



# TROPICAL UPDATE

5 PM EDT

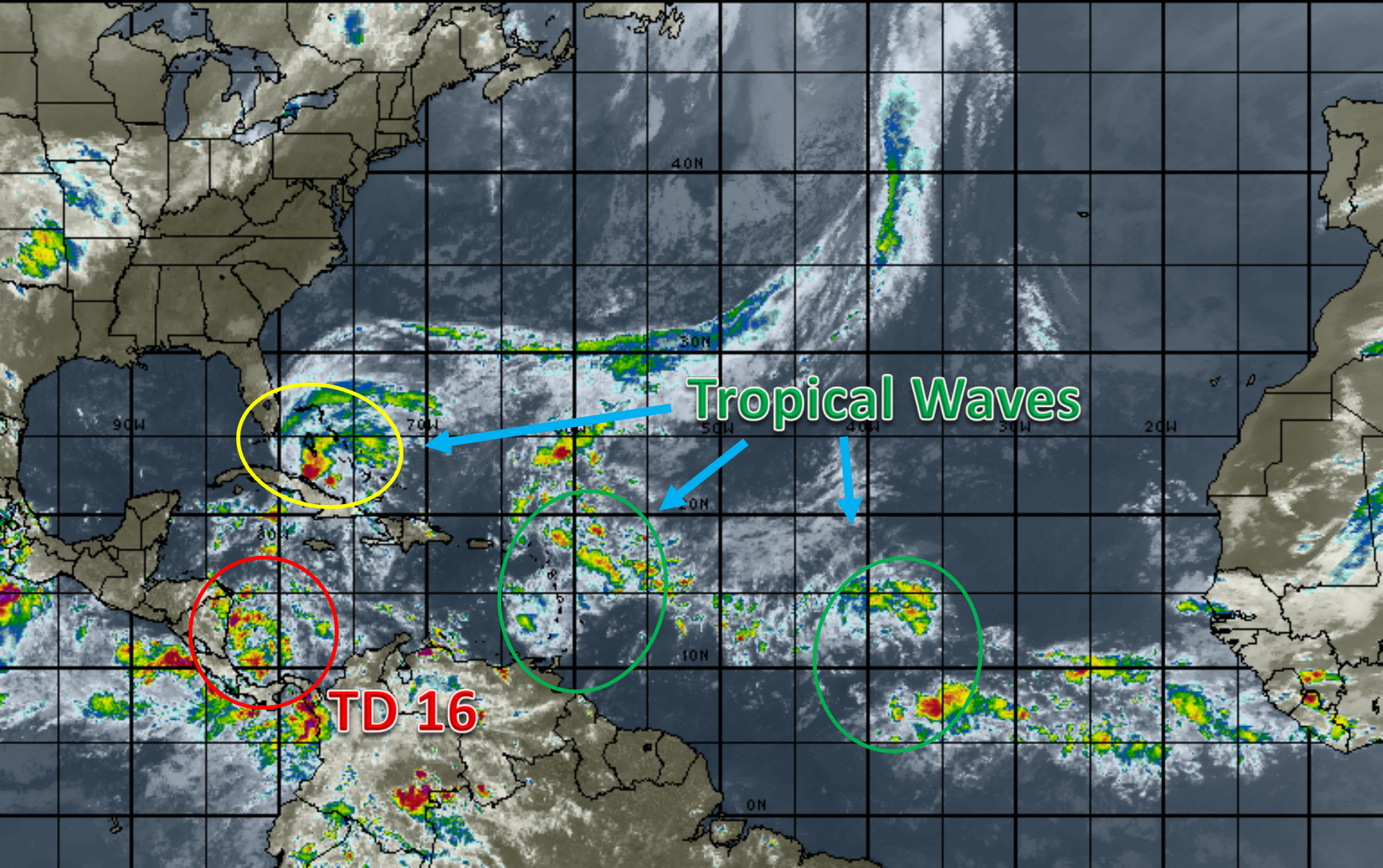
Wednesday, October 4, 2017

Tropical Depression 16 & Bahamas  
Disturbance (near 0%)

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

18:00 04-OCT-2017 GMT Copyright © 1998-2017 WSI Corporation <http://www.wsi.com>





# Five-Day Graphical Tropical Weather Outlook

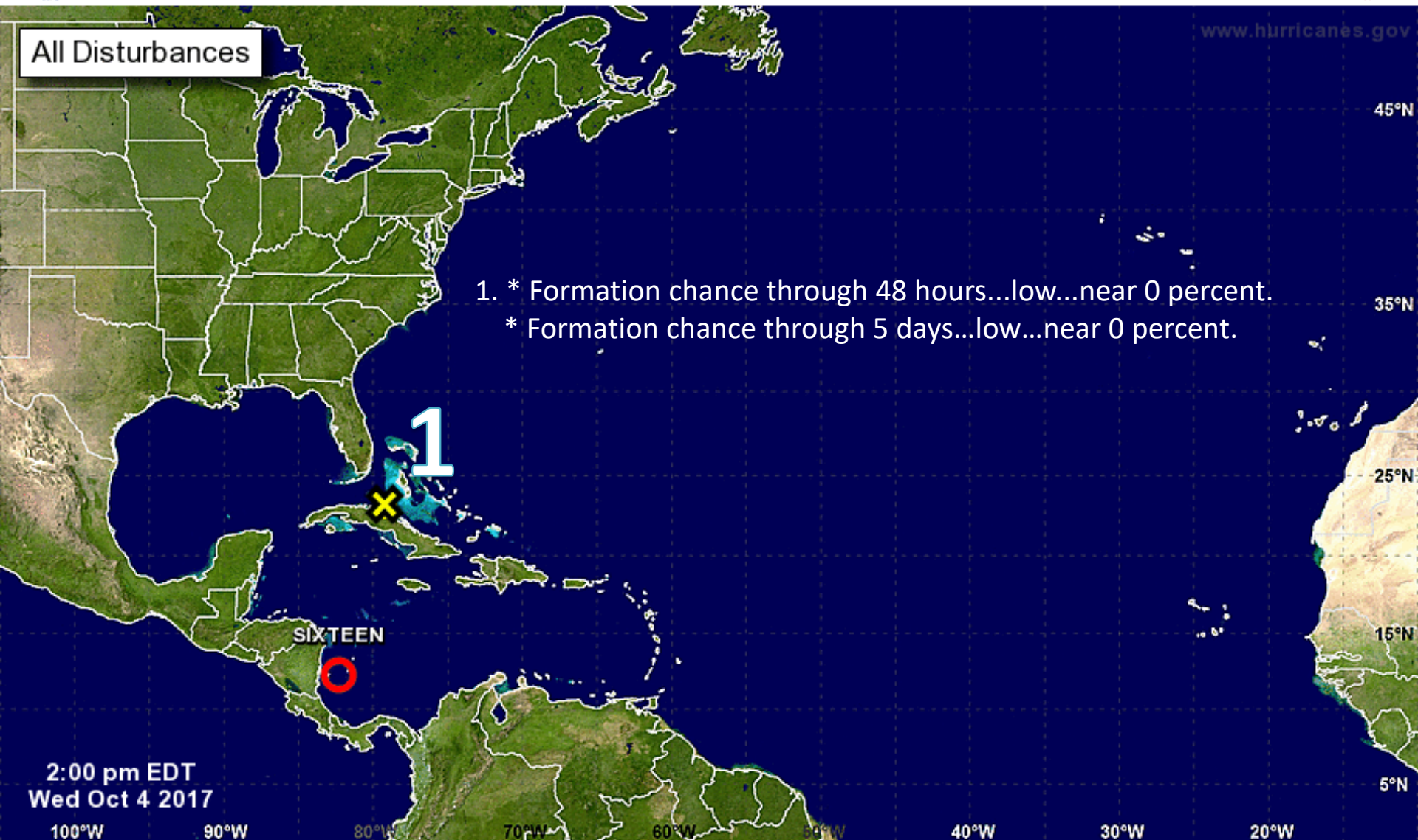
National Hurricane Center Miami, Florida



www.hurricanes.gov

All Disturbances

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



2:00 pm EDT  
Wed Oct 4 2017

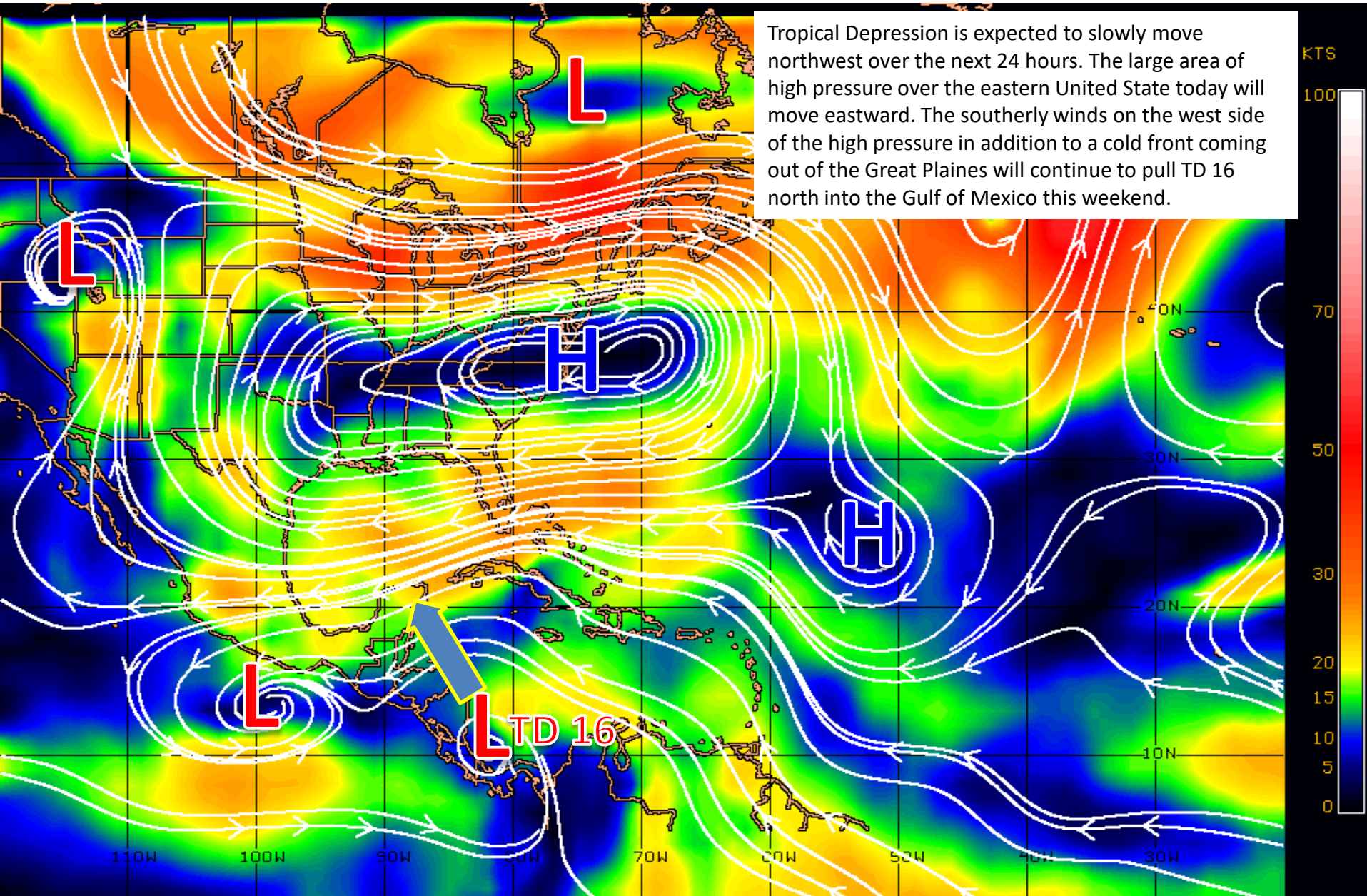
Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%

Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane

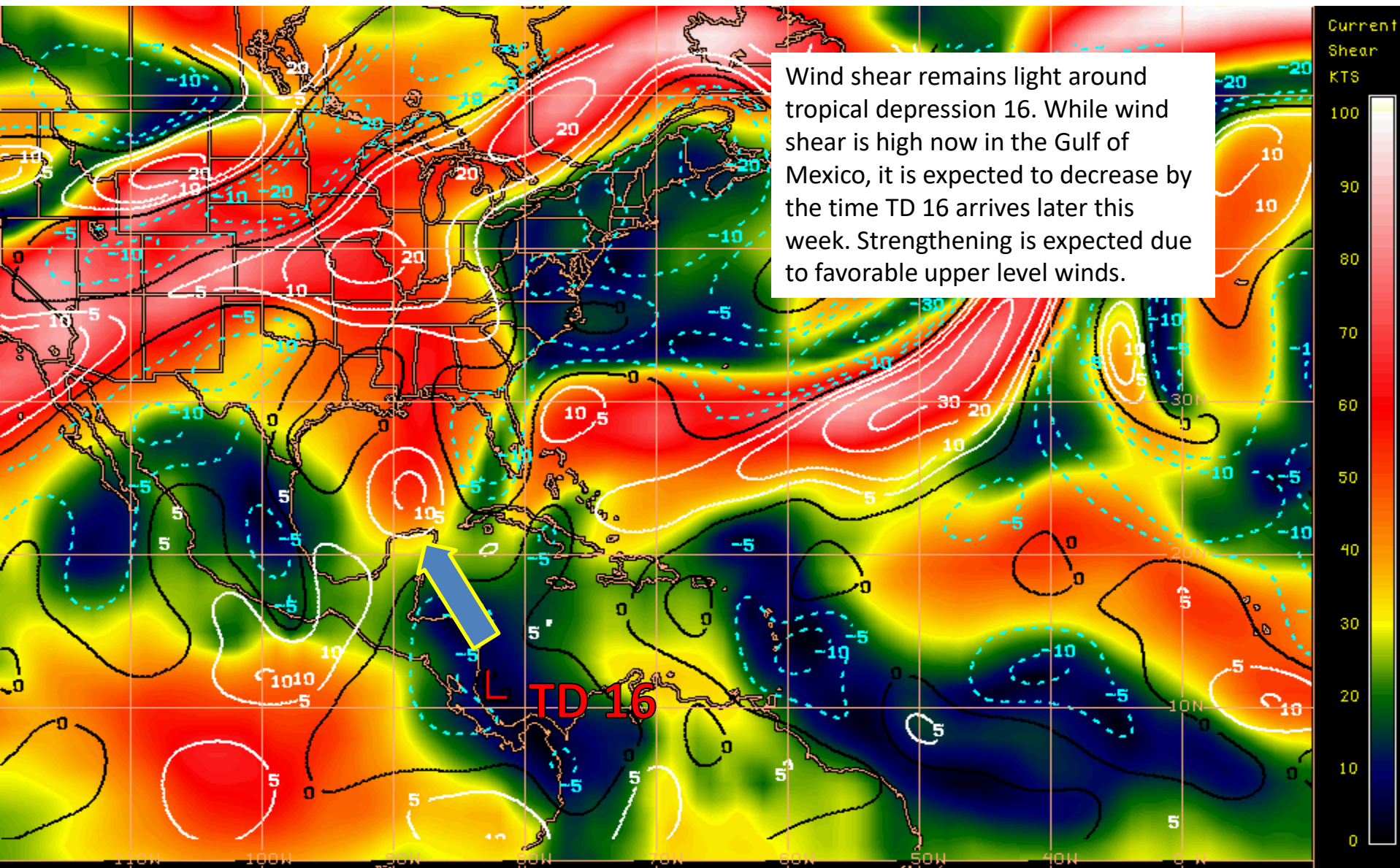
Post-Tropical Cyclone Remnants

# Steering Currents

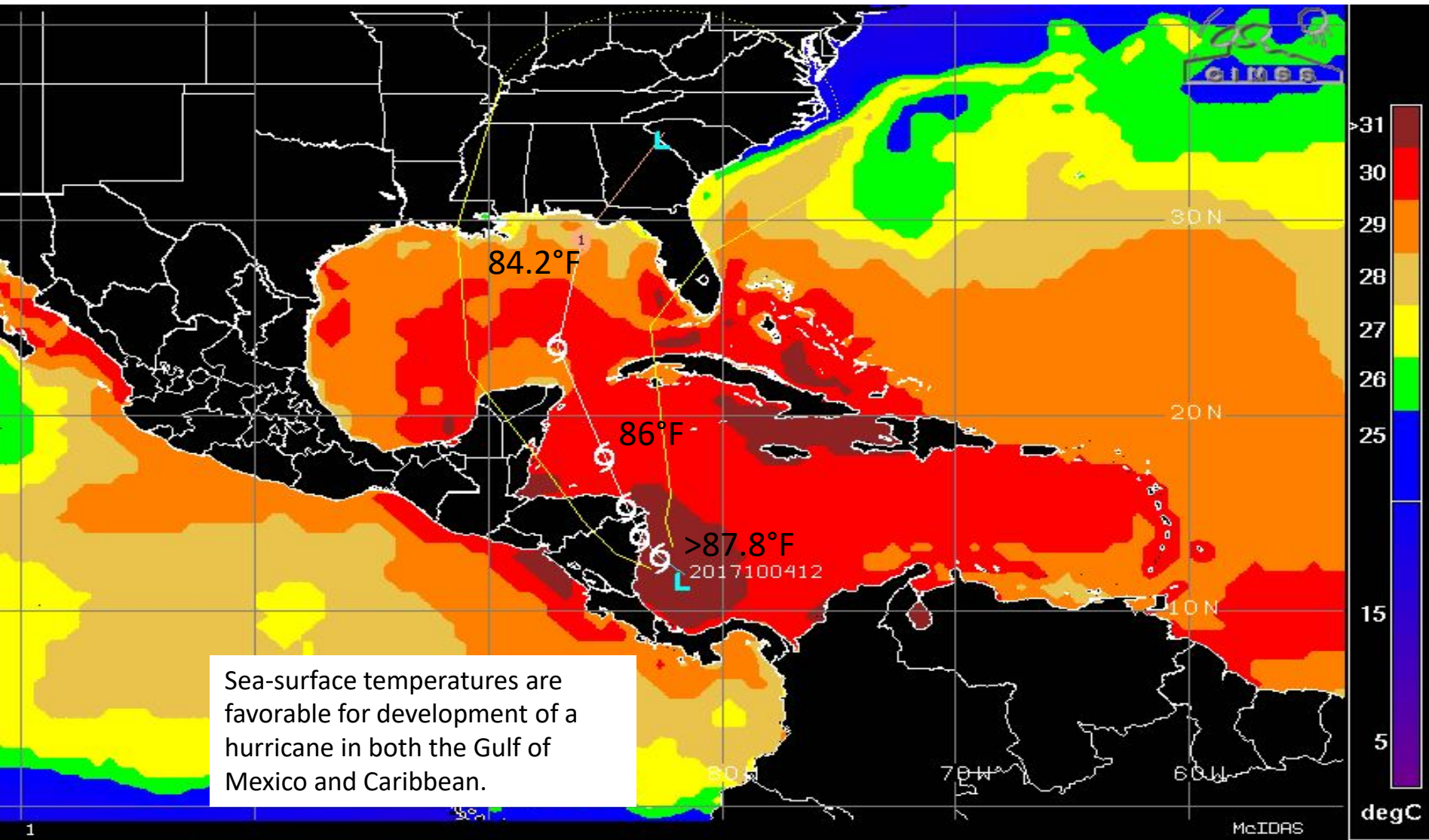
Tropical Depression is expected to slowly move northwest over the next 24 hours. The large area of high pressure over the eastern United State today will move eastward. The southerly winds on the west side of the high pressure in addition to a cold front coming out of the Great Plains will continue to pull TD 16 north into the Gulf of Mexico this weekend.



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



# Sea Surface Temperatures



- |  |               |  |                                |
|--|---------------|--|--------------------------------|
|  | LDN/NAVE      |  | <b>I</b> - Invest Area         |
|  | Tropical Depr |  | <b>L</b> - Tropical Depression |
|  | Tropical Strm |  | <b>S</b> - Tropical Storm      |
|  | Category 1    |  | <b>H</b> - Hurricane/Typhoon   |
|  | Category 2    |  | (w/ category)                  |
|  | Category 3    |  |                                |
|  | Category 4    |  |                                |
|  | Category 5    |  |                                |

McIDAS

degC

# Tropical Depression Sixteen

11 AM EDT Wed Oct 04 2017

Position 12.2 N 81.9 W

Maximum Winds 35 mph

Gusts 45 mph

Movement NW at 6 mph

Minimum Pressure 1005 mb (29.67 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 7:27 PM UTC

3:27 PM EDT

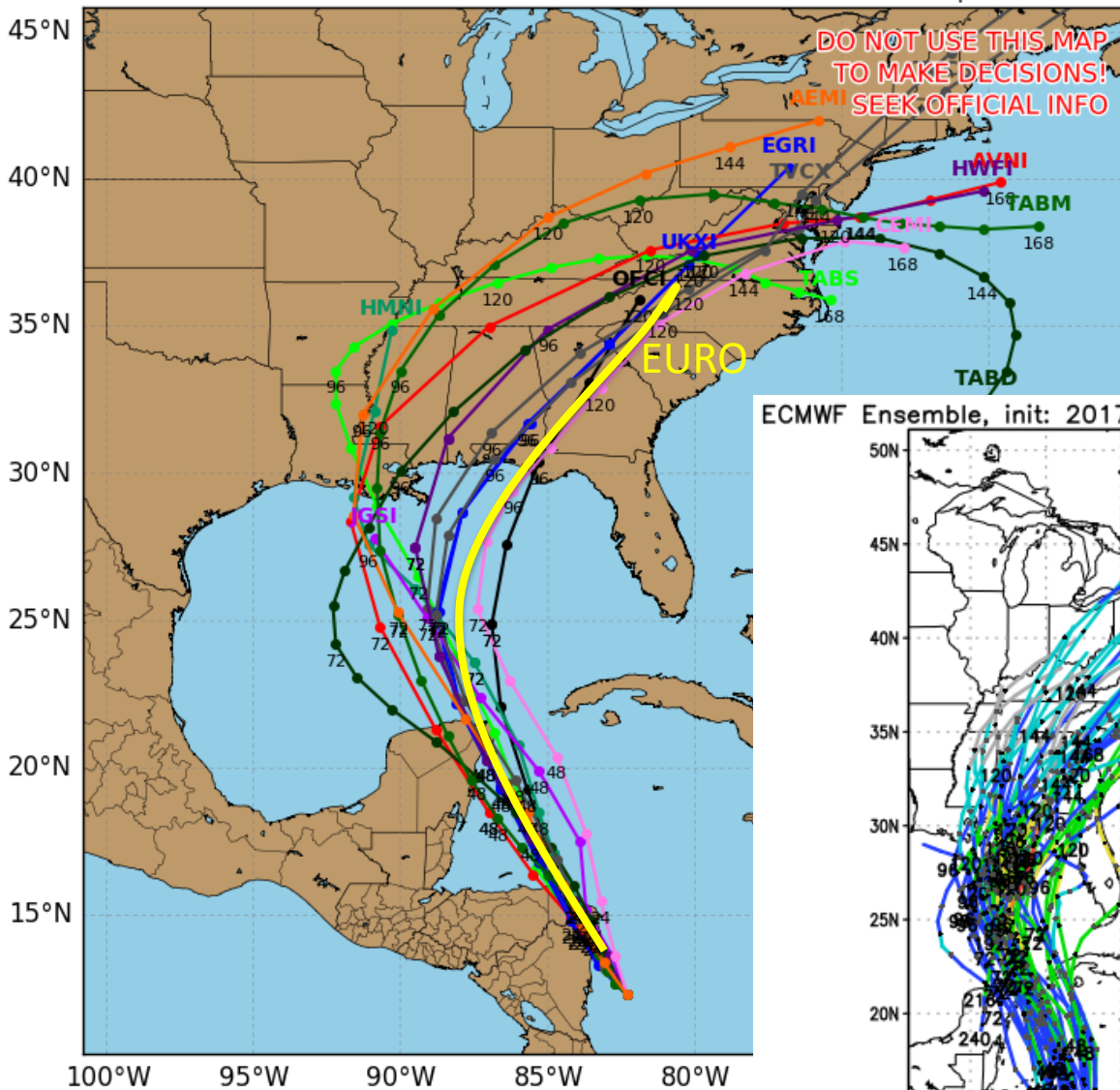


# Tropical Depression 16L Model Track Guidance

Initialized at 18z Oct 04 2017

Levi Cowan - tropicaltidbits.com

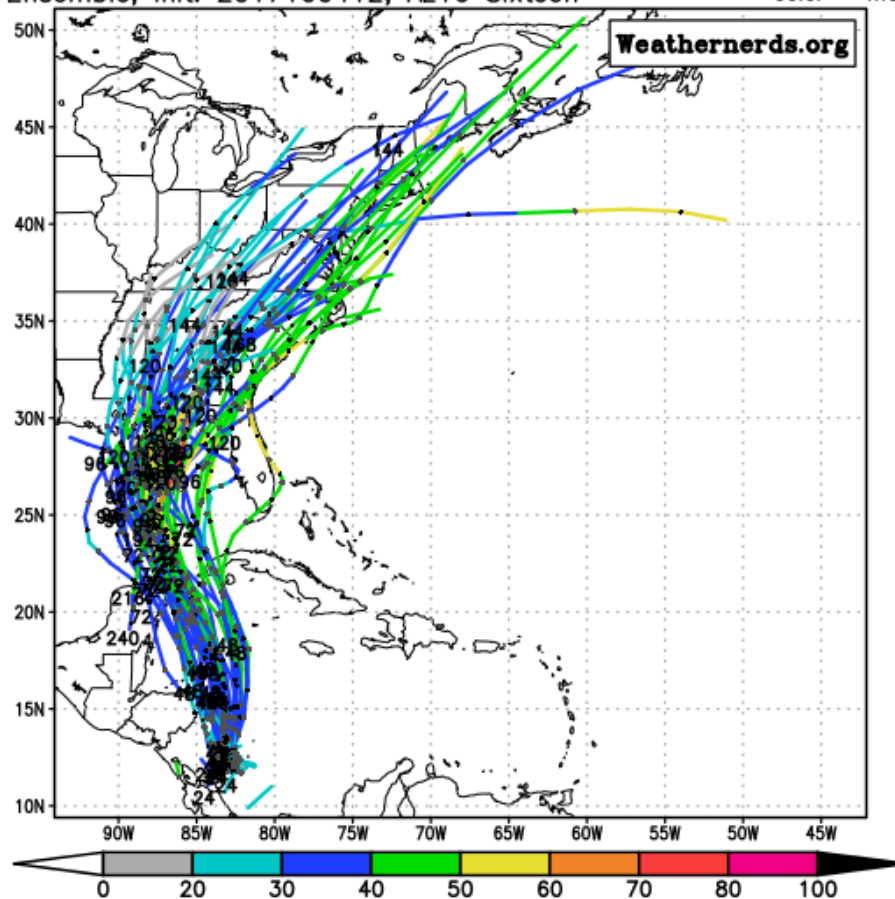
DO NOT USE THIS MAP  
TO MAKE DECISIONS!  
SEEK OFFICIAL INFO



Guidance shifted slightly to the west today, but the official forecast and the European model remain to the east of the bulk of the models.

ECMWF Ensemble, init: 2017100412, AL16 Sixteen

color = max wind (kt)

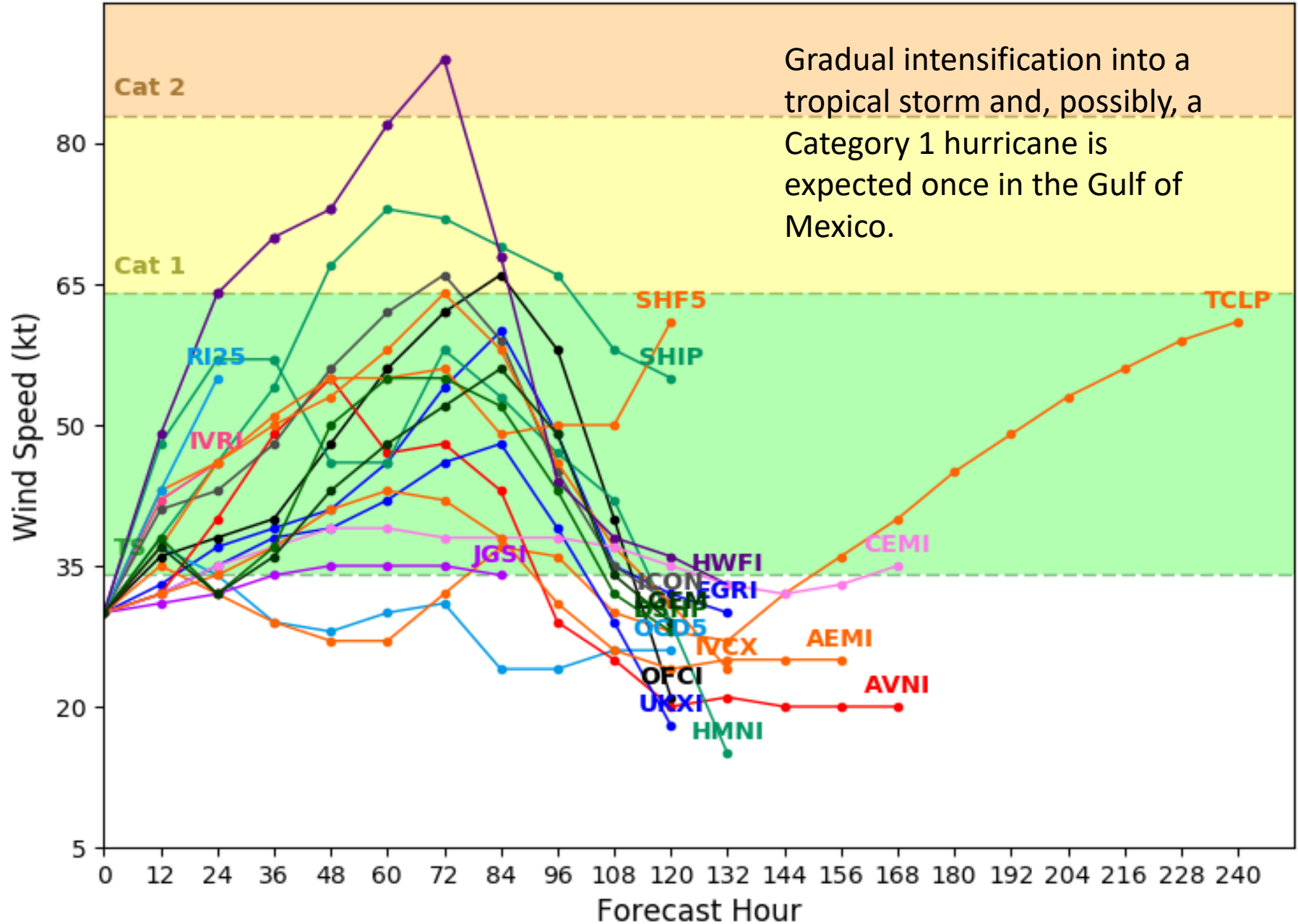




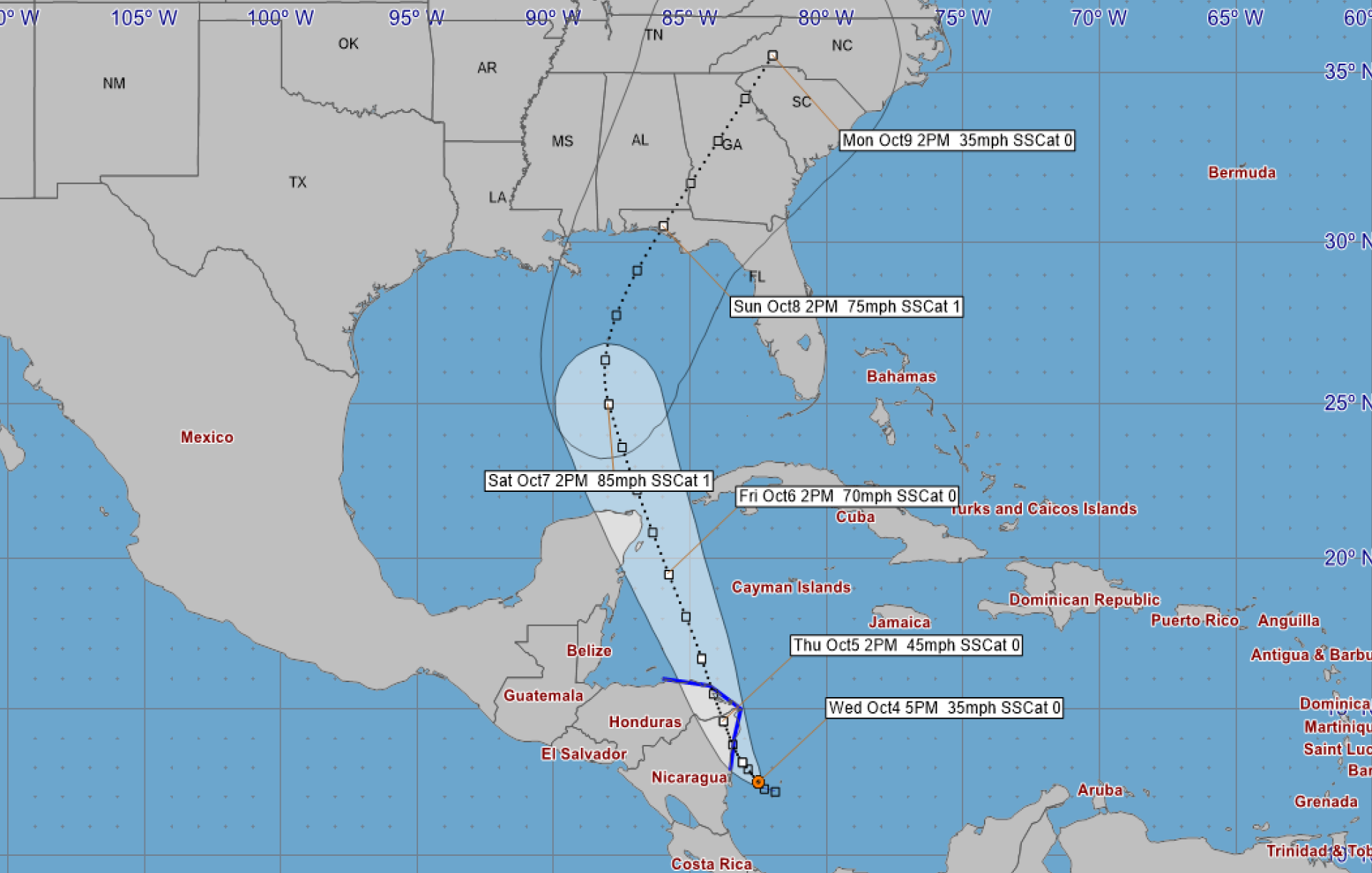
# Tropical Depression 16L Model Intensity Guidance

Initialized at 18z Oct 04 2017

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



Gradual intensification into a tropical storm and, possibly, a Category 1 hurricane is expected once in the Gulf of Mexico.



**Tropical Depression Sixteen - Wednesday, October 4, 2017 5 PM EDT Advisory #2**

Center Location: 12.5 N 82.5 W Maximum Sustained Winds: 35 mph Movement: 7 mph NW

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

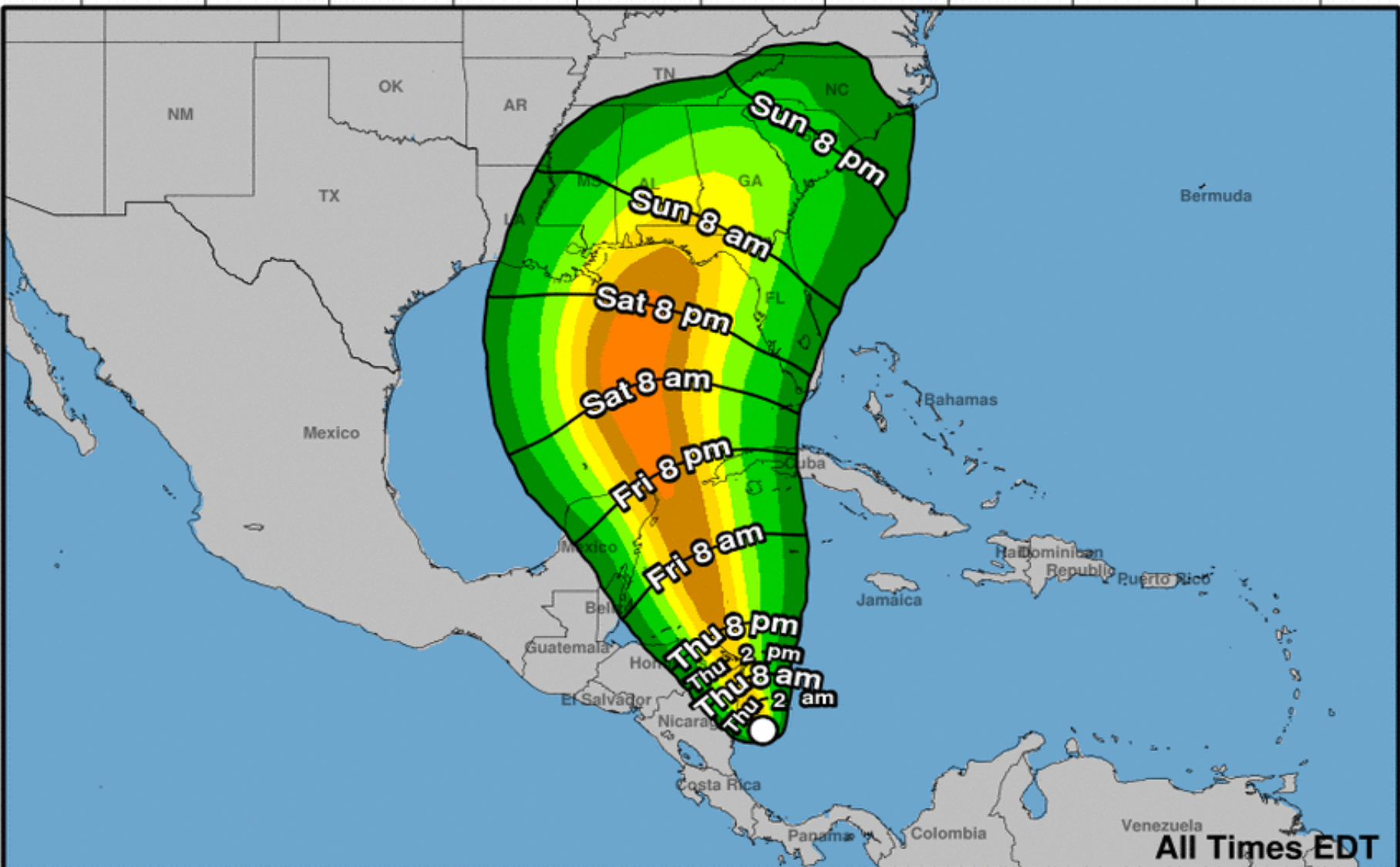


# Most Likely Arrival Time of Tropical-Storm-Force Winds



110W 105W 100W 95W 90W 85W 80W 75W 70W 65W 60W

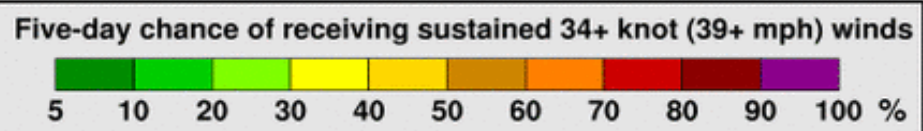
35N  
30N  
25N  
20N  
15N  
10N



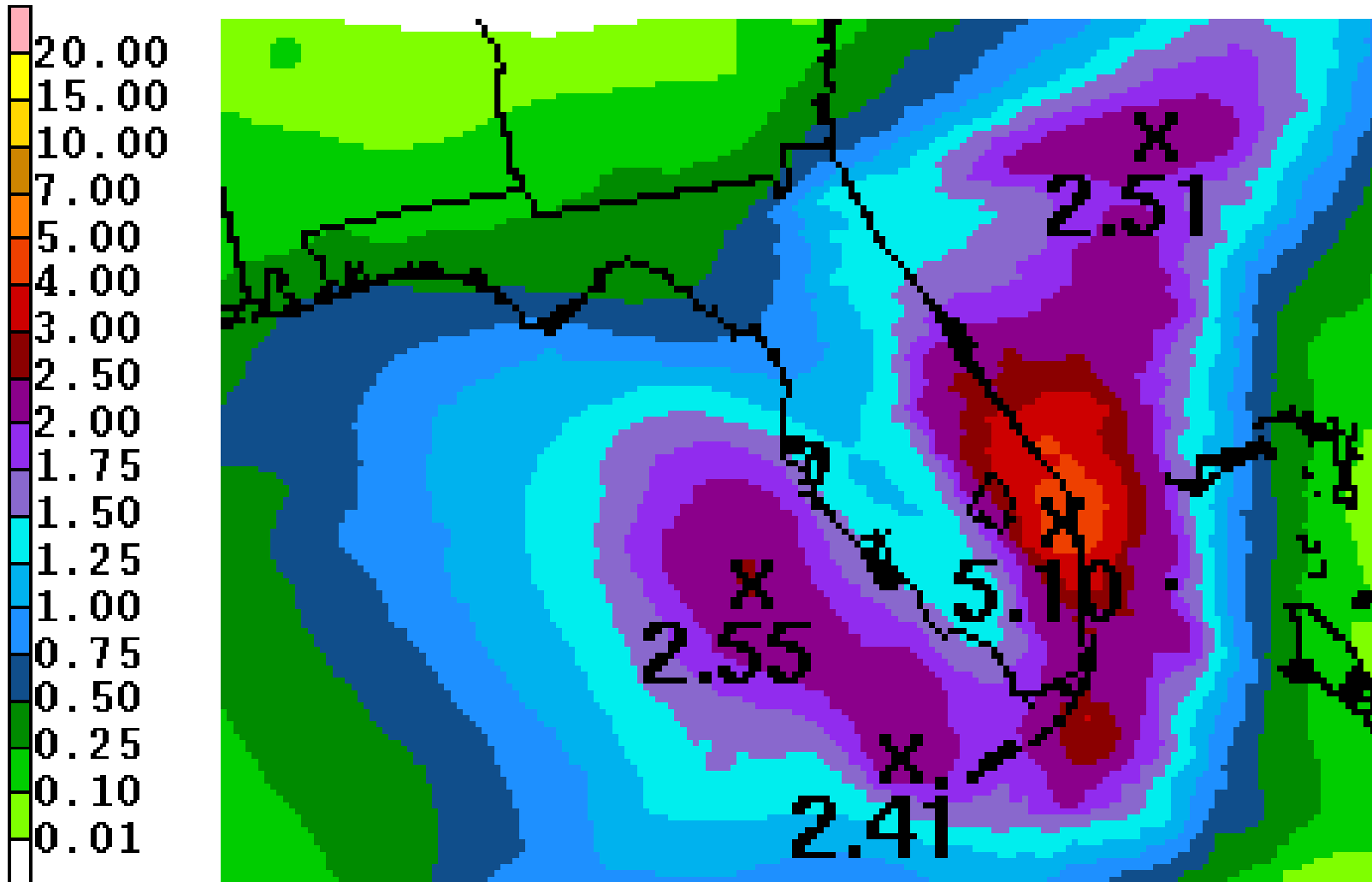
All Times EDT

Tropical Depression Sixteen  
Wed. Oct. 4, 2017 5 pm EDT  
Advisory 2

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



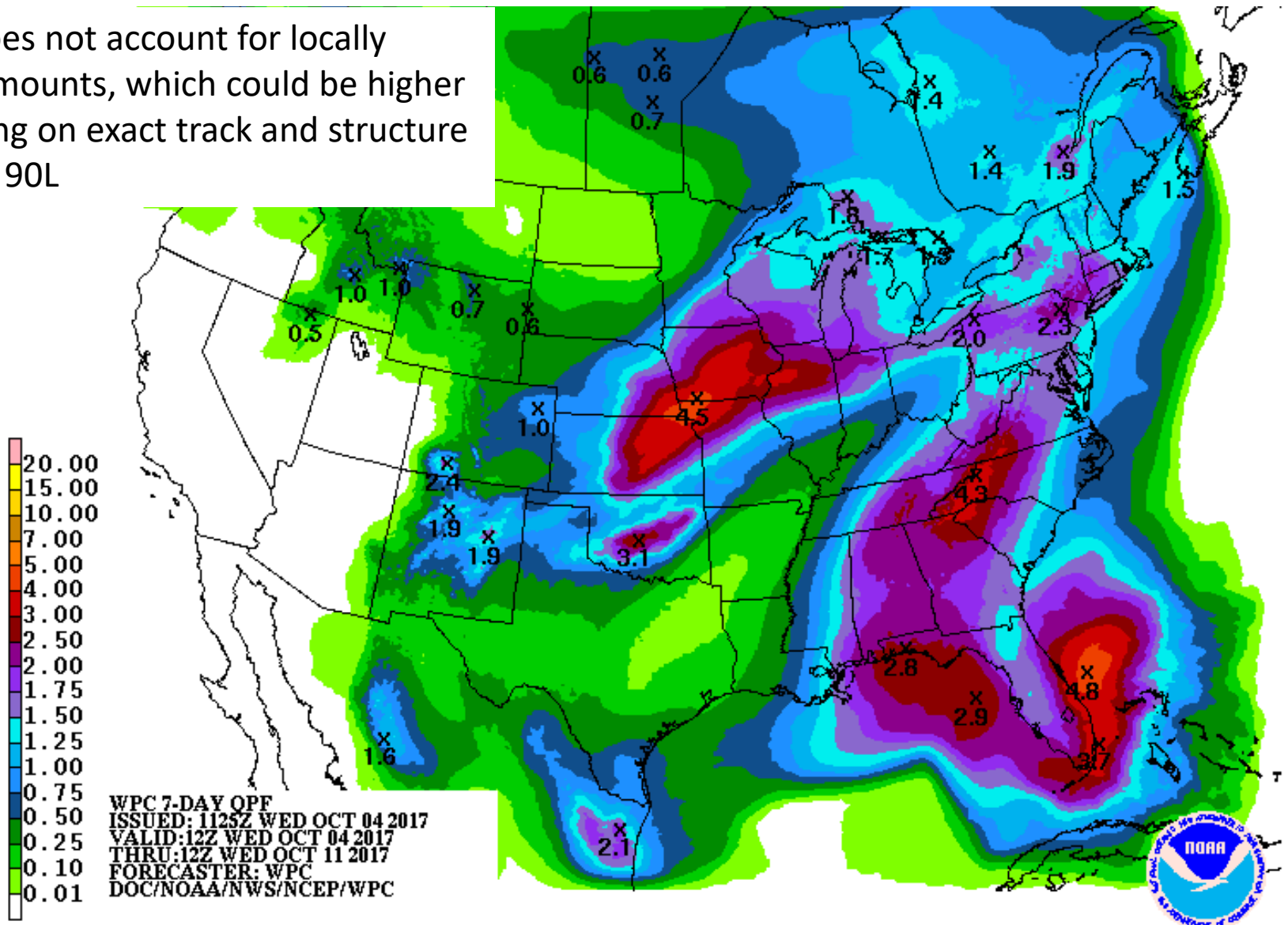
# Forecast Cumulative Rainfall – Next 3 Days



The low pressure disturbance located near the northwestern Bahamas will continue to increase rain chances across South Florida as it moves west. Although development of this system is not expected, it will likely produce heavy rain and gusty winds over portions of the Bahamas and Florida during the next couple of days.

# Forecast Total Rainfall – Next 7 Days

Note: Does not account for locally higher amounts, which could be higher depending on exact track and structure of Invest 90L

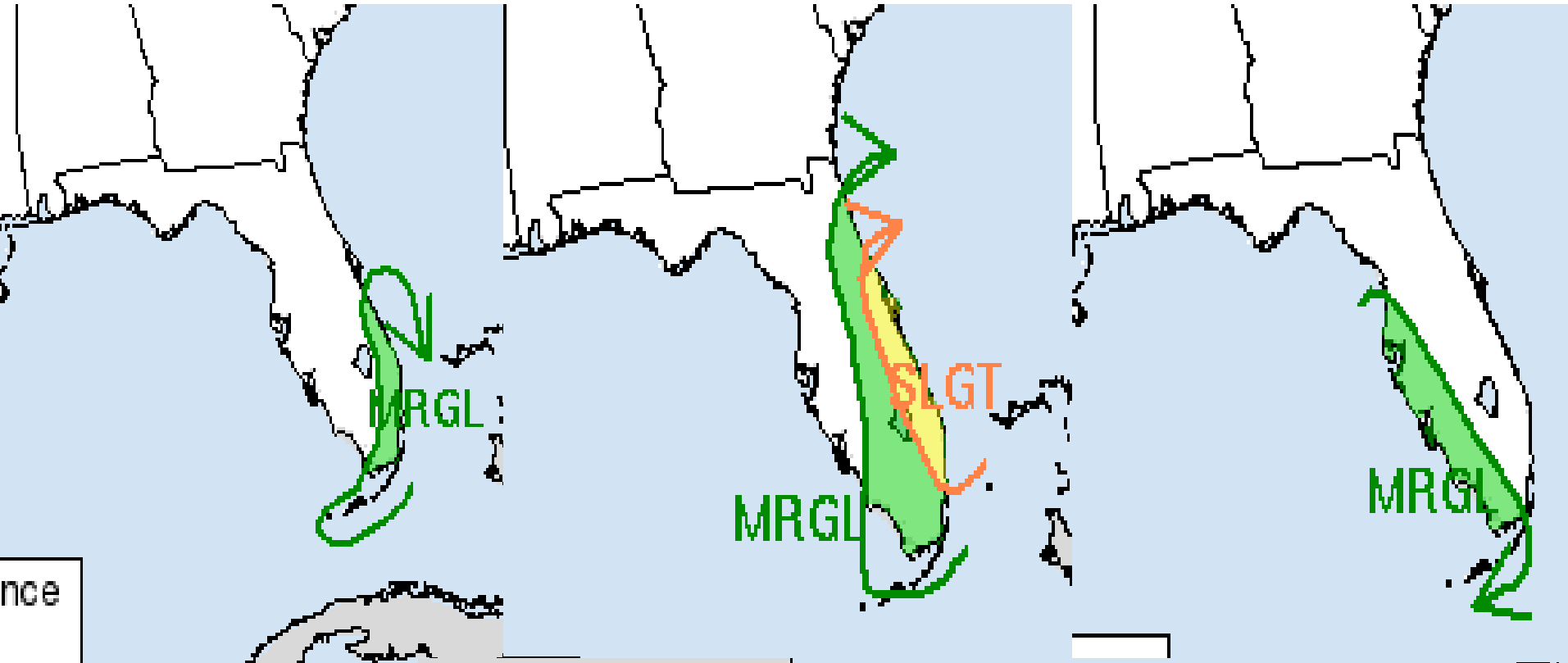


# Flash Flood Threat

Today

Tomorrow

Friday



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

**HIGH: > 15%**

**SLGT: 5%-10%**

**MDT: 10%-15%**

**MRGL: 2%-5%**

Flood Watches are in effect tomorrow for Brevard, Indian River, St. Lucie, and Martin County.

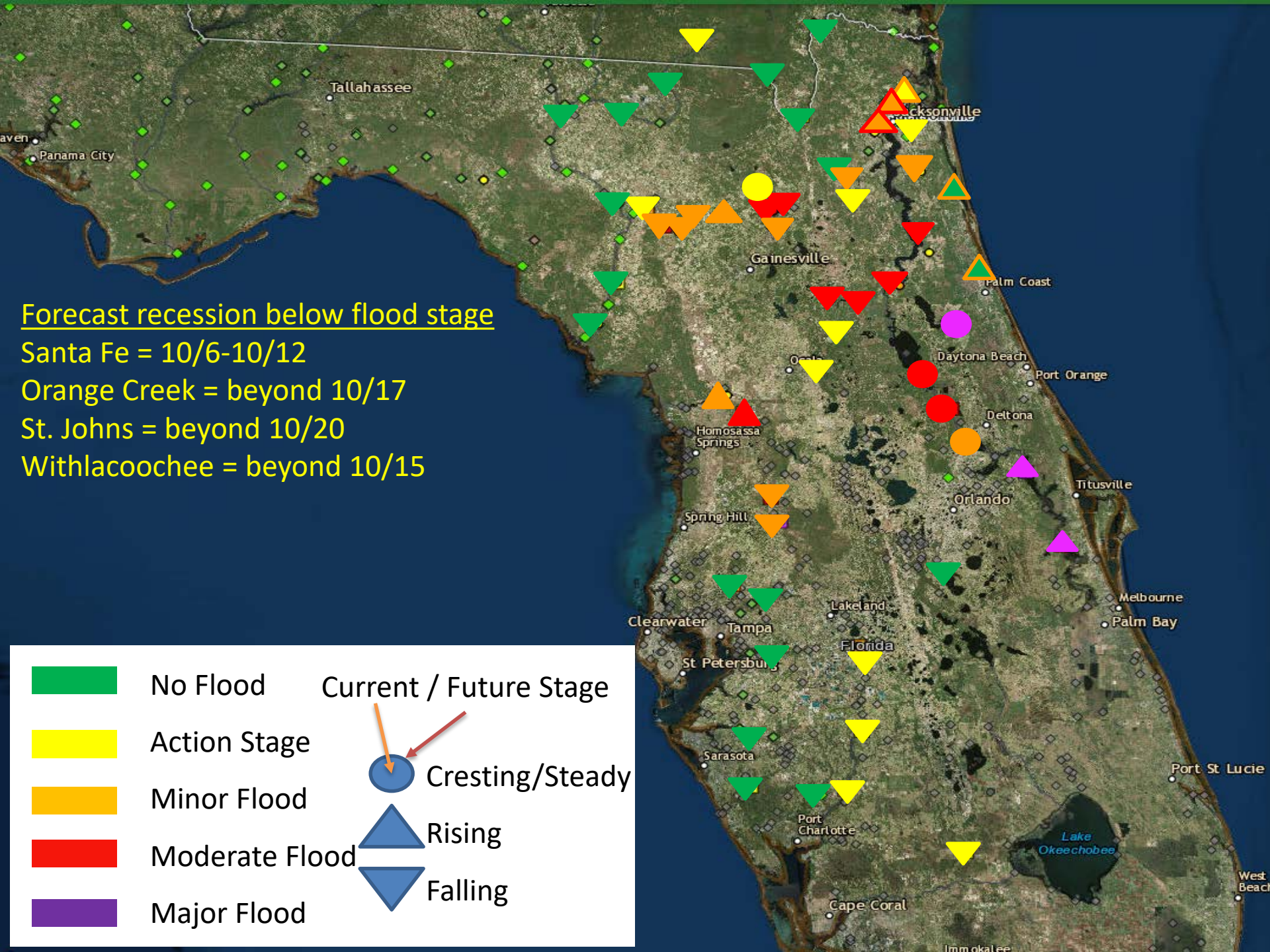
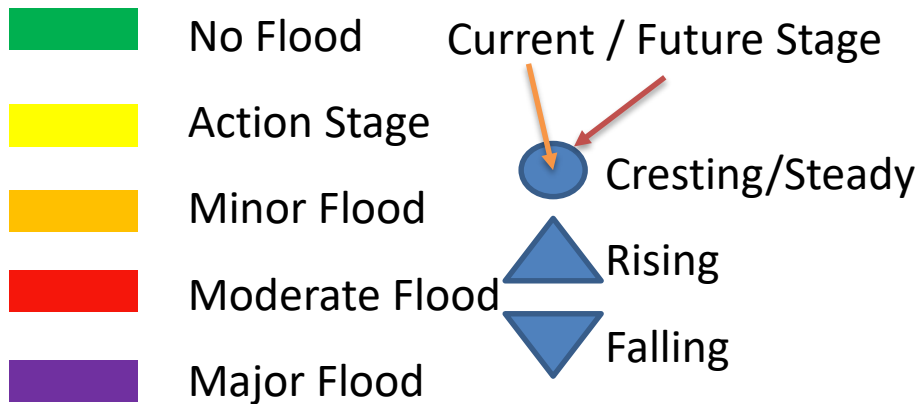
Forecast recession below flood stage

Santa Fe = 10/6-10/12

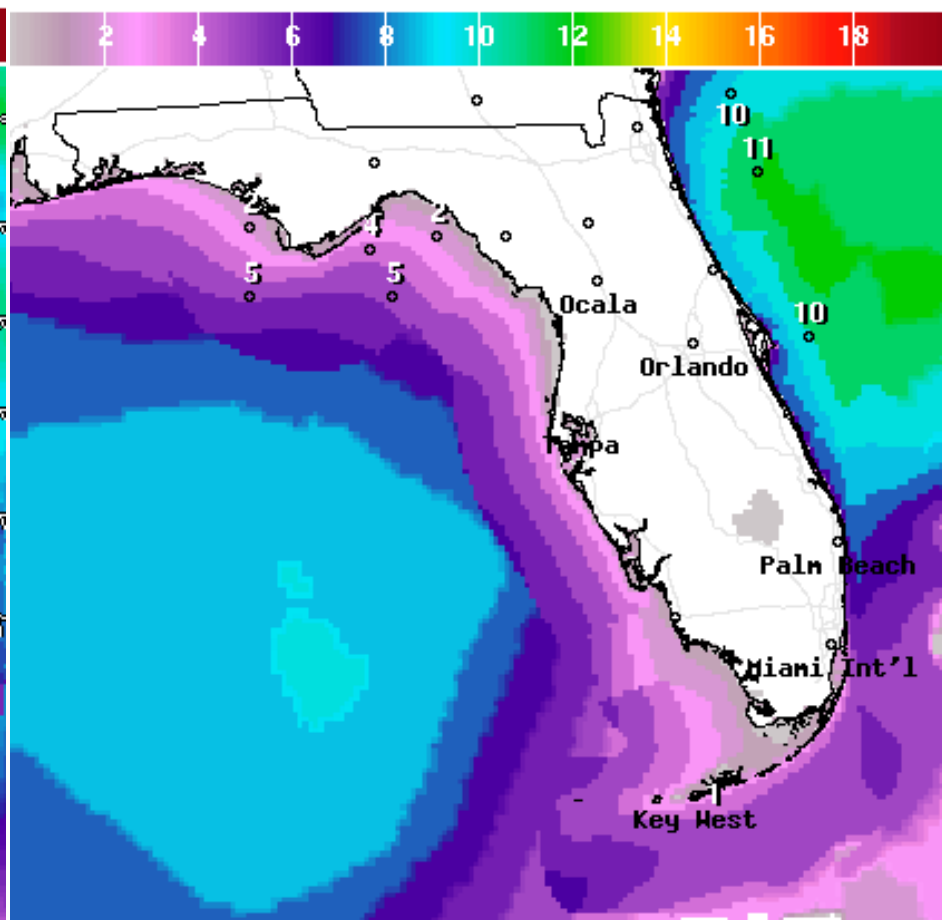
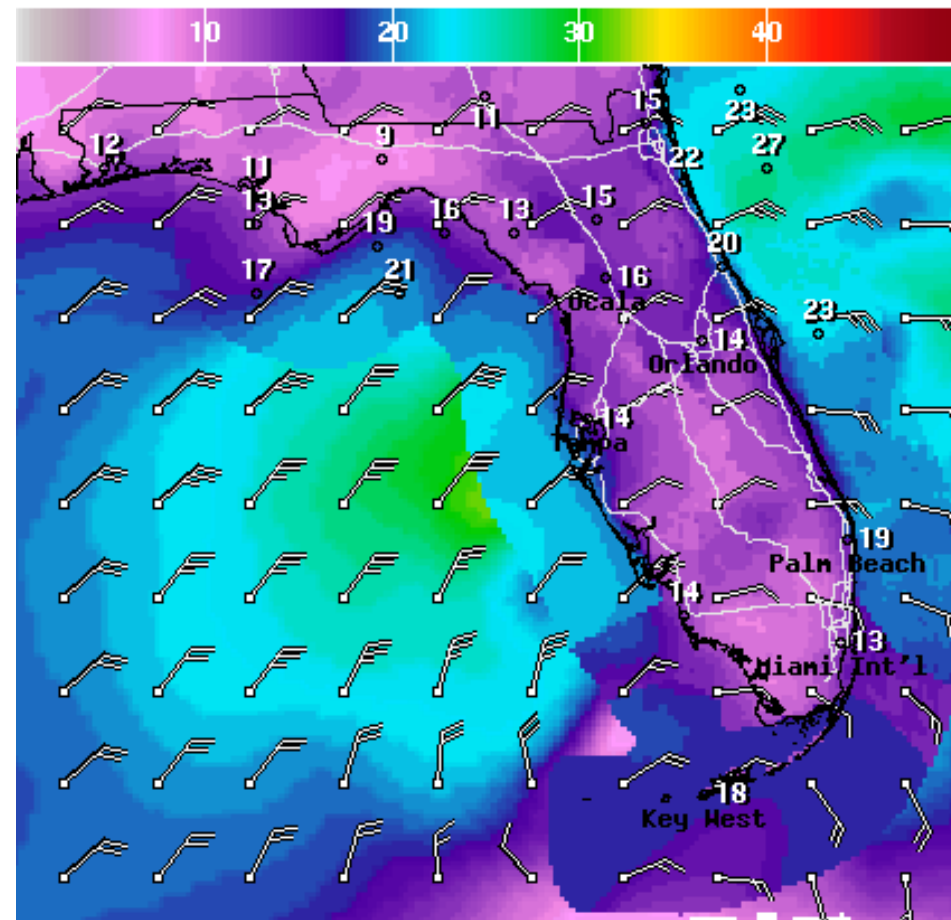
Orange Creek = beyond 10/17

St. Johns = beyond 10/20

Withlacoochee = beyond 10/15



# Forecast Winds/Wave Height Thursday Afternoon

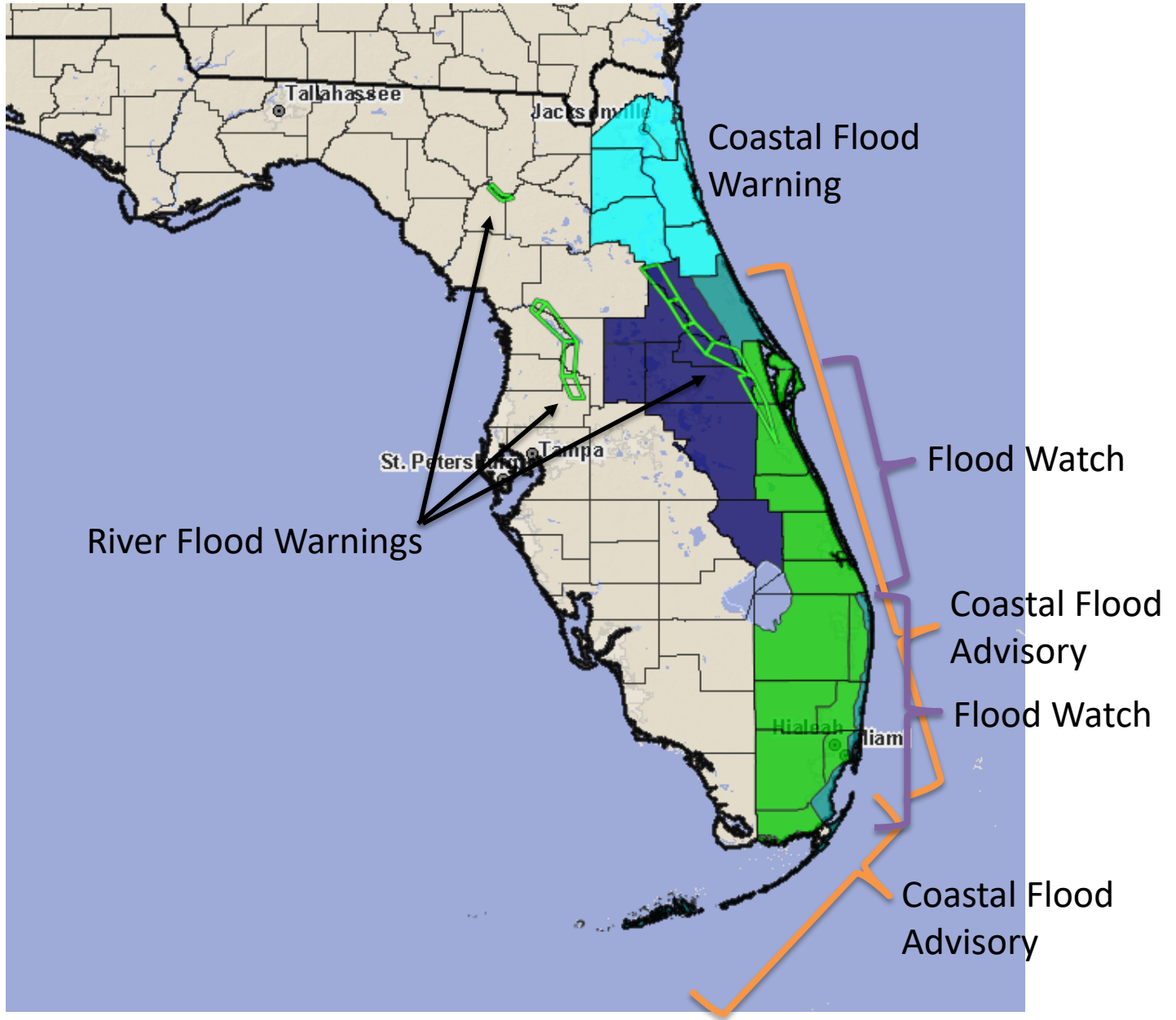


WindSpd(Kts) & WindDir For Thu Oct 05 2017 2PM EDT  
(Thu Oct 05 2017 18Z)  
 National Digital Forecast Database  
 18z issuance Graphic created-Oct 04 2:54PM EDT  


Wave Height(ft) Ending Thu Oct 05 2017 2PM EDT  
(Thu Oct 05 2017 18Z)  
 National Digital Forecast Database  
 18z issuance Graphic created-Oct 04 2:49PM EDT  




# Active Watches/Warnings



## Summary:

- At 11AM EDT, Invest 90L was determined to have a closed center of circulation and advisories began on Tropical Depression 16.
  - As of 5PM EDT, TD 16 had maximum sustained winds of 35 mph and was moving to the northwest at 7 mph.
  - TD 16 is expected to continue to move northwestward and emerge over the southern Gulf of Mexico by Saturday.
  - Confidence in the eventual track and intensity are still currently low, with the range of possibilities for landfall anywhere between New Orleans, LA and Tampa, FL. The current forecast is for a Category 1 hurricane at landfall.
  - Additional Hurricane Hunter reconnaissance missions will continue through the coming days.
  - The next name on the 2017 Atlantic storm list is Nate.
- 
- Elsewhere, a broad low pressure disturbance located near the Florida Straits, Cuba and the Bahamas will continue to increase rain chances across South Florida as it moves west.
  - Although development of this system is not expected, it will likely produce heavy rain and gusty winds over portions of the Bahamas and Florida during the next couple of days.

## Florida Outlook:

- Rainfall amounts of 2-4" (with isolated amounts up to 5-6" possible) is forecast for portions of the Florida East Coast and Florida Keys during the next 48 hours.
  - A **Flood Watch** is currently in effect for all coastal counties between and including Brevard and Miami-Dade counties.
  - Strong east winds combined with the lunar "King Tide" could have the potential to produce high waves and minor coastal flooding during high tide. Any locally heavy rainfall during times of high tide could exacerbate coastal flooding issues.
  - A **Coastal Flood Advisory** is in effect from Miami-Dade to Volusia County, with a **Coastal Flood Warning** in effect for the St. Johns River and tributaries.
- 
- Concerning Tropical Depression 16, specific impacts to Florida are still uncertain.
  - However, a system moving towards the U.S. Gulf Coast would have the ability to produce storm surge, dangerous surf conditions, isolated tornadoes, gusty winds, and heavy rain.

Another briefing packet will be issued Thursday morning. 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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