



# TROPICAL UPDATE



11:00 AM EDT

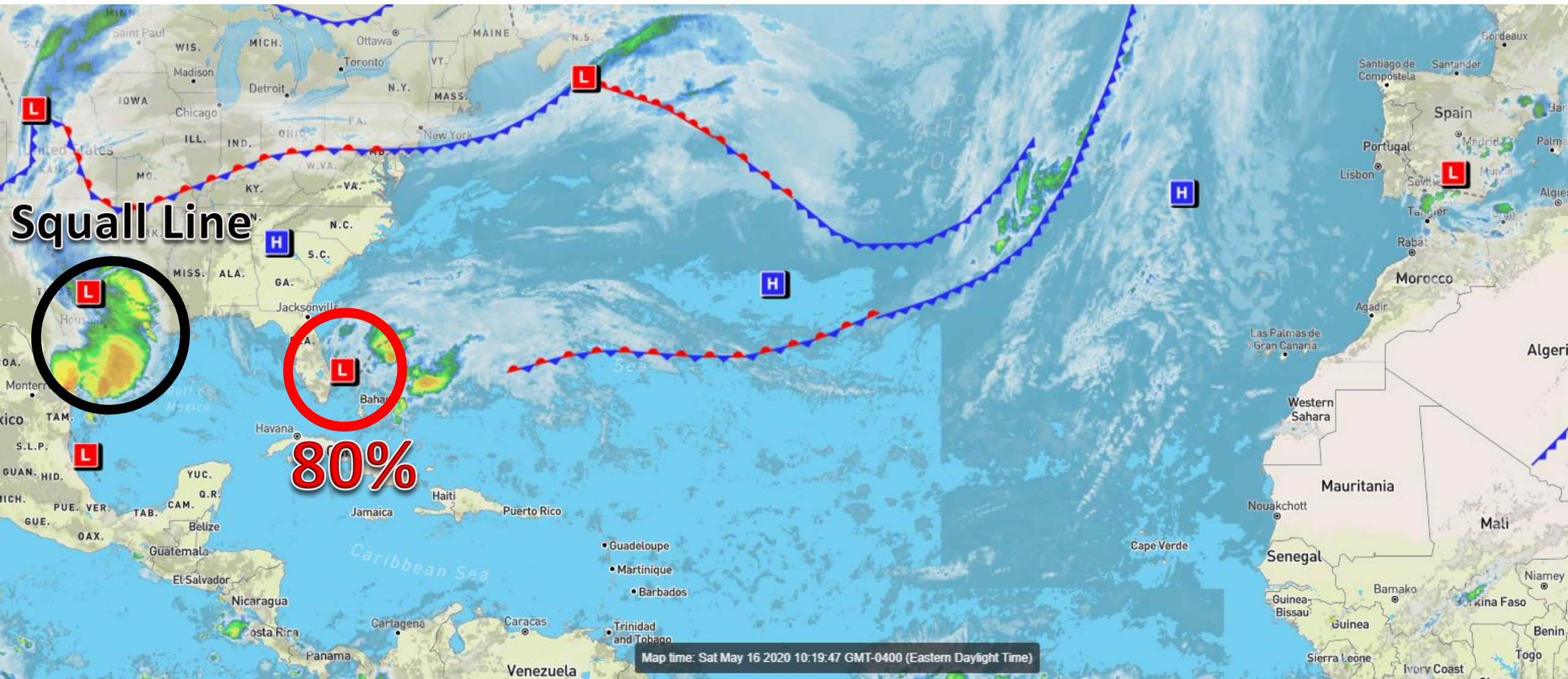
Saturday, May 16, 2020

Invest 90L (80%)

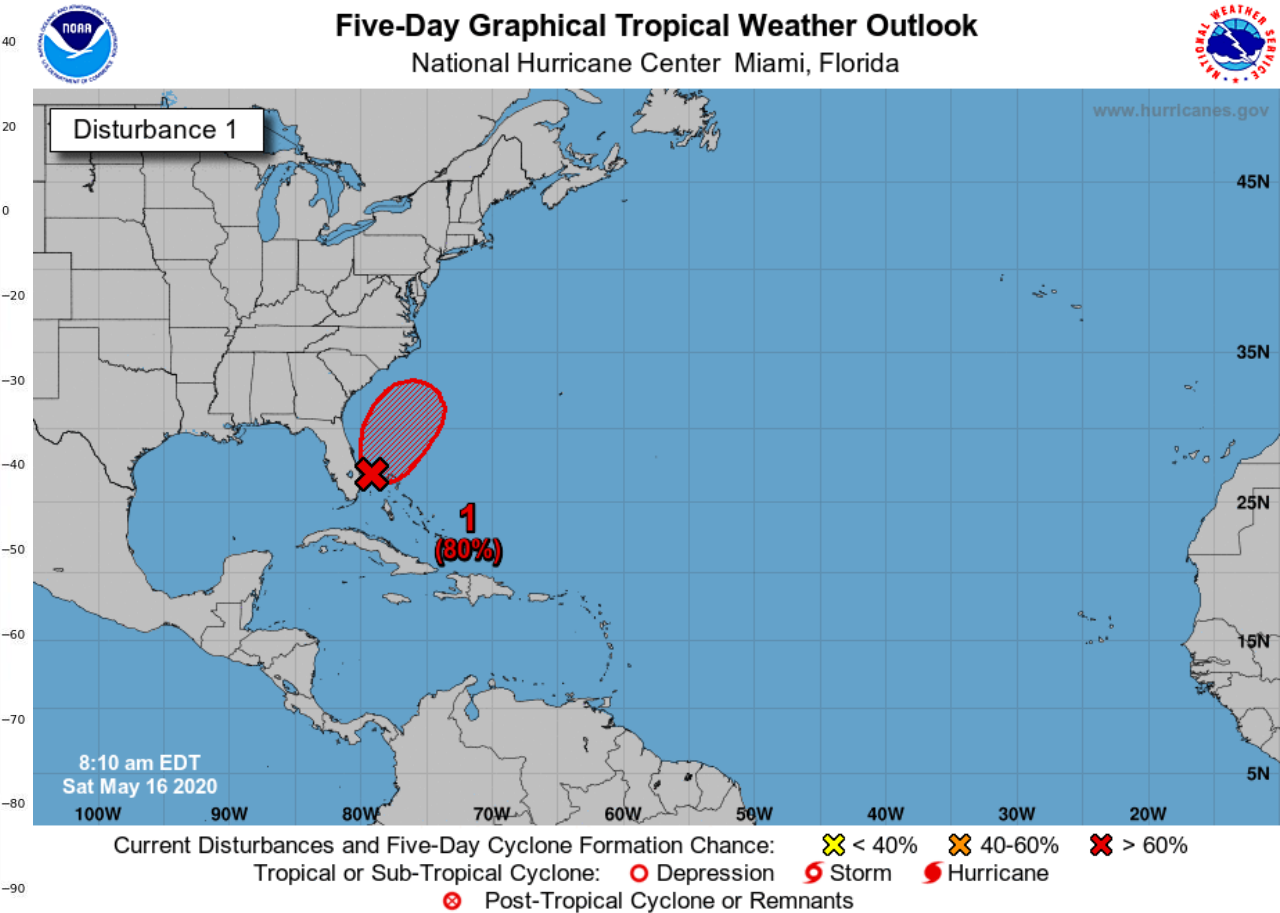
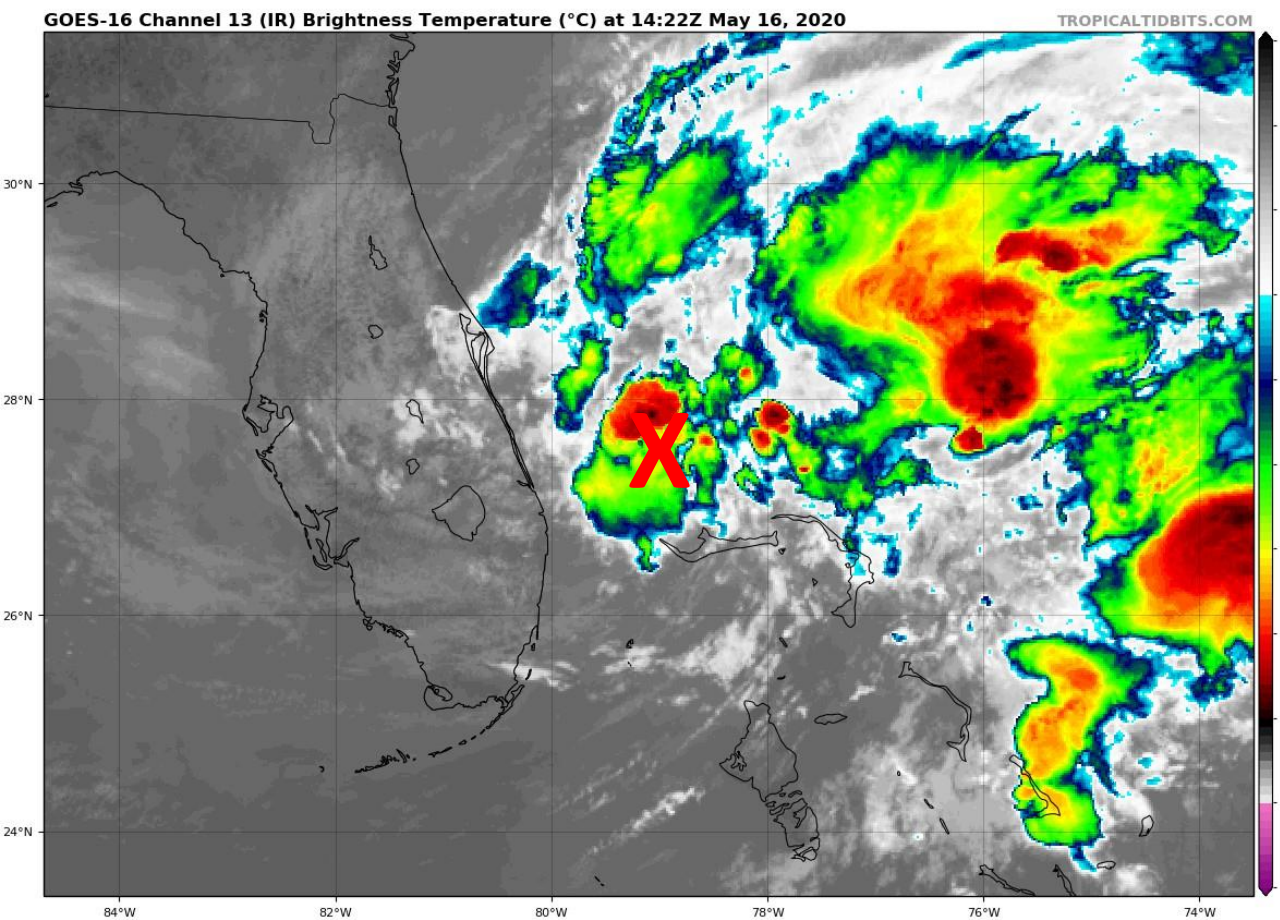
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an 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.hurricanes.gov](http://www.hurricanes.gov).

# Atlantic Basin Satellite Image

Chance of development: — None    — Low    — Medium    — High







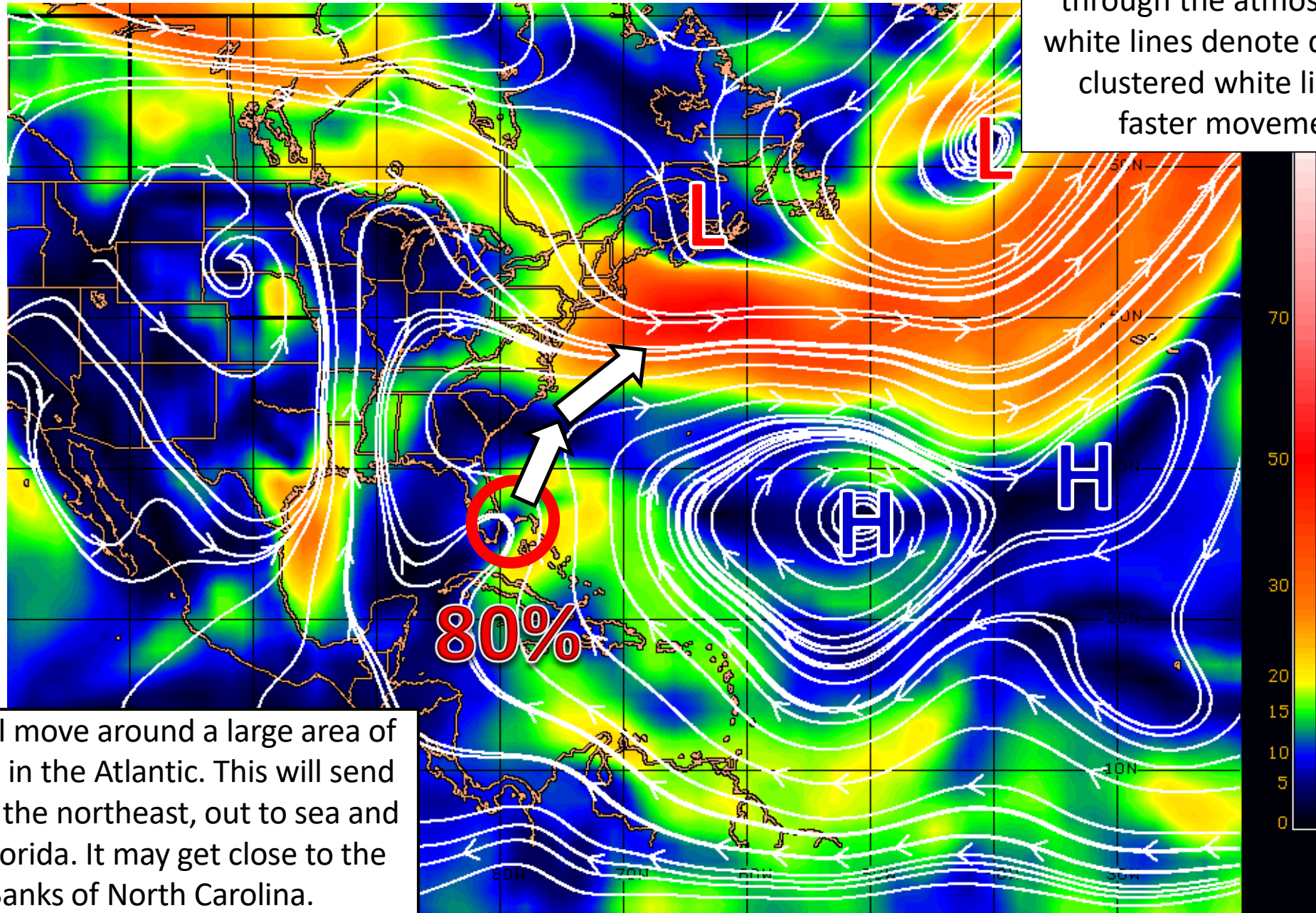
**Invest 90L:** An area of low pressure located just offshore of the southeast coast of Florida continues to produce shower activity and gusty winds from portions of southeast and east-central Florida eastward across the northwestern Bahamas and adjacent Atlantic waters. Satellite images and surface observations indicate that the low is gradually becoming better defined, but the associated showers and thunderstorms remain disorganized. Continued gradual development is expected, and the system is likely to become a tropical or subtropical depression or storm later today or tonight while it moves north-northeastward over the Atlantic waters east of Florida. Later in the weekend and early next week, the system is expected to move generally northeastward over the western Atlantic near or east of the Carolinas. Regardless of development, the disturbance will continue to bring heavy rainfall and gusty winds across portions of east-central Florida and the northwestern Bahamas through today. In addition, hazardous marine conditions will spread northward during the next few days, likely causing dangerous surf and rip currents along much of the southeast and mid-Atlantic coasts of the U.S. An Air Force Reserve Hurricane Hunter aircraft is currently investigating the disturbance.

**\*Formation chance through 48 hours...high...80 percent.**

**\*Formation chance through 5 days...high...80 percent.**

# Steering Currents

Color denotes the movement speed through the atmosphere and thin white lines denote direction. Tightly clustered white lines represent faster movement as well.



Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

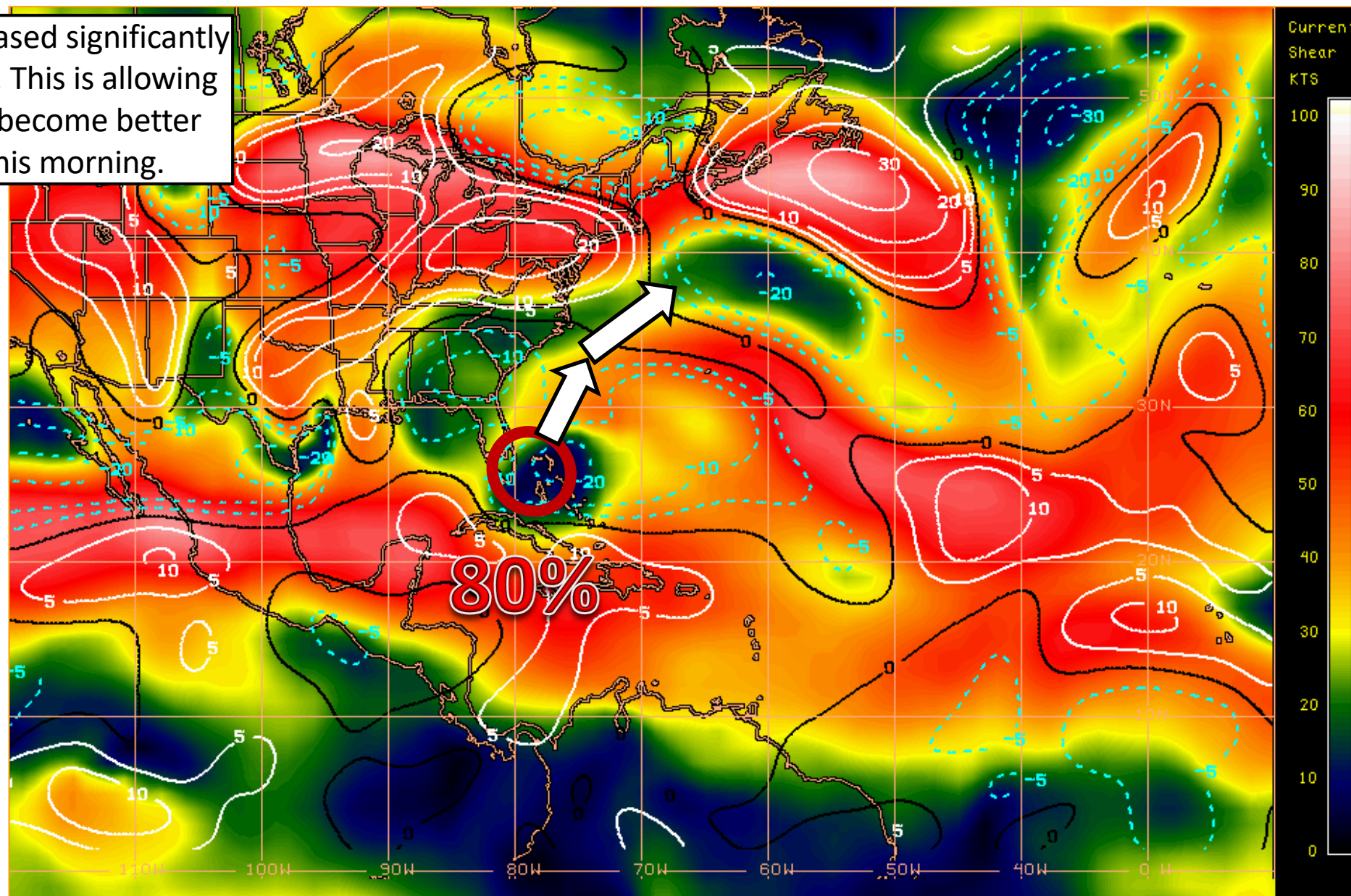
Slow Moving Storm

Invest 90L will move around a large area of high pressure in the Atlantic. This will send the system to the northeast, out to sea and away from Florida. It may get close to the Outer Banks of North Carolina.



# Wind Shear (shaded) and Wind Shear Tendencies (contoured)

Shear has decreased significantly over Invest 90L. This is allowing the system to become better organized this morning.



HIGH Shear  
(Unfavorable)

HIGH Shear  
(Unfavorable)

MODERATE  
Shear  
(Neutral)

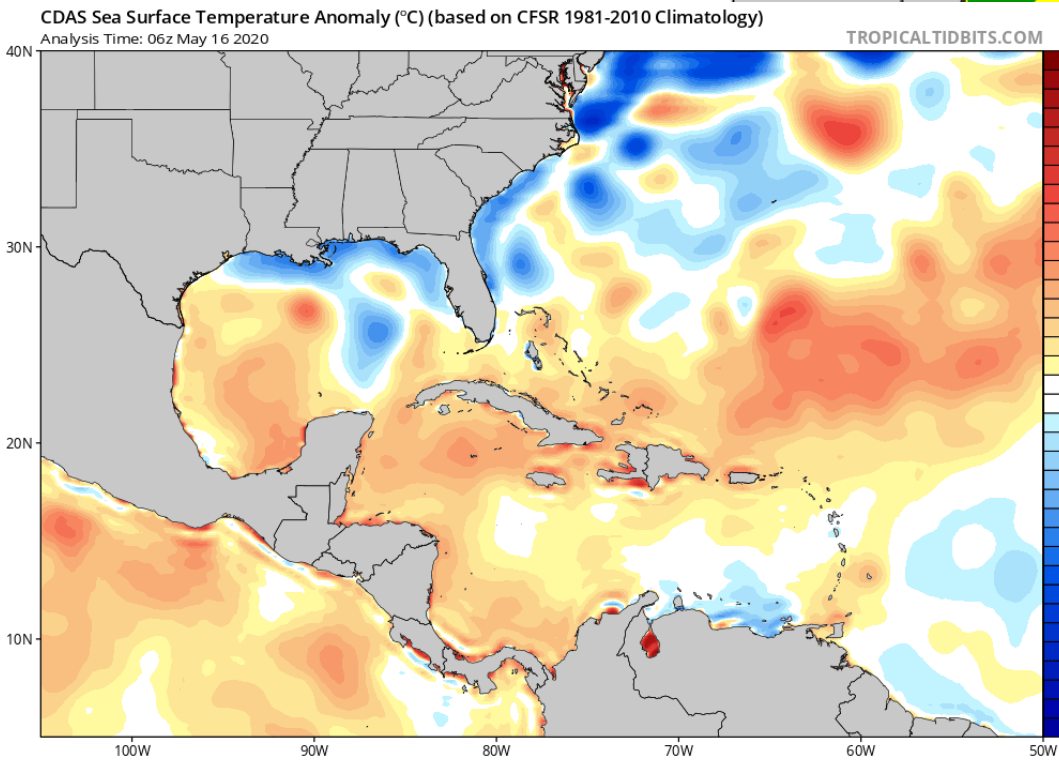
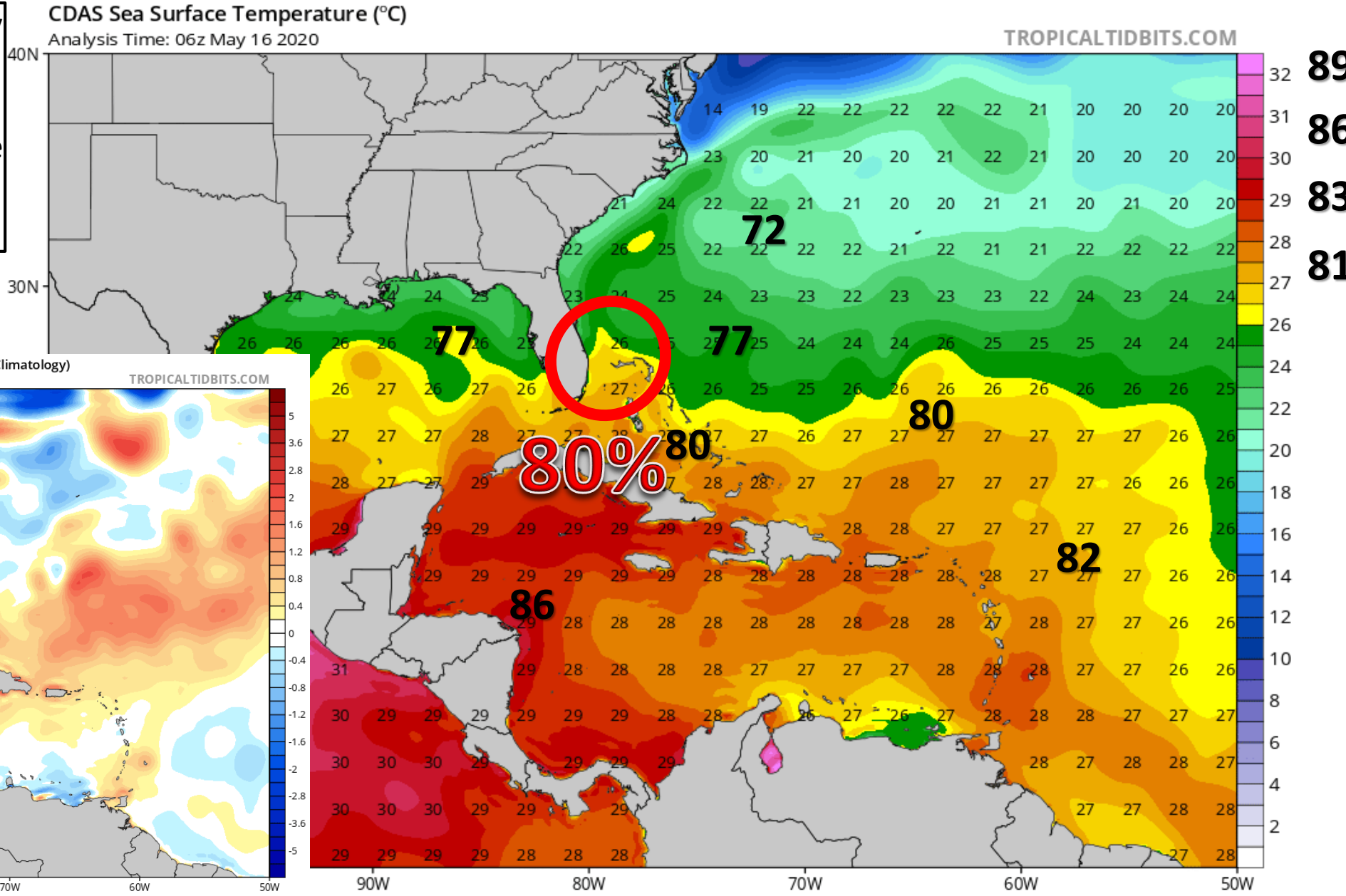
LOW Shear  
(Favorable)

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

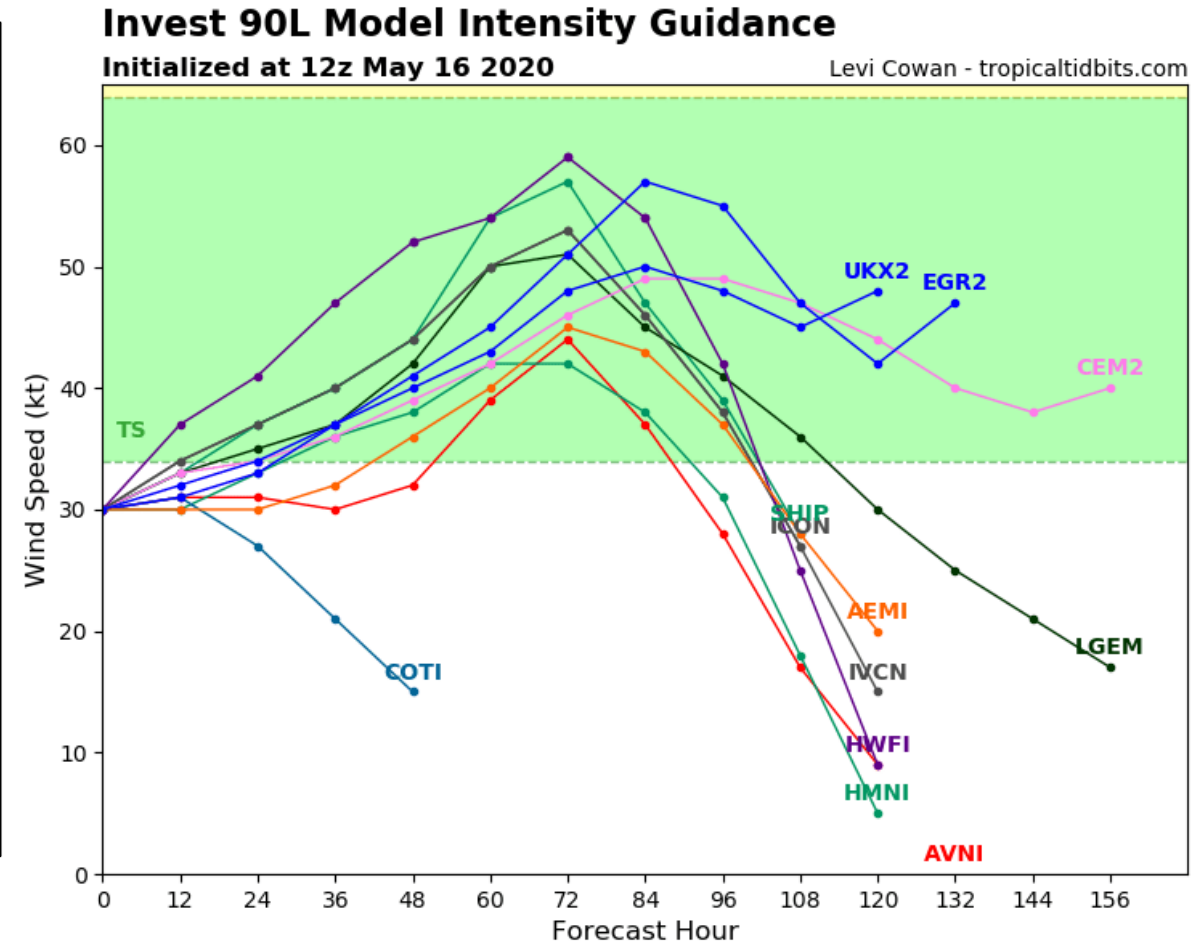
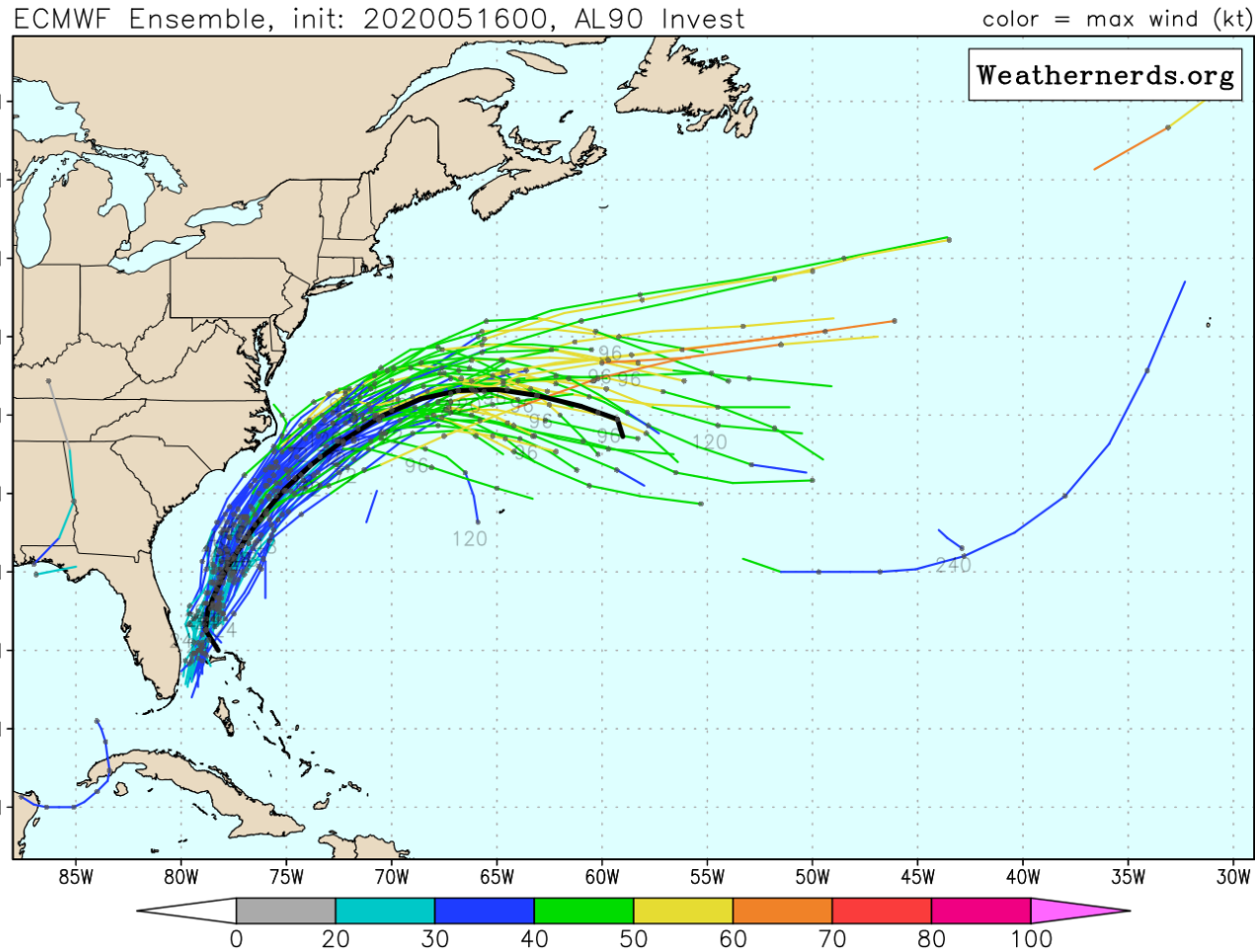
GOES-EAST 24 HOUR WIND SHEAR TENDENCY PRODUCT 1200 UTC 16 MAY 2011 UH-CIMSS METDPS

# Western Atlantic Sea Surface Temperatures and Anomalies

Temperatures are only marginally warm enough for tropical or subtropical development. However, these temperatures are near to slightly above normal for this time of year.

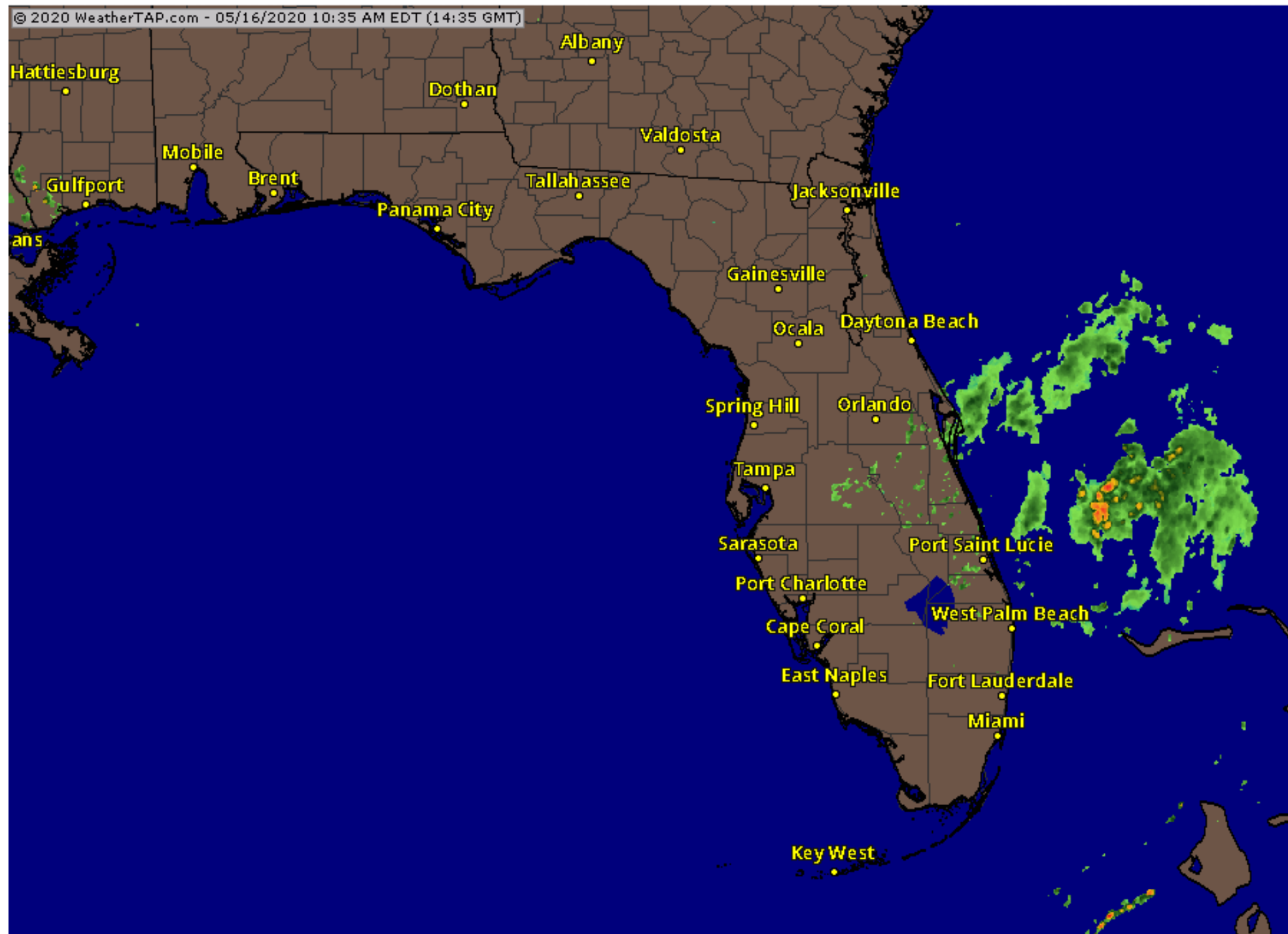


# Model Ensemble Guidance (Track & Intensity)



An area of low pressure will develop over the northwestern Bahamas tonight or Saturday. The system (likely tropical/subtropical storm) will move northeastward over the western Atlantic between the US East Coast and Bermuda. As 90L turns out to sea, it may come very close to the Outer Banks of North Carolina. Most models show this system could become a weak to mid-grade tropical storm at peak intensity.



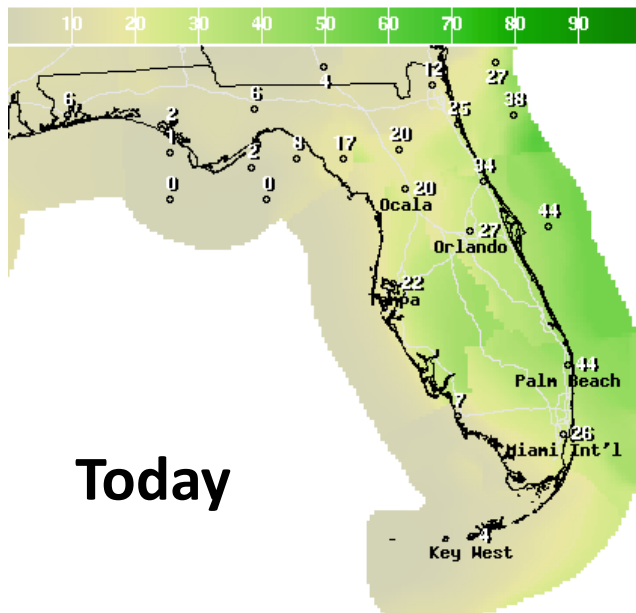


**Current Radar**  
**as of 10:35 AM**  
**EDT**

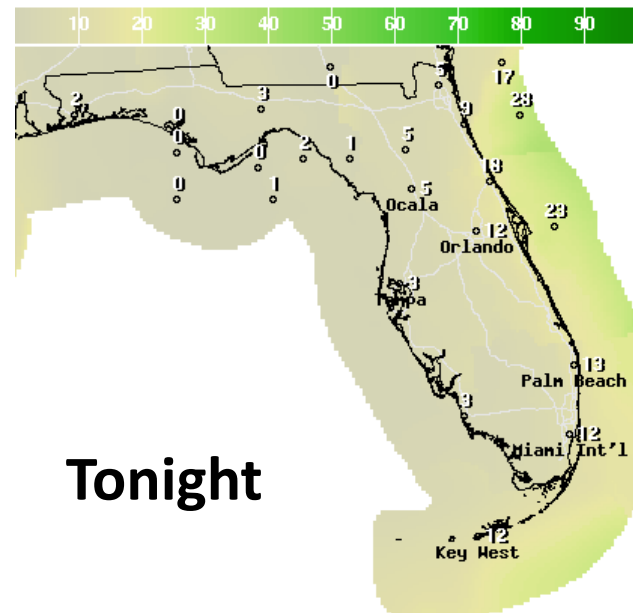


# Rain Chances Today & Sunday

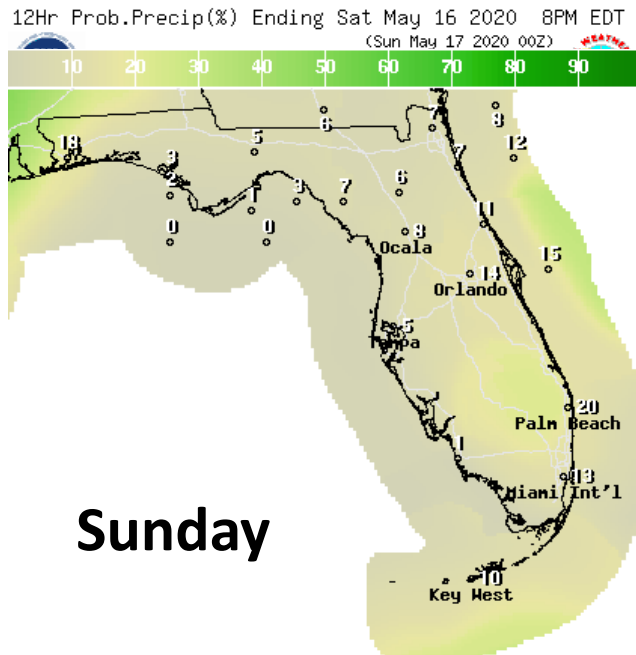
**Today**



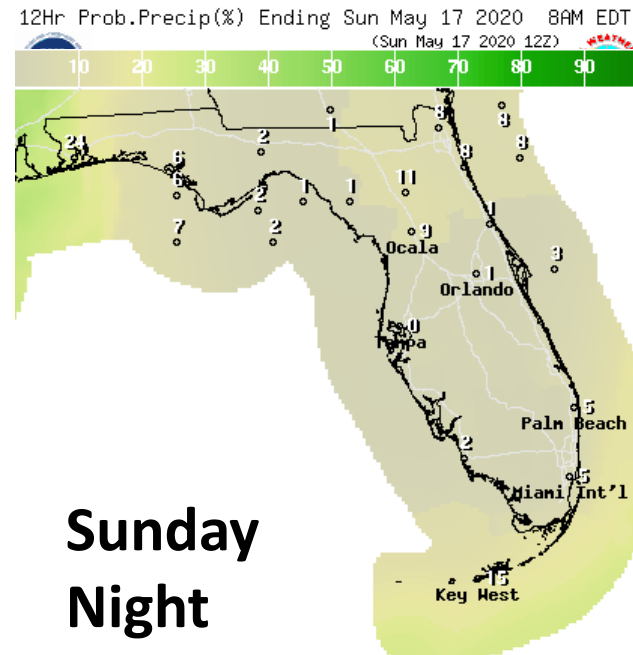
**Tonight**



**Sunday**



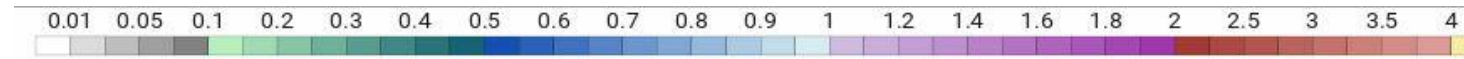
**Sunday Night**



Scattered showers and thunderstorms will be possible across the Peninsula, mainly this afternoon and evening. Rain chances will decrease as Invest 90L moves away, leaving only summer-like pop-up showers and storms for Sunday.

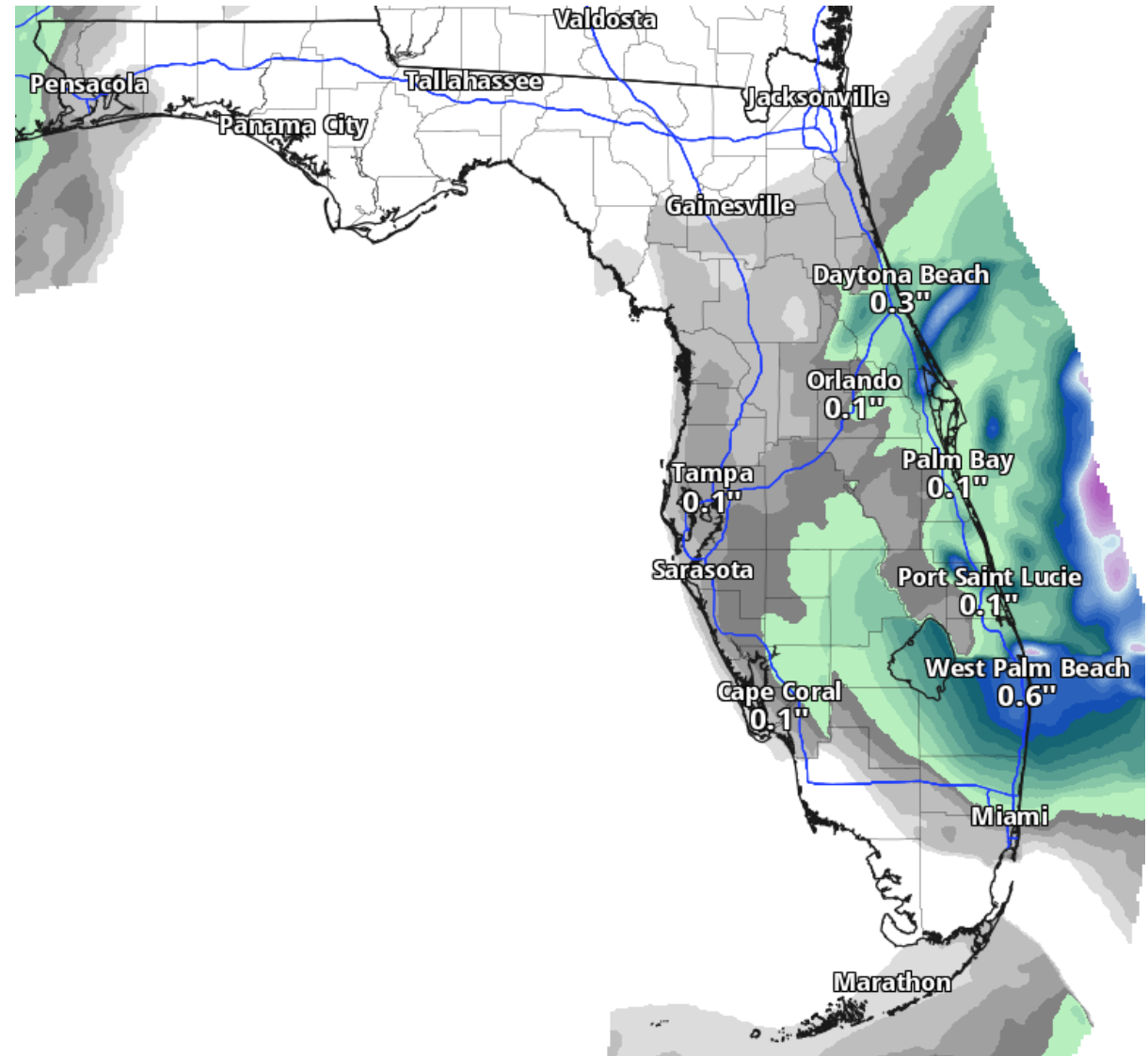
Widespread severe weather is not expected. However, gusty winds, locally heavy downpours, and frequent lightning will accompany the stronger storms.

# Forecast Rainfall Totals Next 48 Hours



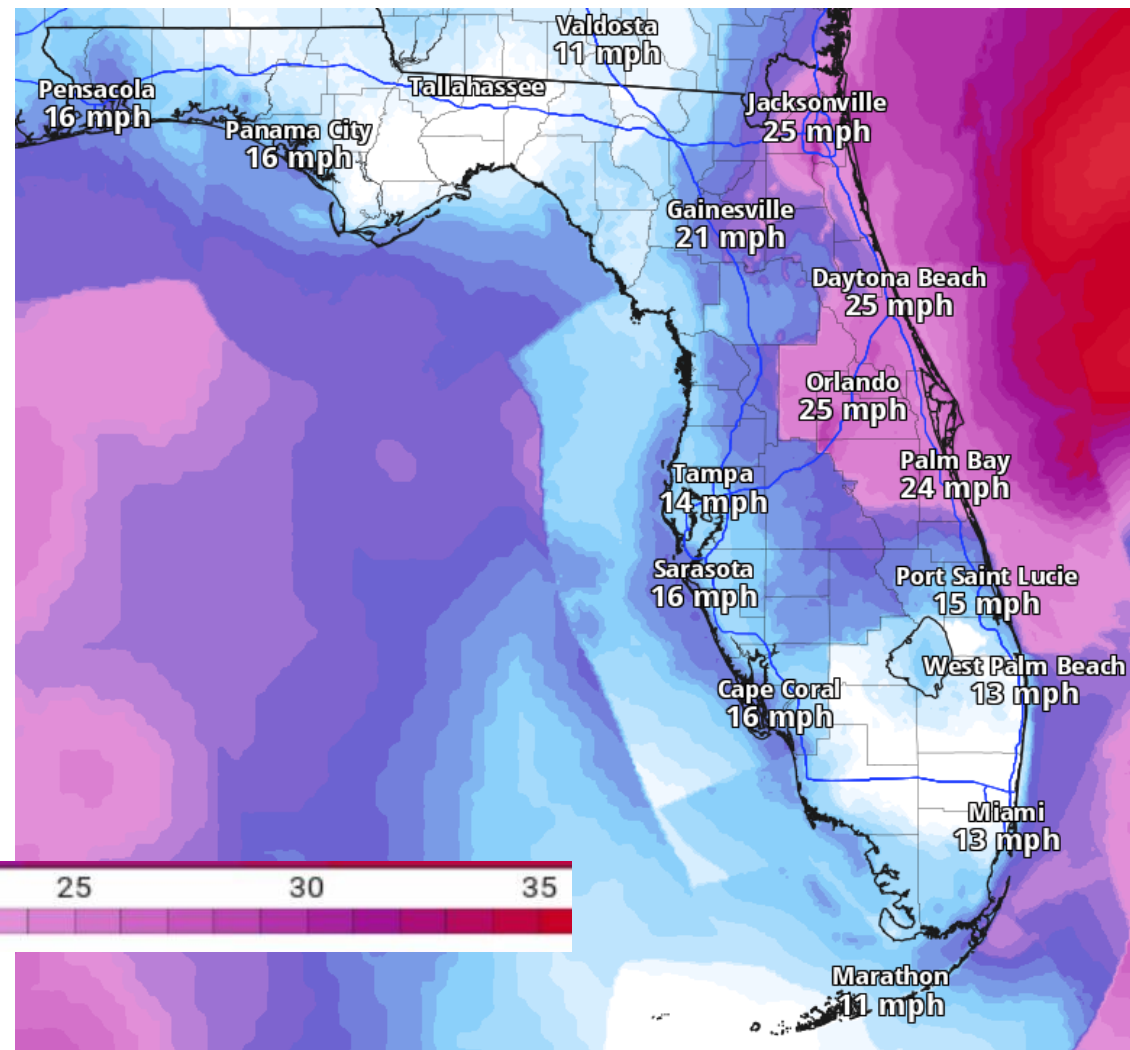
Locally heavy rainfall is possible along the East Coast, but flash flooding is not expected.

Significant, wetting rainfall is not expected in the Panhandle for the next 7 days.



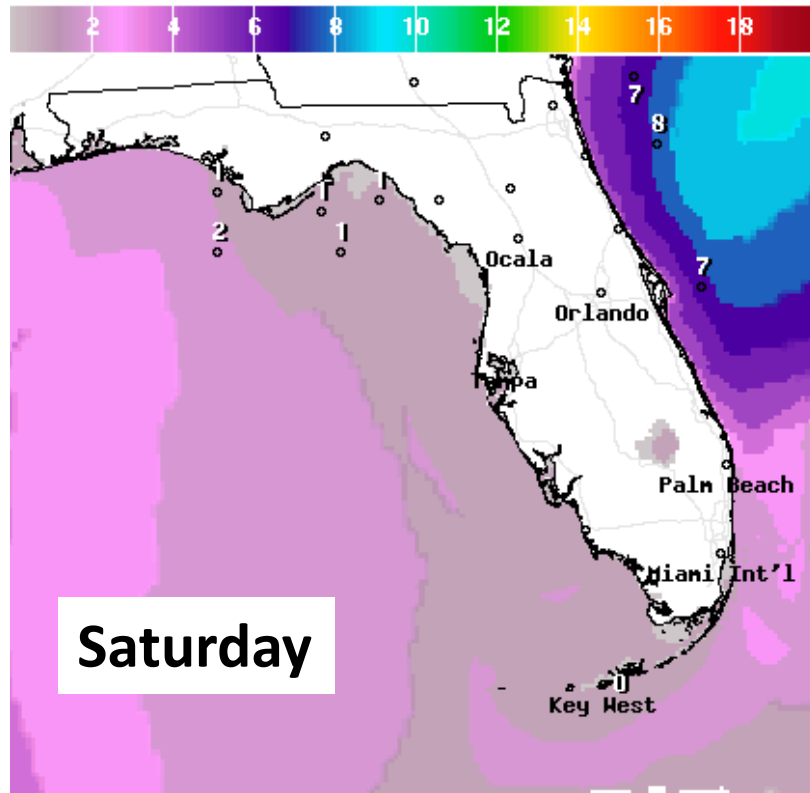


## Wind Gusts Today



Gusty winds are also possible outside of the showers and storms. Wind gusts of 20-30 mph are possible along the East Coast. Higher wind gusts may occur in thunderstorms.

# Wave Heights This Weekend



Saturday

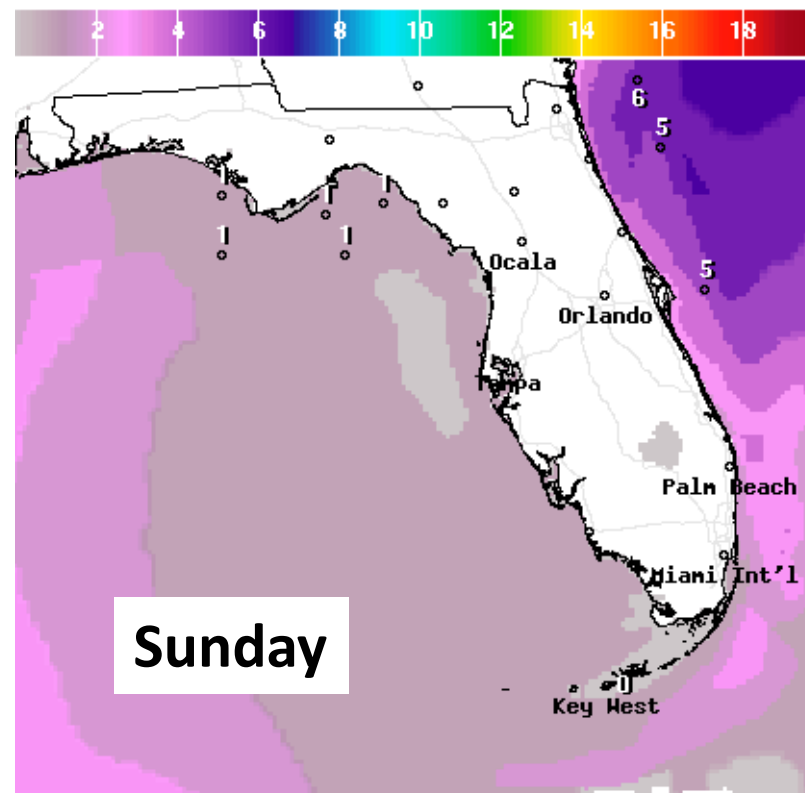
Wave Height(ft) Ending Sat May 16 2020 8PM EDT  
(Sun May 17 2020 00Z)



National Digital Forecast Database

14z issuance

Graphic created-May 16 10:16AM EDT



Sunday

Wave Height(ft) Ending Sun May 17 2020 8PM EDT  
(Mon May 18 2020 00Z)



National Digital Forecast Database

14z issuance

Graphic created-May 16 10:16AM EDT



Waves will remain high this weekend as the system becomes better organized offshore. This combined with breezy easterly winds will result in a **high rip current risk for Atlantic beaches through this weekend**. Conditions improve starting early next week.



# Summary

## **Invest 90L (Bahama Low)**

- The low pressure system has become better organized this morning, and the Hurricane Hunters are currently investigating the system to see if it can be classified as a tropical or subtropical cyclone.
- The system is expected to move northeast around an area of high pressure, heading away from the state of Florida. However, the system could move close to the Outer Banks of North Carolina.
- The National Hurricane Center gives this system an 80% (high) chance of formation during the next 48 hours and an 80% (high) chance of formation during days 2-5.
- If this system were to attain tropical storm intensity, the first name on the list is Arthur.

## **Florida Outlook:**

- Scattered thunderstorms are possible over the Peninsula today. Some storms could contain gusty winds and locally heavy downpours.
- An additional 1" of rainfall is possible along the East Coast, though higher amounts may occur in thunderstorms.
- Gusty winds and frequent lightning are also possible in the stronger showers and thunderstorms.
- Winds could gust up to 30 mph outside of thunderstorms.
- The rip current risk will likely remain high at Atlantic beaches into this weekend.

The next tropics packet will be issued this afternoon. For the latest information on the tropics, please visit the National Hurricane Center 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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