

N42RF ERROR SUMMARY
20170824H1

Flight ID: 20170824H1

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/20170824H1

Local Met Data	Takeoff KLAL (0045Z)	Landing KLAL (0849Z)
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 consistently 2mb higher than PSM.2, PTM.1 about 90mb high. PDALPHA.2 had discontinuity at 08:32:28, PDBETA.2 deviated from 0831-0920. PQM.1/4 spiked about 0350. PITCHI-GPS.1/3 were about 0.2 higher than 2/4. Similar for ROLLI. TDM.2 had issues from 0402-0408 (TDM.1 too). AccAXI.1 about 0.03 higher, AccAYI.1 about 0.02 lower.

Expendable Type -----	# deployed -----	# good -----	# transmitted -----
Dropsondes	10	9	9
Test sondes	0	0	0
AXBTs	6	4	4
AXCPs	0	0	0
AXCTDs	0	0	0
UAS	0	0	0

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

NOAA Aircraft Operations Center - NOAA 42 Flight Manifest

FLIGHT INFORMATION				CREW MANIFEST				MISSION INFORMATION				
FLT ID:	20170824H1	FLT #:		AC:	Price	Scientists:		Pressure		Dropsondes		
From:	KLAL	ETD:	0200Z	CP(s):	Rossi	Rob Rogers (PI)		A/C Takeoff	1007.3	Good	Bad	Sent
To:	KLAL	ETA:	0930Z		Mitchell	Sellwood, Kathryn		Wx Station Takeoff	1007.6	9	1	9
Block Time		Flight Time		Nav(s):	Gallagher	Zhang, Jun						
In:	1003	In:	0956		Urato	Holbach, Heather		A/C Land	1005.3	Good	Bad	Sent
Out:	0142	Out:	0152	FE(s):	Darby	Romer, Mark		Wx Station Land	1006.6	4	2	4
Total:	8.4	Total:	8.1		Sanchez	Jelenak, Zorana						
Sponsoring Org:	NHC	Program:	PRX	FD(s):	Belson	Visitors:		Storm Number ID:		AL092017		
					Parrish			(ie: AL072012)				
Purpose:	Hurricane recon	SSA:		SEB:	Peek			TCPOD/WSPOD Mission		NOAA2 1009A HARVEY		
					Patel			(ie: NOAA2 2418A SANDY)				
AS REQUIRED BY ORM	Y	N	REMARKS	AVAPS:	Richards			OBSERVATIONS				
				Fix Number	Obs Number			Fix Time	SLP			
VOLCANIC ASH		X				1	9	0426	1002			
SCIENCE MISSION WITHIN BDRY LAYER		X				2	15	0605	999			
LACK OF PRECIPITATION		X				3	21	0734	996			
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										

Additional Remarks:

*Highlighted items must be completed before departure.

Cockpit Gmax: 1.7

Gmin: 0.4

APPENDIX 1 – P3 QC Checklist

Flight ID:	20170824H1
Flight Director(s):	Parrish, Belson

Pressure Comparison		
	T/O	Land
Aircraft	1007.3	1005.3
Tower	1007.6	1006.6

UWZ.d mean: 0.12

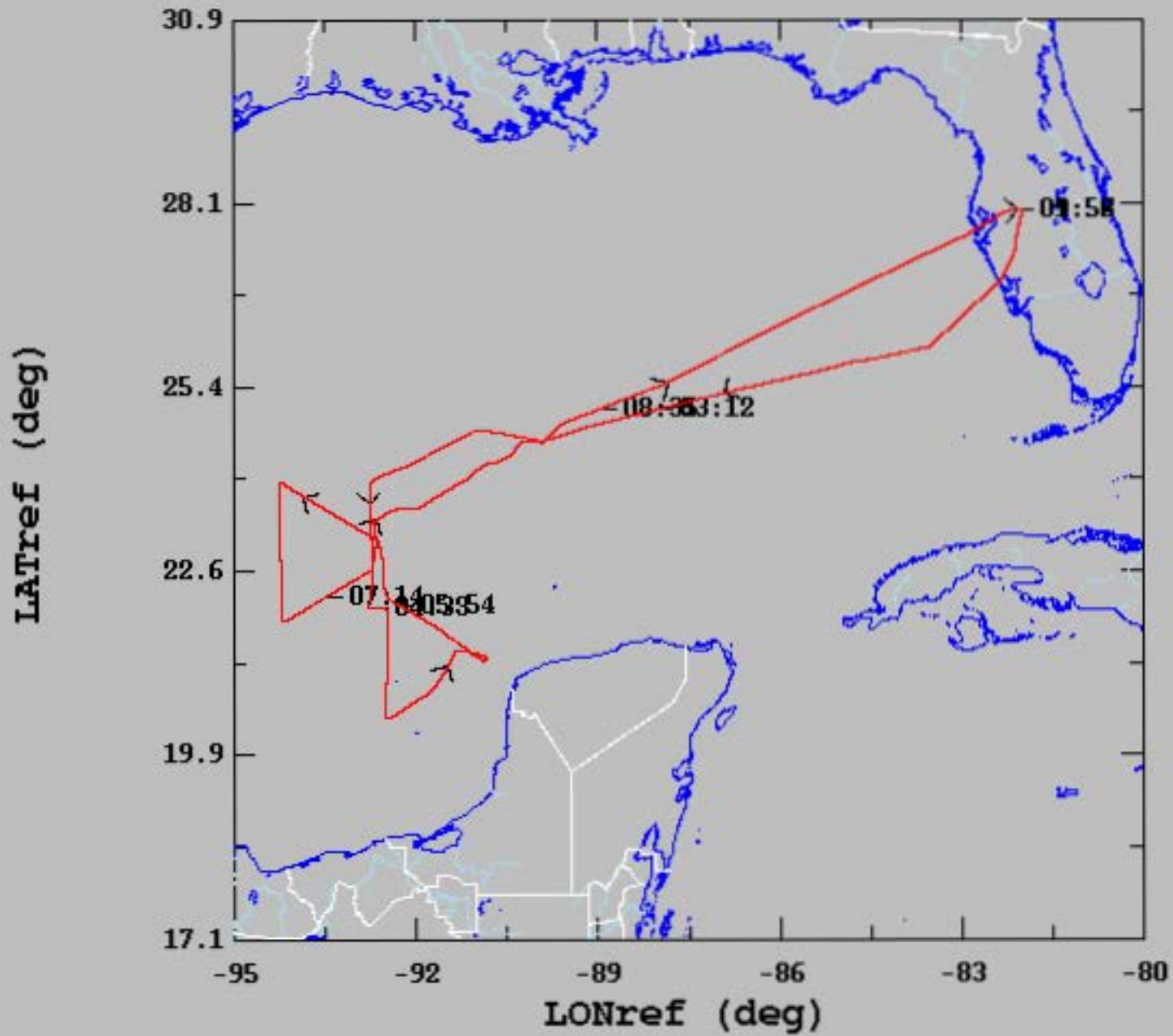
	Raw 1Hz Mean File Parameters				C File Parameters	
x Accelerometer	x AccAXI.1	x AccAYI.1	x AccAZI.1	x AccZfilter-GPS.1	x AccZref	
	x AccAXI.2	x AccAYI.2	x AccAZI.2	x Acc-Zfilter-GPS.2		
	x AccAXI-GPS.1	x AccAYI-GPS.1	x AccAZI-GPS.1			
	x AccAXI-GPS.2	x AccAYI-GPS.2	x AccAZI-GPS.2			
x Altitude	x AltGPS.1	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	e PQM.1	e 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
	e PDBETA.2		e 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	
	x PitchI.3	o PitchRateI.3	x 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:

2017-08-24, 01:52:00-09:56:00



	mean	sigma	min	max
— LATref (deg), 1 s/sec	24.13	1.97	20.43	27.99
— LONref (deg), 1 s/sec	-89.63	3.80	-94.24	-81.97

20170824H1

KLAL - KLAL

13 AOC

4 HRD

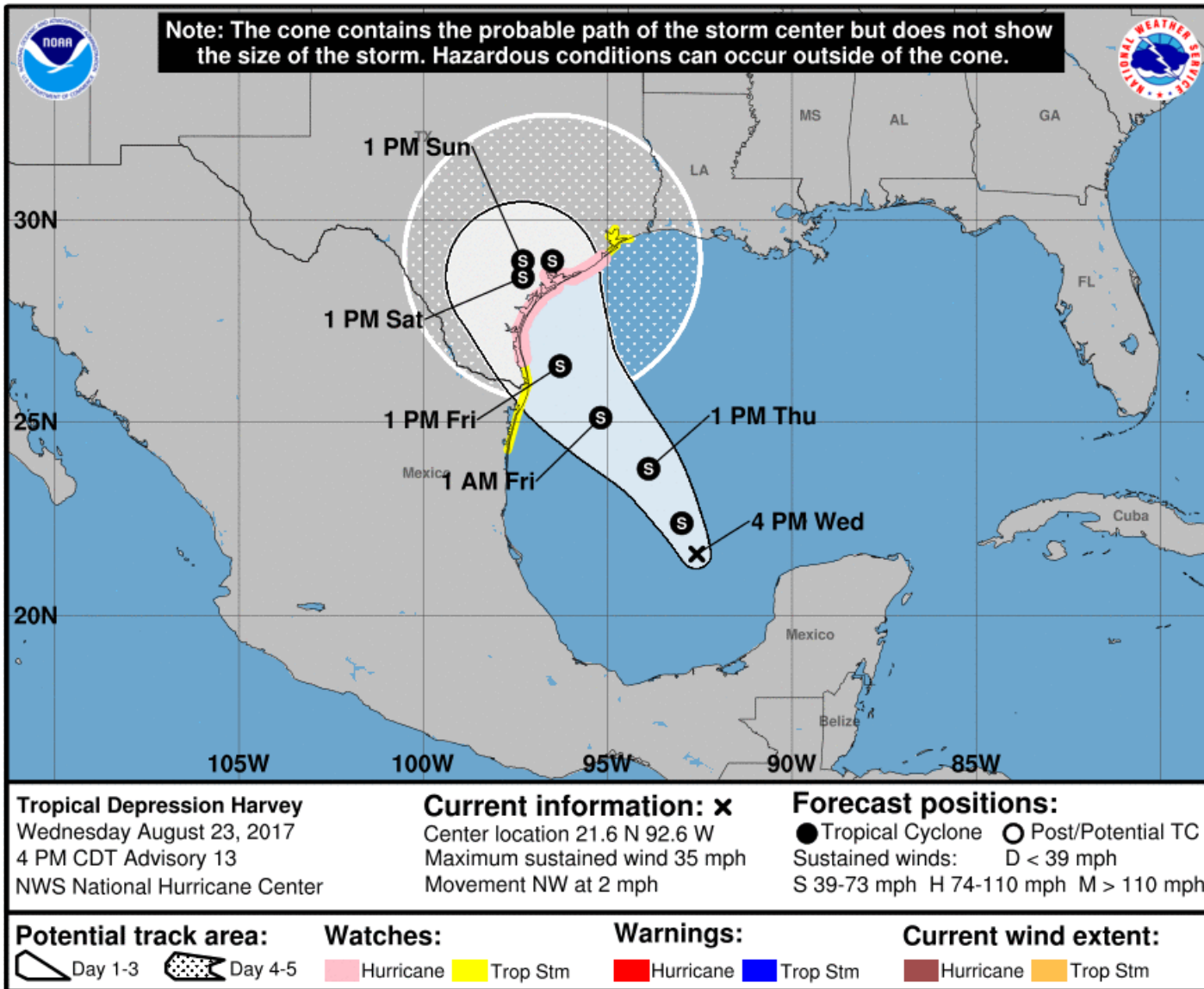
2 NESDIS

T/O 0200Z

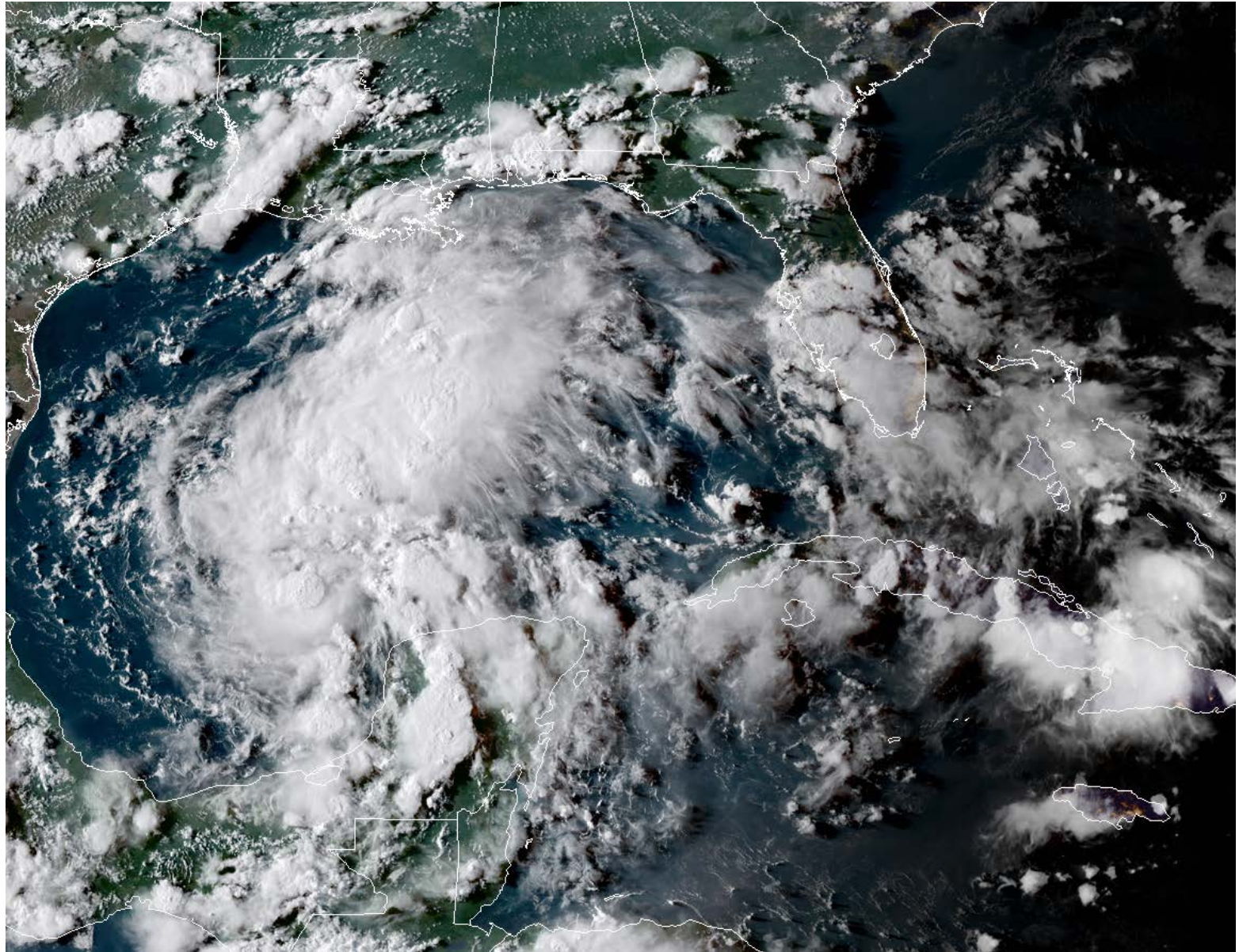
ETE 7+30

NOAA2 1109A HARVEY

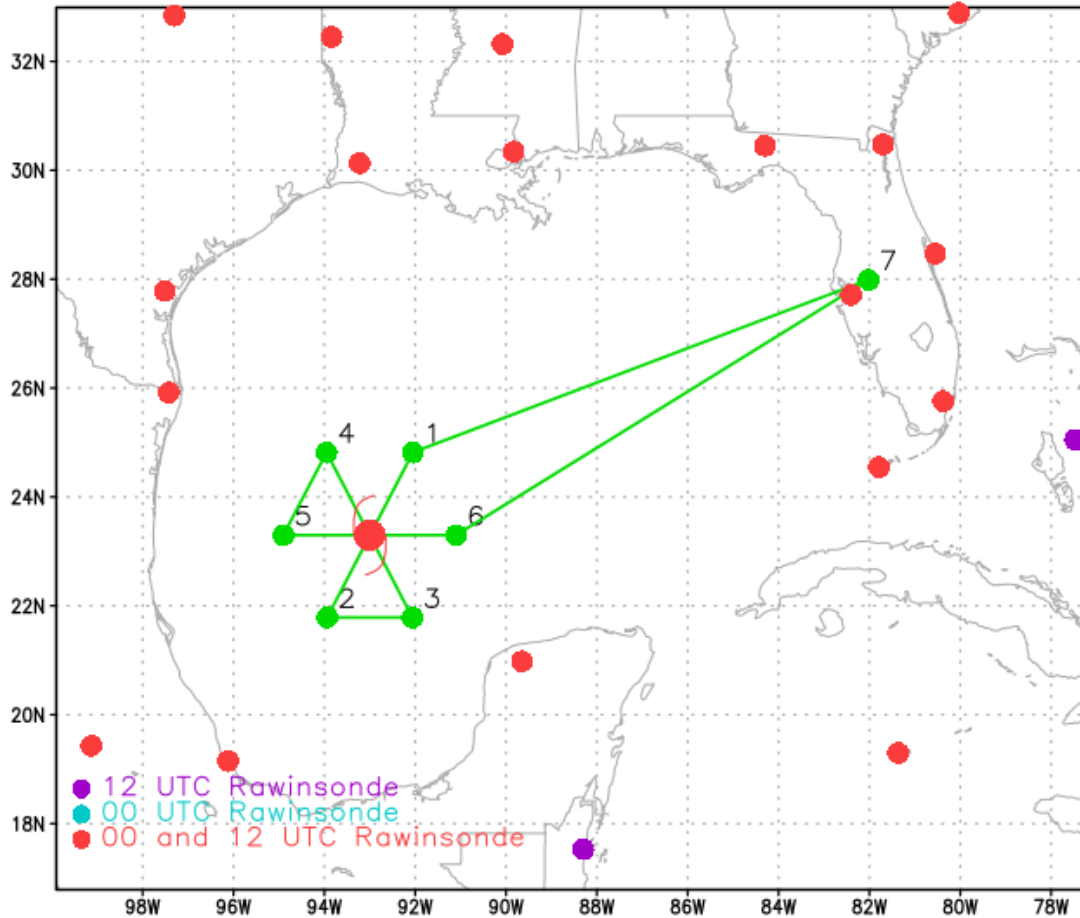
STORM FORECAST



SATELLITE



Mission



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

Other Aircraft

FLIGHT THREE -- TEAL 71

- A. 23/2330Z, 24/0530Z
- B. AFXXX 1009A HARVEY
- C. 23/2115Z
- D. 22.7N 93.2W
- E. 23/2300Z TO 24/0530Z
- F. SFC TO 15,000 FT

FLIGHT FIVE – NOAA 49

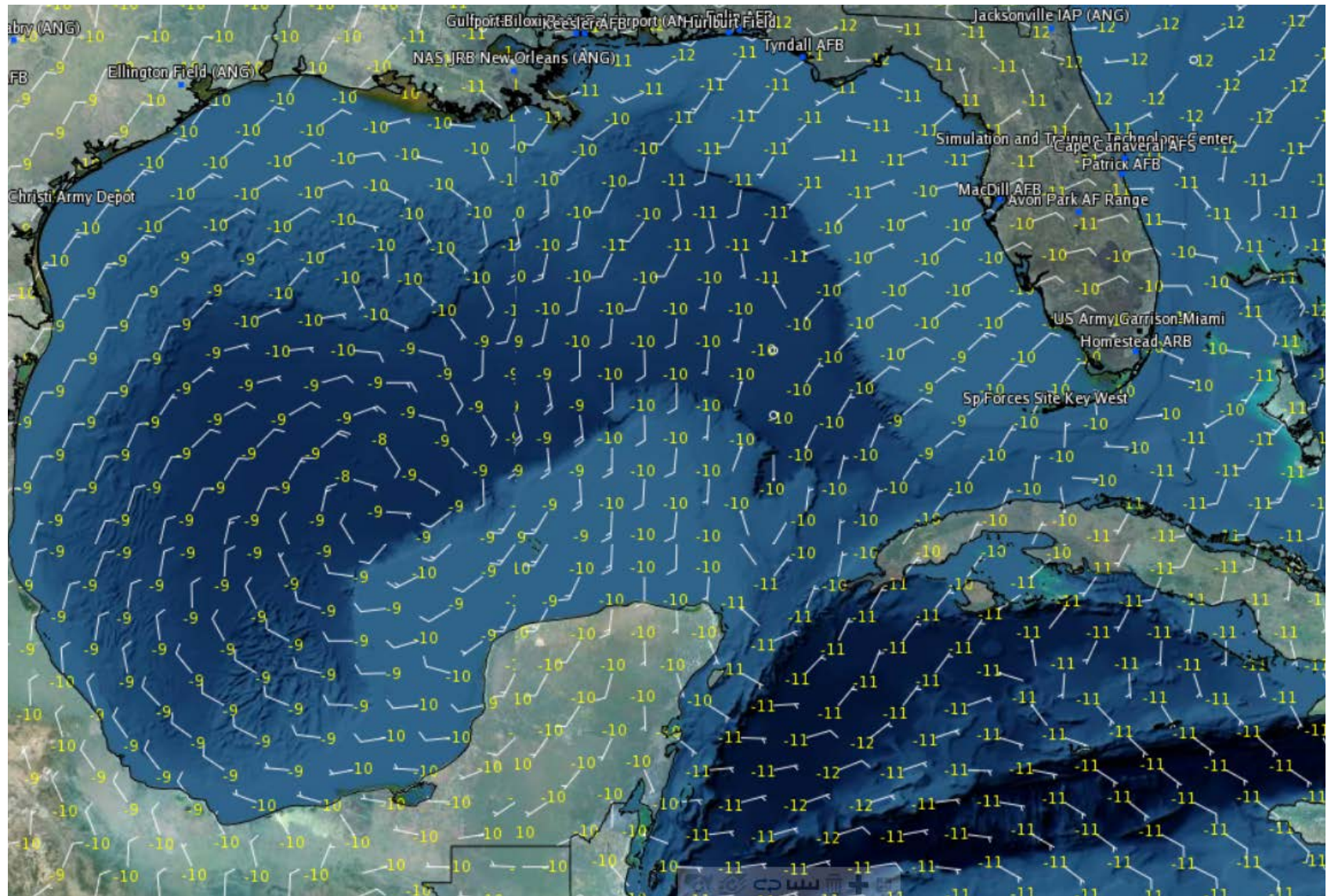
- A. 24/0530Z, 24/1330Z
- B. NOAA9 1209A HARVEY
- C. 24/0530Z
- D. NA
- E. NA
- F. SFC TO 15,000 FT

GLOBAL HAWK

- 78 sondes, should be in/near storm environment at same time we are

Transit FL210

VT 24/06



Airfield Wx

- KLAL 232106Z 2321/2418 09006KT P6SM VCTS SCT050CB BKN150
- TEMPO 2321/2323 VRB12G22KT 4SM -TSRA BKN030CB
FM240000 08007KT P6SM SCT050 BKN100 BKN250
FM240200 VRB03KT P6SM SCT100 BKN250

Hazards

- Icing – above FL180, in storm environment
 - 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