



# TROPICAL UPDATE



**2:00 PM EDT**

**Friday, October 16, 2020**

**Invest 94L – Central Atlantic (60%)**

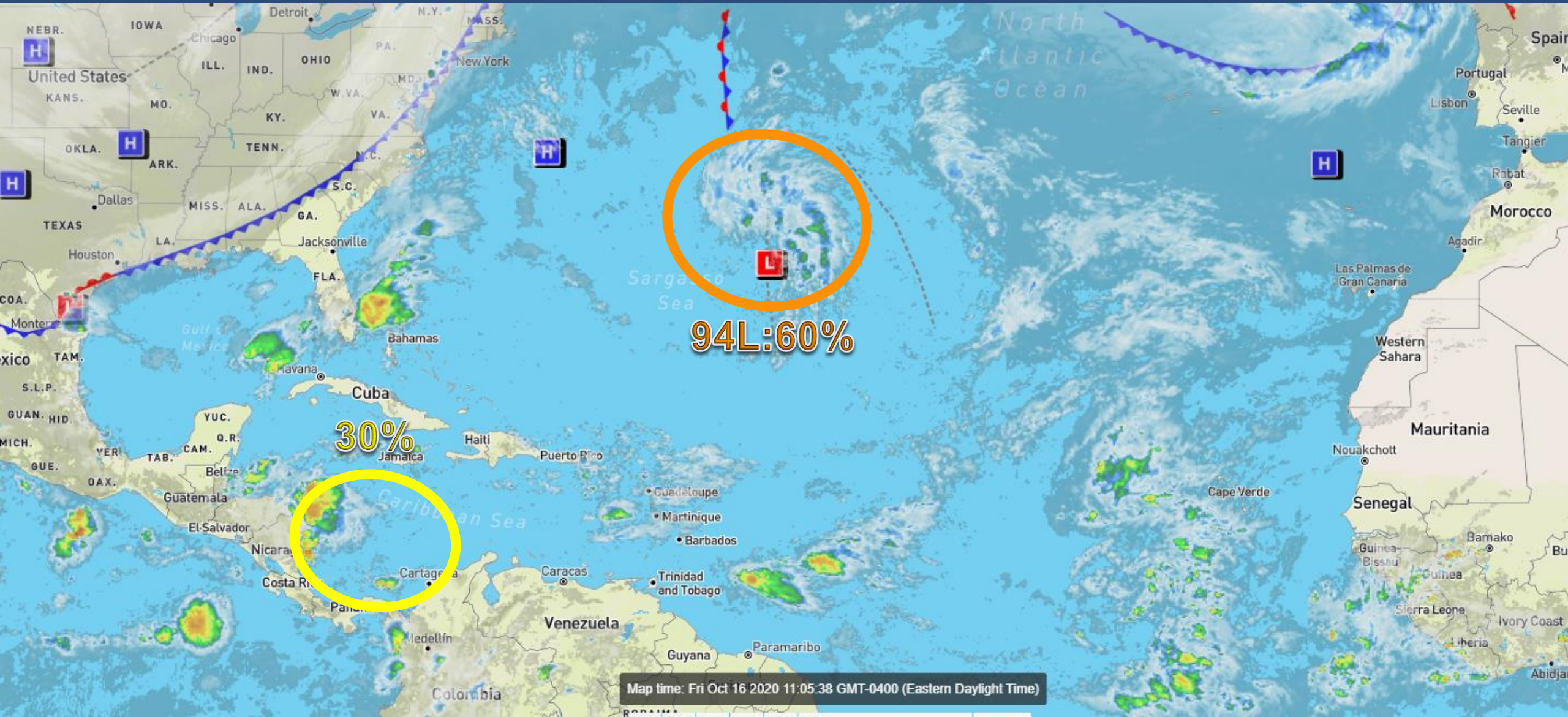
**Low to Develop in Caribbean (30%)**

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](#)) – Invest 94L



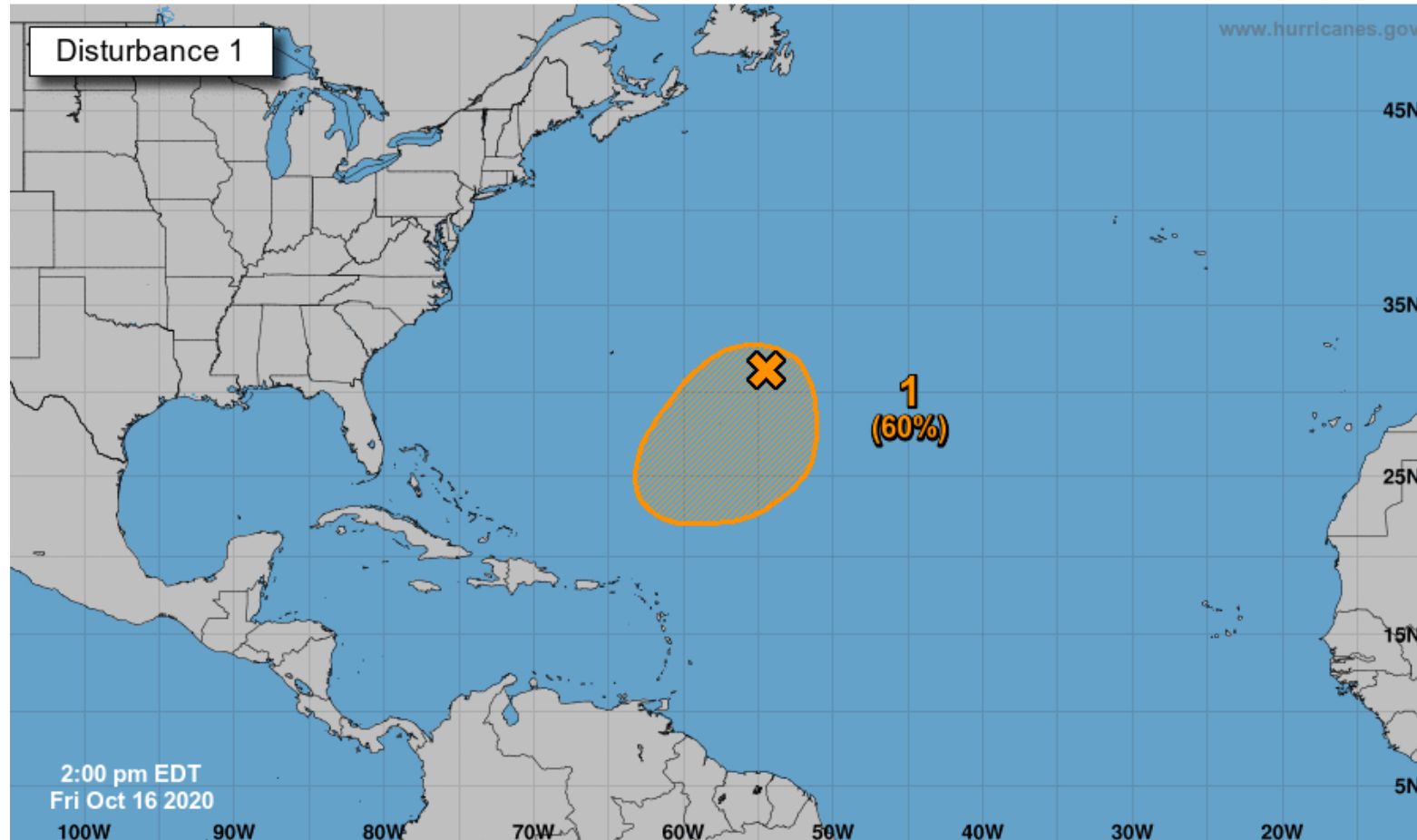
## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 1



2:00 pm EDT  
Fri Oct 16 2020

Current Disturbances and Five-Day Cyclone Formation Chance:  
Tropical or Sub-Tropical Cyclone: ○ Depression ⚡ Storm 🌀 Hurricane  
⊗ Post-Tropical Cyclone or Remnants

Shower activity associated with a broad non-tropical low pressure system located about 600 miles east-southeast of Bermuda is continuing to become better organized, and satellite wind data indicates that the circulation has become somewhat better defined.

Additional development of this system is expected, and a subtropical or tropical depression could form during the next few days while the low meanders over the central Atlantic well to the southeast of Bermuda.

**This system does not need to be monitored for Florida impacts at this time, if at all.**

**\*Formation chance through 48 hrs...medium...40%**

**\*Formation chance through 5 days...medium...60%**



# Tropical Weather Outlook

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



## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 2

2  
(30%)

2:00 pm EDT  
Fri Oct 16 2020

100W 90W 80W 70W 60W 50W 40W 30W 20W

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

Tropical or Sub-Tropical Cyclone: ○ Depression ○ Storm ○ Hurricane

⊗ Post-Tropical Cyclone or Remnants

A broad area of low pressure is expected to form early next week over the southwestern Caribbean Sea.

Some gradual development of this system will be possible through the middle of next week while it moves slowly over the southwestern or western Caribbean Sea.

**This system may need to be monitored next week.**

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

\*Formation chance through 5 days...low...30%

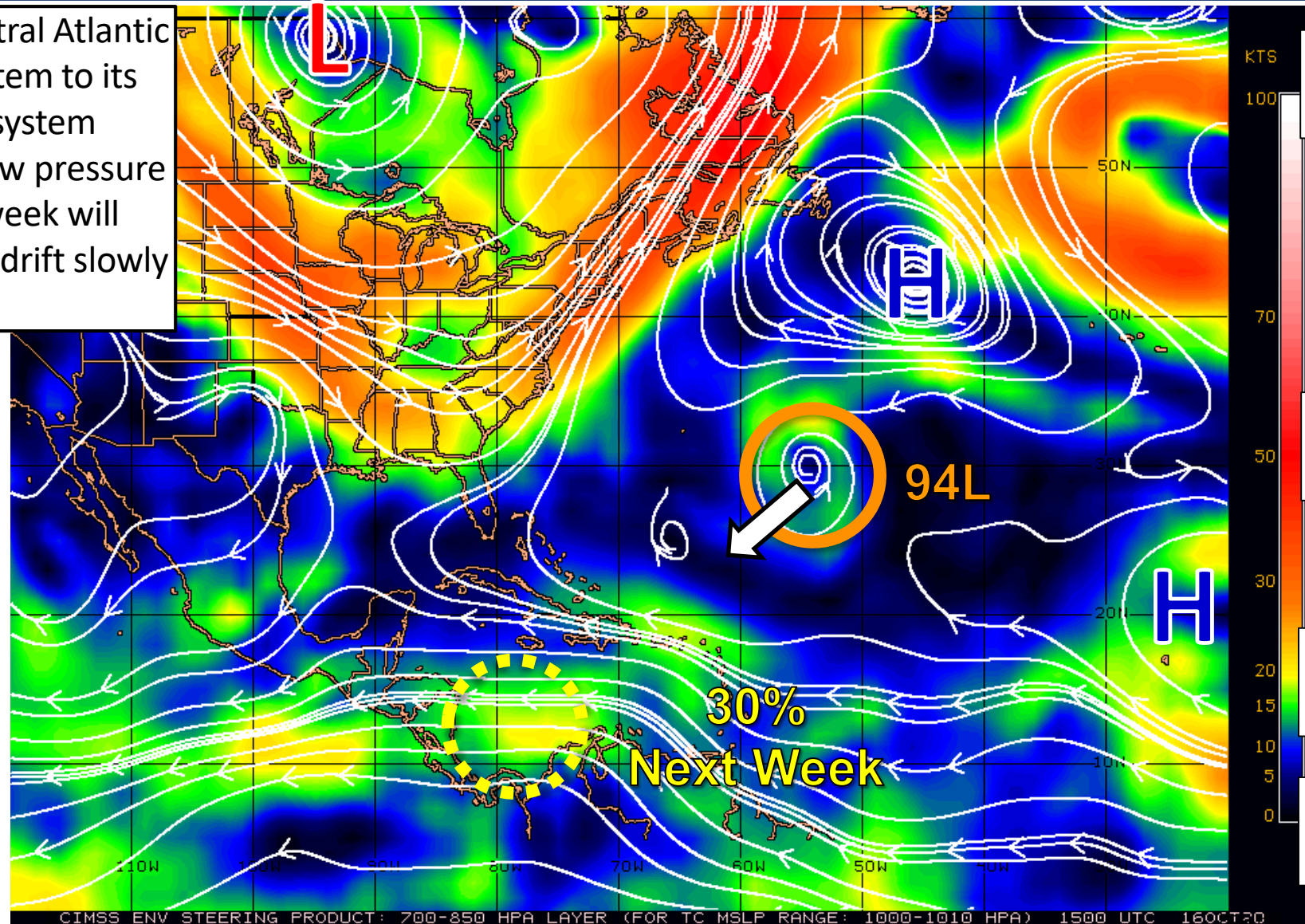


# Steering Currents

## What is Moving the Systems?

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

94L will meander over the central Atlantic before the high pressure system to its north begins to push the system southwestward. The area of low pressure expected to develop next week will remain generally stationary or drift slowly northwestward.



Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

Slow Moving Storm



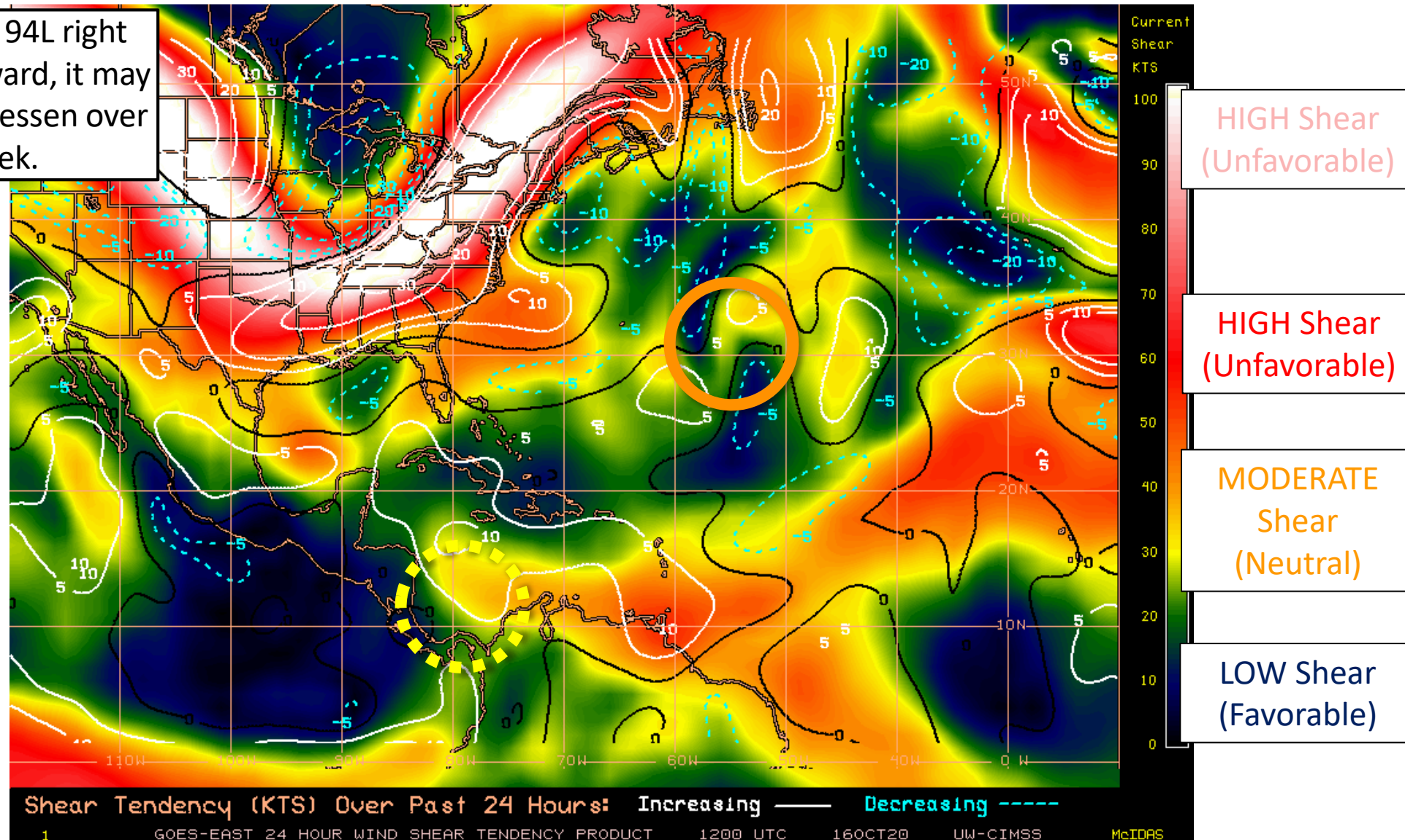


# Wind Shear

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 moderate over 94L right now, but if it drifts southwestward, it may find less shear. Shear will also lessen over the Caribbean next week.





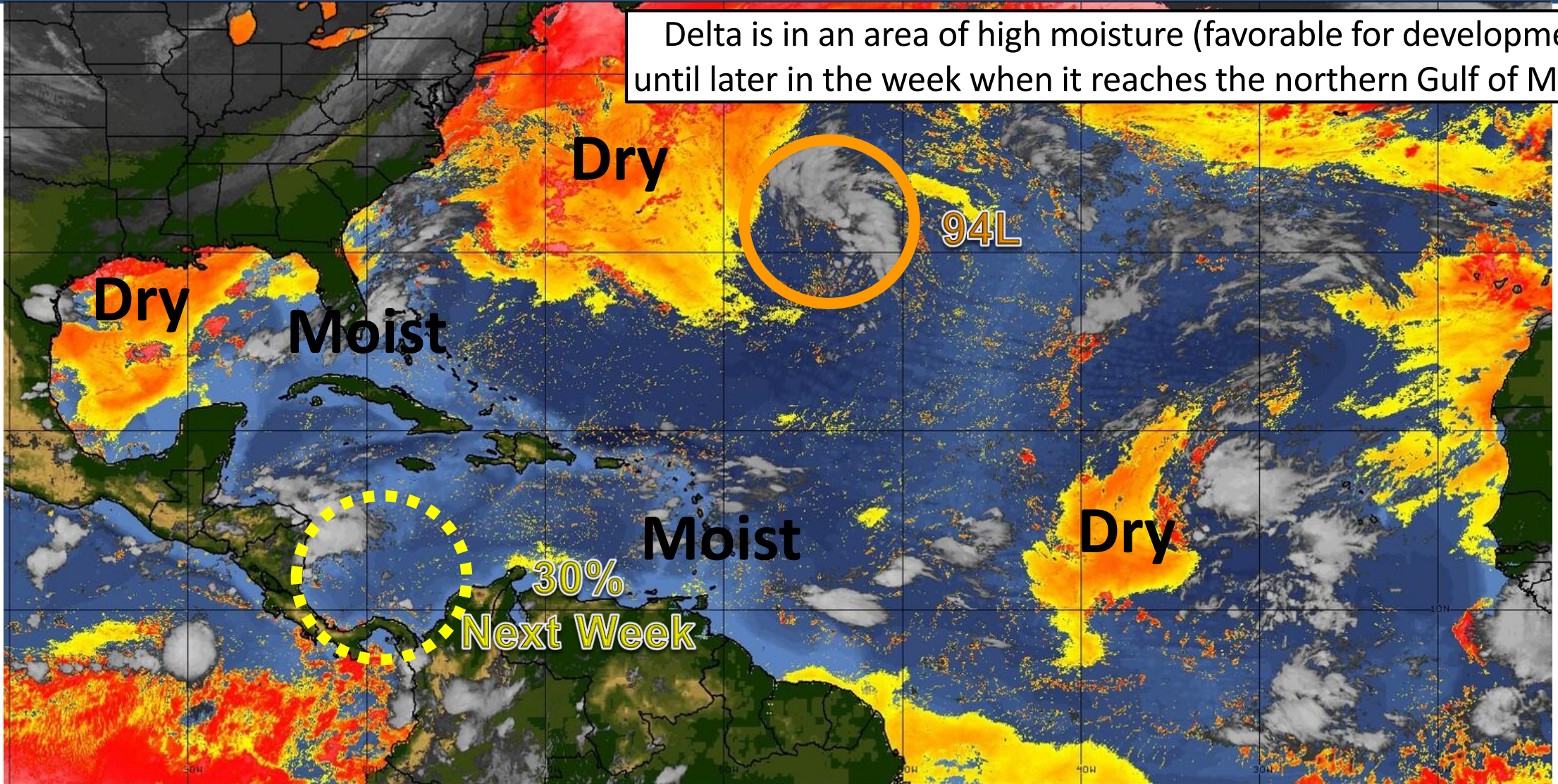


# Dry Air & Saharan Dust

Is the environment favorable for the systems?

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

Delta is in an area of high moisture (favorable for development) until later in the week when it reaches the northern Gulf of Mexico.



LESS <----- DRY AIR (LOW/MID-LEVEL) AND/OR DUSTY SAL AIRMASS -----> MORE





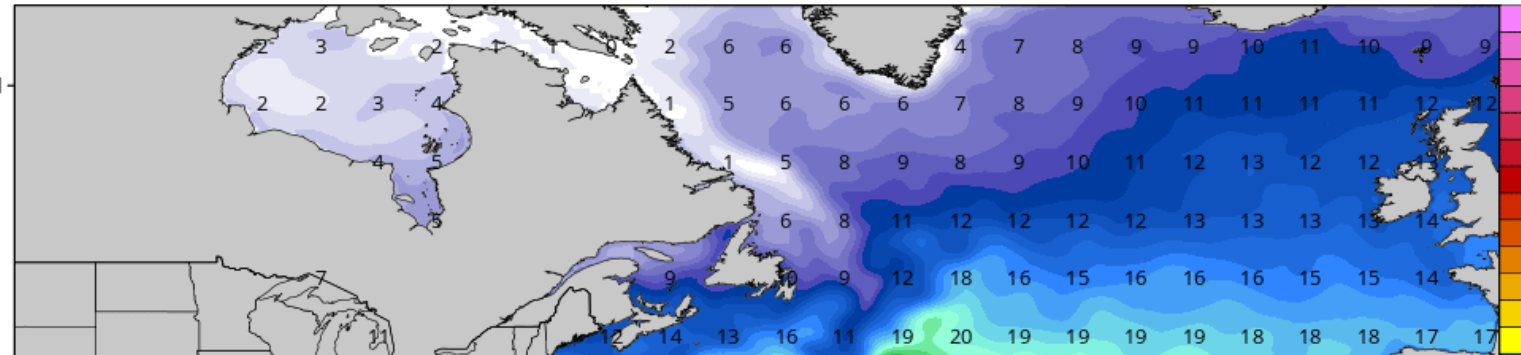
# Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Water temperatures are supportive for tropical development across most of the Atlantic basin, with **very warm, deep water** in the Caribbean.

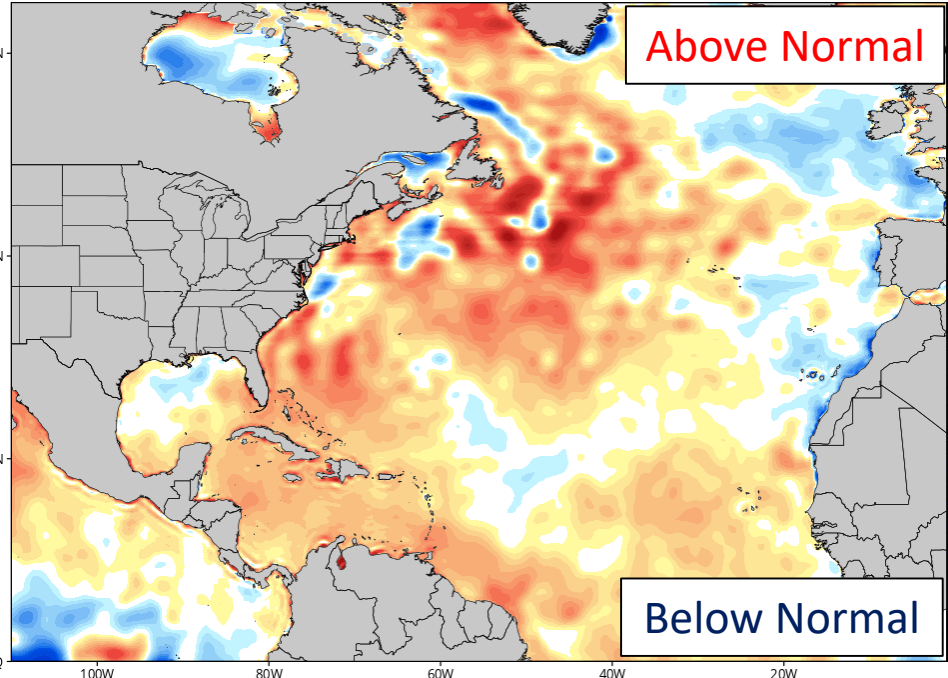
CDAS Sea Surface Temperature (°C)

Analysis Time: 06z Oct 16 2020



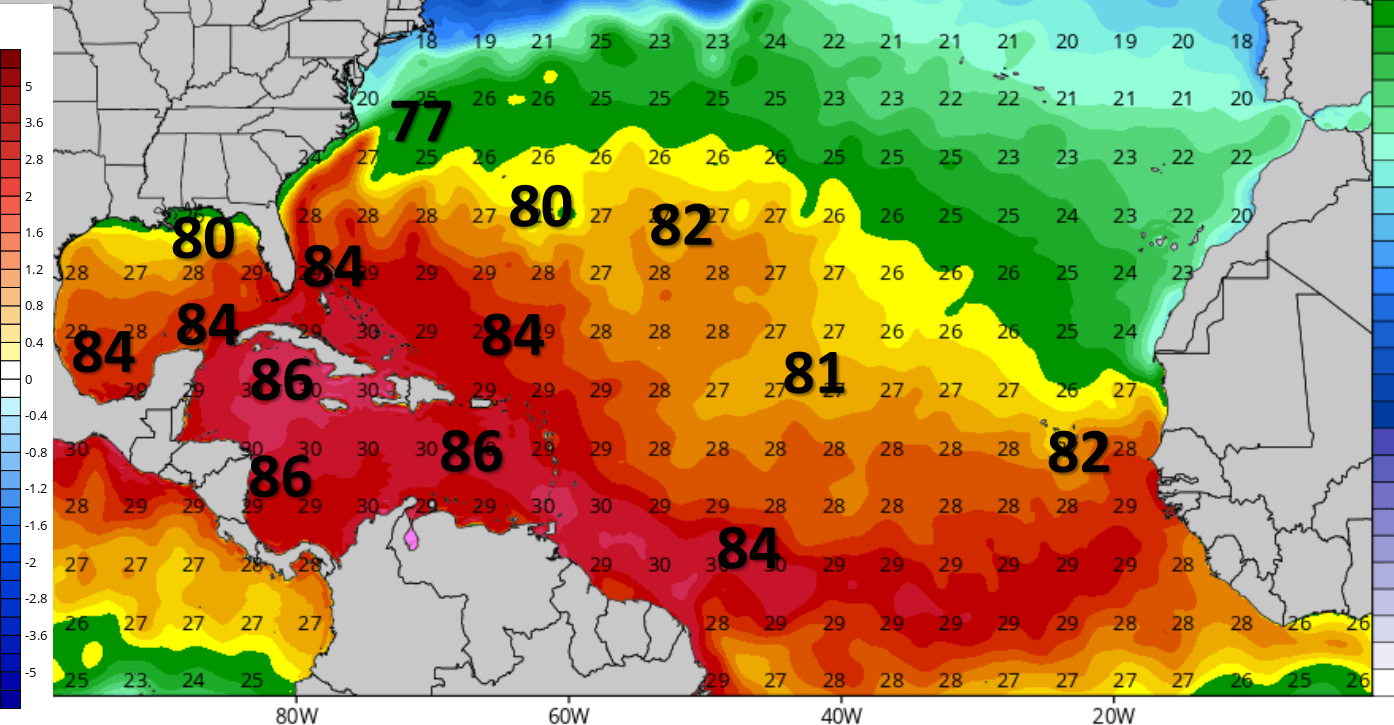
CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)

Analysis Time: 06z Oct 16 2020



Above Normal

Below Normal



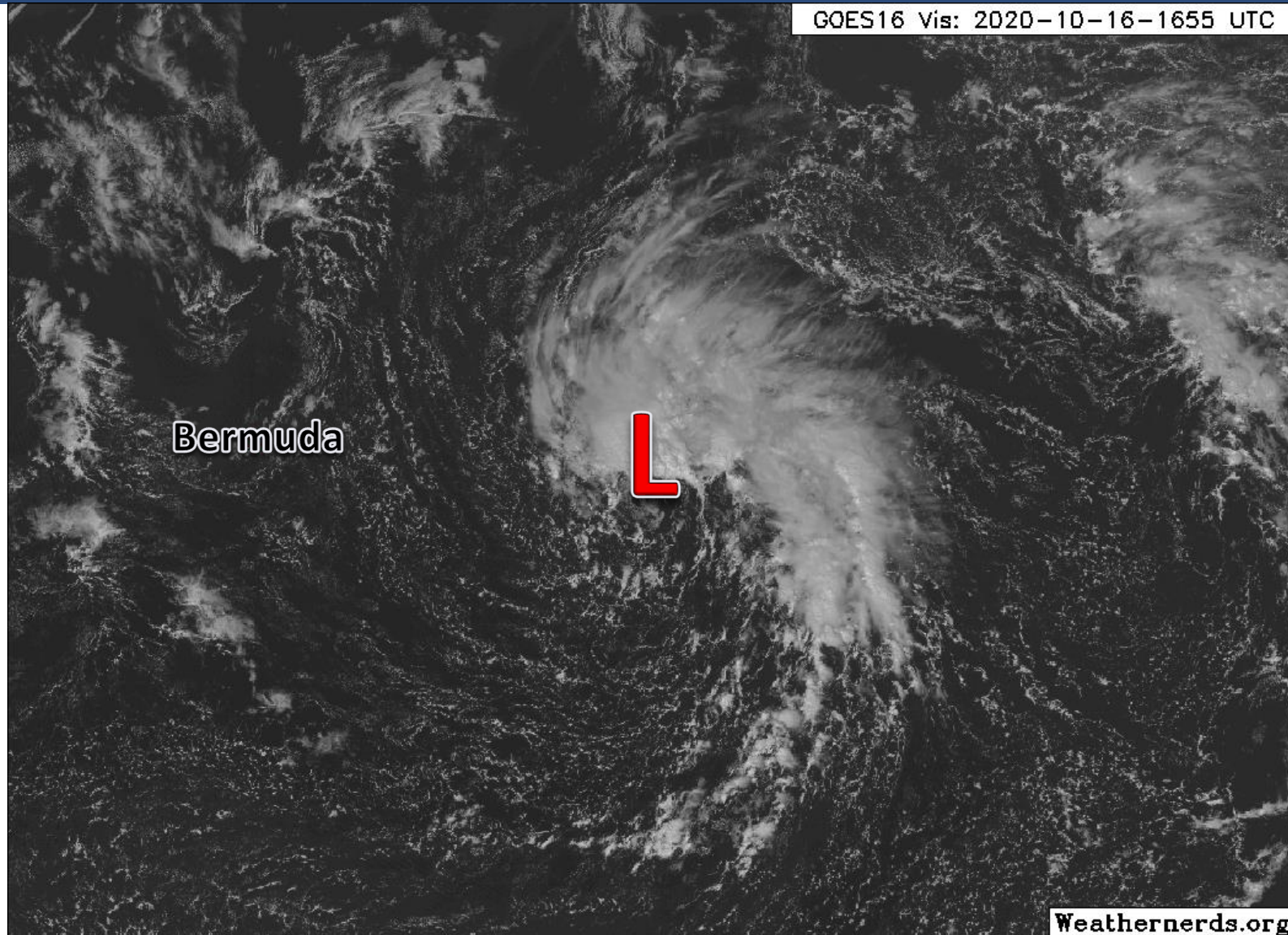
°F  
90  
88  
86  
84  
82  
81  
79  
75  
72



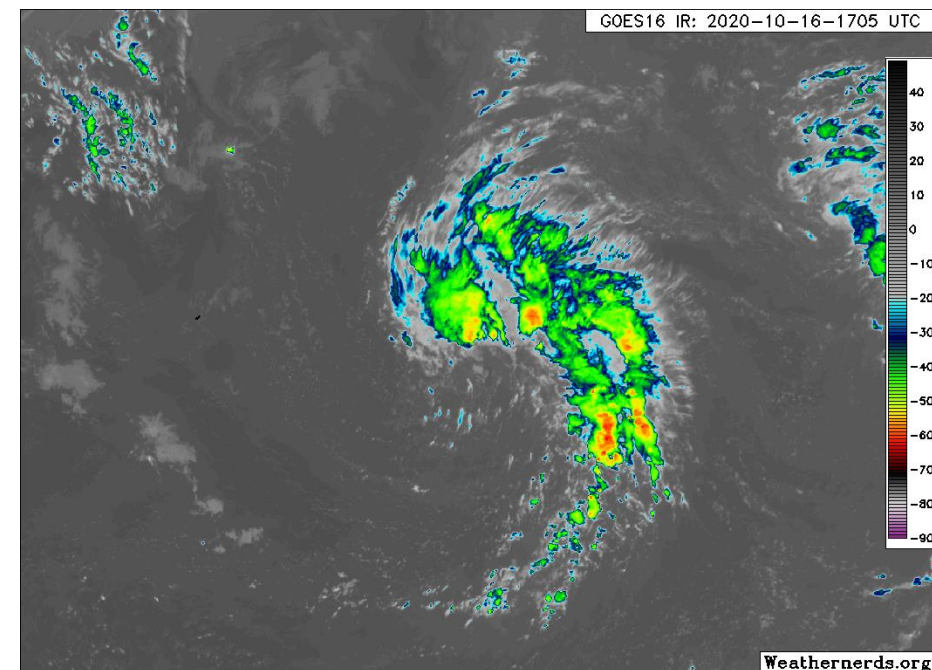


# Satellite Imagery

## Invest 94L – Central Atlantic



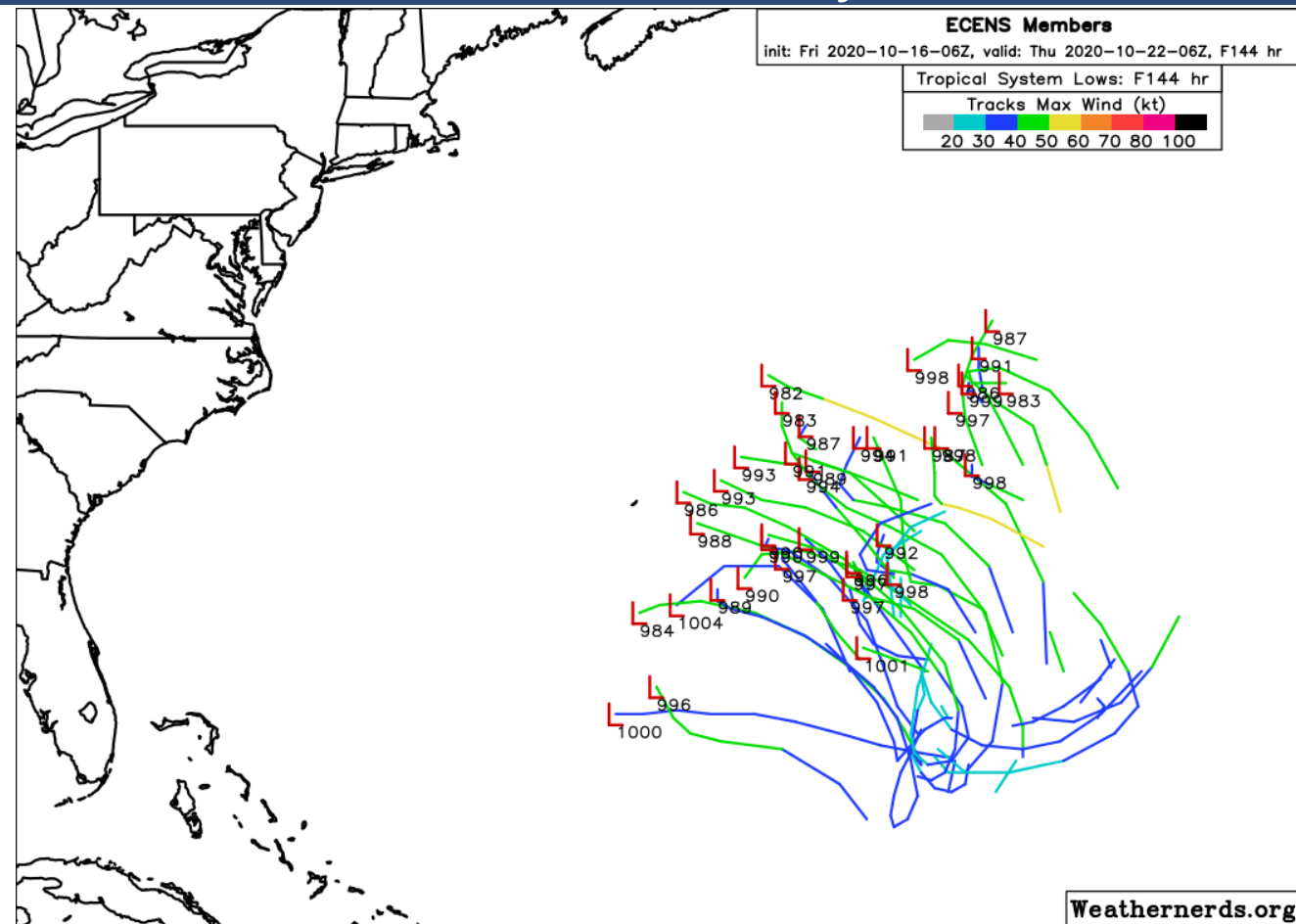
Invest 94L has become better organized through the day. 94L is also under an upper-level low, which could mean that it acquires subtropical characteristics instead of being fully tropical.



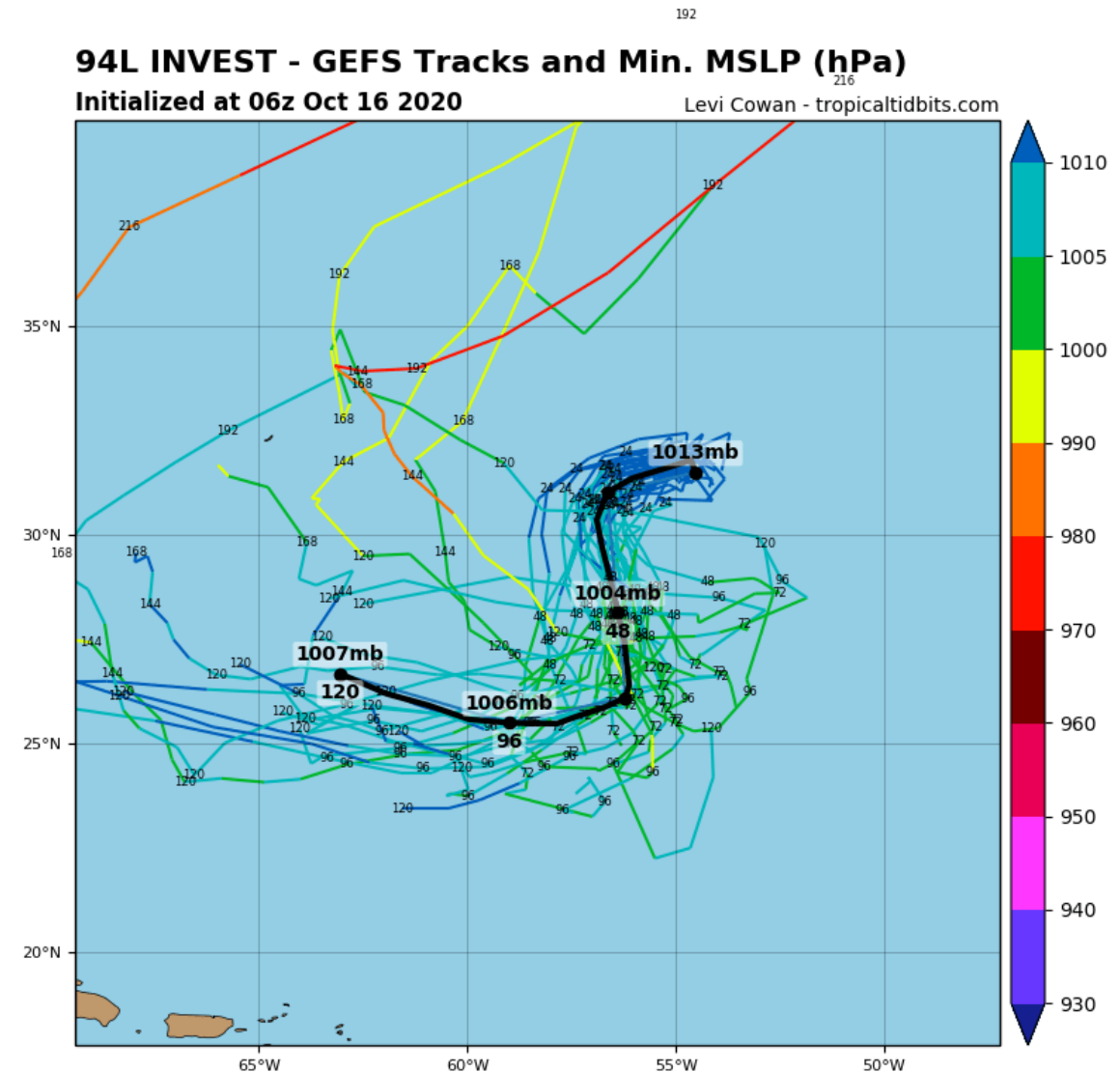


# Model Forecast Tracks

## Ensembles, Dynamical, and Statistical Models



94L will generally meander over the central Atlantic. However, models differ on if the system will move northwestward or southwestward over the next 5 days.

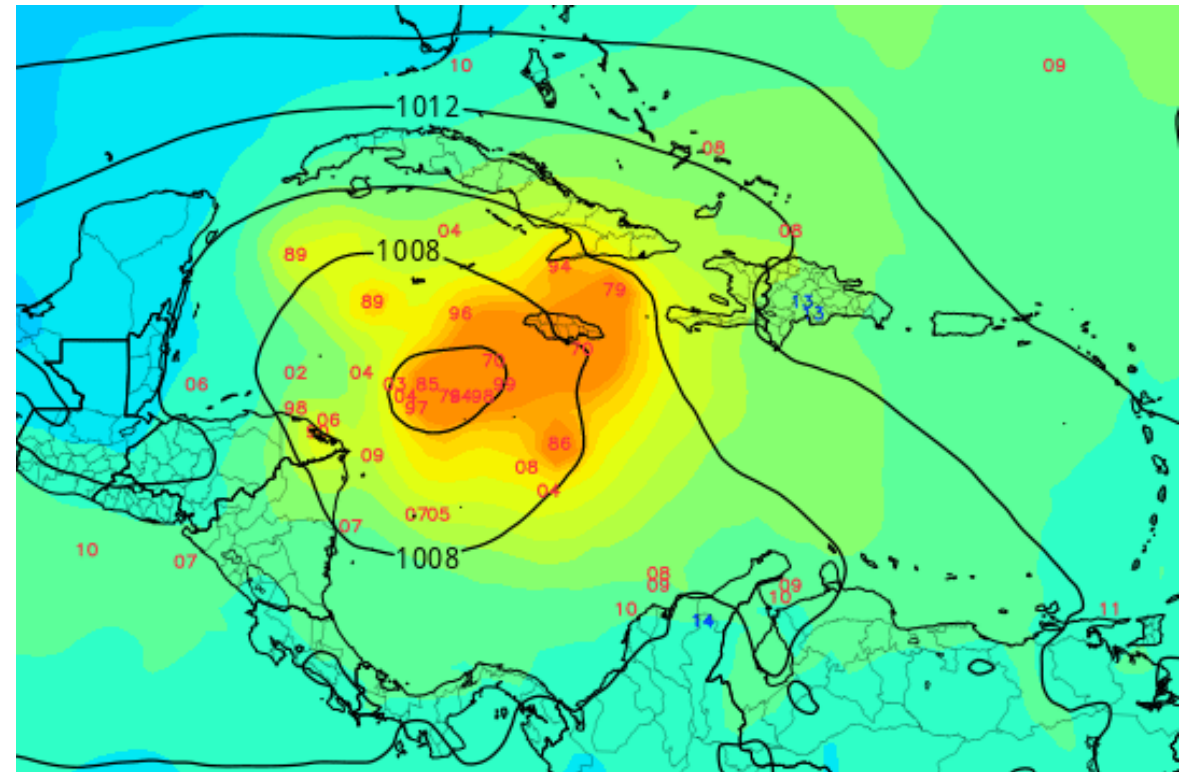
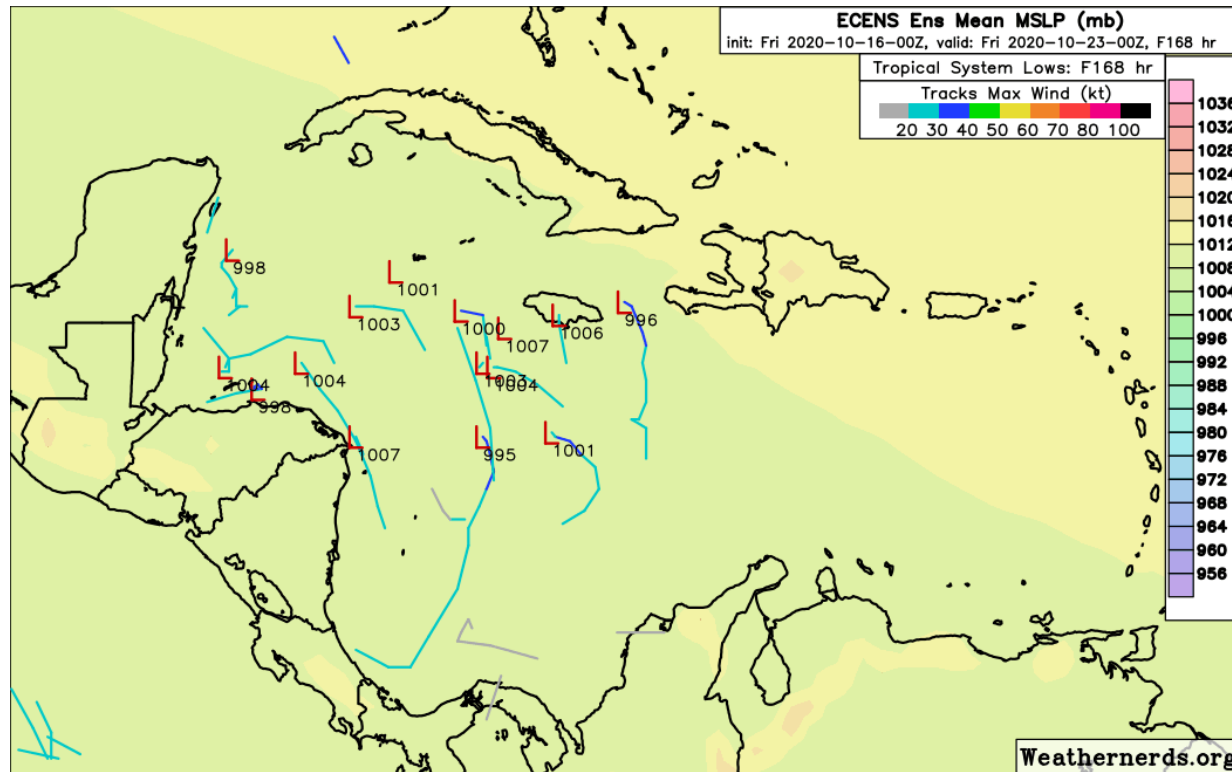






# Model Forecast Tracks

## Ensembles, Dynamical, and Statistical Models



The area of low pressure in the Caribbean may develop next week. Models are split on strength, but a general northwestward drift is expected once it forms and continue well into next week.



# Overall Summary

## **Invest 94L (Central Atlantic)**

- A non-tropical area of low pressure about 600 miles east-southeast of Bermuda has become better organized today.
- Development into a subtropical or tropical depression is expected over the next few days as it meanders over the central Atlantic.
- This system has a 40% (medium) chance of formation during the next 48 hours and a 60% (medium) chance during the next 5 days.
- The next name on the list is Epsilon.

## **Caribbean Low**

- An area of low pressure is forecast to develop over the southwest Caribbean Sea next week.
- This area of low pressure will then drift slowly over the western or northwestern Caribbean Sea.
- This system has a 30% (low) chance of formation during the next 5 days.

## **Florida Outlook:**

- Invest 94L does not pose a threat to Florida over the next 5 days, if at all.
- The low in the Caribbean should be monitored next week.

The next briefing packet will be issued Saturday. 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

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