



# TROPICAL UPDATE



2:00 PM EDT

Monday, September 28, 2020

Western Caribbean (40%)

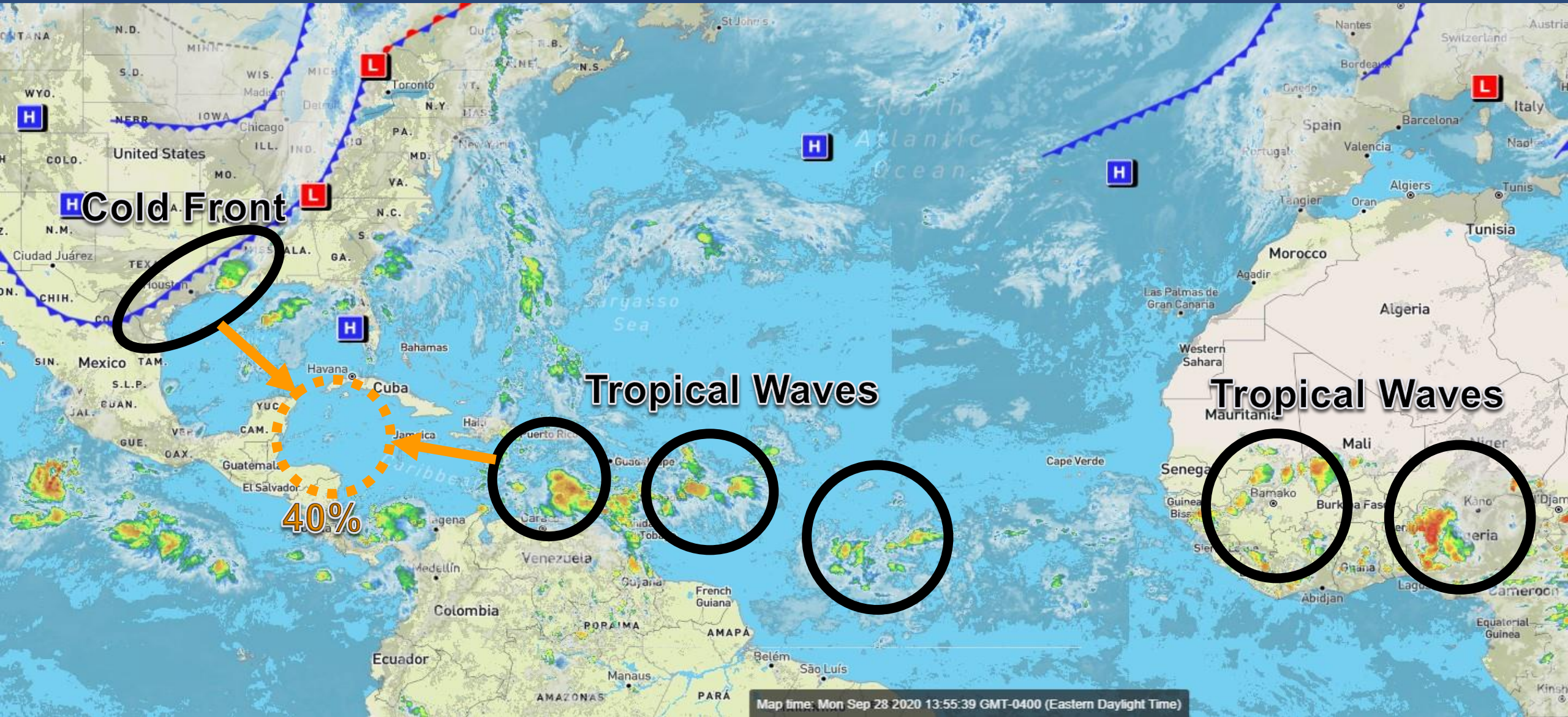
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an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







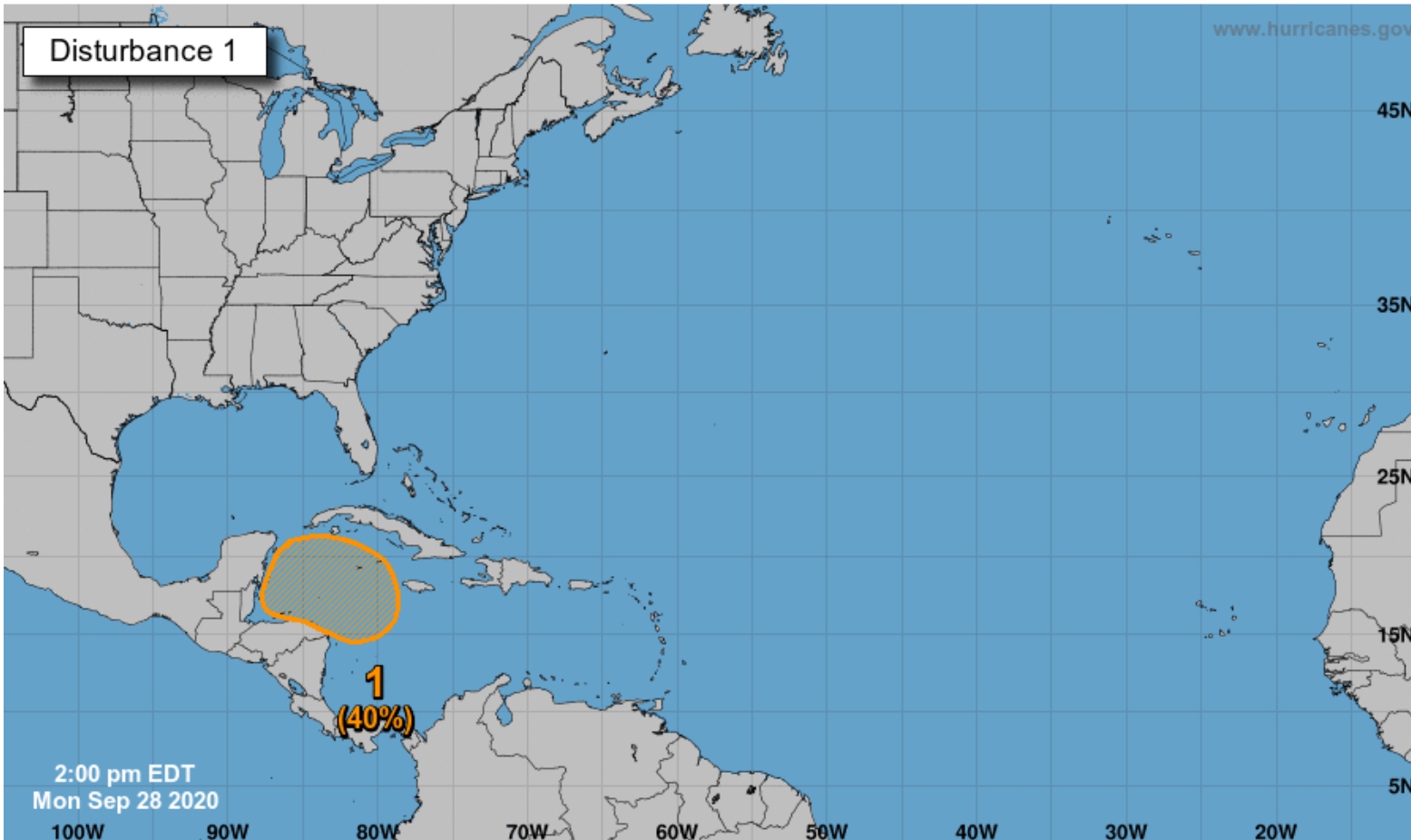
# Tropical Weather Outlook

Possible Area of Development During the Next 5 Days ([LINK](#))



## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



A broad area of low pressure is expected to form over the western Caribbean Sea in a few days.

Environmental conditions are expected to be conducive for some gradual development thereafter, and a tropical depression could form late this week or this weekend while the system moves slowly west-northwestward over the northwestern Caribbean Sea.

The movement and the strength of the system is highly uncertain this weekend and will depend on its evolution over the next few days.

**This system should be monitored closely later this week.**

**\*Formation chance through 48 hrs...low...near 0%**

**\*Formation chance through 5 days...medium...40%**

Current Disturbances and Five-Day Cyclone Formation Chance: < 40% 40-60% > 60%  
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane  
 Post-Tropical Cyclone or Remnants

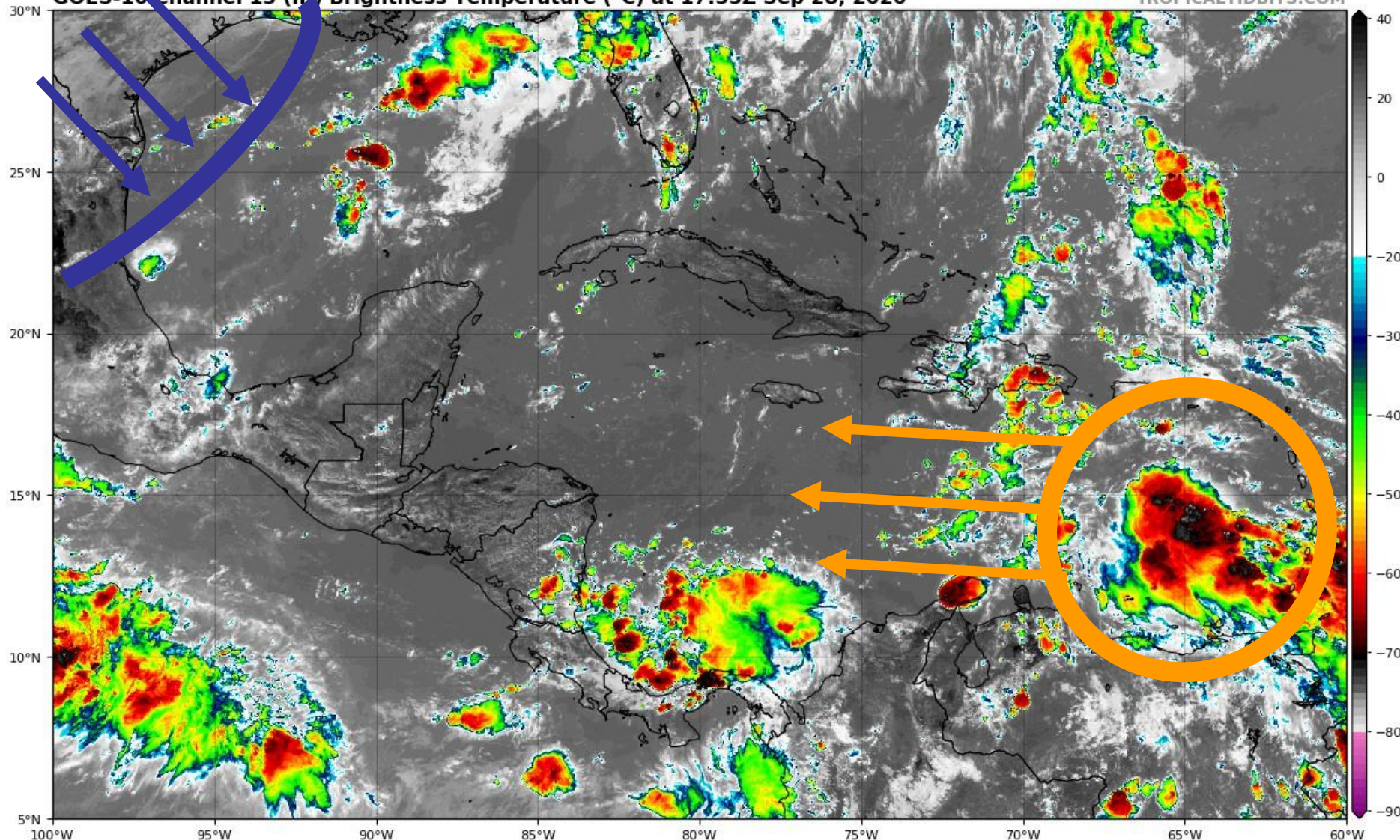


# Satellite Imagery

## Western Atlantic

GOES-16 Channel 13 (IP) Brightness Temperature (°C) at 17:55Z Sep 28, 2020

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A tropical wave currently in the eastern Caribbean is producing numerous showers and thunderstorms, but remains disorganized. It is moving to the west.

A strong, early-season cold front is moving into the Gulf of Mexico over the next couple of days.

These two systems will meet in the western Caribbean later this week and may form an area of low pressure.

There is no development chance in the short-term/next 48 hours.



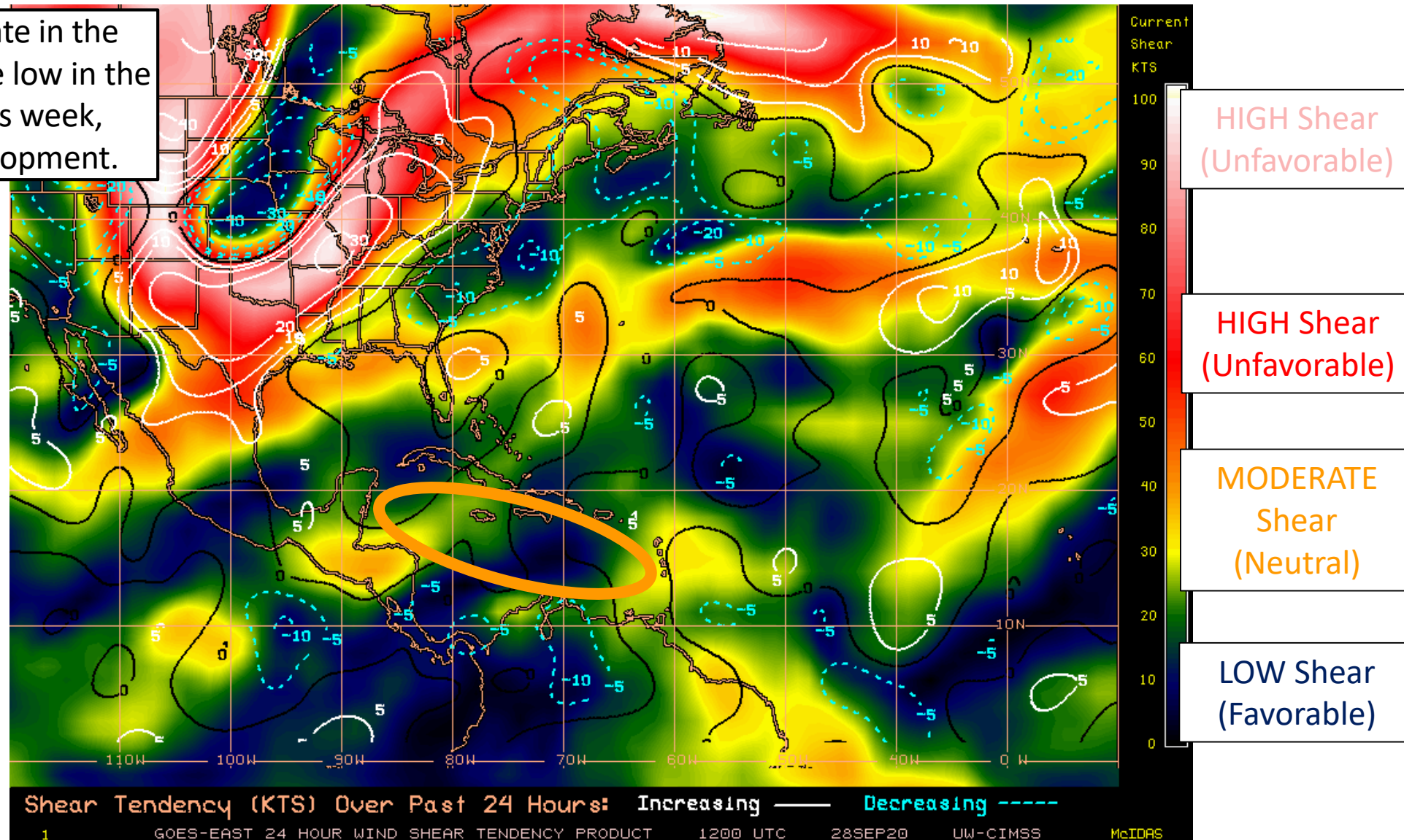


# Wind Shear

Is the environment favorable for the systems?

Color denotes the amount of wind shear and the lines denote how it have changed over the last 24 hours (dotted lines show decreasing shear and solid lines show increasing).

Wind shear is low to moderate in the Caribbean, but is forecast to be low in the western Caribbean later this week, making it favorable for development.



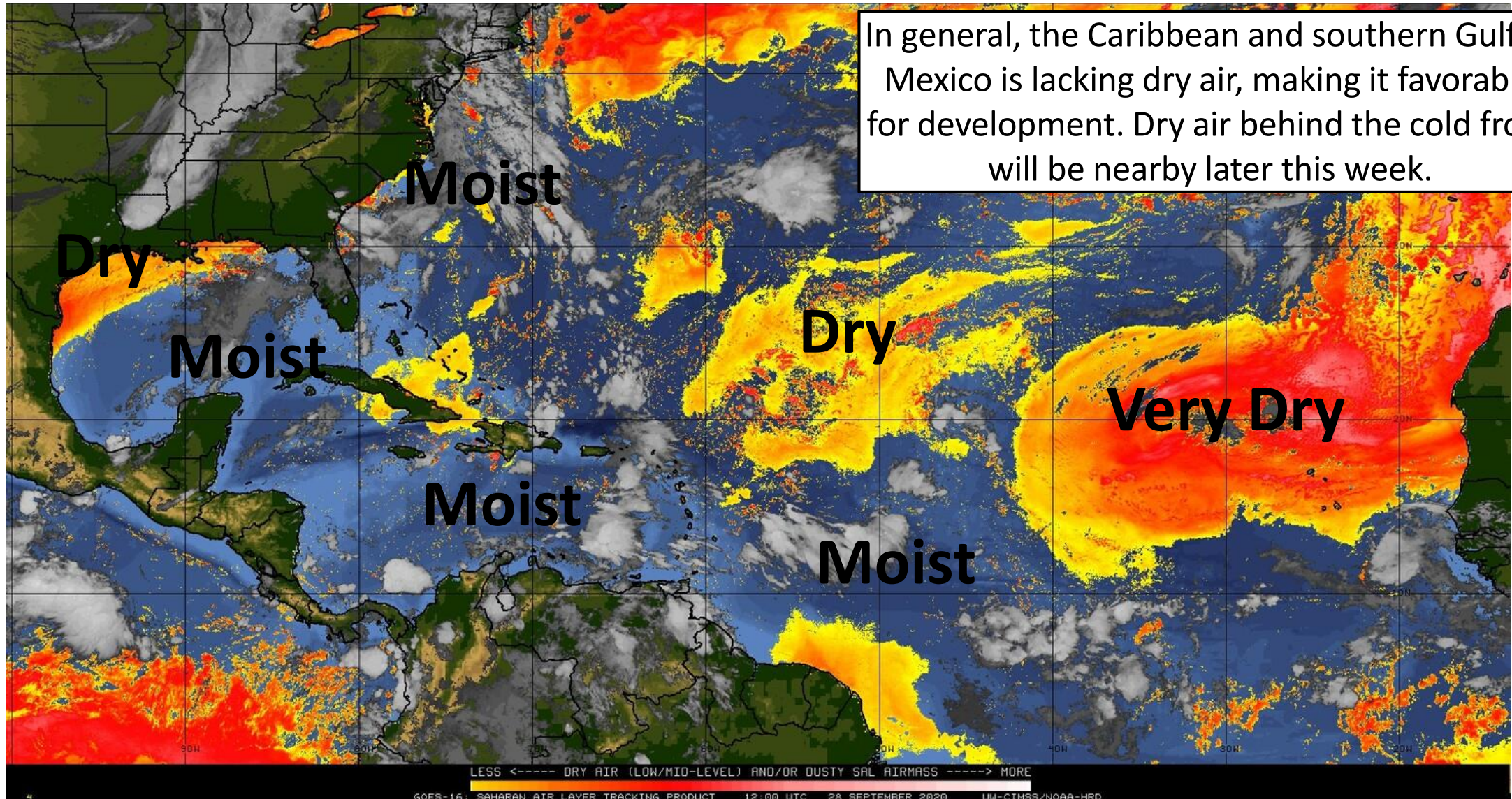




# Dry Air & Saharan Dust

Is the environment favorable for the systems?

Color denotes concentration of Saharan Dust or dry, stable air.







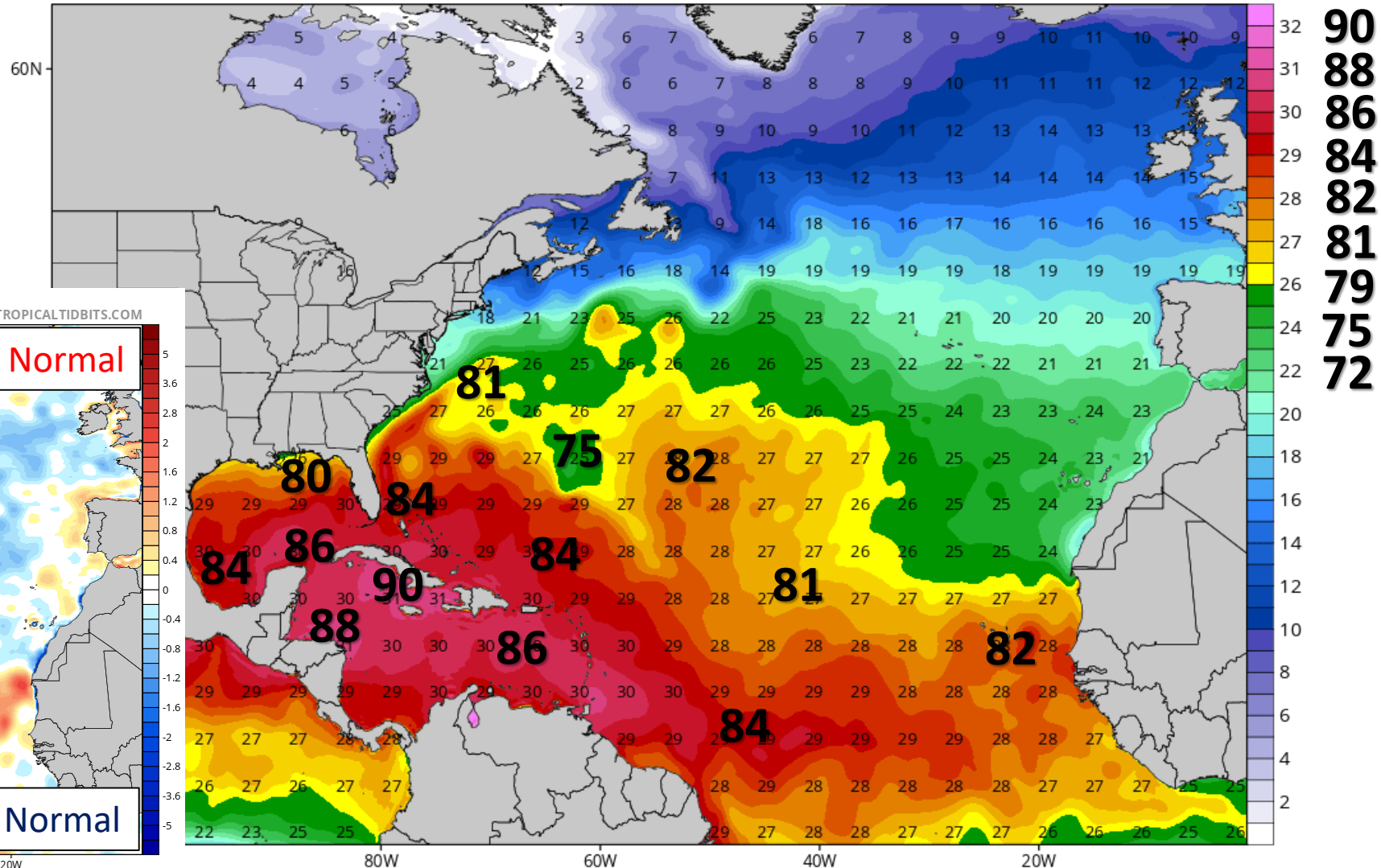
# Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Water temperatures are supportive for tropical development across the entire Caribbean, with very warm, deep water. The recent stretch of storms has cooler waters in the northern Gulf of Mexico and near Bermuda.

CDAS Sea Surface Temperature (°C)

Analysis Time: 06z Sep 28 2020



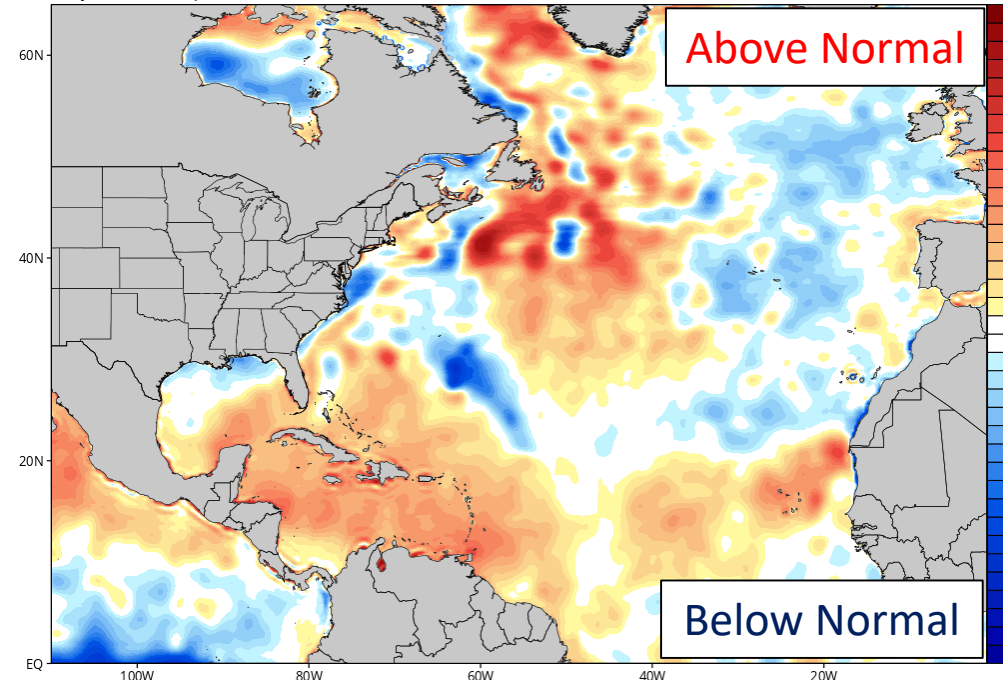
CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)

Analysis Time: 06z Sep 28 2020

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Above Normal

Below Normal





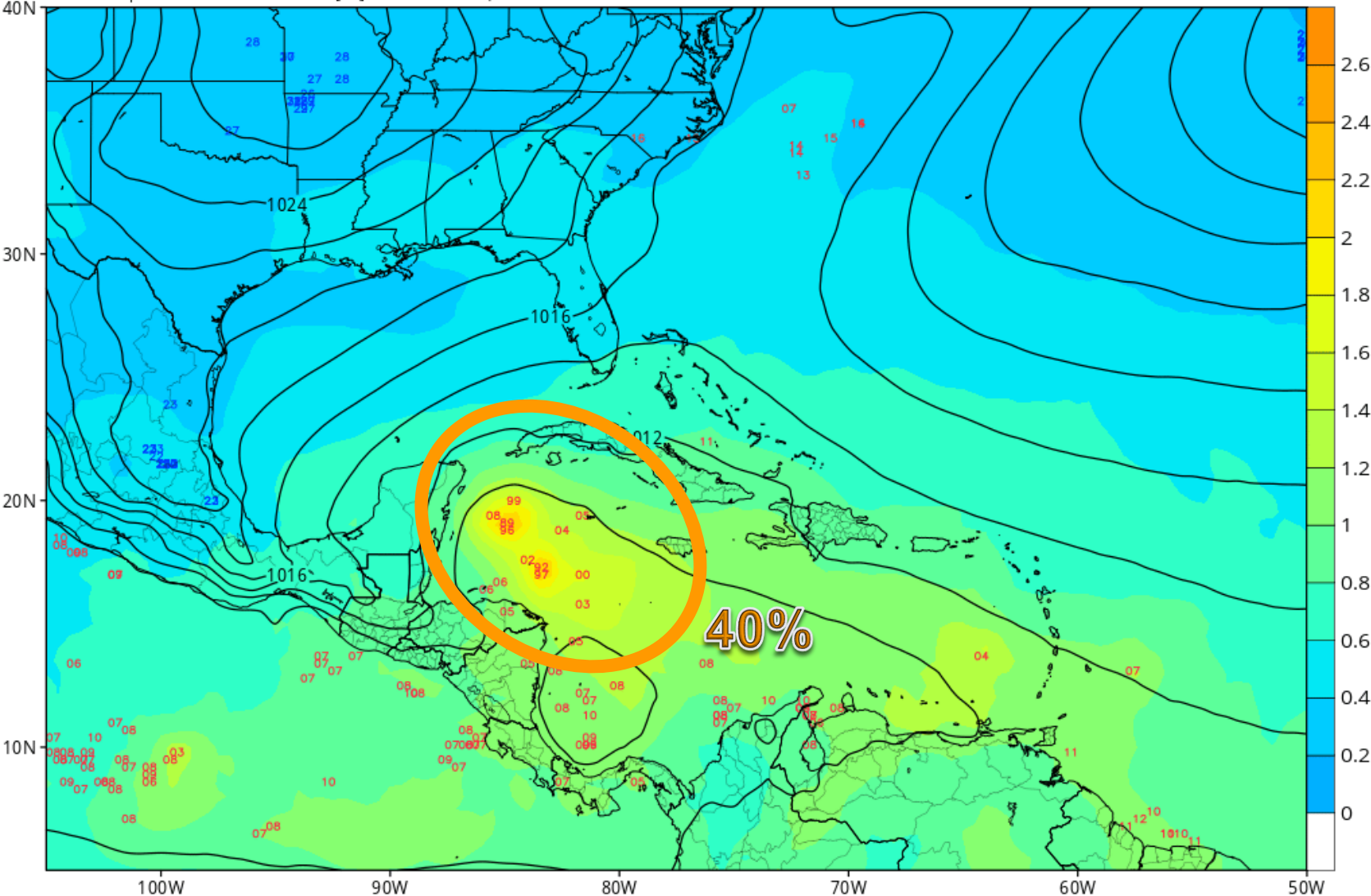
# Model Forecasts

## Ensemble Models – Friday Morning (Oct. 2)

GEFS Mean MSLP (mb), Ensemble Member Pressure Centers (Lows: red | Highs: blue), & Normalized Spread ( $\sigma$ )

Init: 12z Sep 28 2020 Forecast Hour: [96] valid at 12z Fri, Oct 02 2020

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Development is not expected over the next 48 hours, but could begin on Thursday near Jamaica or Friday/Saturday in the western Caribbean.

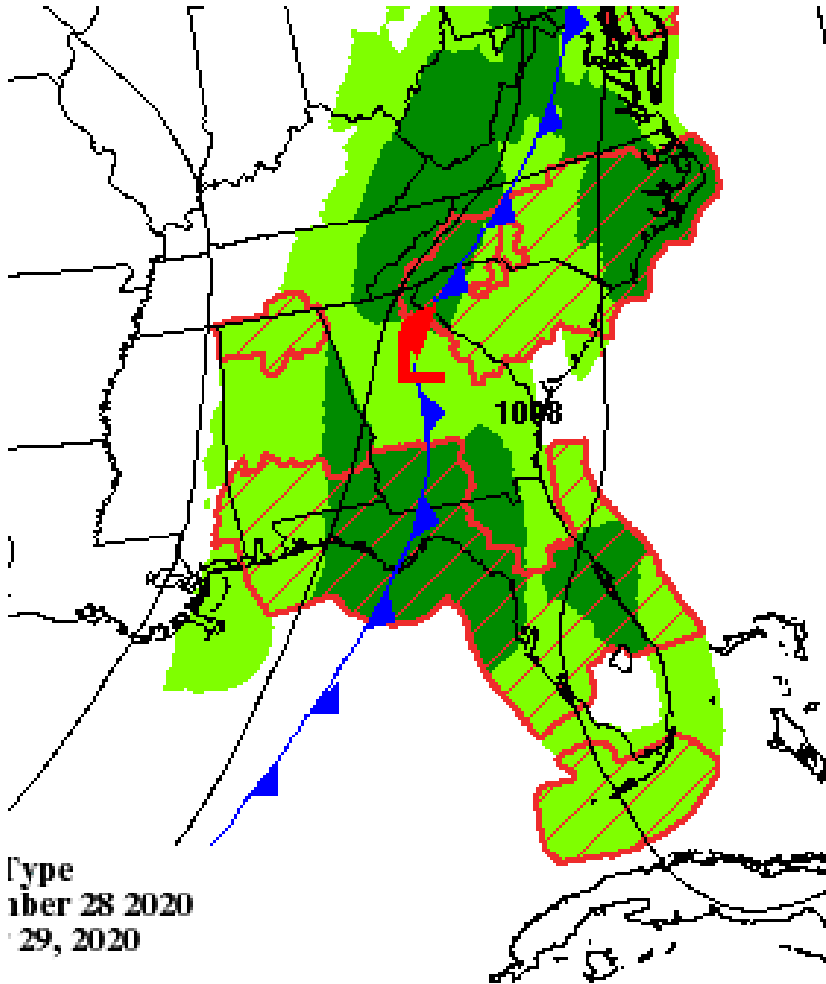
This weekend, *\*IF\** something develops there is great uncertainty in the eventual track.

Climatology favors a northward track this time of year, ***\*BUT\** a western or stationary movement is possible this weekend instead.**

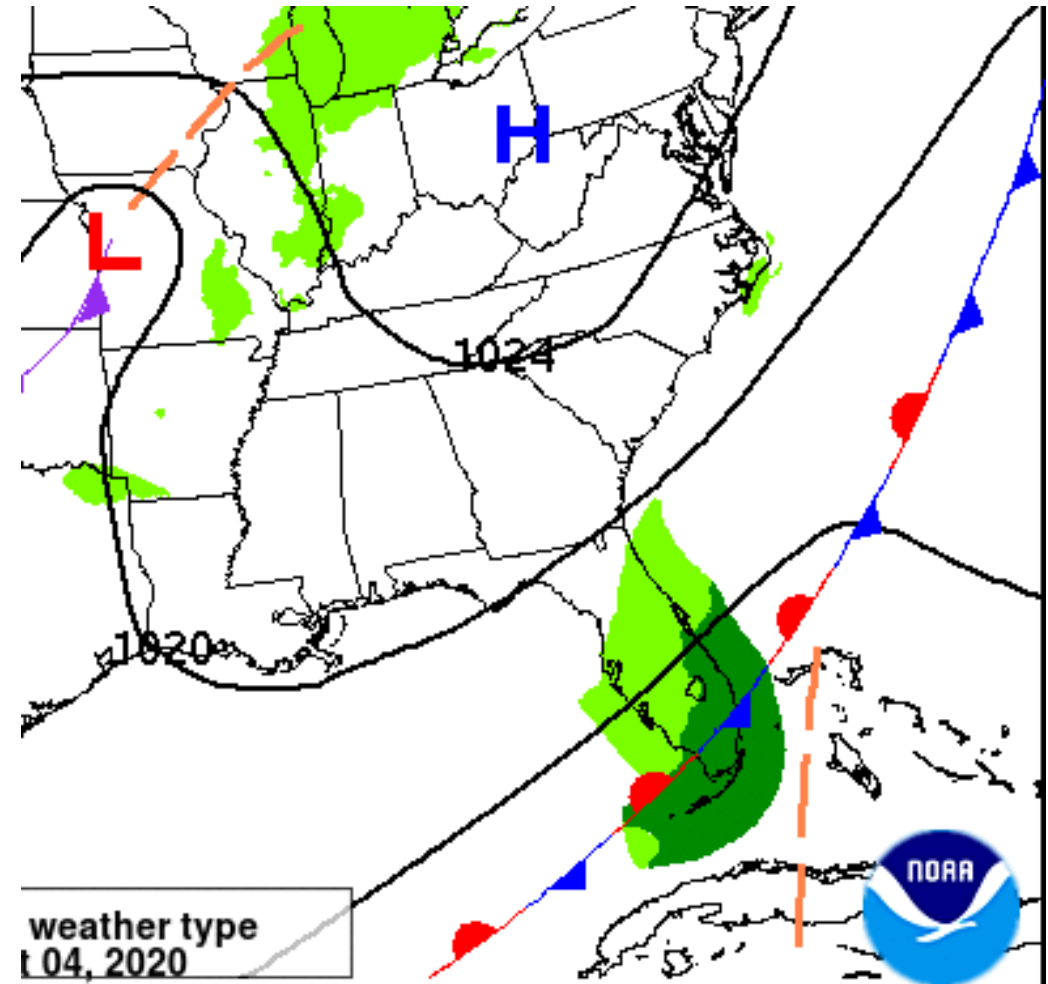




# A Cold Front is Coming!



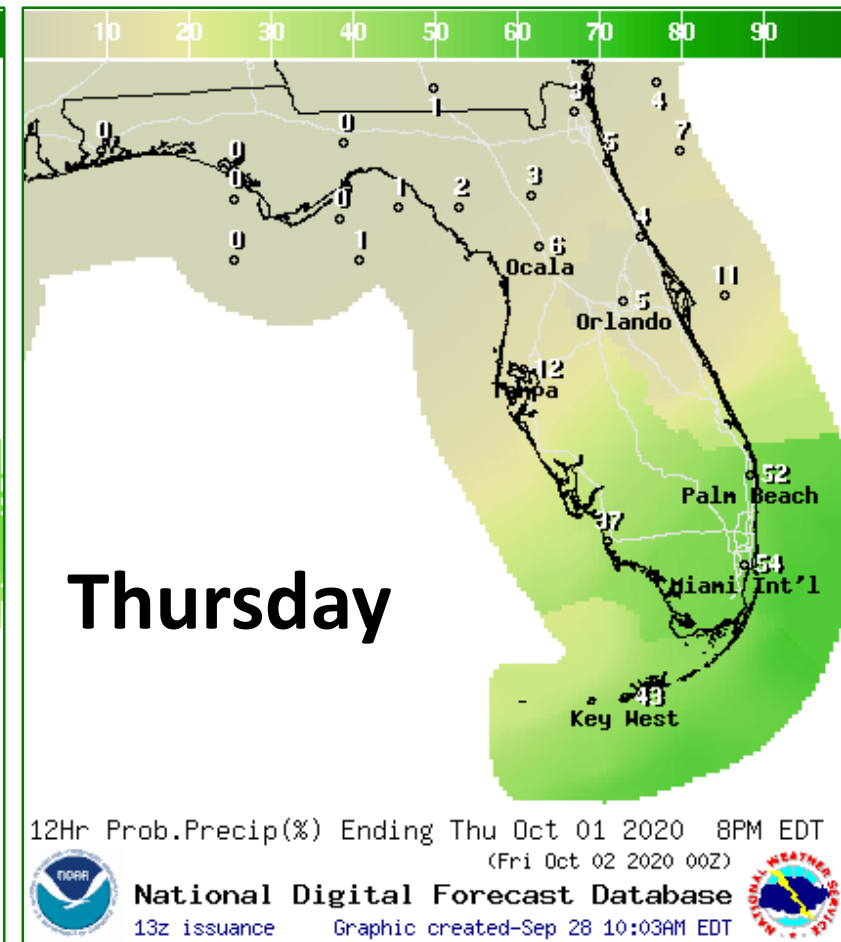
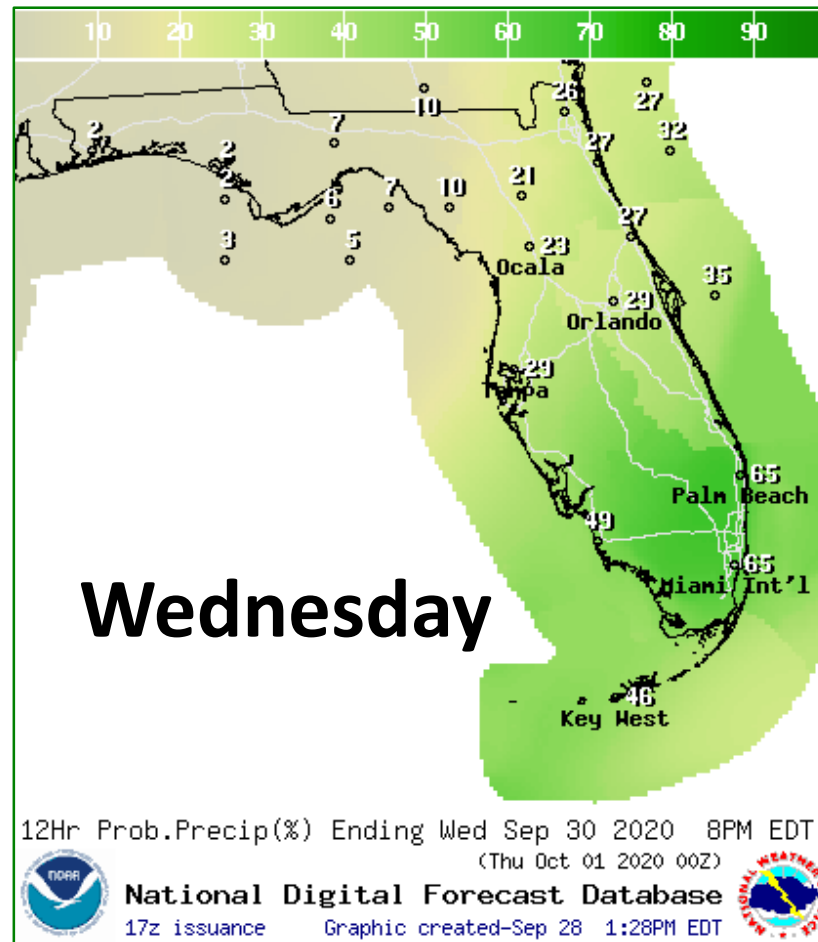
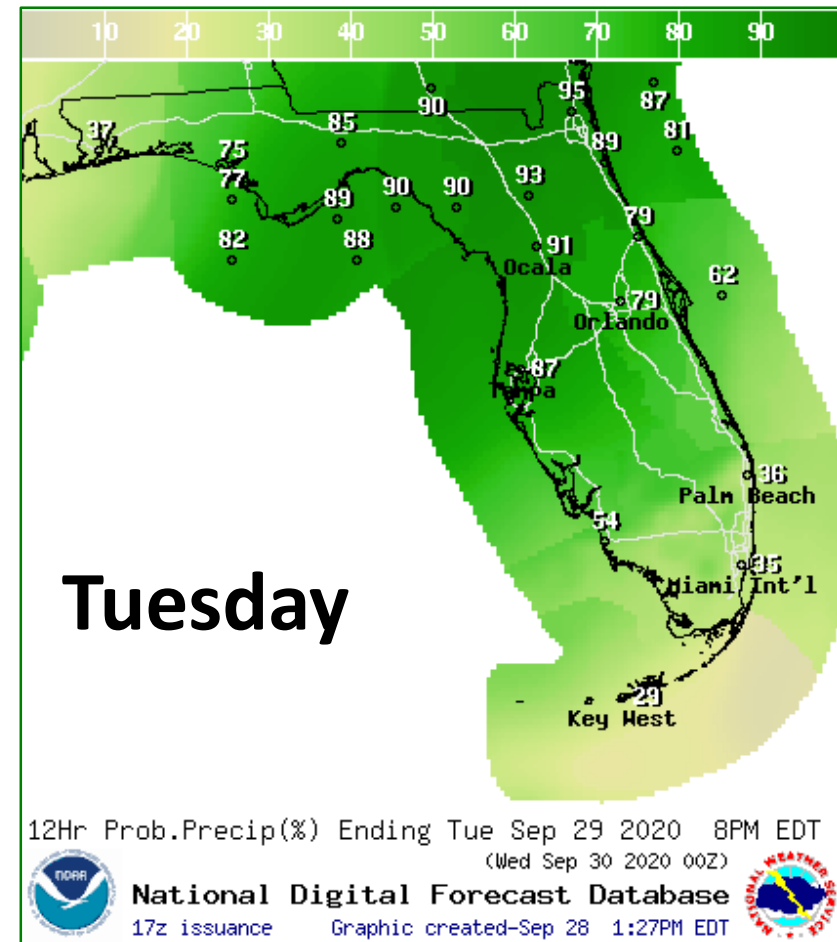
**Tuesday**



**Wednesday-Saturday**



# Forecast Rain Chances

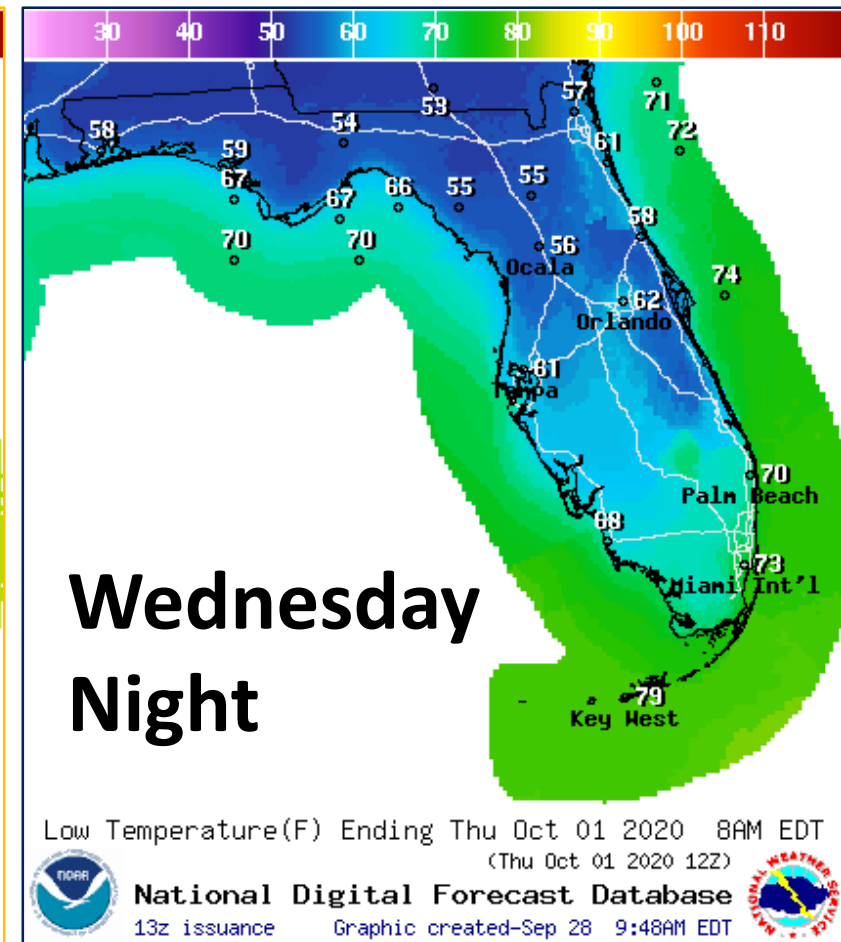
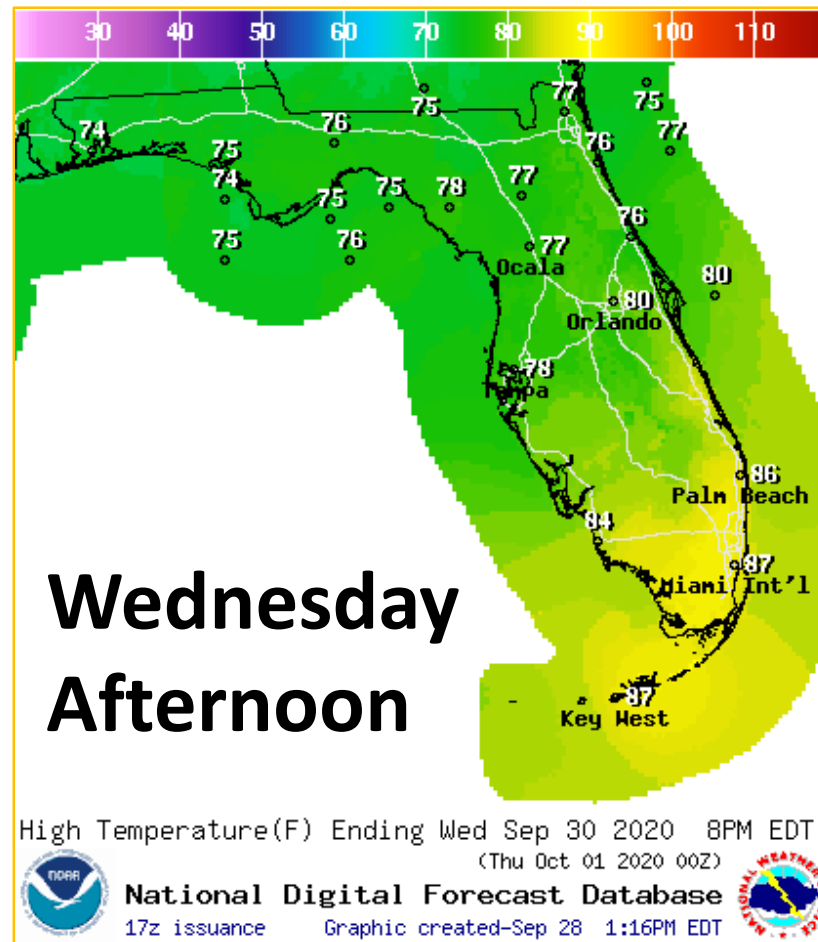
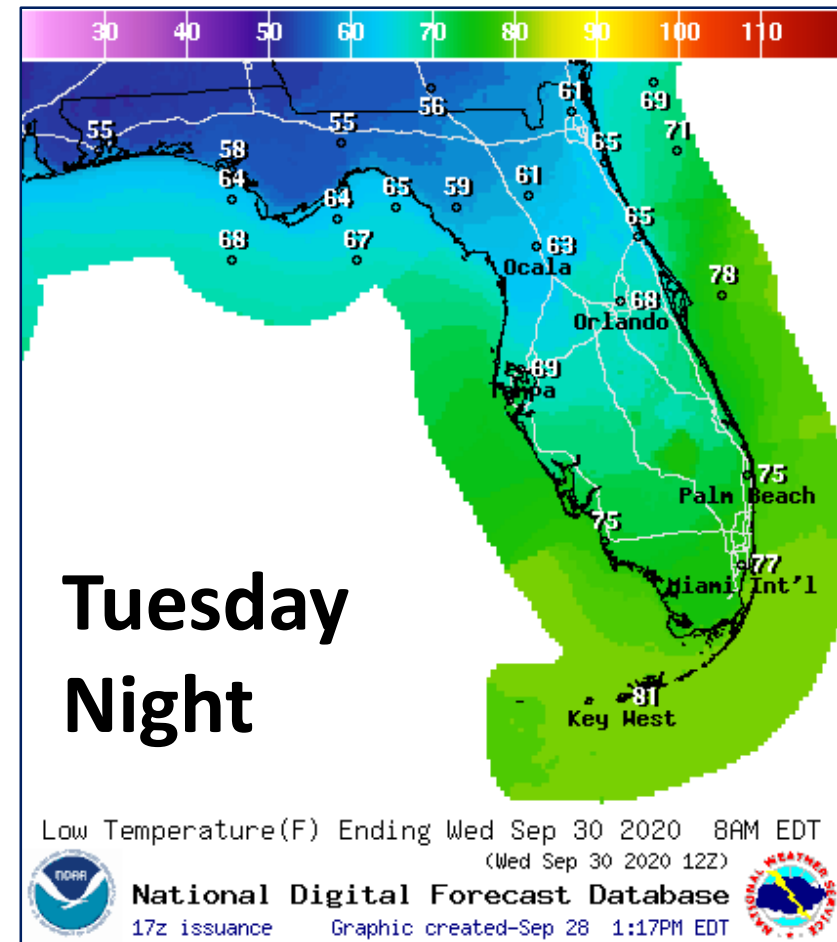


**Numerous thunderstorms ahead of the front with rain chances continuing in South Florida later this week as the front stalls.**





# Forecast Temperatures



**Low humidity will accompany the cooler temperatures. Near record lows in a few locations across North Florida.**



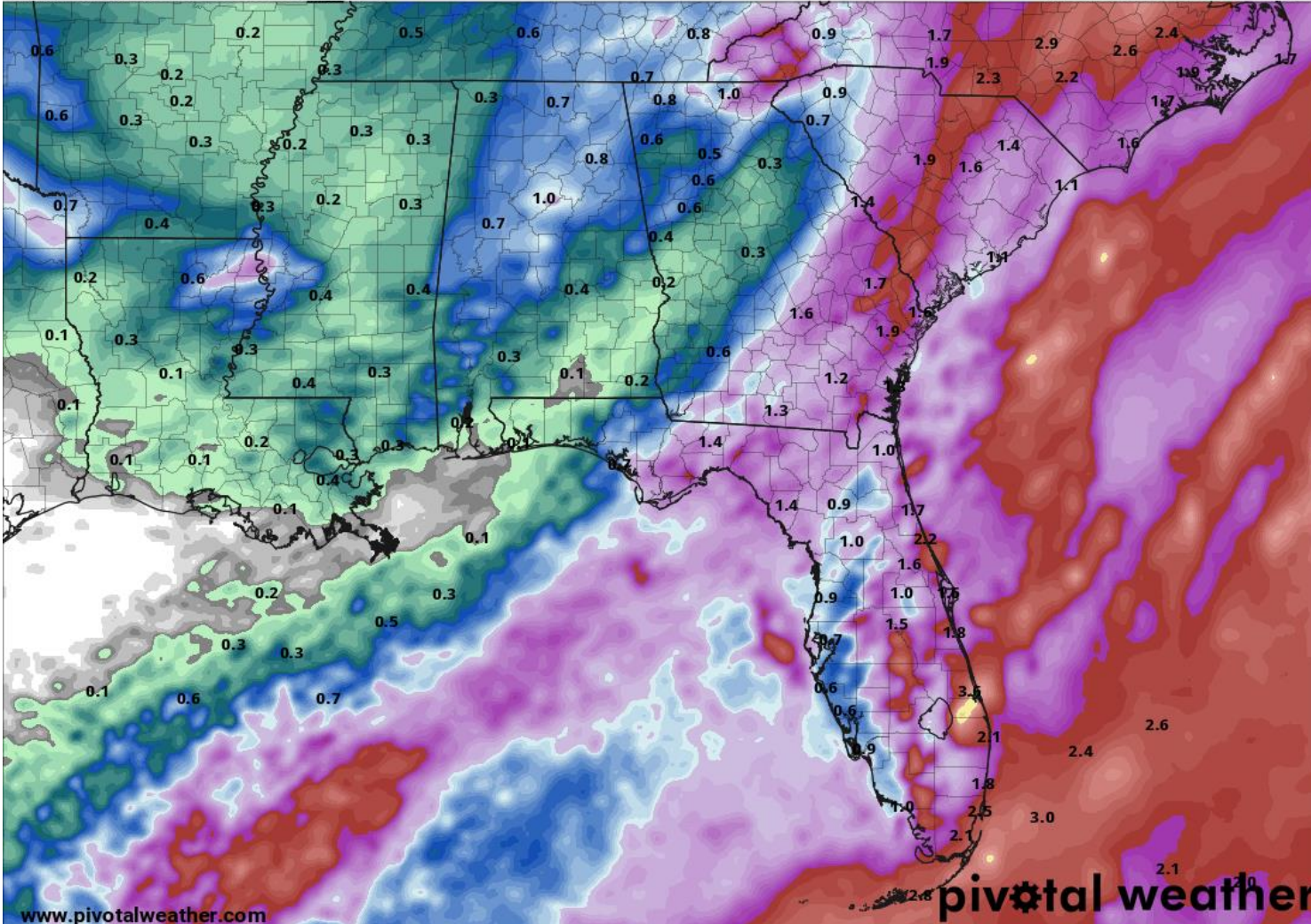
# Rainfall Totals Next 7 Days

**\*UNRELATED TO THE TROPICS\***

7-Day Precipitation (in)

Ending Monday, Oct. 5, 2020 at 8 a.m. EDT

Init: Mon 2020-09-28 12z WPC



The strong, early season cold front will bring a widespread 1-3" of rain across the state over the next few days.

Locally higher totals of 4-6" are possible later in the week across South Florida as the front stalls and tropical moisture remains in place.





# Current & Forecast River Flooding

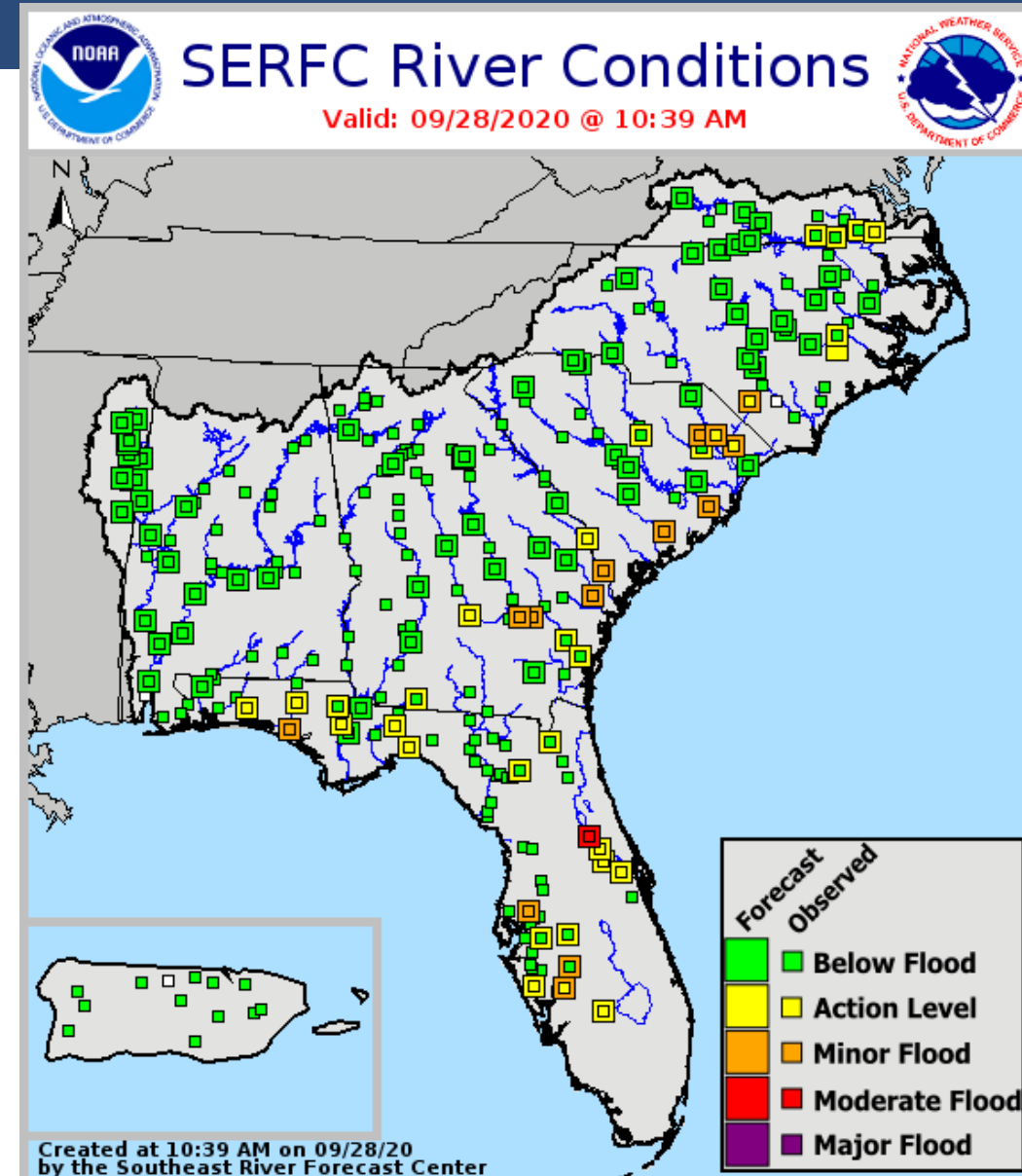
## Southeast River Forecast Center

### Rivers Currently in or Forecast to Reach Flood Stage:

- [Choctawhatchee River at Bruce/Ebro](#)- Minor
- [Chipola River at Scott's Ferry](#)- Minor
- [St. Johns River at Astor](#) – Moderate
- [Haw Creek above Russell Landing](#)- Minor
- [Ocklawaha River at Rodman Dam](#)- Minor
- [Cypress Creek at Worthington Gardens](#)- Minor
- [Peace River at Zolfo Springs](#)- Minor
- [Peace River at Arcadia](#)- Minor

Additional heavy rainfall over the next few days could create minor flooding on a few more rivers in Central Florida.

More details on river levels available at the [Southeast River Forecast Center website](#).





# Overall Summary

## Western Caribbean

- A tropical wave and stalled front may develop into a low pressure area in the western Caribbean later this week or this weekend.
- Conditions are forecast to be favorable for development in the western Caribbean by this weekend.
- This system has a near 0% (low) chance of formation over the next 48 hours, but a 40% (medium) chance in days 3-5 later this week.
- The next name on the list is Gamma.

## Florida Outlook:

- **This system poses no threat to Florida over the next 5 days, but will need to be monitored closely.**
- *Unrelated to the tropics*, a strong cold front will bring numerous thunderstorms to the state today and Tuesday. Locally heavy rainfall is possible with an isolated flash flood.
- Below normal temperatures are expected from mid-week into this weekend for North & Central Florida.
- The front will stall near South Florida and high rain chances will continue into this weekend, regardless of the tropics. South Florida will need to be monitored for a flood threat later in the week.

The next briefing packet will be issued Tuesday. 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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