



TROPICAL UPDATE

8 AM EDT

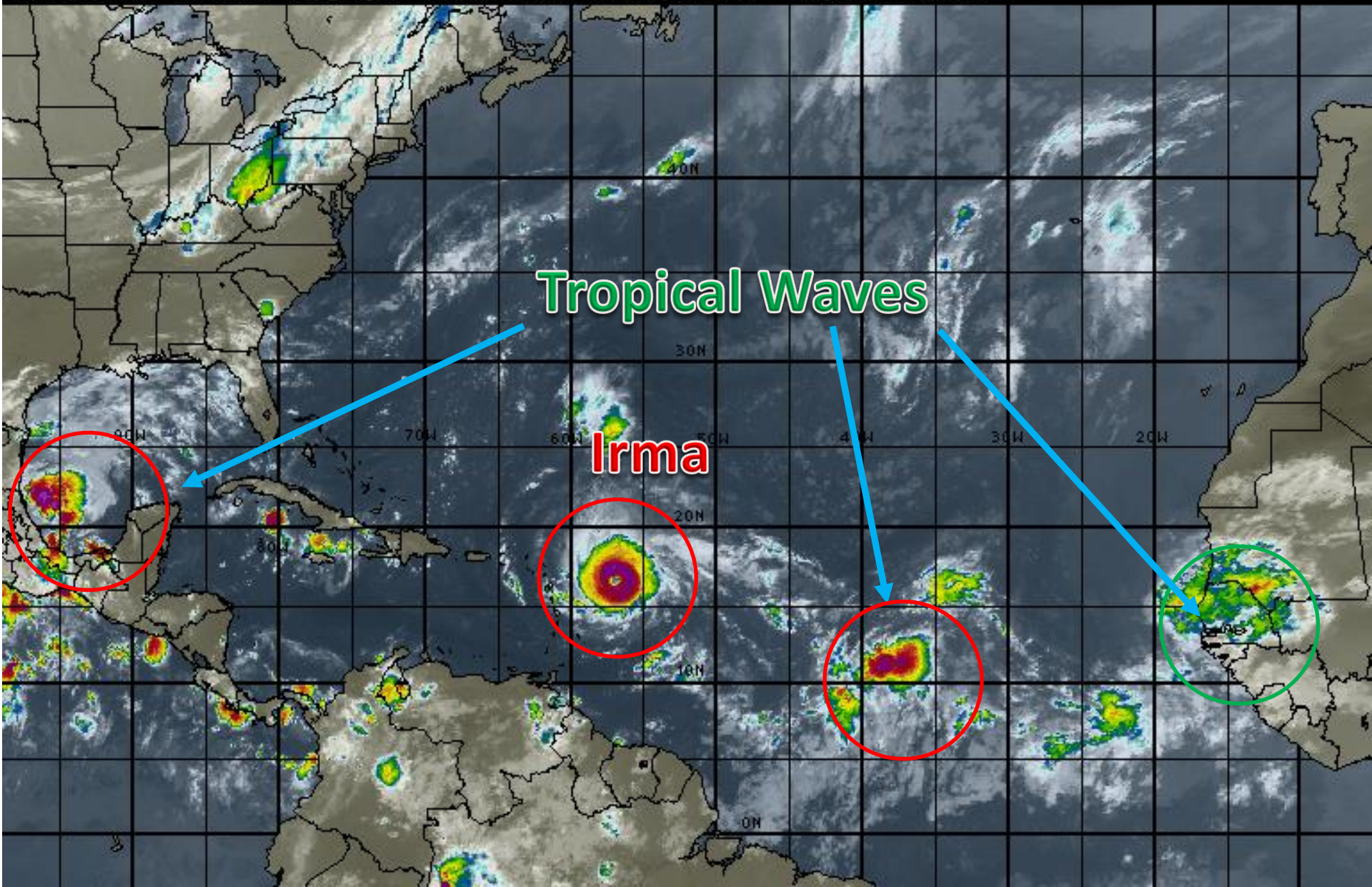
Tuesday, September 5, 2017

**Hurricane Irma, Invest 94L (90%), and SW Gulf
Tropical Wave (70%)**

This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office or visit the National Hurricane Center website at www.nhc.noaa.gov.

Atlantic Basin Satellite Image

09:00 05-SEP-2017 GMT Copyright © 1998-2016 WSI Corporation <http://www.wsi.com>



Hurricane Irma

5 AM EDT Tue Sep 05 2017

Position 16.6 N 57.0 W

Maximum Winds 150 mph

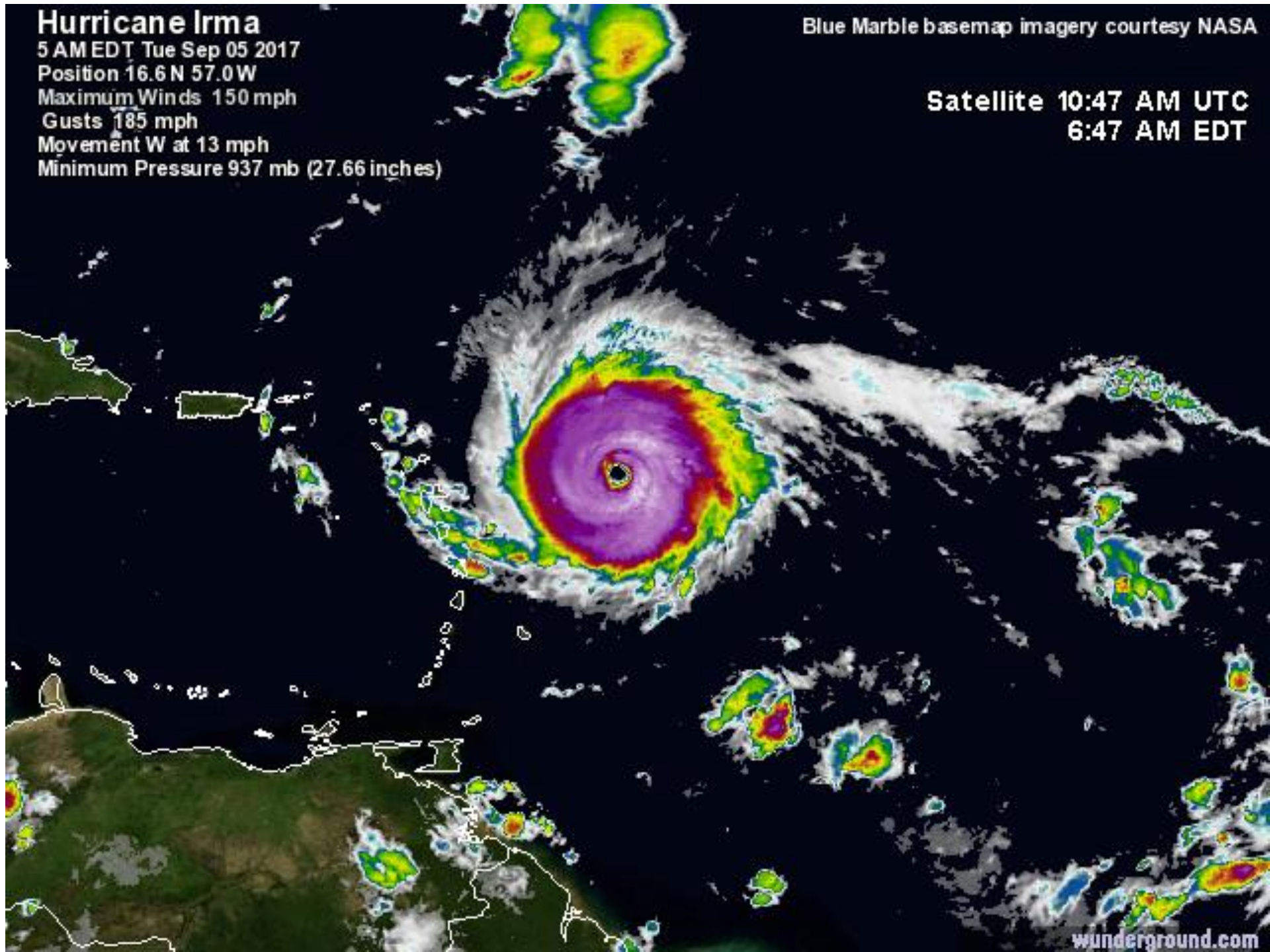
Gusts 185 mph

Movement W at 13 mph

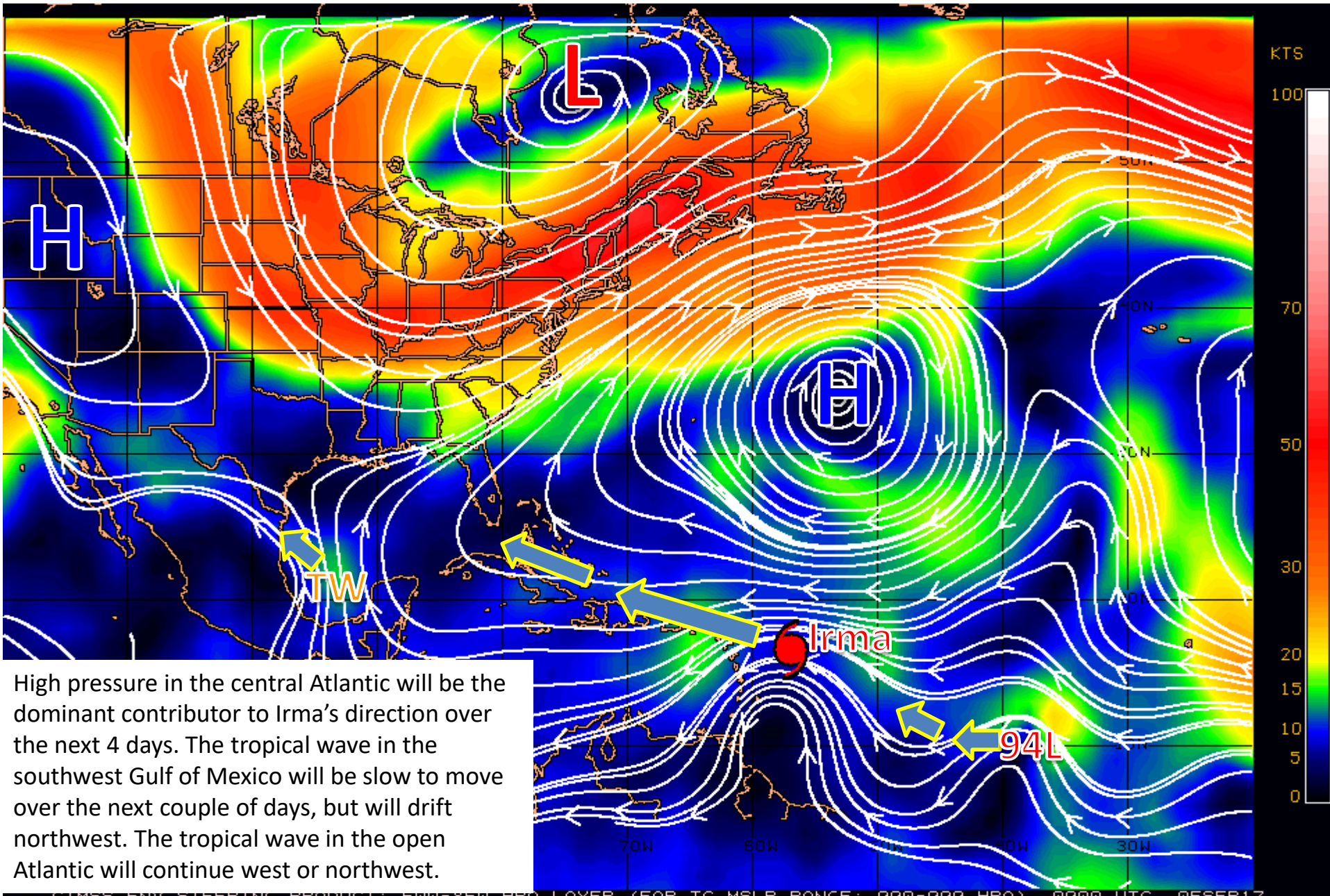
Minimum Pressure 937 mb (27.66 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 10:47 AM UTC
6:47 AM EDT



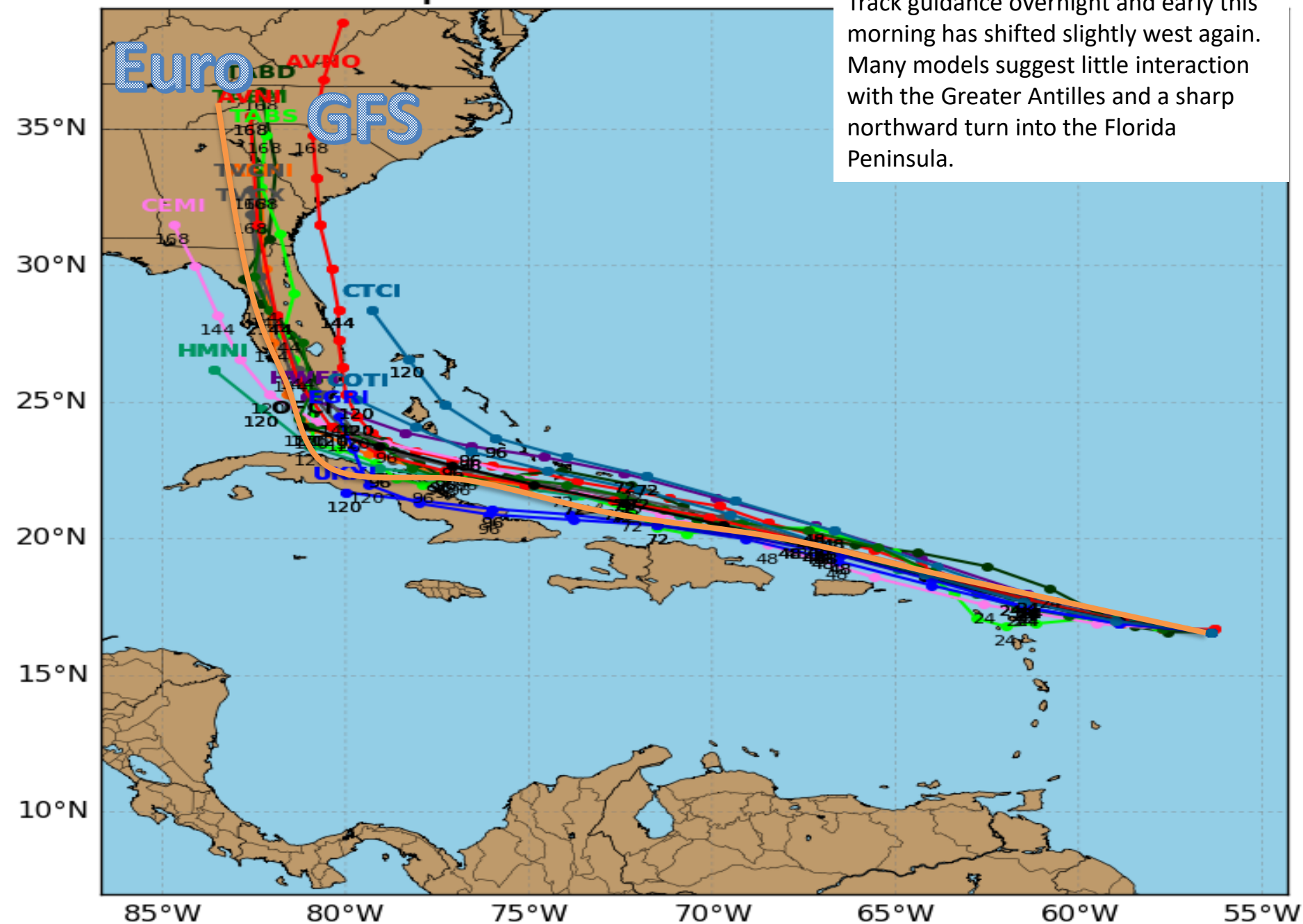
Steering Currents



Hurricane IRMA Model Track Guidance

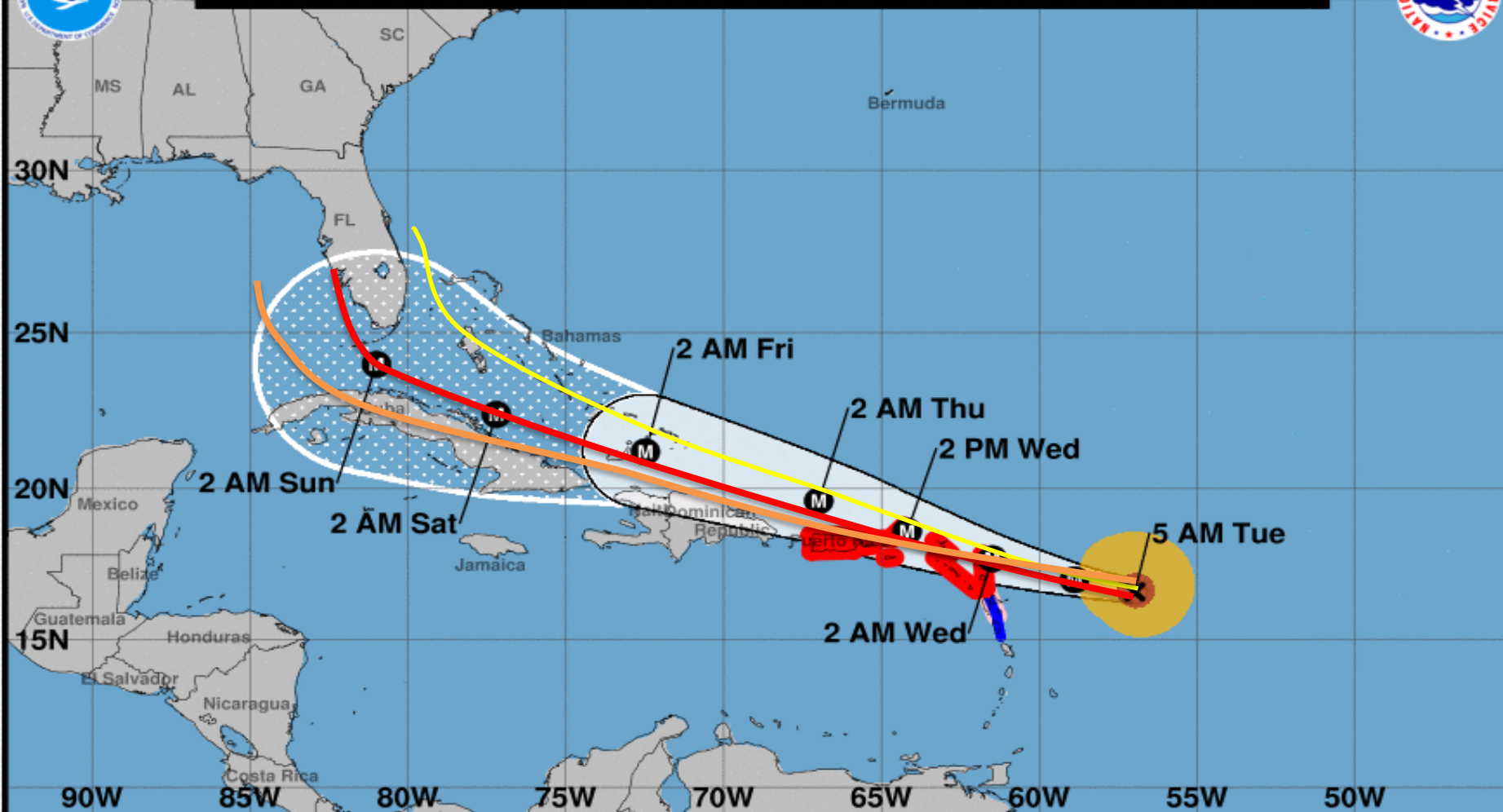
Initialized at 06z Sep 05 2017

Track guidance overnight and early this morning has shifted slightly west again. Many models suggest little interaction with the Greater Antilles and a sharp northward turn into the Florida Peninsula.





Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



Hurricane Irma

Tuesday September 05, 2017

5 AM AST Advisory 24

NWS National Hurricane Center

Current information: x

Center location 16.6 N 57.0 W

Maximum sustained wind 150 mph

Movement W at 14 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 1-3 Day 4-5

Watches:

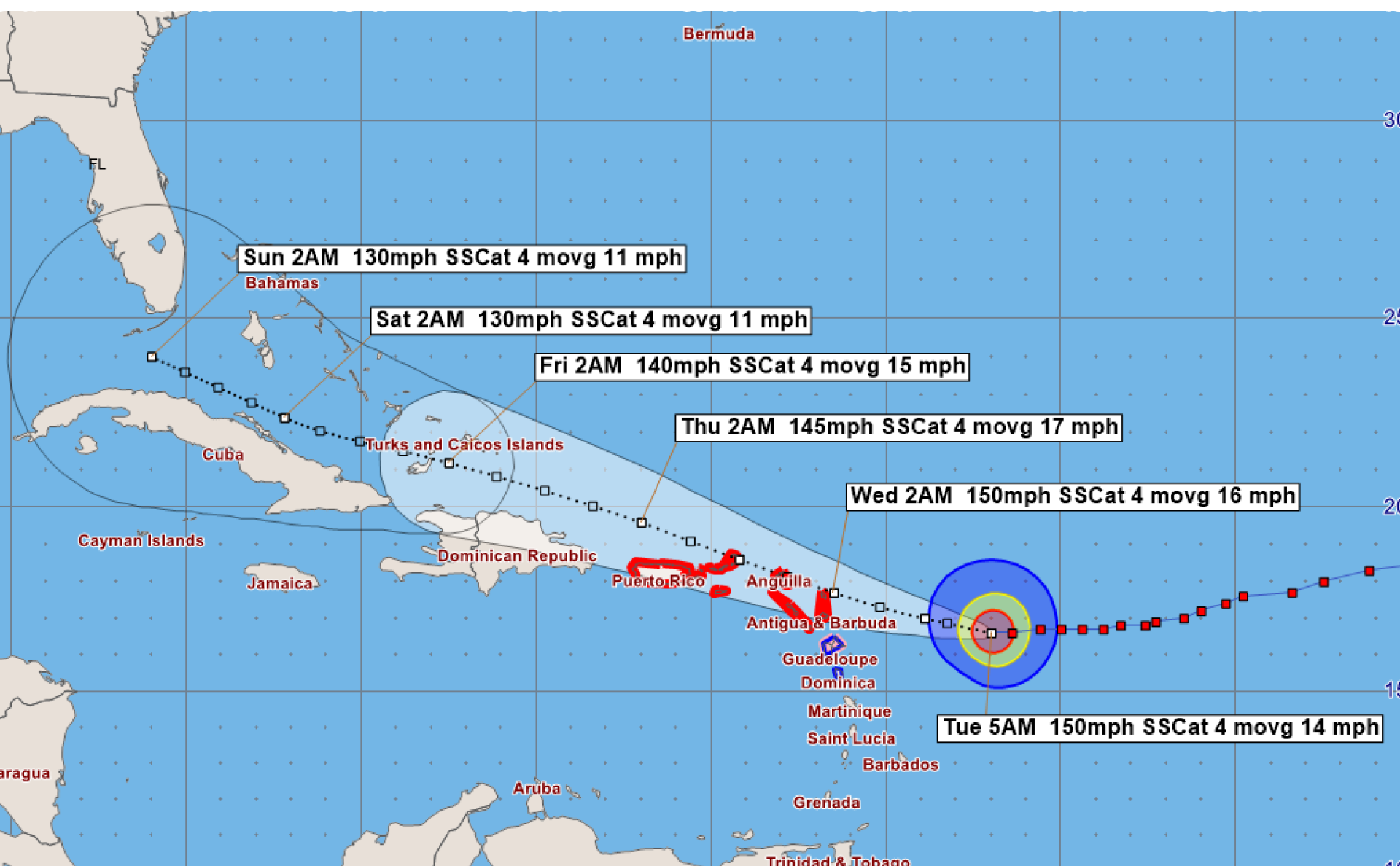
Hurricane Trop Stm

Warnings:

Hurricane Trop Stm

Current wind extent:

Hurricane Trop Stm



Hurricane Irma - Tuesday, September 5, 2017 5 AM EDT Advisory #24

Center Location: 16.6 N 57 W Maximum Sustained Winds: 150 mph (Cat 4) Movement: 14 mph W

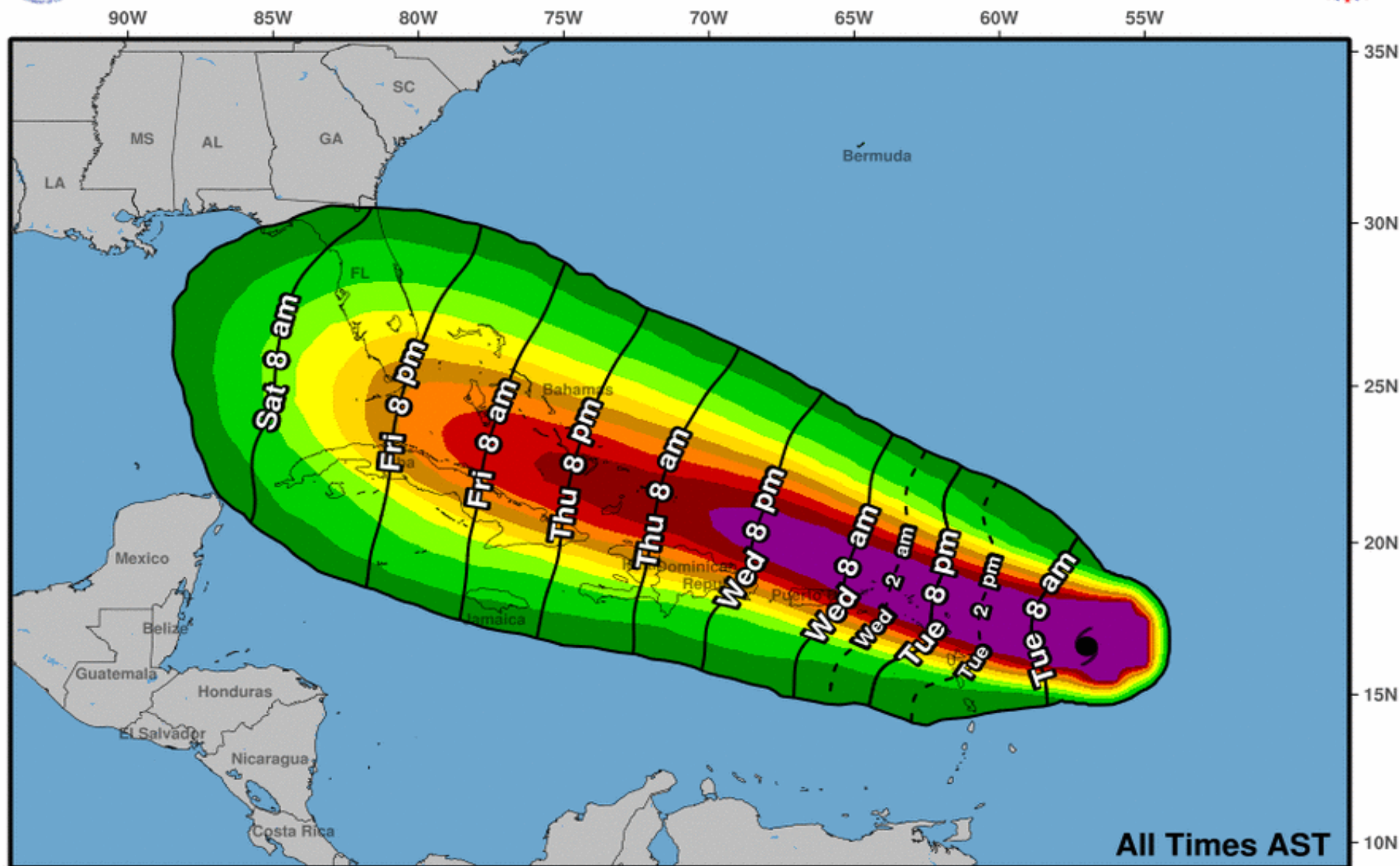
☐ forecast positions Potential Track Area: day 1-3 day 4-5 Surface Wind Field: at current location

Watches: hurricane tropical storm Warnings: hurricane tropical storm

Sustained Wind Speeds: tropical storm >= 34kt/39mph strong tropical storm >= 50kt/58mph hurricane >= 64kt/74mph



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



Hurricane Irma
Tue. Sep. 5, 2017 5 am AST
Advisory 24

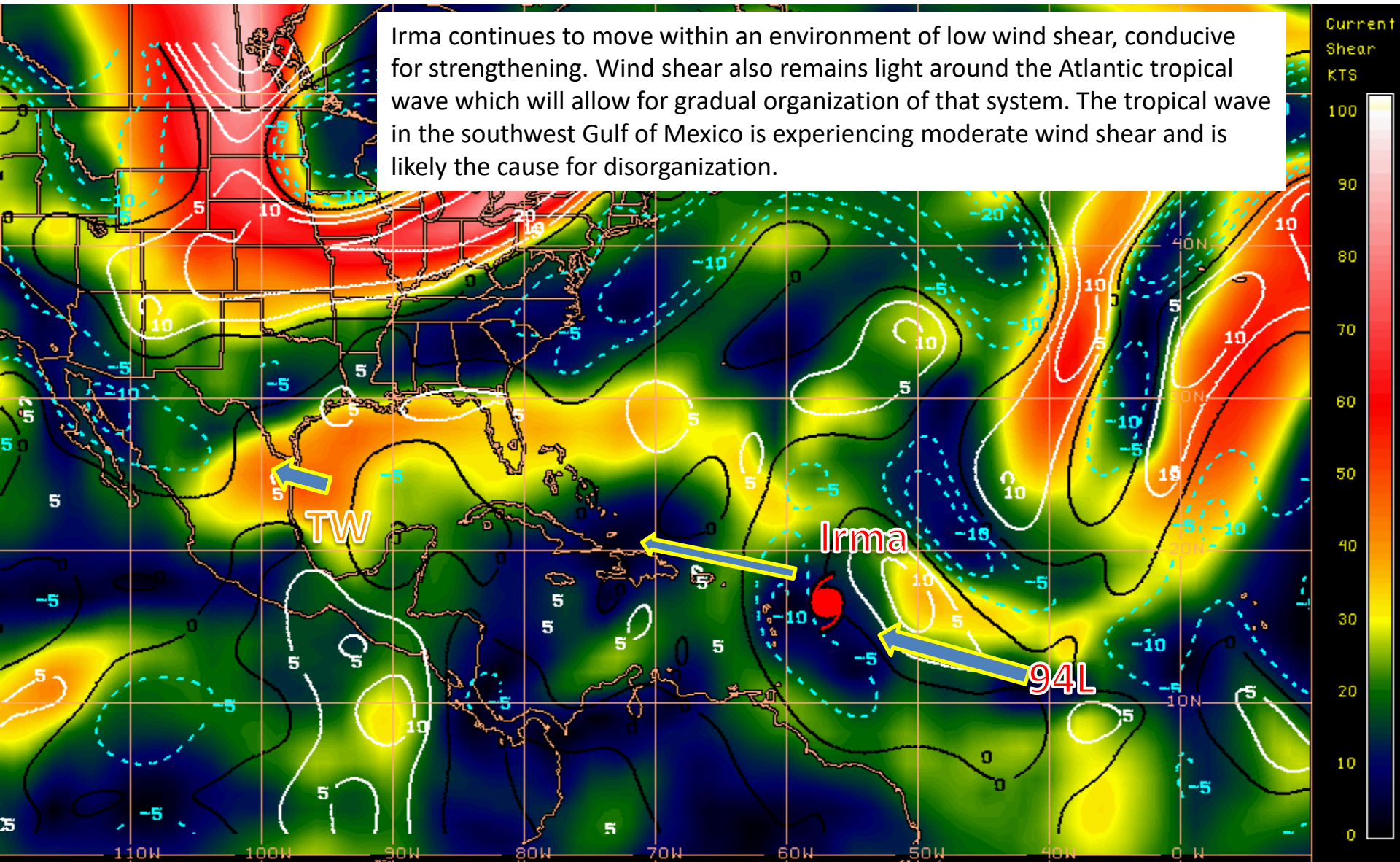
Storm Location &
Wind Speed (knots)
○ <34 ◐ 34-63 ● ≥64

Five-day chance of receiving sustained 34+ knot (39+ mph) winds



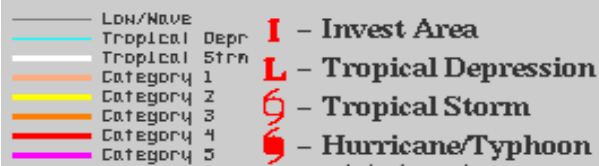
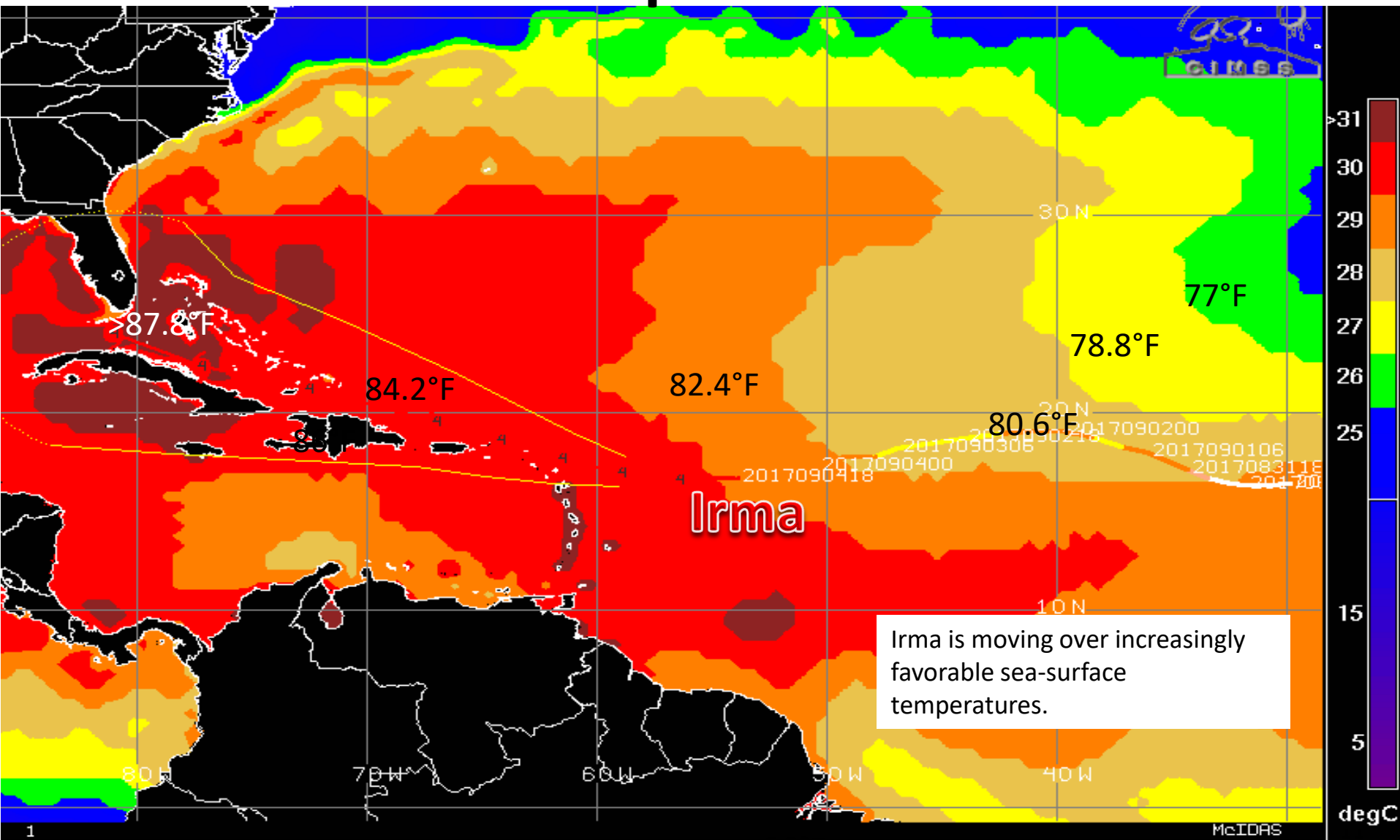
Current Wind Shear (Shaded) and Shear Tendency (Lines)

Irma continues to move within an environment of low wind shear, conducive for strengthening. Wind shear also remains light around the Atlantic tropical wave which will allow for gradual organization of that system. The tropical wave in the southwest Gulf of Mexico is experiencing moderate wind shear and is likely the cause for disorganization.



Shear Tendency (KTS) Over Past 24 Hours: Increasing — Decreasing ----

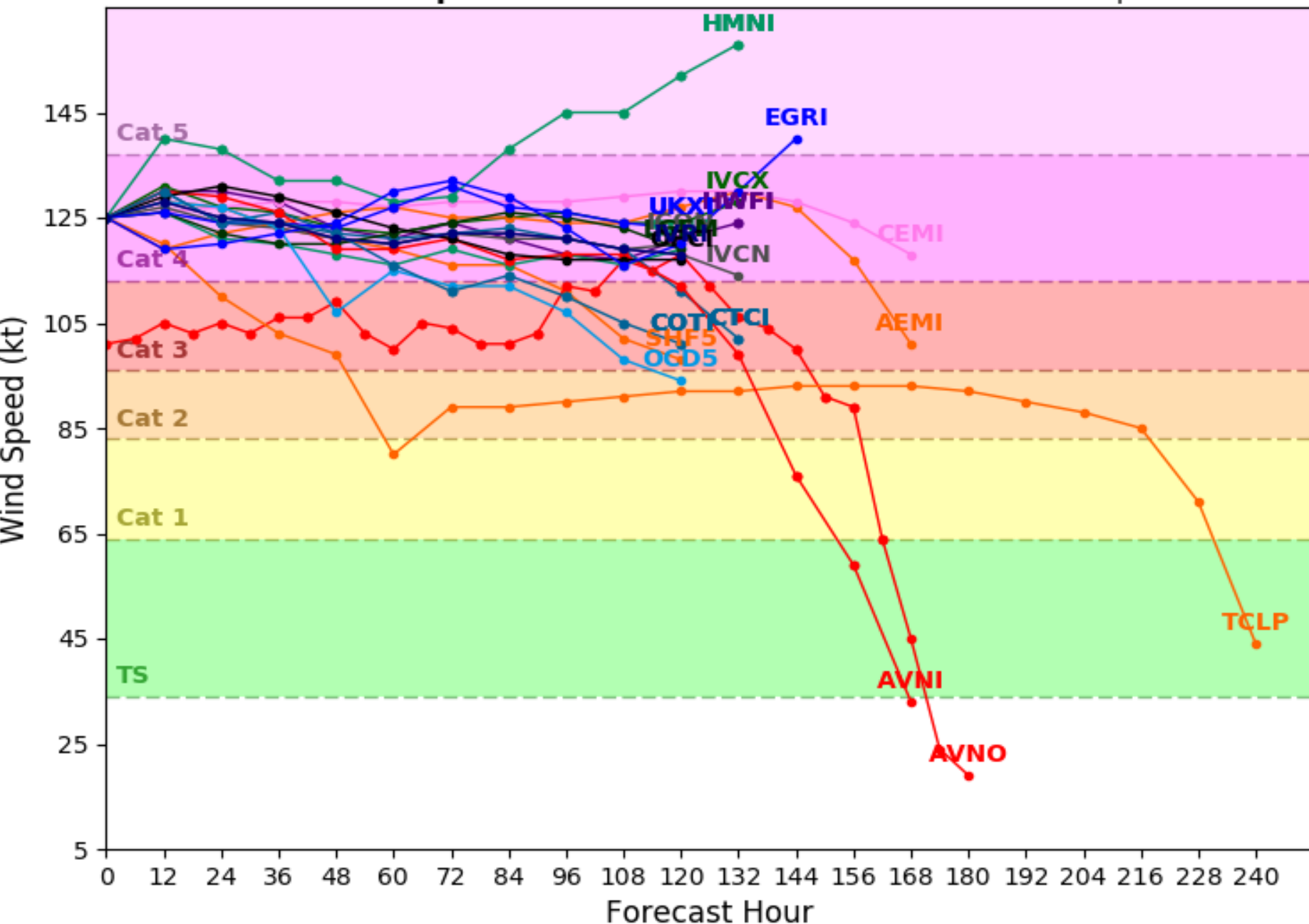
Sea Surface Temperatures Near Irma



Hurricane IRMA Model Intensity Guidance

Initialized at 06z Sep 05 2017

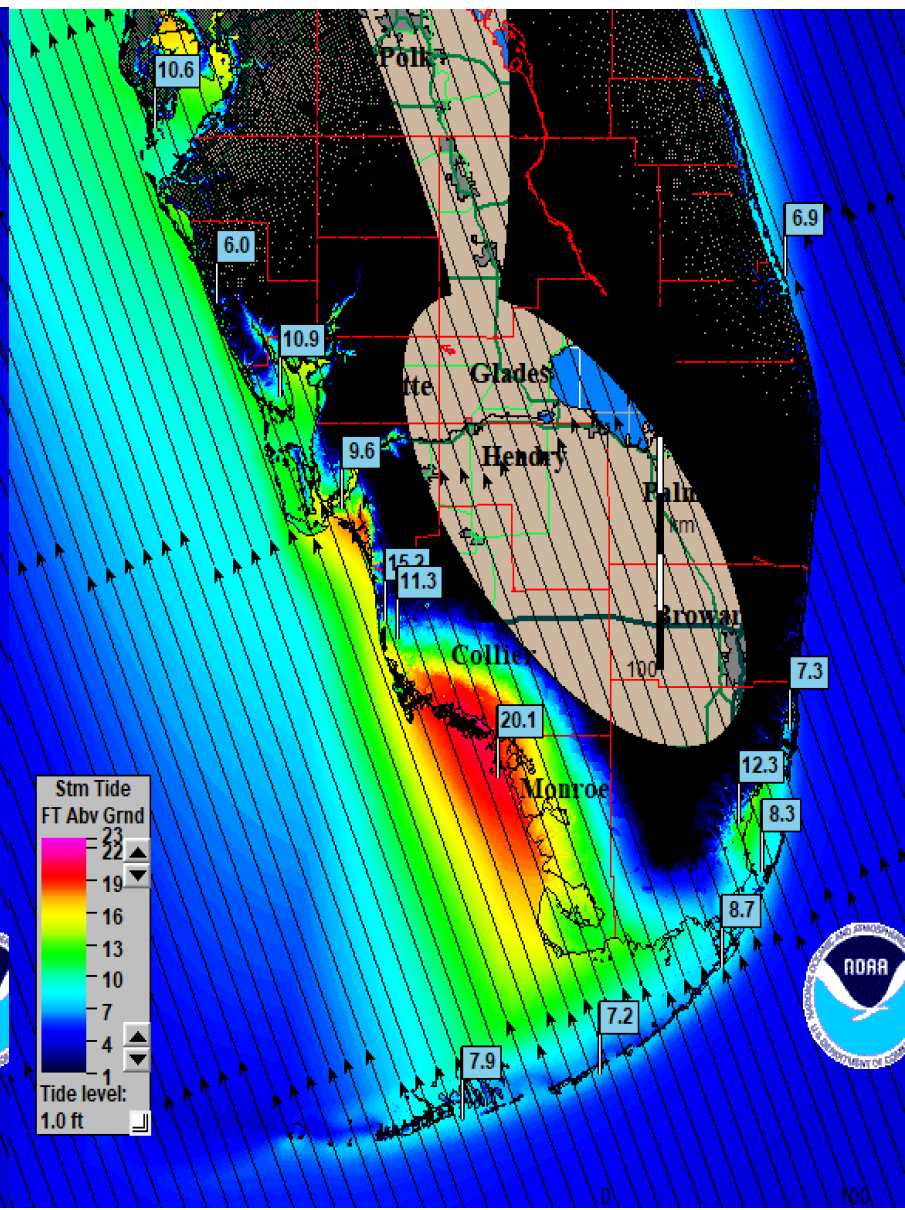
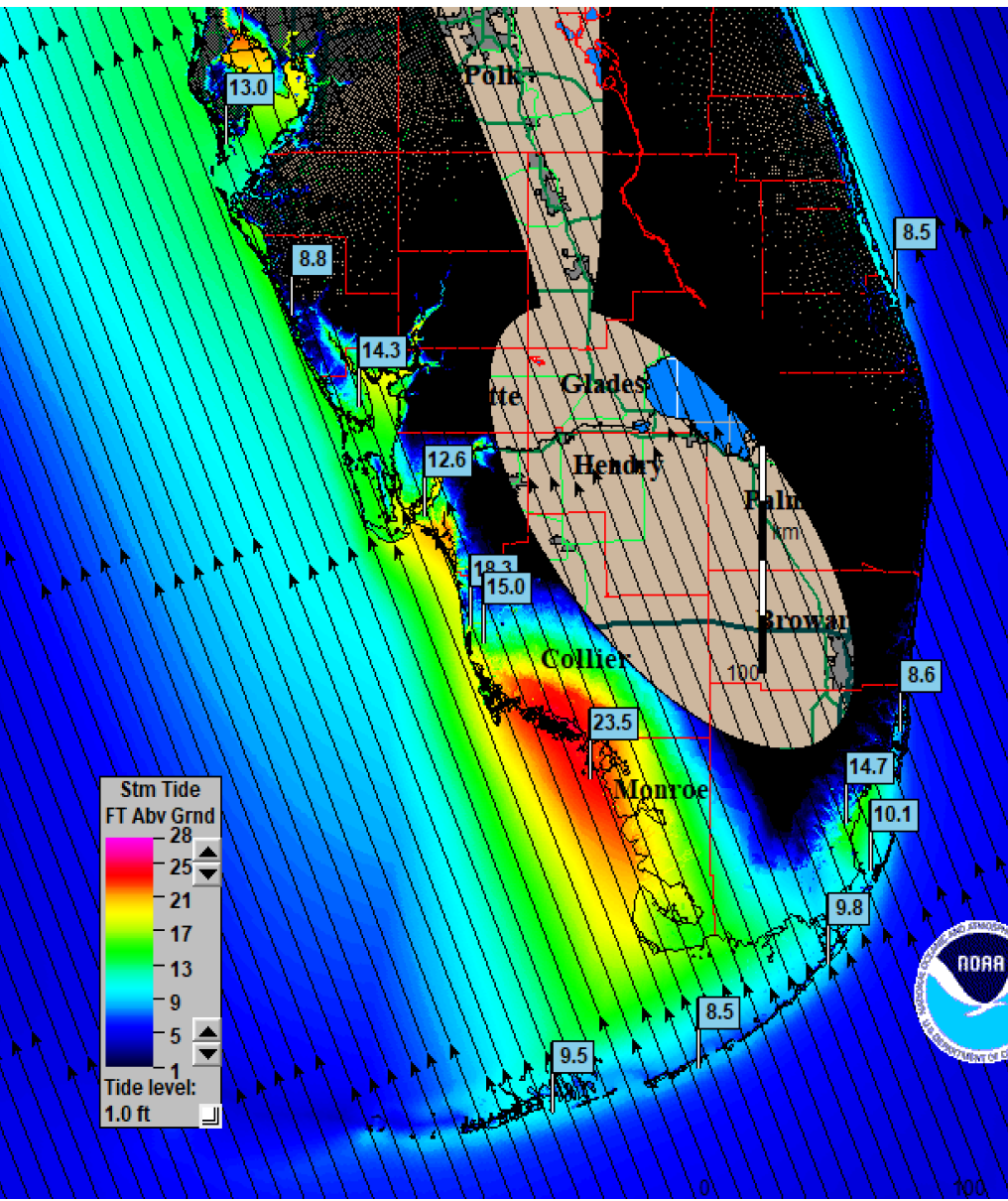
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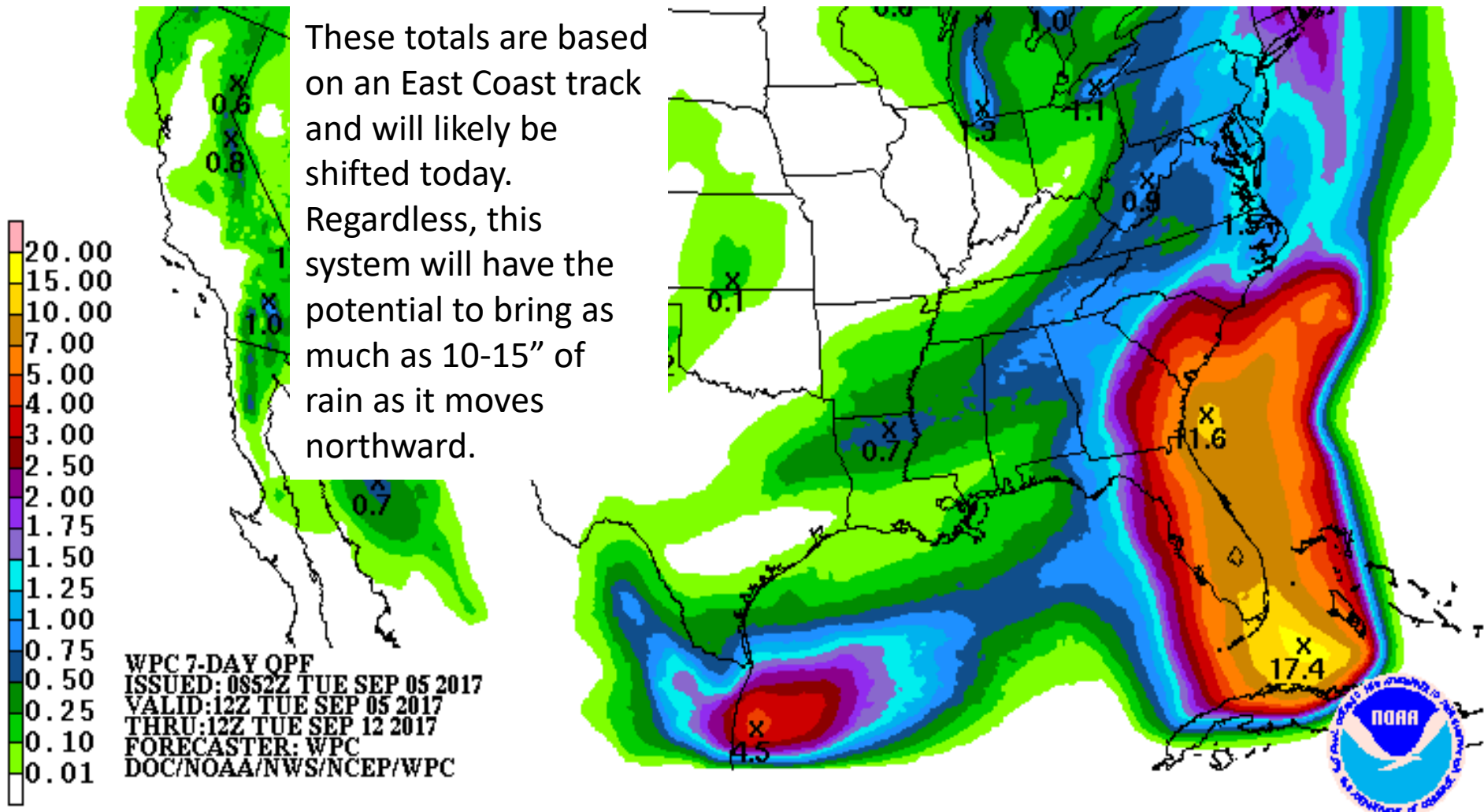
SLOSH storm surge estimates

Cat 5 mvg NNW @10mph

Cat 4 mvg NNW 10mph



7 Day Cumulative Rainfall Forecast (does not account for higher totals)





Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

All Disturbances

- * Formation chance through 48 hours...**high...80 percent.**
* Formation chance through 5 days...**high...90 percent.**
- * Formation chance through 48 hours...**medium...60 percent.**
* Formation chance through 5 days...**high...70 percent.**

2. 60%

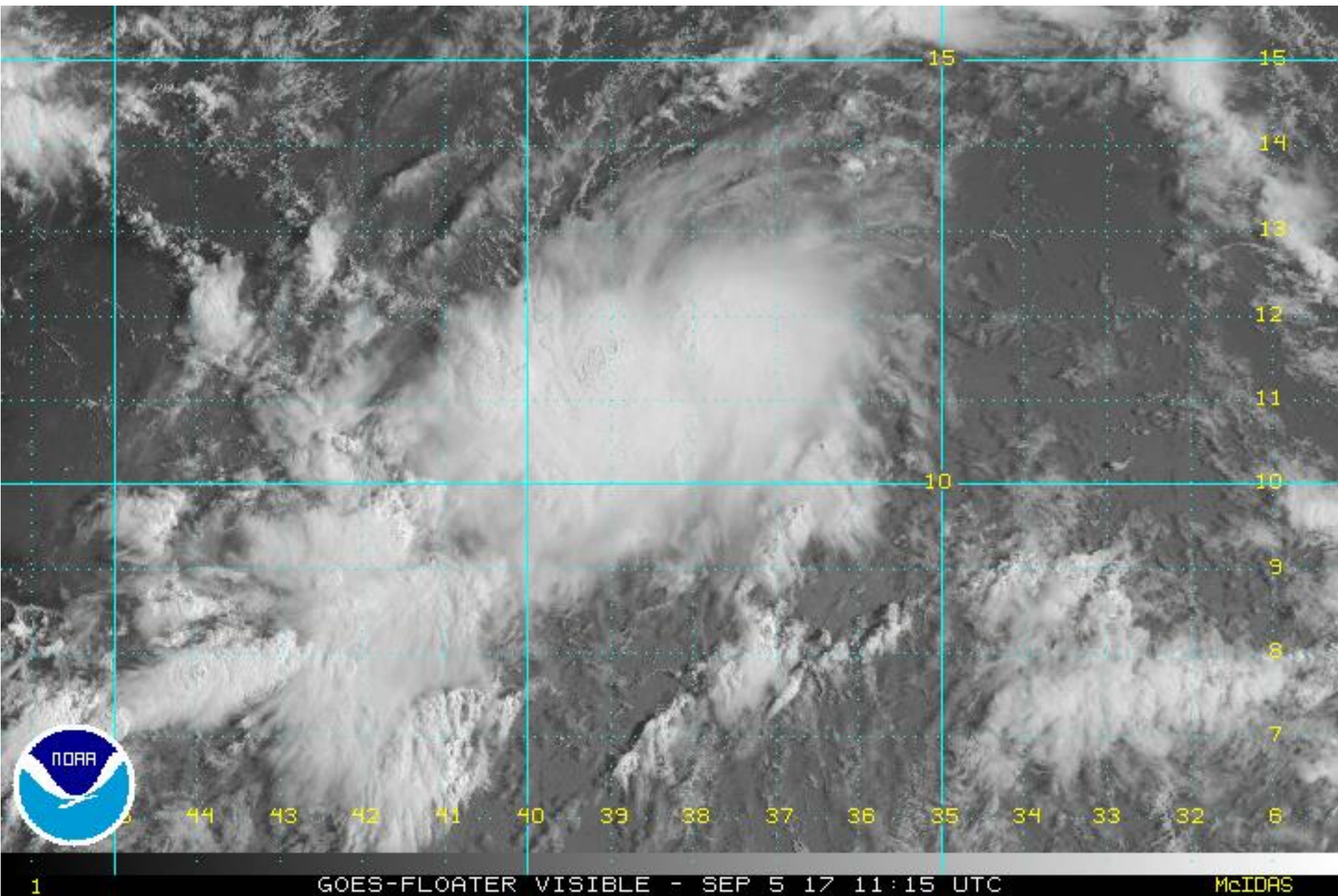
IRMA

1. 90%

8:00 am EDT
Tue Sep 5 2017

Current Disturbances and Five-Day Cyclone Formation Chance: ☒ < 40% ☒ 40-60% ☒ > 60%
Tropical or Sub-Tropical Cyclone: ○ Depression 🌀 Storm 🌀 Hurricane
⊗ Post-Tropical Cyclone ✕ Remnants

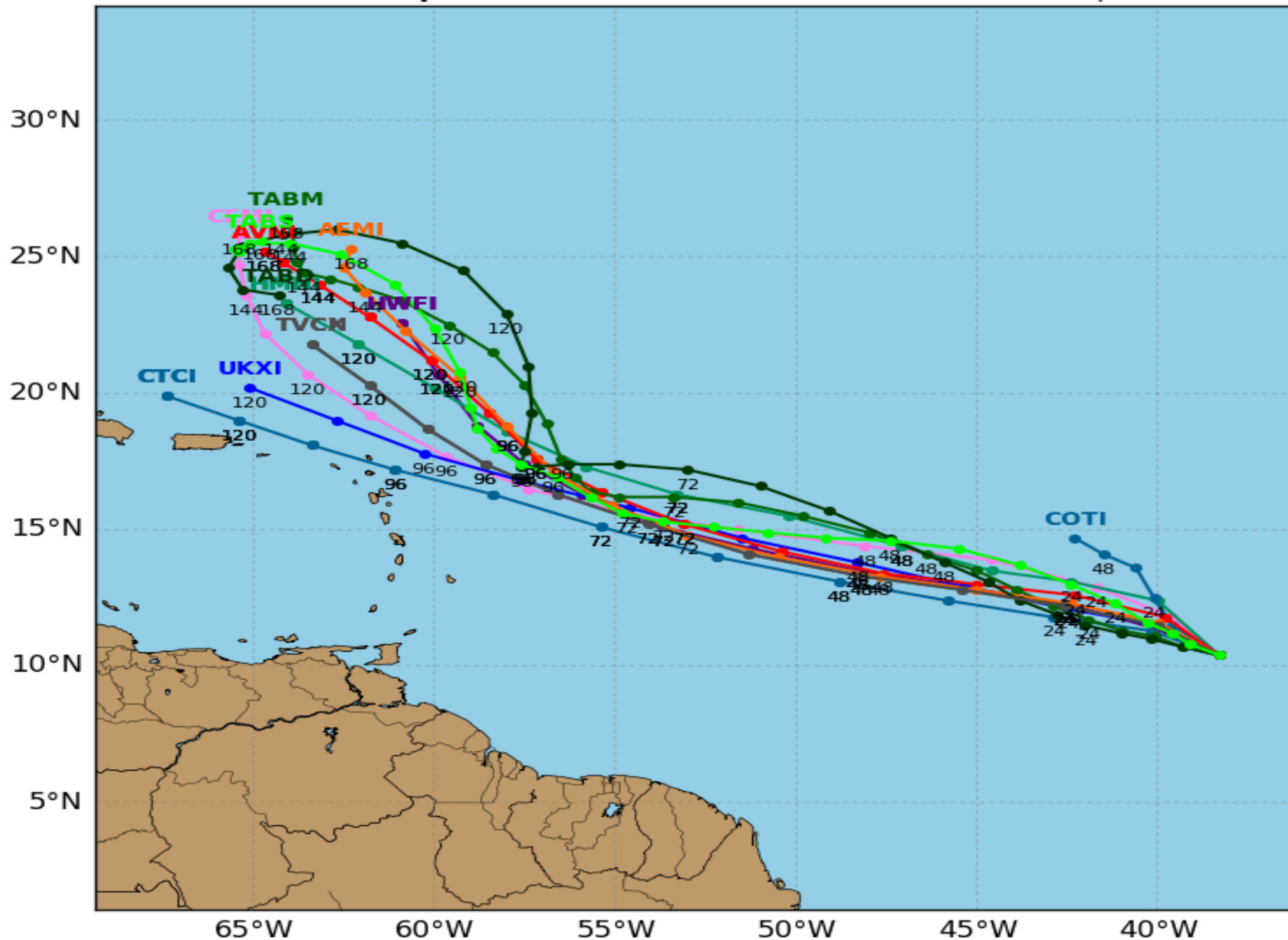
94L Satellite Imagery



Invest 94L Model Track Guidance

Initialized at 06z Sep 05 2017

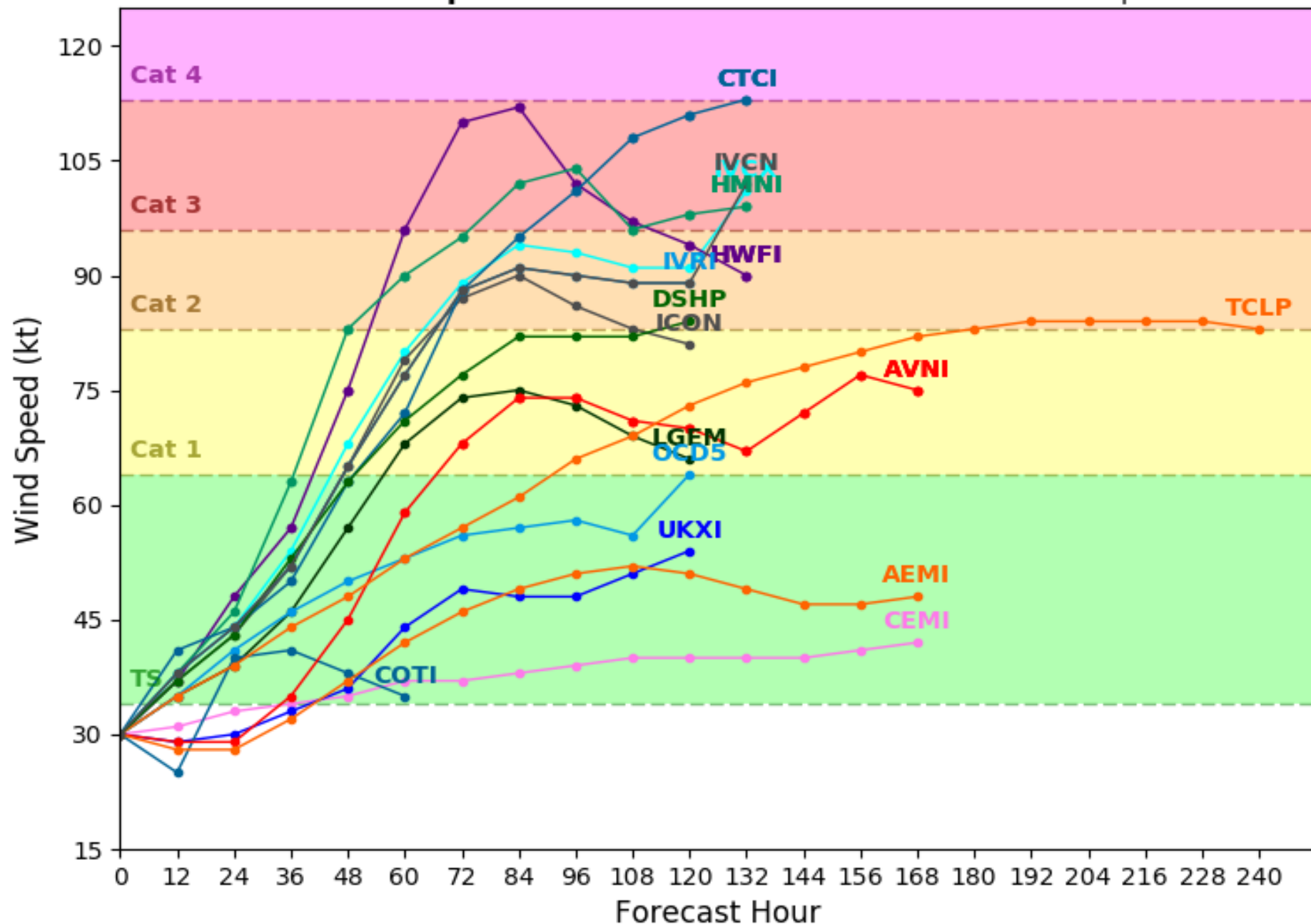
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Invest 94L Model Intensity Guidance

Initialized at 06z Sep 05 2017

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Summary

- At 5am EDT Tuesday, Hurricane Irma was located about 320 miles east of the northern Leeward Islands, or about 1,620 miles east-southeast of Miami.
- Maximum sustained winds have increased to near 175 mph, making Irma a category 5 storm on the Saffir-Simpson Hurricane Wind scale.
- Some fluctuations in intensity are likely during the next day or two, but Irma is forecast to remain a powerful hurricane due to low wind shear and favorable sea-surface temperatures.
- Irma is moving toward the west near 14 mph, and this general motion is expected to continue today, followed by a turn toward the west-northwest tonight.
- Long-range models are predicting a northward turn to occur in about 6 days, but exactly when the turn occurs is still uncertain.
- Hurricane hunter aircraft will continue to investigate the system regularly through the week.
- A tropical wave southeast of Irma in the central Atlantic Ocean, designated as Invest 94L, is becoming better organized this morning.
- Although the center of circulation is still broad, conditions are expected to be favorable for development, and there is an 80% chance it could become a tropical storm today or tomorrow as it continues moving west-northwest.
- Storm models are in some disagreement, but a general west-northwest movement is expected over the next 5 days followed a more northwest or north turn this weekend along with gradual strengthening.
- Elsewhere, a tropical wave in the southwestern Gulf of Mexico is producing disorganized showers and thunderstorms.
- Moderate amounts of wind shear are limiting development, but some gradual organization is possible as the system slowly drifts to the northwest.
- The NHC has given this disturbance a 70% (high) chance of becoming a depression within the next five days as it stays nearly stationary in the southwest Gulf of Mexico.
- The next names on the 2017 Atlantic storm name list is Jose and Katia.

Florida Outlook

- South Florida lies within the NHC 5 day cone of error, but no watches or warnings are currently in effect.
- Wind impacts to South Florida from Irma could occur as early as Friday night.
- Although specifics on storm surge are not yet available, a storm of this size and intensity would have the ability to produce dangerous storm surge heights across portions of South Florida and the Florida Keys.
- In addition, rainfall amounts could reach as high as 10-15", but specifics on the location of high rainfall totals is still uncertain.
- The tropical wave in the southwestern Gulf of Mexico does not pose a direct threat to Florida.
- 94L does not pose a threat to Florida during the next 5-7 days. This system is likely to remain out to sea but will be monitored.

Another briefing packet will be issued this afternoon. Tropical packets will begin at least twice daily tomorrow. For more information, visit the NHC website at www.hurricanes.gov.



TROPICAL UPDATE

Created by:

Amy Godsey, Chief State Meteorologist

amy.godsey@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

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