



TROPICAL UPDATE



10:00 AM EDT

Friday, May 15, 2020

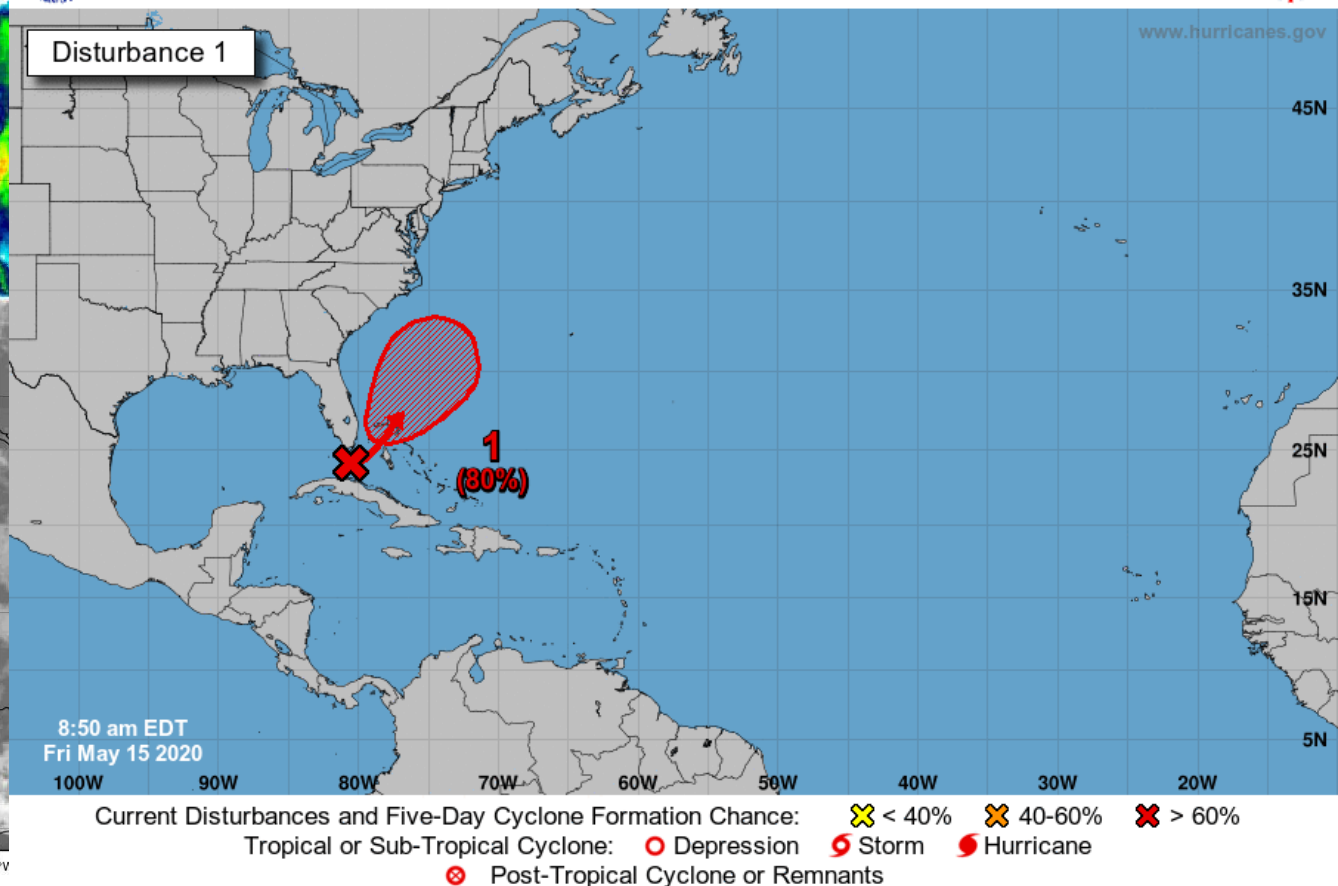
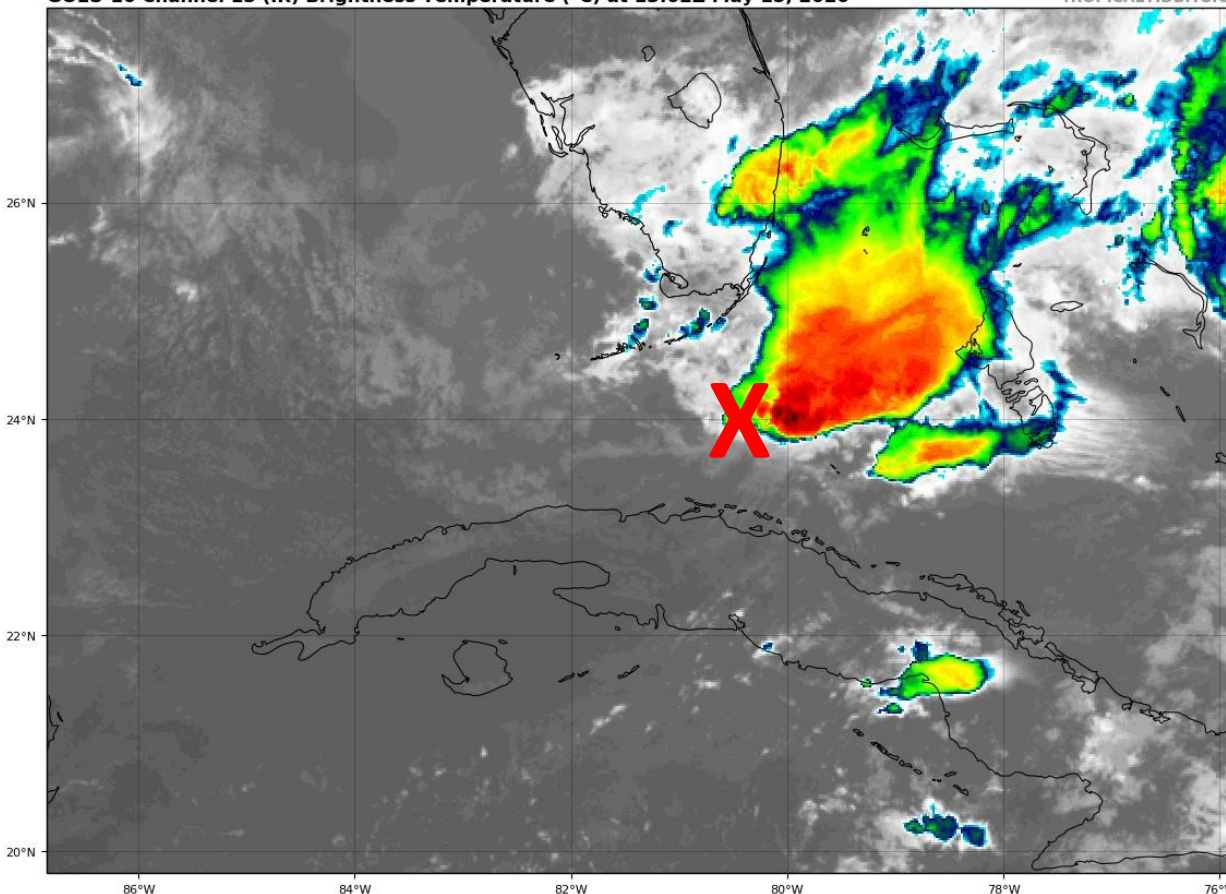
Invest 90L (80%)

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.

Atlantic Basin Satellite Image

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





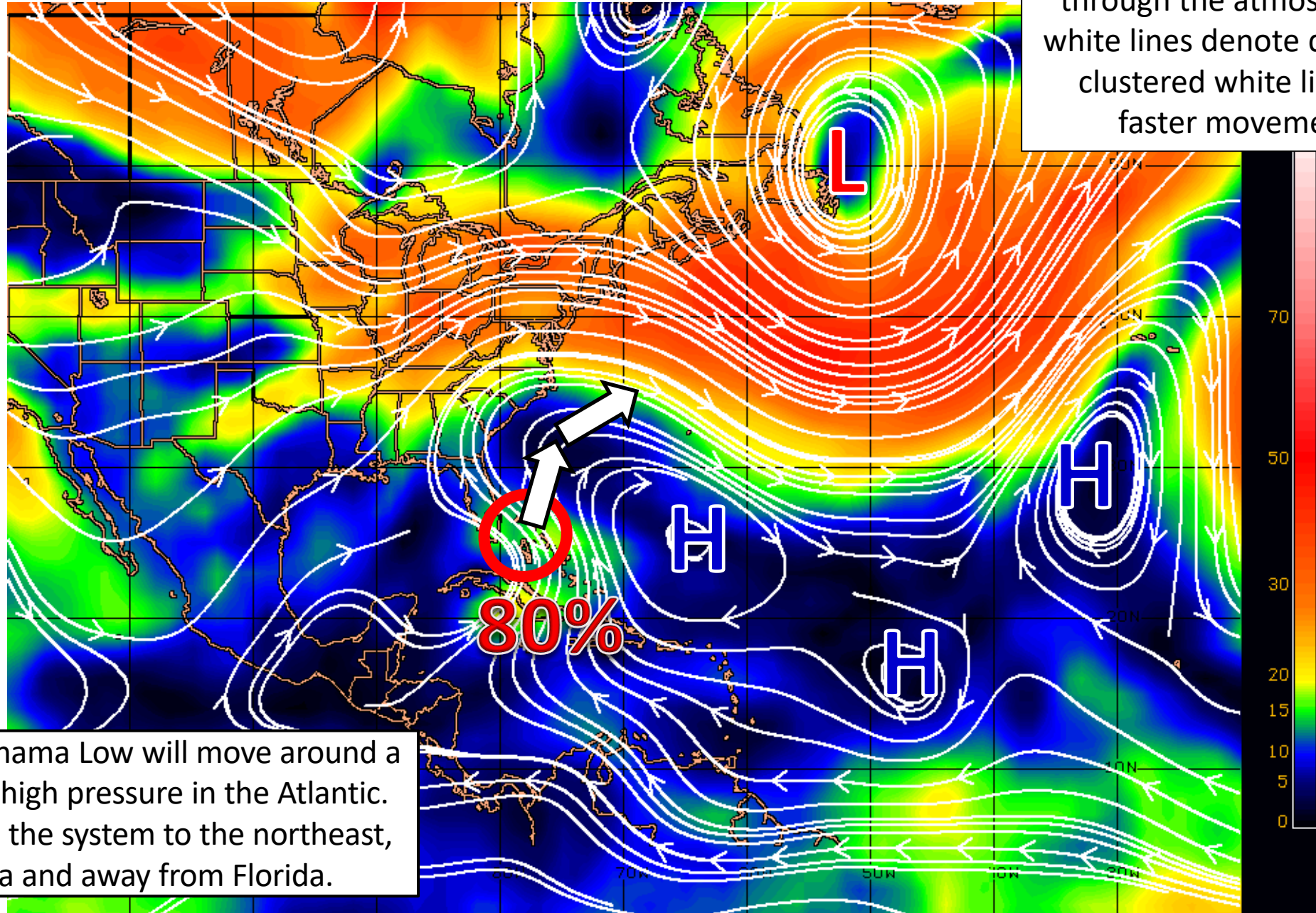
Invest 90L: A trough of low pressure located over the Straits of Florida continues to produce disorganized shower activity and gusty winds across the Florida Keys, portions of southeast Florida, and the northwestern Bahamas. Gradual development of this system is expected, and it will **likely become a tropical or subtropical storm on Saturday when it is located near the northwestern Bahamas**. Later in the weekend and early next week, the system is expected to move generally northeastward over the western Atlantic. Regardless of development, the disturbance will continue to *bring heavy rainfall to portions of the Florida Keys, southeast Florida and the Bahamas through Saturday. Tropical-storm-force wind gusts are also possible across portions of the Florida Keys, southeast Florida, and the Bahamas during the next day or so.* In addition, *hazardous marine conditions are expected along the Florida east coast and in the Bahamas where Gale Warnings are in effect.* Dangerous surf conditions and rip currents are possible along portions of the southeast U.S. coast this weekend and early next week. The Air Force Reserve Hurricane Hunter aircraft scheduled to investigate the system today has been canceled, but an aircraft is scheduled to investigate the disturbance tomorrow, if necessary.

***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

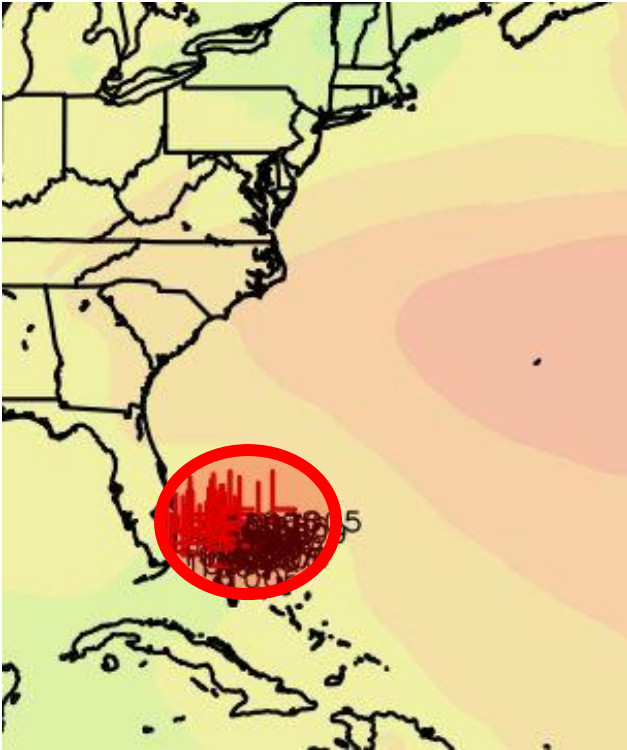
Typical Moving Storm

Slow Moving Storm

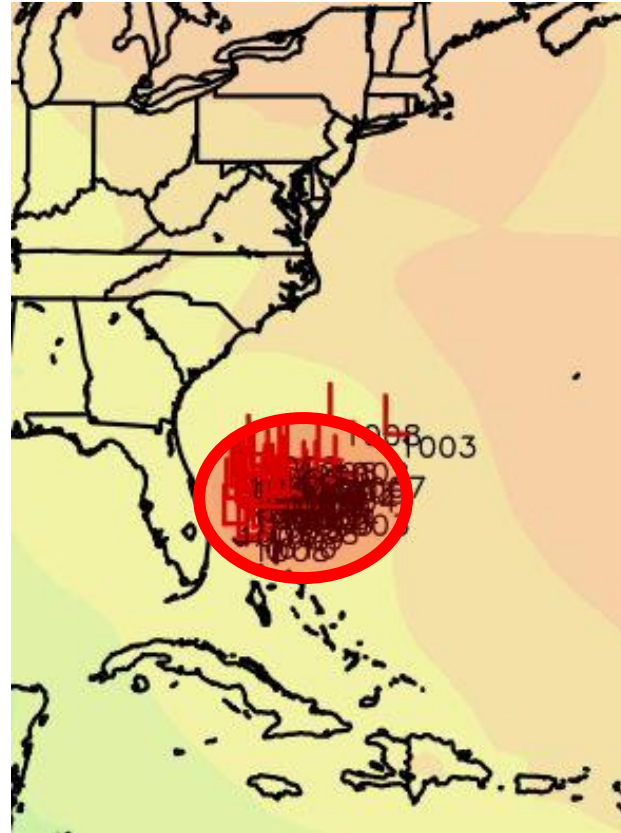
Invest 90L/Bahama Low will move around a large area of high pressure in the Atlantic. This will send the system to the northeast, out to sea and away from Florida.

Model Ensemble Track Guidance

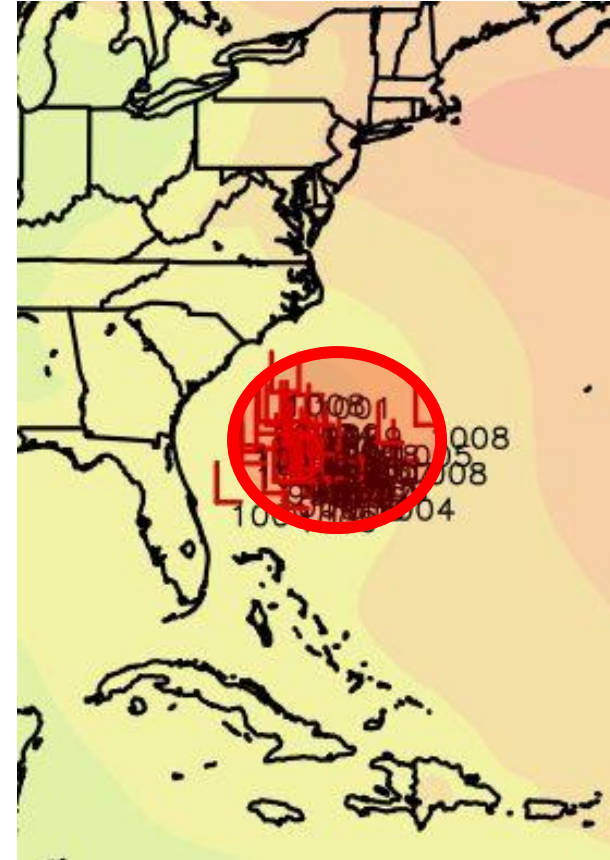
Fri. Afternoon



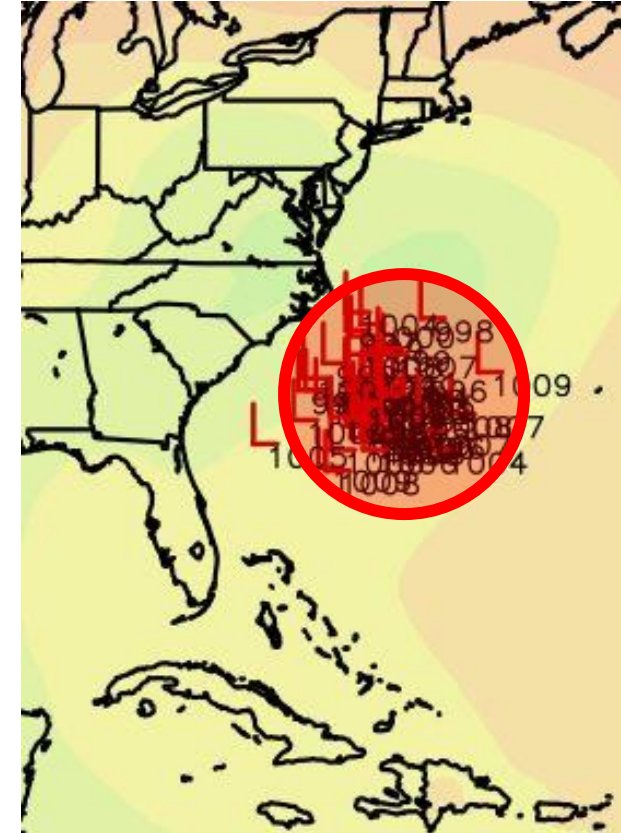
Sat. Afternoon



Sun. Afternoon



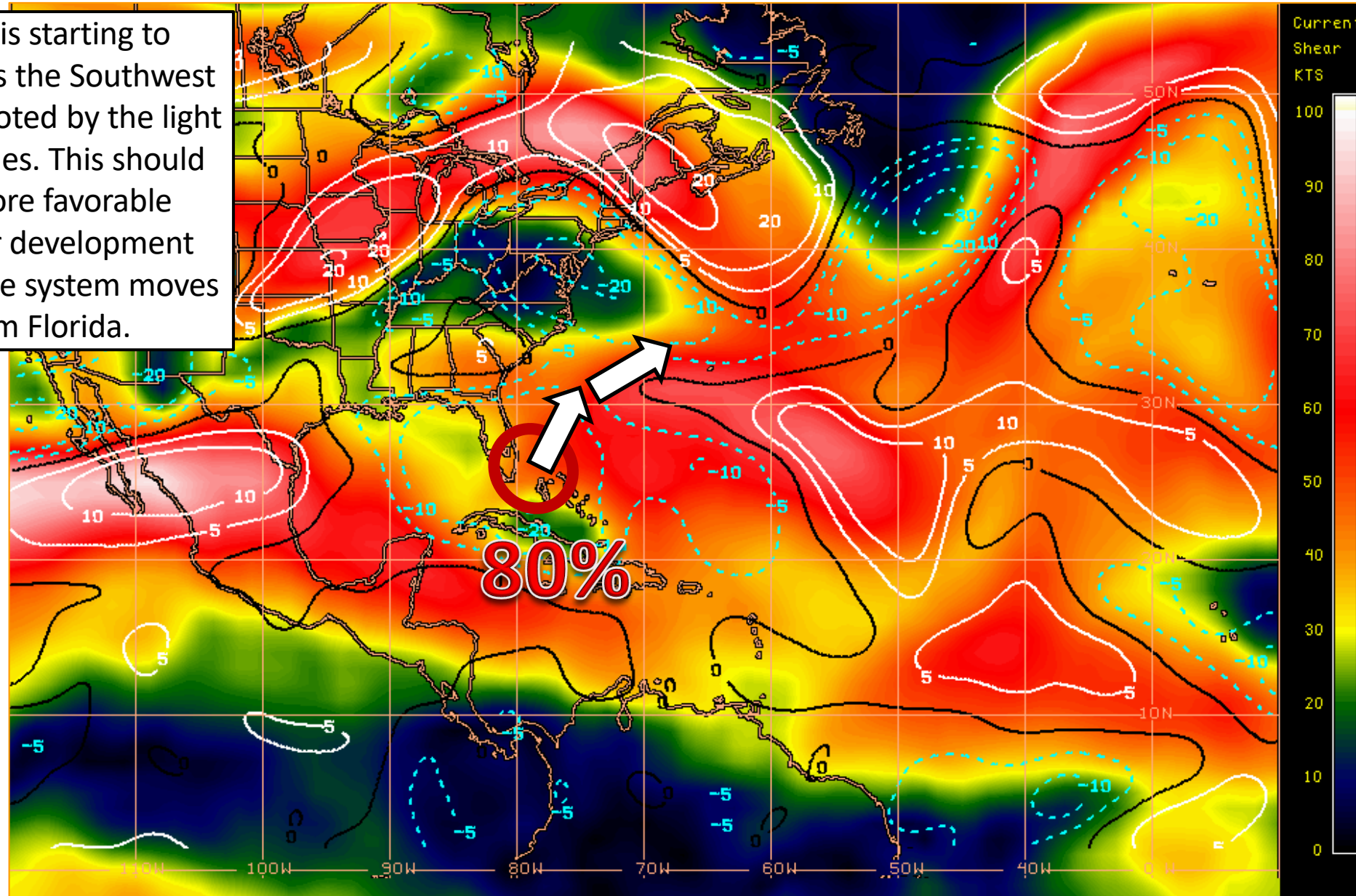
Mon. Afternoon



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. Wind gusts up to tropical-storm-force may be possible along coastal Southeast Florida and in the Keys, mainly in stronger thunderstorms today and tonight.

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

Wind shear is starting to decrease across the Southwest Atlantic, as denoted by the light blue dotted lines. This should allow for more favorable conditions for development tomorrow as the system moves away from Florida.



HIGH Shear
(Unfavorable)

HIGH Shear
(Unfavorable)

MODERATE
Shear
(Neutral)

LOW Shear
(Favorable)

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

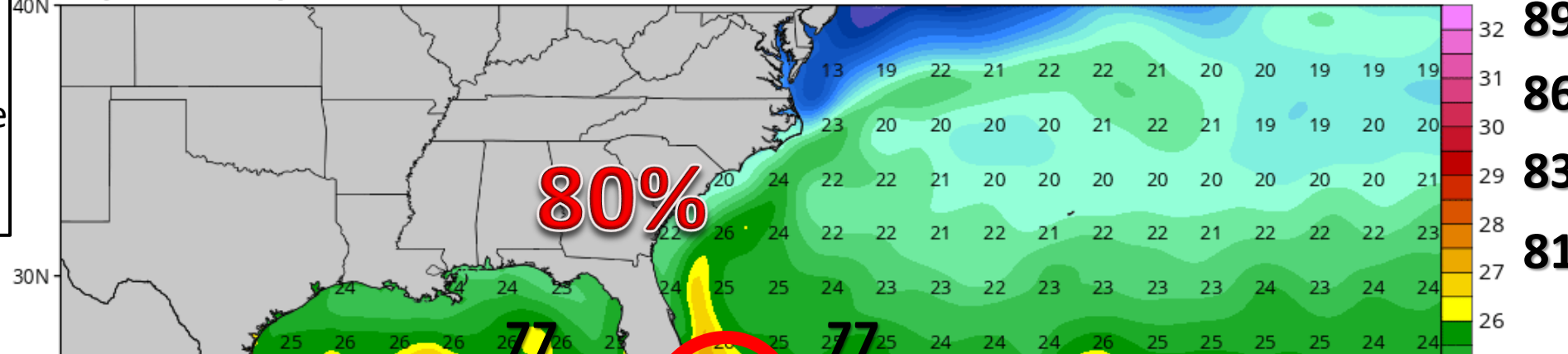
GOES-FAST 24 HOUR WIND SHEAR TENDENCY PRODUCT 1200 UTC 15MOX20 UH-CIMSS McTRPS

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.

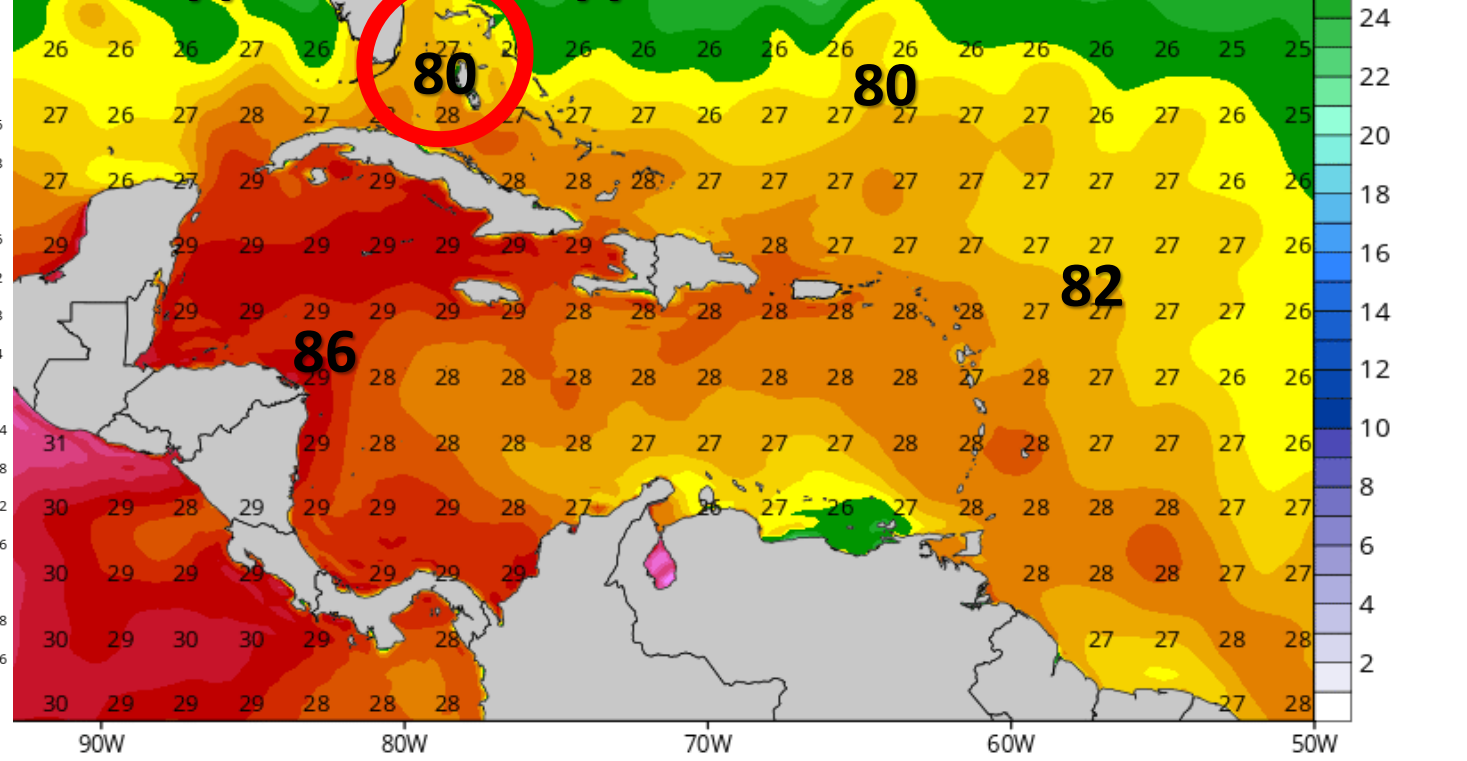
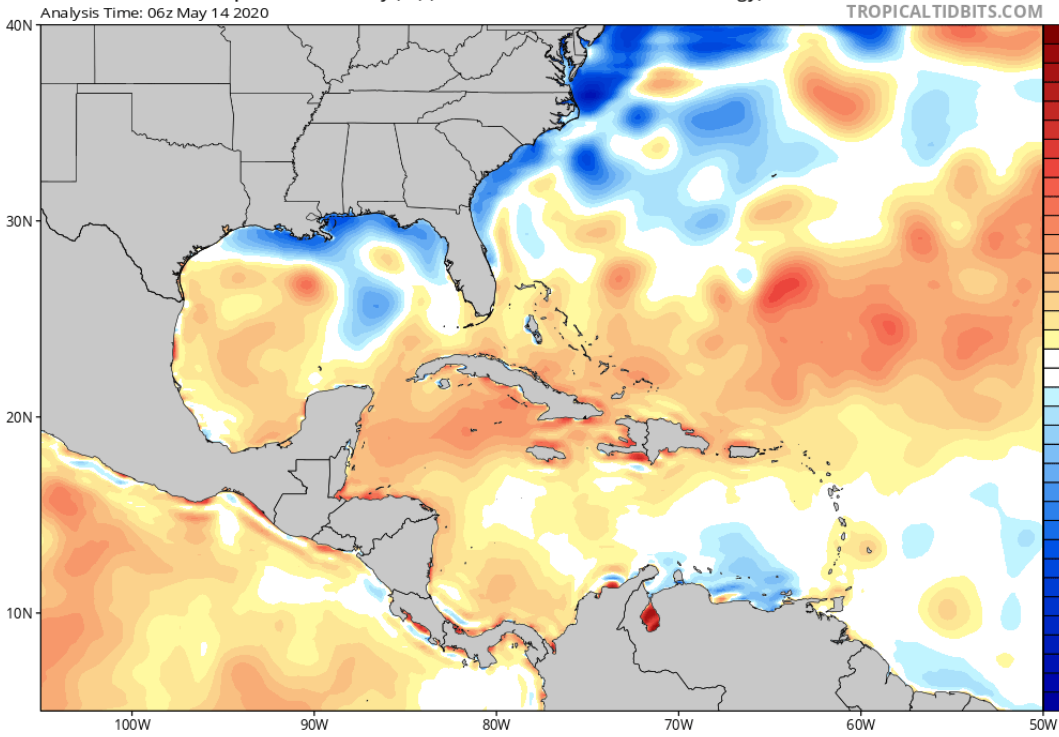
CDAS Sea Surface Temperature (°C)

Analysis Time: 06z May 14 2020



CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)

Analysis Time: 06z May 14 2020

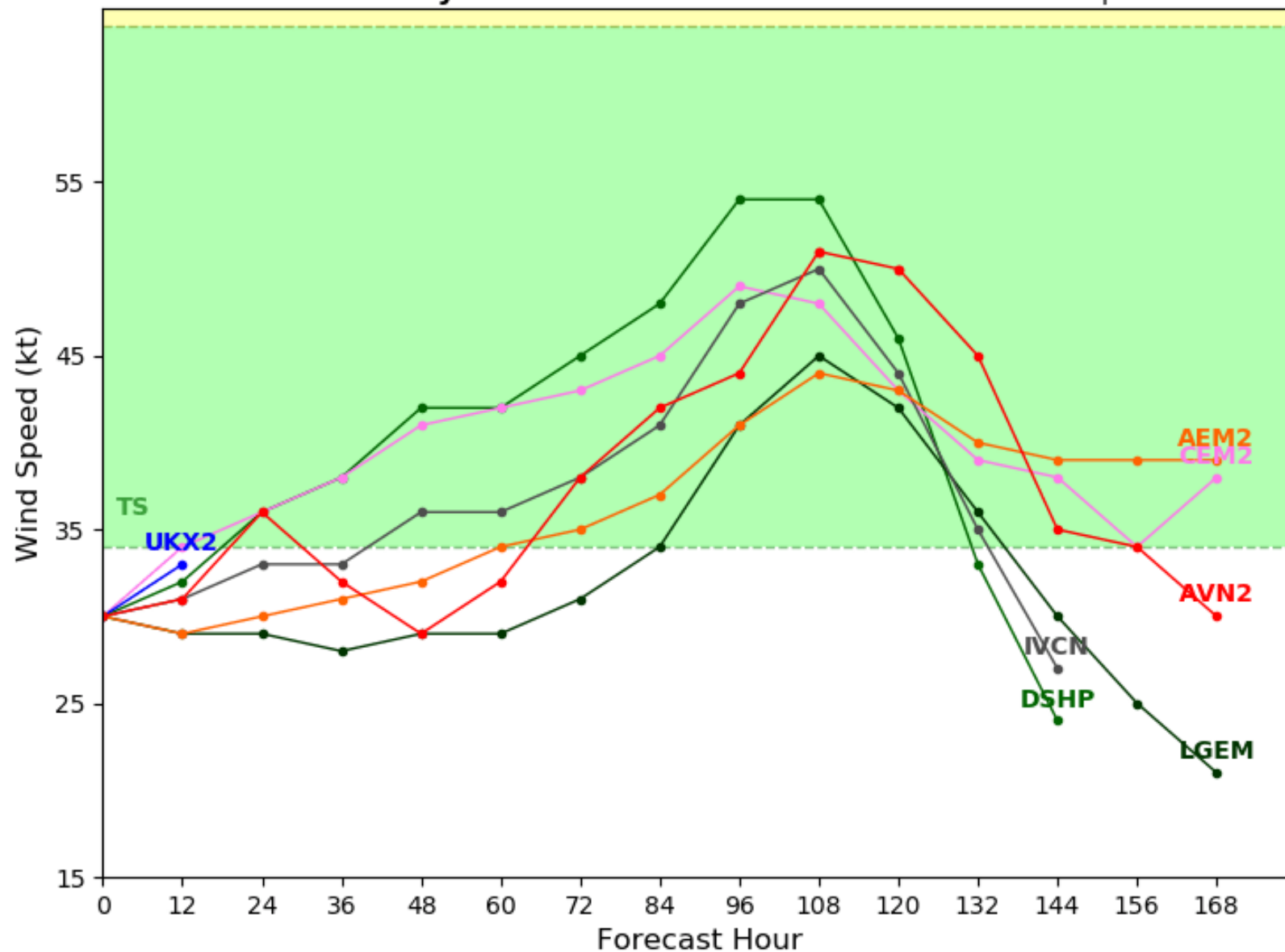


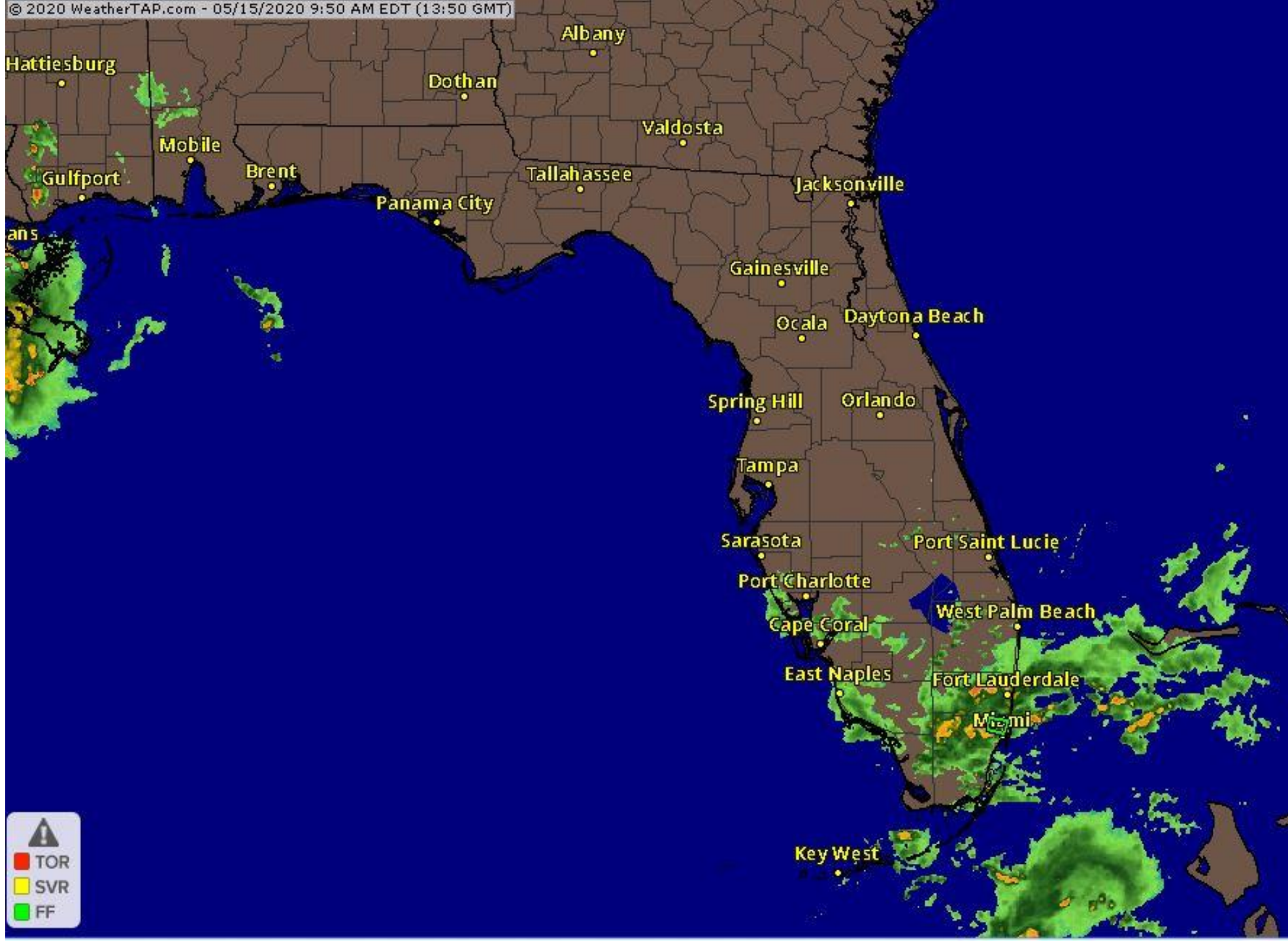
Invest 90L Model Intensity Guidance

Initialized at 12z May 15 2020

Levi Cowan - tropicaltidbits.com

The system is likely to reach tropical storm strength early next week over the open waters of the Southwest Atlantic.





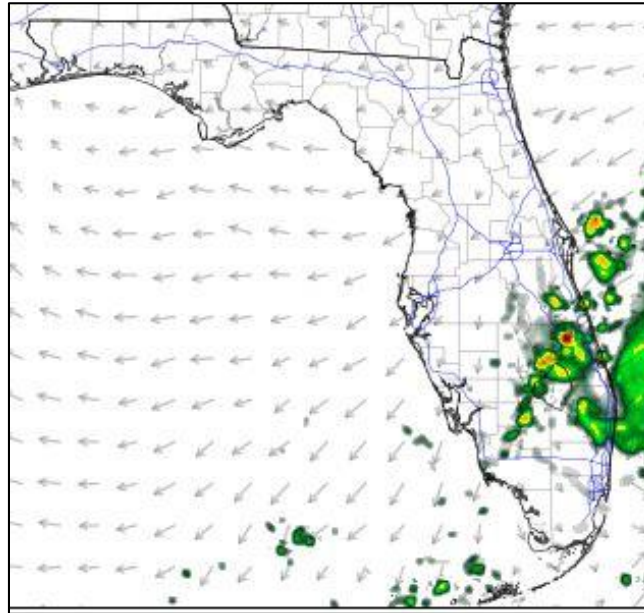
Current Radar as of 9:50 AM EDT

Model Forecast Radar

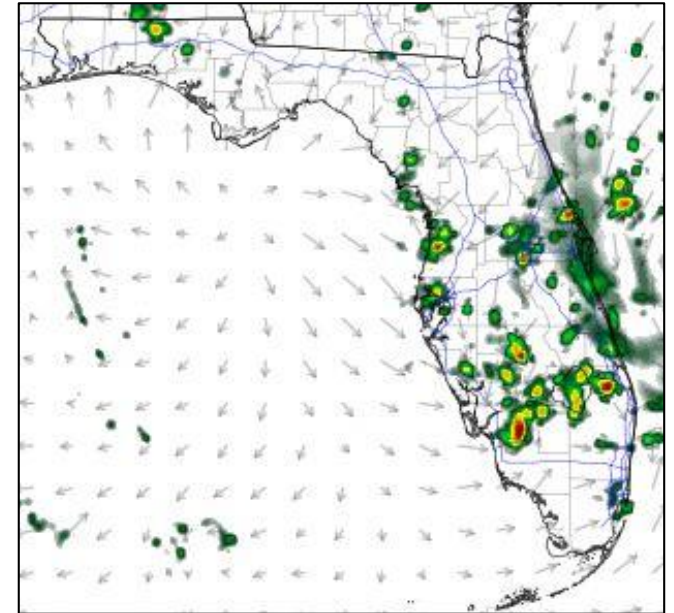
******Only Model Guidance – Not an Actual Forecast. Time & Position Will Vary******



Friday Afternoon

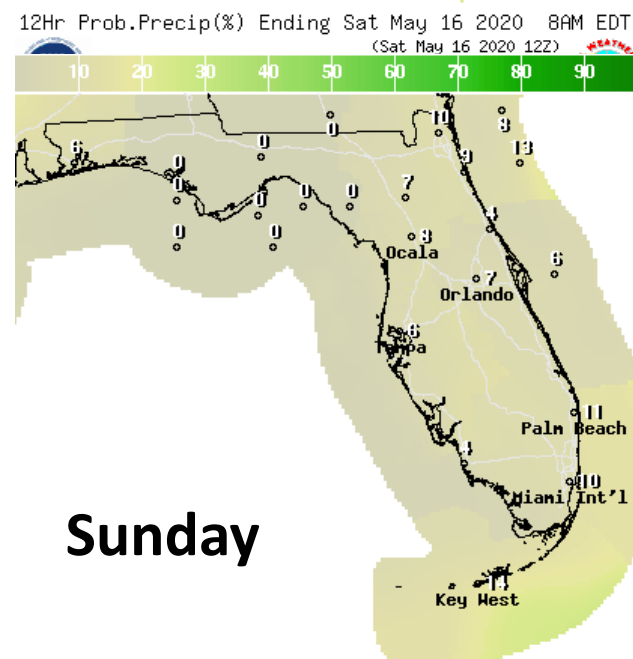
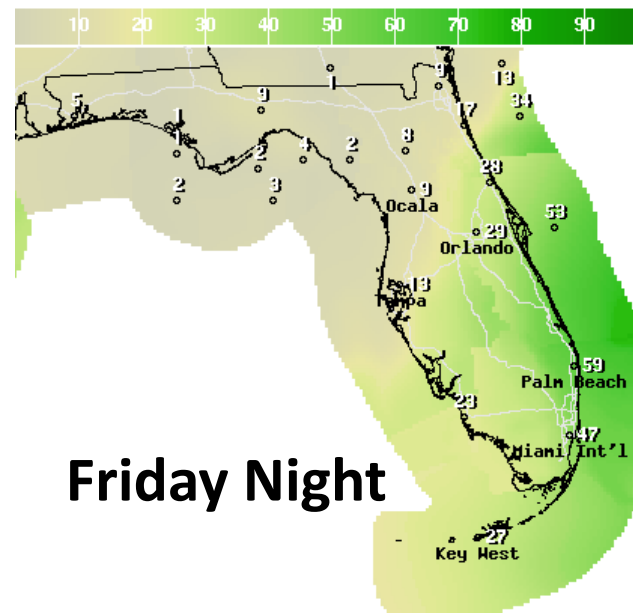
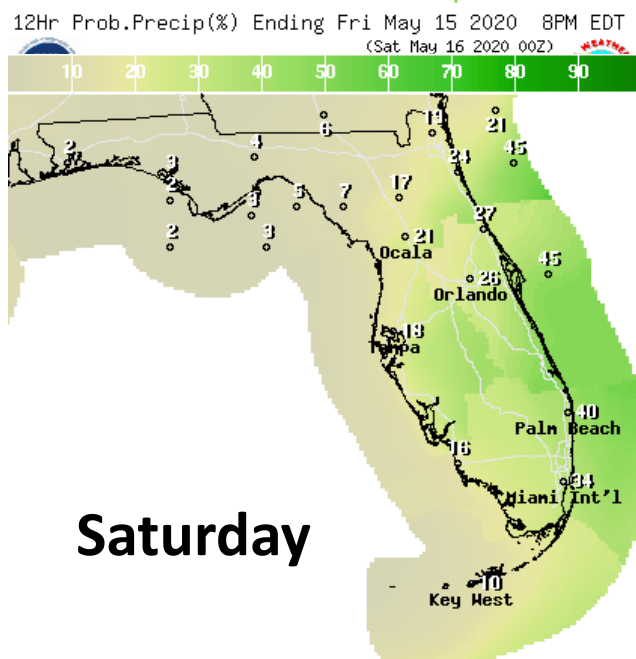
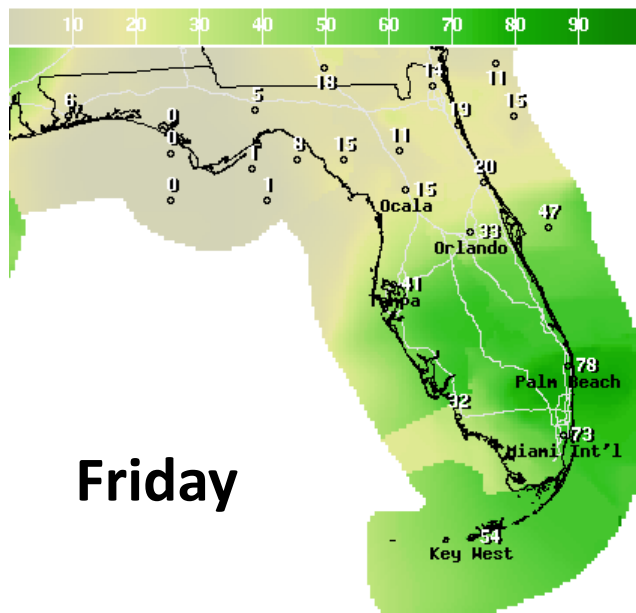


Friday Night



Saturday Afternoon

The isolated thunderstorms and heavy showers across Southeast Florida this morning may become more widespread across all of South Florida by this afternoon. Rain chances decrease tonight and will likely be confined to the I-95 corridor. Additional showers and thunderstorms will develop tomorrow afternoon across the Peninsula but are not expected to be as widespread as today.



Rain Chances Friday - Sunday

High rain chances will continue across the Peninsula through Saturday, before ending on Sunday. The best chances for showers and thunderstorms will be in Southeast Florida and the Treasure Coast. However, scattered thunderstorms may occur in Central Florida as well, with isolated activity in Northeast Florida.

Widespread severe weather is not expected. However, gusty winds of 40-50 mph, waterspouts, locally heavy downpours, and frequent lightning will accompany the stronger storms.

Forecast Rainfall Totals Next 48 Hours

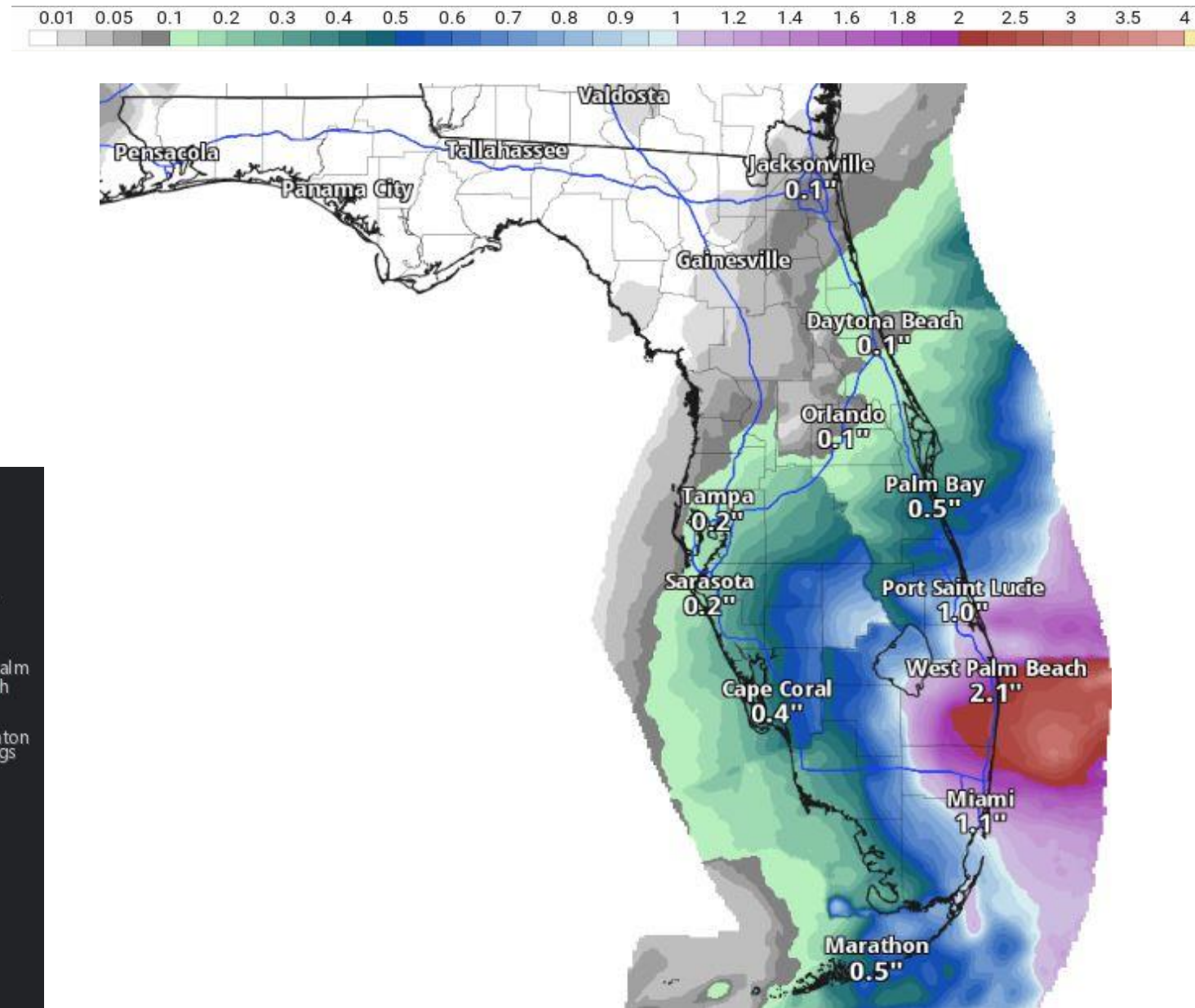
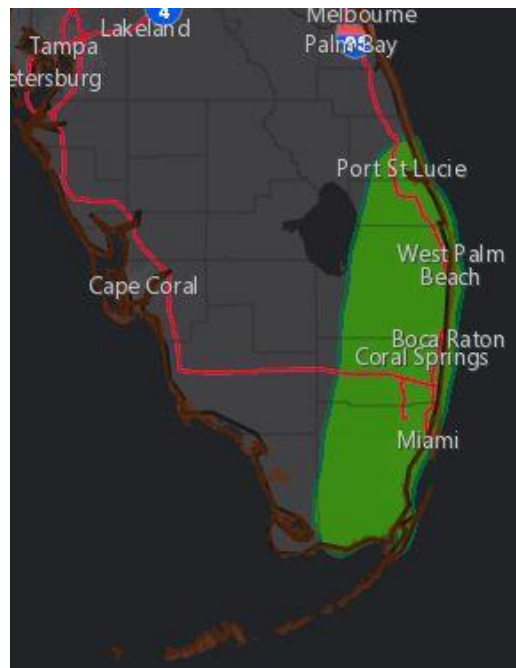
Locally heavy rainfall is likely in Southeast Florida today. Isolated cases of flash flooding are possible, particularly in urban and low-lying areas where street flooding may occur.

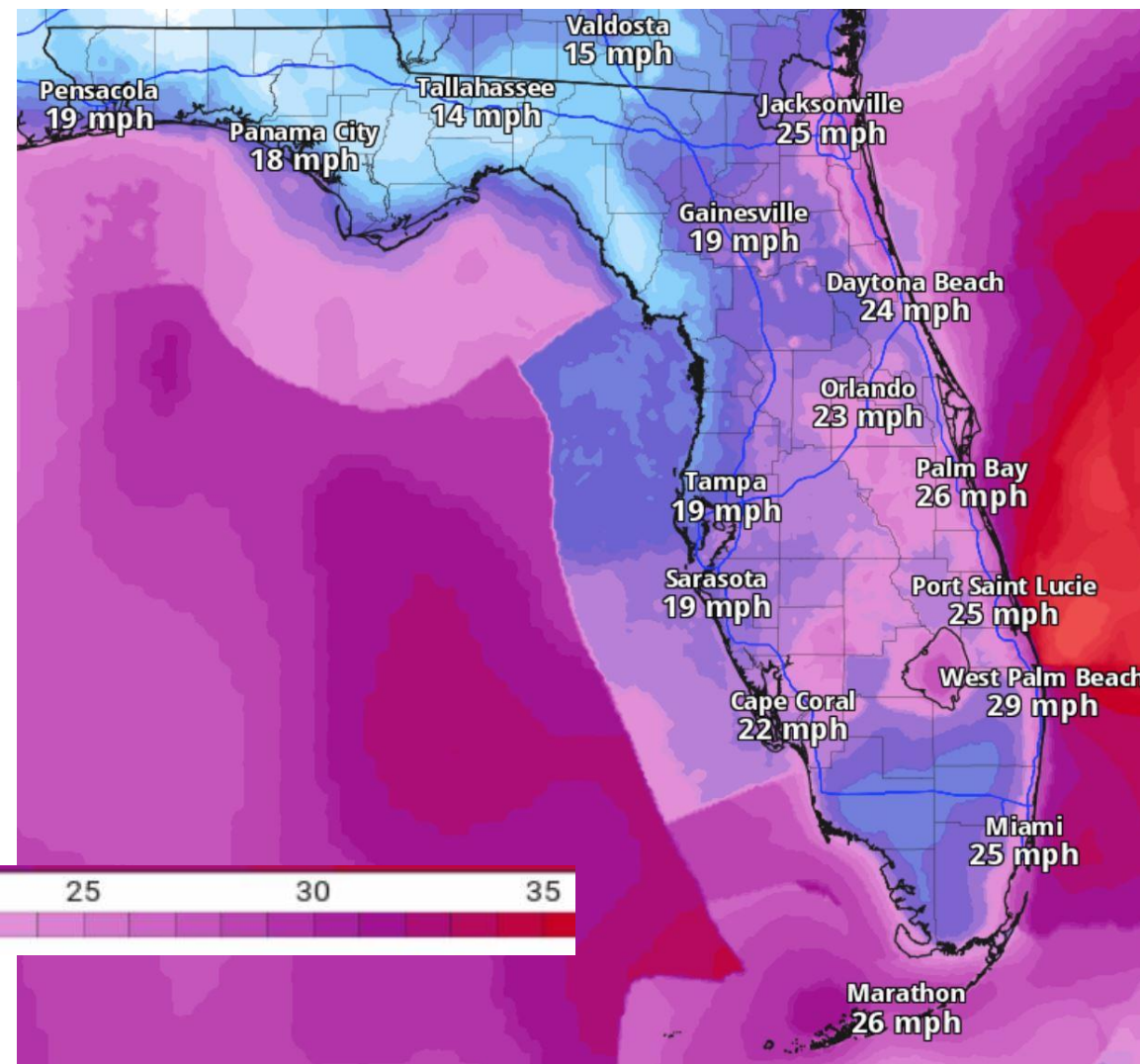
Significant, wetting rainfall is not expected in the Panhandle for the next 7 days.

**MARGINAL
(MRGL)**

**Isolated flash
floods possible**

Localized and
primarily affecting
places that can
experience rapid
runoff with heavy
rainfall.





Wind Gusts Friday & Saturday

Gusty winds are also possible outside of the showers and storms. Wind gusts of 25-35 mph are possible in the Peninsula. Gusts up to 40 mph are possible in spots, particularly in coastal Southeast Florida. Higher wind gusts are also possible in any of the stronger thunderstorms.

Wave Heights Friday - Monday

Friday

Saturday

Sunday

Monday

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)

- An area of low pressure is beginning to develop in the Florida Straits which will move into the northwestern Bahamas late Friday or Saturday.
- This disturbance could become organized tonight and into Saturday, which could become a subtropical or tropical storm.
- The system is expected to move northeast around an area of high pressure, heading away from the state of Florida.
- Air Force Reserve Hurricane Hunters are scheduled to investigate the system on Saturday, if necessary. Today's mission has been cancelled.
- 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:

- Locally heavy rainfall and gusts possibly to tropical storm force will be possible in the Florida Keys and coastal Southeast Florida today/tonight.
- Widespread rainfall totals of 2-4" are expected across Southeast Florida and the Florida Keys. Localized totals could be 6+". Some parts of Miami-Dade have already seen more than 4" of rain today.
- A Marginal Risk for flash flooding continues through tonight across Southeast Florida and the Keys, but recent drought should preclude any widespread flooding. Street flooding in urban areas is the main concern.
- Gusty winds of 40-55 mph, frequent lightning, and waterspouts are also possible in the stronger showers and thunderstorms.
- Windy conditions are possible outside of thunderstorms—gusts of 25-40 mph possible in the Peninsula.
- 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.



TROPICAL UPDATE



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State Meteorological Support Unit

Florida Division of Emergency Management

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