



# **TROPICAL UPDATE**

**5 AM EDT**

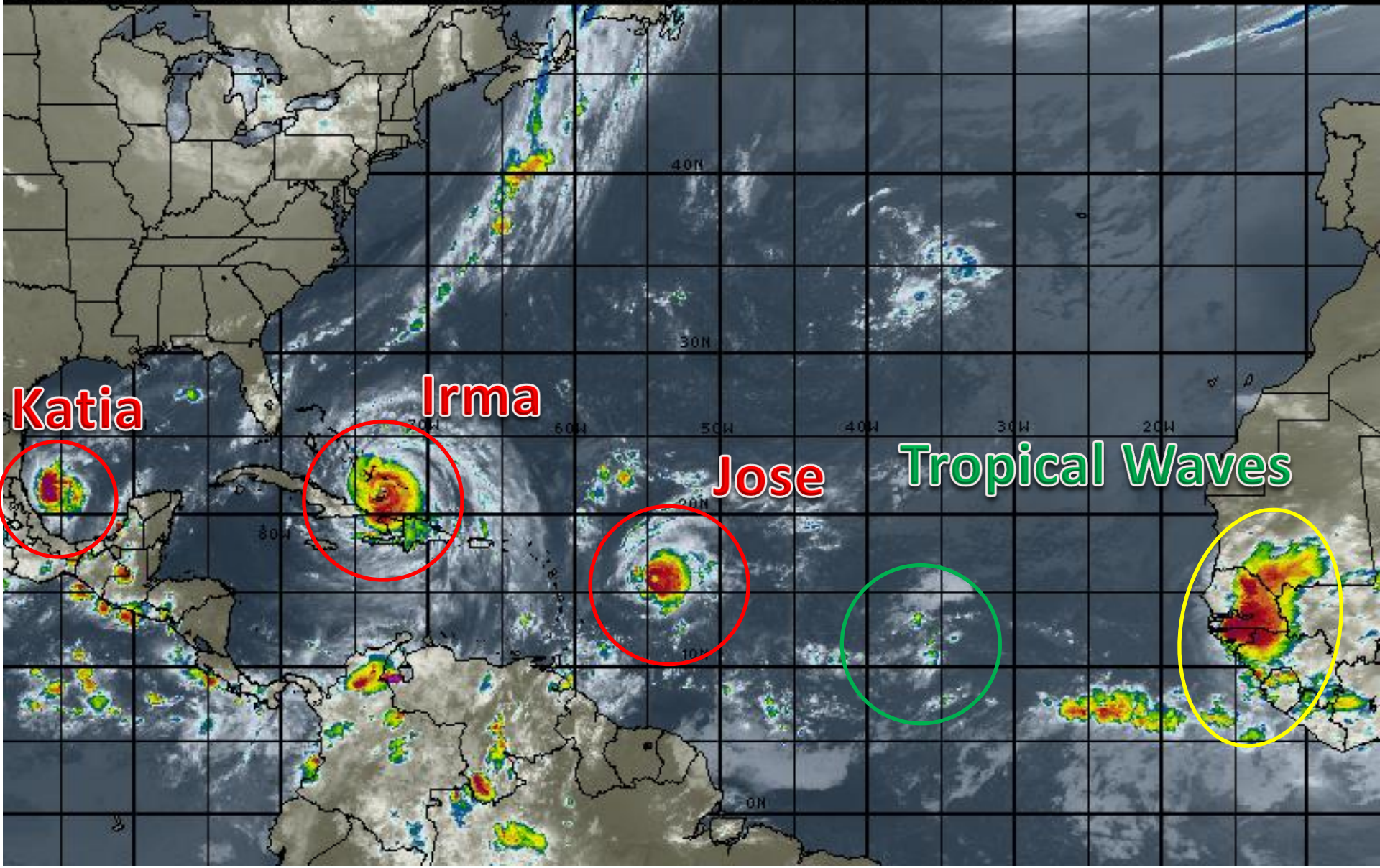
**Friday, September 8, 2017**

**Hurricane Irma, Hurricane Jose, and Hurricane Katia**

**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](http://www.nhc.noaa.gov).**

# Atlantic Basin Satellite Image

06:00 08-SEP-2017 GMT Copyright © 1998-2016 WSI Corporation <http://www.wsi.com>





# Hurricane Irma

5 AM EDT Fri Sep 08 2017

Position 21.7-N-73.8-W

Maximum Winds 155 mph

Gusts 190 mph

Movement WNW at 16 mph

Minimum Pressure 925 mb (27.31 inches)

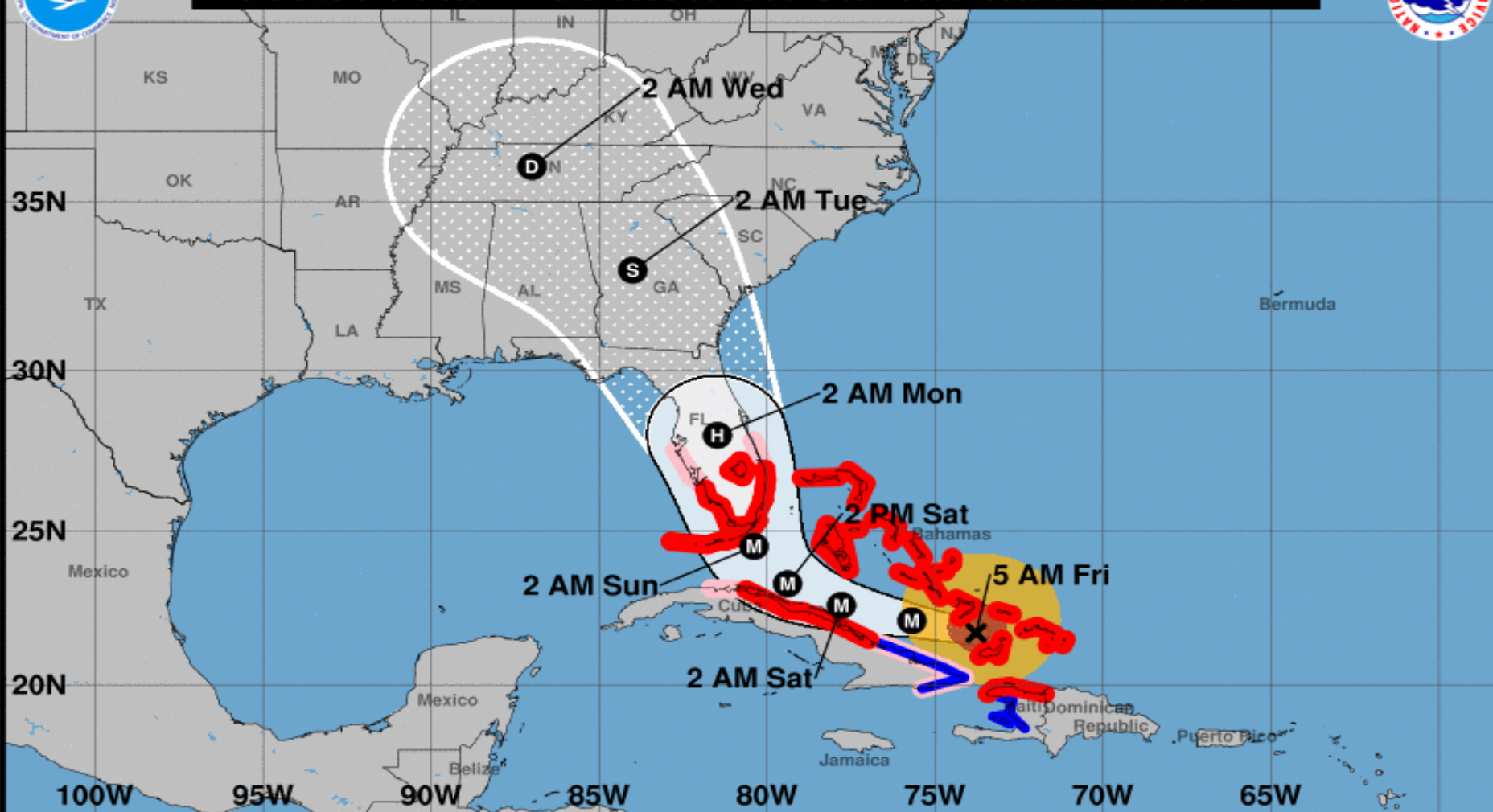
Blue Marble basemap imagery courtesy NASA

Satellite 9:16 AM UTC  
5:16 AM EDT





**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

Friday September 08, 2017

5 AM EDT Advisory 37

NWS National Hurricane Center

## Current information: x

Center location 21.7 N 73.8 W

Maximum sustained wind 155 mph

Movement WNW at 16 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

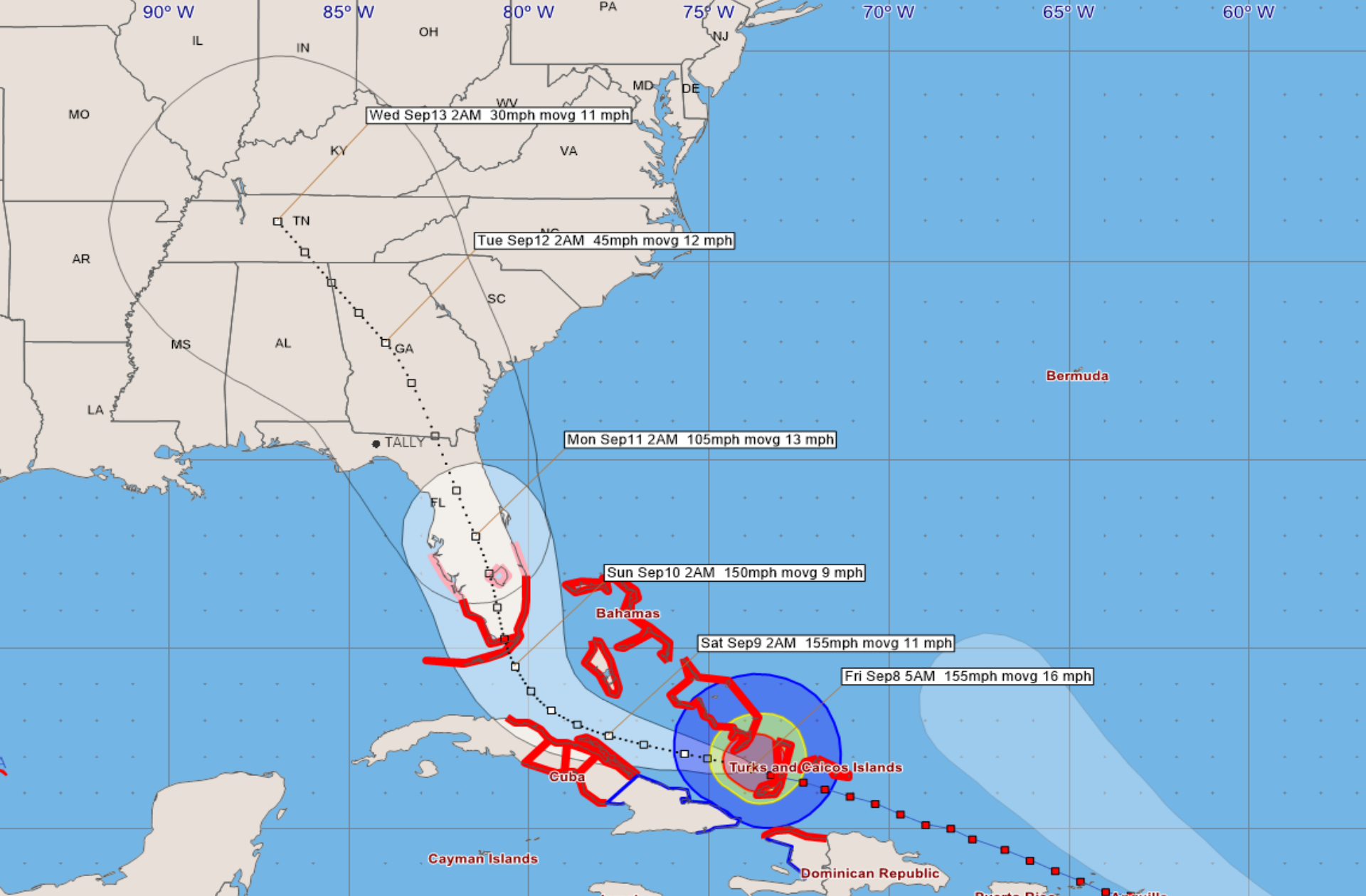
## Warnings:

Hurricane Trop Stm

## Current wind extent:

Hurricane Trop Stm





# Hurricane Irma - Friday, September 8, 2017 5 AM EDT Advisory #37

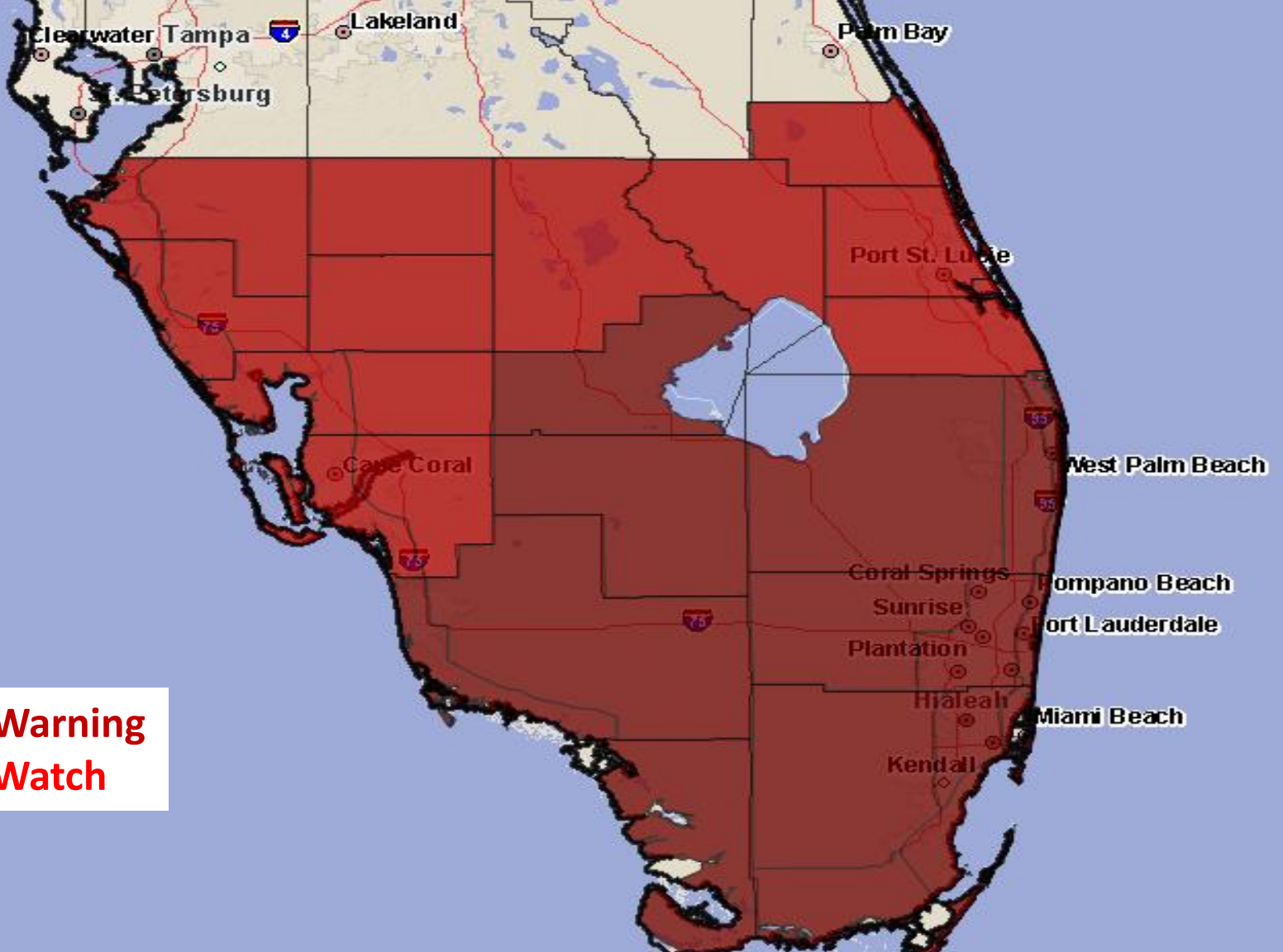
Center Location: 21.7 N 73.8 W Maximum Sustained Winds: 155 mph (Cat 4) Movement: 16 mph W

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



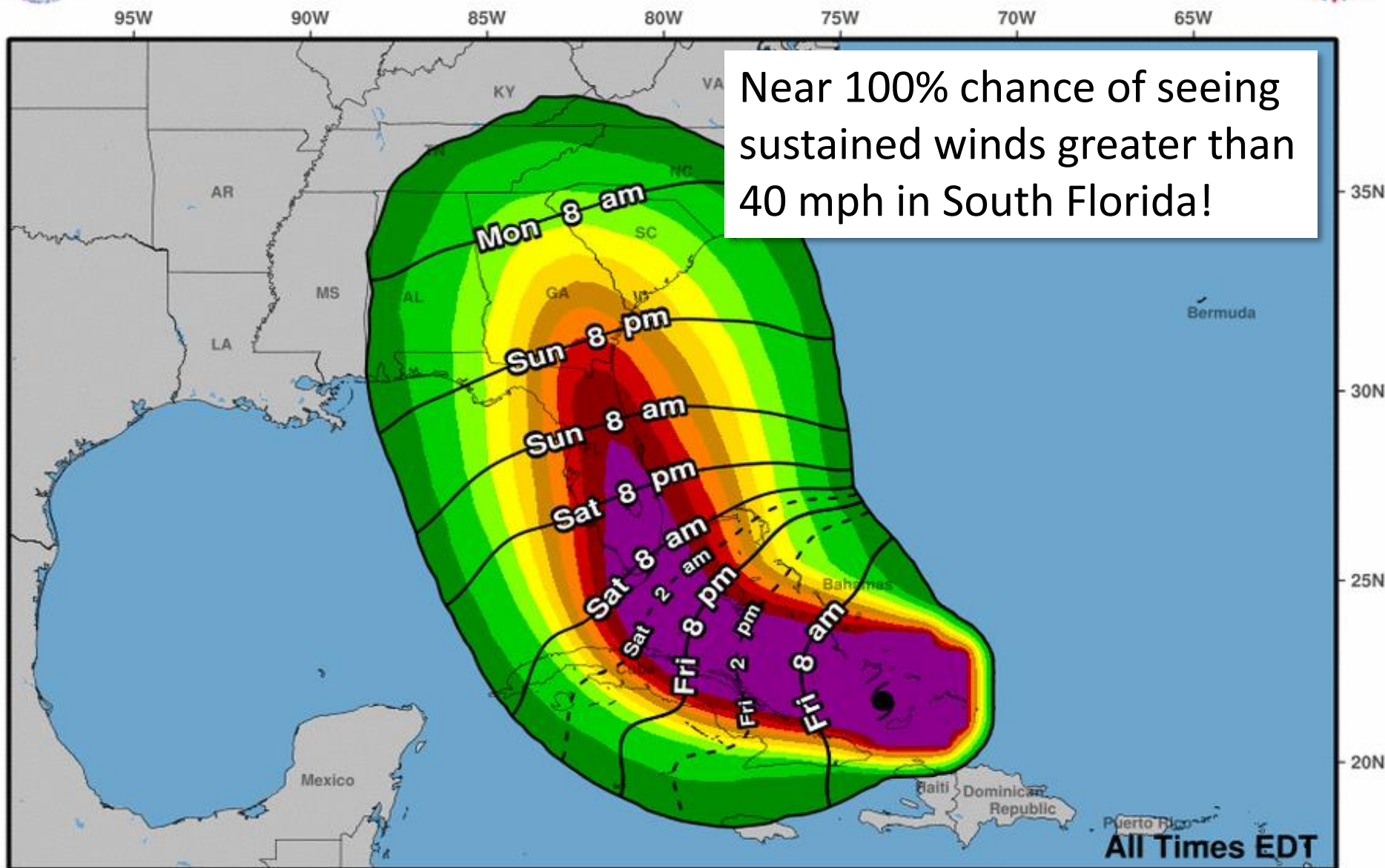
**Hurricane Warning**  
**Hurricane Watch**

The **Hurricane Warning** area also includes the entire Florida Keys and Lake Okeechobee.

\*Additional hurricane watches and warnings will be issued in the northern half of the Peninsula later today.



# Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



**Hurricane Irma**  
**Fri. Sep. 8, 2017 5 am EDT**  
**Advisory 37**

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

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

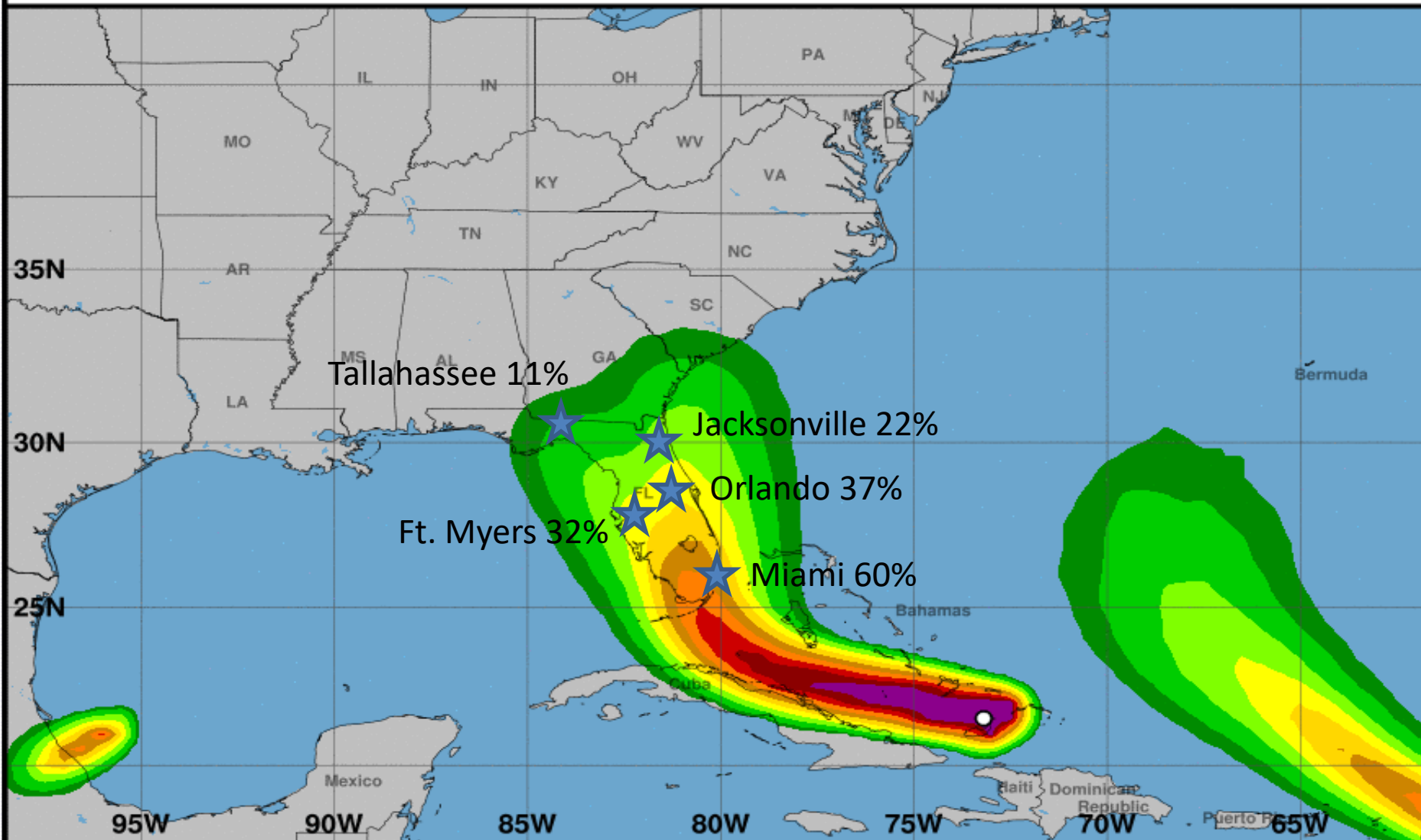






# Hurricane-Force Wind Speed Probabilities

For the 120 hours (5.00 days) from 2 AM EDT FRI SEP 08 to 2 AM EDT WED SEP 13

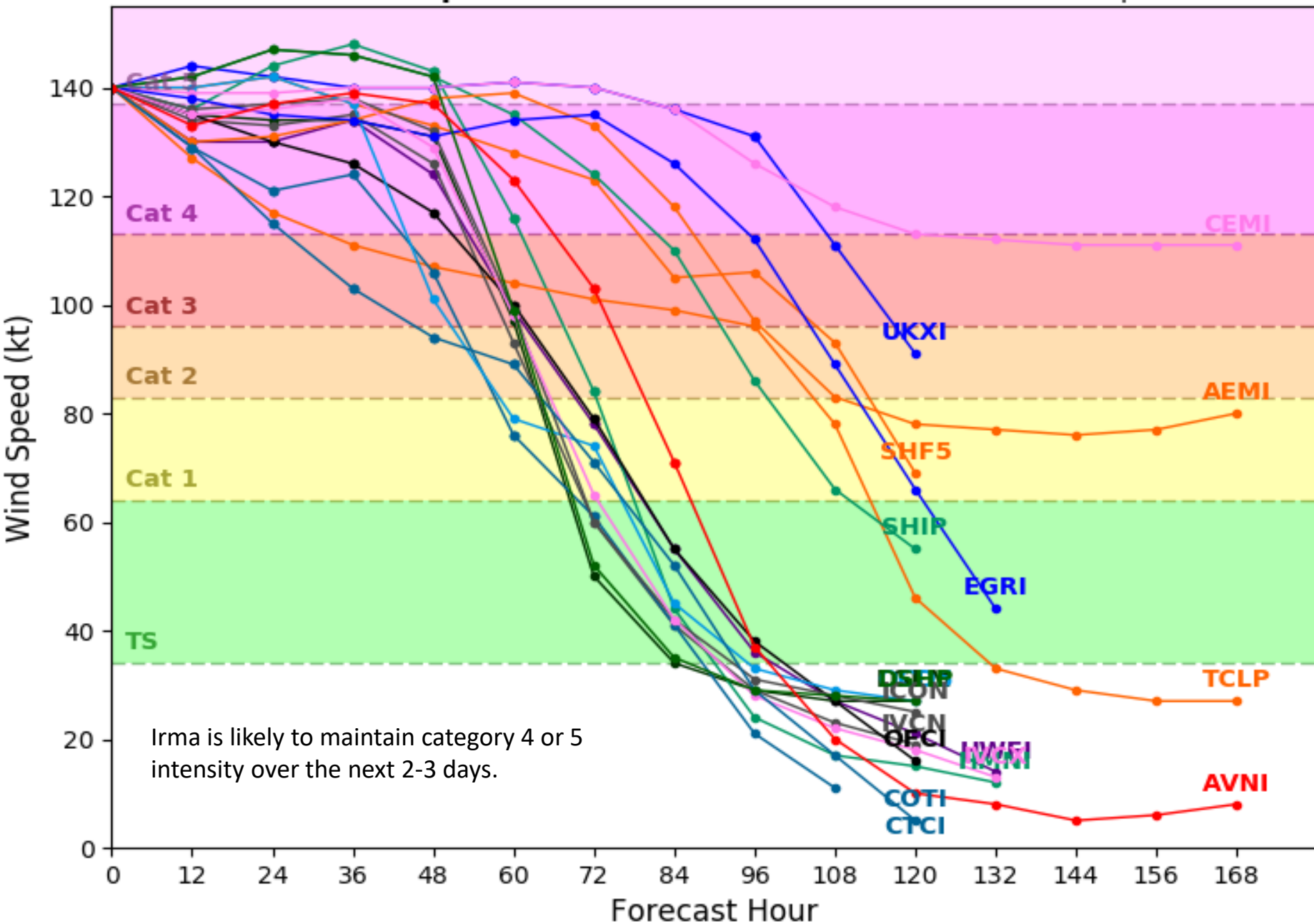


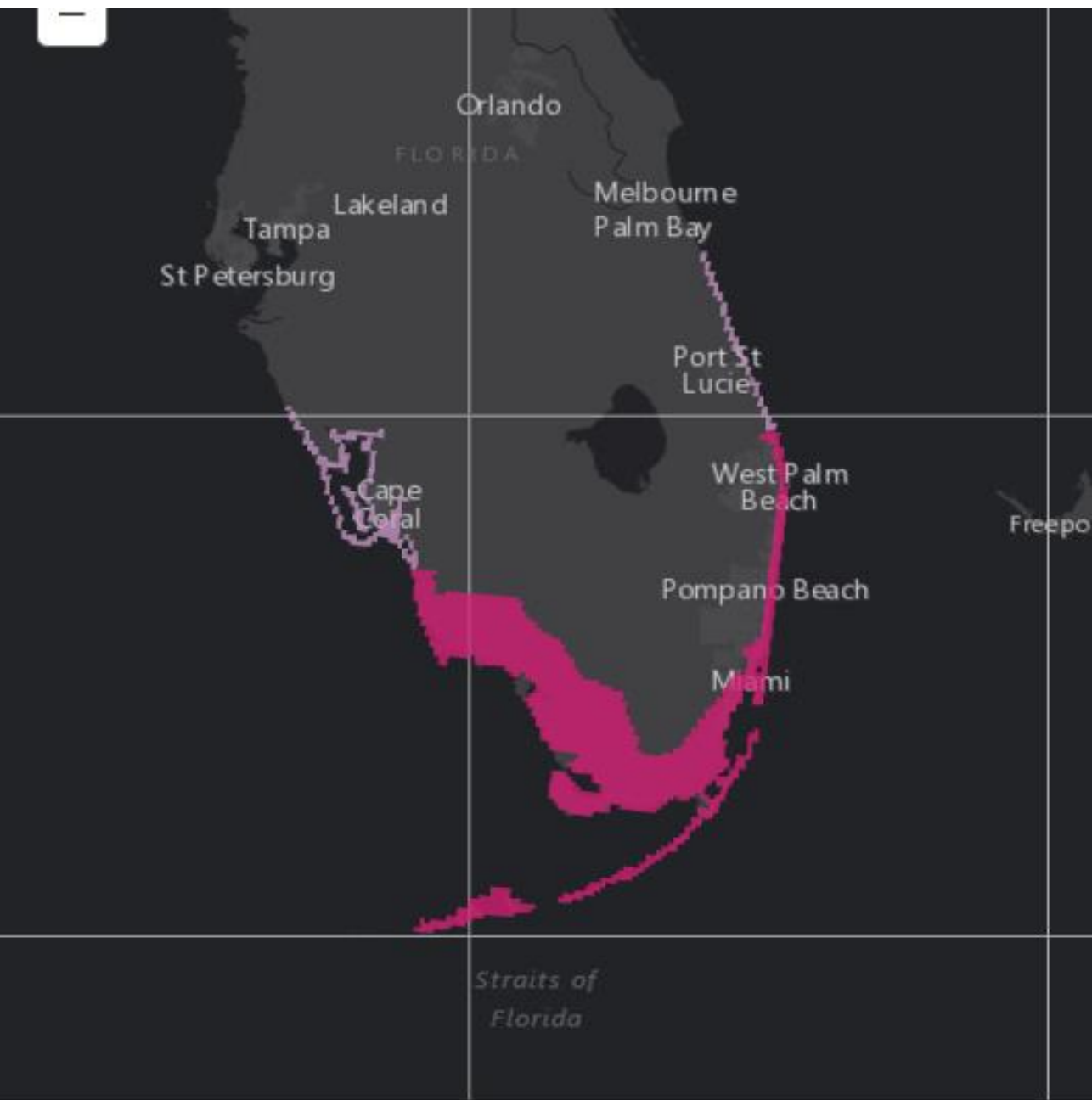
Probability of hurricane-force winds (1-minute average  $\geq 74$  mph) from all tropical cyclones

○ indicates Hurricane Irma center location at 2 AM EDT FRI SEP 08, 2017 (Forecast/Advisory #37)





Levi Cowan - [tropicaltidbits.com](http://tropicaltidbits.com)



## Storm Surge Warning

### Storm Surge Watch

Zoomable maps available here:

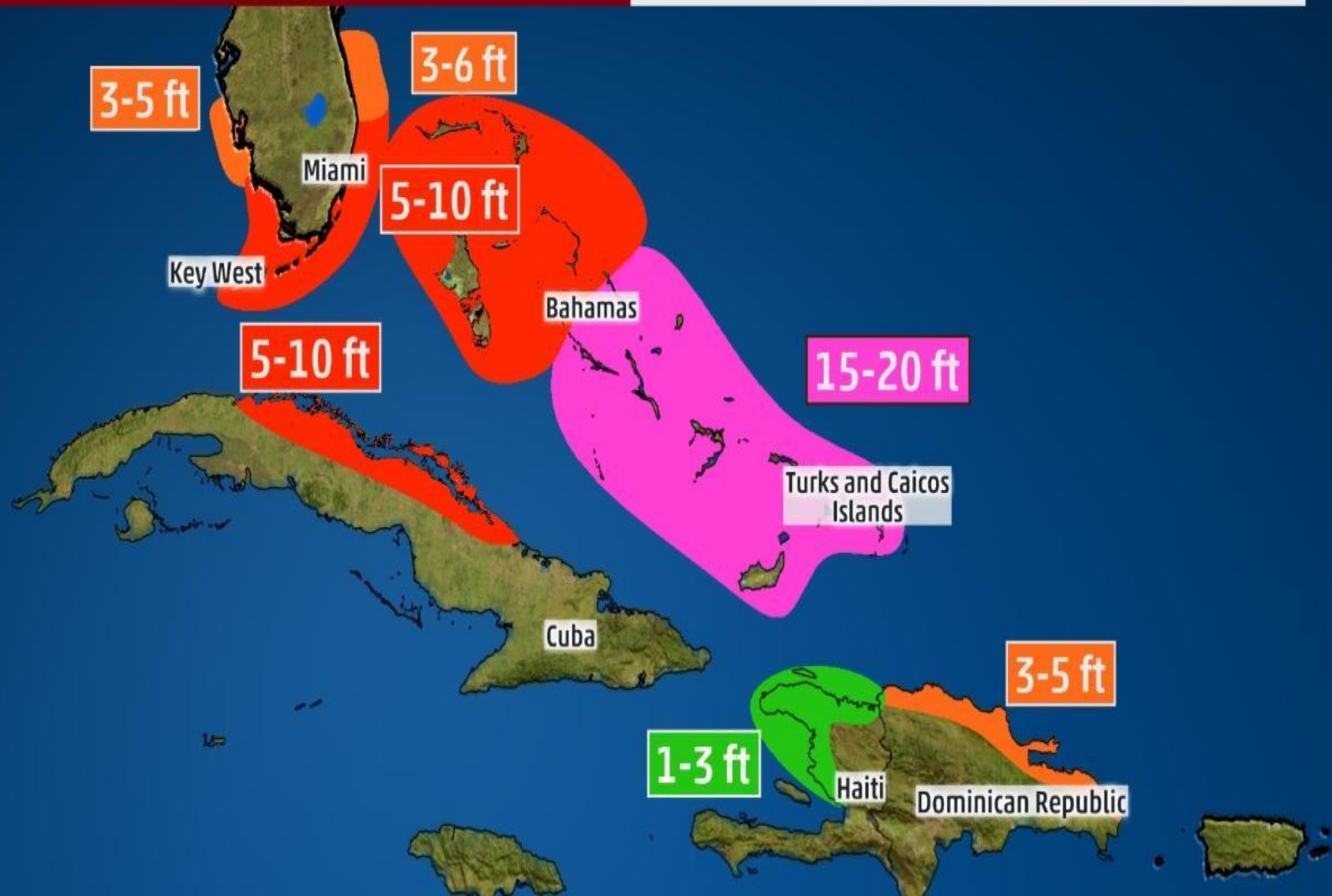
[http://www.nhc.noaa.gov/refresh/graphics\\_at1+shtml/154730.shtml?wsurge#contents](http://www.nhc.noaa.gov/refresh/graphics_at1+shtml/154730.shtml?wsurge#contents)

### Probabilistic Storm Surge

<http://slosh.nws.noaa.gov/psurge2.0/index.php?S=Irma2017&Adv=34&Ty=e10&Z=z4&D=agl&Ti=cum&Msg=17&Help=about>

# STORM SURGE INUNDATION

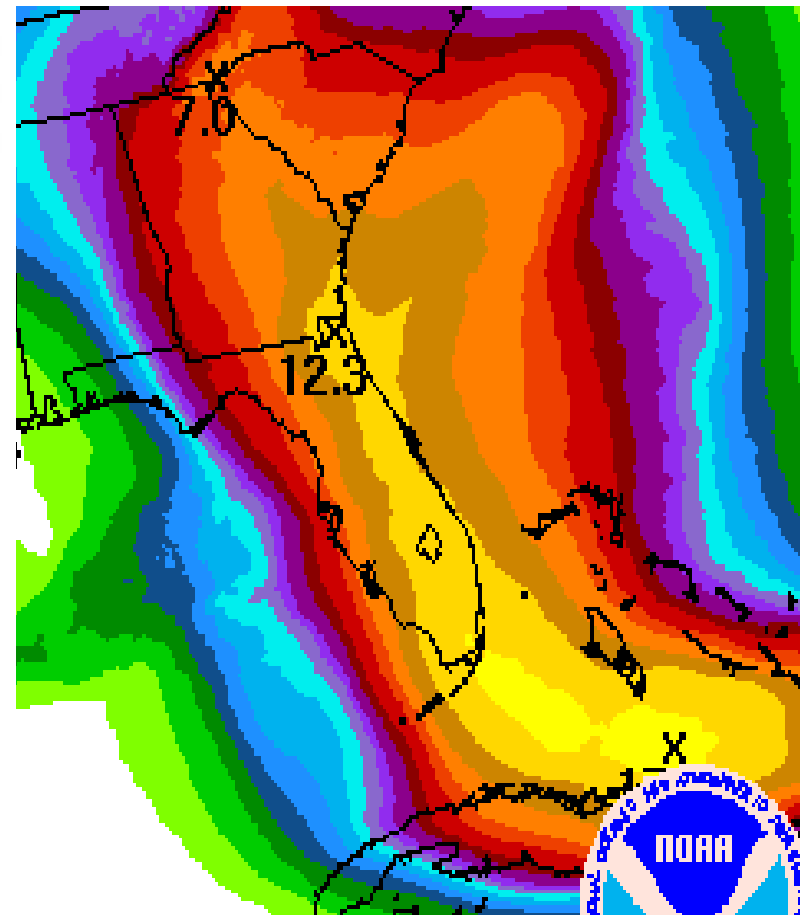
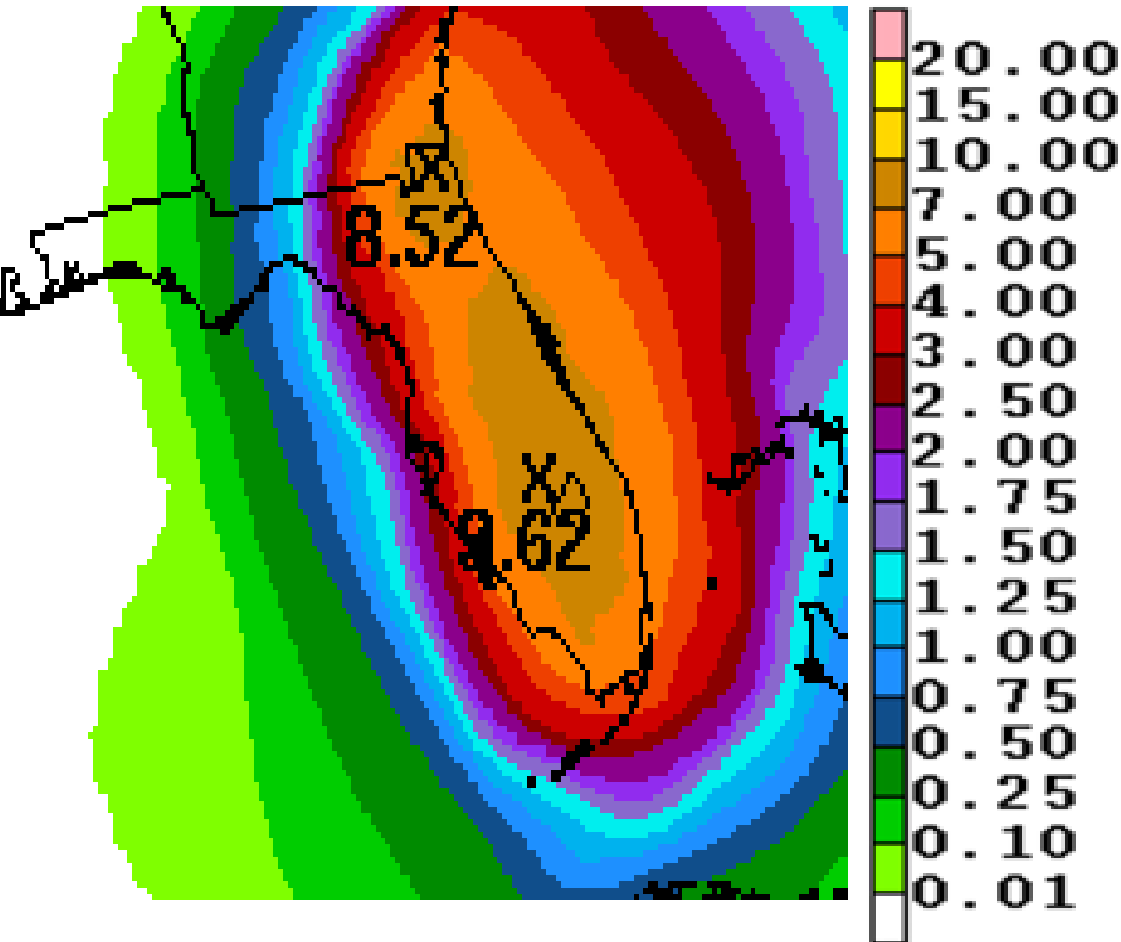
## ABOVE NORMAL TIDE LEVELS





# Rainfall Forecast SUNDAY

# Cumulative Rainfall Forecast Next 5 Days

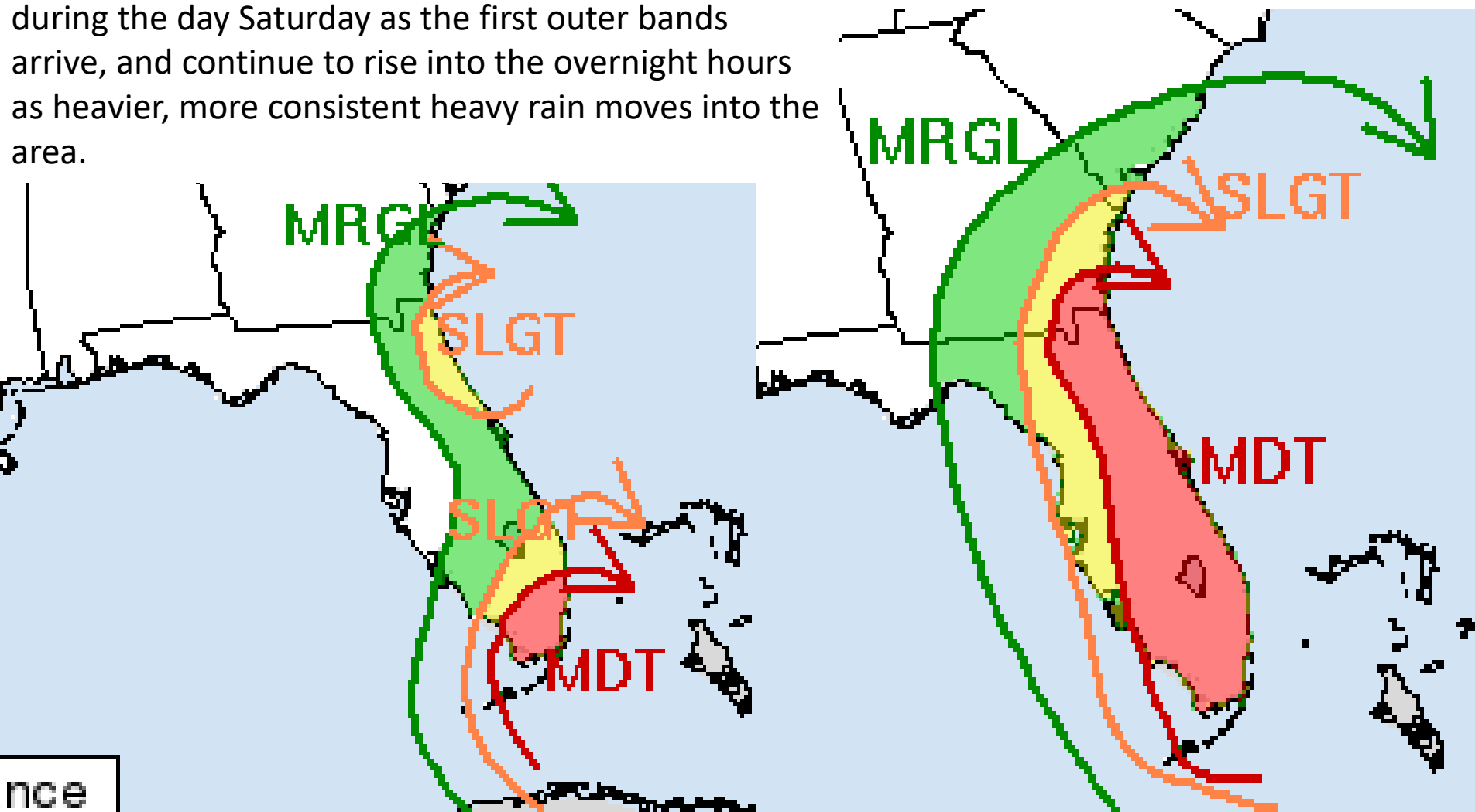


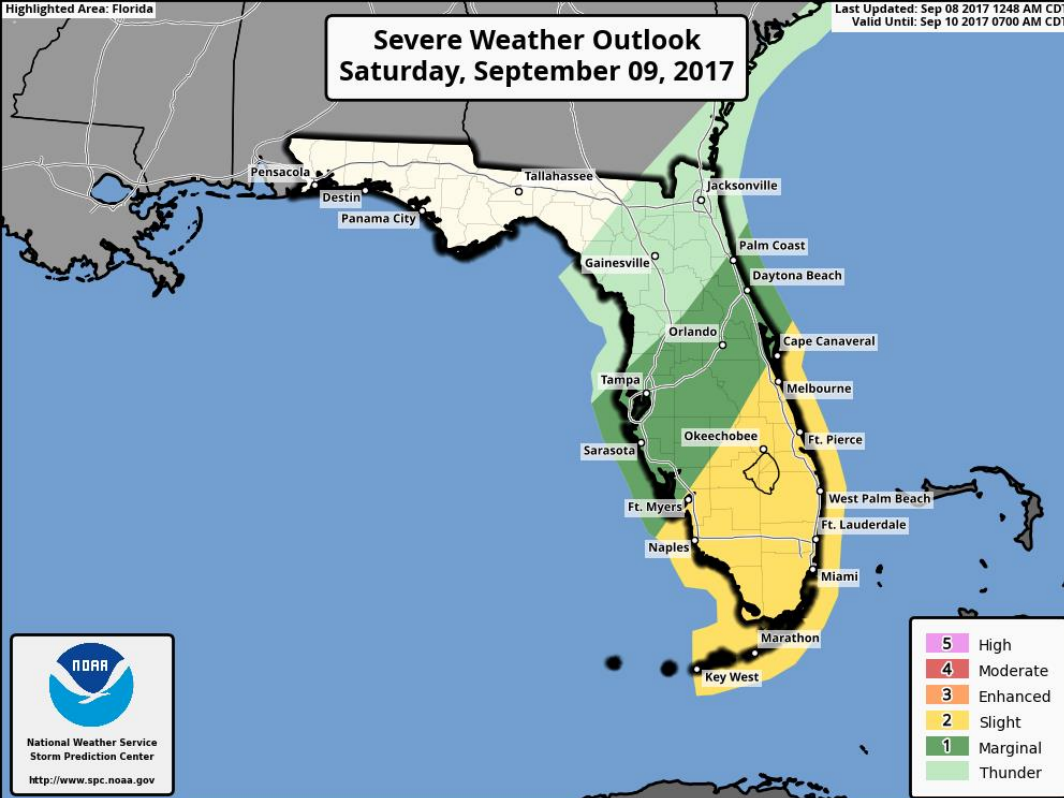
Generally 6-12", locally up to 20" anywhere in Florida Peninsula.

# FLASH FLOOD THREAT

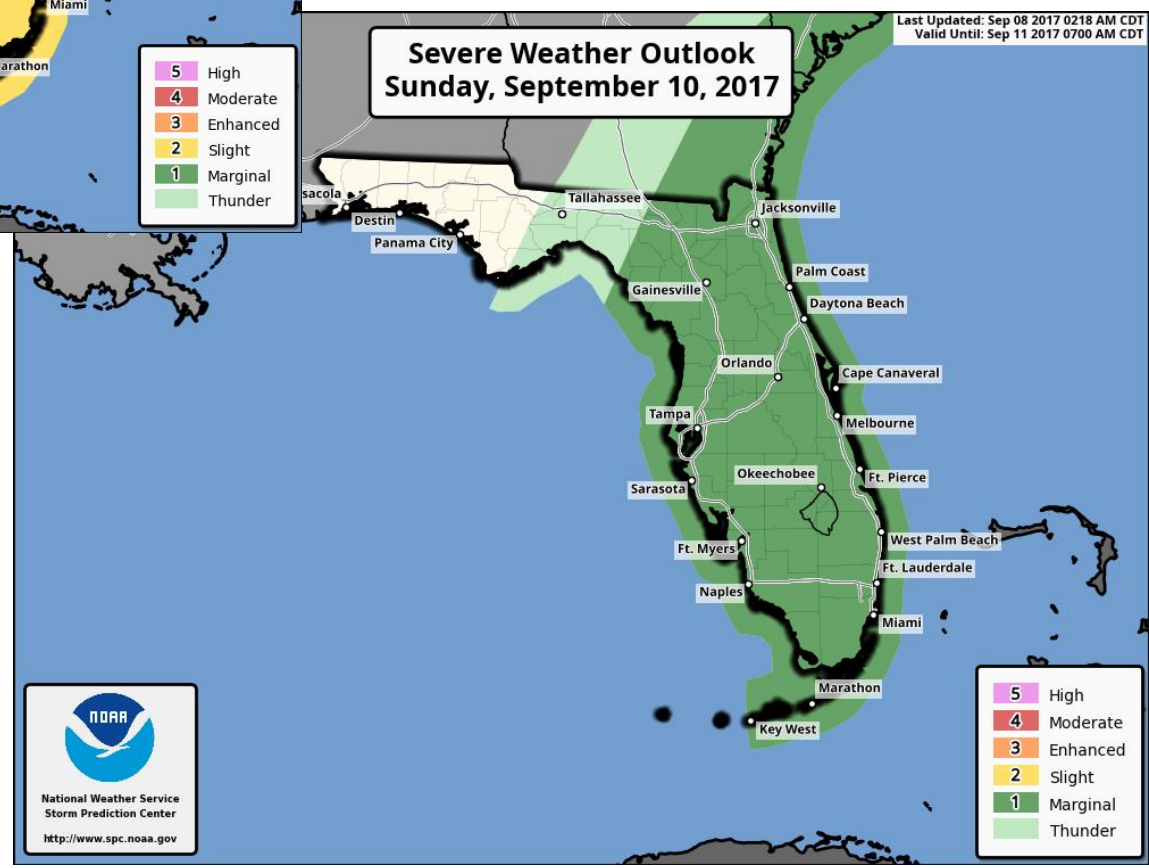
## SATURDAY & SUNDAY

The flood threat for Florida will begin to increase during the day Saturday as the first outer bands arrive, and continue to rise into the overnight hours as heavier, more consistent heavy rain moves into the area.





Tornado threat will begin to increase with the first arrival of outer bands from Irma on Saturday.





# Hurricane Jose

5 PM EDT Thu Sep 07 2017

Position 15.5 N 52.4 W

Maximum Winds 120 mph

Gusts 150 mph

Movement WNW at 18 mph

Minimum Pressure 966 mb (28.52 inches)

Blue Marble basemap imagery courtesy NASA

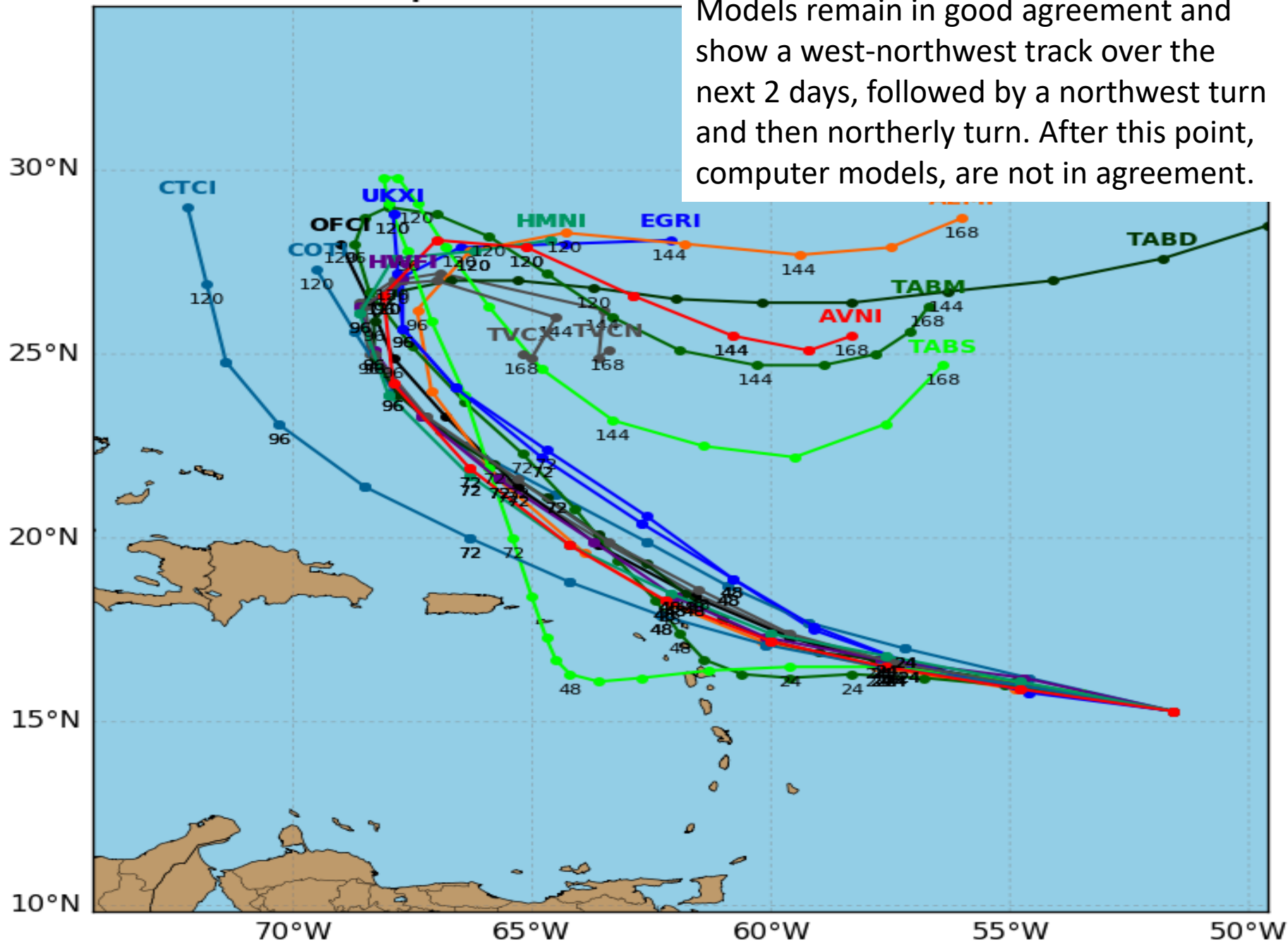
Satellite 9:58 PM UTC  
5:58 PM EDT



# Hurricane JOSE Model Track Guidance

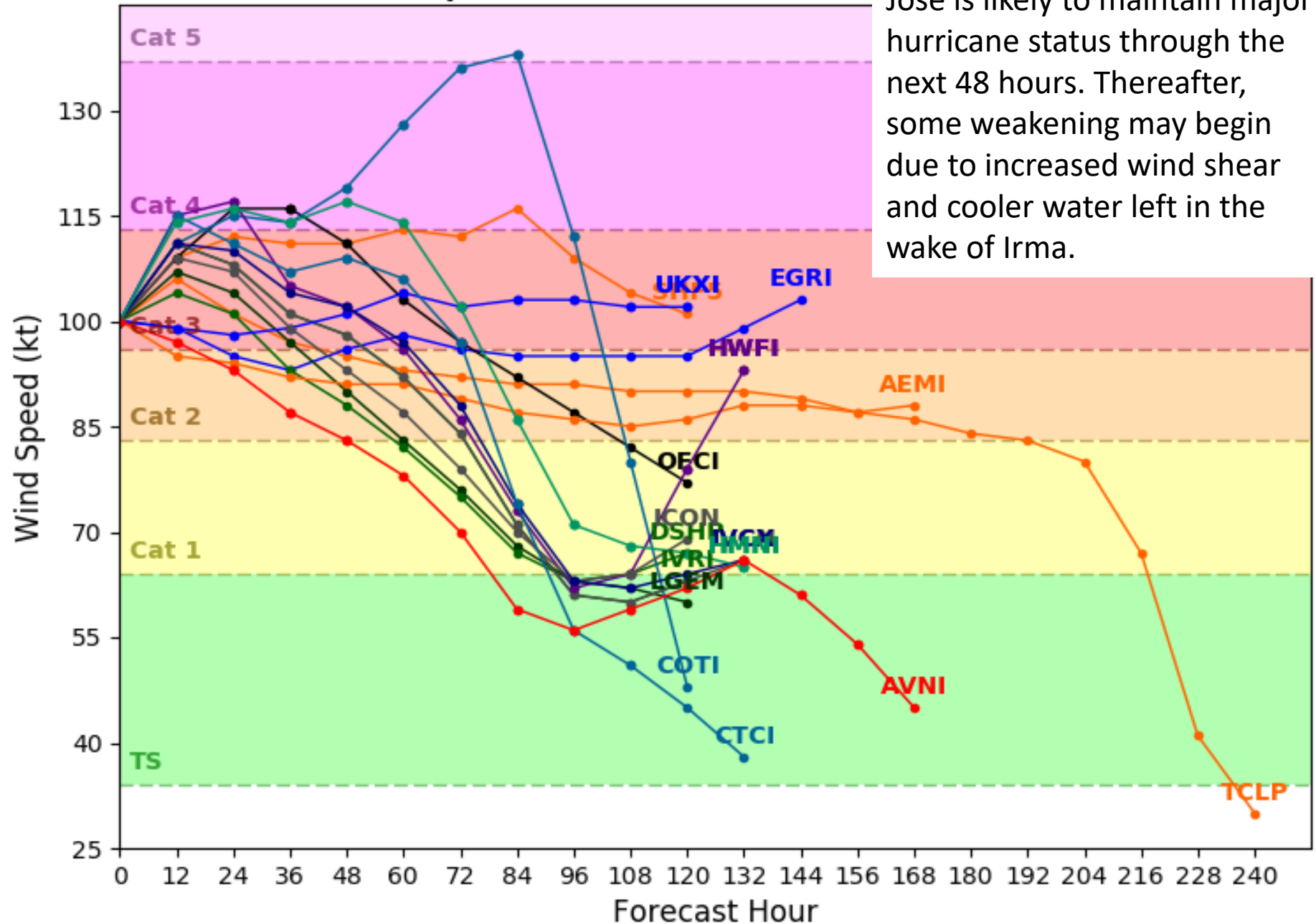
Initialized at 18z Sep 07 2017

Models remain in good agreement and show a west-northwest track over the next 2 days, followed by a northwest turn and then northerly turn. After this point, computer models, are not in agreement.



**Initialized at 18z Sep 07 2017**

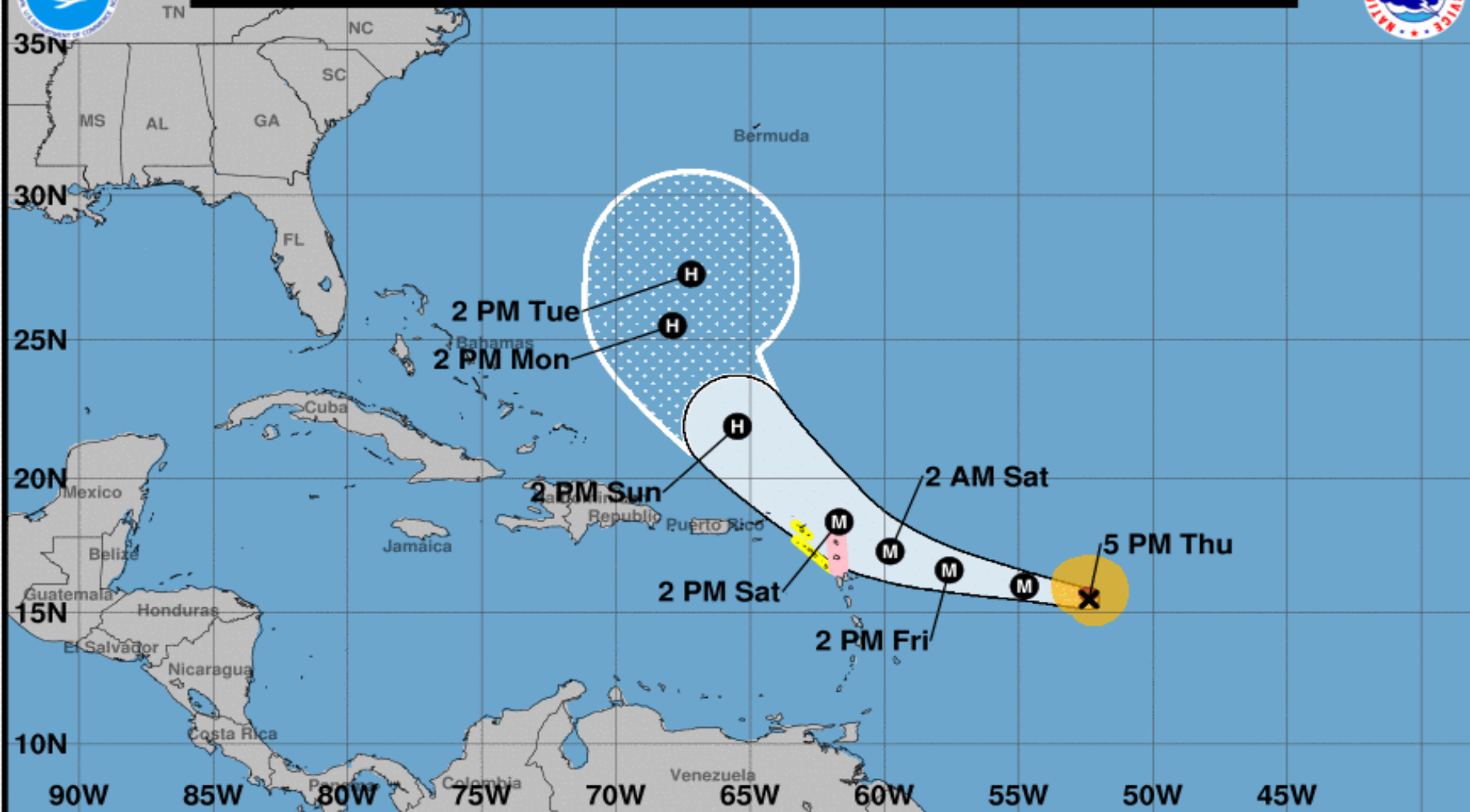
Jose is likely to maintain major hurricane status through the next 48 hours. Thereafter, some weakening may begin due to increased wind shear and cooler water left in the wake of Irma.







**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 Jose

Thursday September 07, 2017  
5 PM AST Advisory 10  
NWS National Hurricane Center

### Current information: X

Center location 15.5 N 52.4 W  
Maximum sustained wind 120 mph  
Movement WNW at 18 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

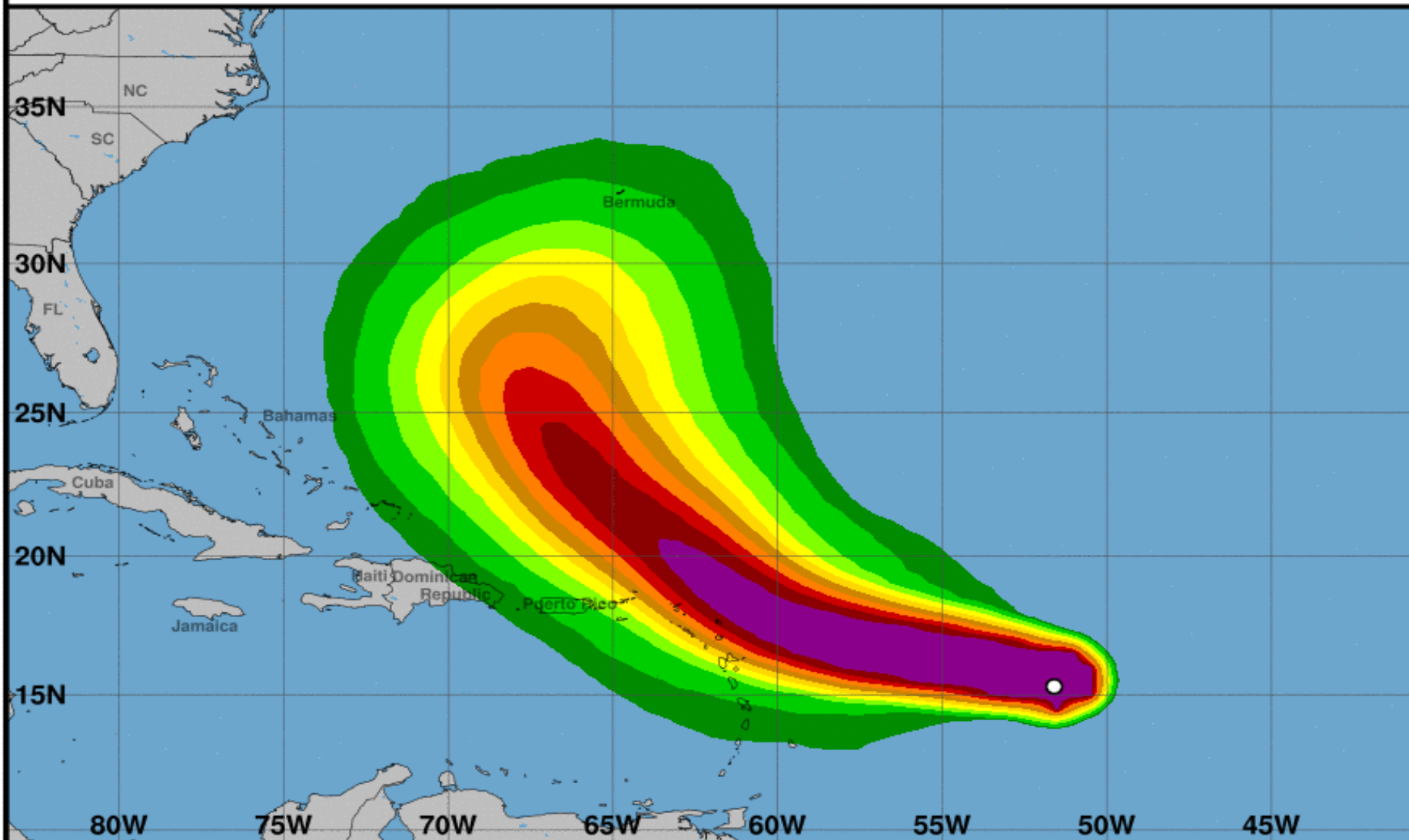
### Current wind extent:

Hurricane Trop Stm



# Tropical-Storm-Force Wind Speed Probabilities (Preliminary)

For the 120 hours (5.0 days) from 2 PM AST THU SEP 07 to 2 PM AST TUE SEP 12



Probability of tropical-storm-force winds (1-minute average  $\geq 39$  mph) from all tropical cyclones  
O indicates Hurricane Jose center location at 2 PM AST THU SEP 07, 2017 (Forecast/Advisory #10)





# Hurricane Katia

5 AM EDT Fri Sep 08 2017

Position 21.3 N 95.4 W

Maximum Winds 90 mph

Gusts 115 mph

Movement WSW at 3 mph

Minimum Pressure 977 mb (28.84 inches)

Blue Marble basemap imagery/courtesy NASA

Satellite 10:48 AM UTC  
6:18 AM EDT







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 Katia

Friday September 08, 2017

4 AM CDT Advisory 11

NWS National Hurricane Center

## Current information: X

Center location 21.3 N 95.4 W

Maximum sustained wind 90 mph

Movement WSW at 3 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



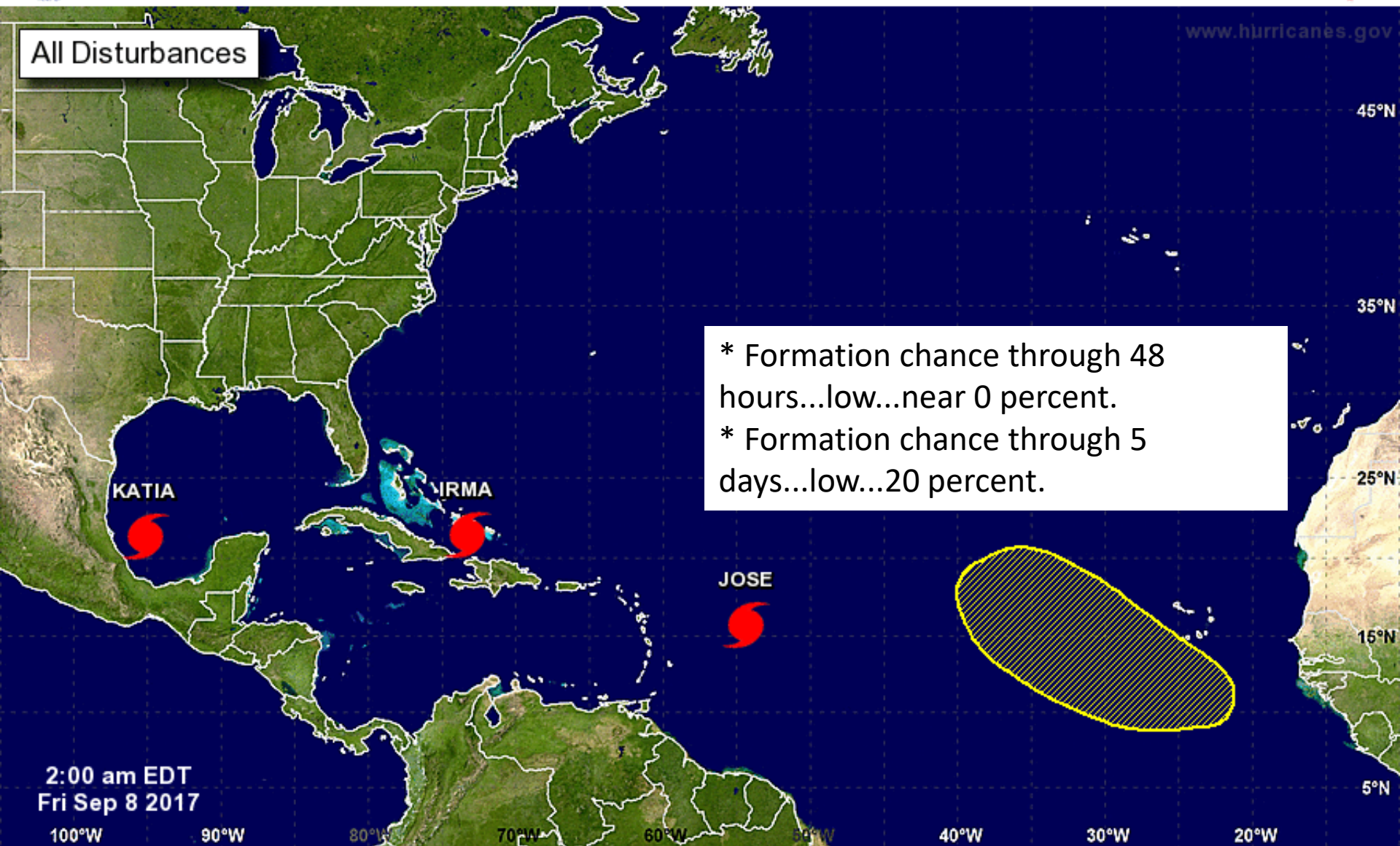
# Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

All Disturbances



\* Formation chance through 48 hours...low...near 0 percent.

\* Formation chance through 5 days...low...20 percent.

Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone Remnants

# Summary

- At 5am EDT Friday, Hurricane Irma was located in the southeastern Bahamas, about 495 miles southeast of Miami.
  - Maximum sustained winds have decreased to near 155 mph with higher gusts, making Irma a category 4 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 continues moving quickly toward the west-northwest near 16 mph, and this general motion is expected to continue for the next day or two along with a decrease in forward speed, before a northward turn occurs on Saturday.
  - The core of the hurricane will move between the north coast of Cuba and the Bahamas during the next day or two, and be near the Florida Keys and the southern Florida Peninsula Sunday morning.
  - As a reminder, do not focus on the center line of the forecast cone. The center of Irma still has the potential to move anywhere within the cone of uncertainty. Models have still not come into complete agreement and there was a small west shift in the track overnight.
  - In addition, tropical Storm force winds extend out 185 miles from the center, and hurricane force 70 miles, meaning a large portion of the Peninsula may experience hurricane force winds and much of the state will at least feel tropical storm conditions.
- 
- At 5am EDT Friday, Hurricane Jose was located 440 miles southeast of Barbuda, which is about 1,740 miles southeast of Miami, Florida.
  - Maximum sustained winds have increased to 125 mph, which is a Category 3 on the Saffir-Simpson Hurricane Wind Scale.
  - Additional strengthening is possible over the next few days, followed by some weakening over the weekend as it turns northwest, passing just north of the Leeward/Virgin Island.
  - A turn to the north and northeast along with a slower forward speed is expected early next week.
- 
- At 5am EDT Friday, Hurricane Katia was located in the southwestern Gulf of Mexico about 940 miles west-southwest of Key West, Florida.
  - Maximum sustained winds are near 90mph, making Katia a Category 1 hurricane.
  - Some additional strengthening is forecast during the next day or so and Katia could be near major hurricane strength at landfall in eastern Mexico tonight or early Saturday.
- 
- A tropical wave is expected to emerge off the coast of Africa over the weekend.
  - Environmental conditions appear to be conducive for gradual development of this system next week as it moves west-northwestward over the eastern Atlantic Ocean
  - There is currently a 20% chance of it becoming a tropical depression within the next 5 days, but these chances could increase.



# Florida Outlook

- All of the Florida Peninsula and Florida Big Bend lie within the NHC 5 day cone of error and could feel impacts from this system regardless of the eventual path.
- **Hurricane Warnings** in effect for: Palm Beach, Broward, Miami-Dade, Monroe, Collier, Glades and Hendry Counties.
- **Hurricane Watches** in effect for Lee, Charlotte, Sarasota, Manatee, Hardee, DeSoto, Highlands, Okeechobee, Martin, St. Lucie and Indian River Counties.
- Wind impacts to South Florida from Irma could occur as early as early Saturday morning, with the most likely timeframe for tropical storm force winds arriving Saturday afternoon. Hurricane force winds could arrive in Southeast Florida early Sunday morning.
- **Storm Surge watches or warnings** are in effect south of Sebastian Inlet on the East Coast and south of Venice on the West Coast. This includes all of the Florida Keys.
- 5-10' of storm surge is currently being forecasted by the Hurricane Center of South Florida and the Keys, with 3-6' possible for the Treasure Coast and Sun Coast.
- In addition, rainfall amounts could reach as high as 8-12" with isolated higher totals of 16" possible.
- Ocean swells from Irma have already reached South Florida and will produce a moderate to high risk of rip currents from today through the weekend.
  
- Hurricane Jose does not pose a threat to Florida within the next 5-7 days, but should be monitored.
- Hurricane Katia does not pose a threat to Florida, but ocean swells from the system may affect portions of the Panhandle coast over the weekend and increase the rip current risk.

Another briefing packet will be issued Friday afternoon. For more information, visit the NHC website at [www.hurricanes.gov](http://www.hurricanes.gov).



# TROPICAL UPDATE

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State Meteorological Support Unit

Florida Division of Emergency Management

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