



# **TROPICAL UPDATE**

**9 AM EDT**

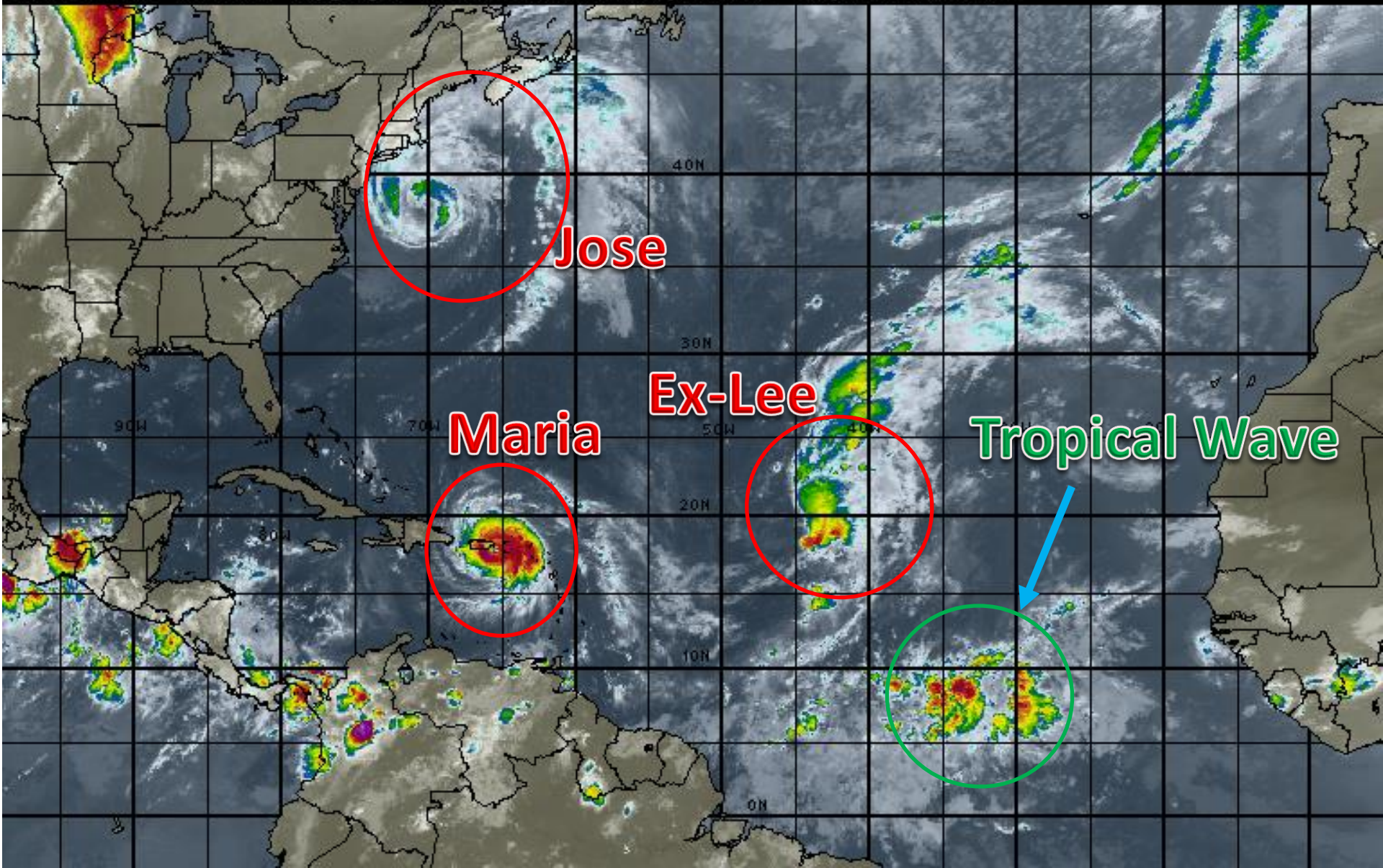
**Wednesday, September 20, 2017**

**Tropical Storm Jose, Hurricane Maria &  
Remnants of Lee (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](http://www.nhc.noaa.gov).**

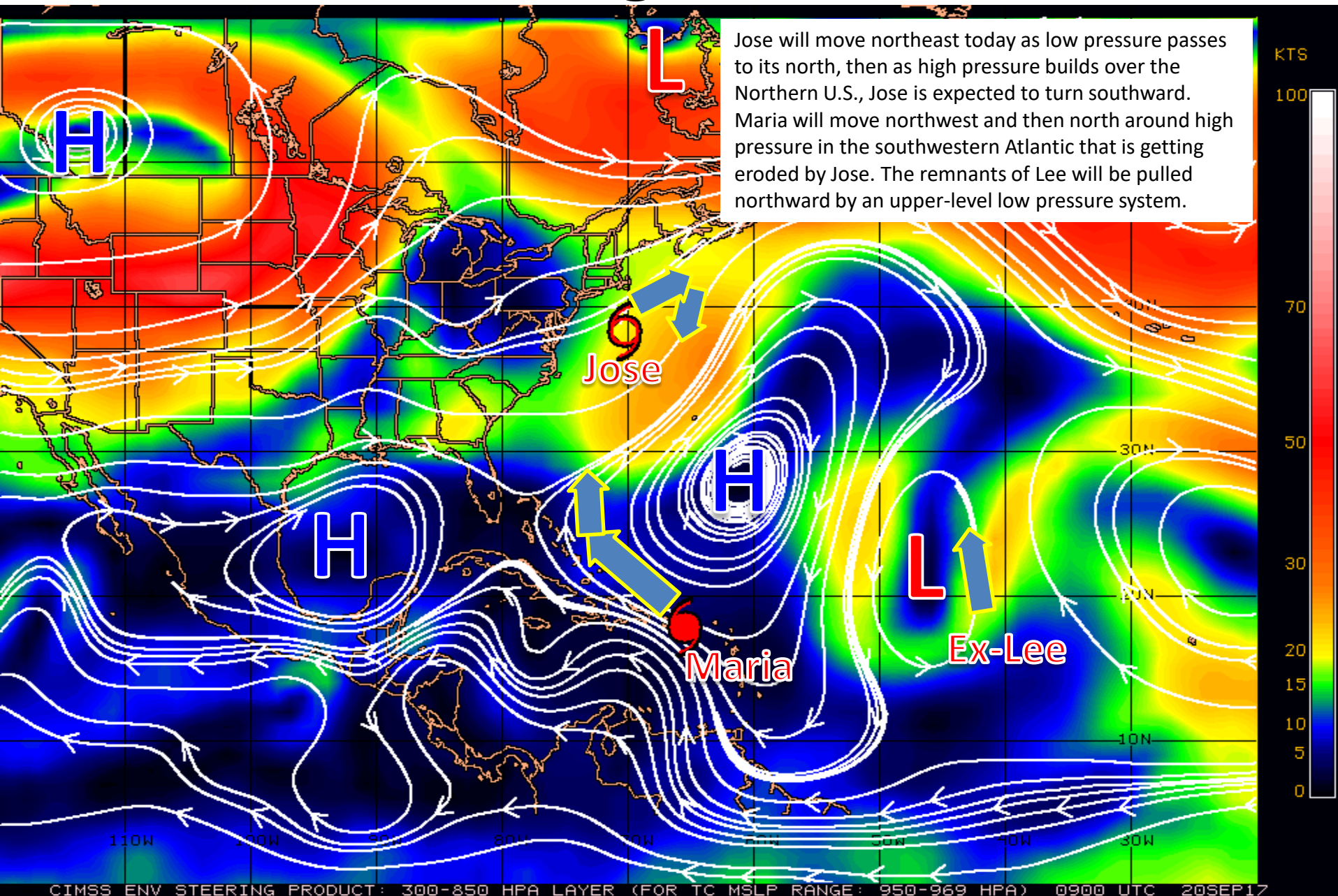
# Atlantic Basin Satellite Image

09:00 20-SEP-2017 GMT Copyright © 1998-2016 MSI Corporation <http://www.wsi.com>

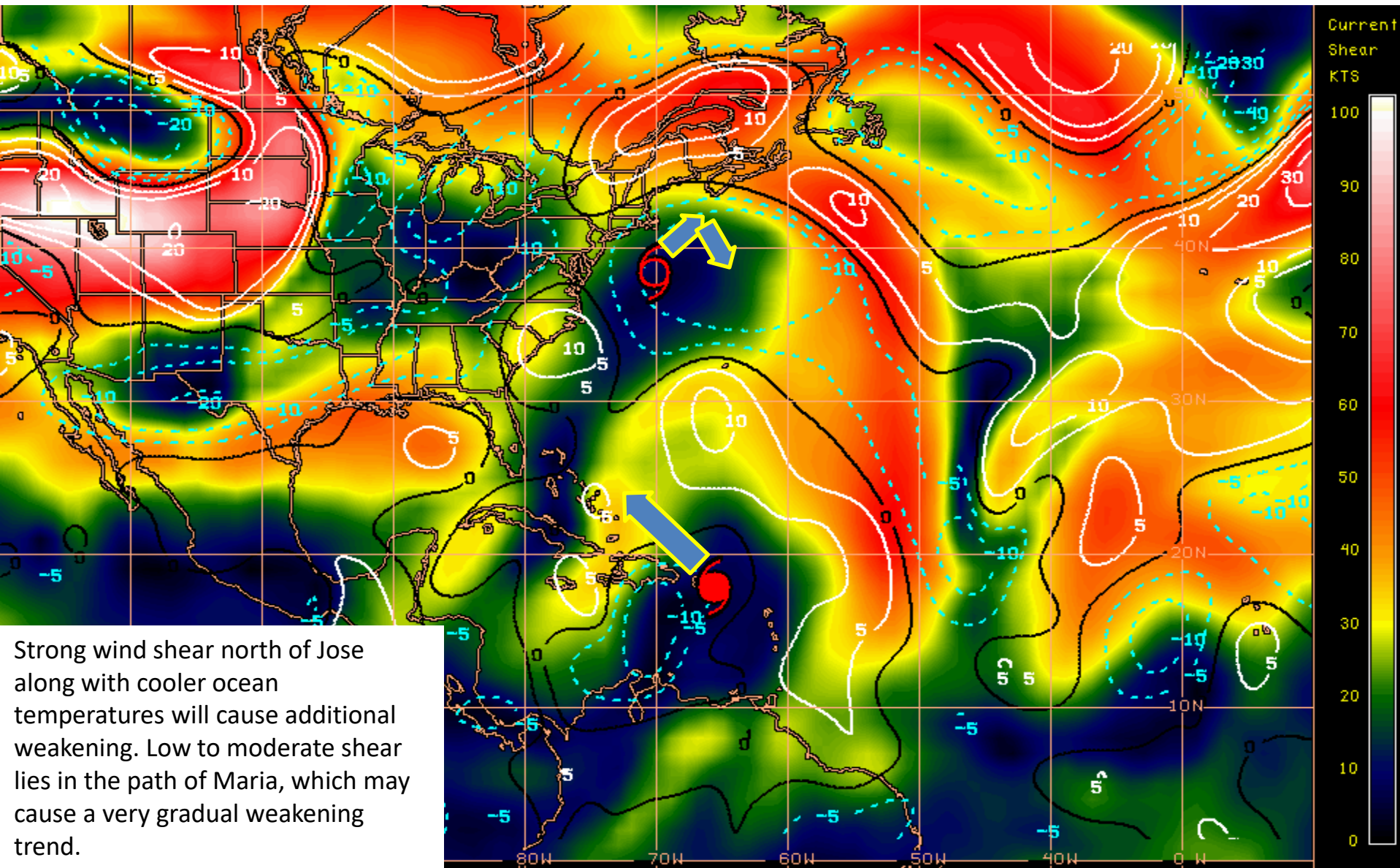




# Steering Currents



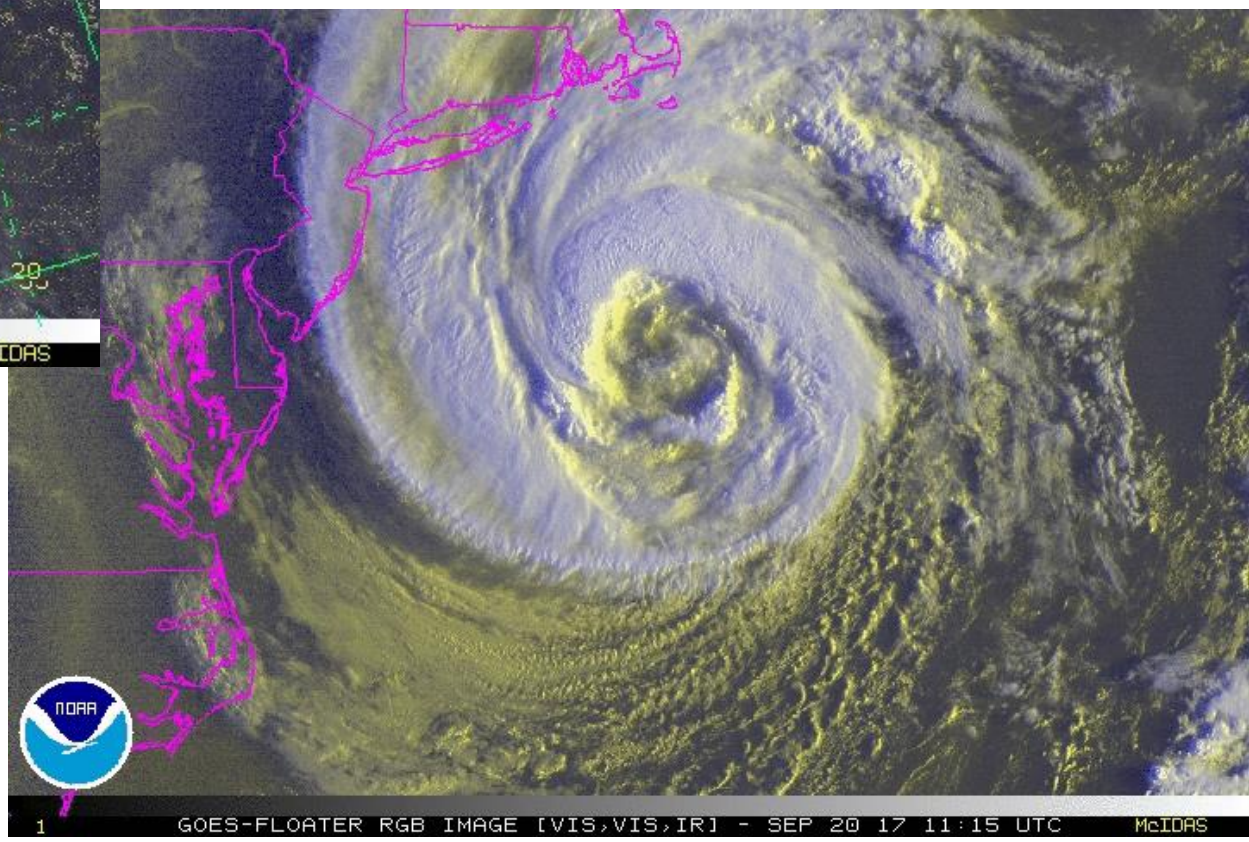
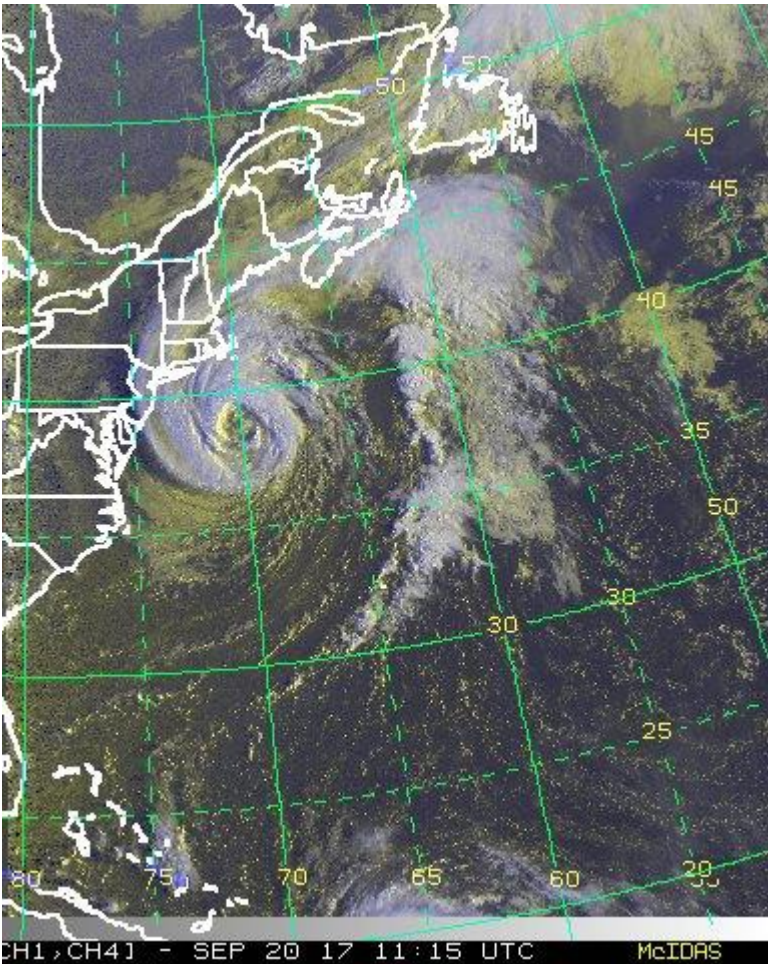
# Current Wind Shear (Shaded) and Shear Tendency (Lines)



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

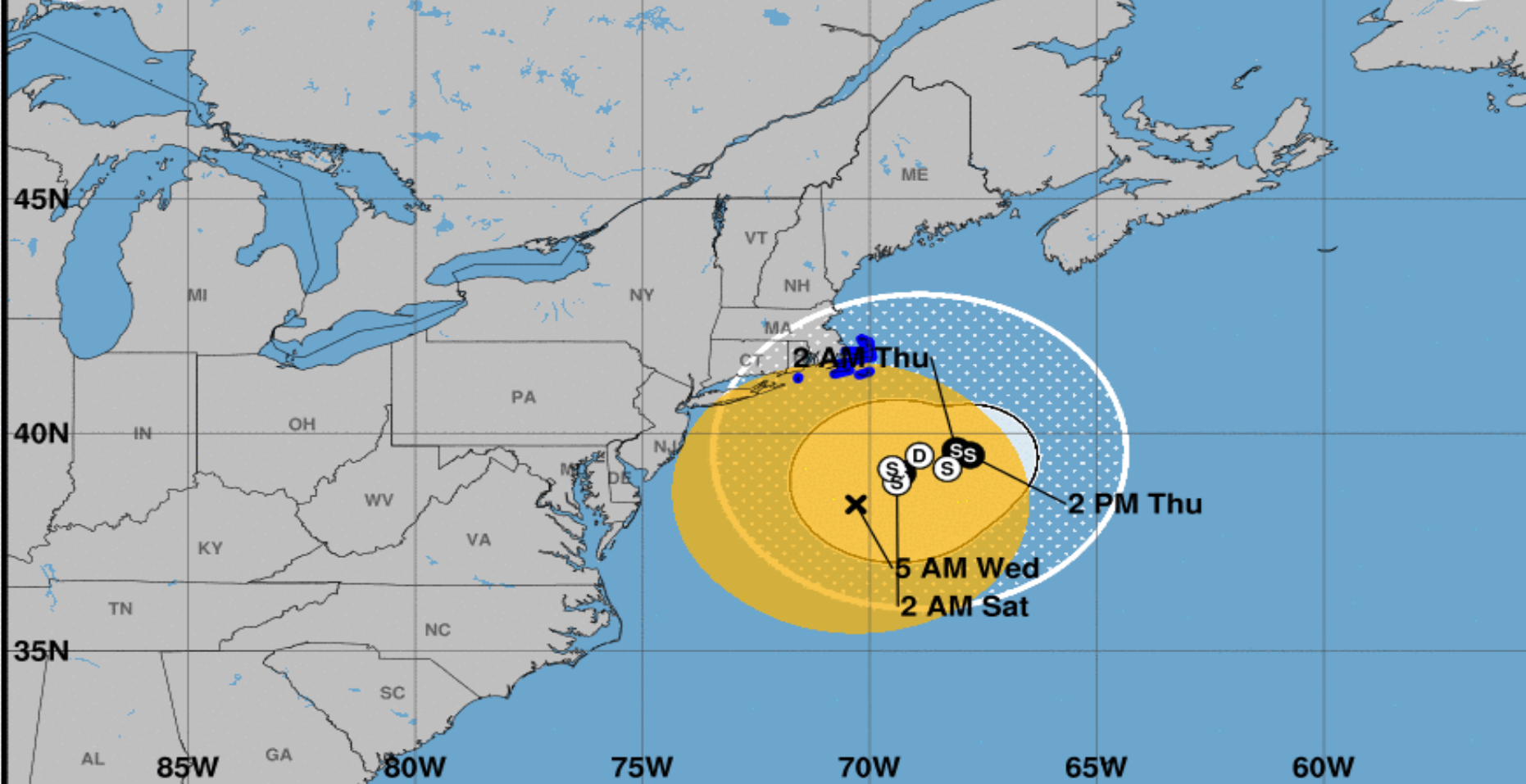


# T.S. Jose Satellite Image





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.



### Tropical Storm Jose

Wednesday September 20, 2017

5 AM EDT Advisory 60

NWS National Hurricane Center

### Current information: X

Center location 38.4 N 70.3 W

Maximum sustained wind 65 mph

Movement NE 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

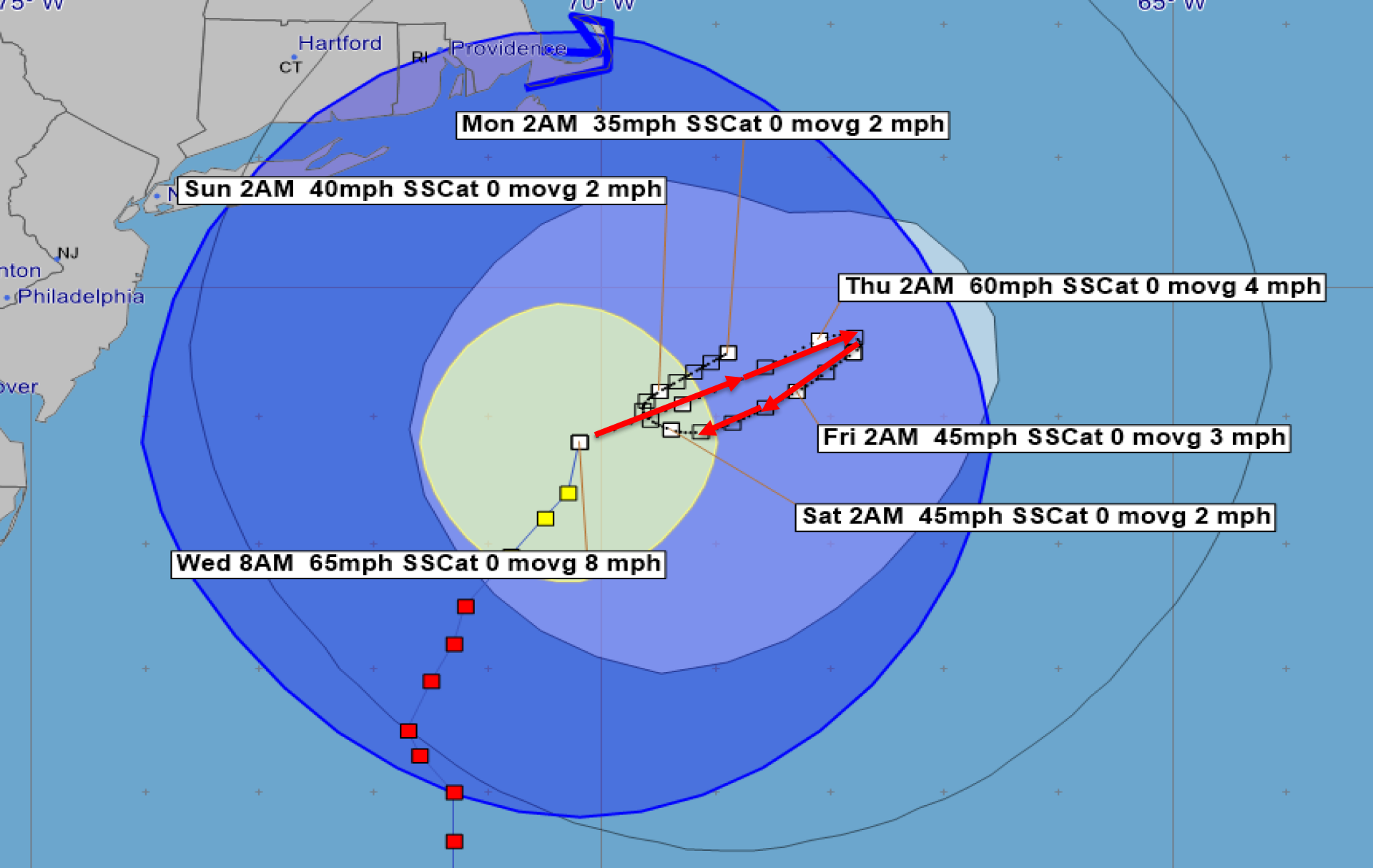
### Warnings:

Hurricane Trop Stm

### Current wind extent:

Hurricane Trop Stm





# **Tropical Storm Jose - Wednesday, September 20, 2017 8 AM EDT Advisory #60A**

Center Location: 38.8 N 70.2 W Maximum Sustained Winds: 65 mph Movement: 8 mph NE

□ 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

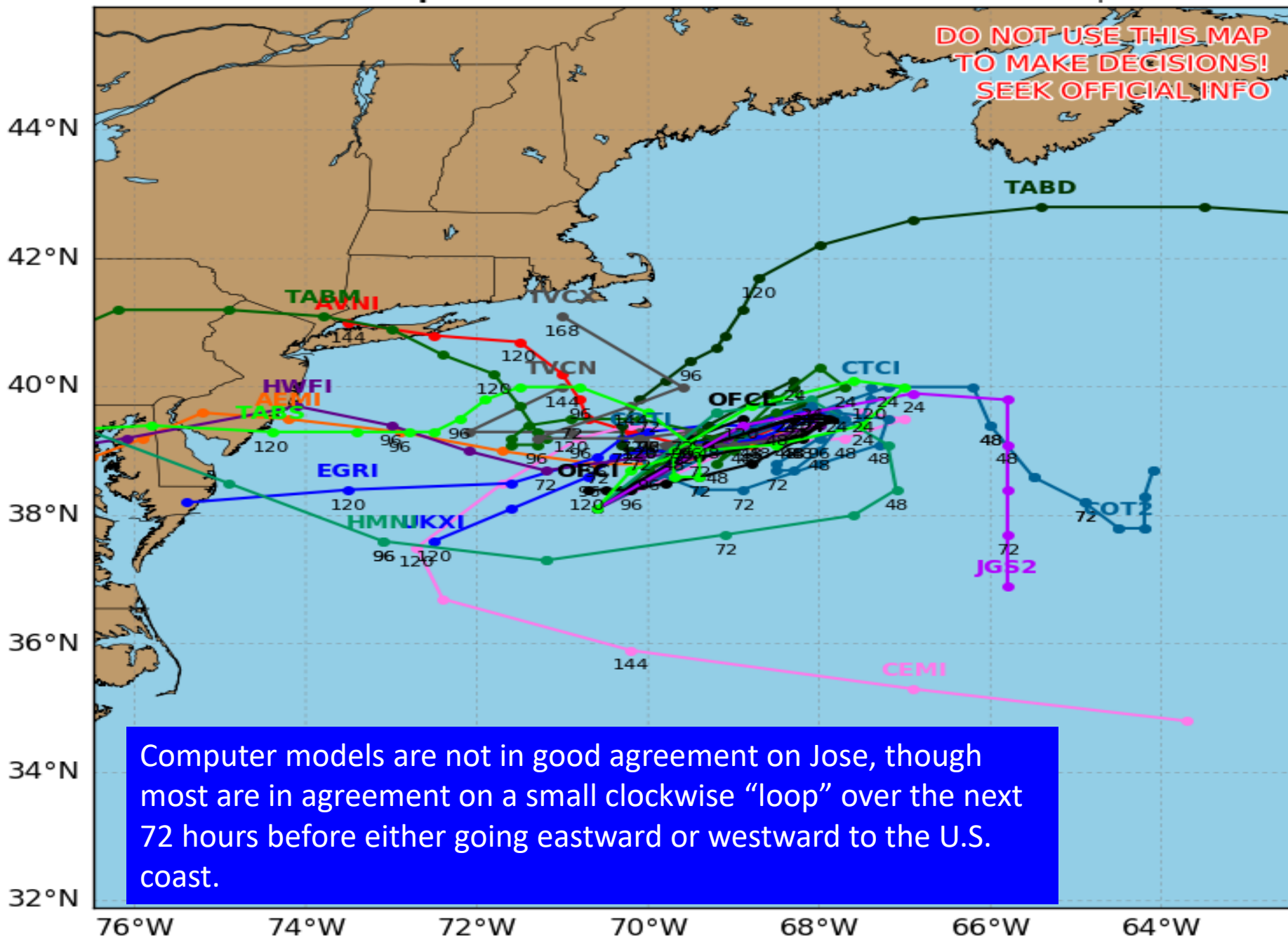
Sustained Wind Speeds: tropical storm  $\geq 34\text{kt}/39\text{mph}$ 
 strong tropical storm  $\geq 50\text{kt}/58\text{mph}$ 
 hurricane  $\geq 64\text{kt}/74\text{mph}$

# Tropical Storm JOSE Model Track Guidance

Initialized at 06z Sep 20 2017

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

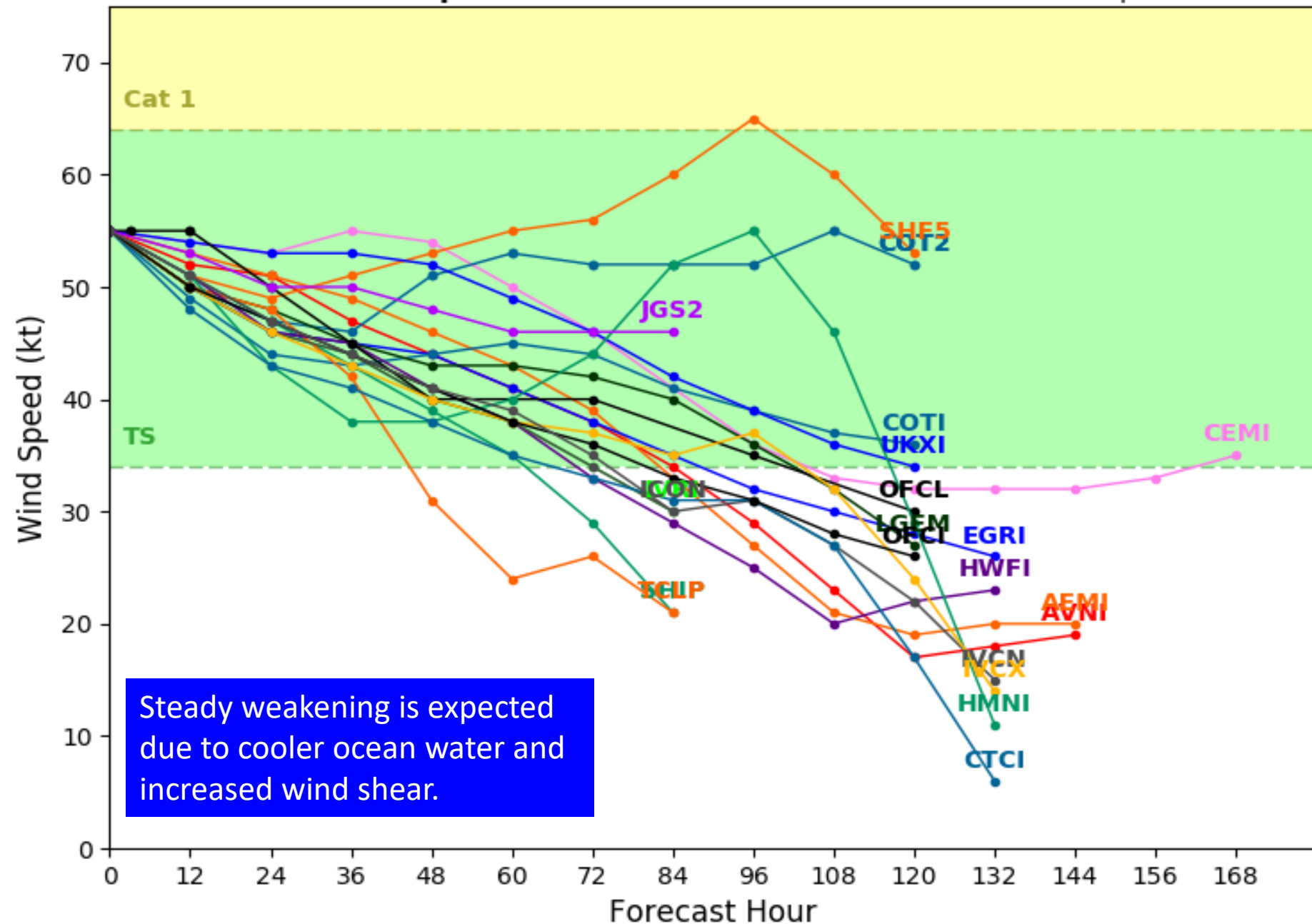
**DO NOT USE THIS MAP  
TO MAKE DECISIONS!  
SEEK OFFICIAL INFO**



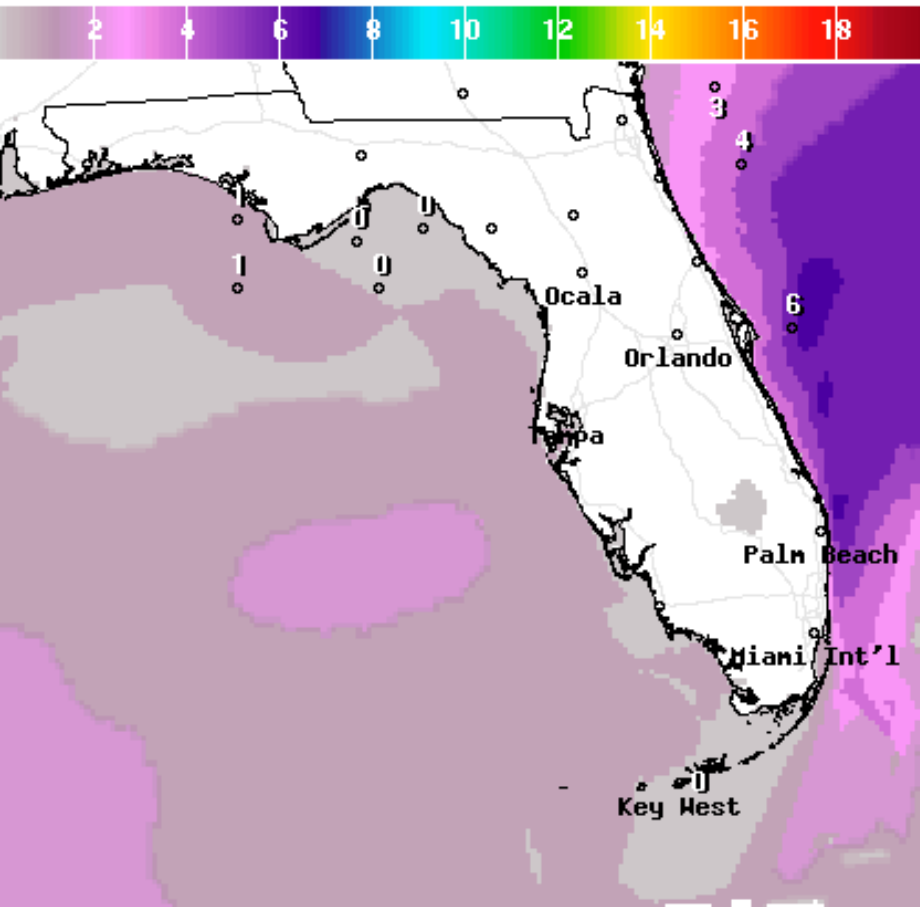
Computer models are not in good agreement on Jose, though most are in agreement on a small clockwise “loop” over the next 72 hours before either going eastward or westward to the U.S. coast.



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



# Wave Forecast for Today and Tonight



Wave Height(ft) Ending Wed Sep 20 2017 2PM EDT

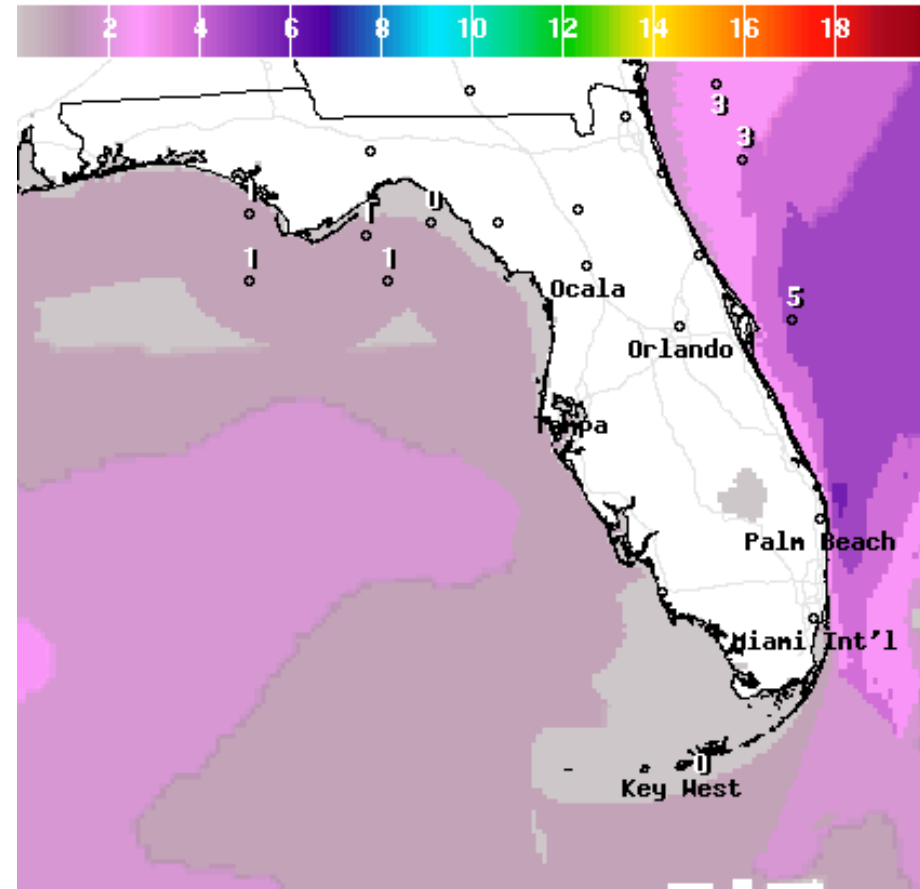
(Wed Sep 20 2017 18Z)



**National Digital Forecast Database**

11z issuance

Graphic created-Sep 20 7:29AM EDT



Wave Height(ft) Ending Thu Sep 21 2017 8AM EDT

(Thu Sep 21 2017 12Z)



**National Digital Forecast Database**

11z issuance

Graphic created-Sep 20 7:29AM EDT





# Hurricane Maria

5 AM EDT Wed Sep 20 2017

Position 17.9 N 65.6 W

Maximum Winds 155 mph

Gusts 190 mph

Movement NW at 10 mph

Minimum Pressure 917 mb (27.07 inches)

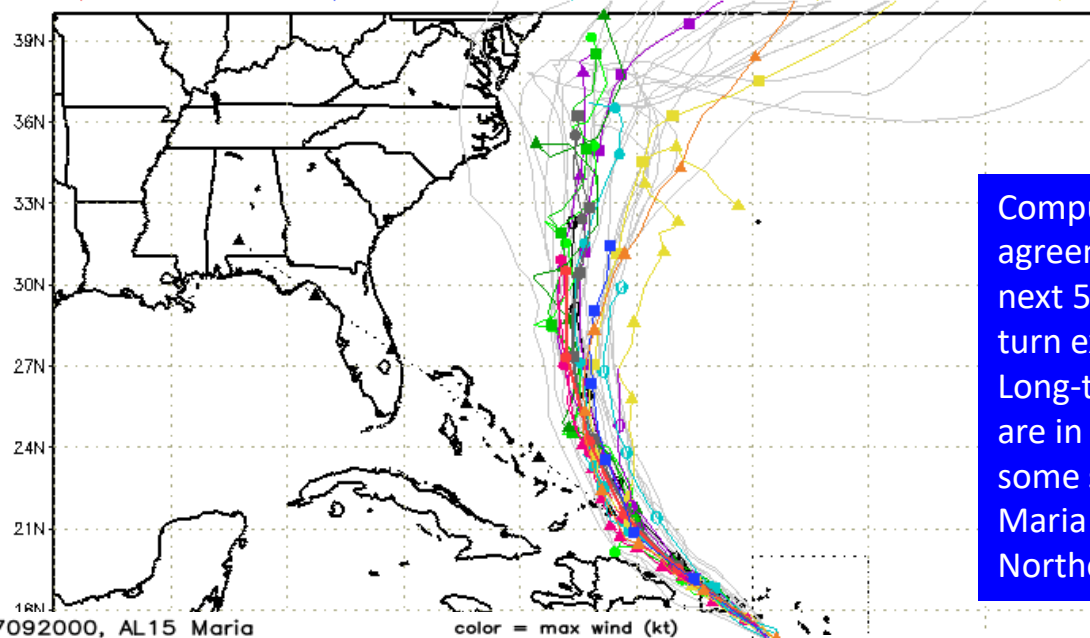
Blue Marble basemap imagery courtesy NASA

Satellite 11:37 AM UTC

7:37 AM EDT



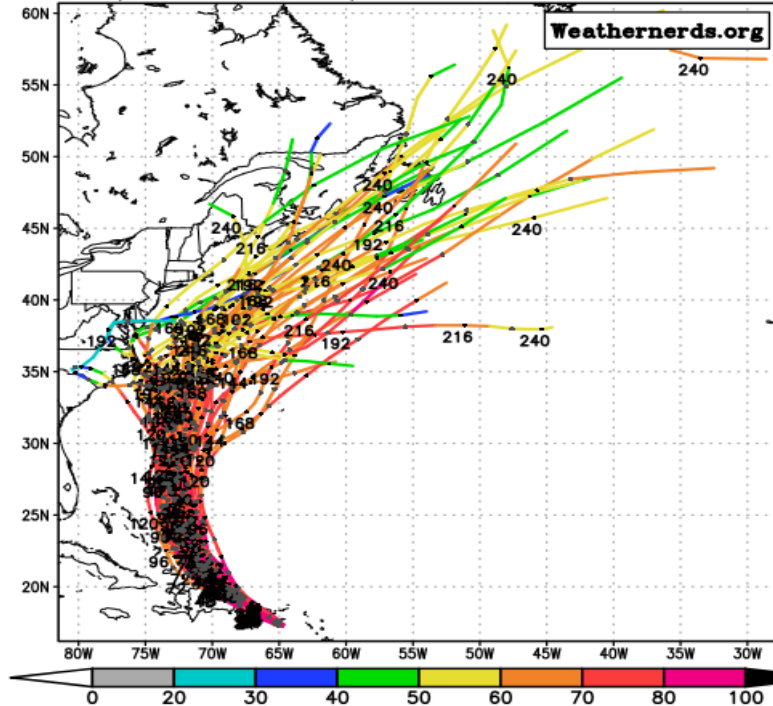
--▲-- XTRP 20/0600Z    ▲ TABD 20/0600Z    ▲ HMON 20/0000Z    ▲ AVNO 20/0000Z    ▲ ECMF 19/0000Z  
 --●-- CLP5 20/0600Z    ● TABM 20/0600Z    ● HWRF 20/0000Z    ● AEMN 20/0000Z    ● ECMN Not Avail  
 --■-- TVCN 20/0600Z    ■ TABS 20/0600Z    ■ NVGM 20/0000Z    ■ APxx 20/0000Z    ■ EExx Not Avail  
 --●-- NHC 20/0900Z    ● UKM 20/0000Z    ● COTC 20/0000Z    ● CMC 20/0000Z    ● GEMN 20/0000Z



Computer models in good agreement on track through the next 5 days, with a northward turn expected in about 24 hours. Long-term models beyond 5 days are in some disagreement and some suggest the center of Maria could come close to the Northeastern U.S. coast.

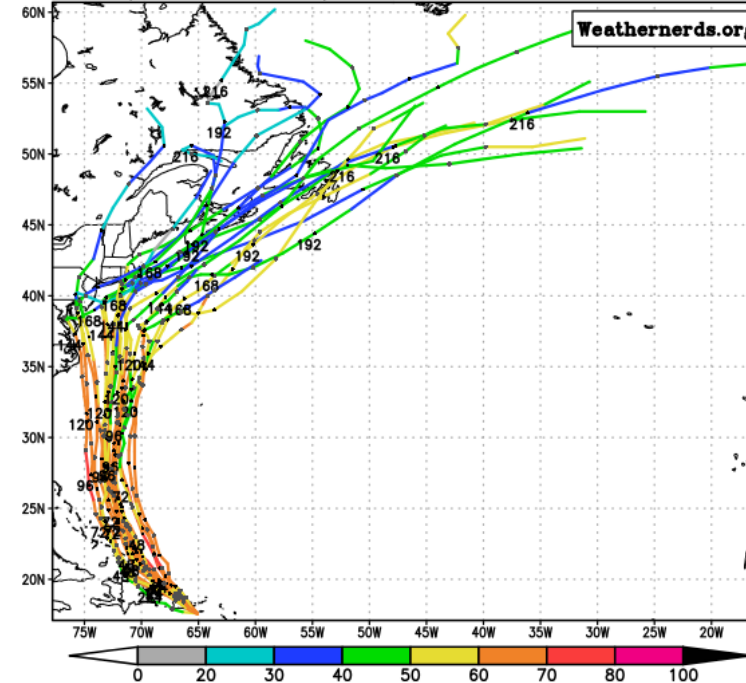
ECMWF Ensemble, init: 2017092000, AL15 Maria

color = max wind (kt)



GFS Ensemble, init: 2017092006, AL15 Maria

color = max wind (kt)



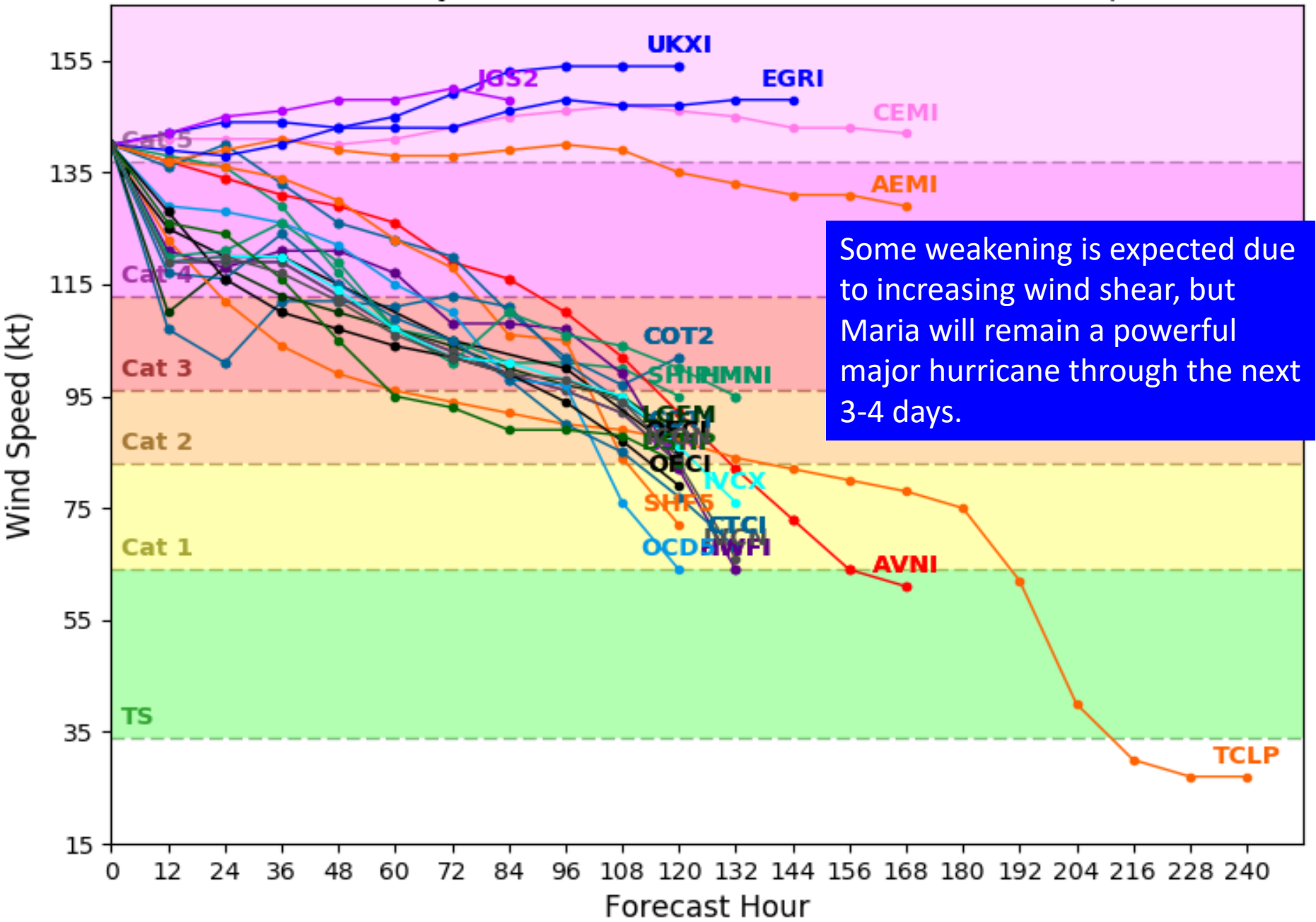
Statements  
discussions,  
the entire  
non/image:



# Hurricane MARIA Model Intensity Guidance

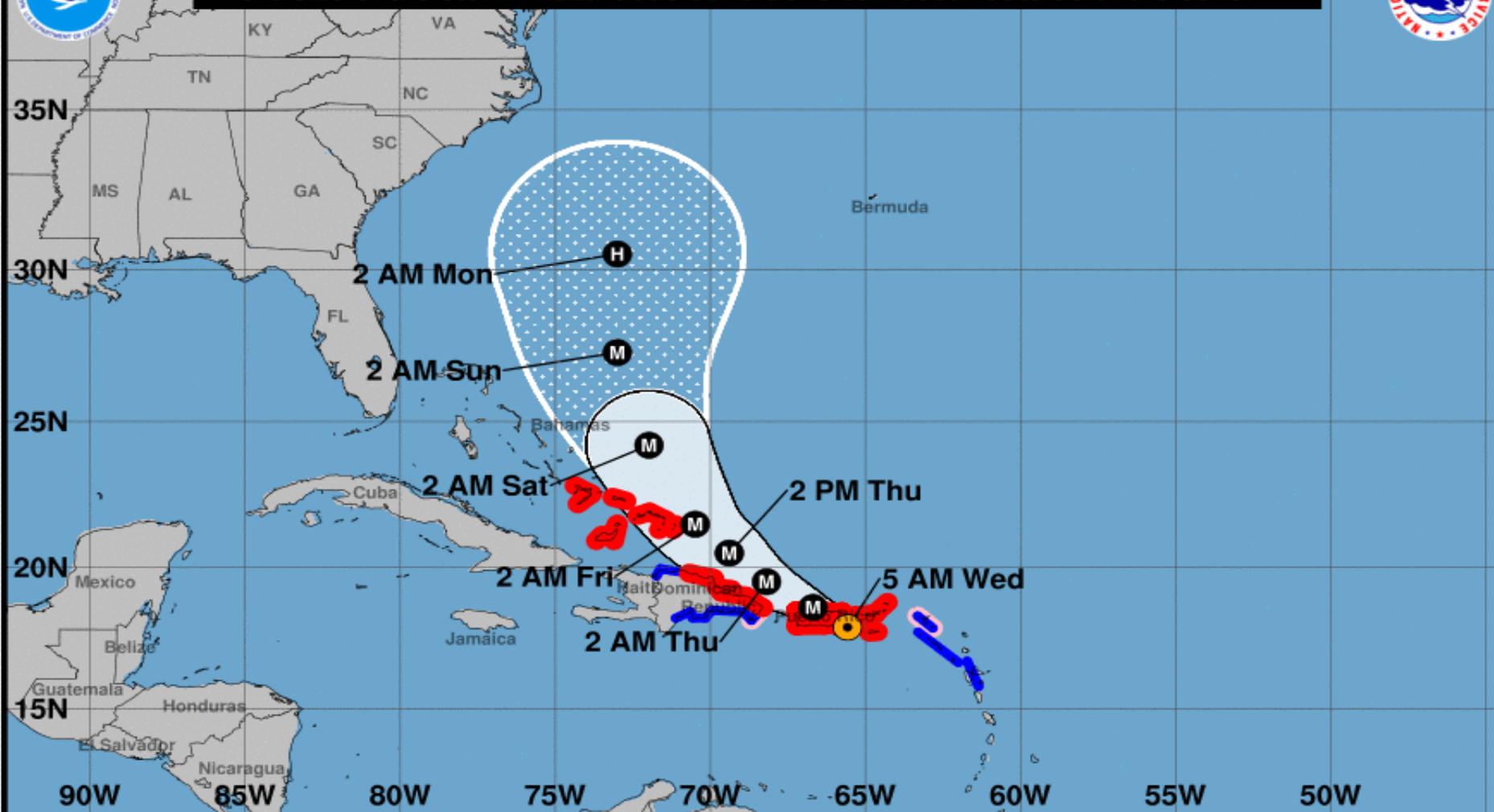
Initialized at 06z Sep 20 2017

Levi Cowan - tropicaltidbits.com





**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 Maria

Wednesday September 20, 2017

5 AM AST Advisory 17

NWS National Hurricane Center

## Current information:



Center location 17.9 N 65.6 W

Maximum sustained wind 155 mph

Movement NW at 10 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 Storm

## Warnings:



Hurricane

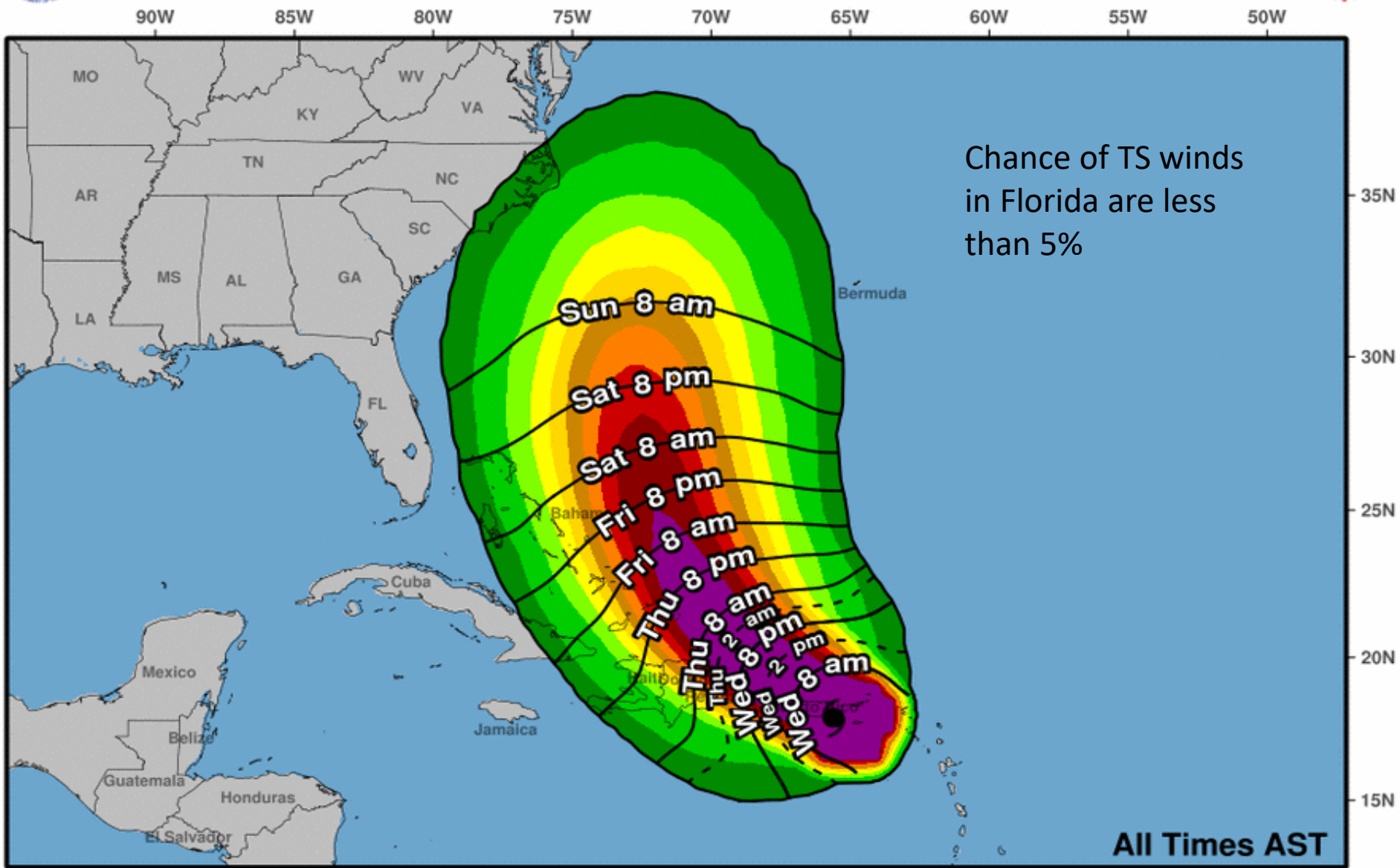


Trop Storm



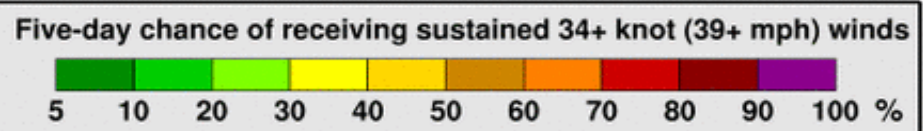


# Most Likely Arrival Time of Tropical-Storm-Force Winds

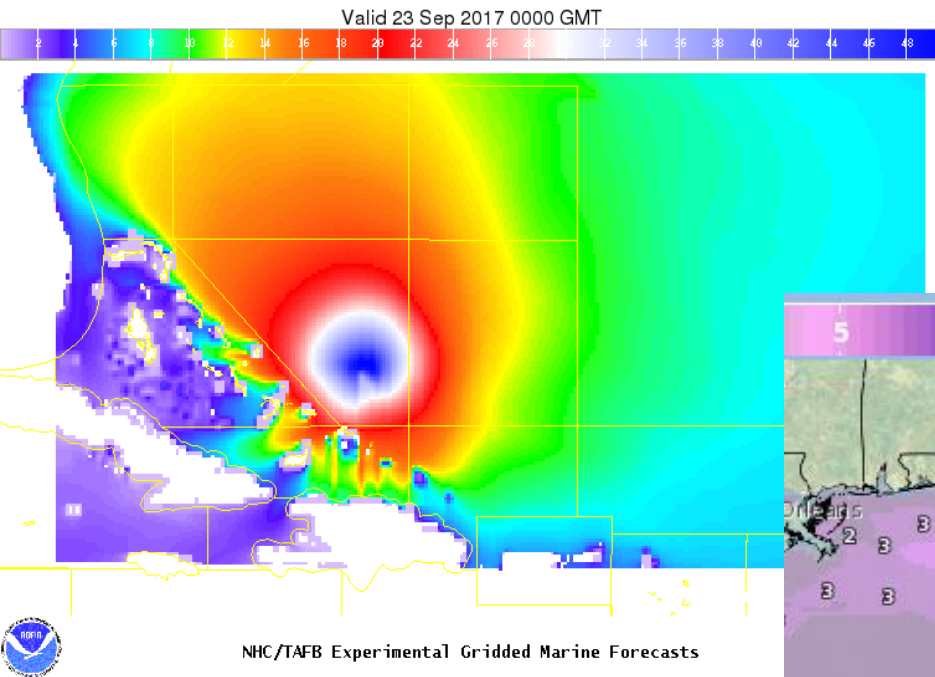


**Hurricane Maria**  
**Wed. Sep. 20, 2017 5 am AST**  
**Advisory 17**

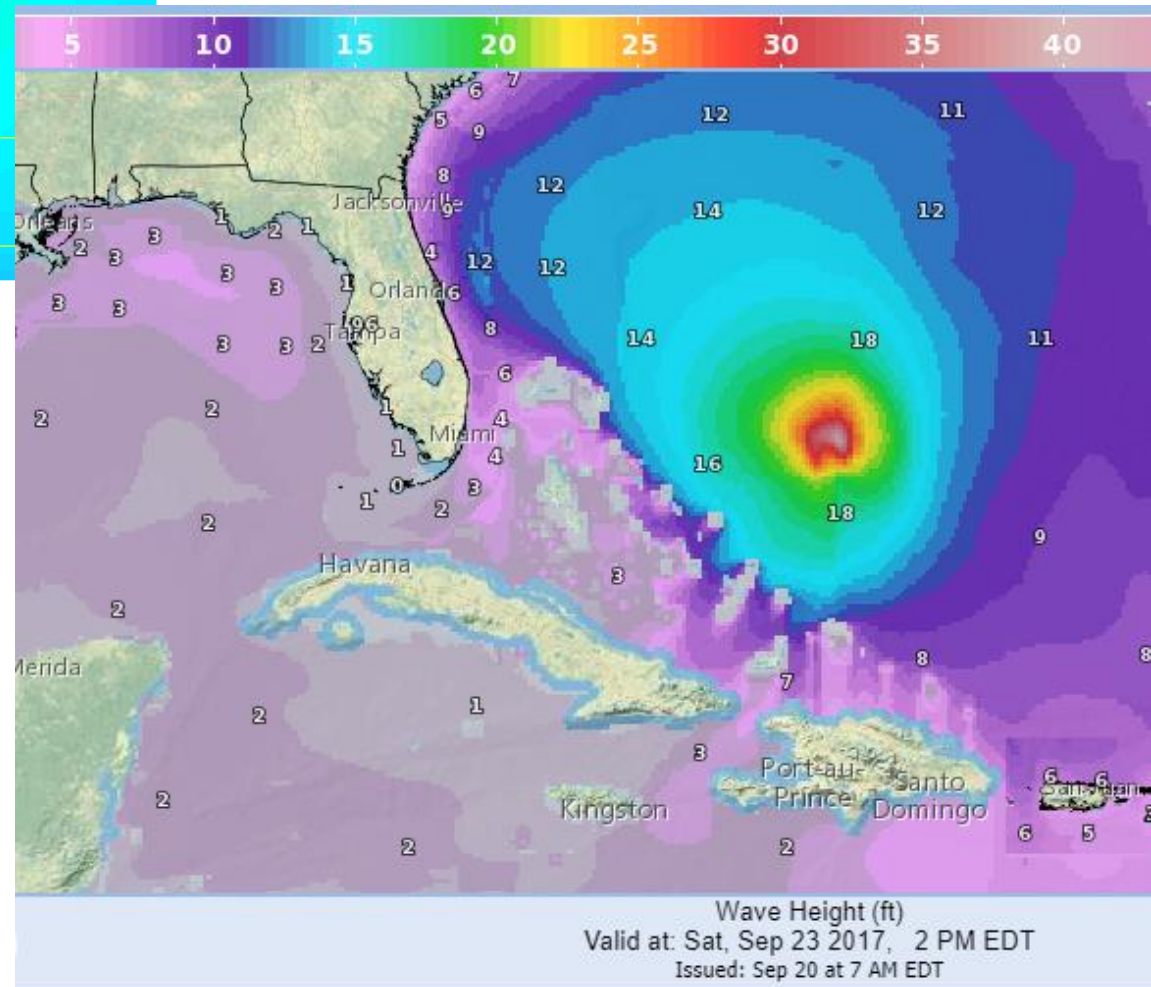
Storm Location &  
Wind Speed (knots)  
○ <34    ◐ 34-63    ● ≥64



# Forecast Wave Heights - Saturday

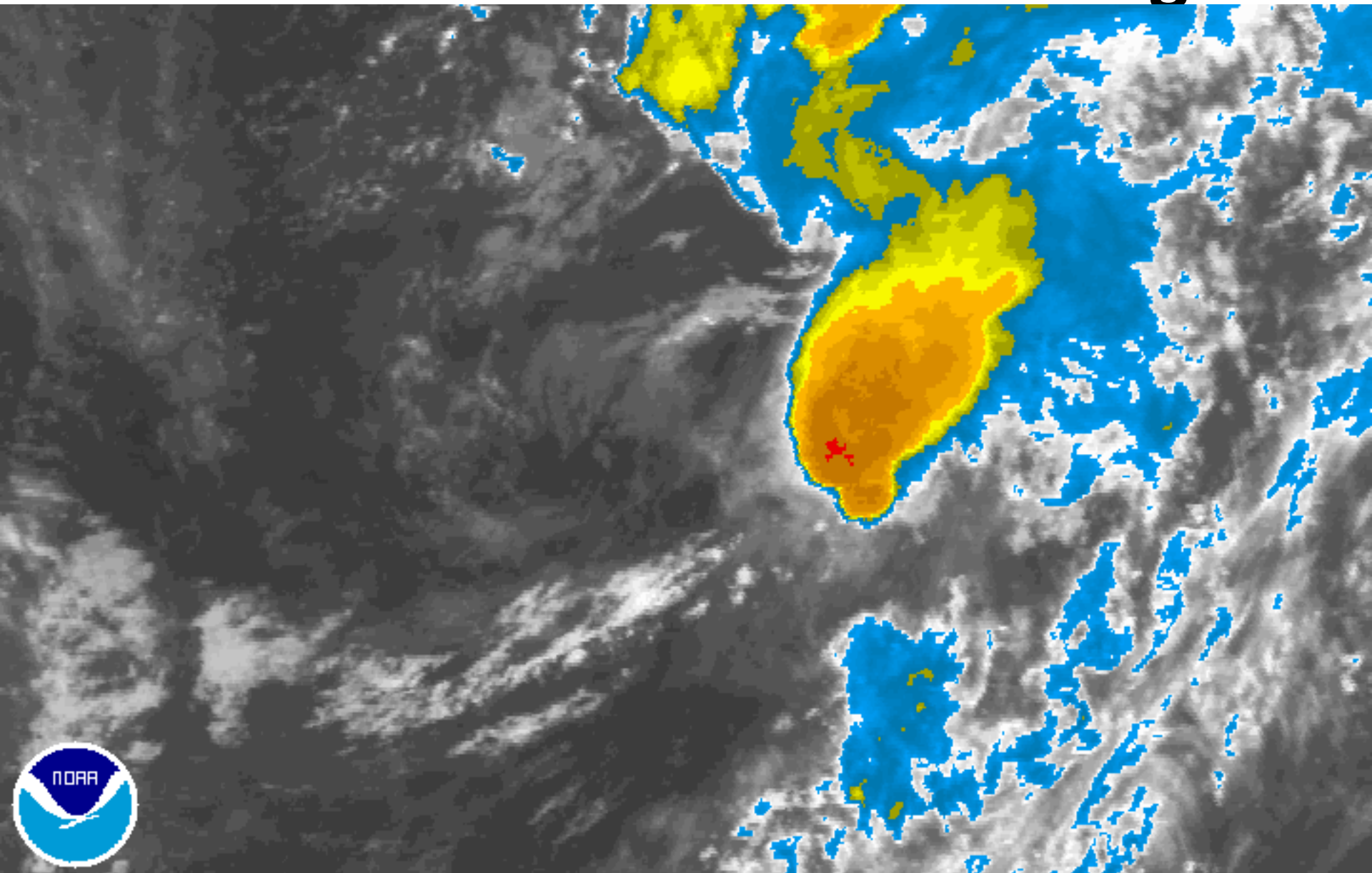


Large waves and ocean swells will impact the Florida coast this weekend as Maria passes to the east. This may result in additional coastal erosion, dangerous seas and strong and frequent rip currents.





# Remnants of Lee Satellite Image





# Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

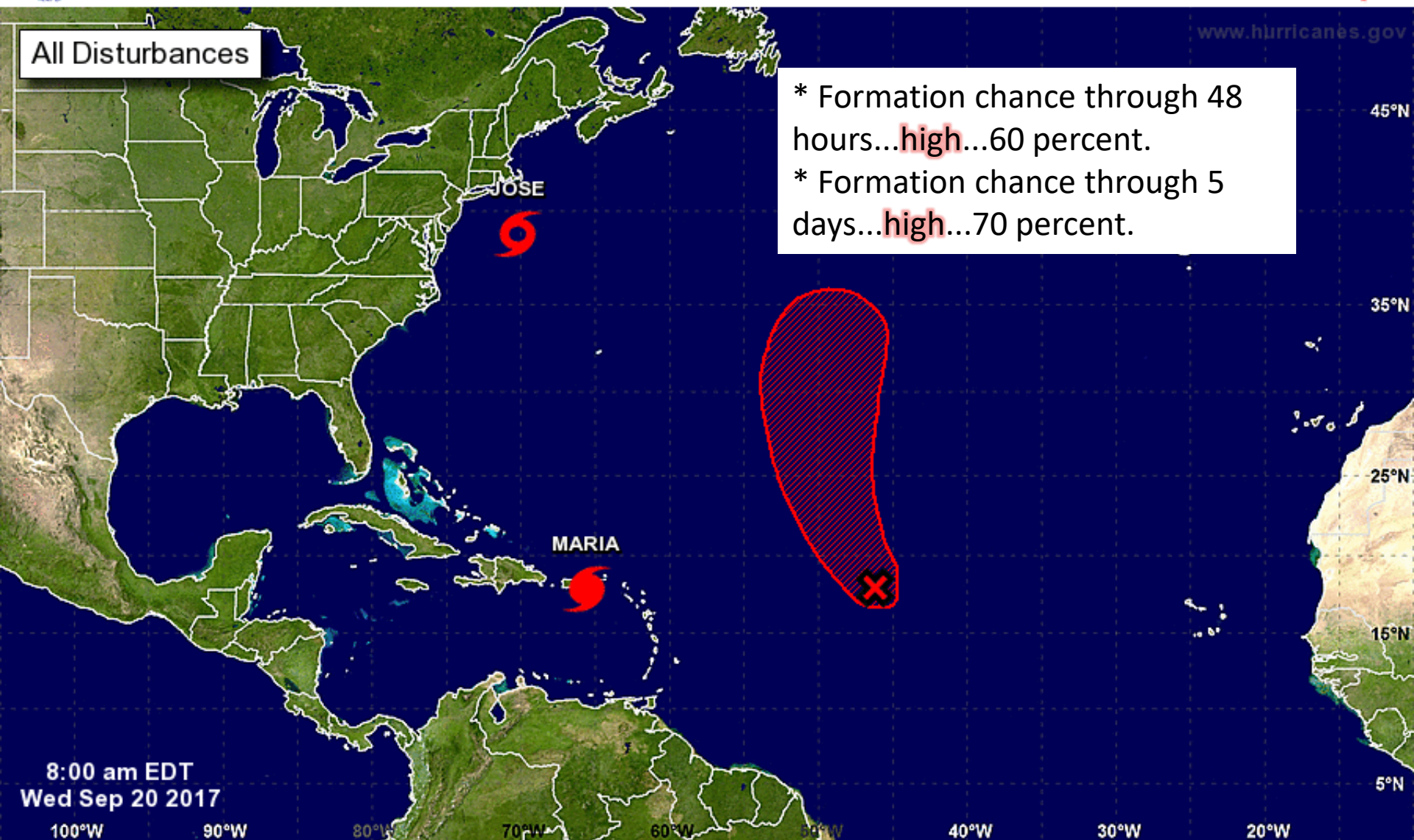


www.hurricanes.gov

All Disturbances

\* Formation chance through 48 hours...**high**...60 percent.

\* Formation chance through 5 days...**high**...70 percent.



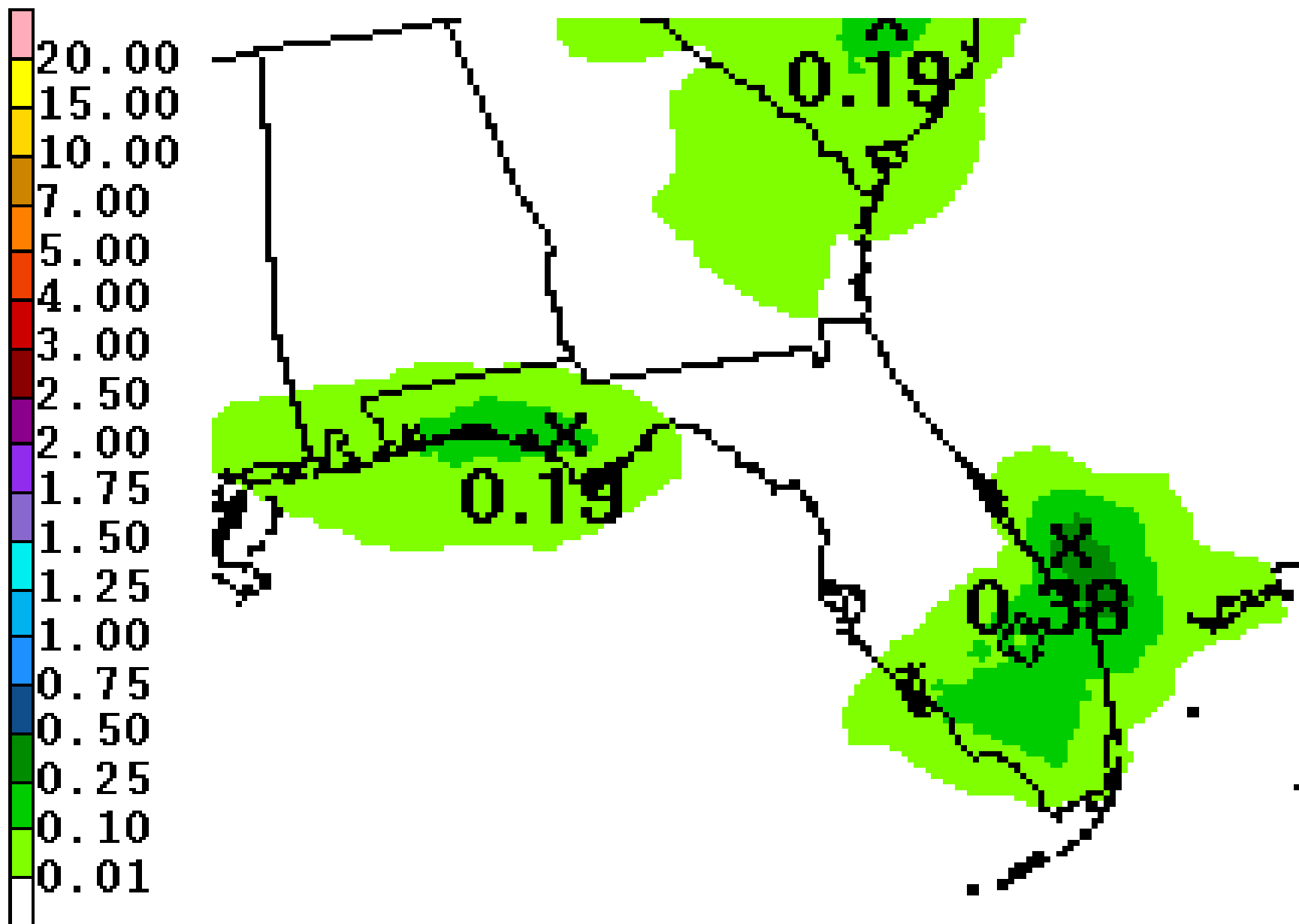
8:00 am EDT  
Wed Sep 20 2017

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

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

Post-Tropical Cyclone Remnants

# Forecast Rainfall, Next 24 Hours





Widespread river flooding continues  
across much of the Florida Peninsula

<http://www.weather.gov/serfc/>

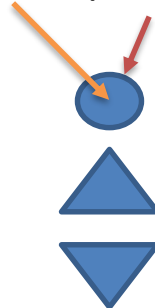
Rivers still rising 9/19/17

Withlacoochee (near crest)

Orange Creek

- No Flood
- Action Stage
- Minor Flood
- Moderate Flood
- Major Flood

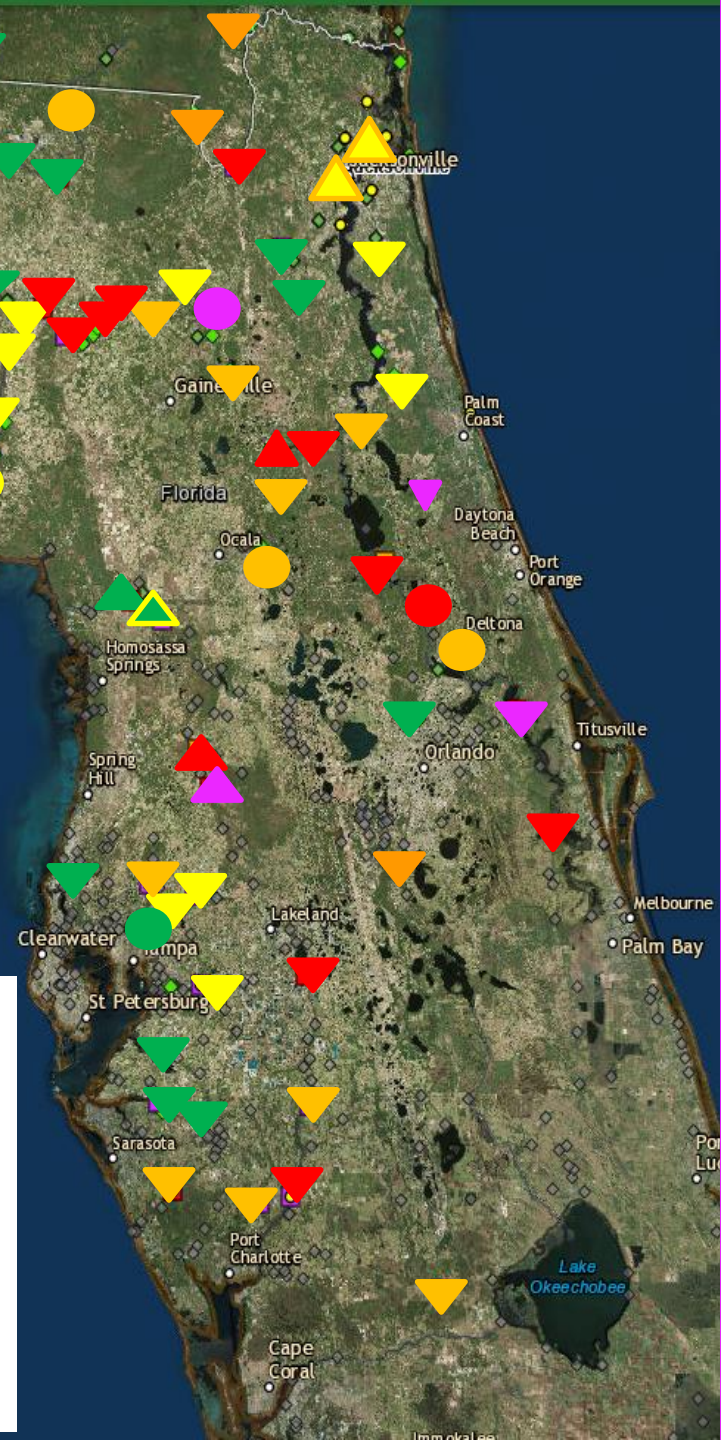
Current / Future Stage



Cresting/Steady

Rising

Falling



# Summary

- At 5am EDT Wednesday, Jose weakened to a tropical storm. At 8am EDT Wednesday, Tropical Storm Jose was located about 165 miles south of Nantucket, Massachusetts.
- Maximum sustained winds have decreased to near 65 mph. Additional weakening is expected over the next few days due to cooler ocean temperatures and increased wind shear.
- Jose is moving toward the northeast near 8 mph, and this motion should continue today with a decrease in forward speed.
- On Thursday, Jose is forecast to begin a southwest motion as it transitions to a post-tropical storm.
- At 6:15am EDT Wednesday, Hurricane Maria made landfall near Yabucoa, Puerto Rico with maximum winds near 155mph.
- At 8am EDT Wednesday, the center of Hurricane Maria was located over eastern Puerto Rico about 15 miles southwest of San Juan.
- Maximum sustained winds are now near 150 mph, making it a Category 4 on the Saffir-Simpson Hurricane Wind Scale.
- Slow and gradual weakening is possible, but Maria is forecast to remain an extremely dangerous major hurricane for the next 3-4 days.
- Maria is moving towards the northeast near 10mph, and this motion should continue for the next 24 hours, followed by a turn to the north as it approaches the southeastern Bahamas.
- The center of Maria should continue north through early next week, moving east of Florida.
- Showers and thunderstorms associated with the remnants of Lee have increased overnight.
- Although environmental conditions are only marginally favorable for development, only a small increase in the overall organization of the system would result in the regeneration of Lee.
- The National Hurricane Center has placed a 70% chance of Lee redeveloping into a depression or storm within the next few days as it moves northward in the open central Atlantic.

# Florida Outlook

- Extensive river flooding will continue across the Peninsula for several days to weeks.
- A **Coastal Flood Advisory** remains in effect for the St. Johns and its tributaries through Wednesday night.
- Lingering waves and ocean swells from Jose will keep the rip current risk at moderate to high levels along much of the Florida East Coast.
- Florida is outside of the 5 day cone of error for Hurricane Maria and the chances of tropical storm conditions in Florida are less than 5%.
- Even if Maria passes well to the east of Florida, indirect impacts in the form of increased waves and ocean swells are expected along the Florida East Coast this weekend and early next week.
- This will result in additional coastal erosion, dangerous seas and a high rip current risk for much of the Florida East Coast.

Another briefing packet will be issued on Tuesday 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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