



TROPICAL UPDATE

5 PM EDT

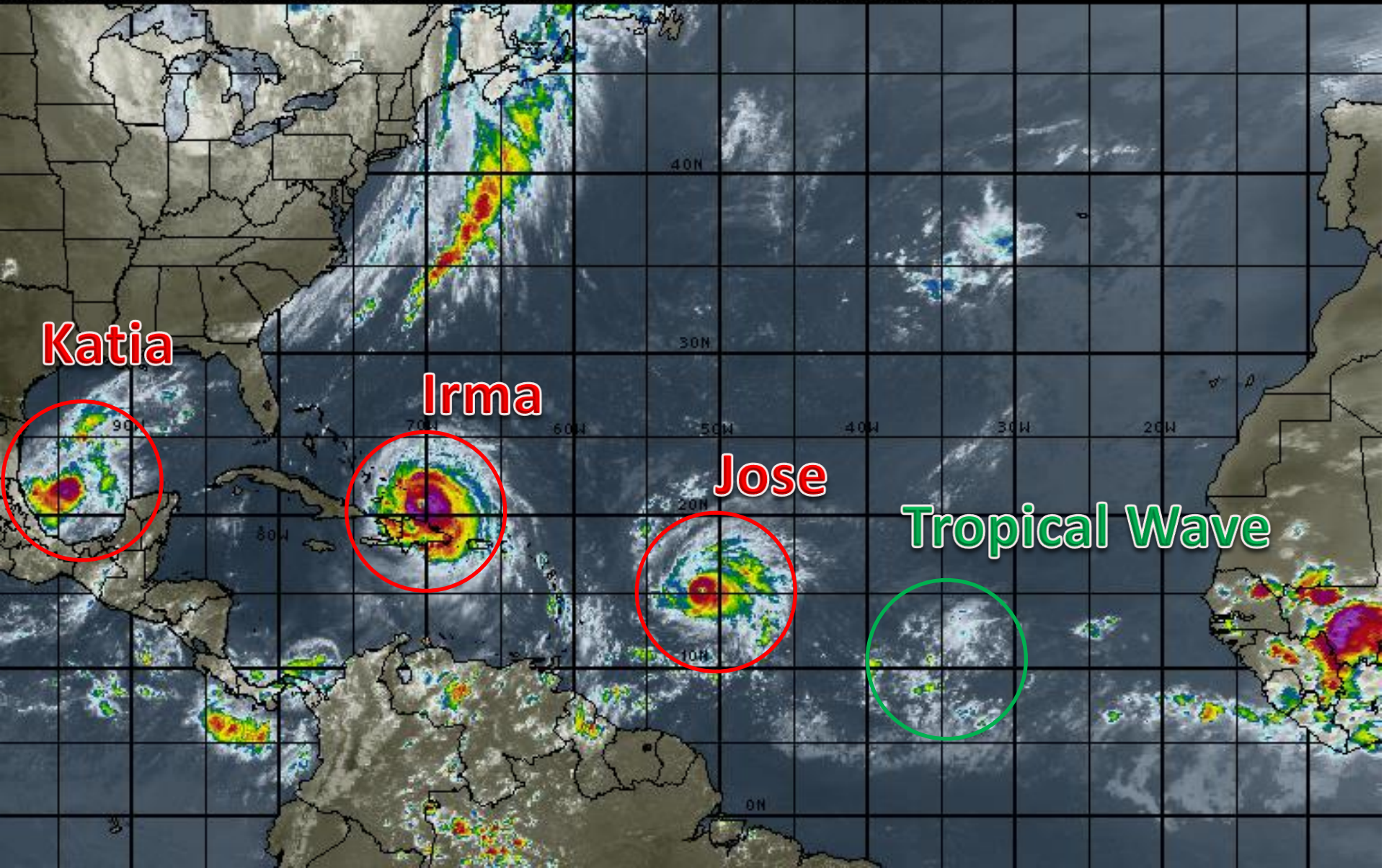
Thursday, September 7, 2017

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.

Atlantic Basin Satellite Image

18:00 07-SEP-2017 GMT Copyright © 1998-2016 MSI Corporation <http://www.usi.com>



Hurricane Irma

5 PM EDT Thu Sep 07 2017

Position 20.9 N, 71.1 W

Maximum Winds 170 mph

Gusts 210 mph

Movement WNW at 16 mph

Minimum Pressure 922 mb (27.22 inches)

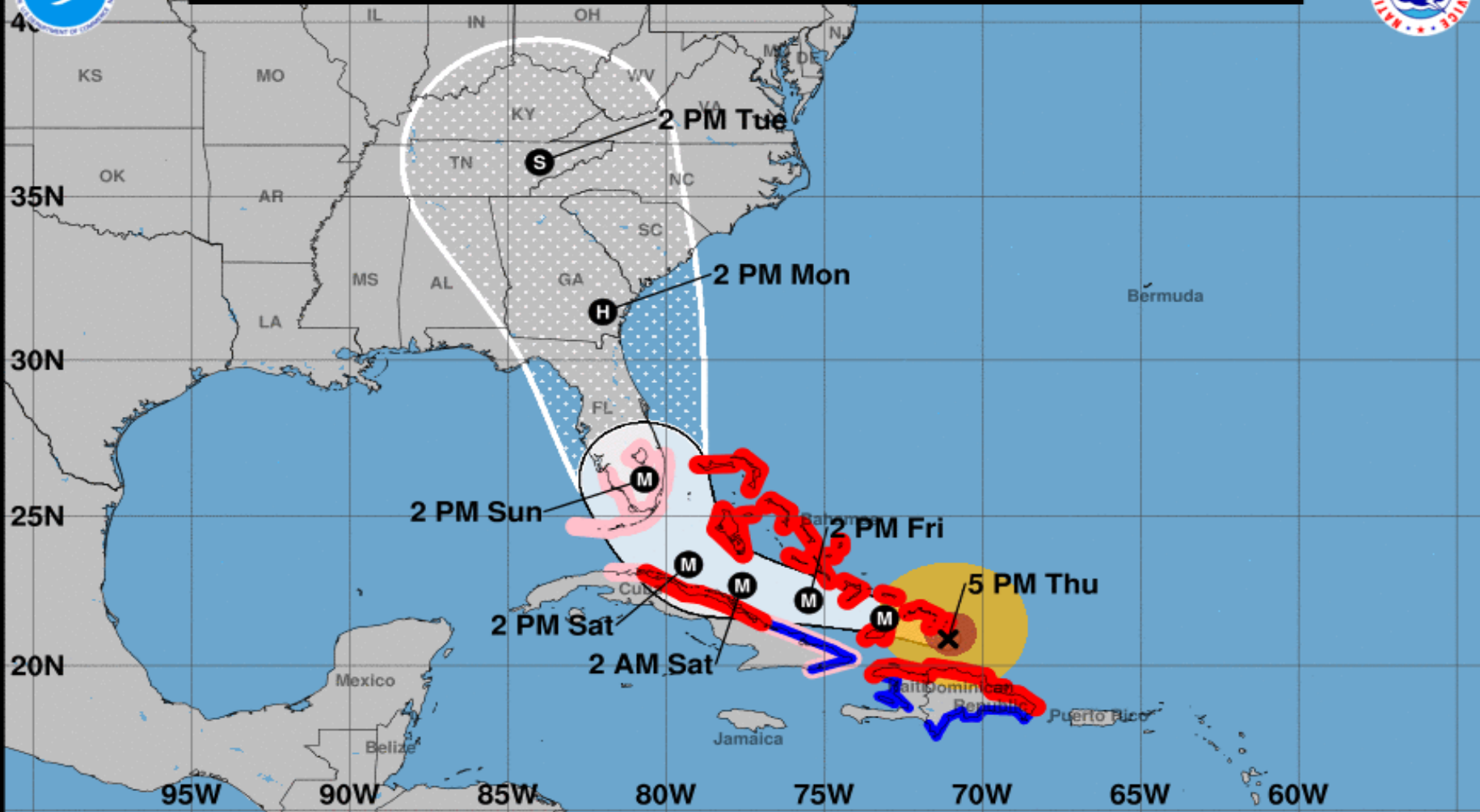
Blue Marble basemap imagery courtesy NASA

Satellite 9:06 PM UTC
5:06 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
 Thursday September 07, 2017
 5 PM EDT Advisory 35
 NWS National Hurricane Center

Current information: x
 Center location 20.9 N 71.1 W
 Maximum sustained wind 175 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:

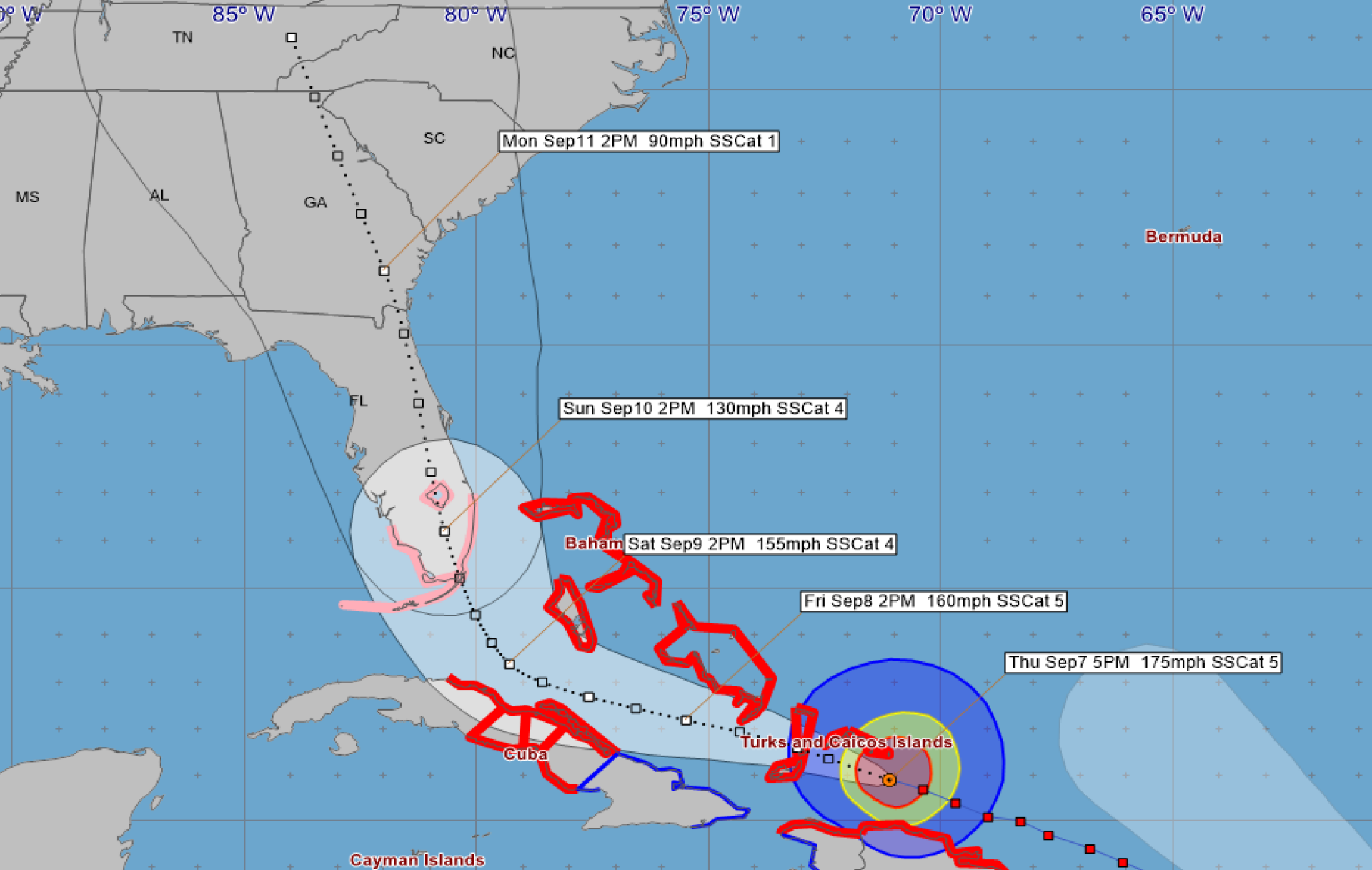
Hurricane Trop Stm

Warnings:

Hurricane Trop Stm

Current wind extent:

Hurricane Trop Stm



Hurricane Irma - Thursday, September 7, 2017 5 PM EDT Advisory #35

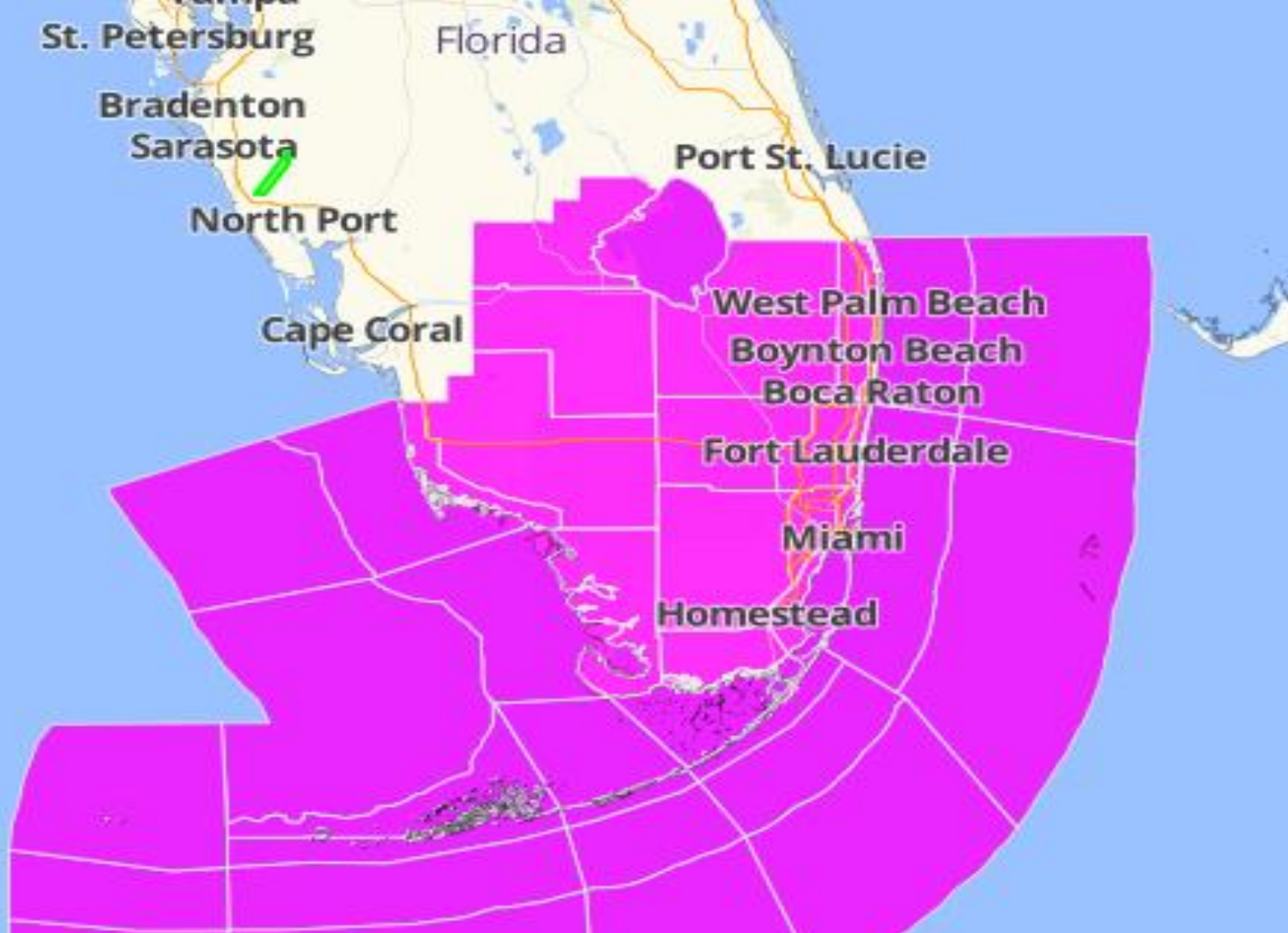
● Center Location: 20.9 N 71.1 W Maximum Sustained Winds: 175 mph (Cat 5) Movement: 16 mph W

□ 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

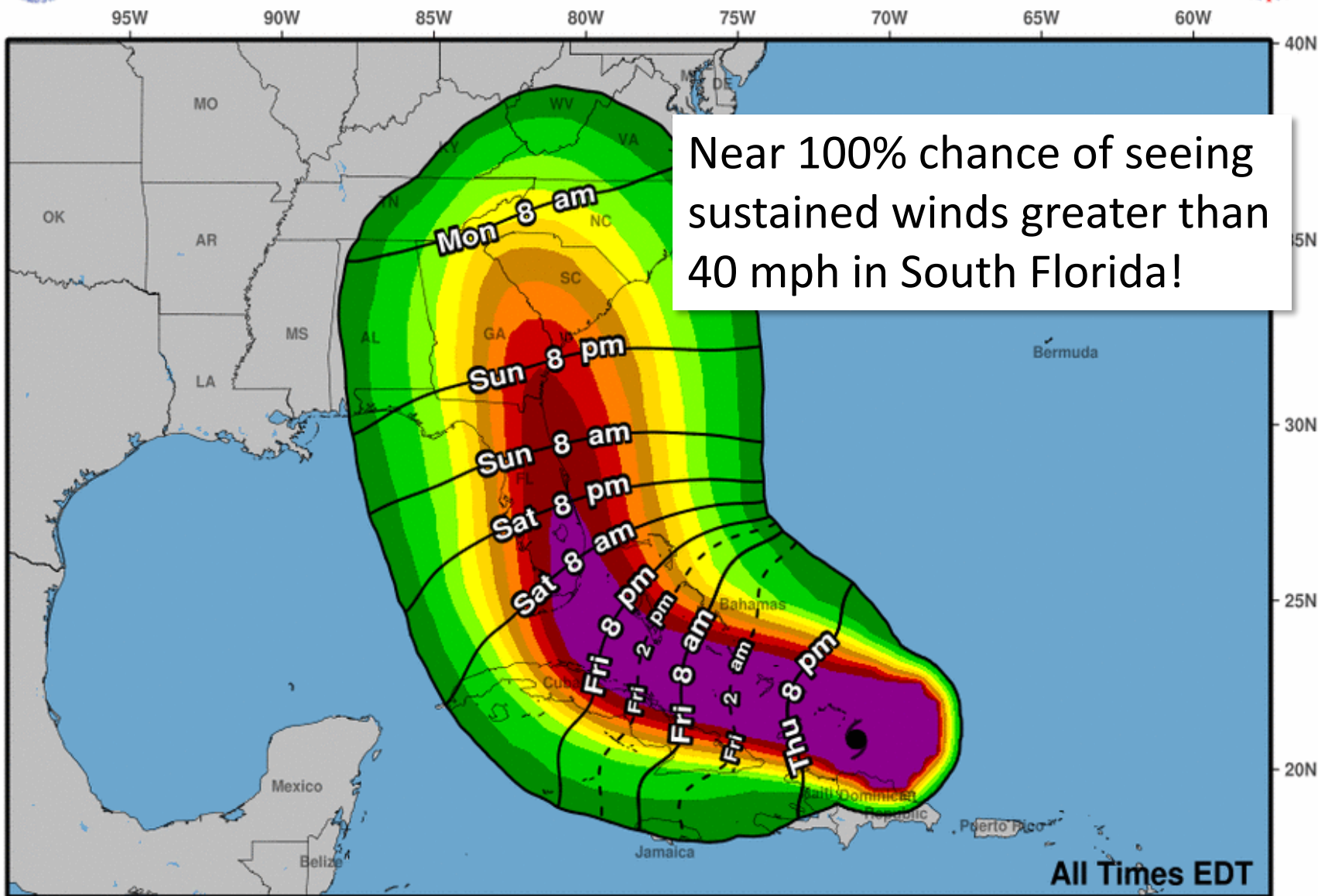


All areas in pink are under a **Hurricane Watch**. This includes Hendry, Glades, Collier, Palm Beach, Broward, Miami-Dade, and Monroe Counties. This is the entire Florida Keys and Lake Okeechobee.

*Additional hurricane watches will be issued for Central Florida tonight or tomorrow.



Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



Near 100% chance of seeing sustained winds greater than 40 mph in South Florida!

Hurricane Irma
 Thu. Sep. 7, 2017 5 pm EDT
 Advisory 35

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

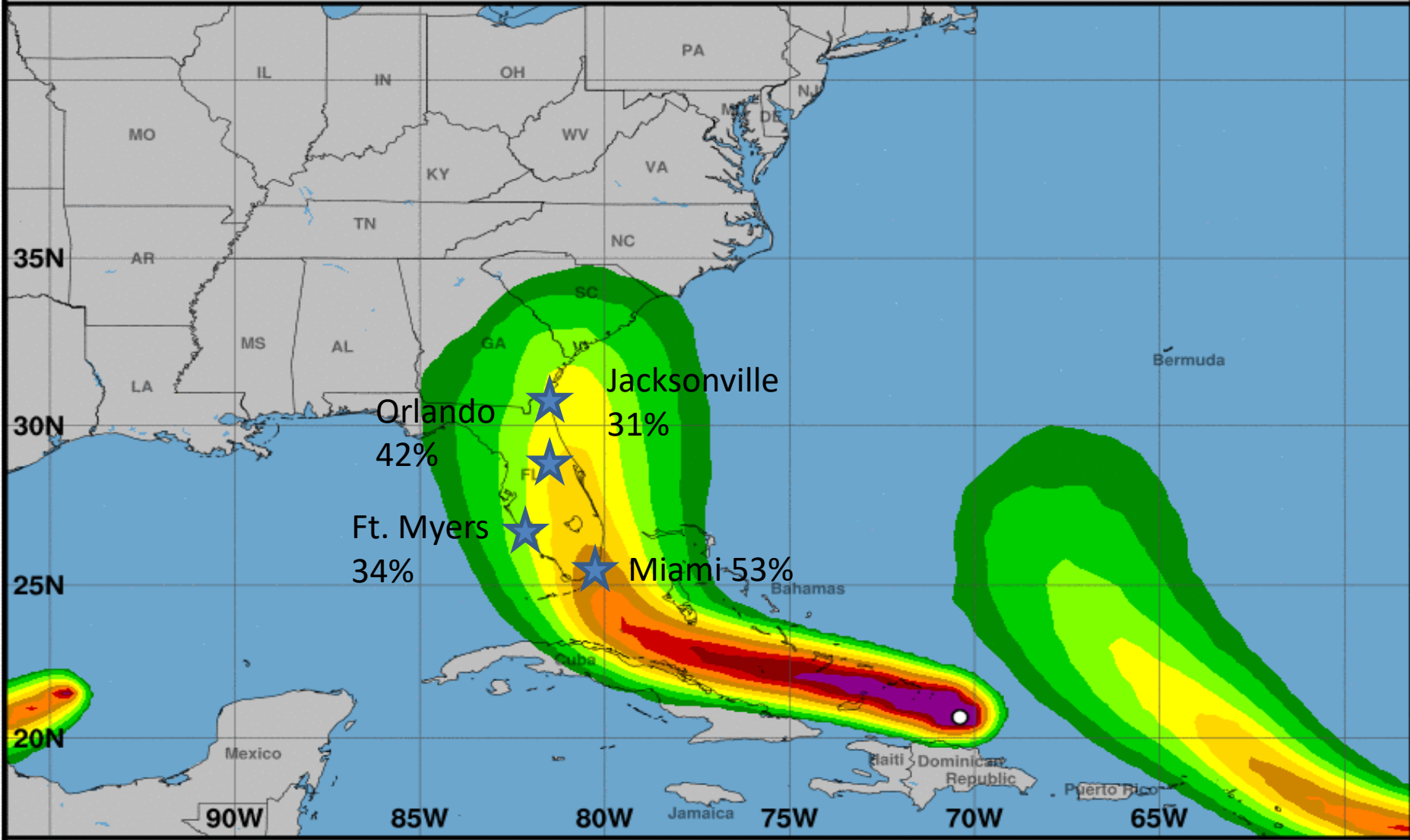
Five-day chance of receiving sustained 34+ knot (39+ mph) winds

5	10	20	30	40	50	60	70	80	90	100 %
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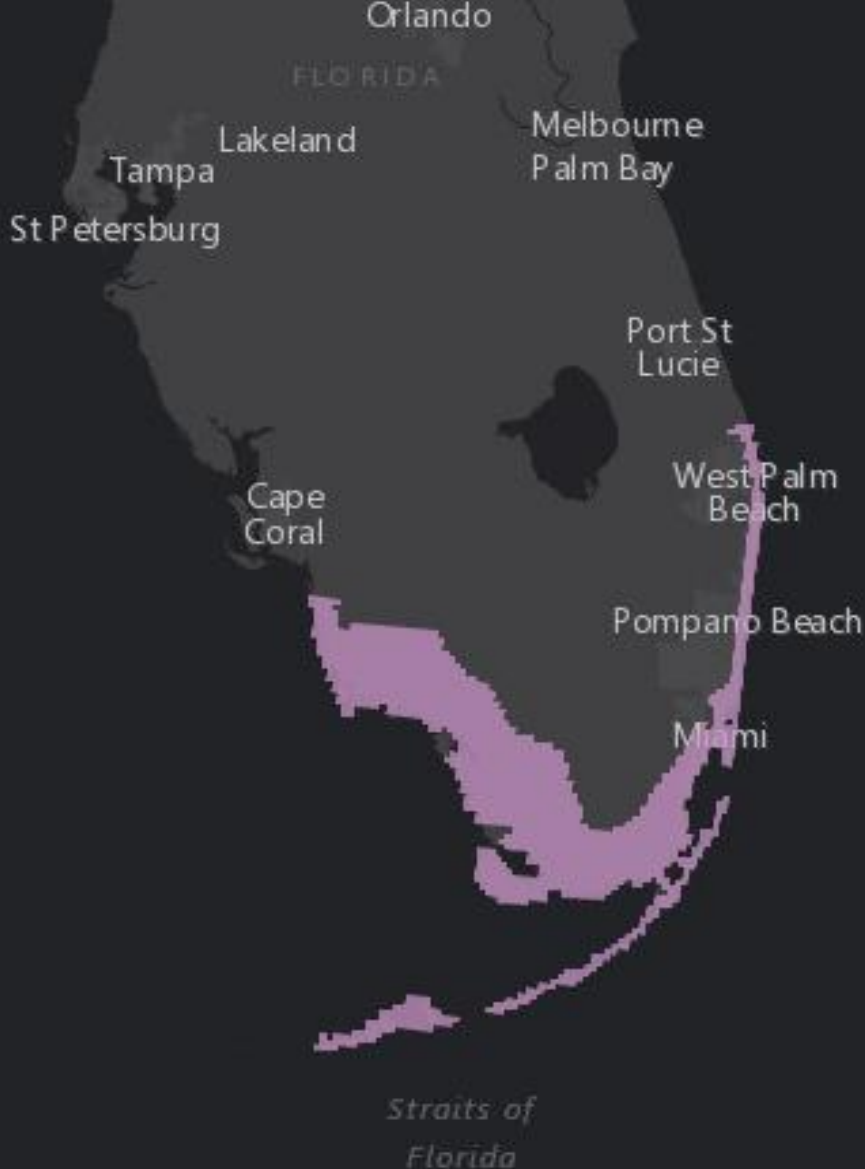
Hurricane-Force Wind Speed Probabilities

For the 120 hours (5.00 days) from 2 PM EDT THU SEP 07 to 2 PM EDT TUE SEP 12



Probability of hurricane-force winds (1-minute average ≥ 74 mph) from all tropical cyclones
○ indicates Hurricane Irma center location at 2 PM EDT THU SEP 07, 2017 (Forecast/Advisory #35)





Storm Surge Watch areas are the colored region. Zoomable maps available here:
http://www.nhc.noaa.gov/refresh/graphics_at1+shtml/154730.shtml?wsurge#contents

Storm Surge Inundation Maps from NHC for Worst Case Scenario, Zoomable:
http://www.nhc.noaa.gov/refresh/graphics_at1+shtml/154730.shtml?inundation#contents

*Additional Storm Surge Watches for Central Florida are likely to be issued tonight or tomorrow.



STORM SURGE INUNDATION

ABOVE NORMAL TIDE LEVELS

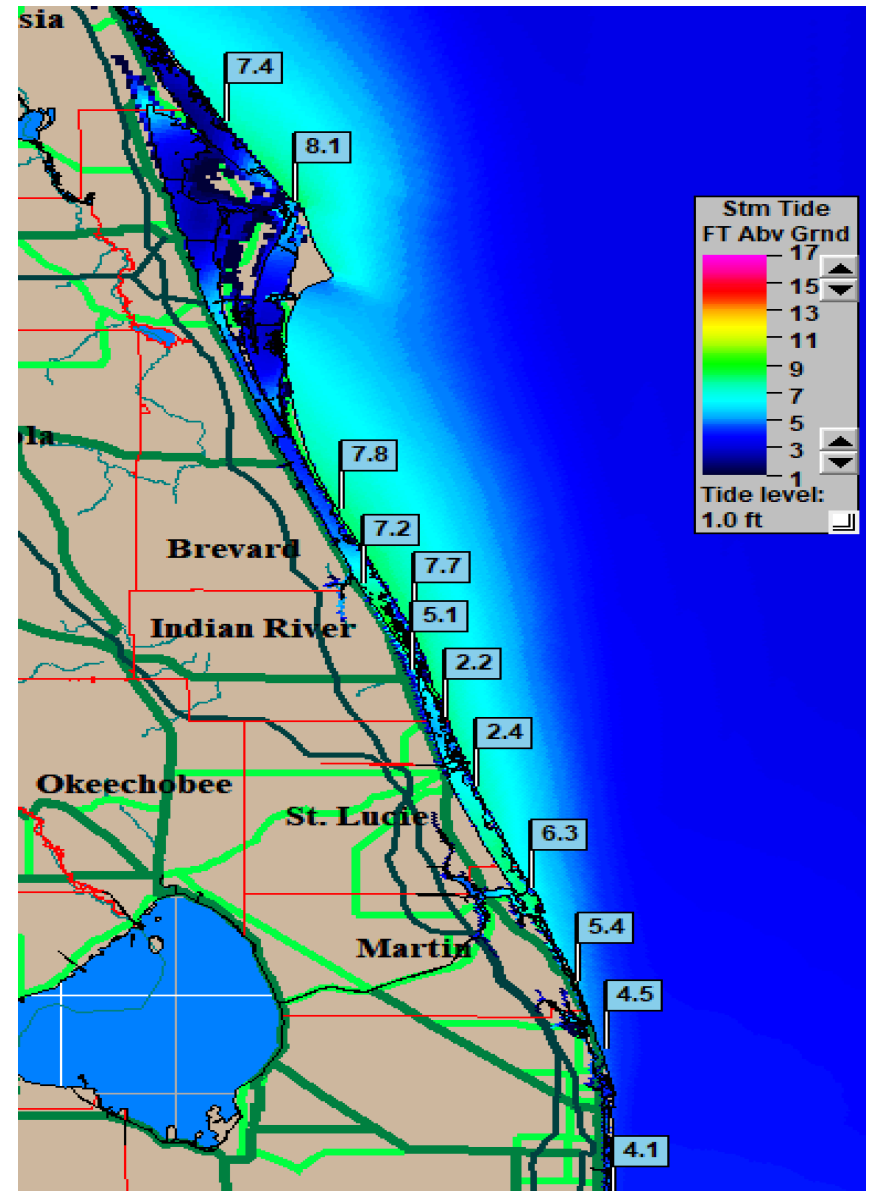
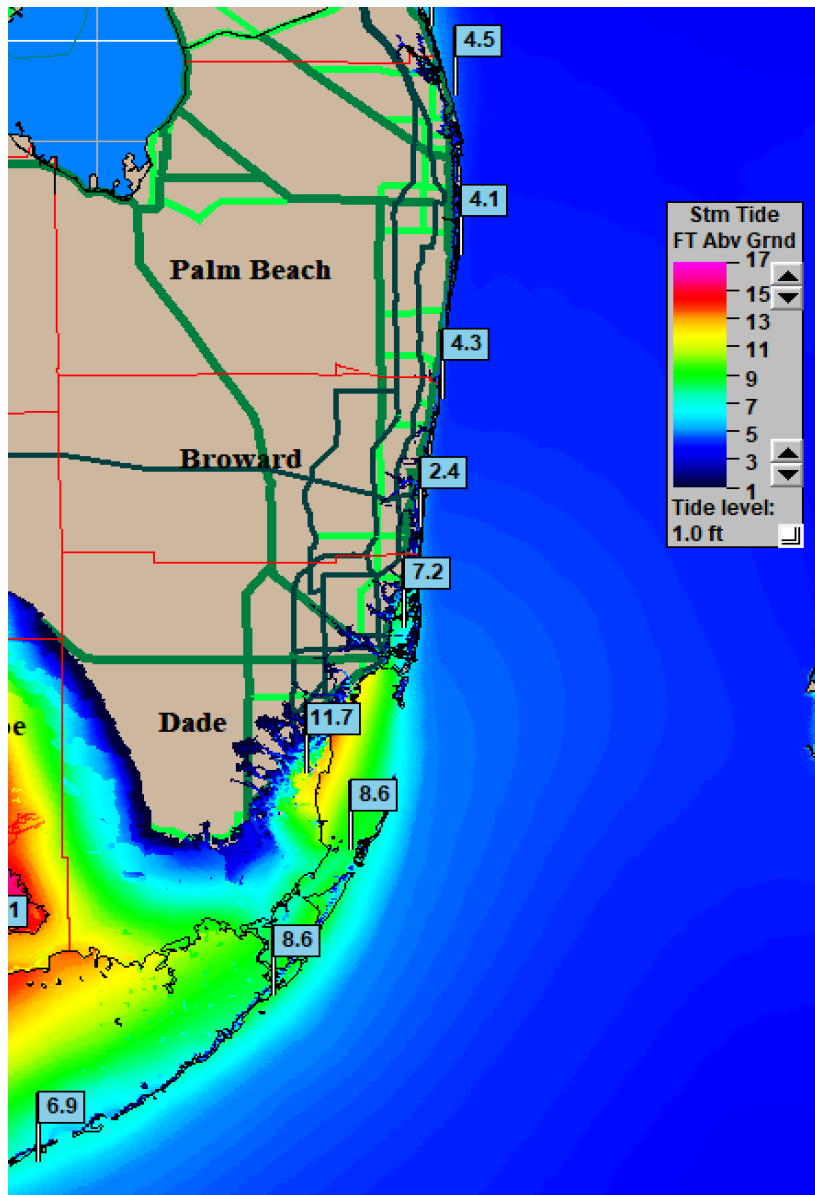


SLOSH maximum storm surge estimates

Cat 4 moving N @10mph. Zoomable map

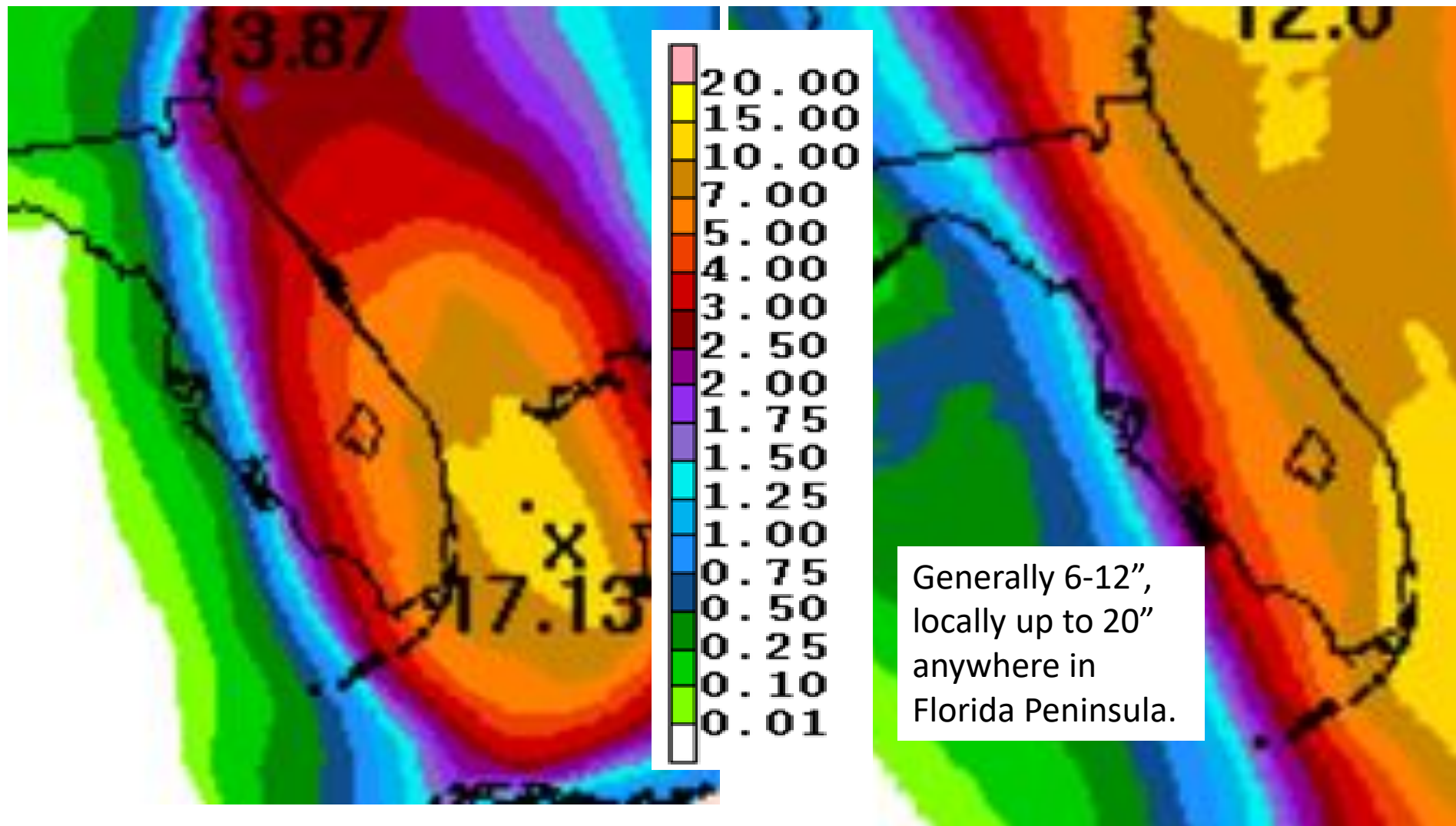
<http://noaa.maps.arcgis.com/apps/MapSeries/index.html?appid=d9ed7904dbec441a9c4dd>

[7b277935fad&entry=1](#)



Rainfall Forecast SUNDAY

Cumulative Rainfall Forecast Next 5-Days



FLASH FLOOD THREAT SATURDAY

The flood threat for South 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.



Day 3 Excessive Rainfall Outlook

Valid 12Z Sat Sep 09 2017
Thru 12Z Sun Sep 10 2017
Issued: 2000Z Thu Sep 07 2017
Forecaster: MUSER
NOAA/NWS/NCEP/WPC

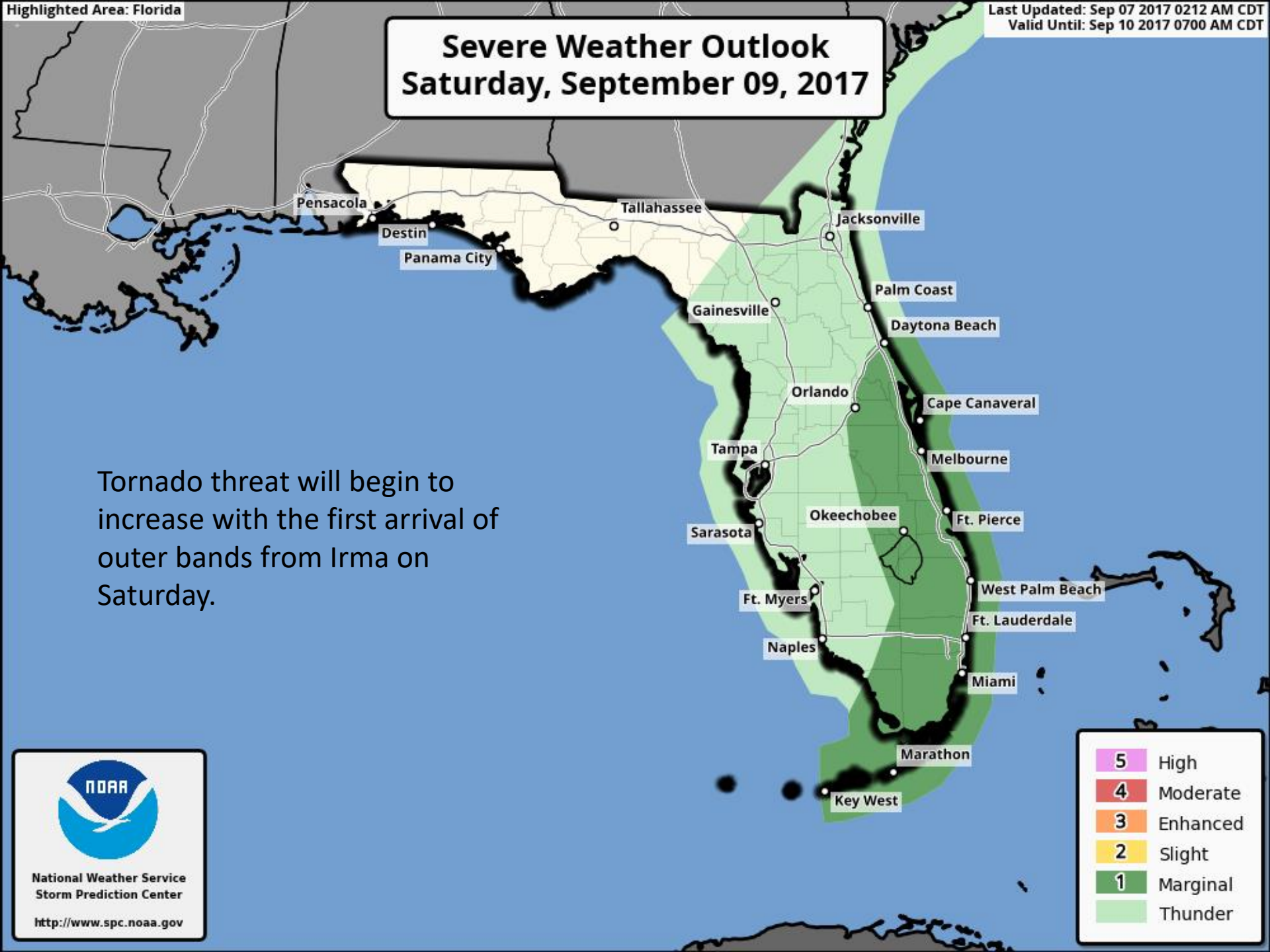
Risk of rainfall exceeding flash flood guidance to the right of a line

HIGH: > 15%	SLGT: 5%-10%
MDT: 10%-15%	MRGL: 2%-5%

MRGL

SLGT
MDT

Severe Weather Outlook Saturday, September 09, 2017



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

5	High
4	Moderate
3	Enhanced
2	Slight
1	Marginal
	Thunder



National Weather Service
Storm Prediction Center
<http://www.spc.noaa.gov>

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

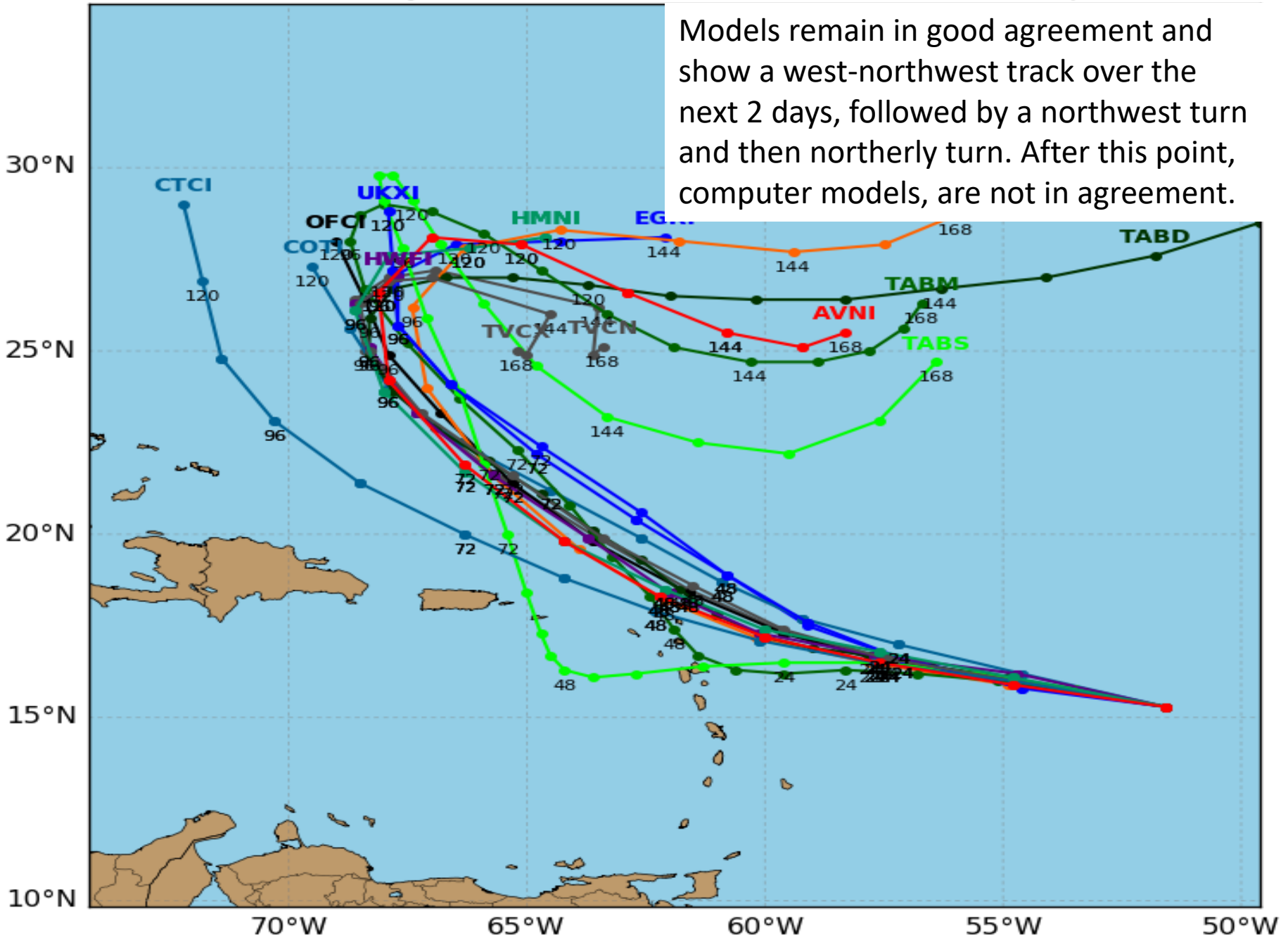


Hurricane JOSE Model Track Guidance

Initialized at 18z Sep 07 2017

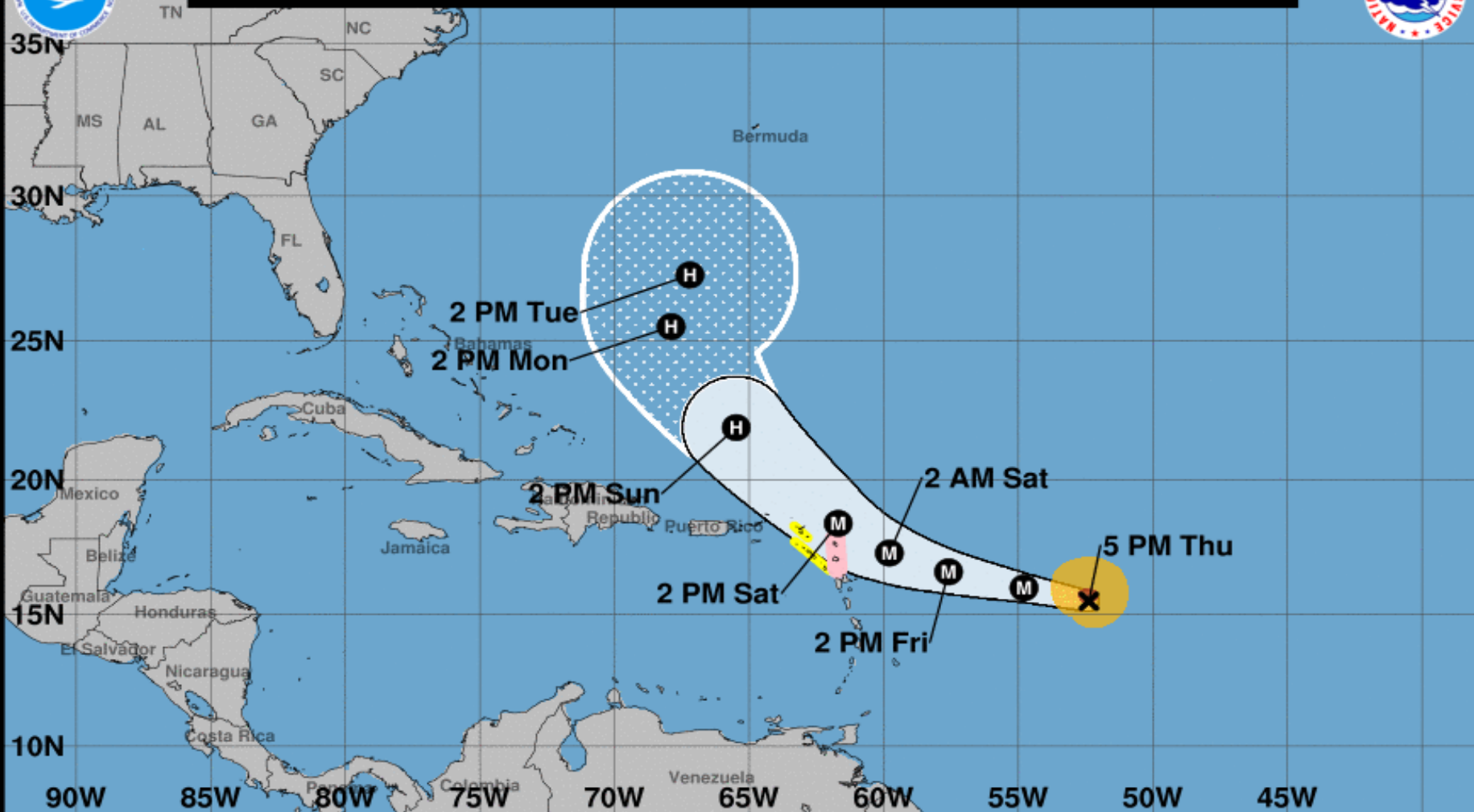
Levi Cowan - tropicaltidbits.com

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.





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:



Watches:



Warnings:



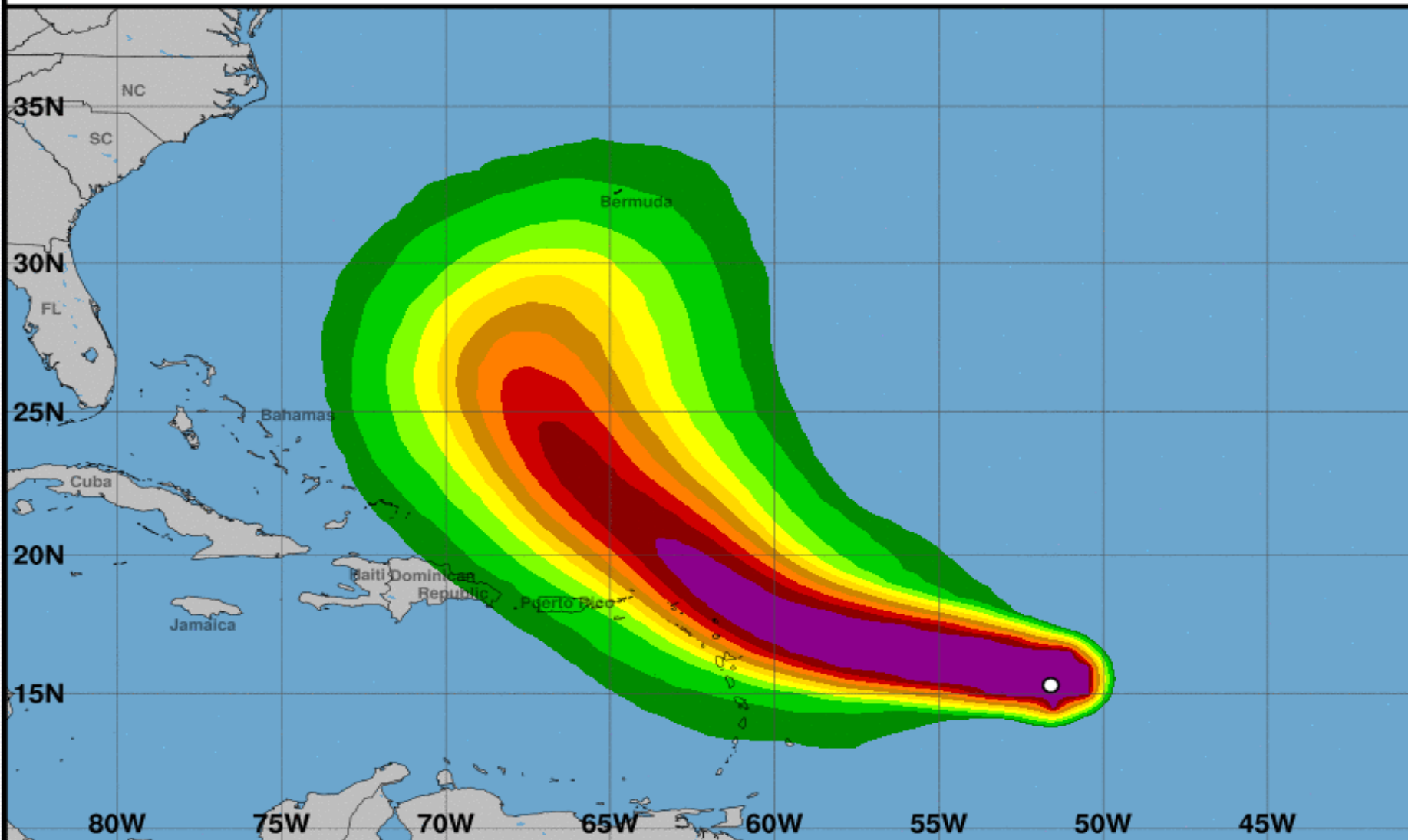
Current wind extent:





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 ≥ 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 PM EDT Thu Sep 07 2017

Position 21.6N 94.6W

Maximum Winds 80 mph

Gusts 95 mph

Movement N at 0 mph

Minimum Pressure 980 mb (28.93 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 9:58 PM UTC

5:58 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
 Thursday September 07, 2017
 4 PM CDT Advisory 9
 NWS National Hurricane Center

Current information: X
 Center location 21.6 N 94.6 W
 Maximum sustained wind 80 mph
 Movement: Stationary

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

Summary

- At 5pm EDT Thursday, Hurricane Irma was located about 40 miles south of the Turks and Caicos, or about 620 miles southeast of Miami.
- Maximum sustained winds are near 175 mph with higher gusts, keeping 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 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.
- On the forecast track, the core of Irma will move across the Turks and Caicos Islands tonight and then between Cuba and the central Bahamas on tomorrow.
- The core of Irma is forecast to approach South Florida and the Florida Keys by Sunday while beginning a northward turn. .
- Exactly when the turn occurs is still uncertain and would make a huge difference in the level of impact to portions of South and Central Florida.
- 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 cone this afternoon.
- Even if the center eventually remains offshore, impacts could be felt along much of the Florida Peninsula due to the large size of the storm. Tropical Storm force winds extend out 185 miles from the center, and hurricane force 70 miles.

- At 5pm EDT Thursday, Hurricane Jose was located 590 miles east of the Leeward Islands, which is about 2,000 miles southeast of Miami, Florida.
- Maximum sustained winds have increased to 120 mph, which is a Category 3 on the Saffir-Simpson Hurricane Wind Scale.
- Additional strengthening is expected and Jose could be a category 4 by Friday. After that, some weakening is likely.
- Jose is expected to continue moving towards the west-northwest, approaching the northern Leeward Islands this weekend before turning more northwest and north.
- Beyond 4 days, the track for Jose is also uncertain as some models predict the Jose could stall in the western Atlantic.

- At 5pm EDT Thursday, Hurricane Katia was located in the southwestern Gulf of Mexico about 350 miles south-southeast of the U.S./Mexico border, or about 890 miles west-southwest of Key West, Florida.
- Maximum sustained winds are near 80mph, making Katia a Category 1 hurricane. Gradual strengthening to Cat 2 is forecasted.
- Katia is stationary and little overall motion is anticipated tonight. The hurricane is forecast to turn southwestward and approach the coast of eastern Mexico late Friday or early Saturday.

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 Watches are in effect for all counties in South Florida, which includes the keys. Storm Surge watches are in effect for coastal regions of South Florida and the keys. Hurricane and storm surge watches are likely tonight or early tomorrow for Central Florida.
- The chances for tropical storm and hurricane winds continue to increase for the Florida Peninsula.
- There is currently a 1 in 2 chance of hurricane force winds across the Treasure Coast and Southeast Florida, as well as the upper Florida Keys within the next 5 days.
- 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.
- A storm of this size and intensity would have the ability to produce dangerous storm surge heights across portions of South Florida, the Florida Keys and the Florida East Coast. Dangerous storm surge could also occur along the West coast due to westerly winds on the south side of the storm as it moves northward.
- 5-10' of storm surge is currently being forecasted by the Hurricane Center of South Florida and the Keys.
- In addition, rainfall amounts could reach as high as 10-15", but specifics on the location of high rainfall totals is still uncertain and dependent on the track of the system.
- 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 morning. For more information, visit the NHC website at www.hurricanes.gov.



TROPICAL UPDATE

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State Meteorological Support Unit

Florida Division of Emergency Management

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