



# **TROPICAL UPDATE**

**5 AM EDT**

**Sunday, September 10, 2017**

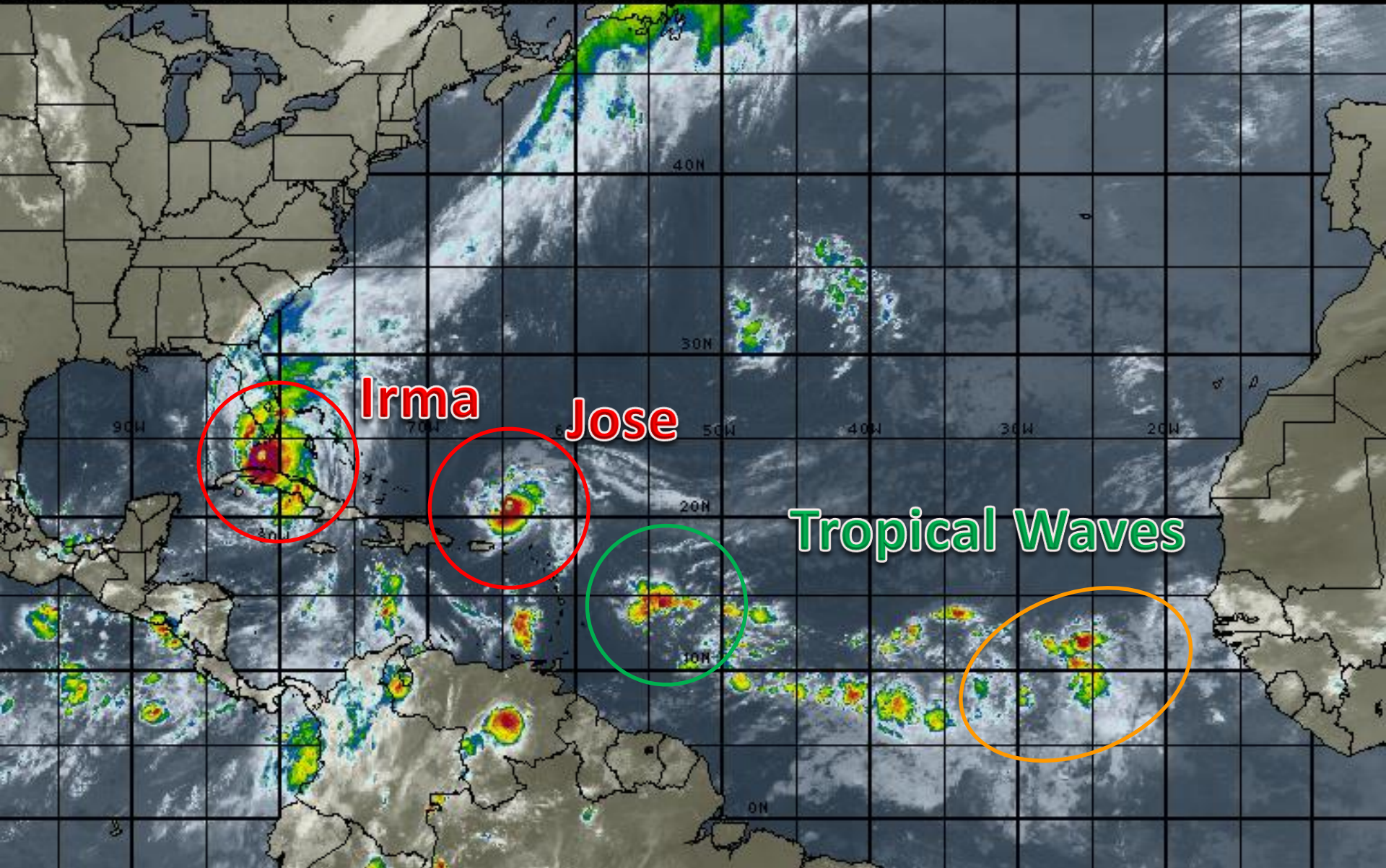
**Hurricane Irma, Hurricane Jose**

**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

09:00 10-SEP-2017 GMT Copyright © 1998-2016 WSI Corporation <http://www.wsi.com>





# Hurricane Irma

5 AM EDT Sun Sep 10 2017

Position 24.1 N 81.5 W

Maximum Winds 130 mph

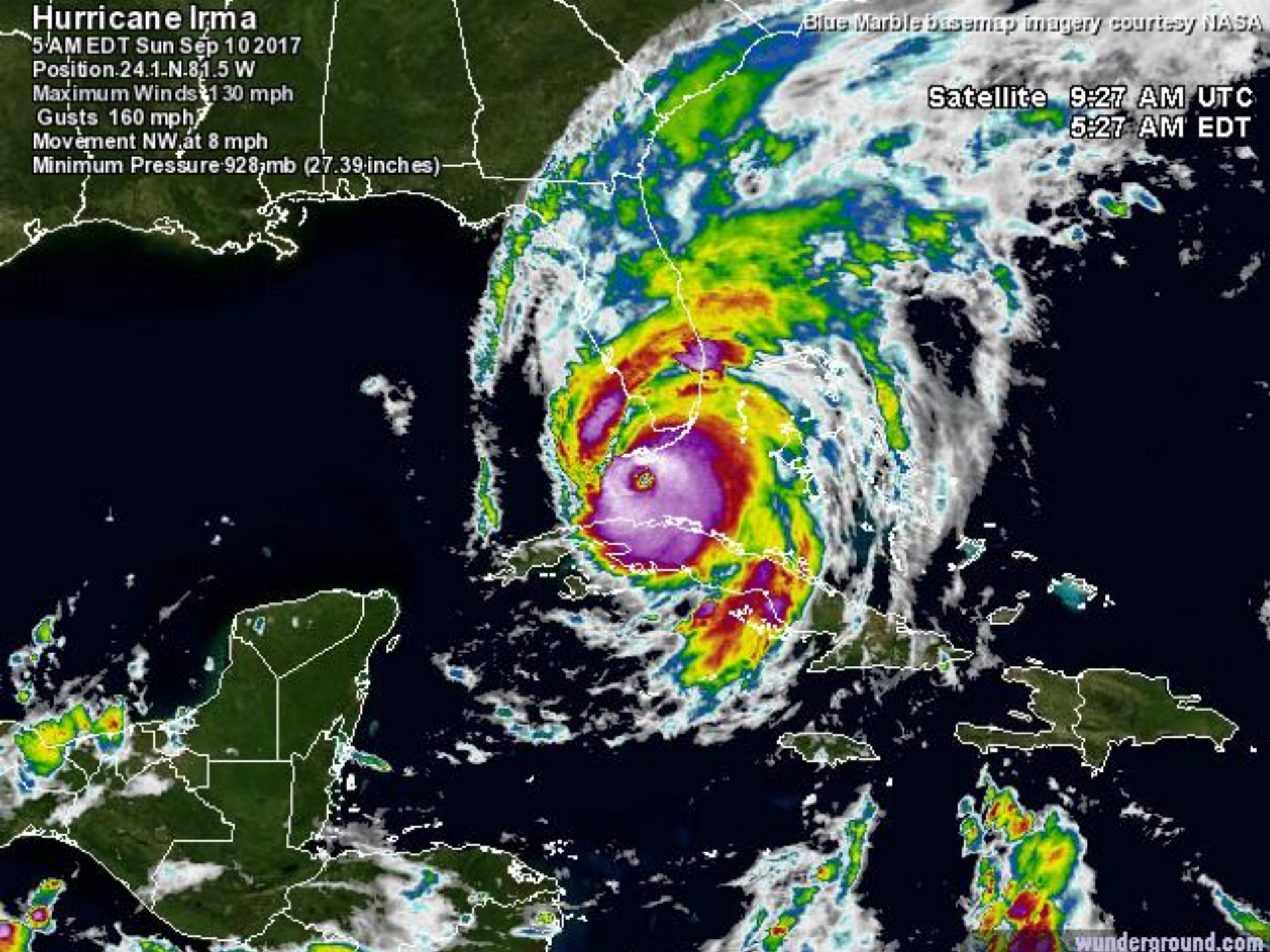
Gusts 160 mph

Movement NW at 8 mph

Minimum Pressure 928 mb (27.39 inches)

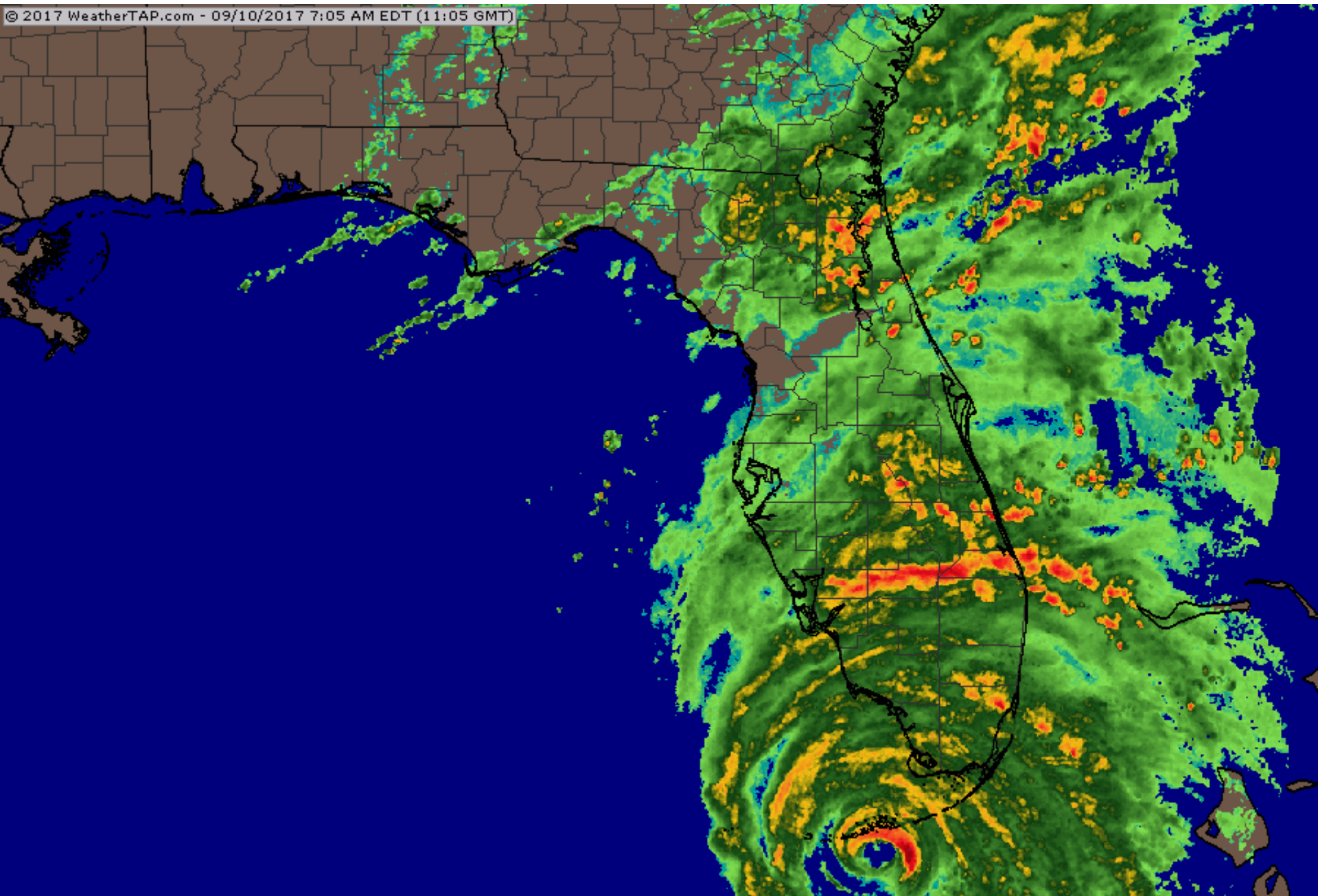
Blue Marble basemap imagery courtesy NASA

Satellite 9:27 AM UTC  
5:27 AM EDT





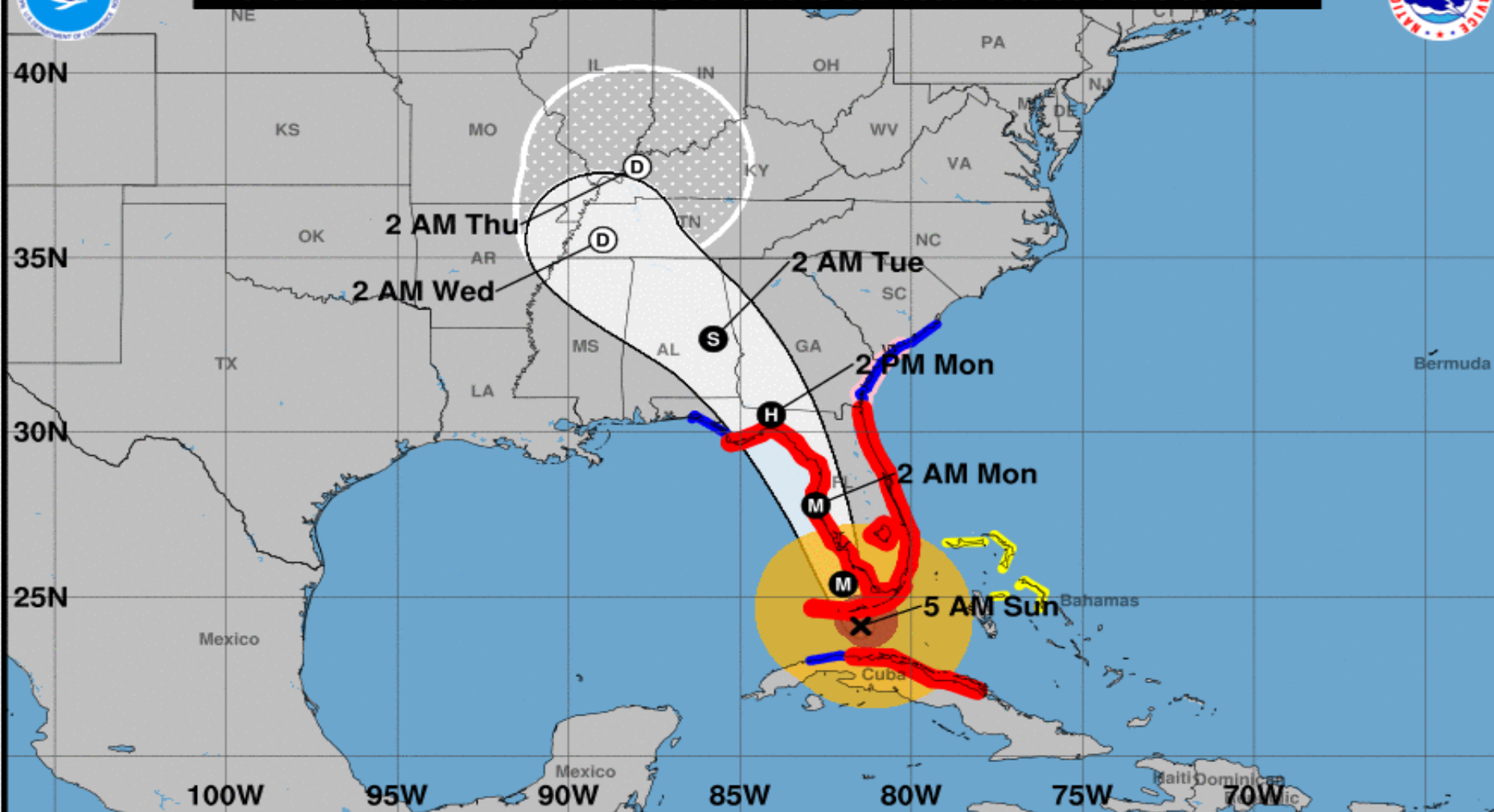
# State radar as of 07:00am EDT Sunday







**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

Sunday September 10, 2017

5 AM EDT Advisory 45

NWS National Hurricane Center

## Current information: X

Center location 24.1 N 81.5 W

Maximum sustained wind 130 mph

Movement NW at 8 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

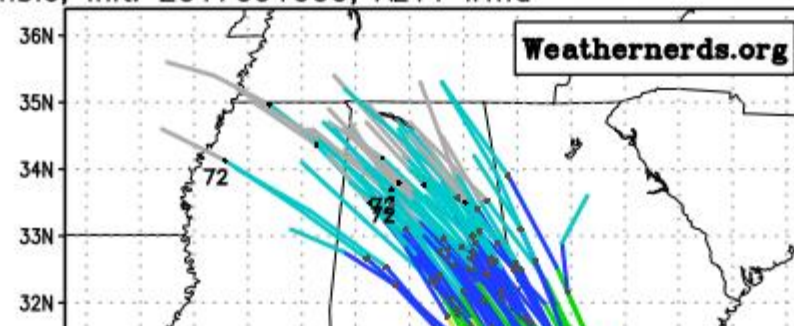
## Current wind extent:

Hurricane Trop Stm



ECMWF Ensemble, init: 2017091000, AL11 Irma

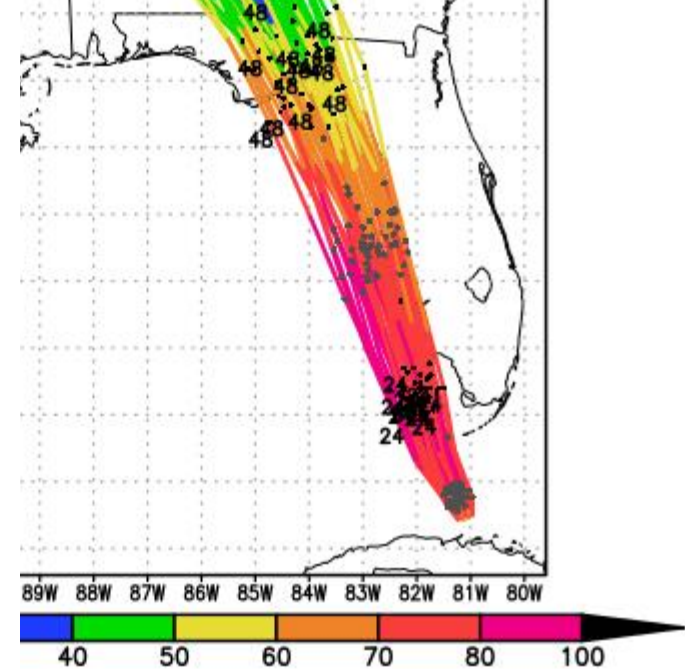
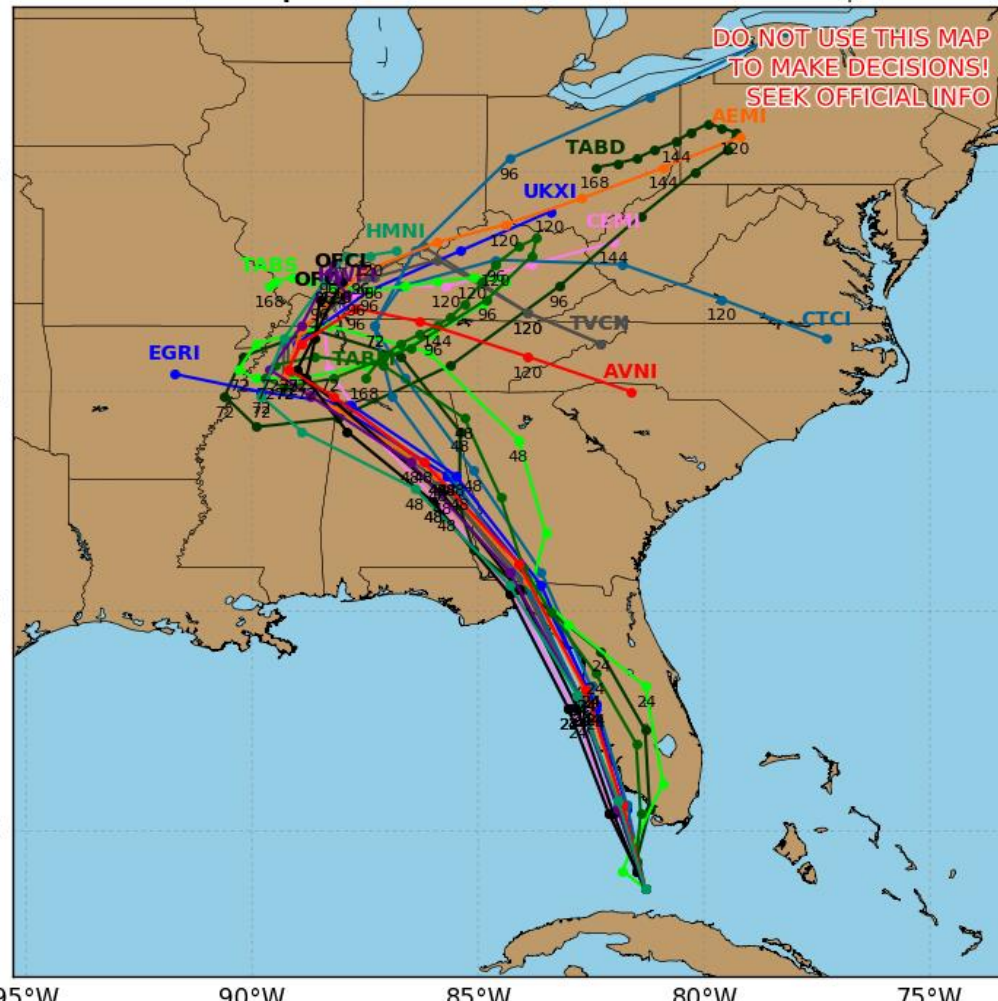
color = max wind (kt)



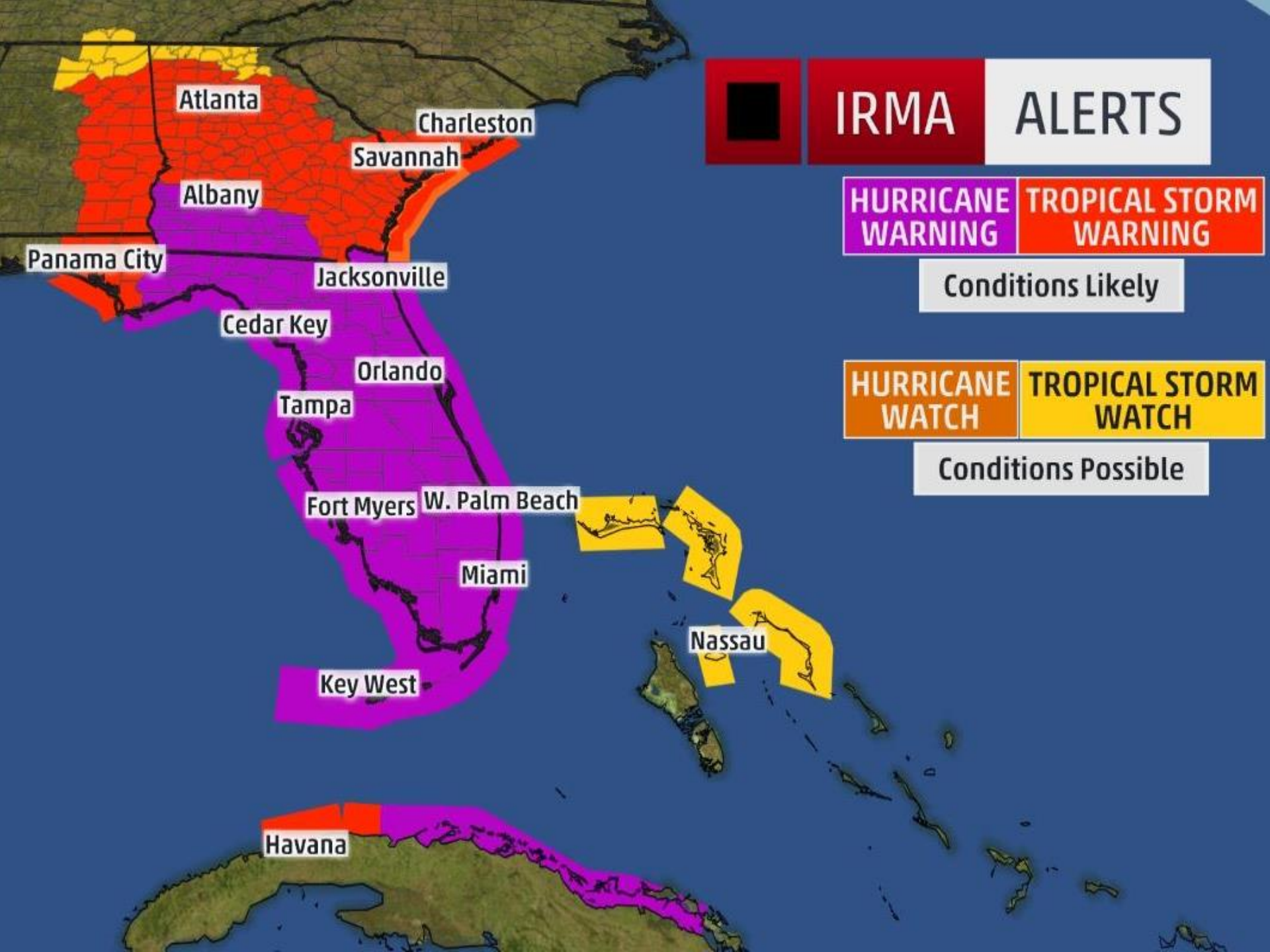
## Hurricane IRMA Model Track Guidance

Initialized at 06z Sep 10 2017

Levi Cowan - tropicaltidbits.com







# IRMA ALERTS

**HURRICANE WARNING** **TROPICAL STORM WARNING**

Conditions Likely

**HURRICANE WATCH** **TROPICAL STORM WATCH**

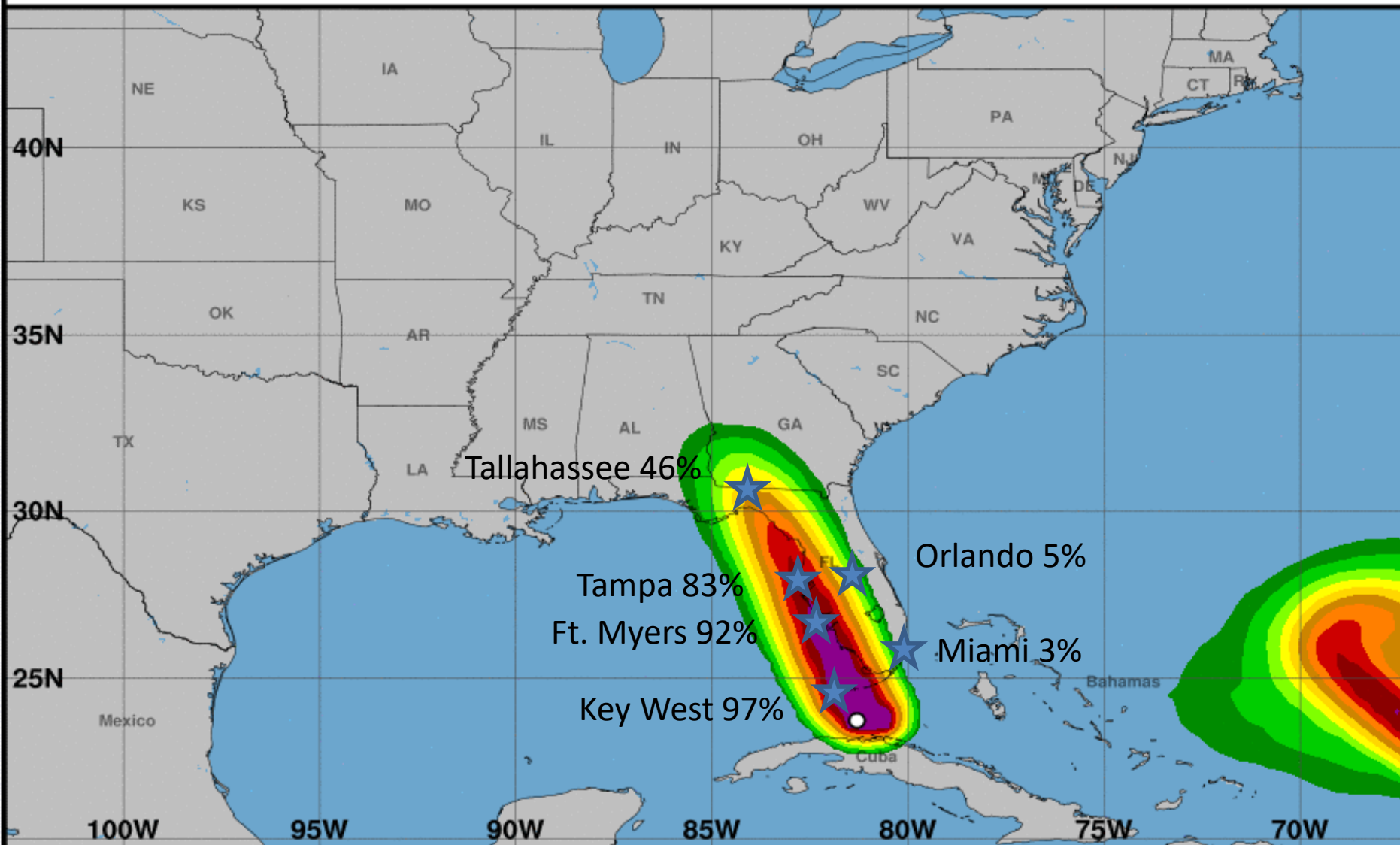
Conditions Possible





# Hurricane-Force Wind Speed Probabilities

For the 120 hours (5.00 days) from 2 AM EDT SUN SEP 10 to 2 AM EDT FRI SEP 15

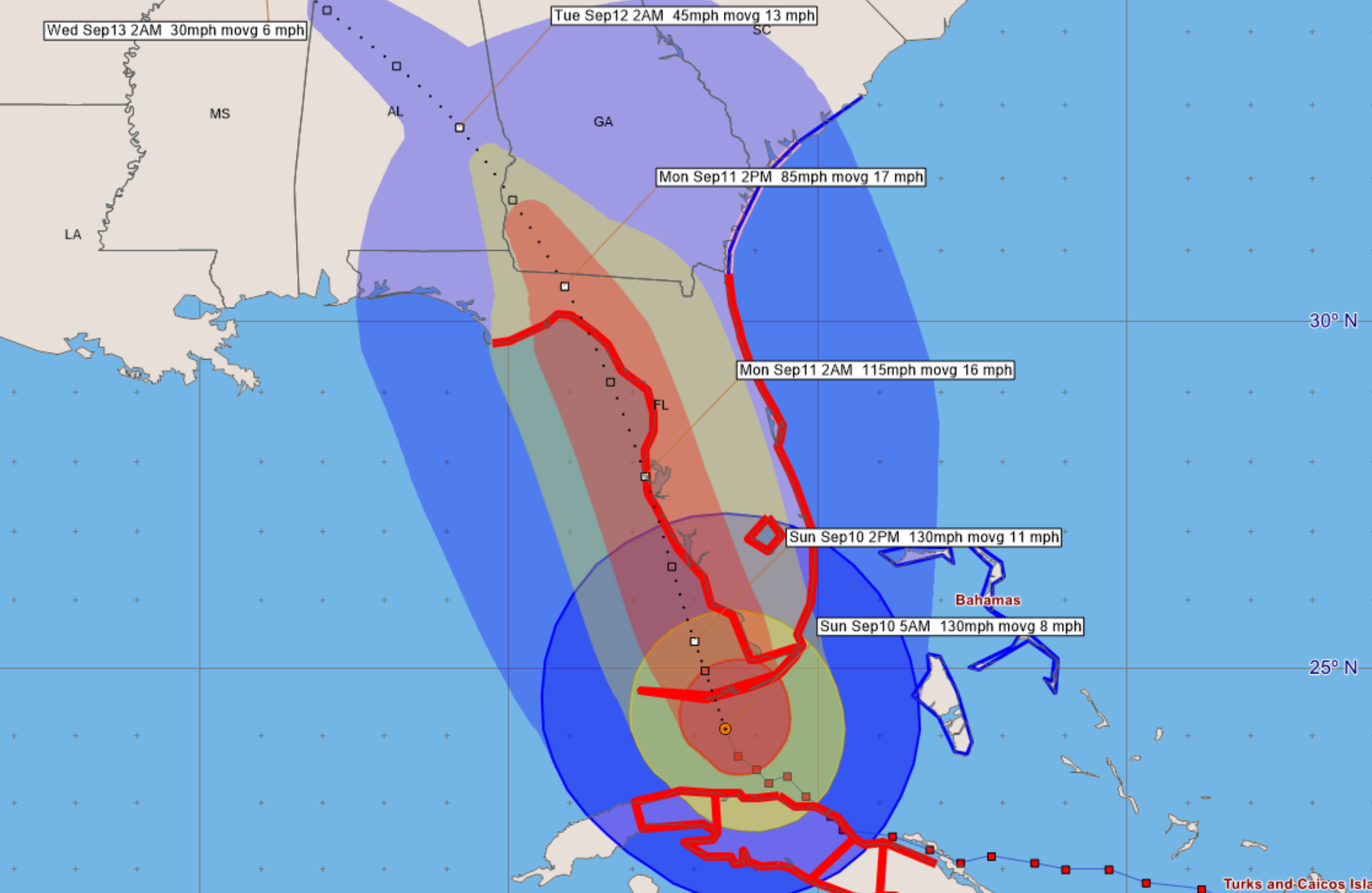


Probability of hurricane-force winds (1-minute average  $\geq 74$  mph) from all tropical cyclones

○ indicates Hurricane Irma center location at 2 AM EDT SUN SEP 10, 2017 (Forecast/Advisory #45)







### Hurricane Irma - Sunday, September 10, 2017 5 AM EDT Advisory #45

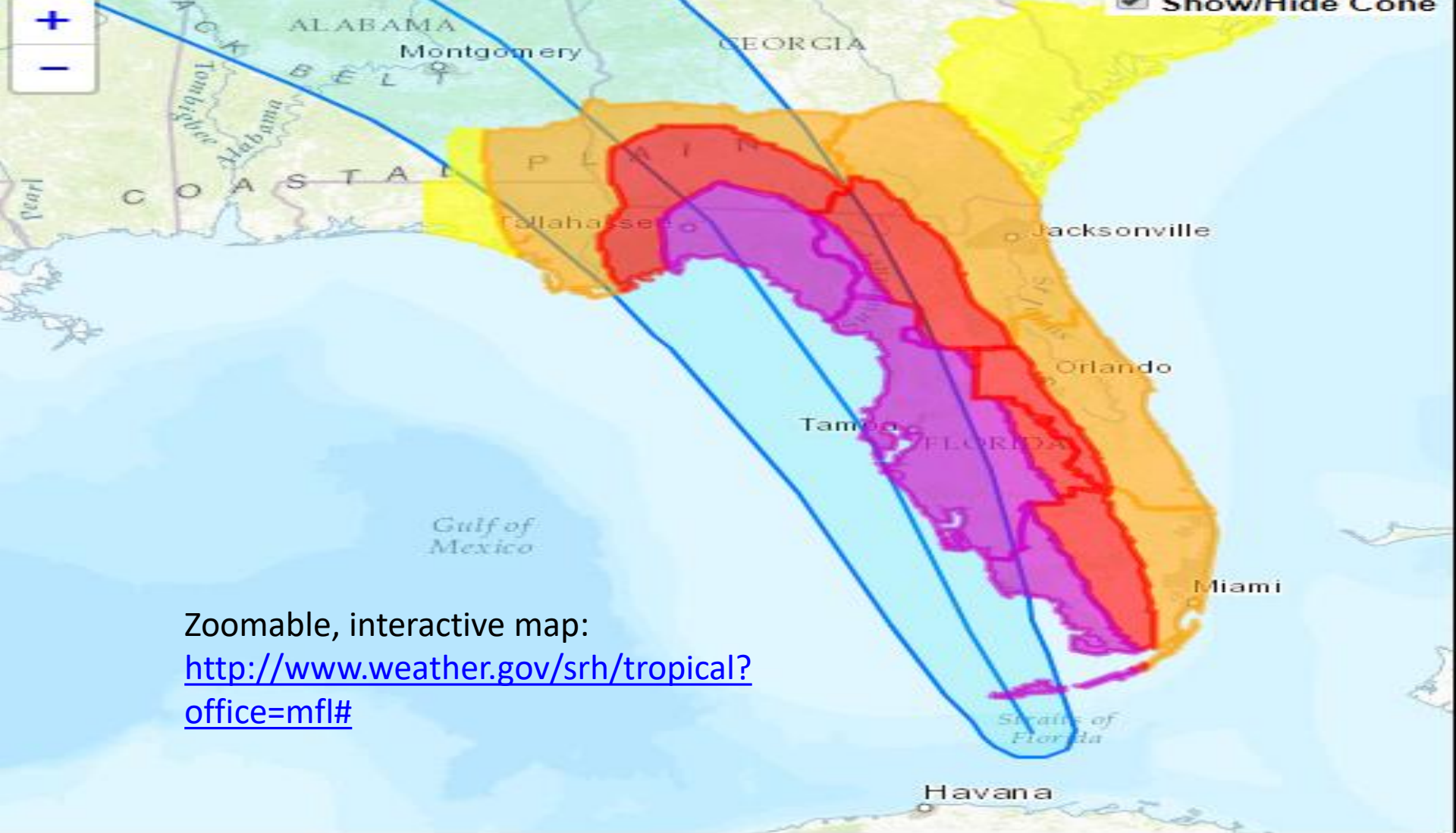
Center Location: 24.1 N 81.5 W Maximum Sustained Winds: 130 mph (Cat 4) Movement: 8 mph NW

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  $\geq 34$ kt/39mph strong tropical storm  $\geq 50$ kt/58mph hurricane  $\geq 64$ kt/74mph

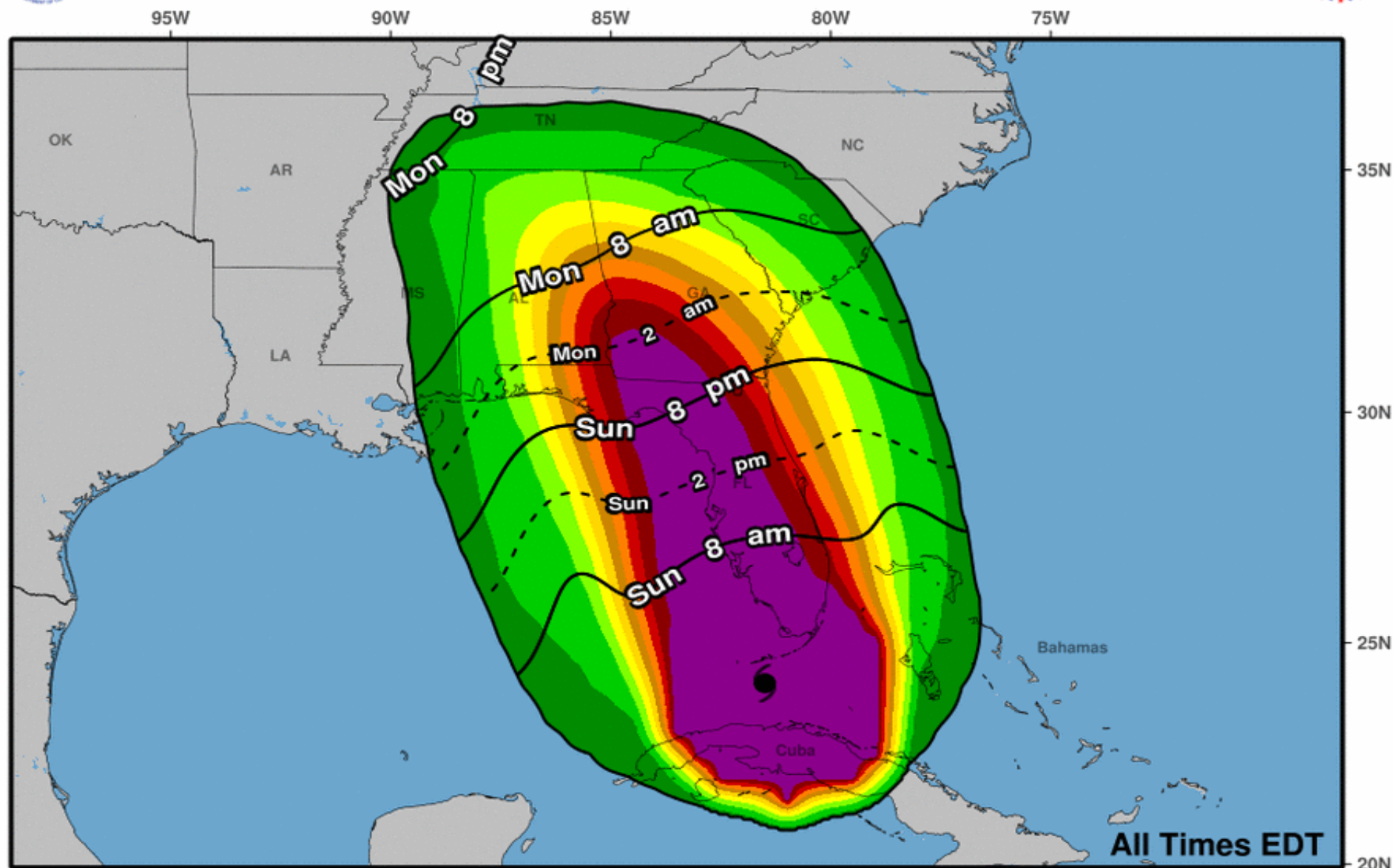








# Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



**Hurricane Irma**  
**Sun. Sep. 10, 2017 5 am EDT**  
**Advisory 45**

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

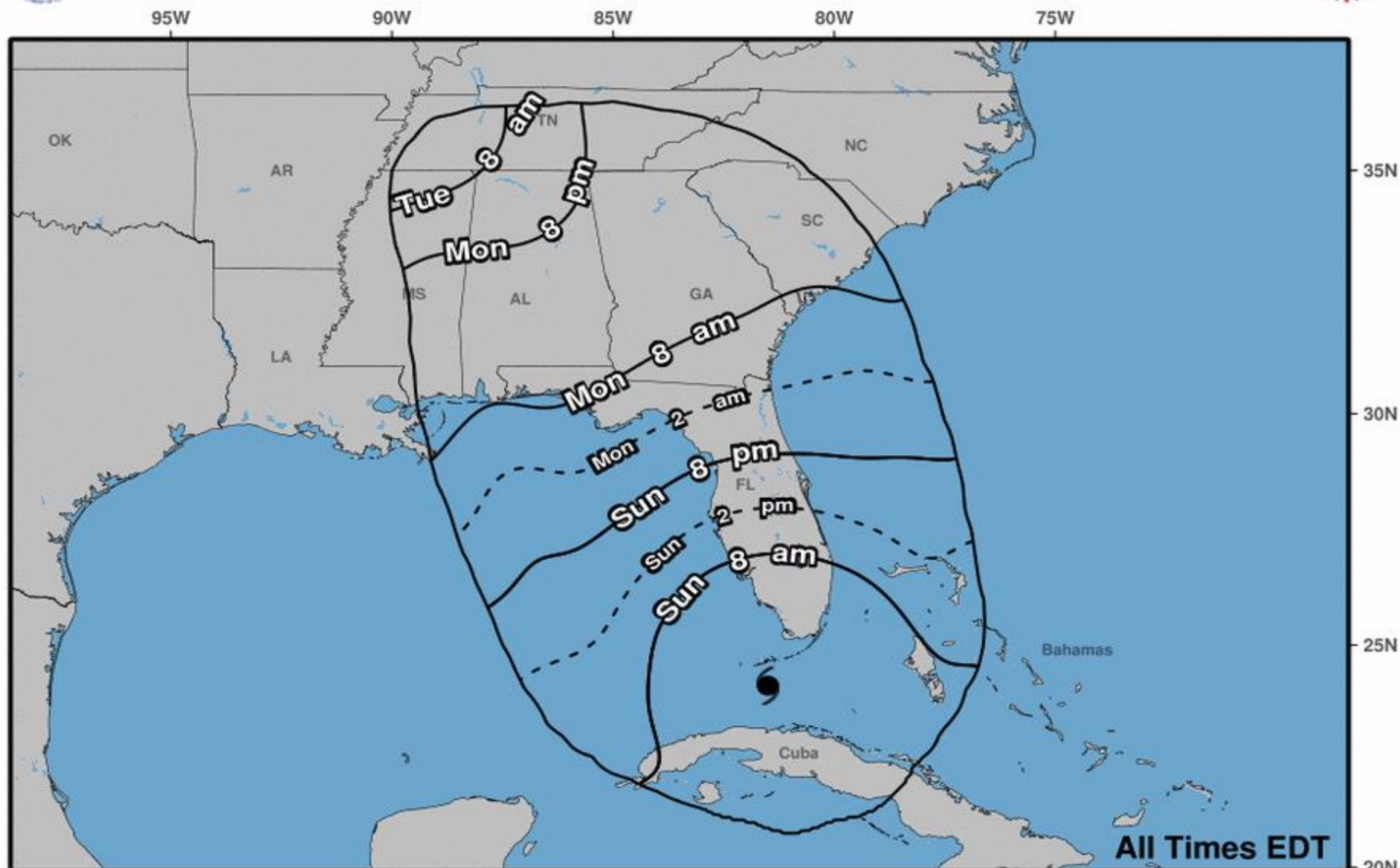
Five-day chance of receiving sustained 34+ knot (39+ mph) winds







# Most Likely Arrival Time of Tropical-Storm-Force Winds



**Hurricane Irma**  
**Sun. Sep. 10, 2017 5 am EDT**  
**Advisory 45**

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



Based on Advisory 45 Issued 9/10/2017 5 AM EDT

### Wind Timing and Intensity Chart for Local Areas

### Meaning Of Report

This chart represents wind arrival and departure details for select locations that are currently forecast to have tropical storm or greater winds during the next 72 hours.

**Cautionary Note:**

This information is quite specific and is subject to large forecast errors. You should NOT use these wind forecasts until just before landfall, and then only as a general indication of the expected wind patterns.

[illegible]



### Wind Timing and Intensity Chart for Local Areas



Based on Advisory 45 Issued 9/10/2017 5 AM EDT

### Wind Timing and Intensity Chart for Local Areas

### Meaning Of Report

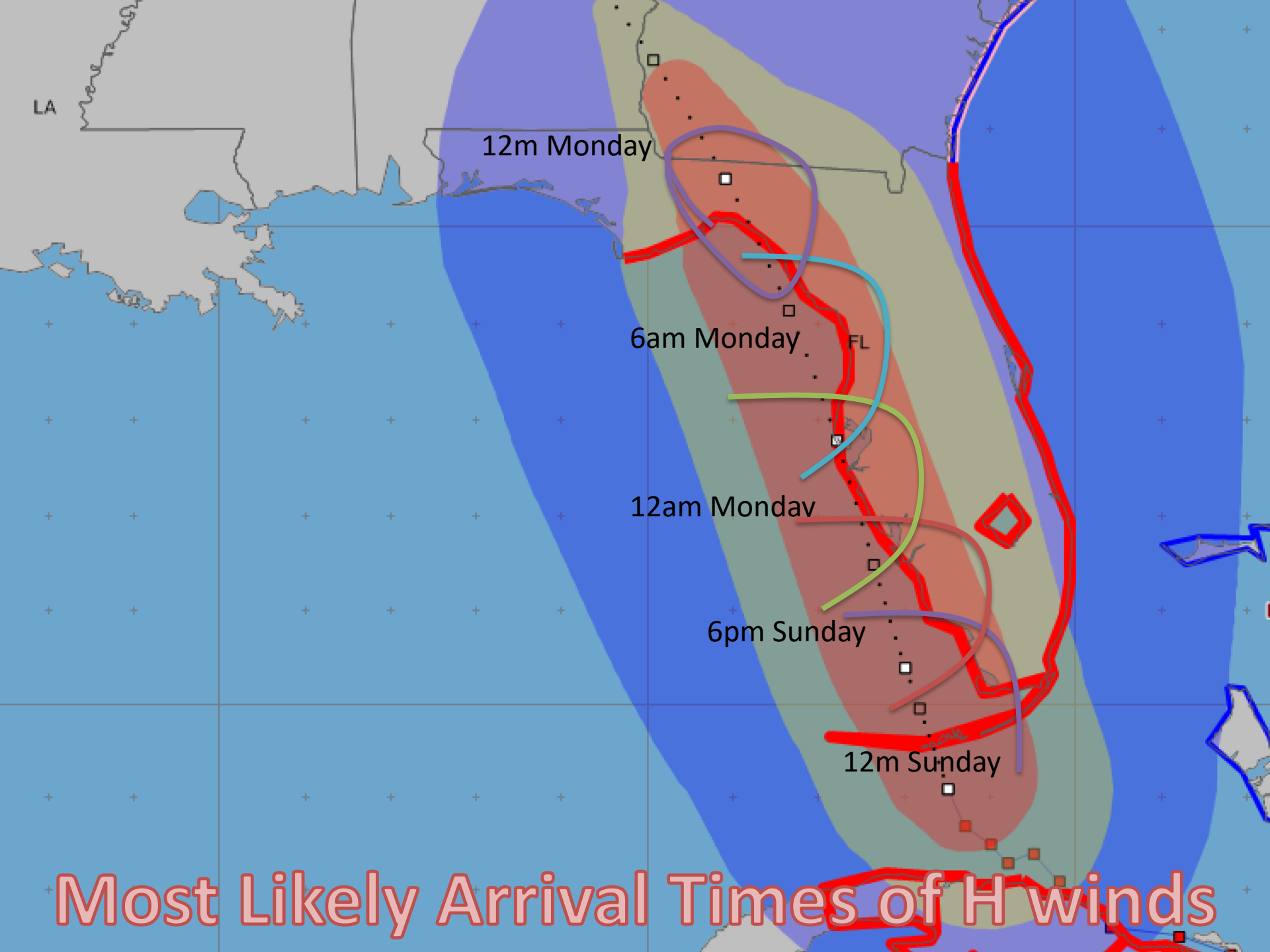
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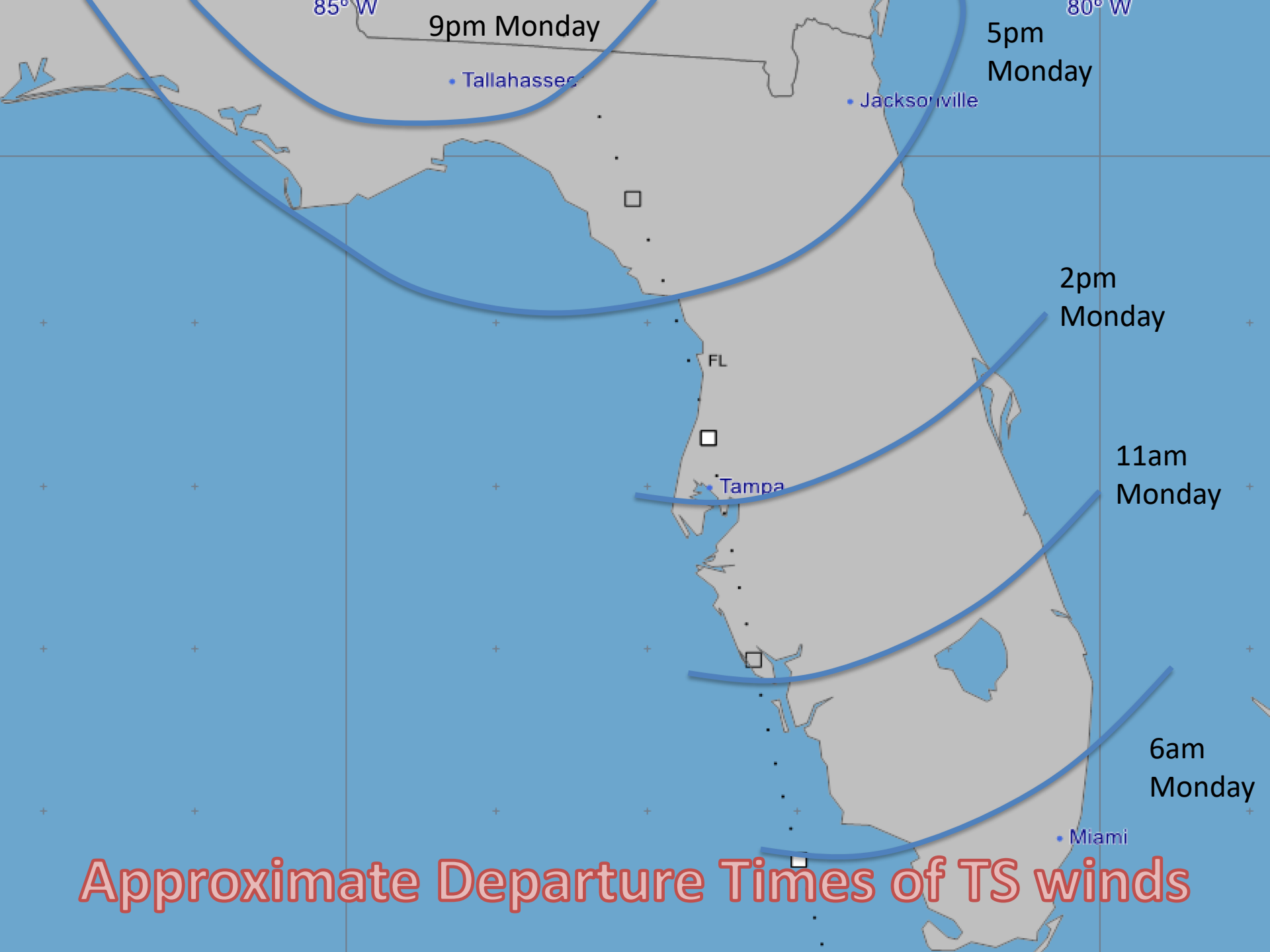
[illegible]





Most Likely Arrival Times of H winds









## Storm Surge Warning

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)

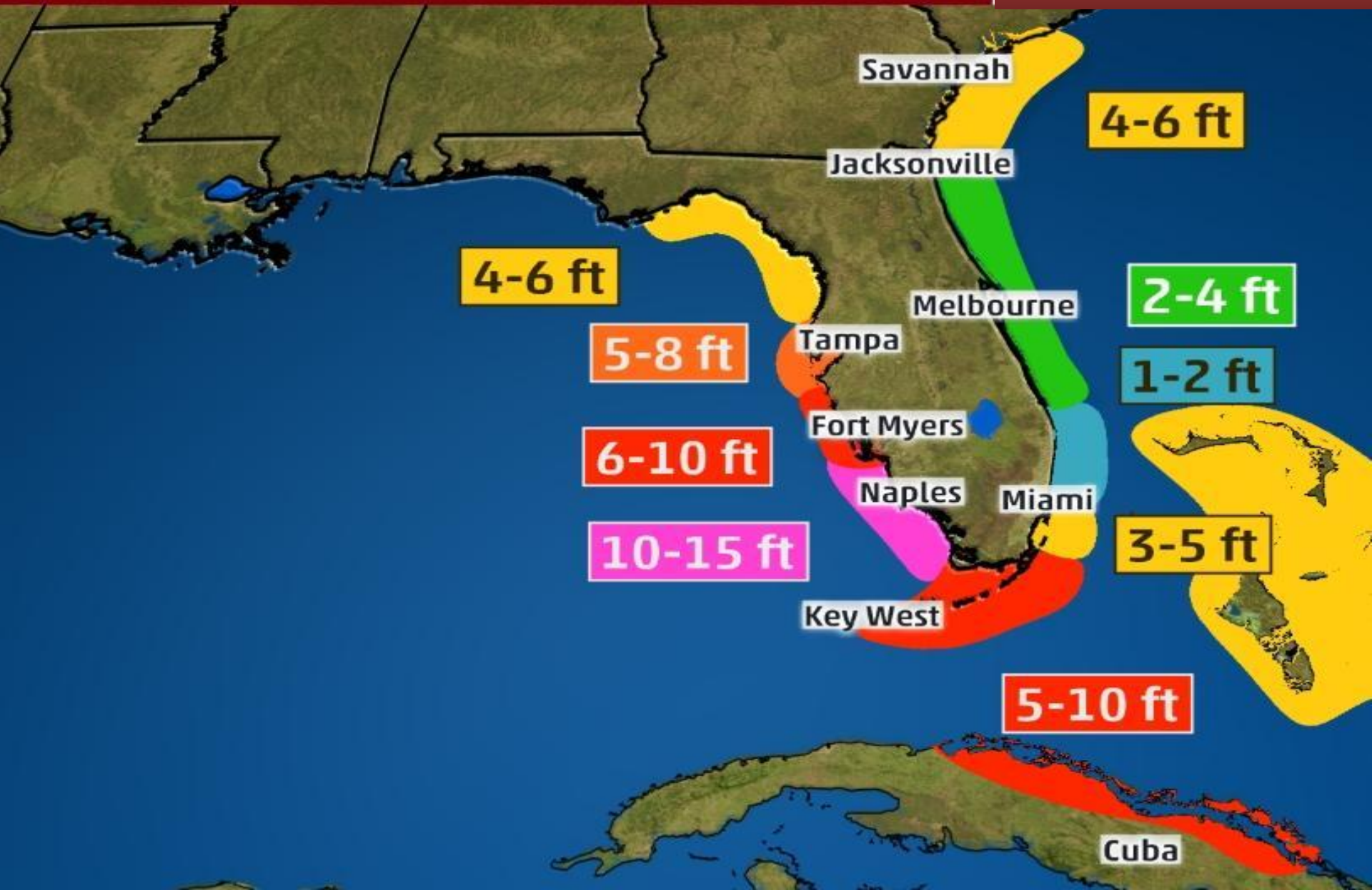
Probabilistic Storm Surge

<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>

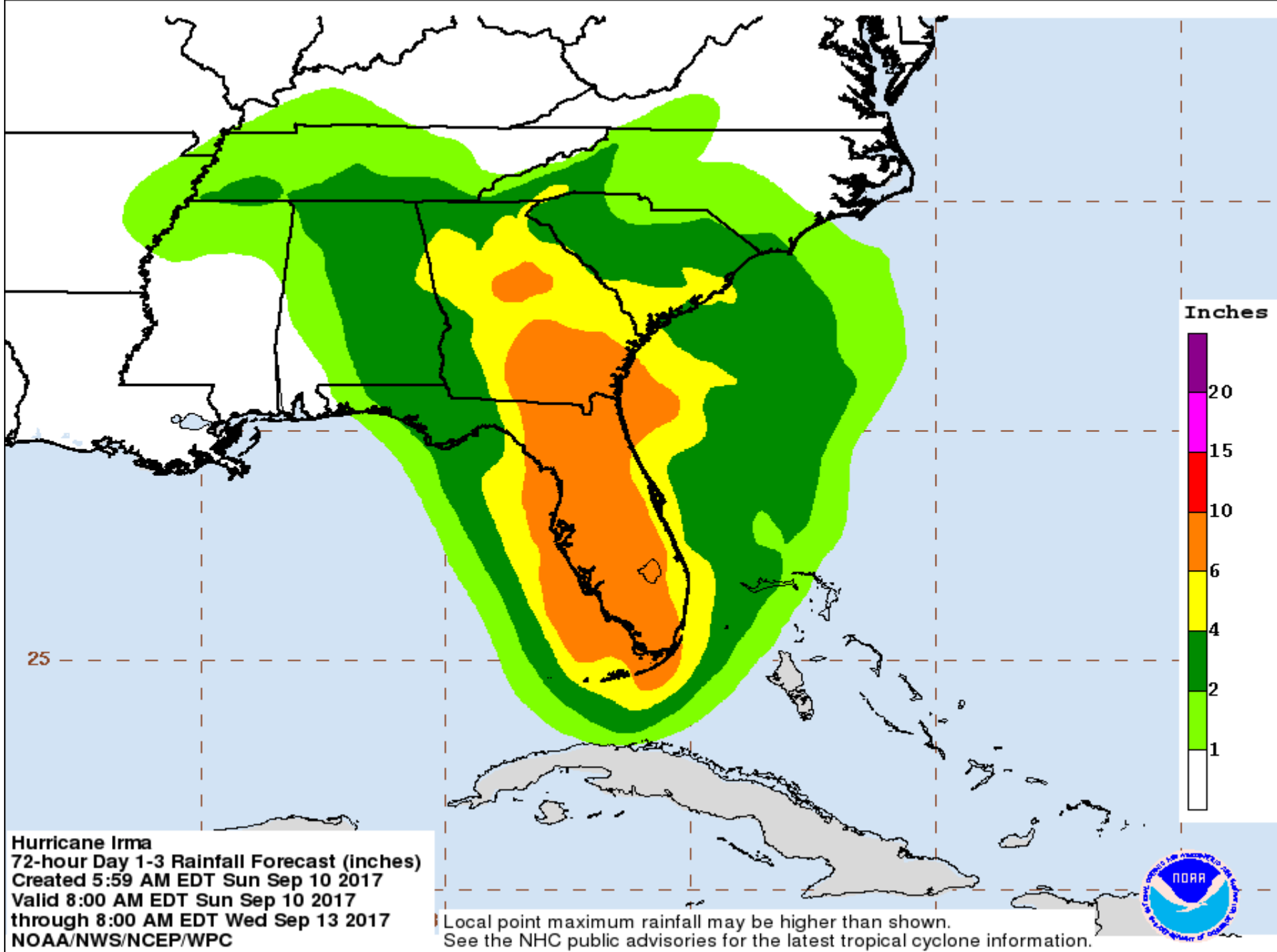


# STORM SURGE INUNDATION

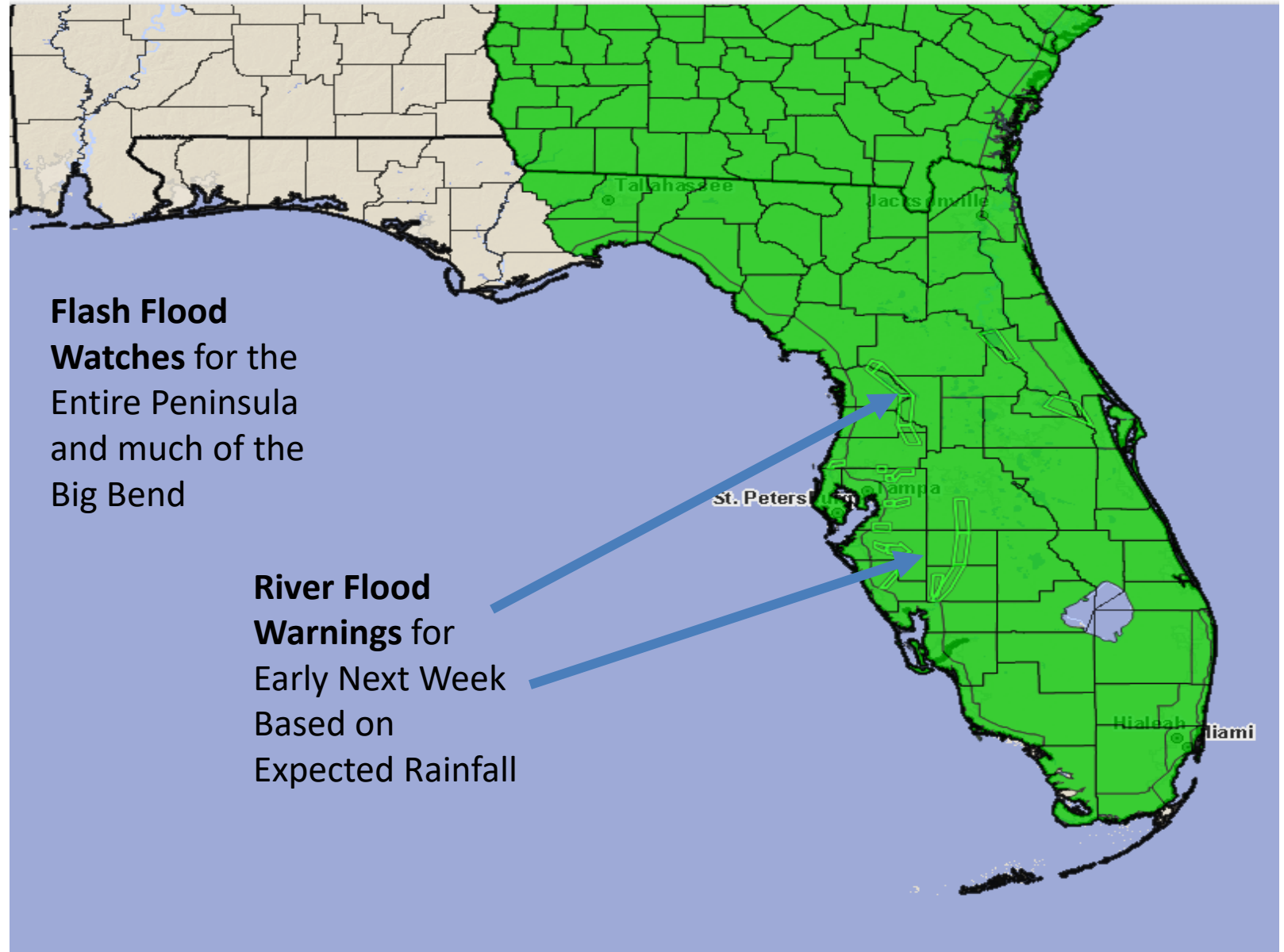
Above Normally  
Dry Ground













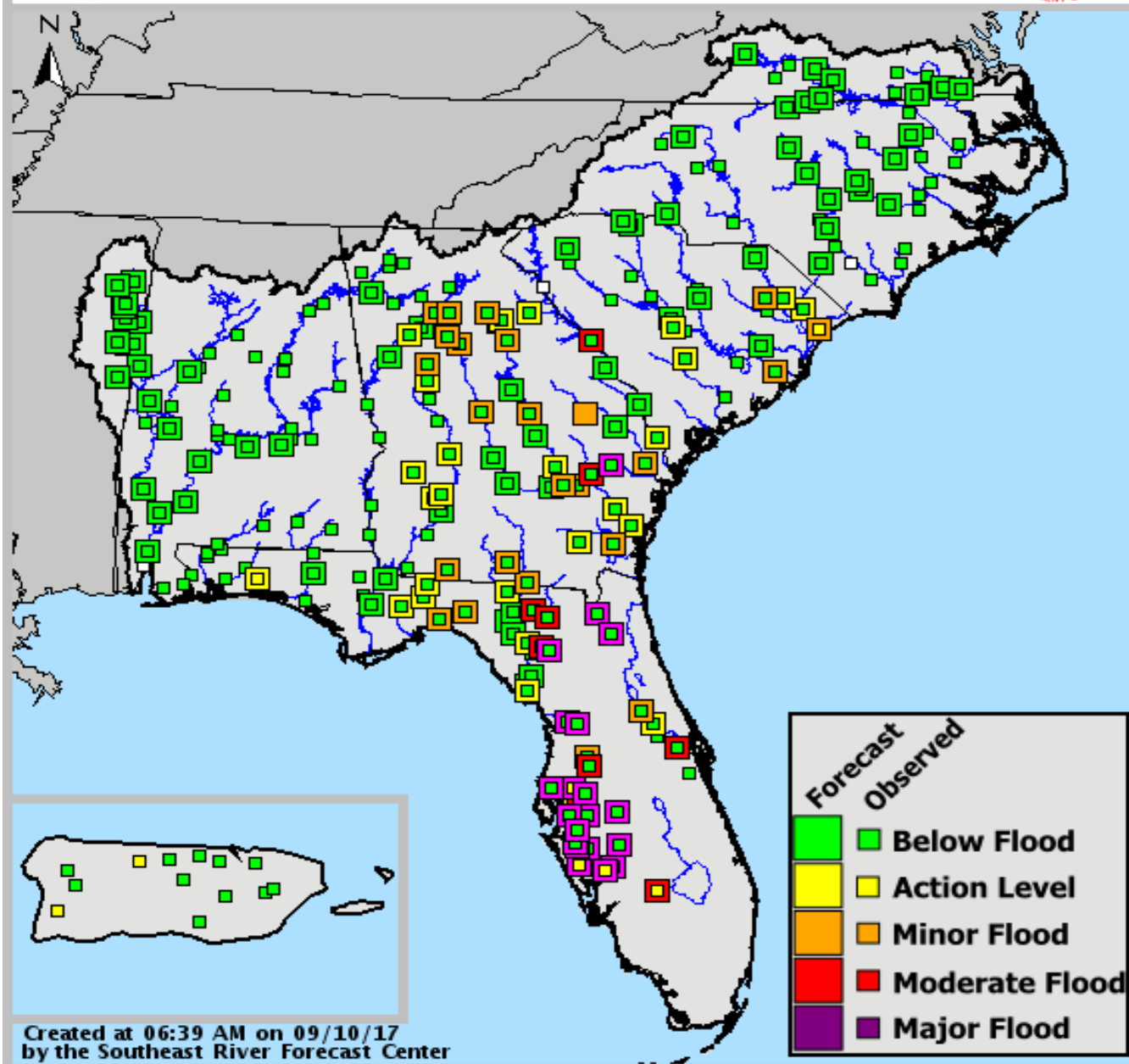


# SERFC River Conditions

Valid: 09/10/2017 @ 06:39 AM

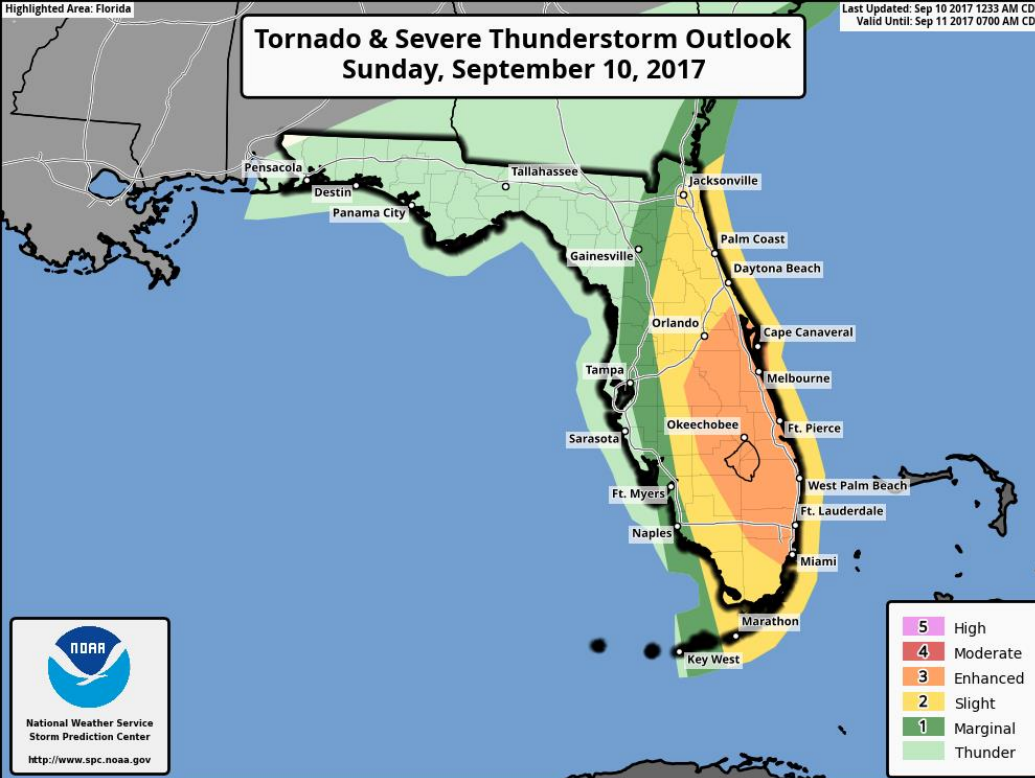


Extensive  
river  
flooding  
expected  
across  
much of  
the Florida  
Peninsula



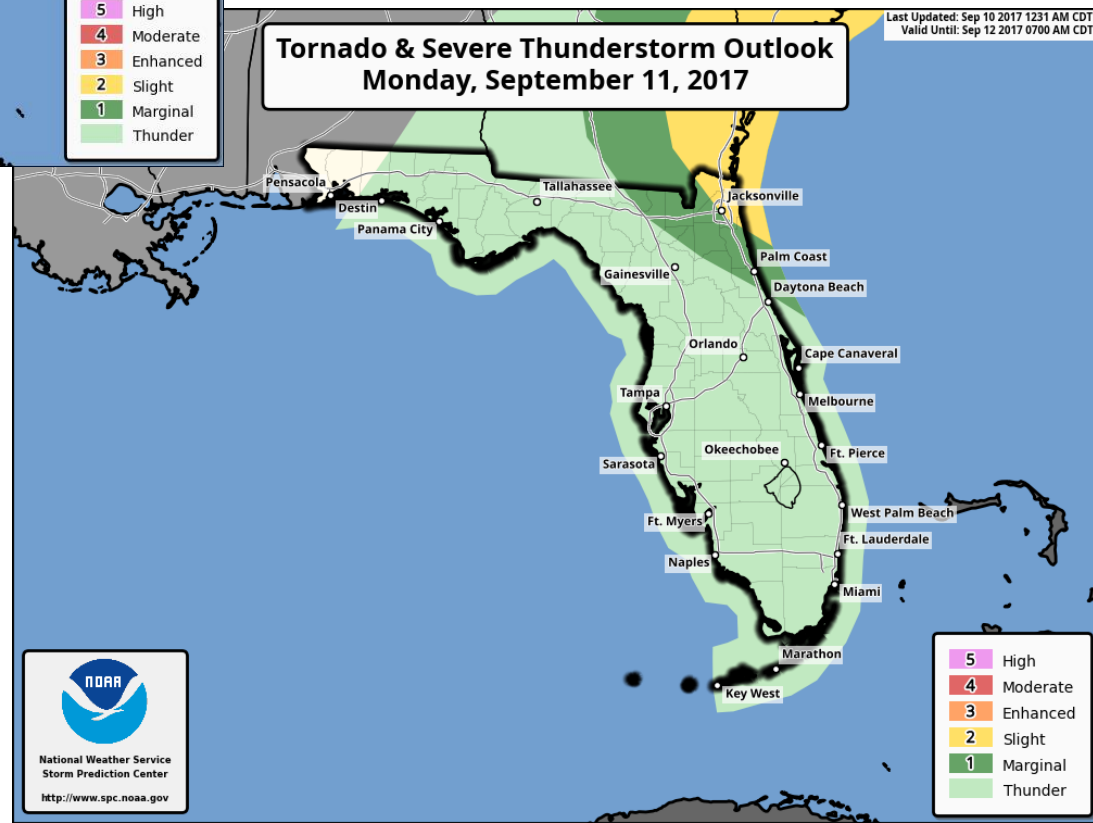


## Tornado & Severe Thunderstorm Outlook Sunday, September 10, 2017

Last Updated: Sep 10 2017 1233 AM CDT  
Valid Until: Sep 11 2017 0700 AM CDT

Tornado threat will increase with the outer bands from Irma.  
Tornado watches may be extended into portions of the Central and Northeast Florida.

## Tornado & Severe Thunderstorm Outlook Monday, September 11, 2017

Last Updated: Sep 10 2017 1231 AM CDT  
Valid Until: Sep 12 2017 0700 AM CDT

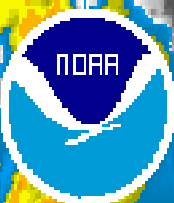
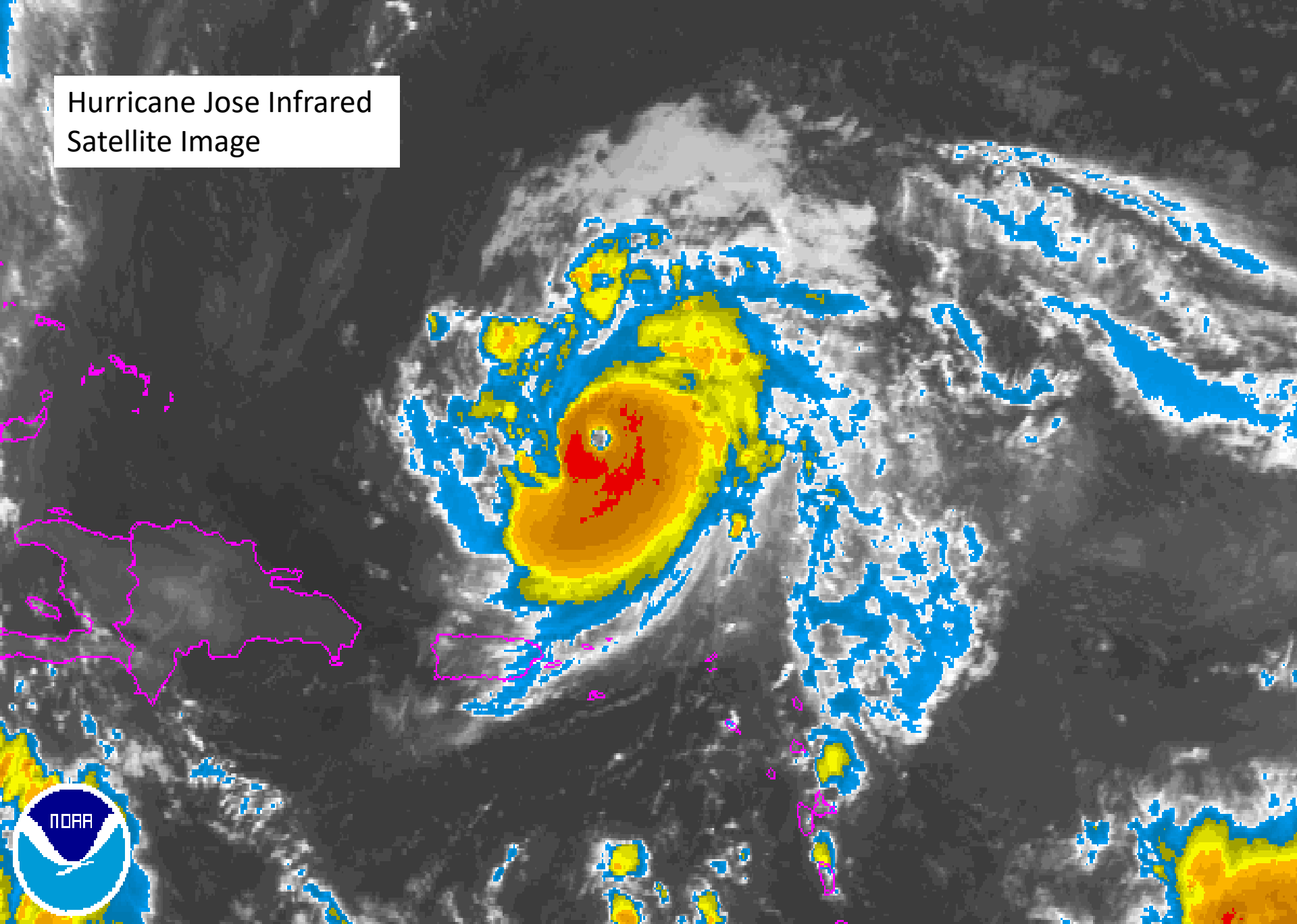




**Tornado Watch # 482 - Valid from 1140 PM until 1200 PM EDT**



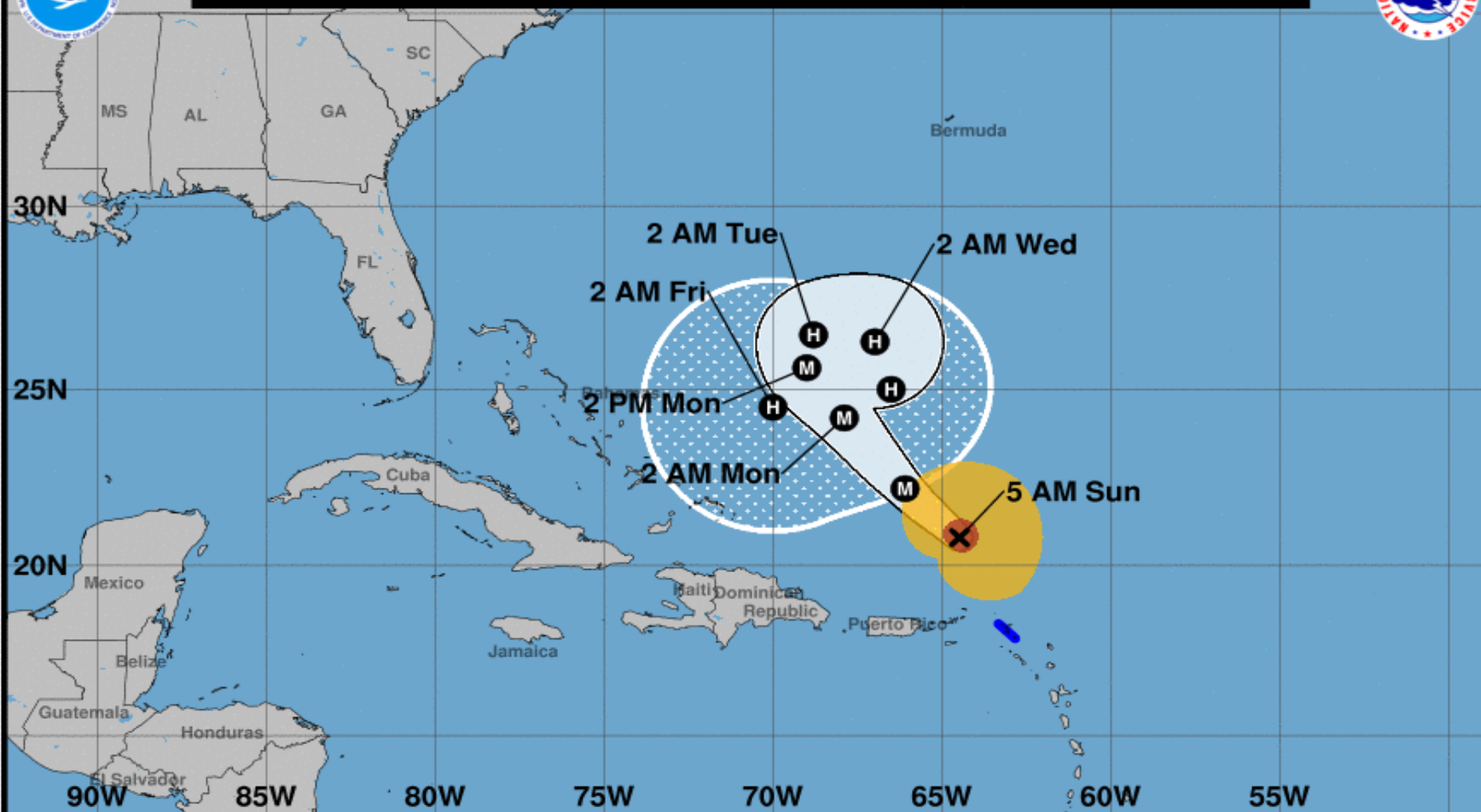
Hurricane Jose Infrared  
Satellite Image







**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

Sunday September 10, 2017

5 AM AST Advisory 20

NWS National Hurricane Center

### Current information: x

Center location 20.8 N 64.5 W

Maximum sustained wind 130 mph

Movement NW 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

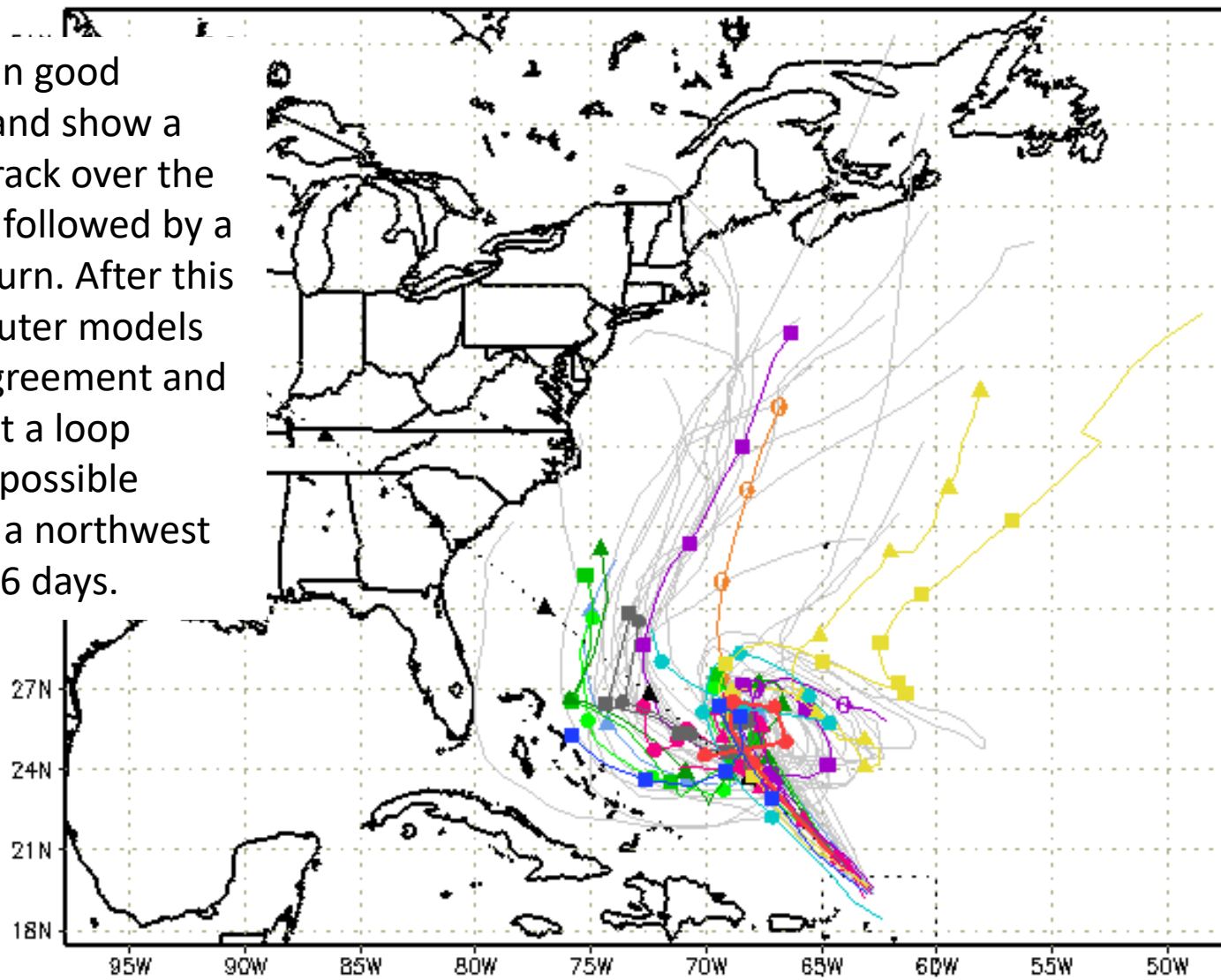
### Current wind extent:

Hurricane Trop Stm



---▲--- XTRP 10/0600Z	▲ TABD 10/0600Z	▲ HMON 10/0000Z	▲ AVNO 10/0000Z	▲ GCM 10/0000Z
■ TVCN 10/0600Z	■ TABM 10/0600Z	■ GFDN Not Avail	■ AEMN 10/0000Z	■ GEMN 10/0000Z
● TVCX 10/0600Z	● TABS 10/0600Z	● HWRF 10/0000Z	● APxx 10/0000Z	● UKM 10/0000Z
● NHC 10/0900Z	● NVGM 09/1800Z	● COTC Not Avail	● NAM 10/0000Z	● CLP5 10/0600Z

Models are in good agreement and show a northwest track over the next 2 days, followed by a northward turn. After this point, computer models are not in agreement and some project a loop feature and possible resuming of a northwest motion in 5-6 days.



storm\_12  
 sfwmd.gov  
 weather@sfwmd.gov  
 10-Sep 07:21EDT

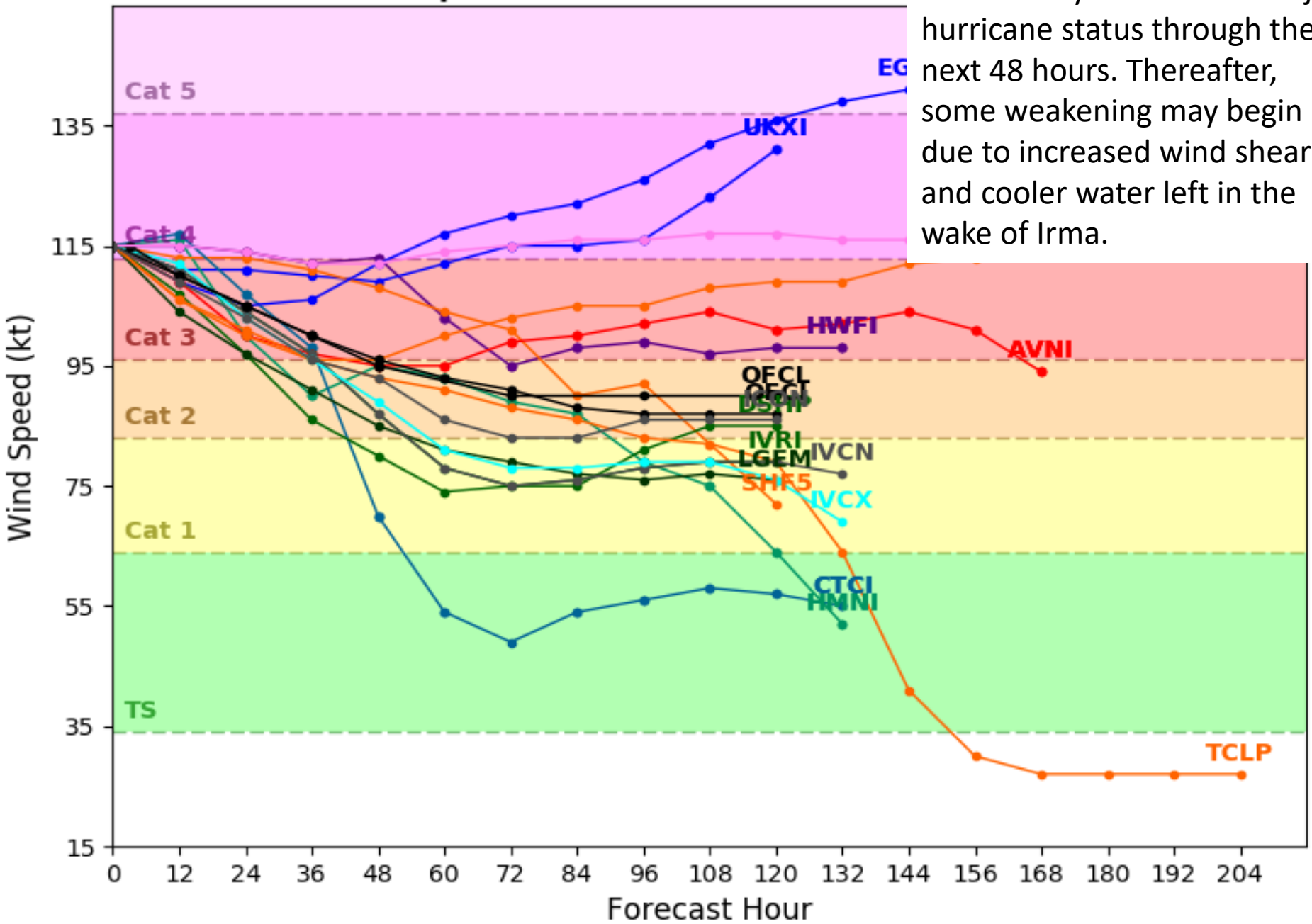
NHC Advisories and County Emergency Management Statements supersede this product. This graphic should complement, not replace, NHC discussions. If anything on this graphic causes confusion, ignore the entire product. For full info, see <http://my.sfwmd.gov/sfwmd/common/images/weather/plots.html>





**Initialized at 06z Sep 10 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.







# Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

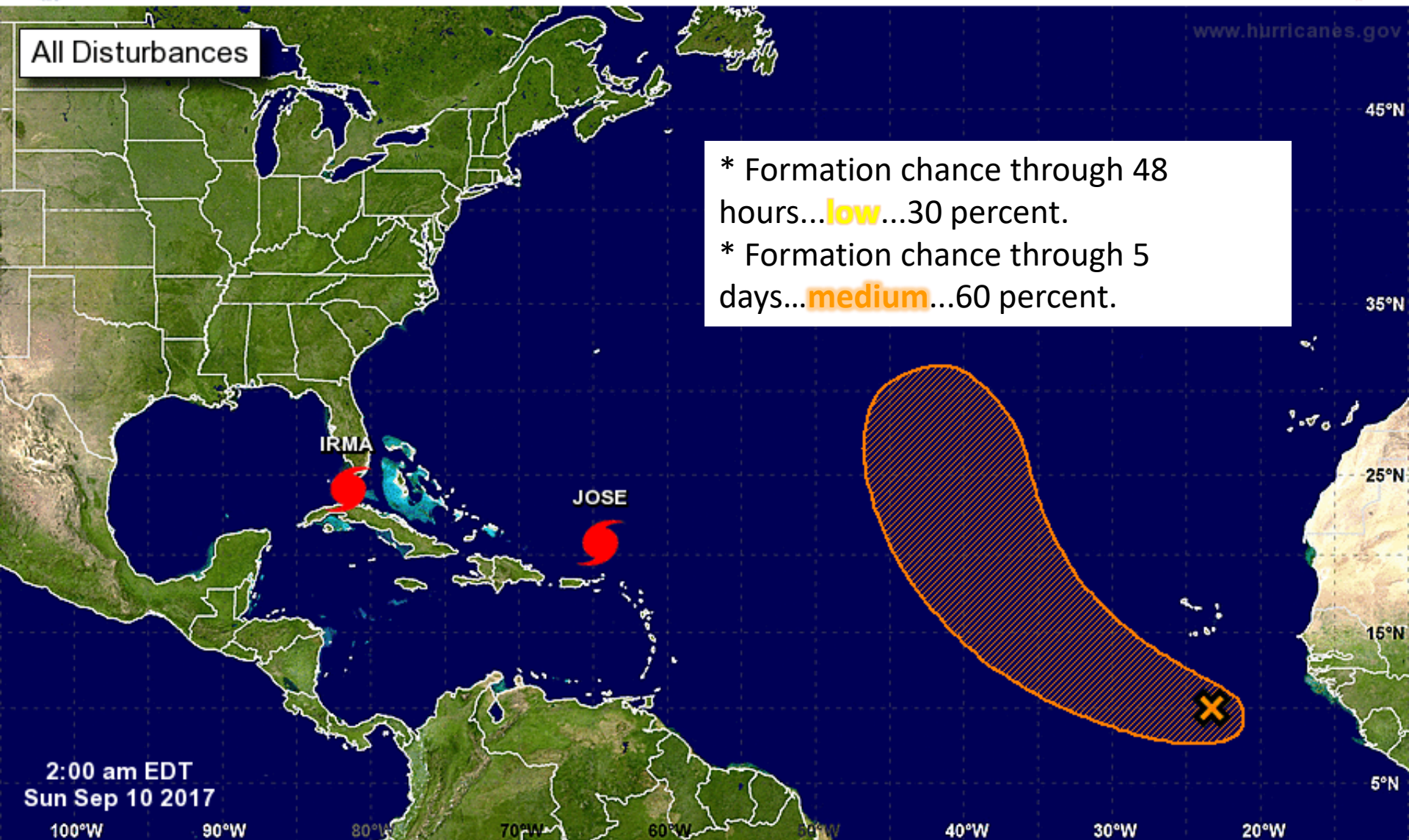


www.hurricanes.gov

All Disturbances

\* Formation chance through 48 hours...**low**...30 percent.

\* Formation chance through 5 days...**medium**...60 percent.

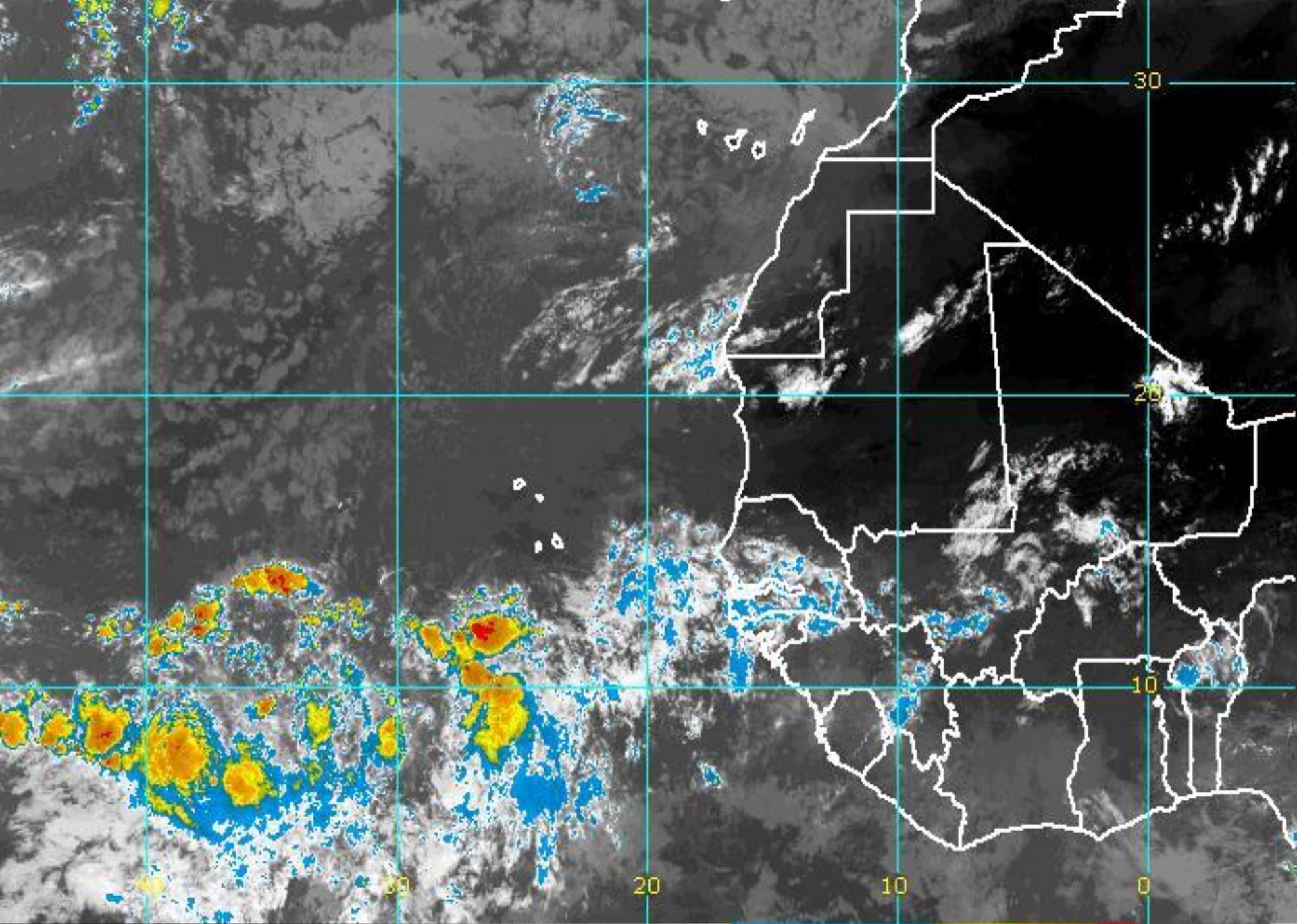


Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone Remnants







# Key Messages

- Irma is expected bring life-threatening wind and storm surge to the Florida Keys and southwestern Florida as an extremely dangerous major hurricane today.
- The threat of catastrophic storm surge flooding is high along the West Coast of Florida, where up to 15 feet of inundation above ground level is expected.
- Irma will bring wind impacts to much of Florida regardless of the exact track of the center.
- Irma is expected to produce very heavy rainfall and inland flooding.
- Significant river flooding is possible.



# Summary

- At 7am EDT Saturday, Hurricane Irma was moving northwest at 8 mph with maximum sustained winds of 130 mph, making Irma a category 4 storm on the Saffir-Simpson hurricane wind scale.
- Irma is expected to maintain strength as it crosses the Florida Straits this morning, but it is now expected to remain a category 4 storm as it approaches Southwest Florida.
- On the current forecast track, Irma is crossing the Lower Keys this morning and will then move along or near the Florida West Coast this afternoon through Monday morning.
- The forecast then brings Irma into the Big Bend of Florida and southwestern Georgia late Monday morning through Monday evening.
- The forecast track again shifted slightly westward in this advisory as Irma has yet to make a north-northwest turn, potentially bringing Irma's center through eastern portions of Leon County around noon on Monday.
- Tropical Storm force winds extend out 220 miles from the center, and hurricane force 80 miles, meaning a large portion of the Peninsula and Big Bend may experience hurricane force winds and much of the state will at least feel tropical storm conditions.
- At 5am EDT Saturday, Hurricane Jose was located 200 miles north-northwest of the Northern Leeward Islands, which is about 1,000 miles southeast of Miami, Florida.
- Maximum sustained winds are near 130 mph, which is a Category 4 on the Saffir-Simpson Hurricane Wind Scale.
- Little change in intensity is expected overnight, but gradual weakening should begin by Monday.
- Jose is moving toward the northwest near 16 mph and this motion is expected to continue for the next day or so.
- However, after 48 hours, the models are in good agreement showing Jose slowing to a crawl and executing a slow loop well to the east of the Bahamas.
- Shower and thunderstorm activity associated with a tropical wave located several hundred miles west of the Cabo Verde Islands has become somewhat better organized today.
- Environmental conditions are expected to support at least some additional development, and there is a 60% chance that a tropical depression could form in a few days while the system moves generally northwestward over the eastern Atlantic Ocean.



# Florida Outlook

- Nearly all of the Florida Peninsula and Florida Panhandle will feel impacts from this system.
- A **Hurricane Warning** is now in effect for all Florida counties east of the Apalachicola River, including Lake Okeechobee and Florida Bay.
- A **Storm Surge Warning** is now in effect from the Ochlockonee River southward around the Florida Peninsula to North Miami Beach and from Jupiter Inlet to Fernandina Beach, including the Florida Keys and Tampa Bay.
- A **Tropical Storm Warning** is in effect for Bay, Calhoun, Gulf, Holmes, Jackson, Walton, and Washington counties.
- Rainfall amounts could reach as high as 10-15" with isolated higher totals of 20" possible in the Peninsula. Lesser amounts of 4-9" are expected in the Big Bend and less than that in the Panhandle.
- Flash Flood Watches are in effect for the entire Peninsula and Big Bend.
- Significant river flooding is expected in the coming days in many rivers of Central and Southwest FL.
- Life-threatening storm surge will be impacting the West Coast of Florida today, especially SW FL.
- Isolated tornadoes are possible in the outer bands of Irma and will spread northward tonight and tomorrow. A **Tornado Watch** is in effect for South Florida, with additional tornado watches possible today for Central and Northeast Florida.
- Hurricane Jose does not pose a threat to Florida within the next 5-7 days, but should be monitored.

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





# TROPICAL UPDATE

Created by:

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State Meteorological Support Unit

Florida Division of Emergency Management

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