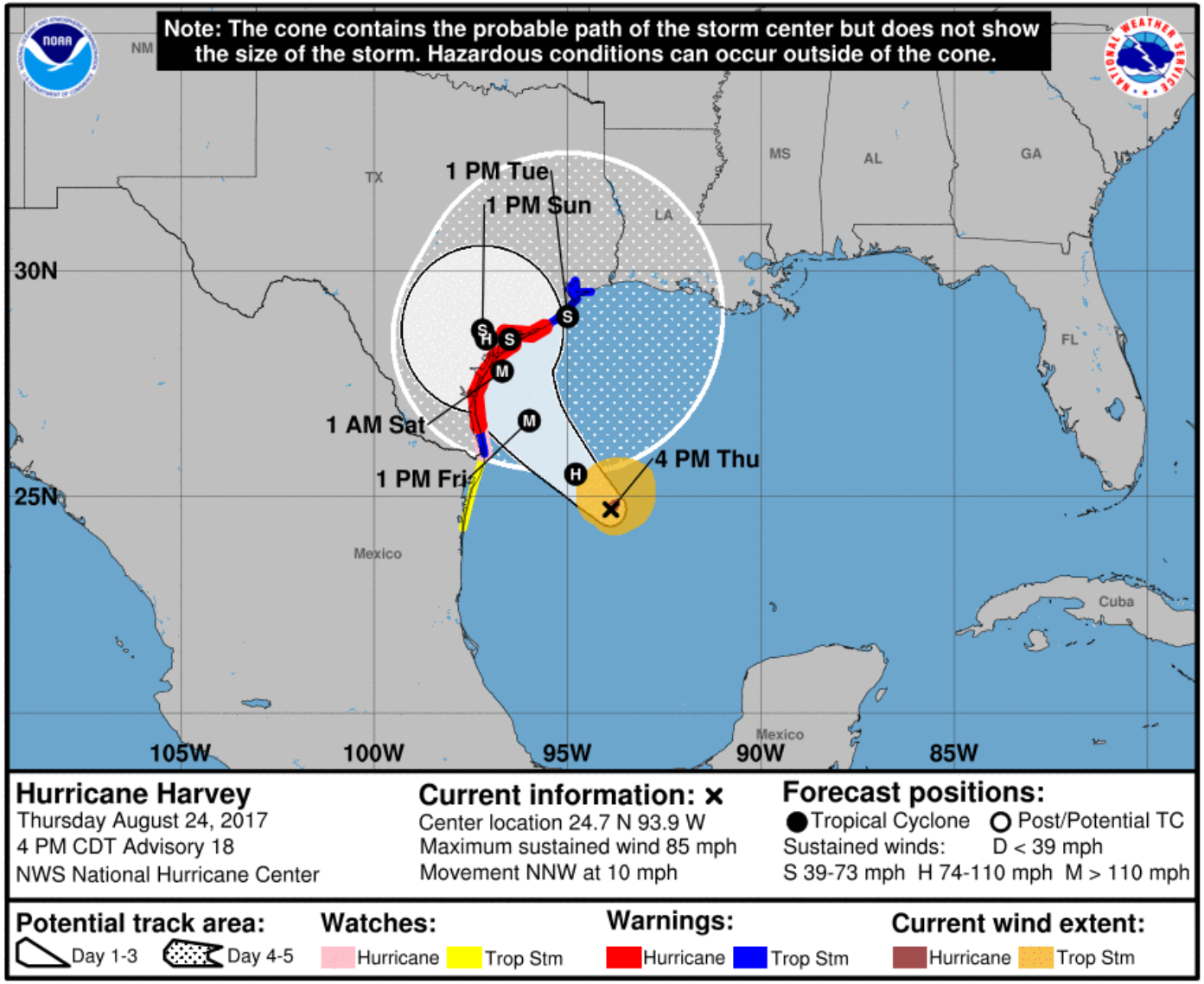
	Raw 1Hz Mean File Parameters								C File Parameters			
x Accelerometer	x	AccAXI.1	x AccAYI.1	x	AccAZI.1	x	AccZfilter-GPS.1		x AccZref			
	x	AccAXI.2	x AccAYI.2	x	AccAZI.2	x	Acc-Zfilter-GPS.2					
	x	AccAXI-GPS.1	x AccAYI-GPS.1	x	AccAZI-GPS.1							
	x	AccAXI-GPS.2	x AccAYI-GPS.2	x	AccAZI-GPS.2							
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	e TDM.1	x	TRadD.1				x TD.c	x	TTMref	
	x	TTM.2	e 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:

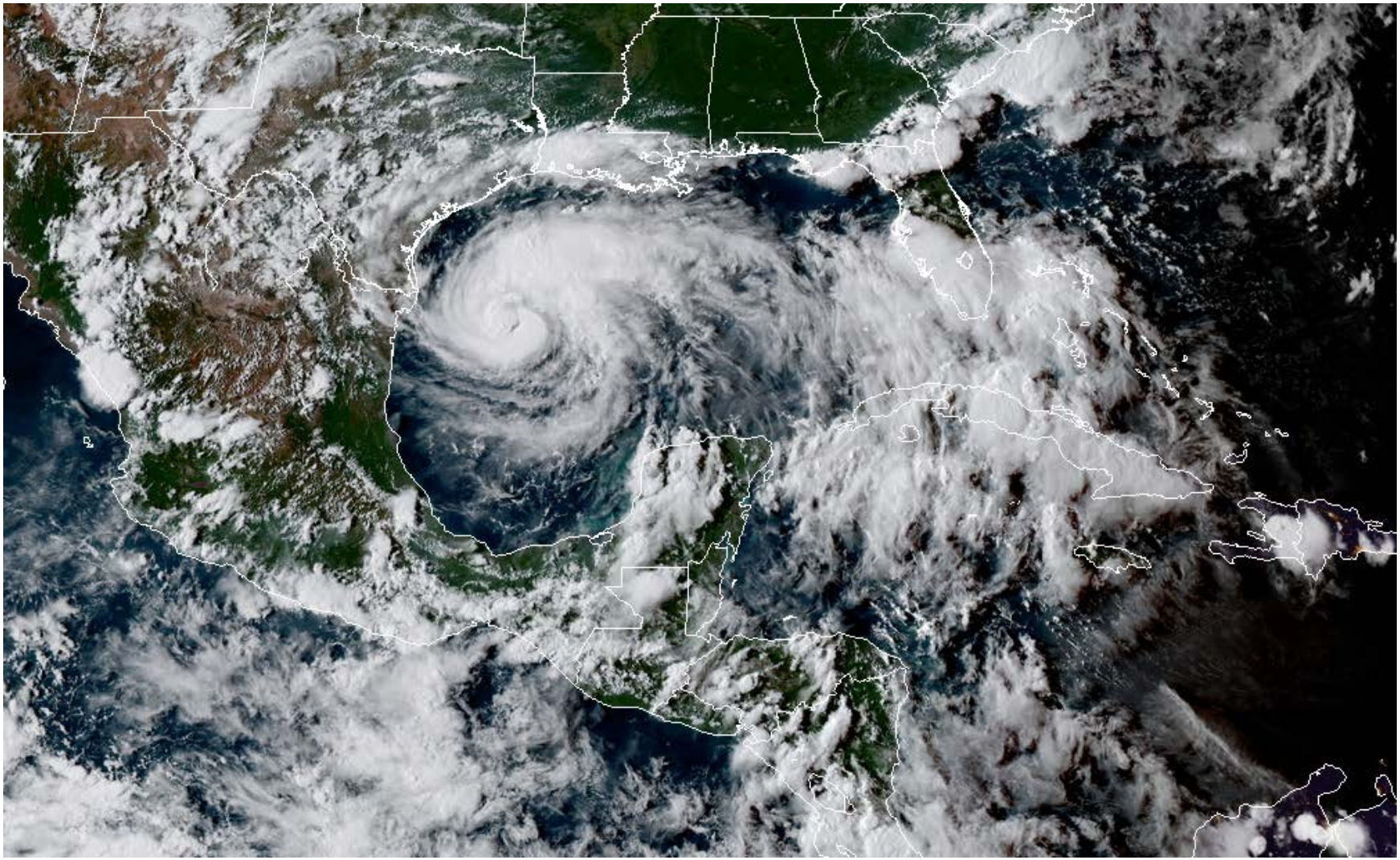
X	Error Summary
X	Crew Manifest
X	QC checklist
X	Dropwindsonde Log(s) – AVAPS and FD if completed
X	Flight Track
X	Miscellaneous FD notes

NOTES:

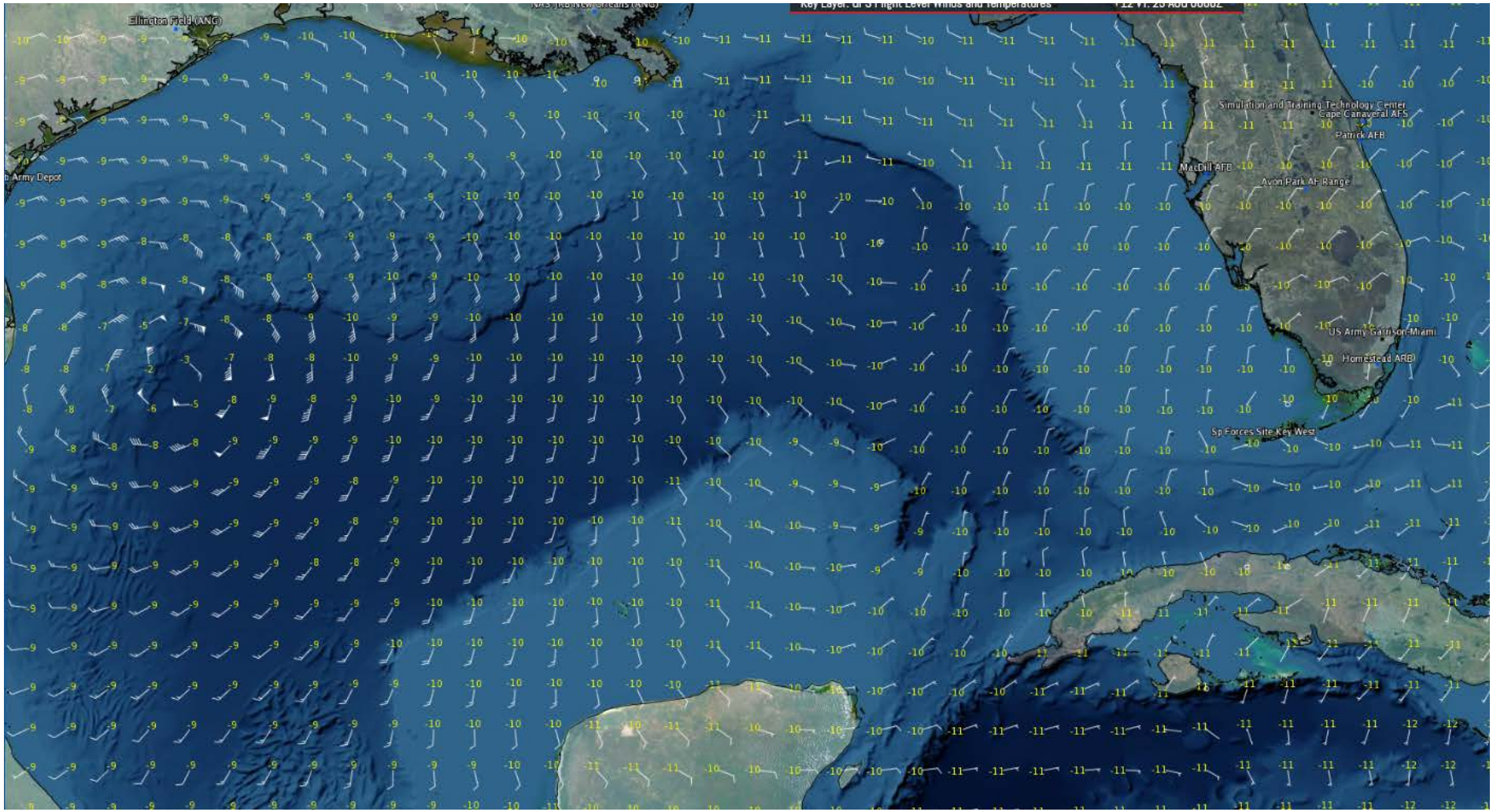
STORM FORECAST



SATELLITE



Transit FL210
VT 25/06



Airfield Wx

- KLAL 242250Z 15011KT 10SM SCT025 28/24 A2985
- KLAL 242238Z 2423/2518 13007KT P6SM SCT035 BKN200
  FM250100 VRB03KT P6SM FEW040 BKN250

Hazards

- Icing – above FL180, in storm environment
  - Freezing / Melting Altitude 16,000 ft
- Turbulence – in convection
- Volcanic Ash - Negative
- HD - yes
- Rapid Intensification – Yes
- 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