



TROPICAL UPDATE



8:00 AM EDT

Monday, August 9, 2021

Invest 93L (20%) – Central Atlantic

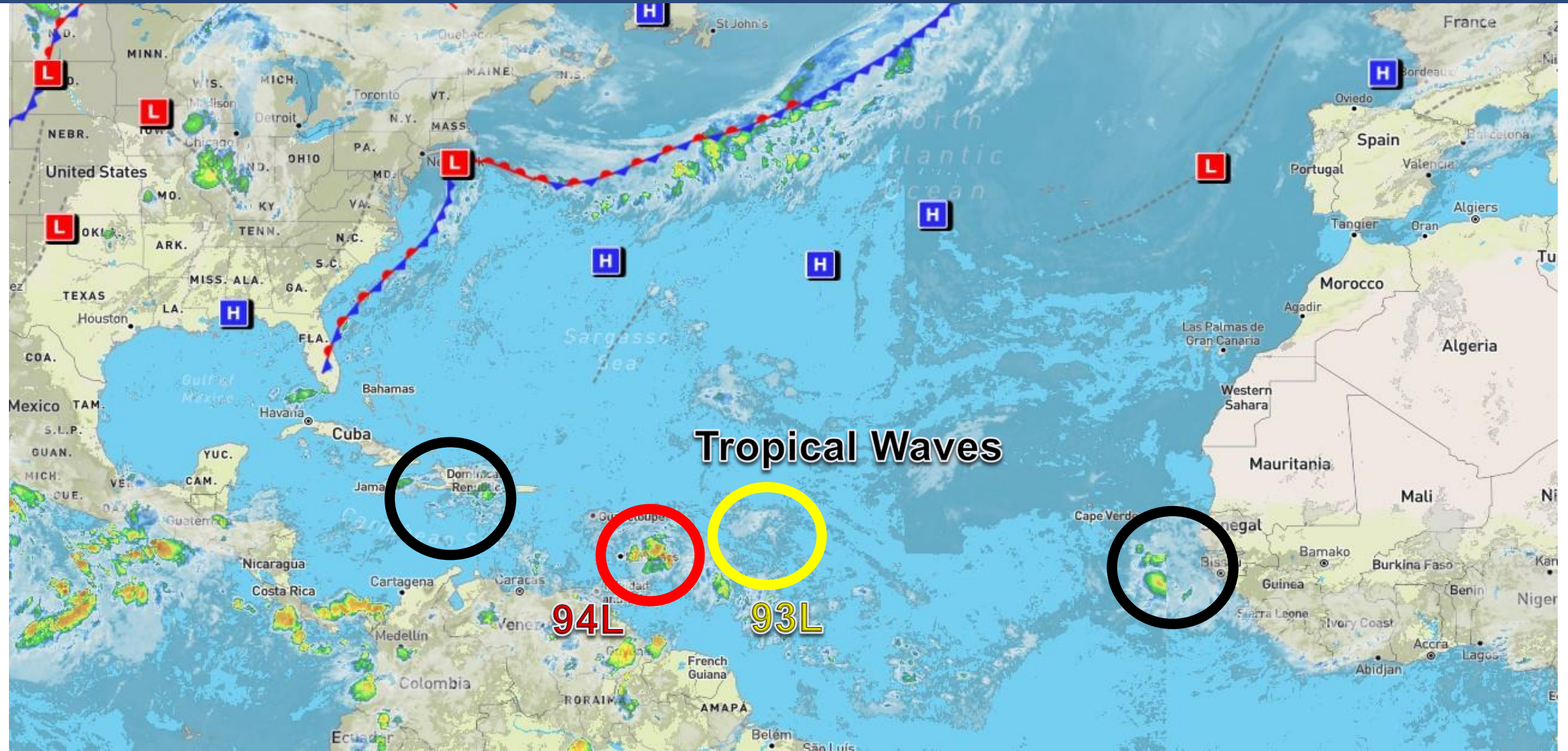
Invest 94L (70%) – Lesser Antilles

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





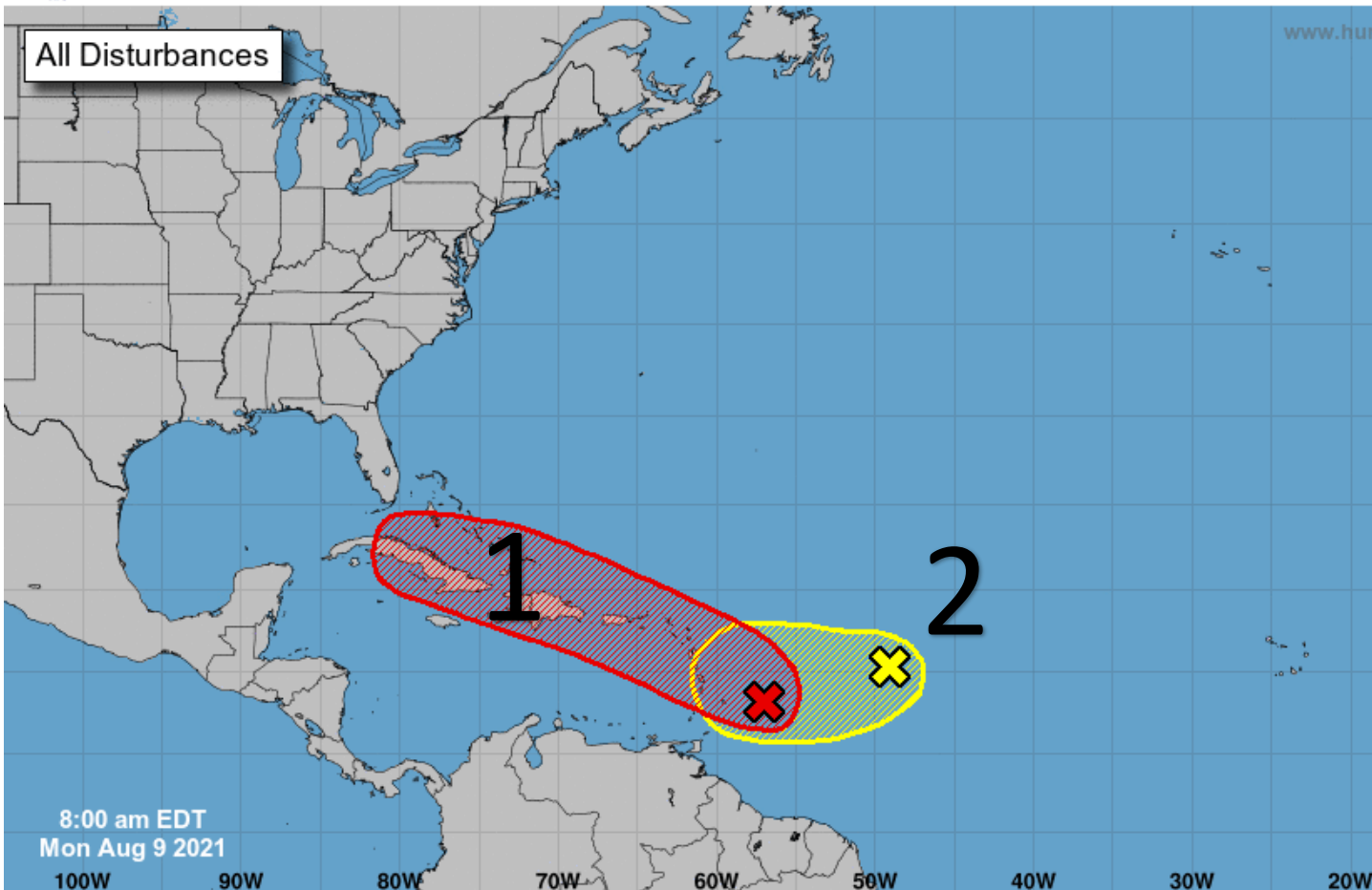
Tropical Weather Outlook

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



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Disturbance 1: 70% Chance of Cyclone Formation in 5 Days

As of 8:00 am EDT Mon Aug 9 2021 ...

Showers and thunderstorms have become more concentrated this morning in association with a low pressure system located about 150 miles east of Barbados. Environmental conditions are expected to be conducive for additional development, and a tropical depression is likely to form later today or tonight while the low moves west-northwestward at 10 to 15 mph. The disturbance is forecast to reach portions of the Lesser Antilles tonight, then move near the Virgin Islands and Puerto Rico on Tuesday, and be near Hispaniola around the middle of this week. Tropical storm watches or warnings could be required today with shorter-than-normal lead times for portions of the Lesser Antilles, the Virgin Islands, and Puerto Rico. In addition, heavy rains and flooding are likely for the Leeward Islands, Virgin Islands, and Puerto Rico. Interests in those areas should monitor the progress of this system.

* Formation chance through 48 hours...high...70 percent.

* Formation chance through 5 days...high...70 percent.

Disturbance 2: 20% Chance of Cyclone Formation in 5 Days

As of 8:00 am EDT Mon Aug 9 2021 ...

Disorganized showers and thunderstorms have changed little in association with an elongated low pressure area located several hundred miles east of the Lesser Antilles. Development of this system is becoming less likely during the next few days while it moves toward the west or west-southwest at around 10 mph.

* Formation chance through 48 hours...low...10 percent.

* Formation chance through 5 days...low...20 percent.

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

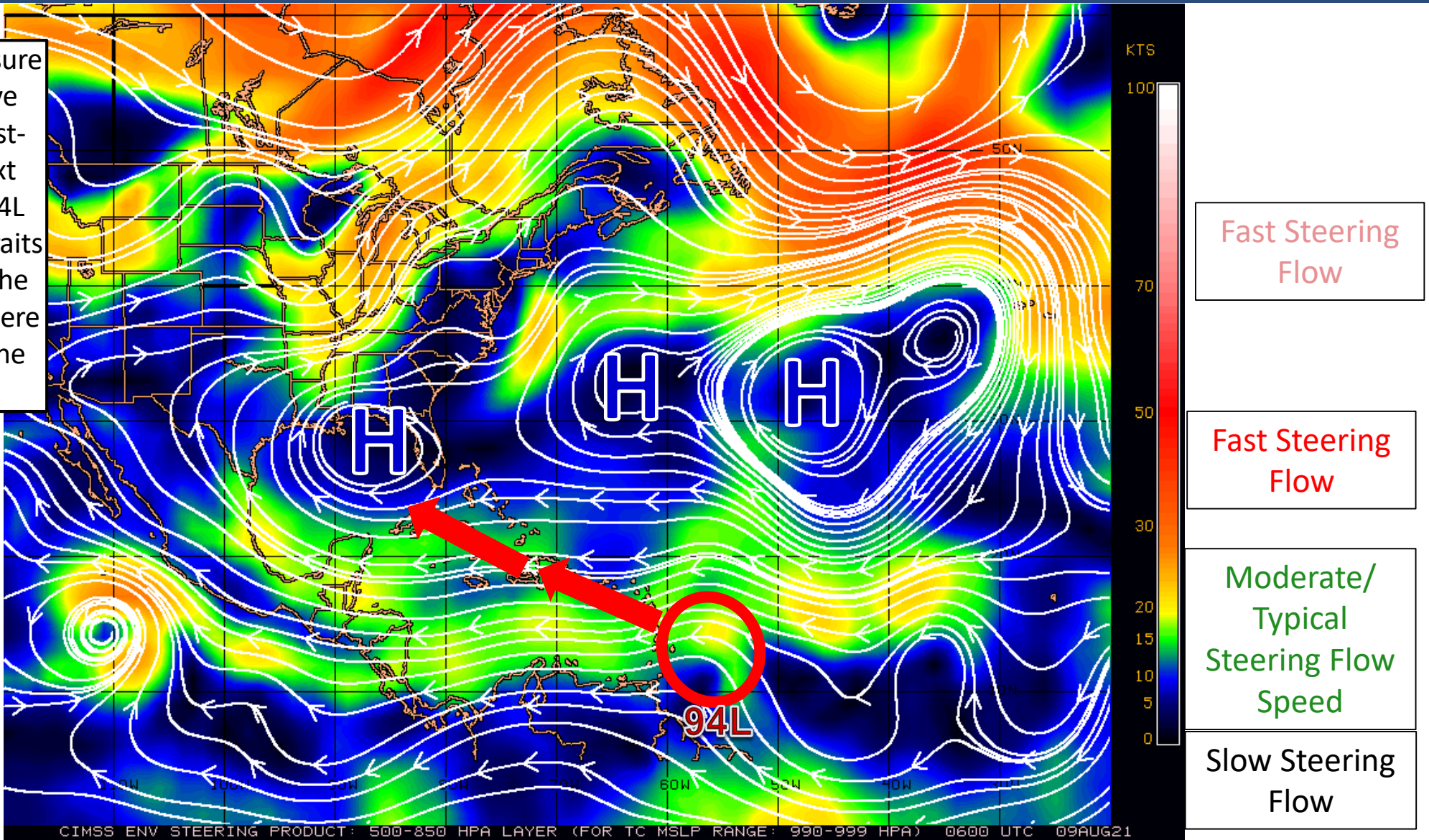


Steering Currents

What is Moving the System?

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

A large area of high pressure near Bermuda will move Invest 94L generally west-northwest over the next couple of days. Invest 94L may reach the Florida Straits late in the week. Once the system is near Florida, there is more uncertainty in the track forecast.



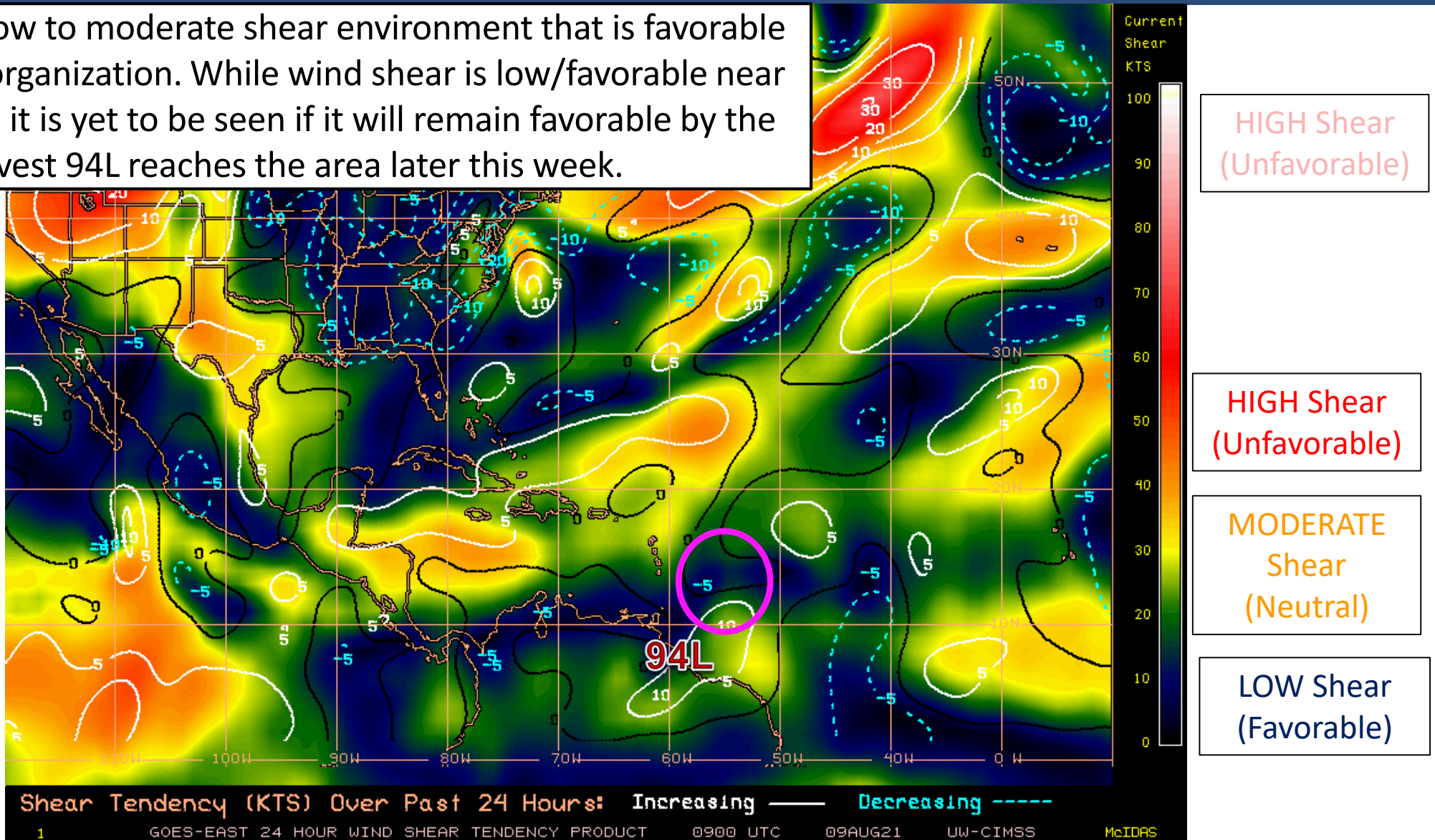


Wind Shear

Is the environment favorable for the system?

Invest 94L is in a low to moderate shear environment that is favorable for slow/gradual organization. While wind shear is low/favorable near Florida right now, it is yet to be seen if it will remain favorable by the time Invest 94L reaches the area later this week.

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).

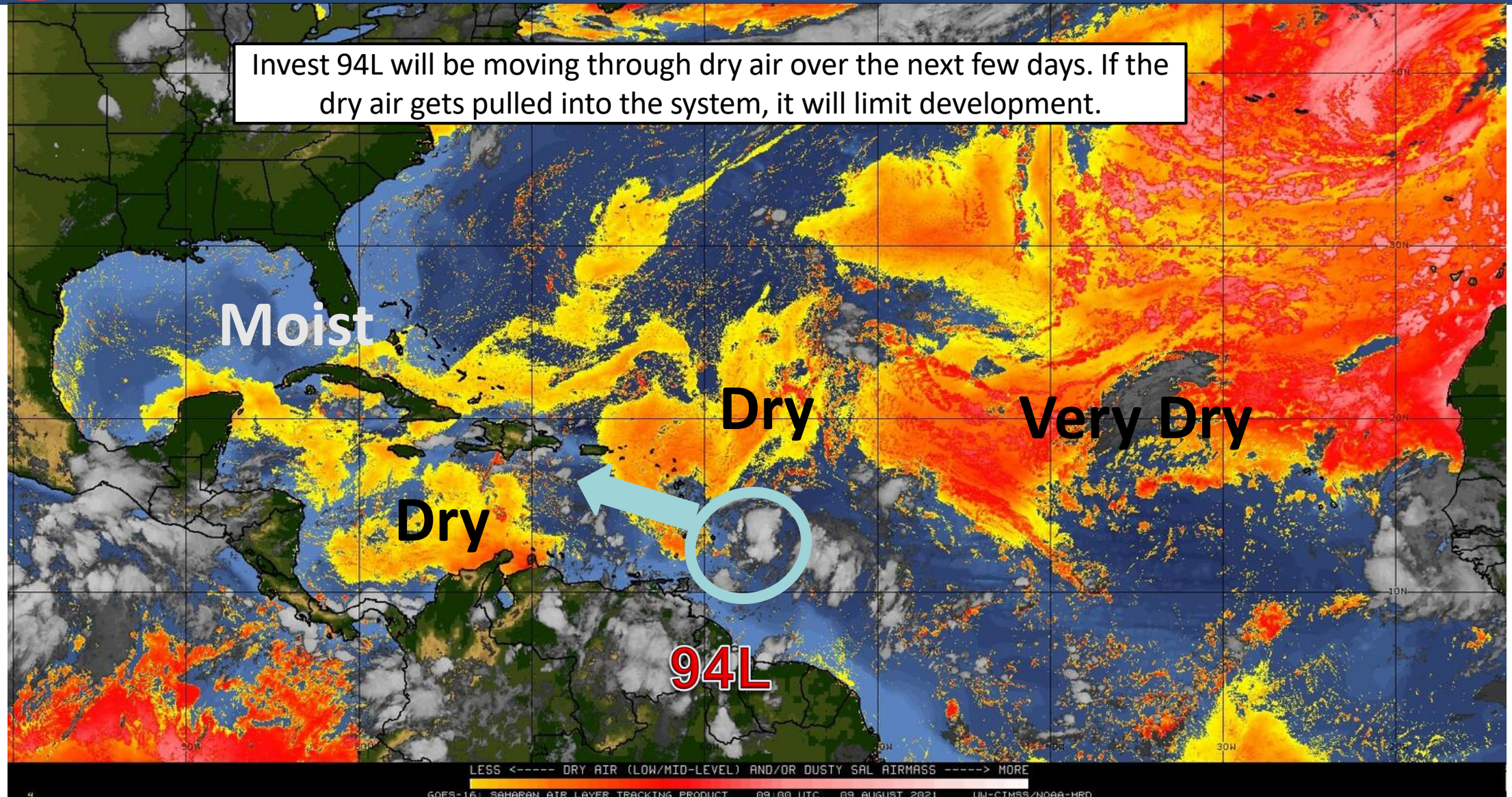




Dry Air & Saharan Dust

Is the environment favorable for the system?

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



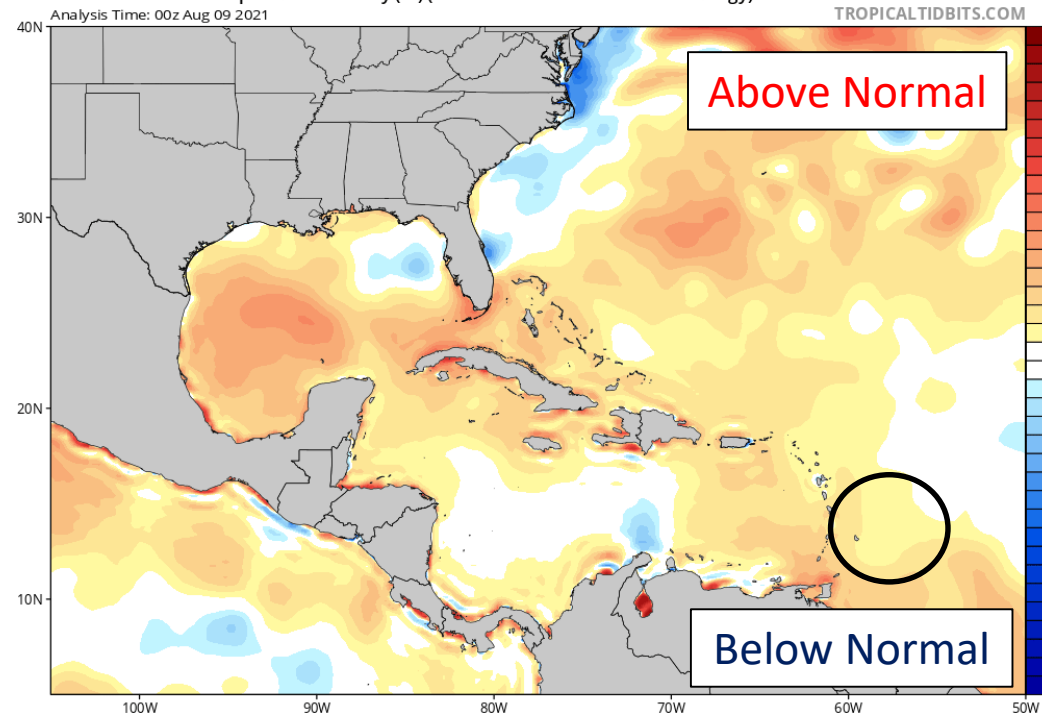


Sea Surface Temperatures & Anomalies

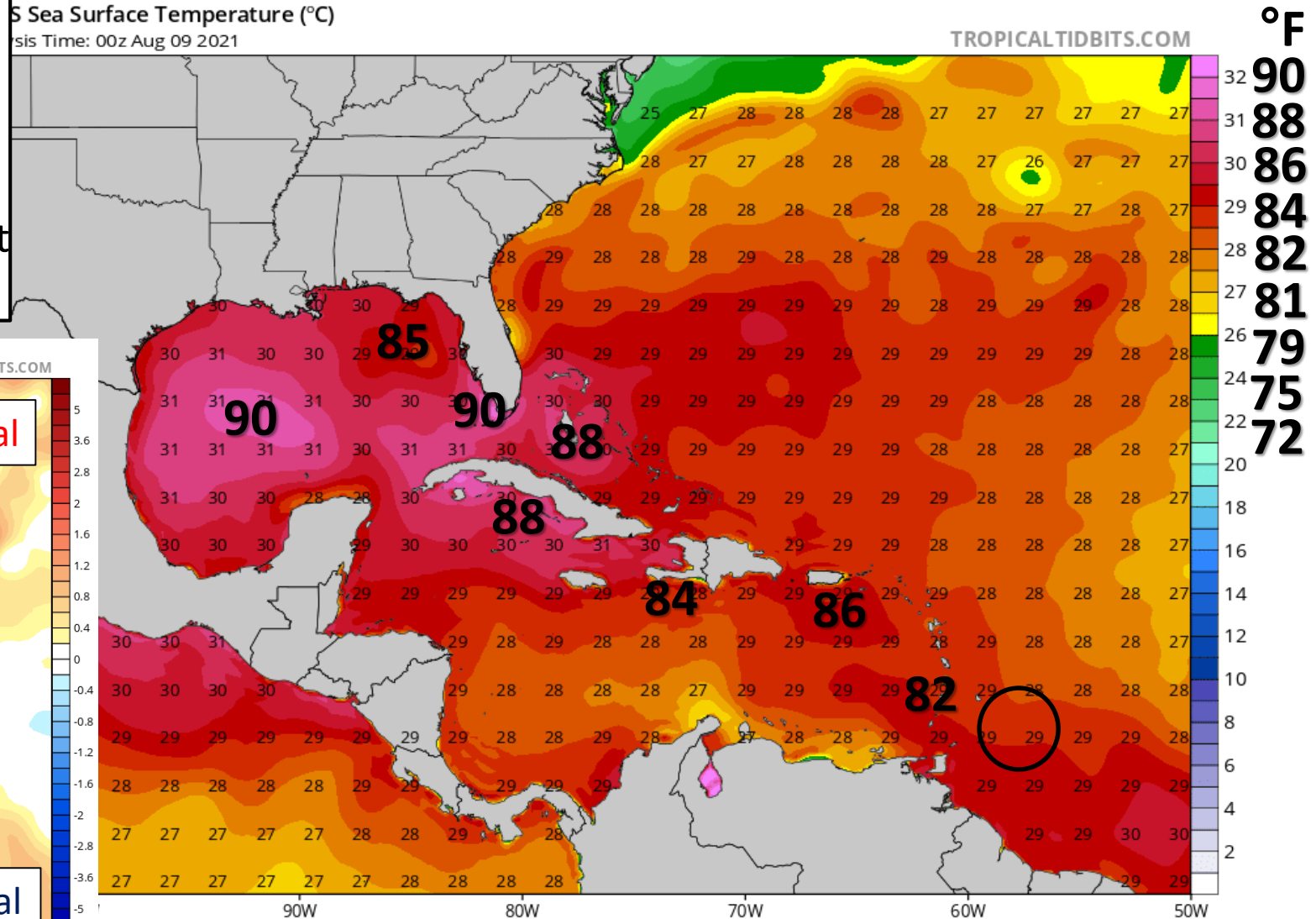
Is the ocean favorable for the system?

Water temperatures across much of the Caribbean, southwest Atlantic, and Gulf of Mexico are above normal and will support tropical development. Water temperatures will become more favorable for development as Invest 94L moves northwest.

CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)
Analysis Time: 00z Aug 09 2021



Sea Surface Temperature (°C)
Analysis Time: 00z Aug 09 2021

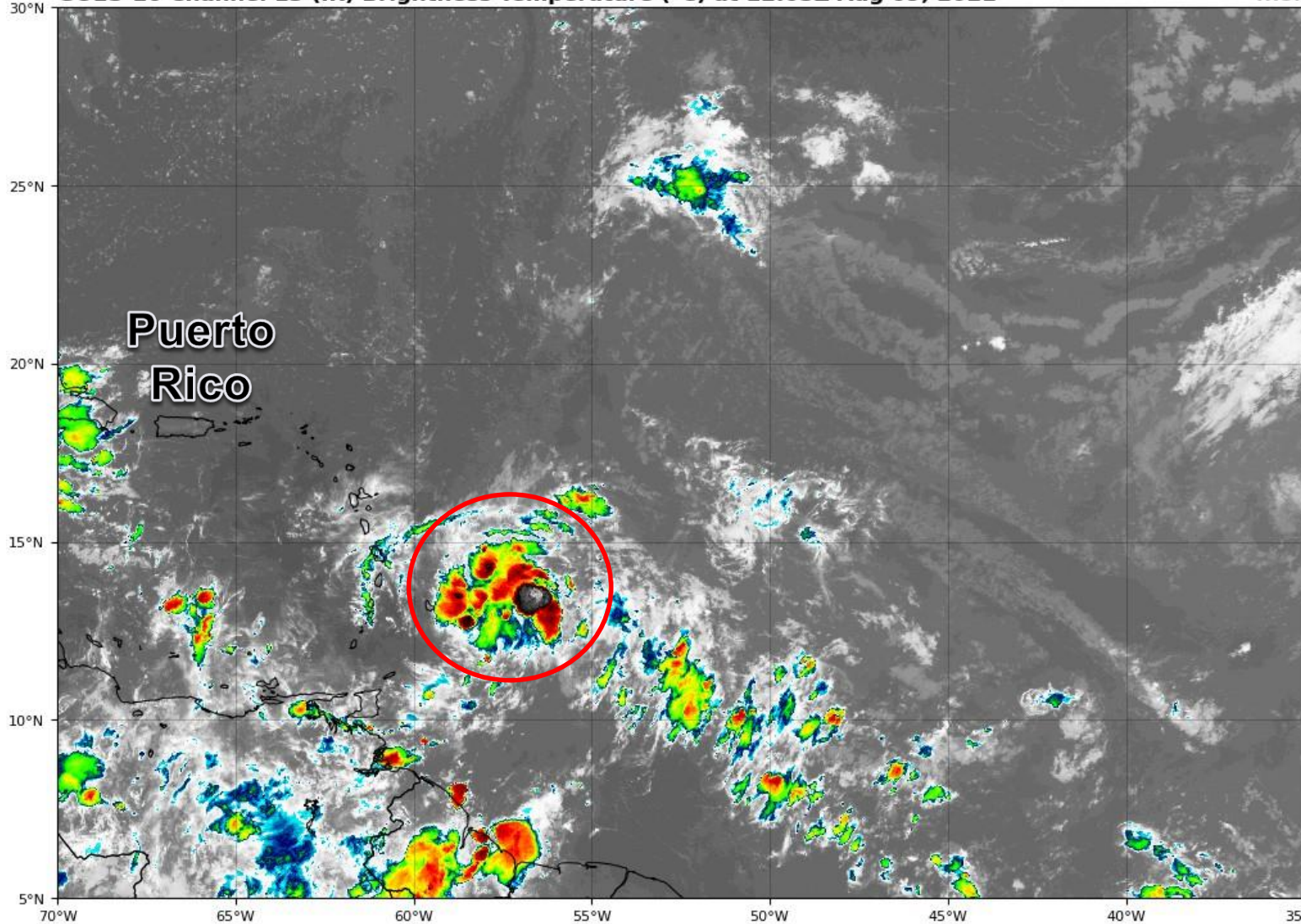




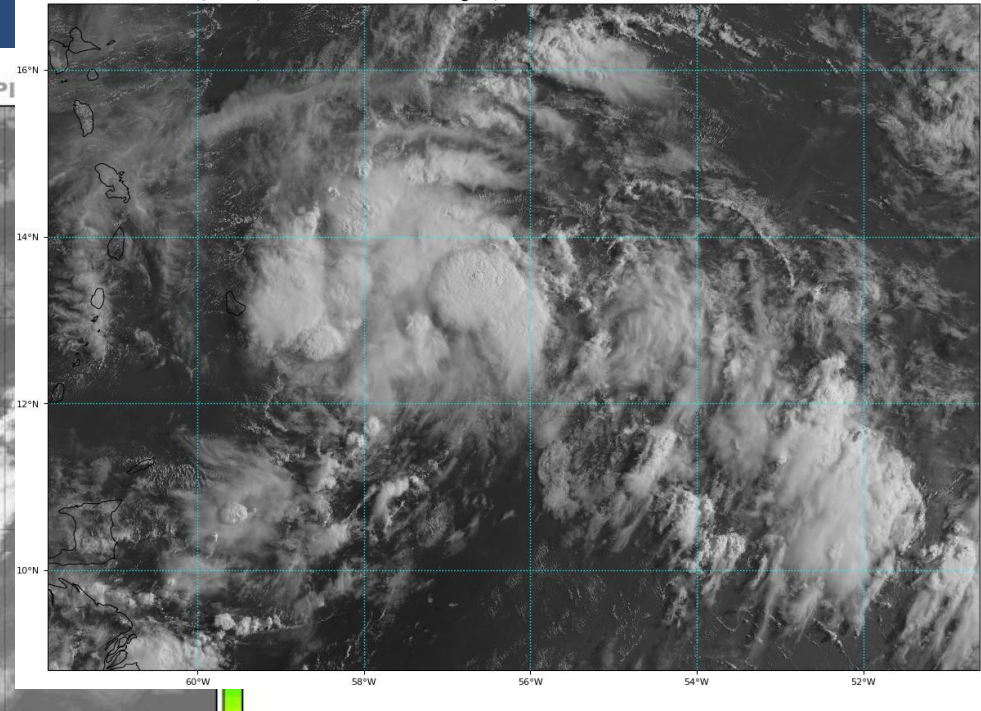
Satellite Imagery

Central Atlantic – Invest 94L

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 12:05Z Aug 09, 2021



GOES-16 Channel 2 (visible) Reflectance at 12:05Z Aug 09, 2021



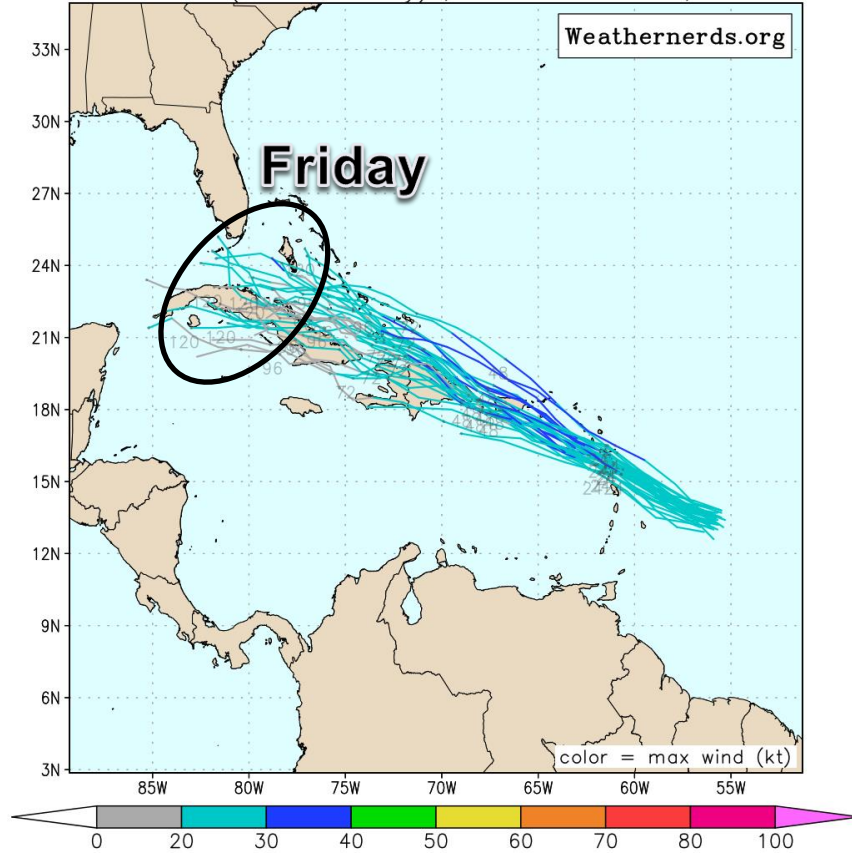
Showers and thunderstorms have been persistent overnight and this morning, and are gradually getting better organized. A tropical depression may form as soon as this afternoon if the circulation becomes more defined.



Model Forecasts

Ensembles, Dynamical, and Statistical Models

GEFS Ensemble (0-120 h only), init: 2021080906, AL94 Invest



Invest 94L will be in the vicinity of South Florida/Florida Straits this weekend and bring increased rain chances.

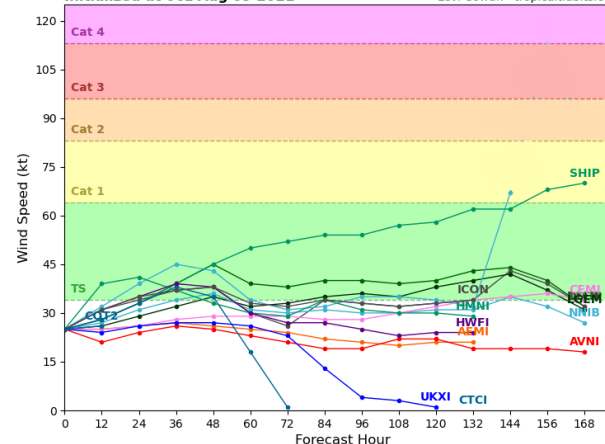
However, land interaction and dry air will likely limit significant development between now and Friday.

94L could be in the Gulf of Mexico or the Bahamas this weekend, and will need to continue to be monitored.

Invest 94L Model Intensity Guidance

Initialized at 06z Aug 09 2021

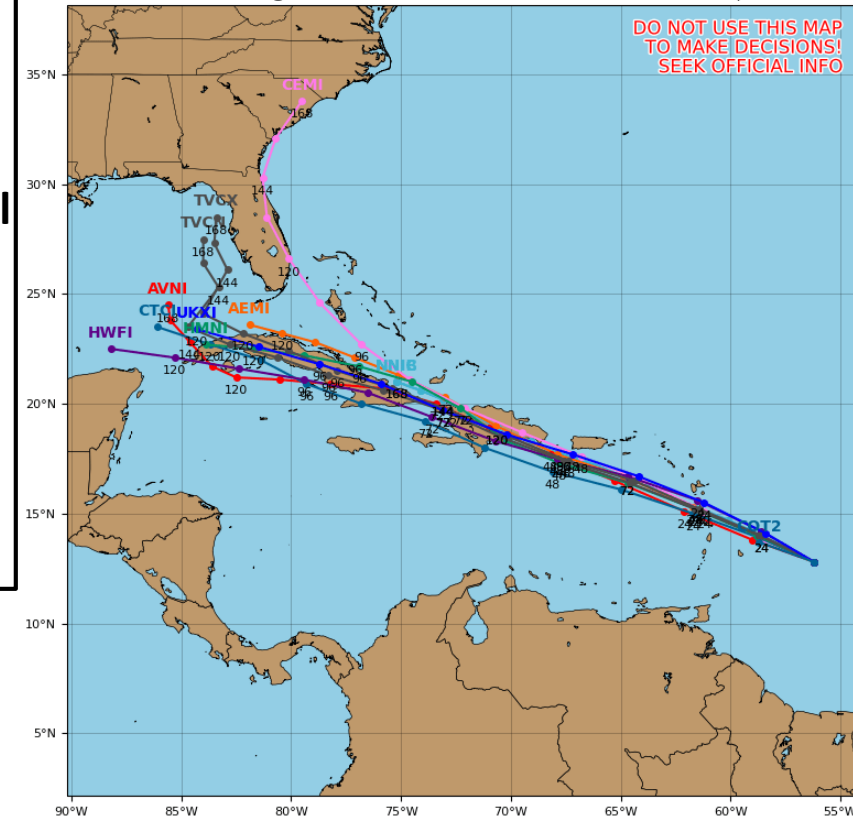
Levi Cowan - tropicaltidbits.com



Invest 94L Model Track Guidance

Initialized at 06z Aug 09 2021

Levi Cowan - tropicaltidbits.com



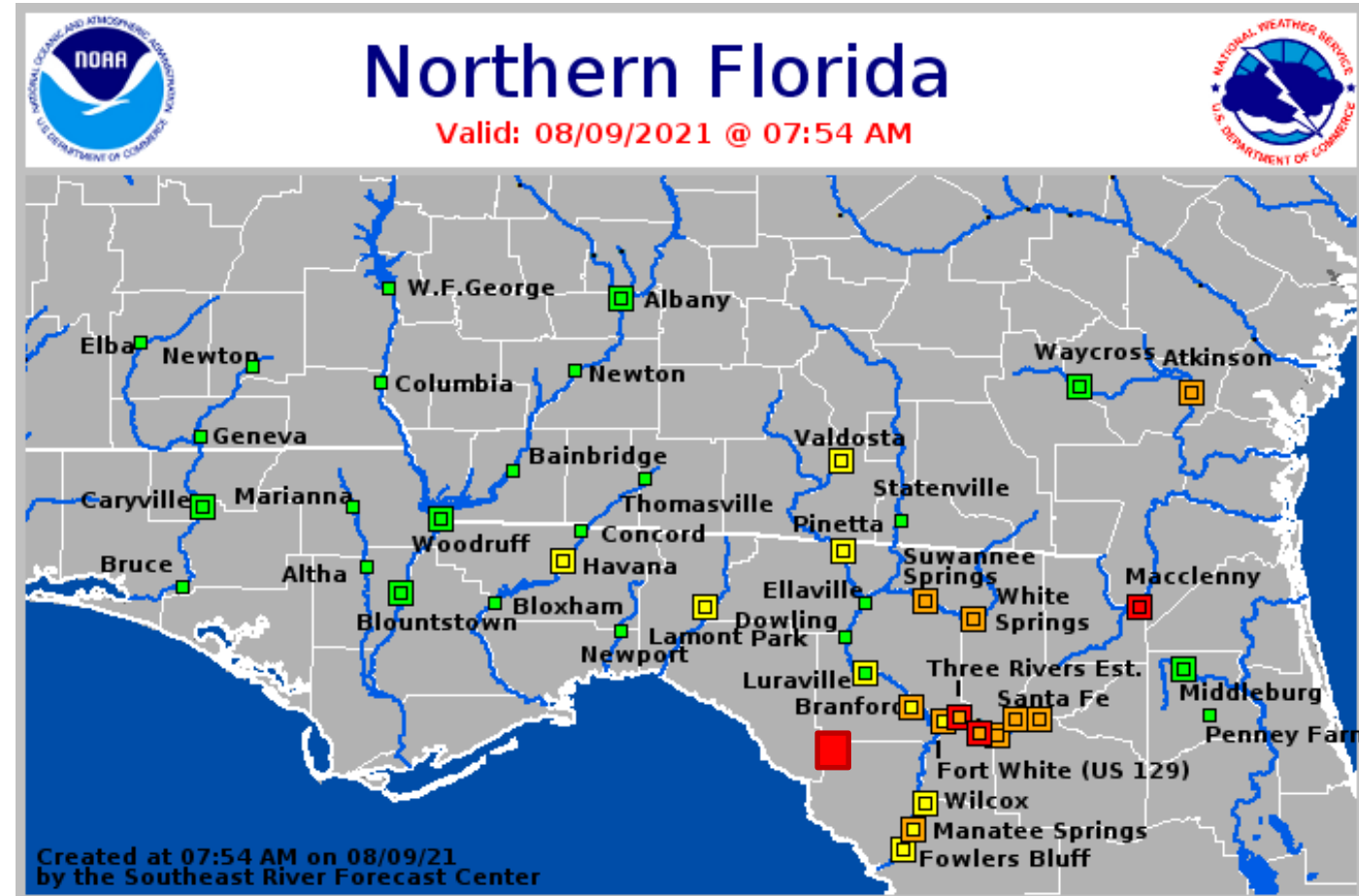
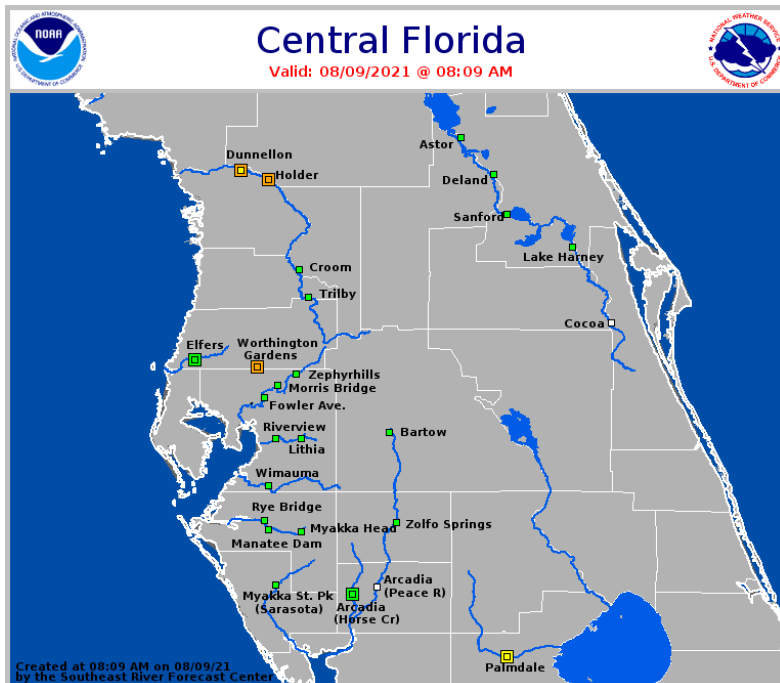


Current & Forecast River Flooding

North Florida – Southeast River Forecast Center

Extensive river flooding will continue across Northeast Florida this week.

More details on river levels available at the [Southeast River Forecast Center website](https://www.srfc.noaa.gov/).





Overall Summary

Invest 93L – Central Tropical Atlantic

- A tropical wave over the central Atlantic Ocean is several hundred miles east of the Caribbean Sea.
- It has little to no thunderstorms activity with it this morning and development appears unlikely.
- There is a 10% (low) chance of development into a tropical depression within the next 48 hours and a 20% (low) chance over 5 days.

Invest 94L – Lesser Antilles

- A tropical wave about 150 miles east of Barbados and the Lesser Antilles is producing some organized showers and thunderstorms this morning as it moves west-northwest at 10-15 mph.
- Conditions are favorable for gradual development over the next couple of days as the system tracks west-northwest into the eastern Caribbean and across or near the Greater Antilles mid-week.
- Land interaction and dry air may limit development as the system approaches the Florida Straits on Friday.
- However, it will near the Bahamas or eastern Gulf of Mexico this weekend and will need to continue to be monitored.
- There is a 70% (high) chance of development into a tropical depression during the next 48 hours and 5 days.
- The next name on the list is Fred.

Florida Outlook:

- Invest 94L should be monitored, as it will bring increased rain chances to South Florida on Friday and Saturday.
- It is too early to determine any other impacts to the state.
- Widespread minor to moderate river flooding will continue this week in Northeast Florida.

Another briefing packet will be issued Tuesday morning, or sooner if the system develops. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.



TROPICAL UPDATE



Created by:

Michael Spagnolo, Deputy State Meteorologist

Michael.Spagnolo@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

Users wishing to subscribe (approval pending) to this distribution list, register at:

https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic_id=SERT_Met_Tropics.

Other reports available for subscription are available at:

<https://public.govdelivery.com/accounts/FLDEM/subscriber/new?preferences=true>