



# **TROPICAL UPDATE**

**5 PM EDT**

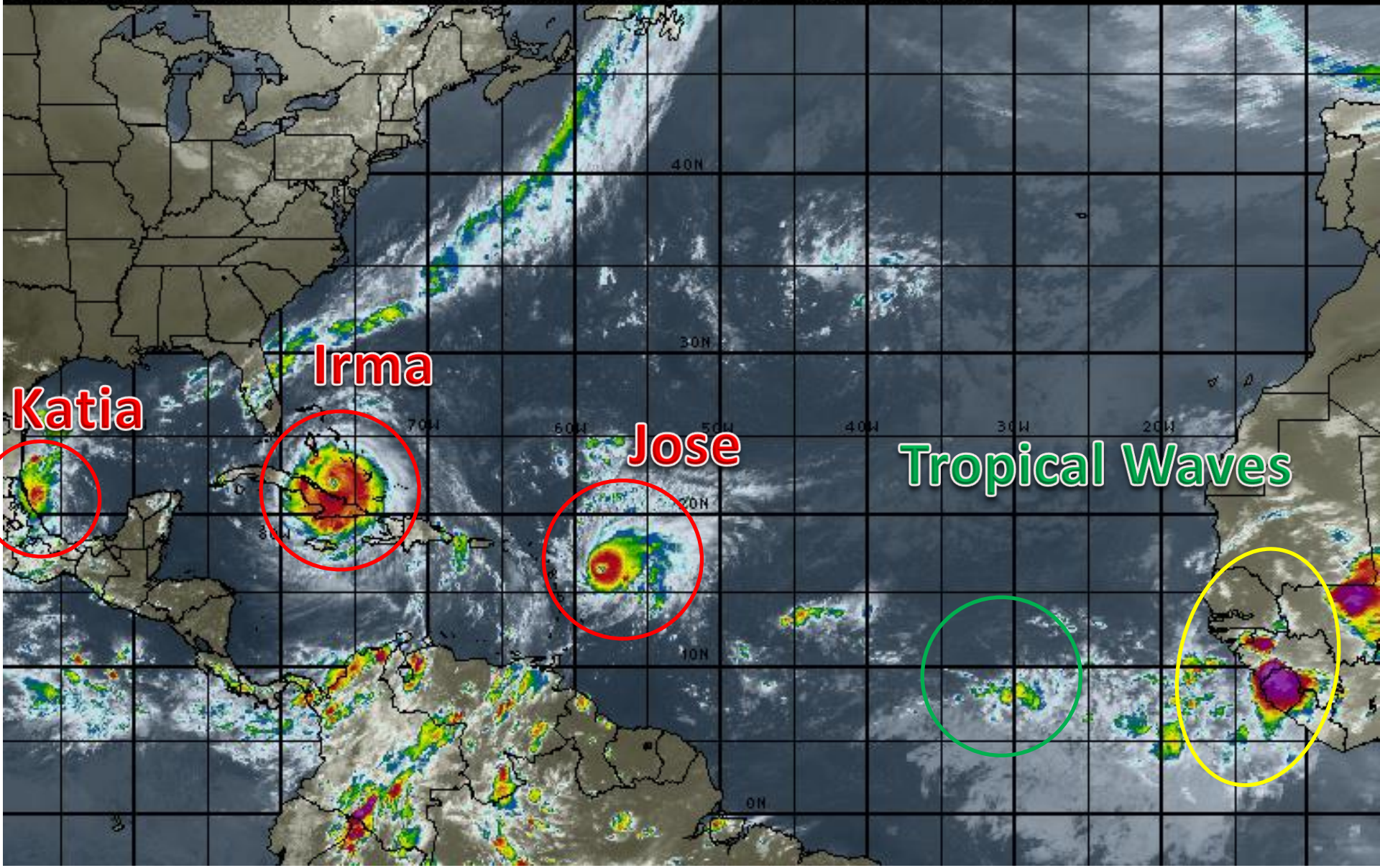
**Friday, September 8, 2017**

**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

21:00 08-SEP-2017 GMT Copyright © 1998-2016 WSI Corporation <http://www.wsi.com>





# Hurricane Irma

5 PM EDT Fri Sep 08 2017

Position 22.1-N-76.5-W

Maximum Winds 155 mph

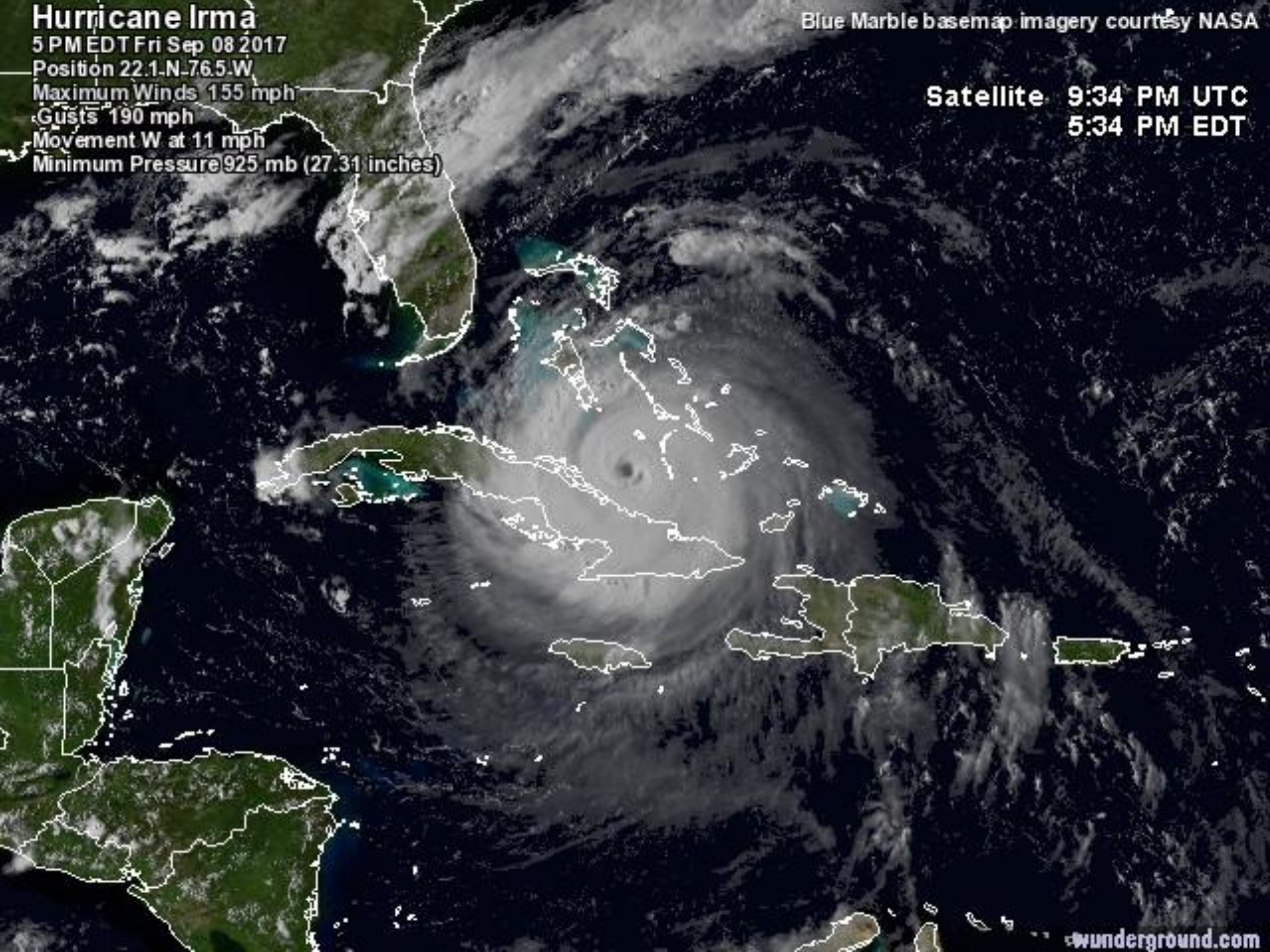
Gusts 190 mph

Movement W at 11 mph

Minimum Pressure 925 mb (27.31 inches)

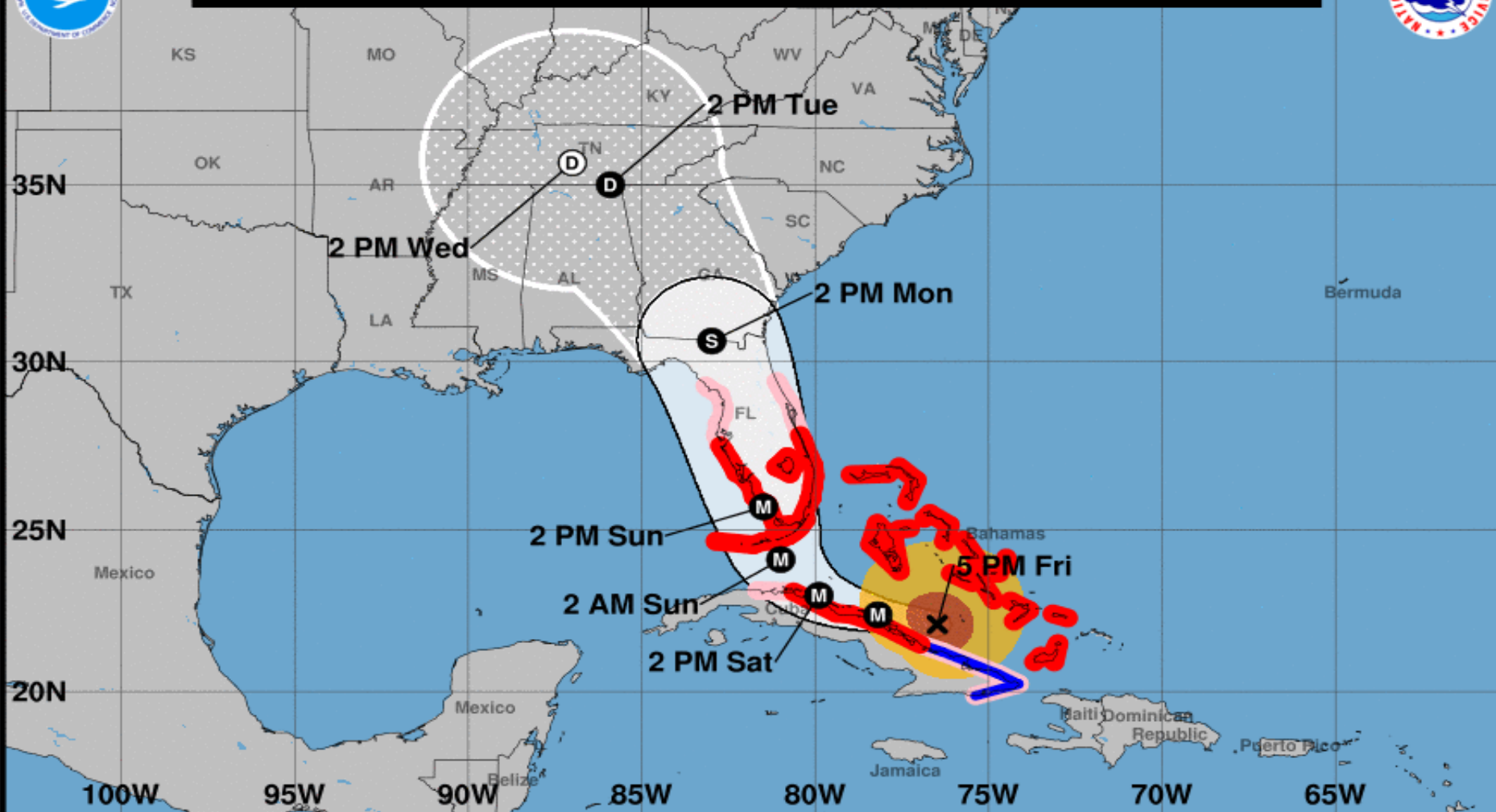
Blue Marble basemap imagery courtesy NASA

Satellite 9:34 PM UTC  
5:34 PM 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 PM EDT Advisory 39

NWS National Hurricane Center

## Current information: X

Center location 22.1 N 76.5 W

Maximum sustained wind 155 mph

Movement W at 12 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

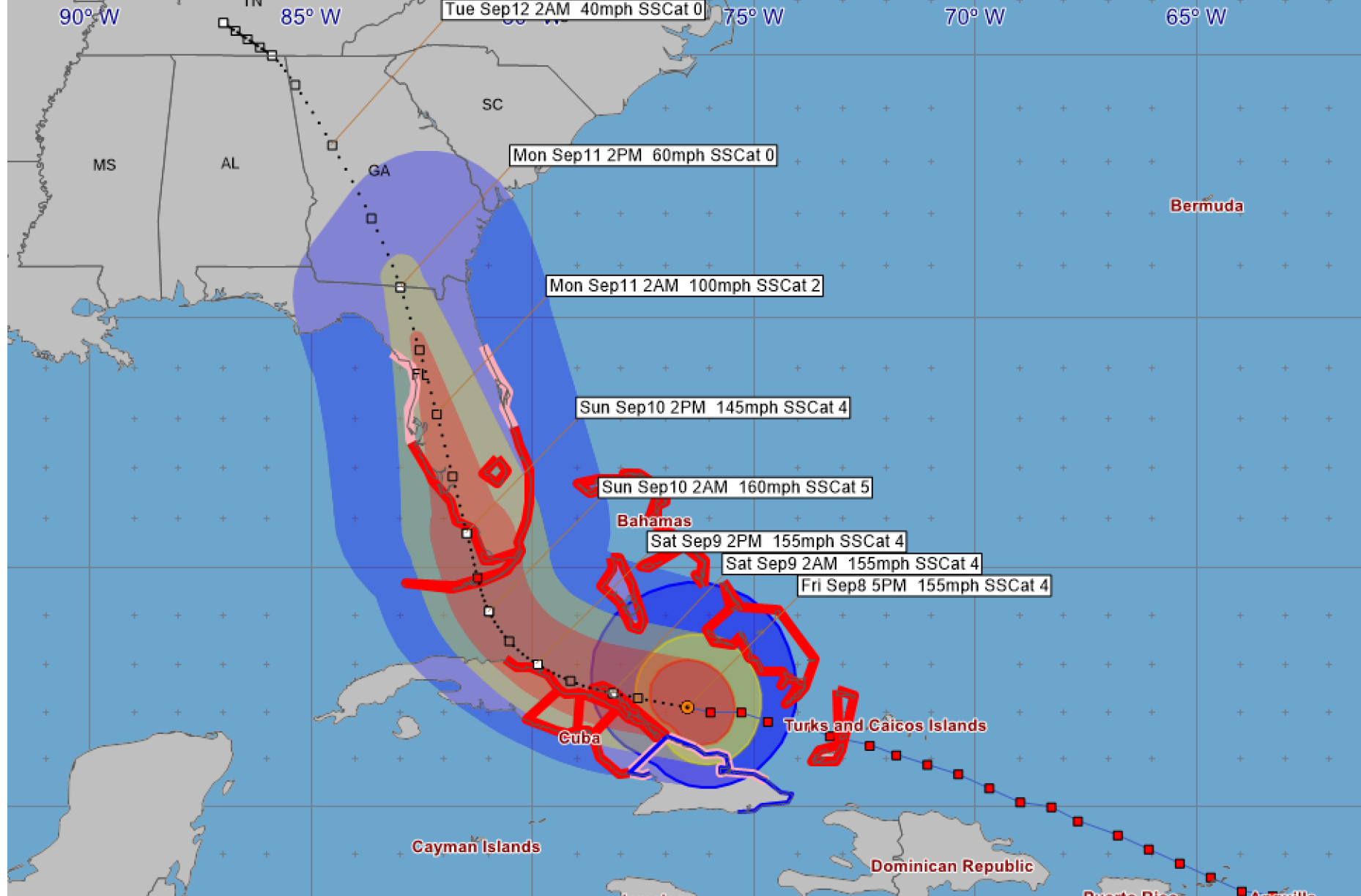
## Warnings:

Hurricane Trop Stm

## Current wind extent:

Hurricane Trop Stm





### Hurricane Irma - Friday, September 8, 2017 5 PM EDT Advisory #39

Center Location: 22.1 N 76.5 W Maximum Sustained Winds: 155 mph (Cat 4) Movement: 12 mph W

forecast positions Surface Wind Field: at current location along 3-day forecast track

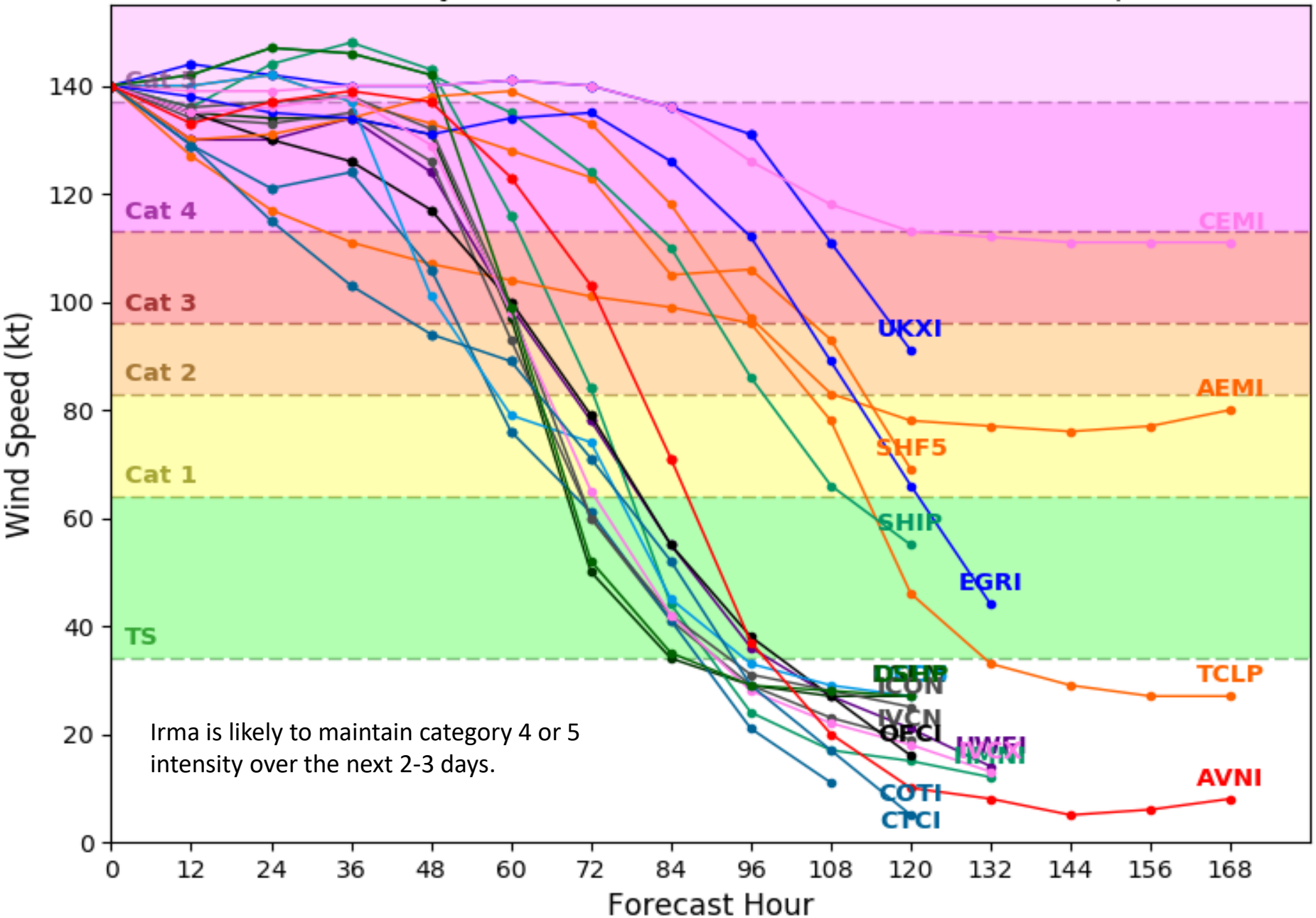
Watches: hurricane tropical storm Warnings: hurricane tropical storm

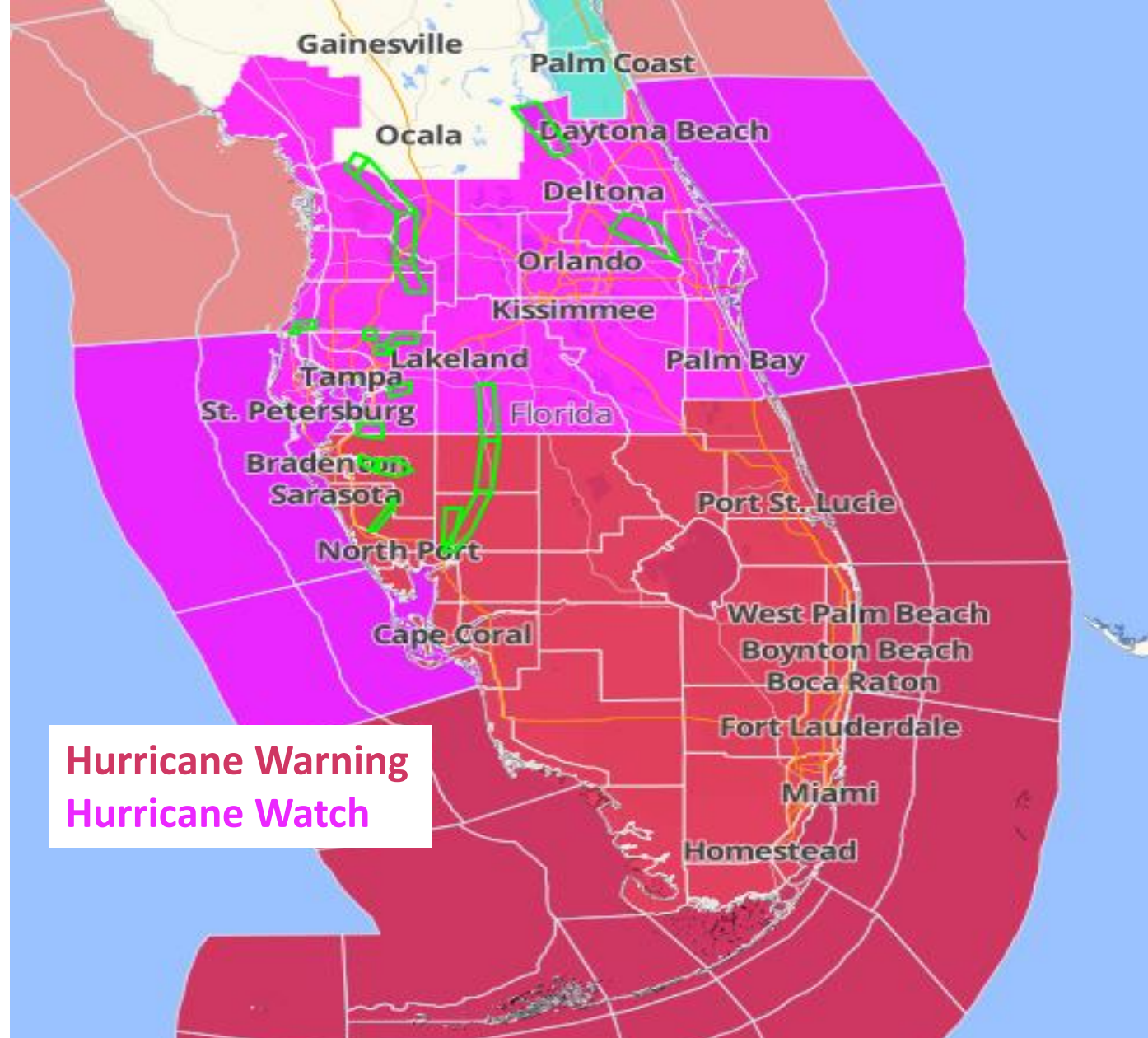
Sustained Wind Speeds: tropical storm >= 34kt/39mph strong tropical storm >= 50kt/58mph hurricane >= 64kt/74mph

# Hurricane IRMA Model Intensity Guidance

Initialized at 06z Sep 08 2017

Levi Cowan - tropicaltidbits.com



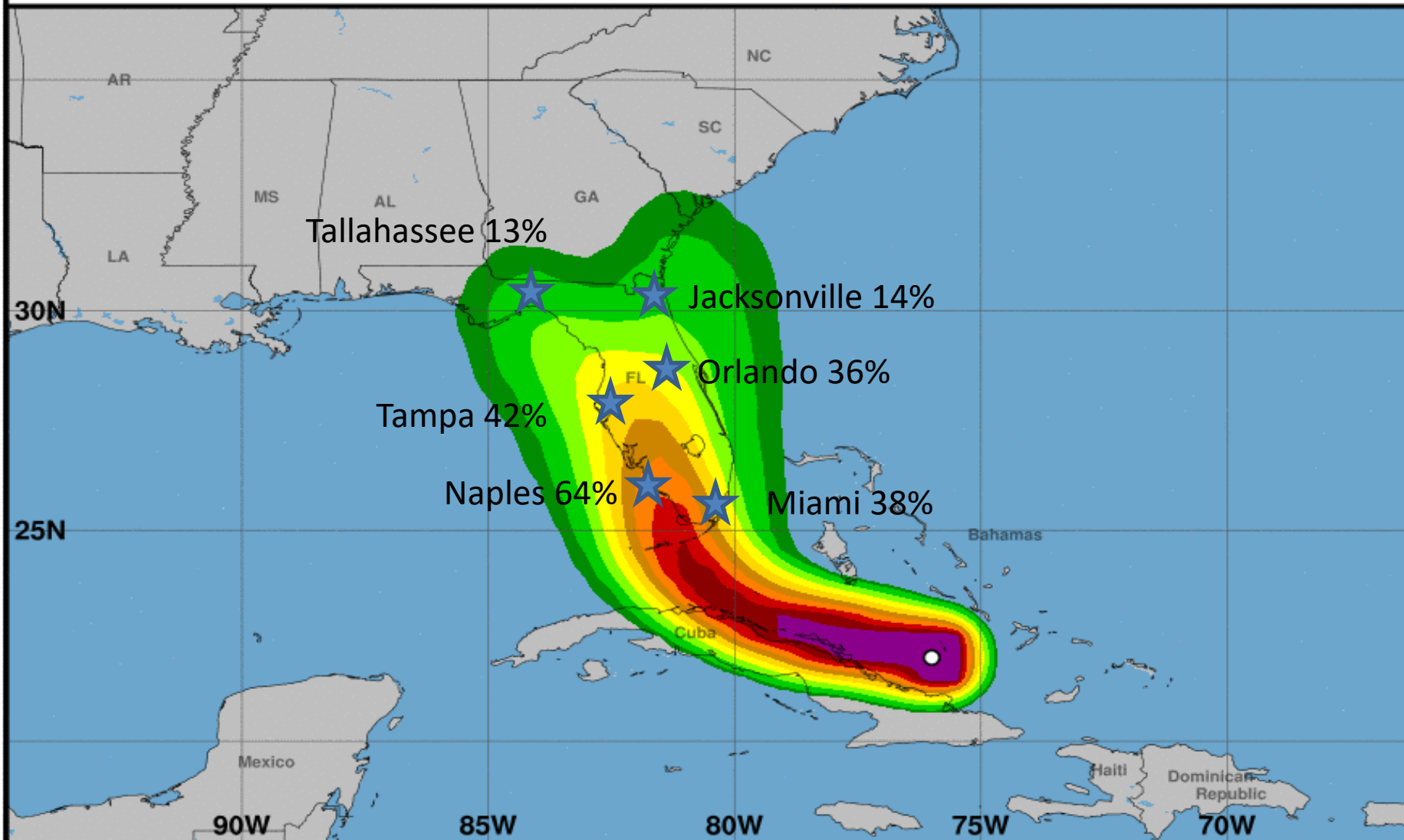


The **Hurricane Warning** area also includes the entire Florida Keys and Lake Okeechobee.



## Hurricane-Force Wind Speed Probabilities (Preliminary)

For the 120 hours (5.0 days) from 2 PM EDT FRI SEP 08 to 2 PM EDT WED SEP 13



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

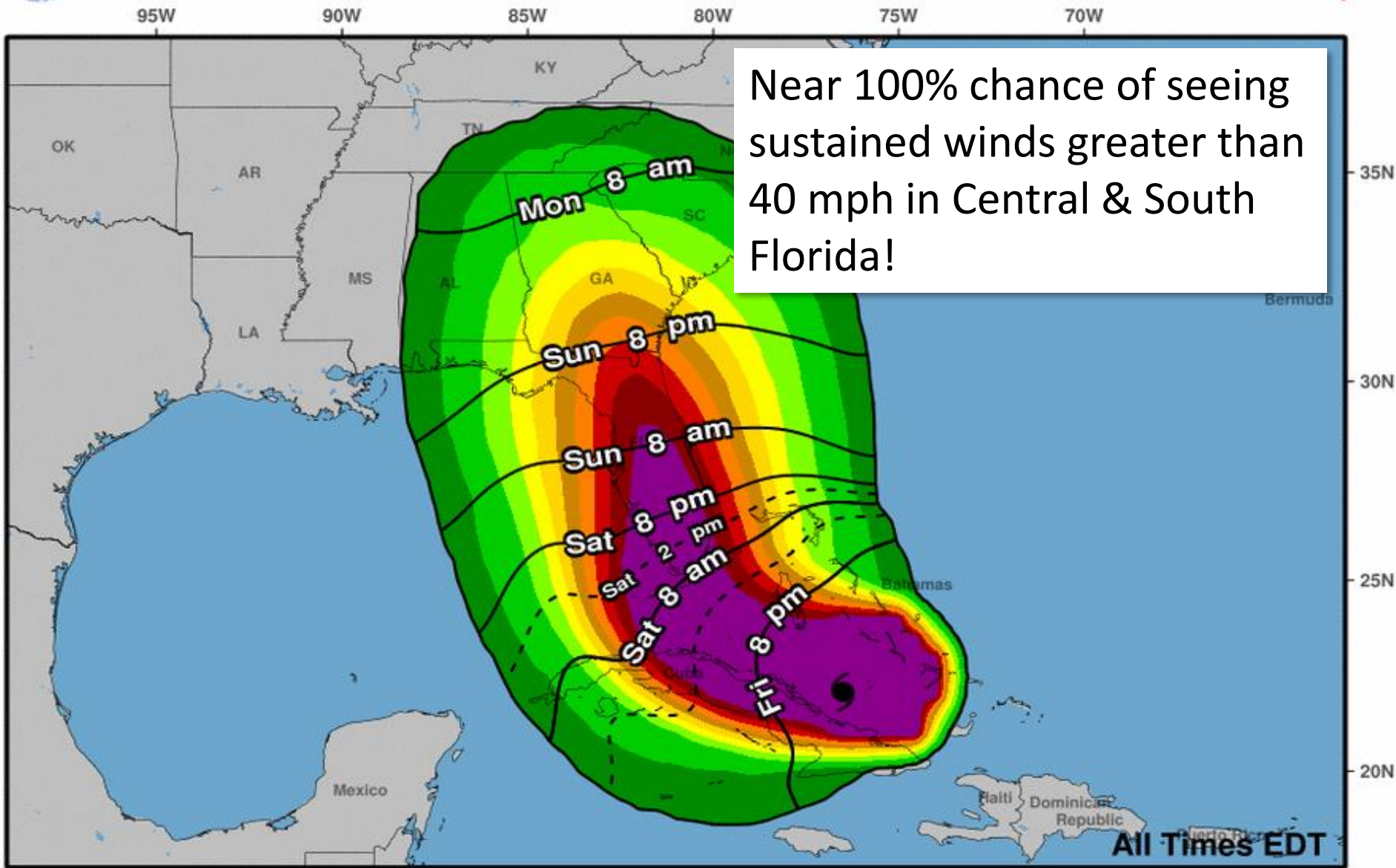
O indicates Hurricane Irma center location at 2 PM EDT FRI SEP 08, 2017 (Forecast/Advisory #39)







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



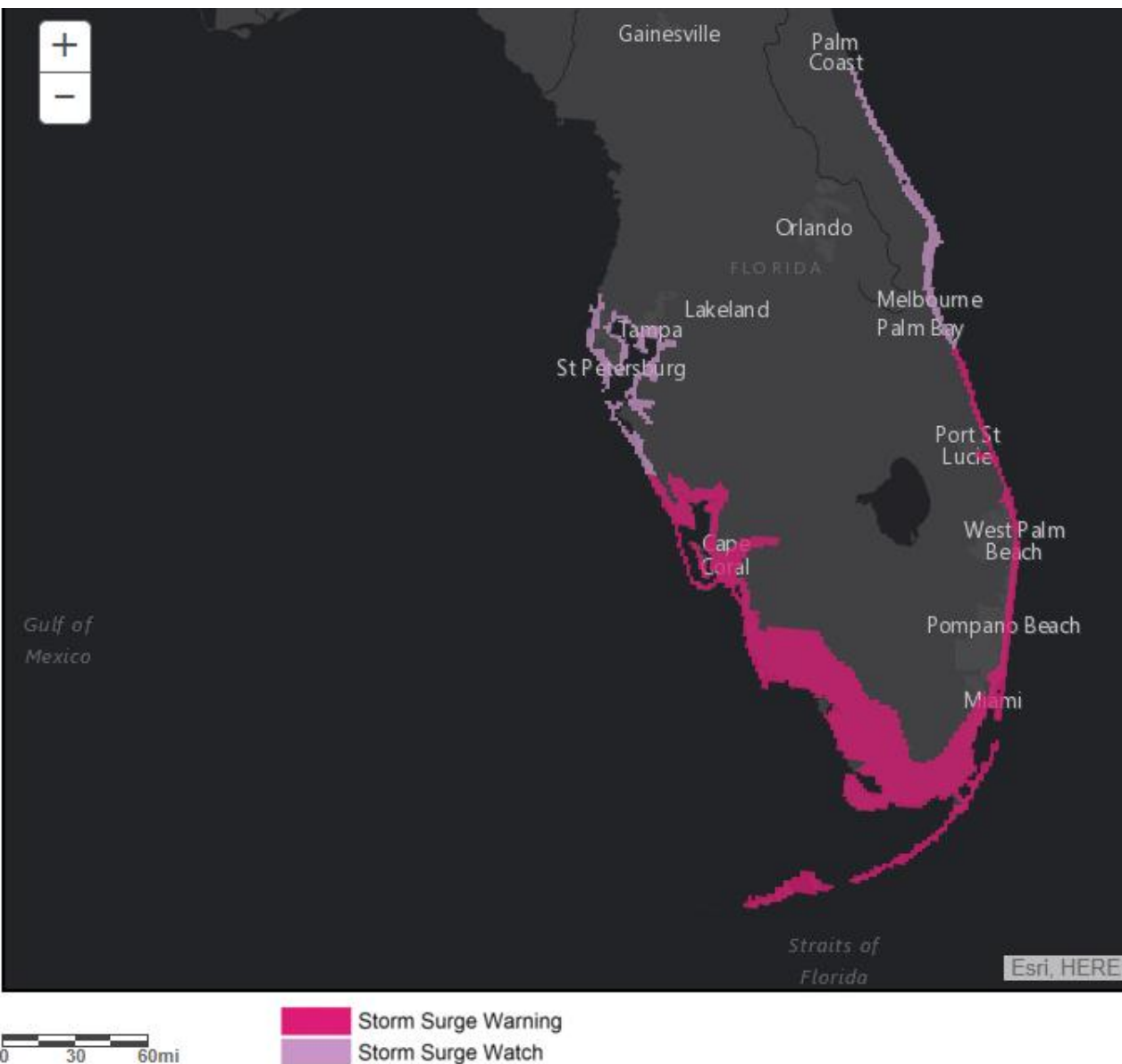
**Hurricane Irma**  
**Fri. Sep. 8, 2017 5 pm EDT**  
**Advisory 39**

Storm Location &  
Wind Speed (knots)

○ <34    ◐ 34-63    ● ≥64

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





## 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>

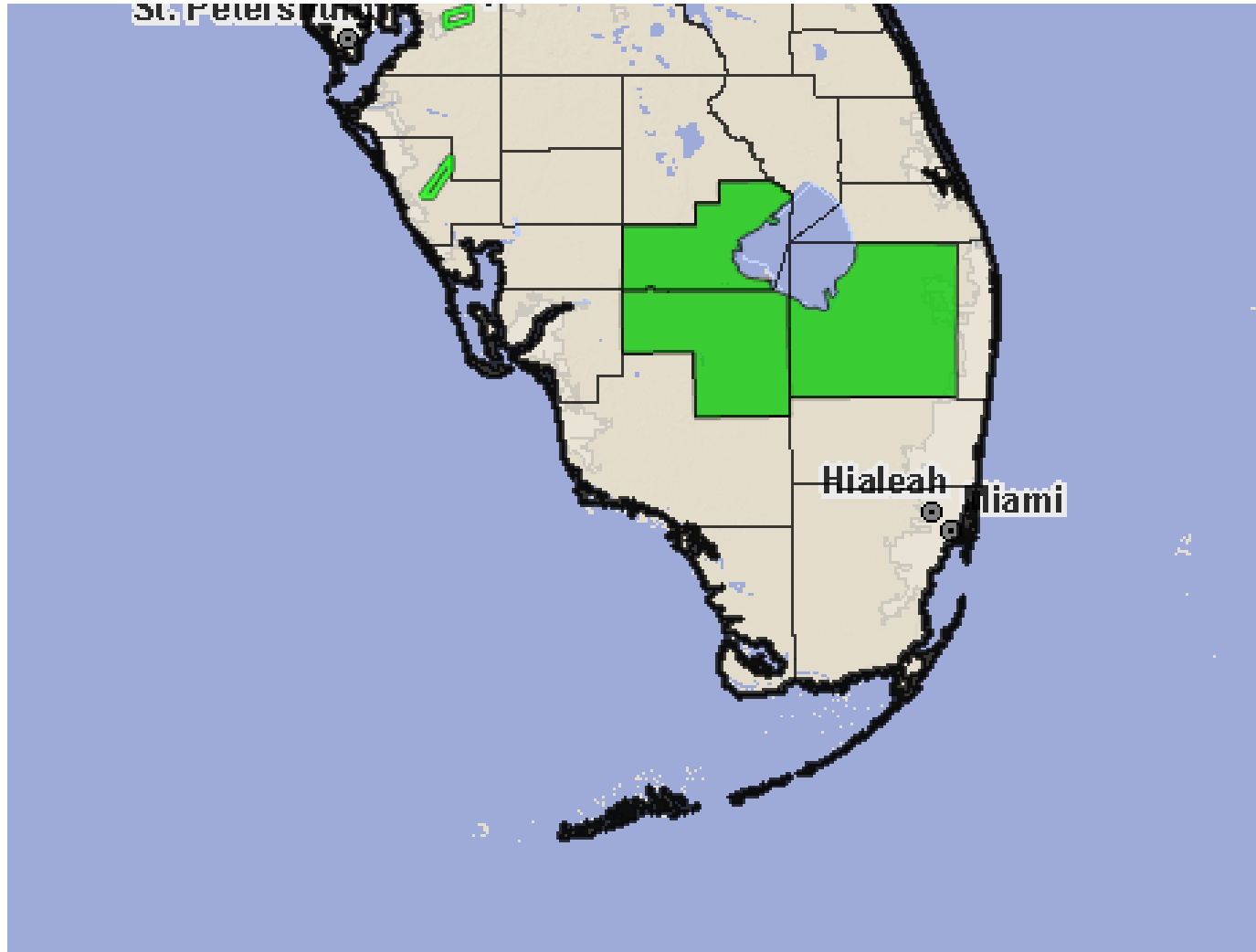
# STORM SURGE INUNDATION

## ABOVE NORMAL TIDE LEVELS

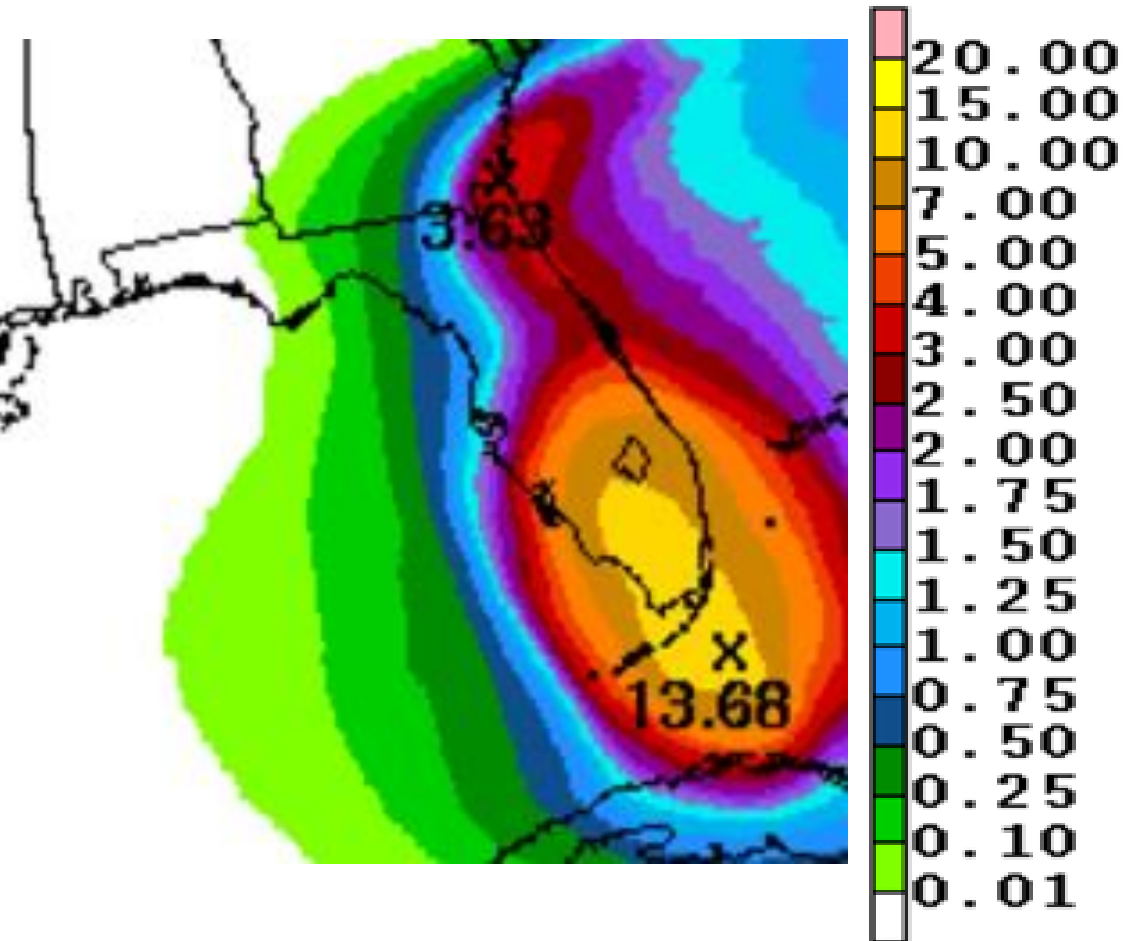




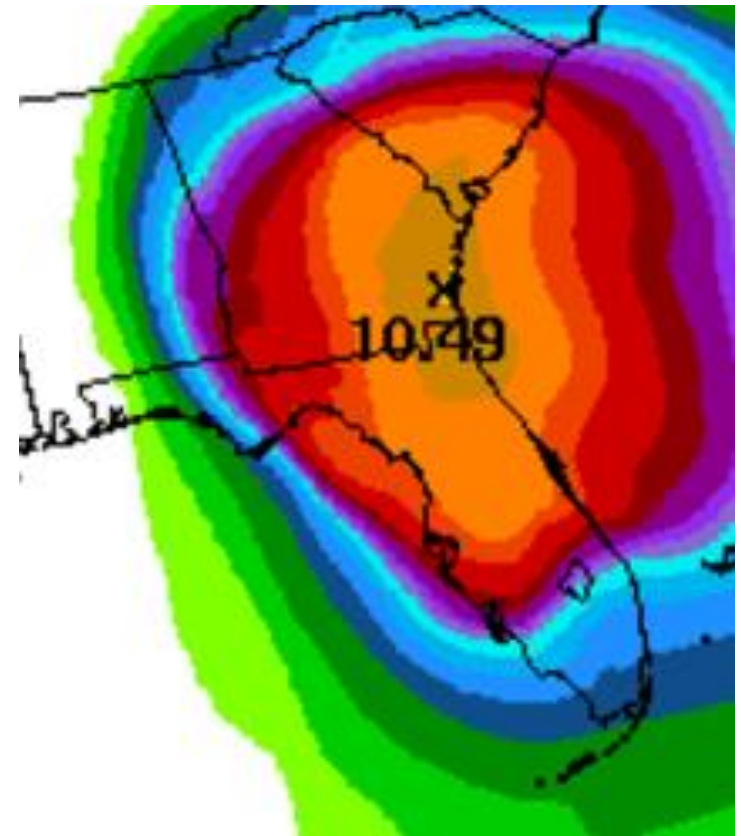
# Flash Flood Watch through Monday for Potential Lake Okeechobee Overwash At Construction Sites Along the Dike.



# Rainfall Forecast SUNDAY



# Rainfall Forecast MONDAY



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

River Flood  
Warnings for  
Early Next Week  
Based on  
Expected Rainfall

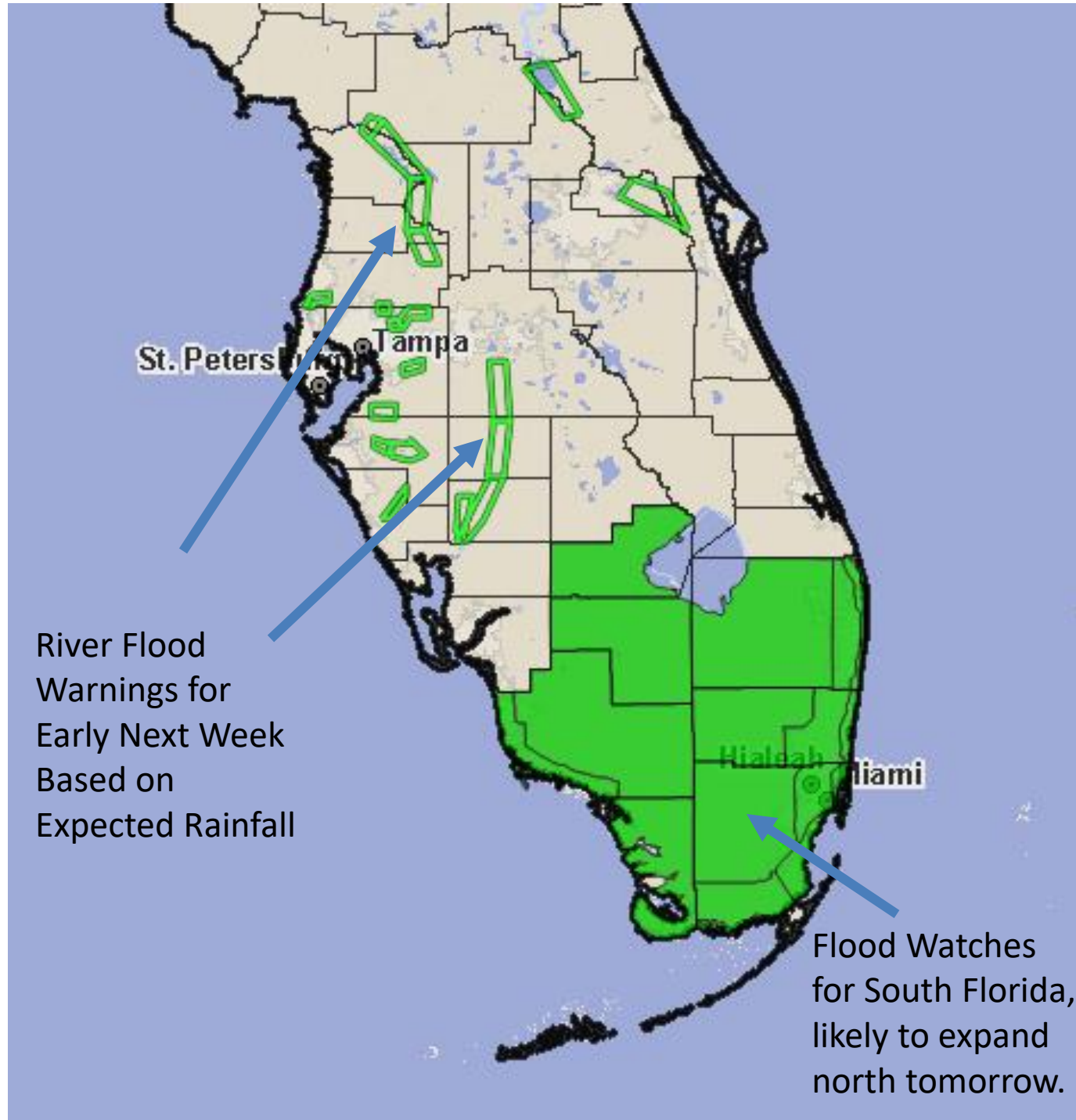
St. Petersburg

Tampa

Hialeah

Miami

Flood Watches  
for South Florida,  
likely to expand  
north tomorrow.

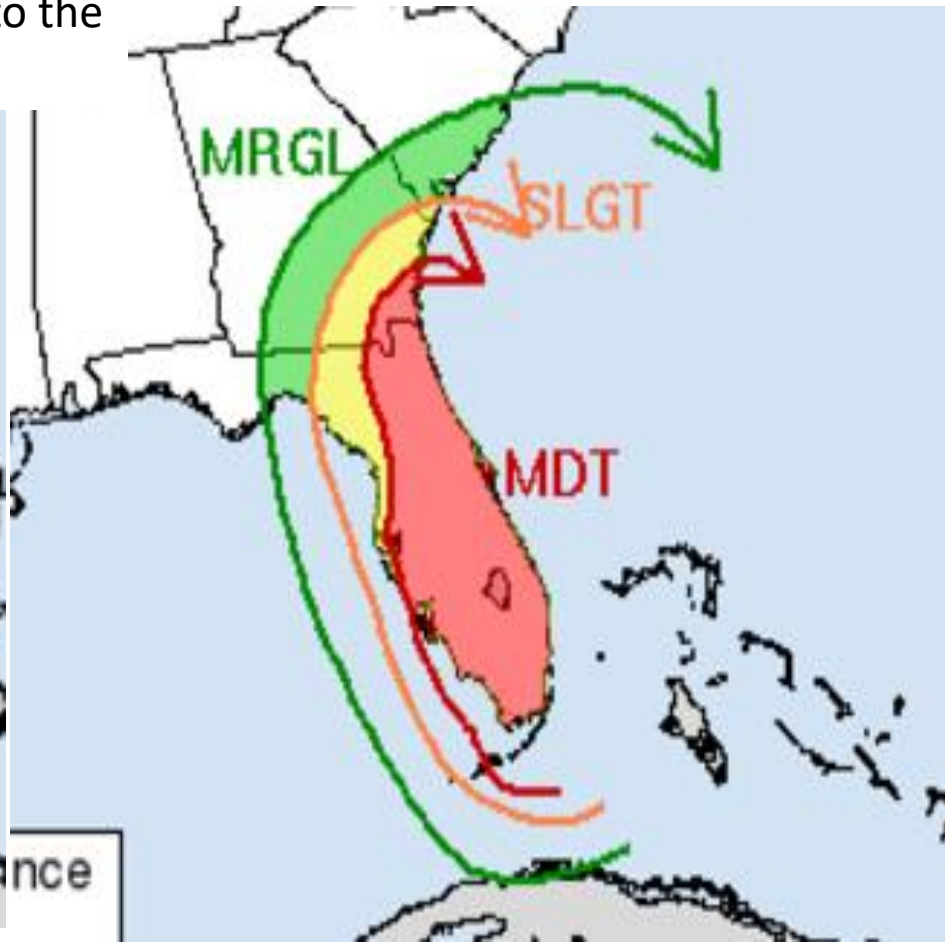


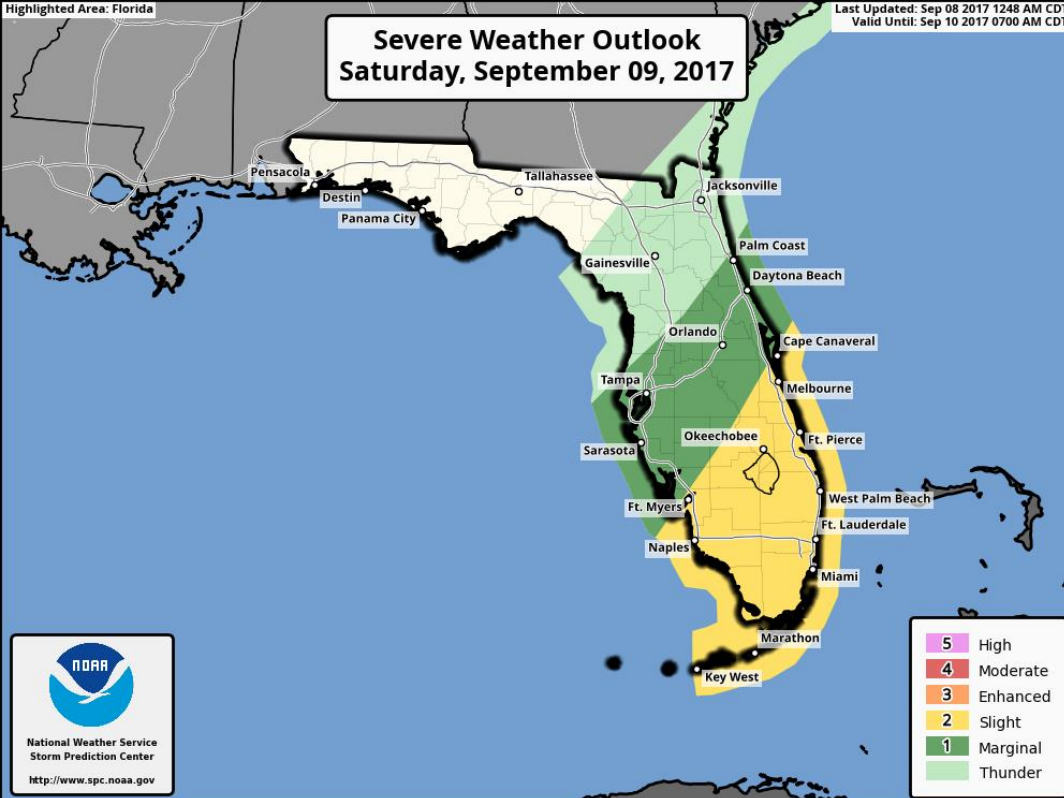


# FLASH FLOOD THREAT

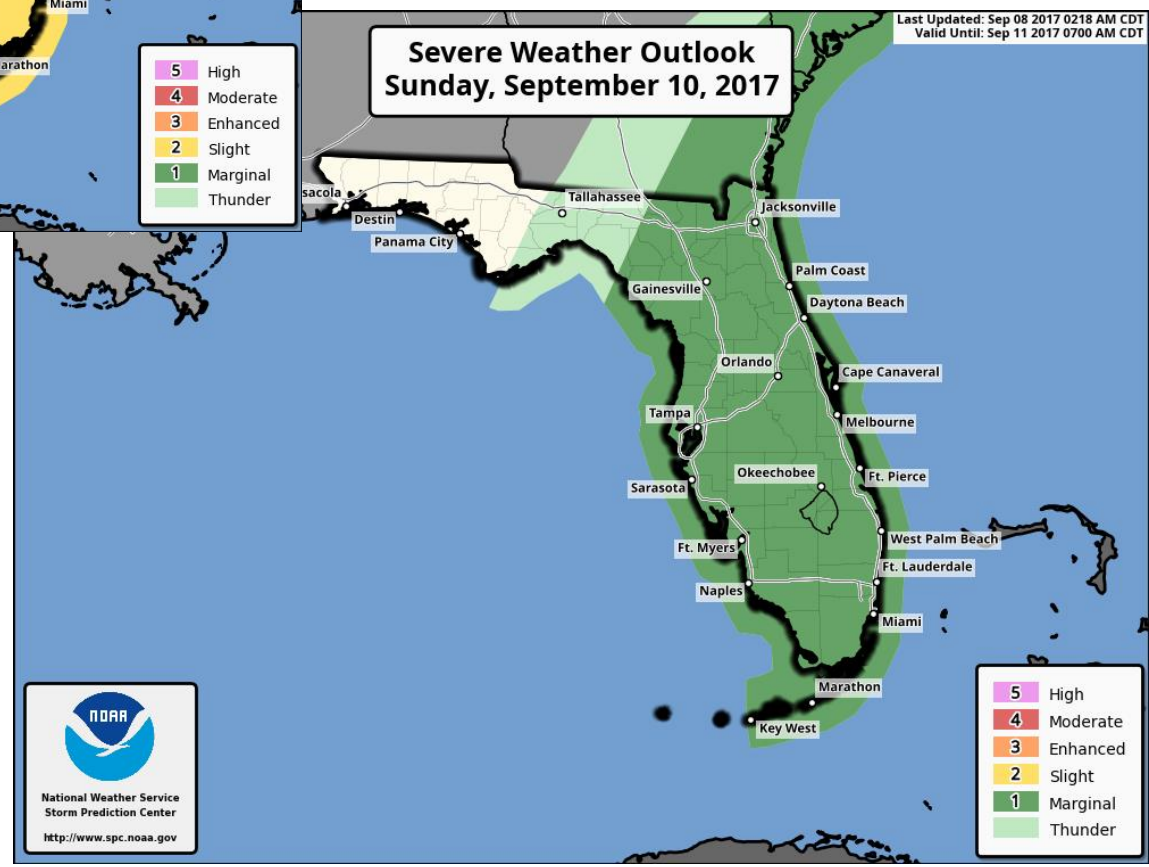
## SATURDAY & SUNDAY

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 arrive before the wind threat—starting just before sunrise for SE FL/Keys. It will spread into the Peninsula through the day Saturday and Sunday.





# Hurricane Jose

5 PM EDT Fri Sep 08 2017

Position 16.6 N 58.3 W

Maximum Winds 150 mph

Gusts 185 mph

Movement WNW at 17 mph

Minimum Pressure 940 mb (27.75 inches)

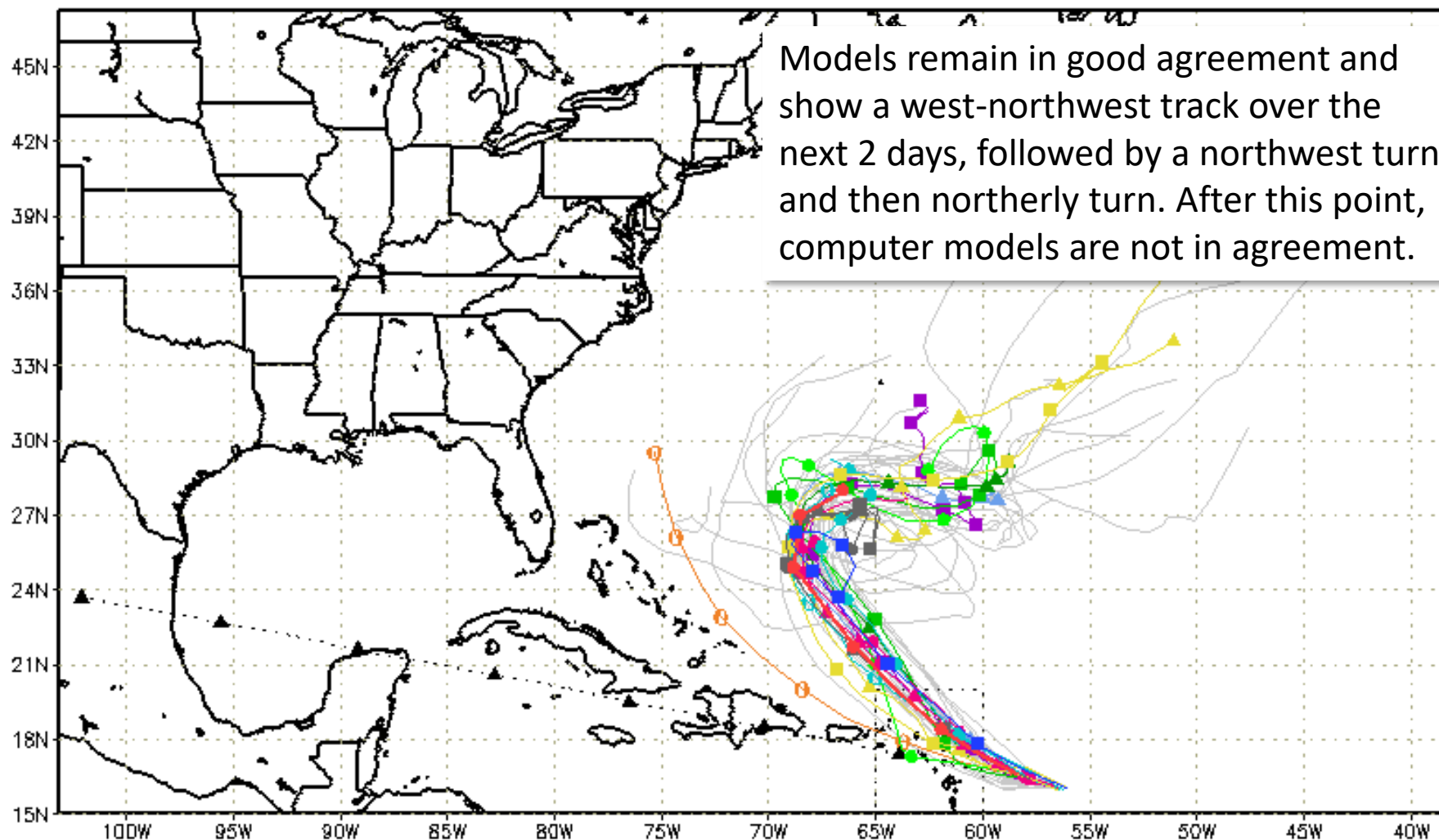
Blue Marble basemap imagery courtesy NASA

Satellite 9:26 PM UTC  
5:26 PM EDT





--▲-- XTRP 08/1800Z    ▲ TABD 08/1800Z    ▲ HMON 08/1200Z    ▲ AVNO 08/1200Z    ▲ CMC 08/1200Z  
 ■ TVCN 08/1800Z    ■ TABM 08/1800Z    ■ GFDN Not Avail    ■ AEMN 08/1200Z    ■ CEMN 08/1200Z  
 ● TVCX 08/1800Z    ● TABS 08/1800Z    ● HWRF 08/1200Z    ● APxx 08/1200Z    ● UKM 08/1200Z  
 ● NHC 08/2100Z    ● NVGM 08/1200Z    ● COTC 08/1200Z    ● NAM Not Avail    ● CLP5 08/1800Z



storm\_12

[sfwmd.gov](http://sfwmd.gov)

weather@sfwmd.gov

08-Sep 17:36EDT

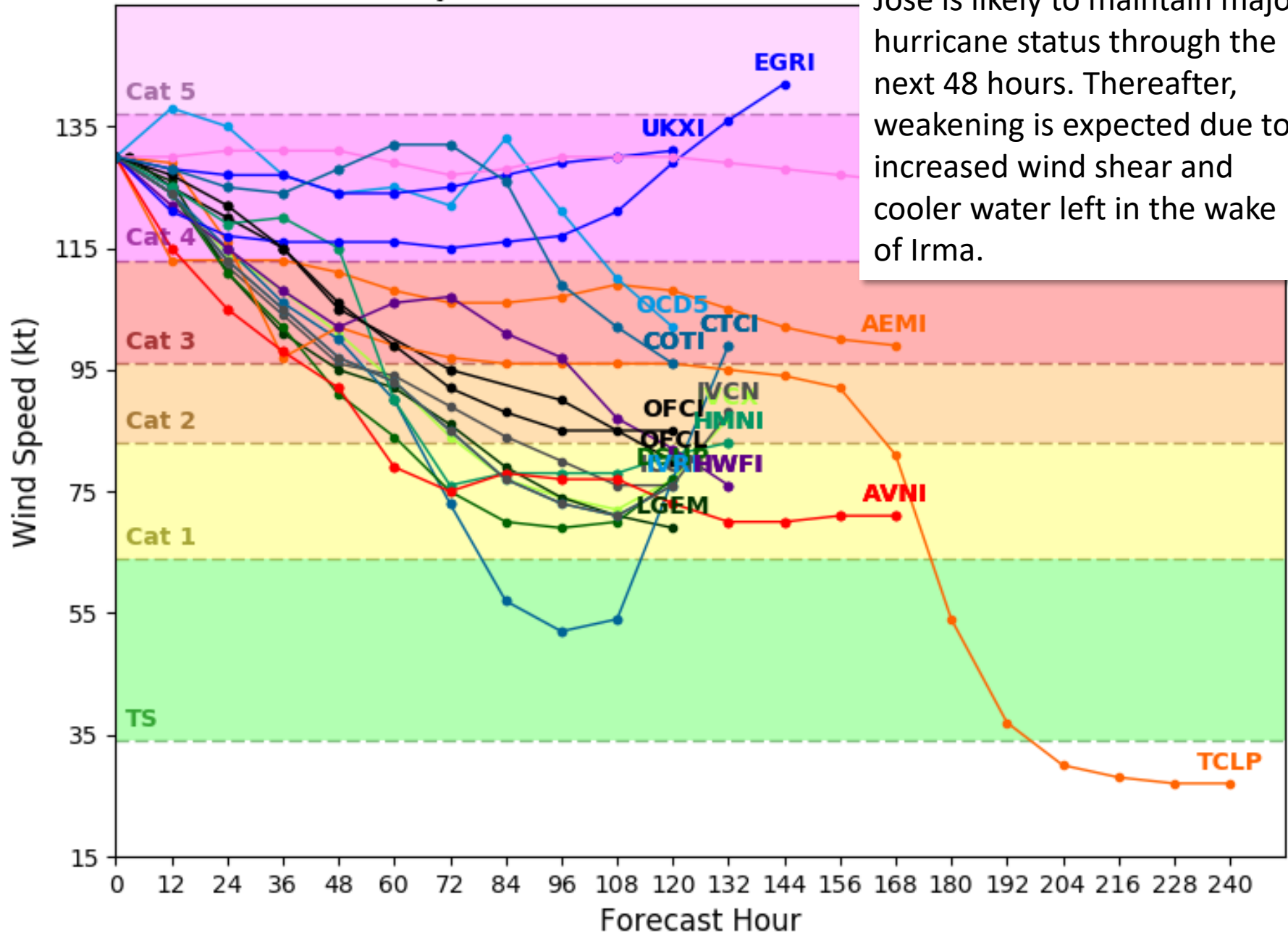
NHC Advisories and County Emergency Management Statements supersede this product.  
 This graphic should complement, not replace, NHC discussions.  
 If anything on this graphic causes confusion, ignore the entire product.  
 For full info, see <http://my.sfwmd.gov/sfwmd/common/images/weather/plots.html>



**Initialized at 18z Sep 08 2017**

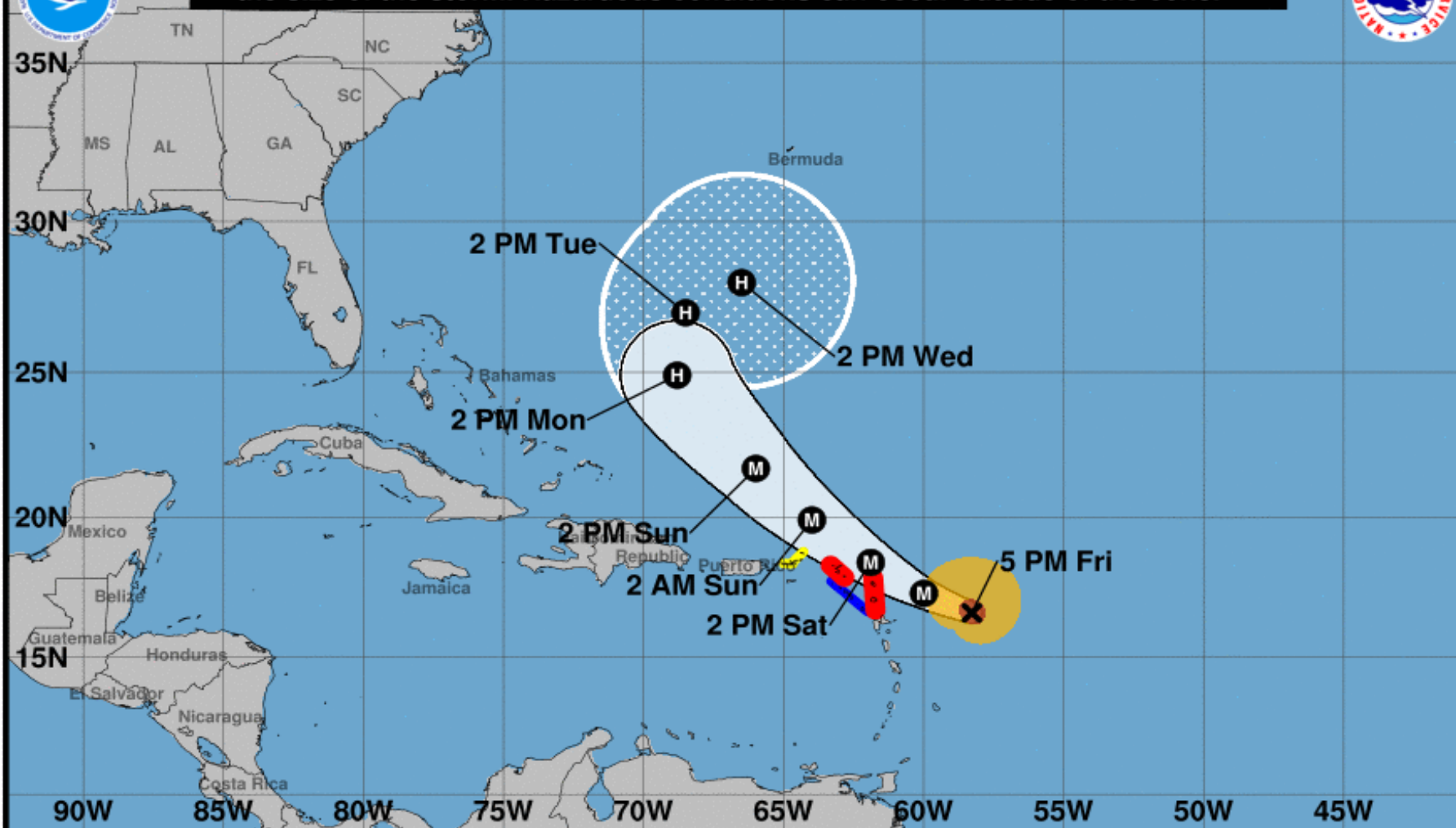
**Initialized at 18z Sep 08 2017**

Jose is likely to maintain major hurricane status through the next 48 hours. Thereafter, weakening is expected 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

Friday September 08, 2017

5 PM AST Advisory 14

NWS National Hurricane Center

### Current information: x

Center location 16.6 N 58.3 W

Maximum sustained wind 150 mph

Movement WNW at 17 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:

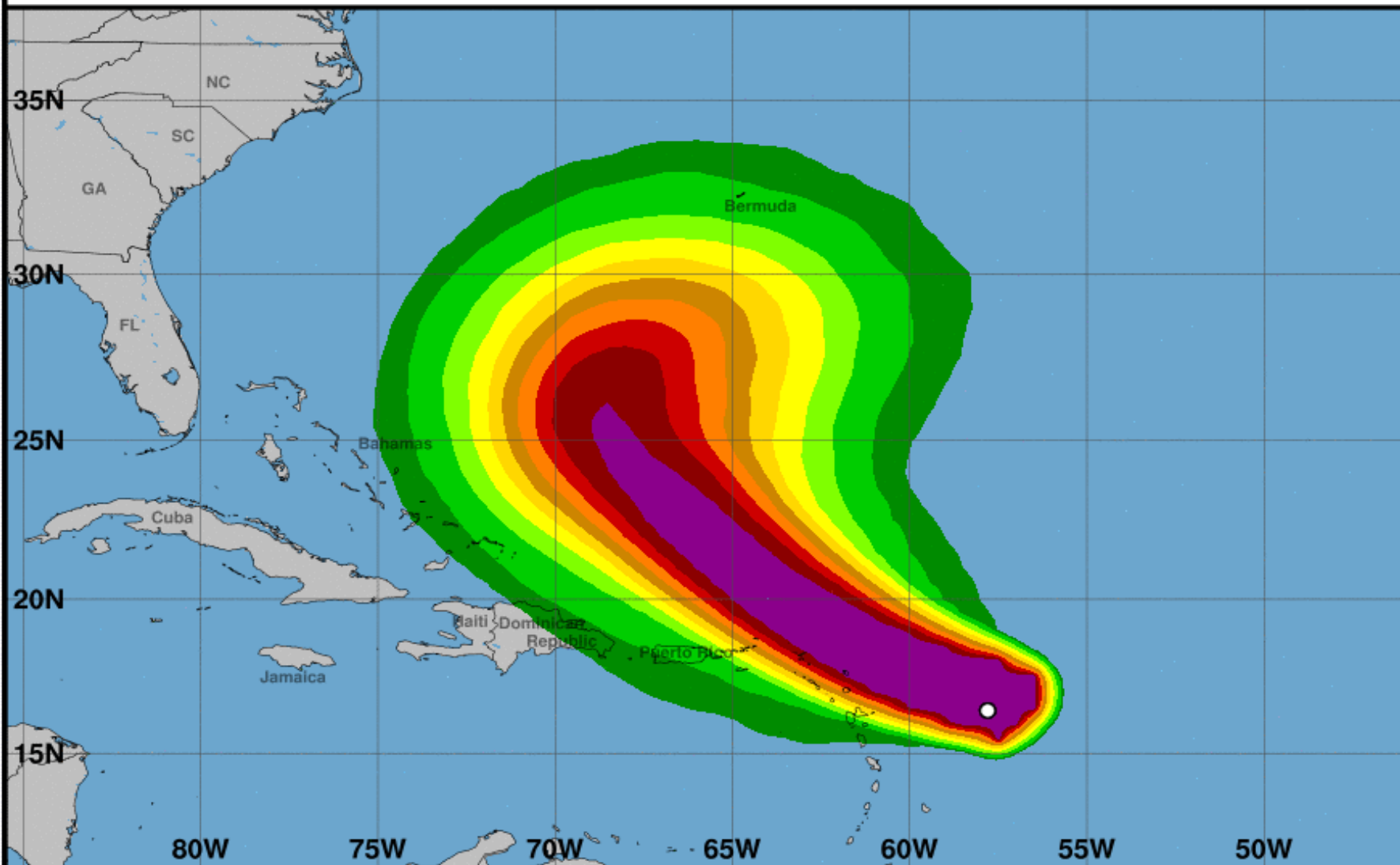
Hurricane Trop Stm





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

For the 120 hours (5.0 days) from 2 PM AST FRI SEP 08 to 2 PM AST WED SEP 13



Probability of tropical-storm-force winds (1-minute average  $\geq 39$  mph) from all tropical cyclones

○ indicates Hurricane Jose center location at 2 PM AST FRI SEP 08, 2017 (Forecast/Advisory #14)



# Hurricane Katia

5 PM EDT Fri Sep 08 2017

Position 21.0N 96.5W

Maximum Winds 105 mph

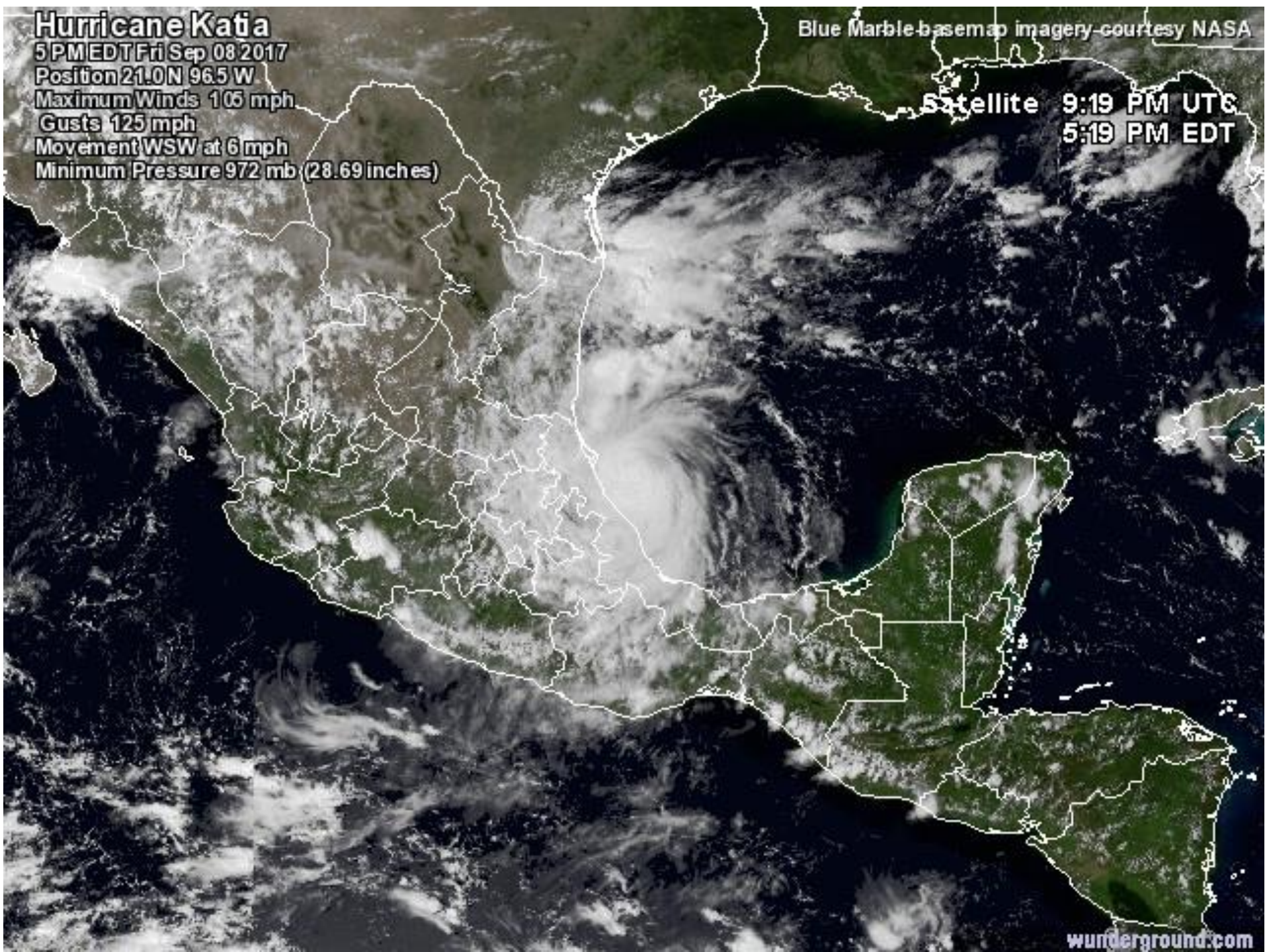
Gusts 125 mph

Movement WSW at 6 mph

Minimum Pressure 972 mb (28.69 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 9:19 PM UTC  
5:19 PM 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 PM CDT Advisory 13

NWS National Hurricane Center

## Current information: x

Center location 21.0 N 96.5 W

Maximum sustained wind 105 mph

Movement WSW at 7 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



# Atlantic Tropical Cyclones and Disturbances

www.hurricanes.gov

\* Formation chance through 48 hours...low...near 0 percent.  
\* Formation chance through 5 days...low...20 percent.

KATIA

IRMA

JOSE

1:54 pm EDT  
Fri Sep 8 2017

100°W 90°W 80°W 70°W 60°W 50°W 40°W 30°W 20°W

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

Tropical or Sub-Tropical Cyclone: ○ Depression 🌀 Storm 🌀 Hurricane

⊗ Post-Tropical Cyclone ✖ Remnants

# Summary

- At 5pm EDT Friday, Hurricane Irma was located 195 miles east of Caibarien, Cuba, or about 380 miles southeast of Miami.
  - Maximum sustained winds remain at 155 mph with higher gusts, making Irma a high-end 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 steadily toward the west near 12 mph, and this general motion is expected to continue overnight along with a decrease in forward speed, before a northward turn occurs on Saturday.
  - The core of the hurricane will move ashore 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 have been small westward shifts in the track last night and today.
  - In addition, tropical Storm force winds extend out 185 miles from the center, and hurricane force winds 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 5pm EDT Friday, Hurricane Jose was located 335 miles east-southeast of the northern Leeward Islands, which is about 1,600 miles southeast of Miami, Florida.
  - Maximum sustained winds remain at 150 mph, which is a Category 4 on the Saffir-Simpson Hurricane Wind Scale.
  - Jose was expected to gradually weaken over the weekend as it turns northwest, passing just north of the Leeward and Virgin Islands as a major hurricane.
  - A turn to the north and northeast along with a slower forward speed is expected early next week.
- 
- At 5pm EDT Friday, Hurricane Katia was located in the southwestern Gulf of Mexico about 120 miles north of Veracruz, Mexico or 950 miles west-southwest of Key West, Florida.
  - Maximum sustained winds are near 105mph, making Katia a Category 2 hurricane.
  - Katia is expected to make landfall in eastern Mexico tonight.
- 
- 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, Hendry, Lee, Charlotte, Sarasota, Manatee, Hardee, DeSoto, Highlands, Okeechobee, Indian River, St. Lucie and Martin Counties.
- **Hurricane Watches** in effect for Brevard, Osceola, Polk, Hillsborough, Pinellas, Pasco, Hernando, Citrus, Levy, Sumter, Orange, Lake, Seminole and Volusia Counties.
- Wind impacts to South Florida from Irma could occur as early as early Saturday morning, with the most likely time frame for tropical storm force winds arriving Saturday afternoon. Hurricane force winds could arrive in Southeast Florida early Sunday morning. Tropical storm force winds will most likely arrive in Central Florida on Sunday and North Florida Sunday night.
- **Storm Surge watches or warnings** are in effect south of the Flagler-Volusia County line on the East Coast and Anclote River on the West Coast, including Tampa Bay. This includes all of the Florida Keys.
- 6-12' of storm surge is expected for the Southwest Florida coast with 5-10' for the rest of South Florida and the Keys. 3-6' are possible for the Treasure and Sun Coasts. 3-5' in the Tampa Bay region.
- **Storm-total rainfall** amounts of 8-15" with isolated amounts to 20" are expected for much of the Florida Peninsula with 4-8 inches (isolated 12") for West and North Florida from Tampa northward.
- Ocean swells from Irma have already reached South Florida and will produce a **high risk of rip currents** from today through the weekend. Rip current risk will also go up for Gulf Coast beaches this weekend.
- **Slight Risk for Tornadoes** for South Florida Saturday into Saturday night with a marginal risk for Central Florida.
- **Flash Flood Watch** in effect for specific areas in eastern Glades County, northern Hendry County and western Palm Beach County due to potential overtopping of the dyke on the south end of Lake Okeechobee.
- **Flood Watches** for South Florida and many river flood warnings have been issued ahead of the expected heavy rainfall.
- 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 there.

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





# TROPICAL UPDATE

Created by:

Michael Spagnolo, Deputy State Meteorologist

[Michael.spagnolo@em.myflorida.com](mailto:Michael.spagnolo@em.myflorida.com)

State Meteorological Support Unit

Florida Division of Emergency Management

Users wishing to subscribe (approval pending) to this distribution list, register at  
[https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic\\_id=SERT\\_Met\\_Tropics](https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic_id=SERT_Met_Tropics).

Other reports available for subscription are available at

<https://public.govdelivery.com/accounts/FLDEM/subscriber/new?preferences=true>