N42RF ERROR SUMMARY
20170905H2

Flight ID: 20170905H2

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/20170905H2

Local Met Data	Takeoff TBPB (1748Z)	Landing TBPB (0001Z)
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.1 lower than AccAX.2, AccAY.1 higher than AccAY.2
PDALPHA.2 appears erroneous.
TDM.1 about 1.5C higher than TDM.2, TDM.3 ~10C high, TDM.1 had erroneous spike in center on pass 2 and 3. (changed default to TDM.2)
A file had to be restarted mid-flight, now split _A.nc and _B.nc

Expendable Type	# deployed	# good	# transmitted
Dropsondes	15	15	15
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

FLT ID:	20170905H2	**FLT #:**	
From:	TBPB	**ETD:**	2000Z
To:	TBPB	**ETA:**	0230Z

Block Time		**Flight Time**	
In:	0256	In:	0247
Out:	2030	Out:	2035
Total:	6.4	Total:	6.2

Sponsoring Org:	EMC/NHC
Program:	PRX
Purpose:	Hurricane Recon

CREW MANIFEST

AC:	Price	**Scientists:**
CP(s):	Mitchell	
	Rees	Zawislak, Jon
Nav(s):	Sloan	Zhang, Jun
	Urato	
FE(s)	Darby	
	Tuffnel, Todd	
FD(s):	Belson	
	Parrish	**Visitors:**
SEB:		
	Warnecke	
SSA:	Mascaro	
AVAPS:	McAlister	

MISSION INFORMATION

Pressure		**Dropsondes**		
		Good	Bad	Sent
A/C Takeoff	1002.0	15	0	15
Wx Station Takeoff	1001.6	**BTs**		
		Good	Bad	Sent
A/C Land	1005.2	0	0	0
Wx Station Land	1004.8			

Storm Number ID: (ie: AL072012)	AL112017
TCPOD/WSPOD Mission (ie: NOAA2 2418A SANDY)	NOAA2 1011A IRMA

OBSERVATIONS

Fix Number	Obs Number	Fix Time	SLP
1	5	2139	920
2	12	2245	917
3	19	0003	917
4	25	0121	917

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	

Additional Remarks:

*Highlighted items must be completed before departure.

Cockpit Gmax: 2.2 Gmin: -0.5

APPENDIX 1 – P3 QC Checklist

Flight ID:	20170905H2
Flight Director(s):	Belson/Parrish

Pressure Comparison		
	T/O	**Land**
Aircraft	**1002.0**	**1005.2**
Tower	**1001.6**	**1004.8**

UWZ.d mean: 0.24

	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
	x 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	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:

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

Project: Hurricane 2017 Mission: Hurricaine Irma Flight ID: 20170905H2

Take Off : _____ Landing: _____ Flt Dir : Belson / Parrish

Drop #	Sonde Serial #	Rcvr #	Press Offset	Launch Time	Operator	Charge $$ To	Comments	Good ?
1	143855118	1	-0.5	2108	Mac	HFIP	Pt 1 Inbound	✓
2	162815317	2	-1.4	2135	Mac	NHC	Max W Eyewall In	✓
3	143255182	3	-1.3	2138	Mac	HFIP	Center	✓
4	163325027	4	-0.1	2142	Mac	NHC	Max W Eyewall out	✓
5	143255091	1	-0.7	2203	Mac	HFIP	Pt 2 turn	✓
6	143215122	2	-0.8	2226	Mac	HFIP	Pt 3 Inbound	✓
7	143215174	3	-0.6	2245	Mac	NHC	Center	✓
8	143215131	4	+1.0	2248	Mac	NESDIS	Eyewall. MW outbound	✓
9	143315007	1	-0.6	2313	Mac	HFIP	Pt 4 Turn	✓
10	143315008	2	-0.7	2335	JW	HFIP	Pt 5 Inbound	✓
11	162825120	4	-0.3	0003	JW	NHC	Center	✓
12	162815128	4	-0.4	0032	JW	HFIP	Pt 6 Turn	✓
13	143255075	1	-0.5	0100	JW	HFIP	Pt 7 Inbound	✓
14	142835143	2	-0.2	0121	JW	NHC	Center Fl. Inbd	✓
15	162745082	3	-0.3	0143	JW	HFIP	PT 8 Outbound	
16								
17								
18								
19								
20								
21								
22								
23								
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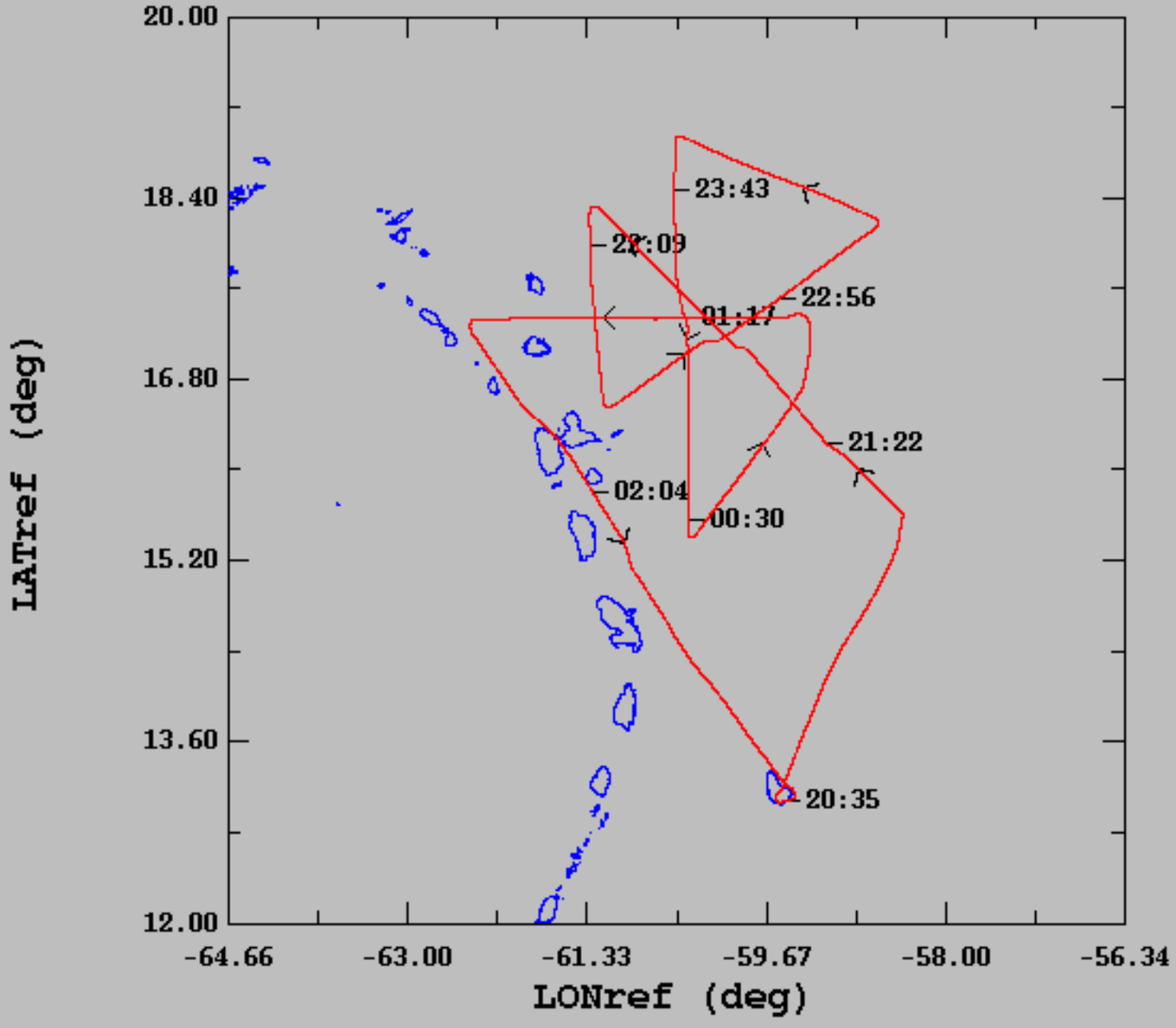
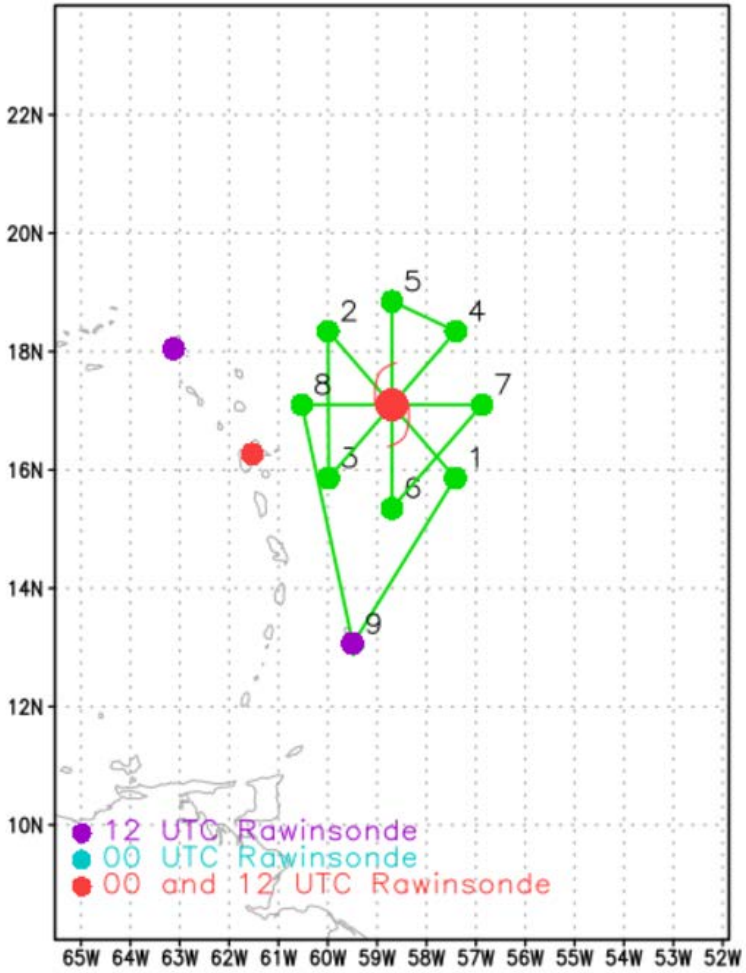


	mean	sigma	min	max
LATref (deg), 1 s/sec	16.56	1.45	13.07	18.94
LONref (deg), 1 s/sec	-60.18	0.91	-62.41	-58.39

20170905H2
TBPB - TBPB

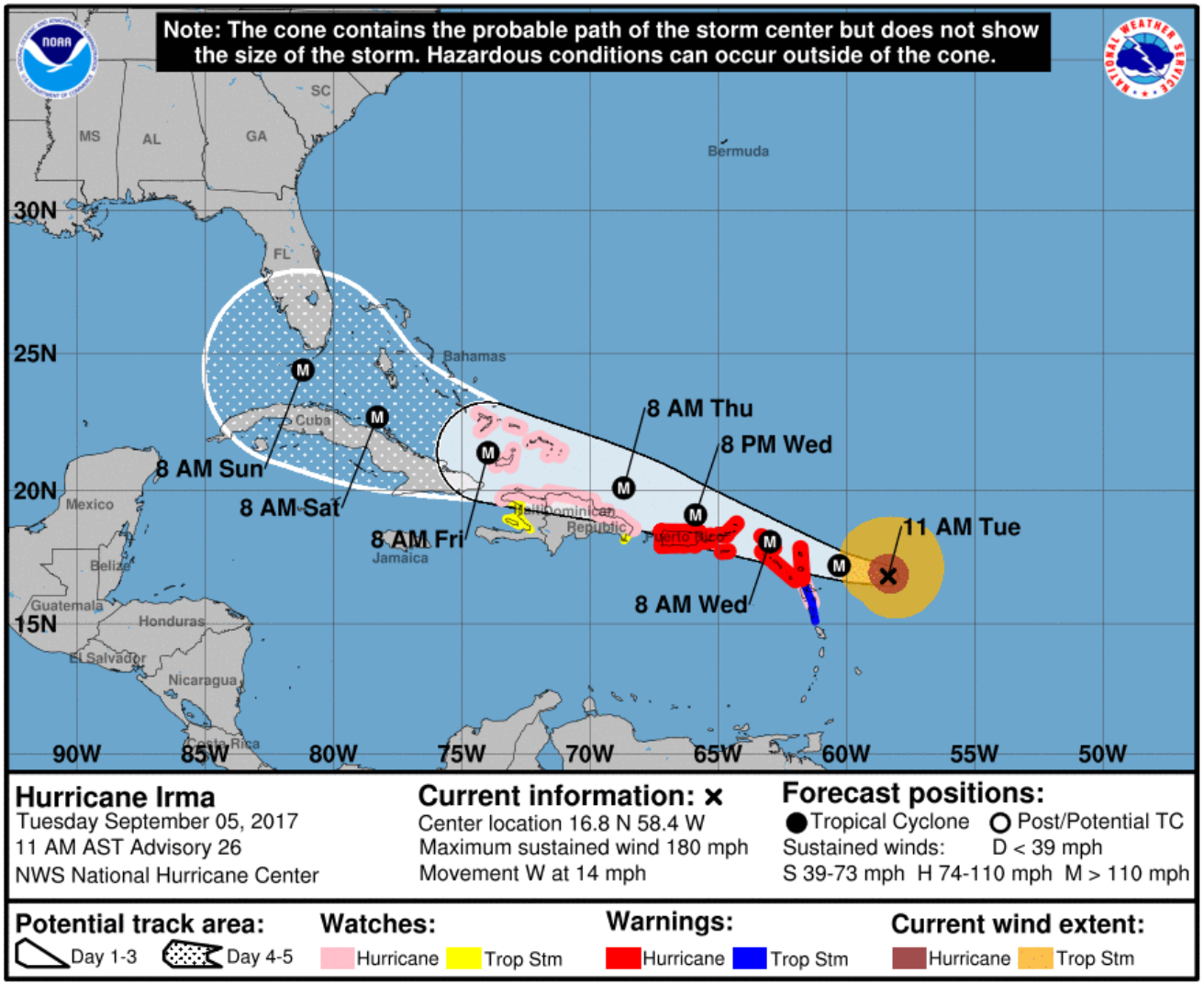
12 AOC
2 HRD
T/O 2000Z
ETE 6+30
NOAA2 1011A IRMA

Mission



- Sondes on endpoints (HFIP), sonde in center (NHC) – backups
- 105nm legs, FL100 (adjusted to FL080 for AF as required)

STORM FORECAST



Other Aircraft

FLIGHT THREE -- TEAL 74

A. 05/2330Z,06/0530Z

B. AFXXX 1111A IRMA

C. 05/2145Z

D. 17.3N 59.6W

E. 05/2300Z TO 06/0530Z

F. SFC TO 15,000 FT

FLIGHT ONE -- NOAA 49 CCA

A. 06/0000Z

B. NOAA9 0911A IRMA

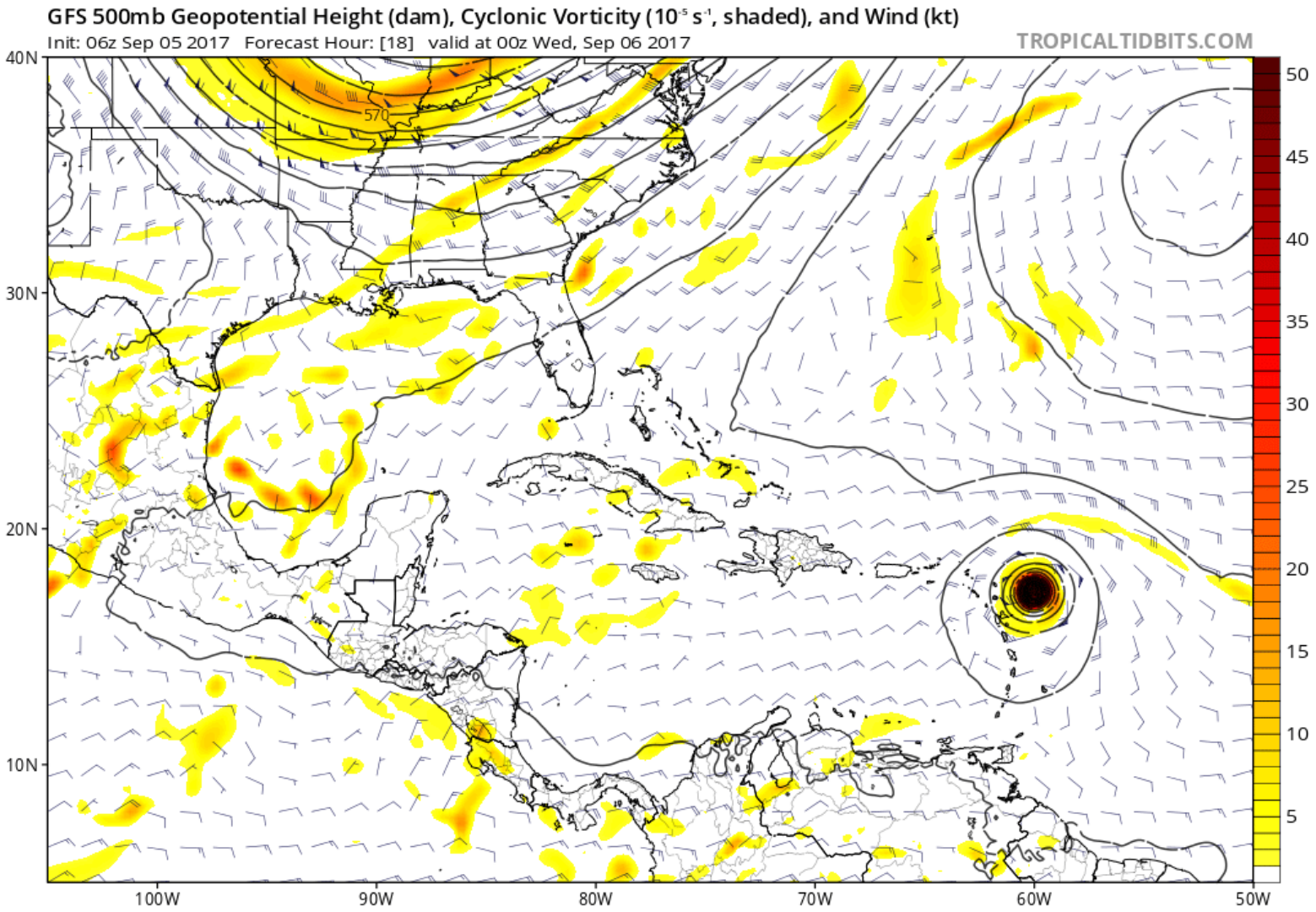
C. 05/1730Z

D. NA

E. NA

F. 41,000 TO 45,000 FT

Transit
VT 05/00Z



Airfield Wx

- TBPB 051700Z 23025KT 9999 SCT016 30/26 Q1008 NOSIG
- TAF TBPB 051700Z 0518/0618 23020KT 9999 SCT016 BKN035
  TEMPO 0518/0521 23020G42KT SHRA RA BKN014 SCT016CB

Hazards

- Icing - 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