



Tropical Update



12:00 PM EDT

Sunday, June 30, 2024

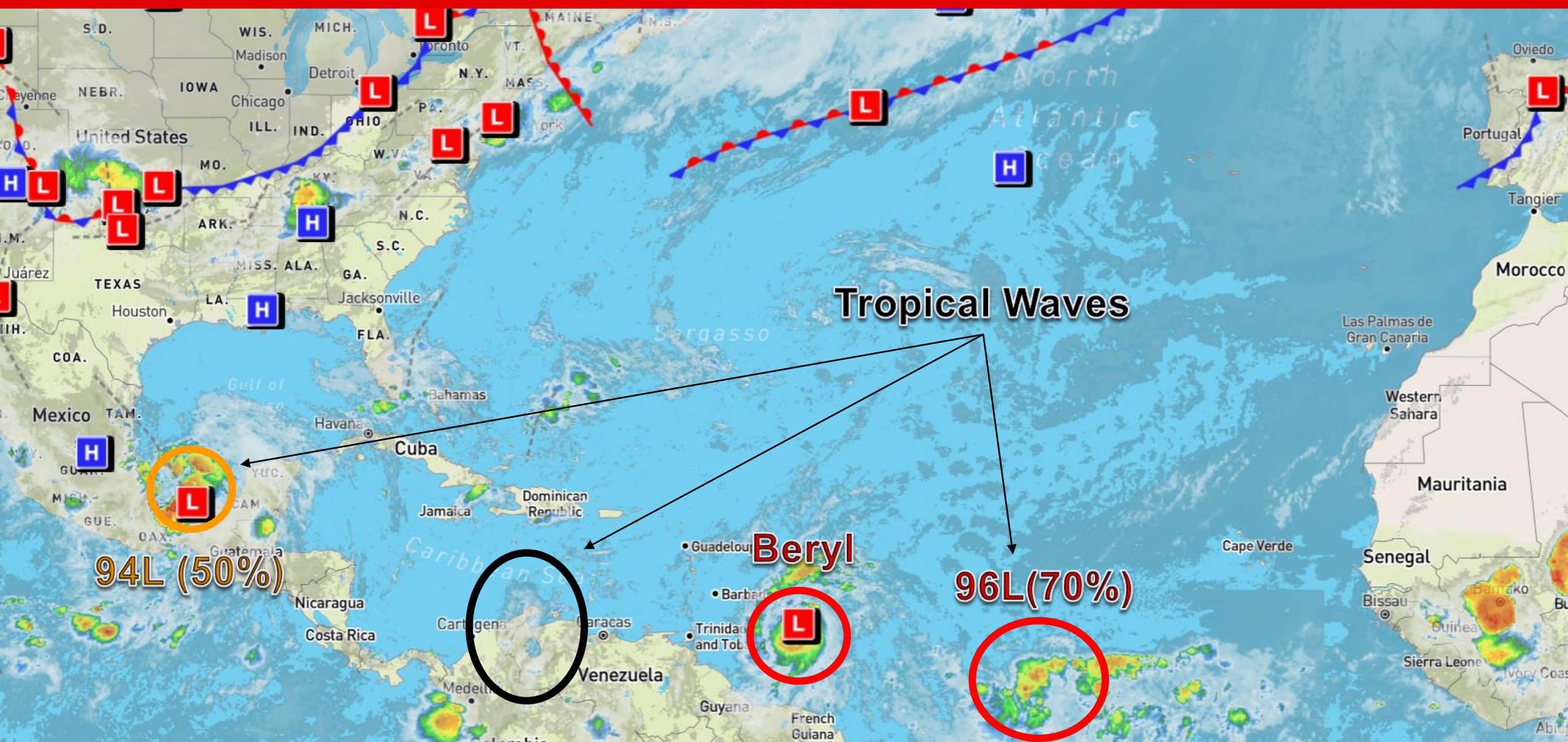
Major Hurricane Beryl Forecast To Strengthen Further Before Reaching Windward Islands Early Monday; Invest 94L Could Become Short-Lived Tropical Depression Before Moving Inland Monday (40%); Invest 96L Producing Showers and Thunderstorms Near Cabo Verde Islands (70%)

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

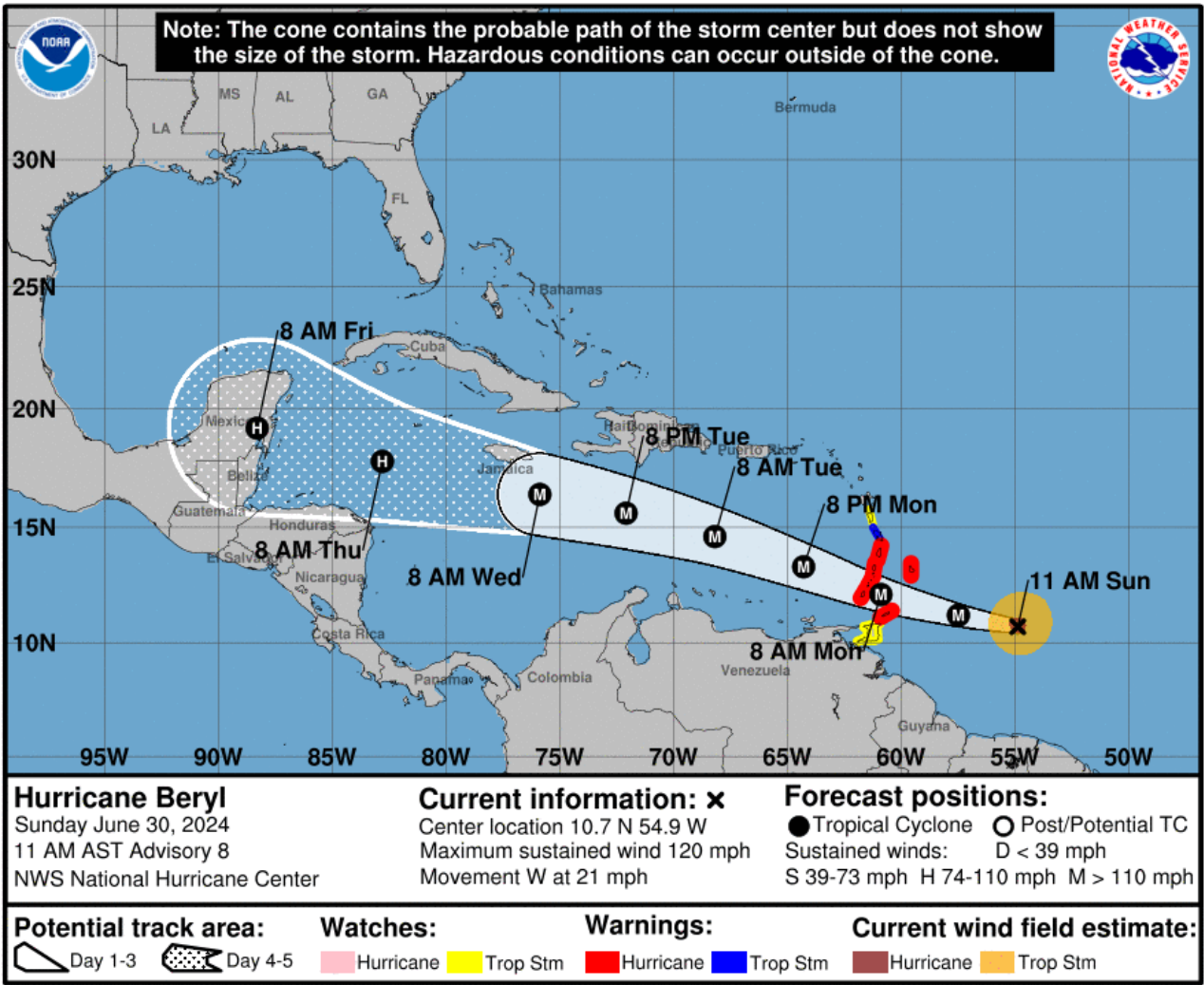
Chance of development: None Low Medium High





Major Hurricane Beryl

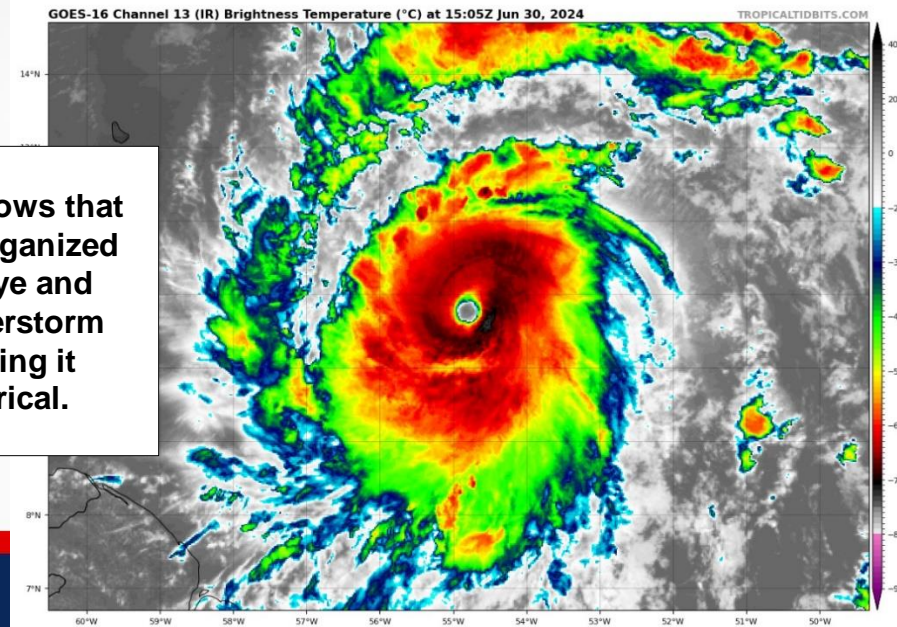
From the National Hurricane Center (NHC)



- **Location:** 350 miles east-southeast of Barbados
- **Maximum Sustained Winds:** 130 mph (Category 4)
- **Current Movement:** W at 21 mph
- **FL Watches & Warnings:** None

A continued westward to west-northwestward motions is expected during the next few days. On the forecast track, the center of Beryl is expected to move across the Windward Islands Monday morning and across the southeastern and central Caribbean Sea late Monday through Wednesday. Some additional strengthening is forecast through tonight, and Beryl is expected to become an extremely dangerous category 4 hurricane before it reaches the Windward Inlands.

Satellite imagery shows that Beryl is very well organized indicated by the eye and shower and thunderstorm activity surrounding it remains symmetrical.





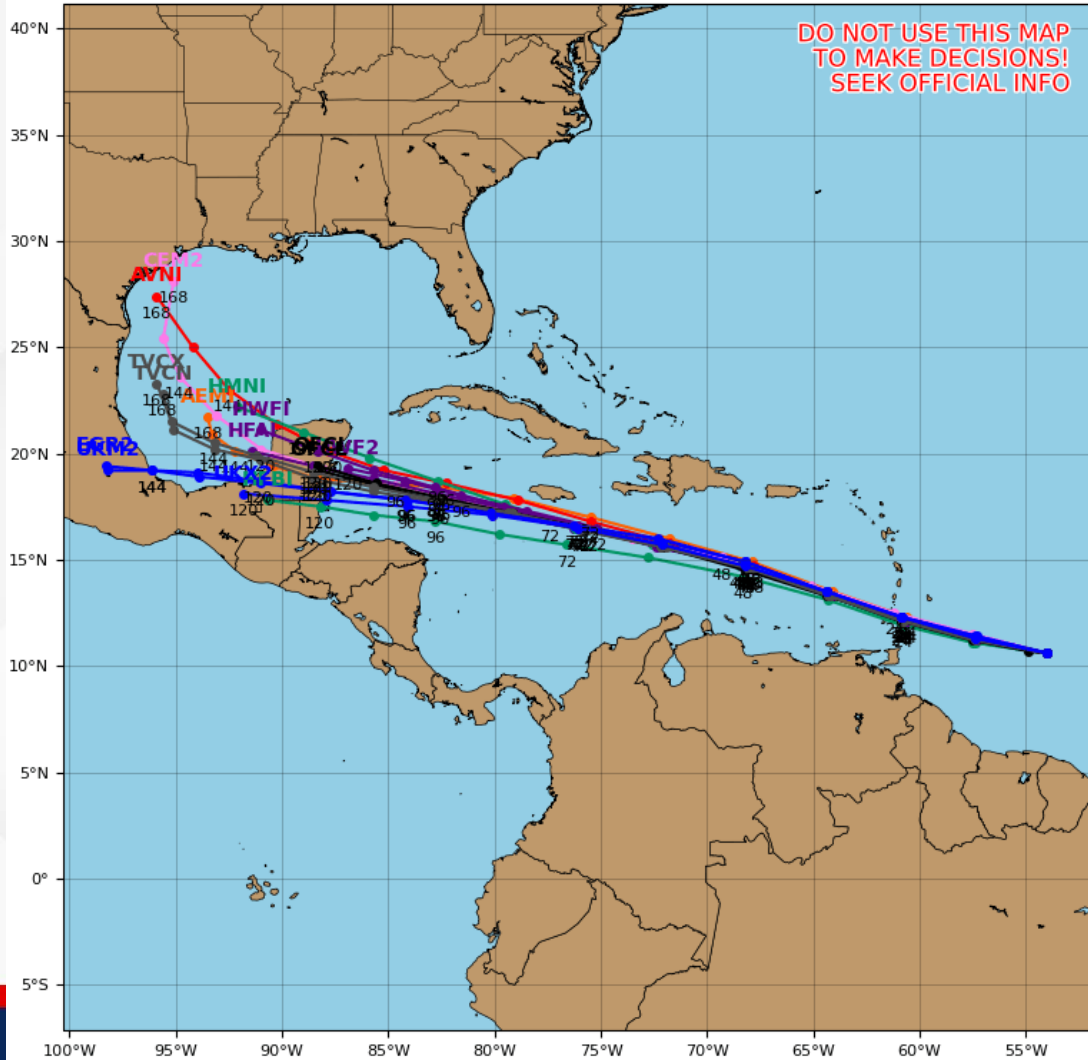
Model Forecasts – Next 5 Days

Major Hurricane Beryl

Hurricane BERYL Model Track Guidance

Initialized at 12z Jun 30 2024

Levi Cowan - tropicaltidbits.com



Computer model guidance remains within very good agreement that Beryl will continue to generally move westward as it moves along the southern periphery of a large area of high pressure over the Central Tropical Atlantic near the Azores. The system will continue on a quick westward to west-northwestward motion during the next several days due to the area of high pressure. This will bring Beryl to the Windward Islands Monday morning, then across the Caribbean Sea over the following days.

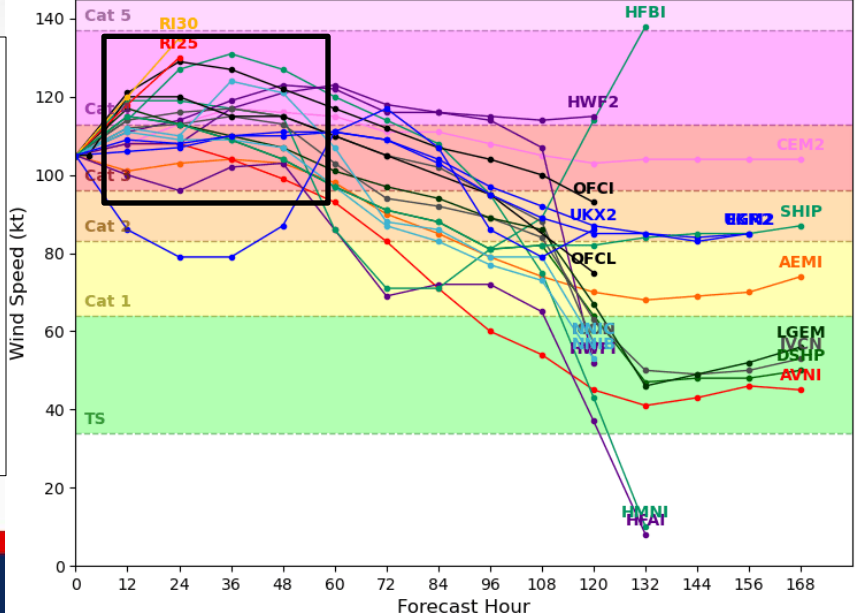
Computer model guidance also remains within good agreement that Beryl will undergo some additional strengthening through the next 12-24 hours as environmental conditions will remain conducive. Early this next week, computer model guidance shows environmental conditions becoming less favorable once Beryl moves into the Caribbean Sea. Beryl will likely reach its peak intensity within the next 24-48 hours, then gradually weaken through middle to latter portions of this week.

Computer model guidance continues to be within very good agreement keeping Beryl as a dangerous hurricane throughout the next couple of days. Beryl is likely to reach its peak intensity within the next 24-48 hours.

Hurricane BERYL Model Intensity Guidance

Initialized at 12z Jun 30 2024

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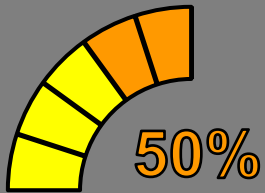
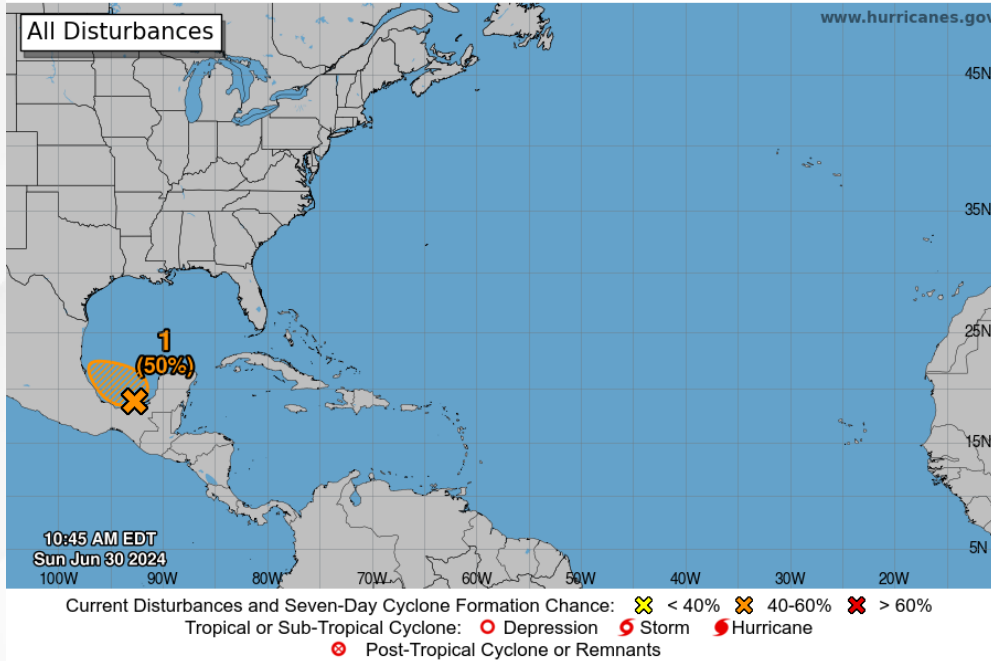


Tropical Weather Outlook

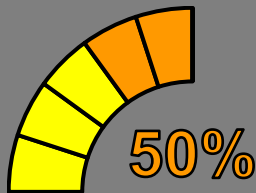
Disturbance 1 – Invest 94L ([LINK](#))



Seven-Day Graphical Tropical Weather Outlook National Hurricane Center Miami, Florida



48 Hour Formation



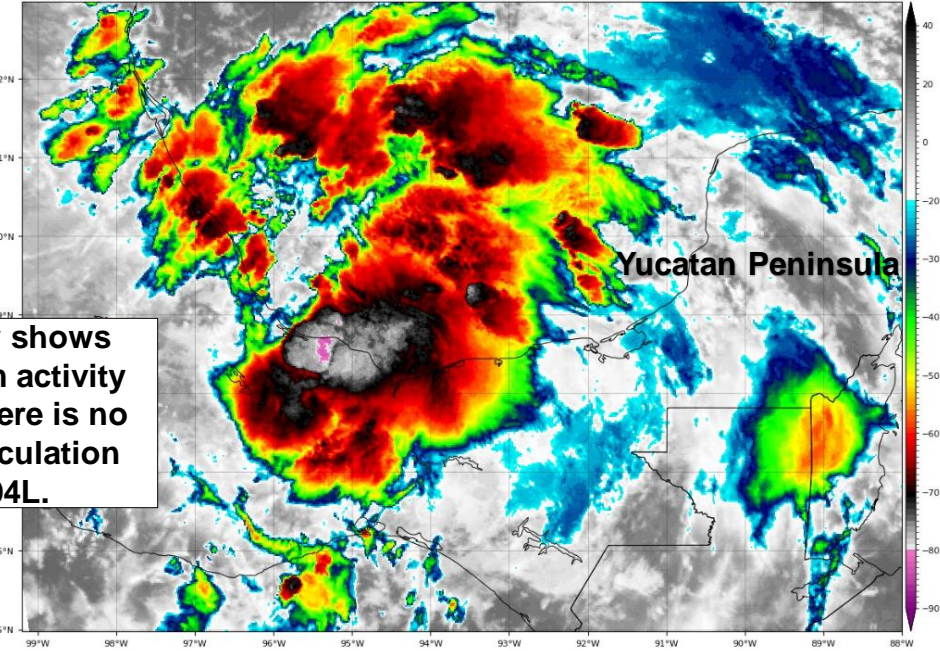
7 Day Formation

An area of low pressure over the southern portions of the Bay of Campeche is producing disorganized showers and thunderstorms. Environmental conditions appear conducive for further development, and a short-lived tropical depression could form before the system moves inland over Mexico on Monday morning. Regardless of development, heavy rainfall associated with the area of low pressure will continue to affect portions of Central America and Mexico through early next week. Hurricane Hunter aircraft is scheduled to investigate the system later today. *This system poses no direct threat to Florida but will bring local ocean swells and a high risk for rip currents along Panhandle beaches today and through the early part of next week.*

* Formation chance through 48 hours...**medium...50%**

* Formation chance through 7 days...**medium...50%**

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 13:45Z Jun 30, 2024



Current satellite imagery shows shower and thunderstorm activity remains disorganized. There is no well-defined center of circulation in association with 94L.



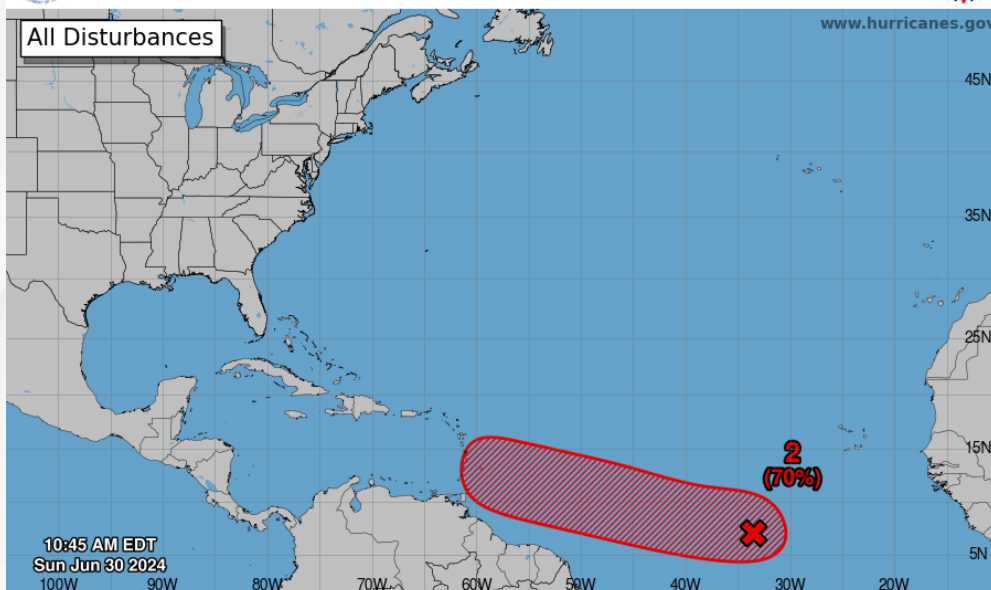
Tropical Weather Outlook

Disturbance 2 – Invest 96L ([LINK](#))

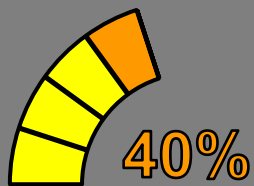


Seven-Day Graphical Tropical Weather Outlook

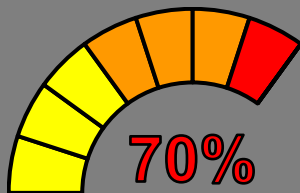
National Hurricane Center Miami, Florida



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



48 Hour Formation



7 Day Formation

Showers and thunderstorms continue in association with an area of low pressure located several hundred miles southwest of the Cabo Verde Islands. Environmental conditions appear conducive for additional development of this system, and a tropical depression is likely to form by the middle part of this week while it moves generally westward at 15-20 mph across the eastern and central tropical Atlantic.

This system poses no threat to Florida over the next 7-10 days but will continue to be monitored.

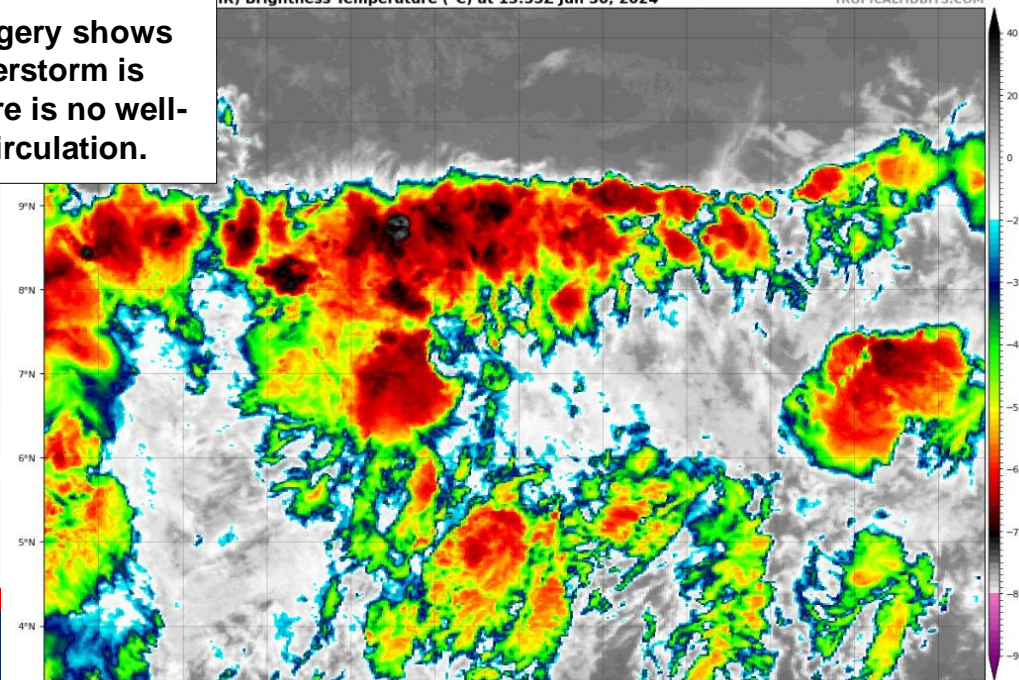
* Formation chance through 48 hours...**medium...40%**

* Formation chance through 7 days...**high..70%**

Current satellite imagery shows shower and thunderstorm is disorganized and there is no well-defined center of circulation.

IR Brightness Temperature (°C) at 13:55Z Jun 30, 2024

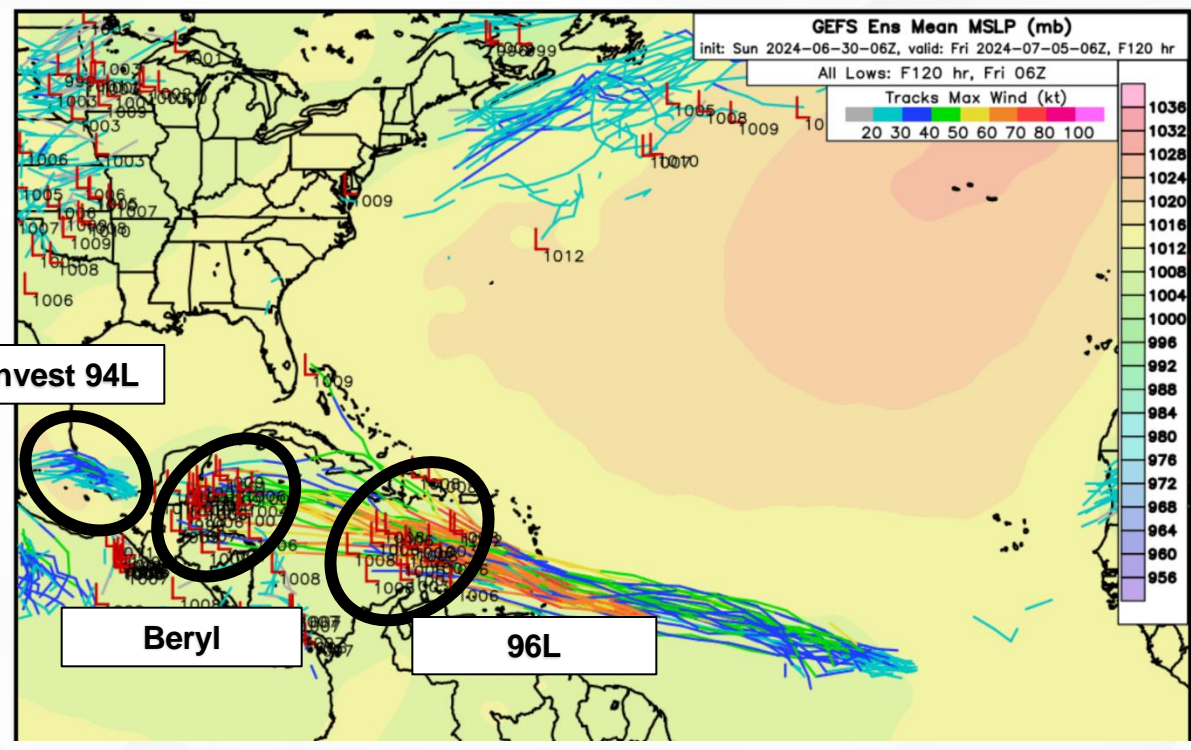
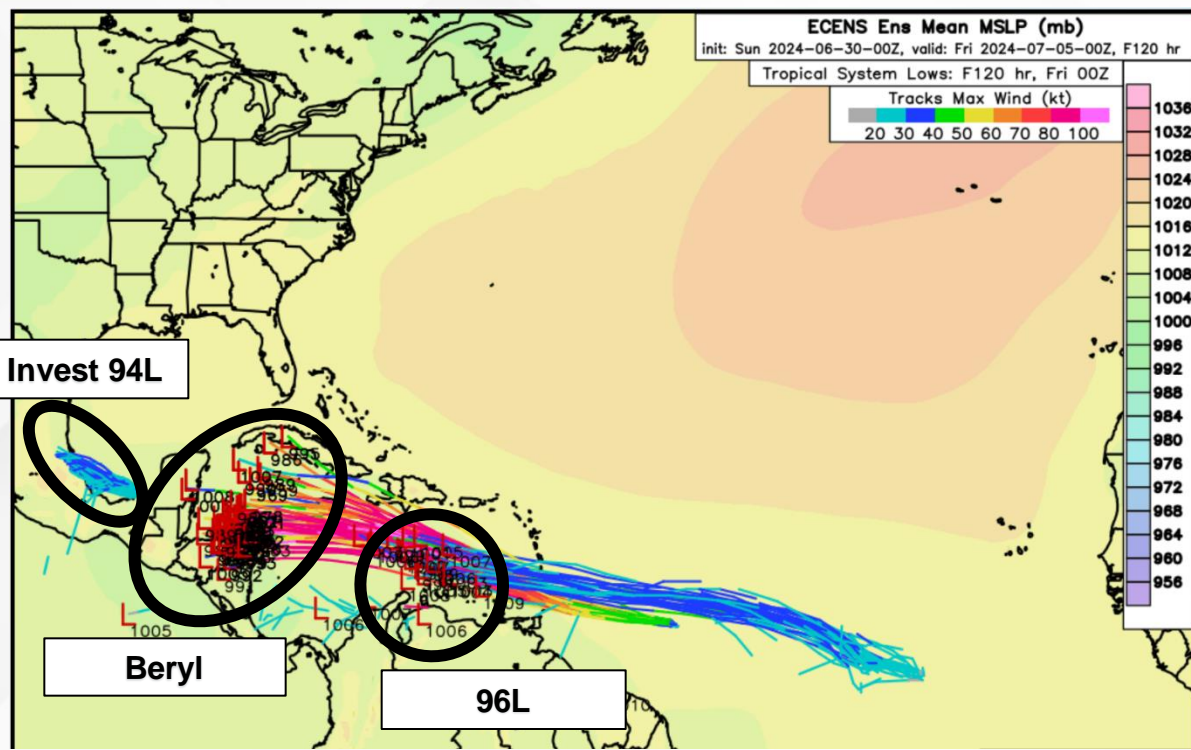
TROPICALTIDBITS.COM





Model Forecasts – Next 5 Days

Atlantic Basin



Computer model guidance is in good agreement that Invest 94L will move westward to northwestward towards the coast of Mexico tonight and into Monday. Some slightly development may be possible before the system reaches the coast of Mexico Monday morning. The system will then move inland along eastern Mexico.

Computer model guidance continues to remain within good agreement that Beryl will continue generally move westward through the next 5 days across the tropical Atlantic waters, then into the southern Caribbean Sea. There remains some slight disagreement once Beryl reaches the central Caribbean Sea, where the European forecast models has a larger range/spread compared to the American forecast models. Beryl will continue to be monitored as it reaches the Caribbean Sea near midweek. Computer model guidance shows Beryl strengthening as it reaches the Windward Islands tonight and Monday, then moving into the Caribbean Sea where some slight additional strengthening may be possible, followed by weakening by midweek. Invest 96L looks to follow a similar path and direction from Beryl, which is a general westward motions over the next 5 days. Forecast guidance is showing Invest 96L reaching the eastern Caribbean Sea by the latter portions of this week. The European forecast models do not have as large of a range/spread compared to the American forecast models. The system will continue to be monitored through the early to middle part of this week.



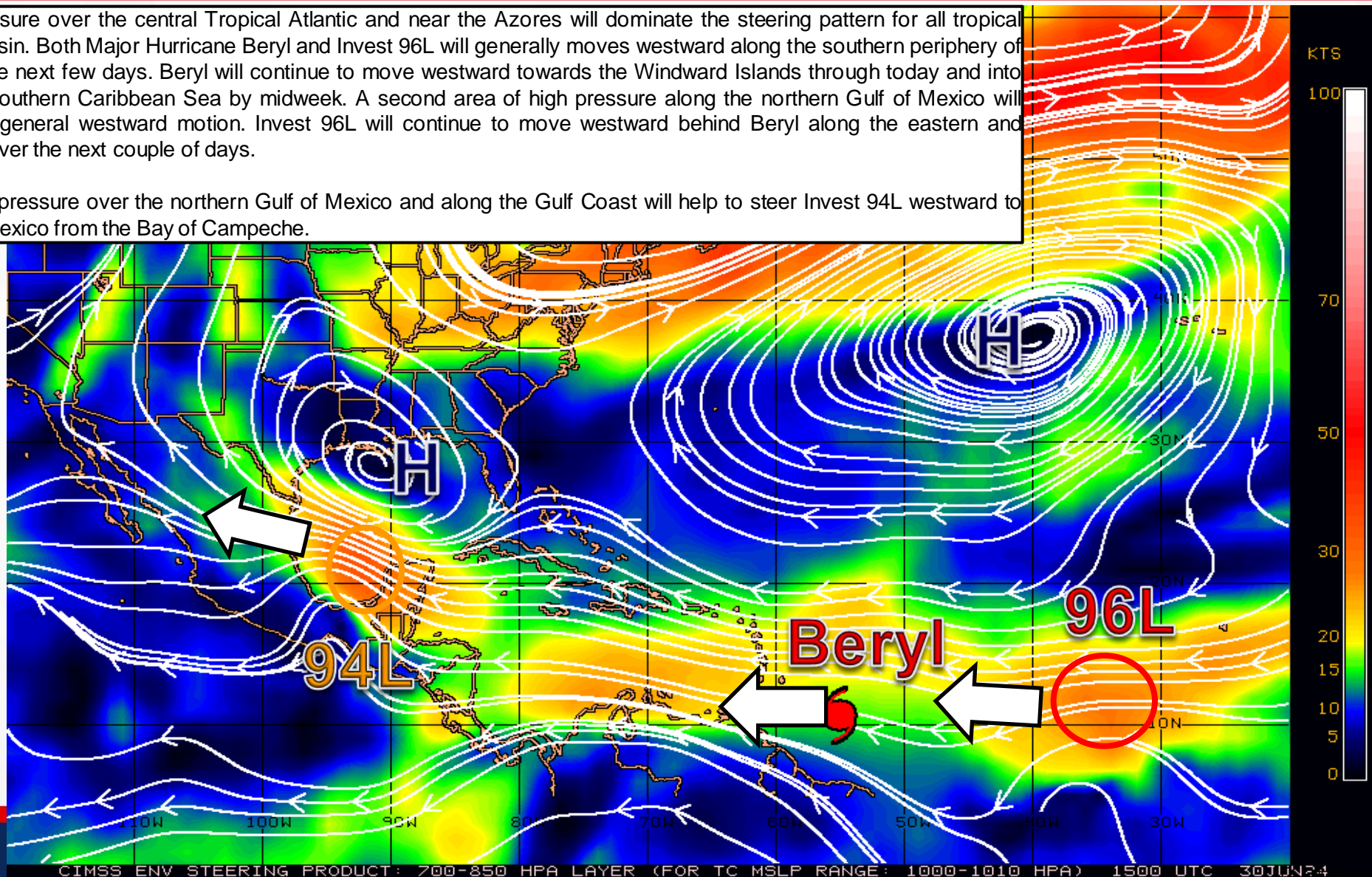
Steering Currents

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 over the central Tropical Atlantic and near the Azores will dominate the steering pattern for all tropical systems in the Atlantic basin. Both Major Hurricane Beryl and Invest 96L will generally move westward along the southern periphery of the high pressure over the next few days. Beryl will continue to move westward towards the Windward Islands through today and into Monday, then enter the southern Caribbean Sea by midweek. A second area of high pressure along the northern Gulf of Mexico will help to reinforce Beryl's general westward motion. Invest 96L will continue to move westward behind Beryl along the eastern and western tropical Atlantic over the next couple of days.

The second area of high pressure over the northern Gulf of Mexico and along the Gulf Coast will help to steer Invest 94L westward to northwestward towards Mexico from the Bay of Campeche.



Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

Slow Moving Storm



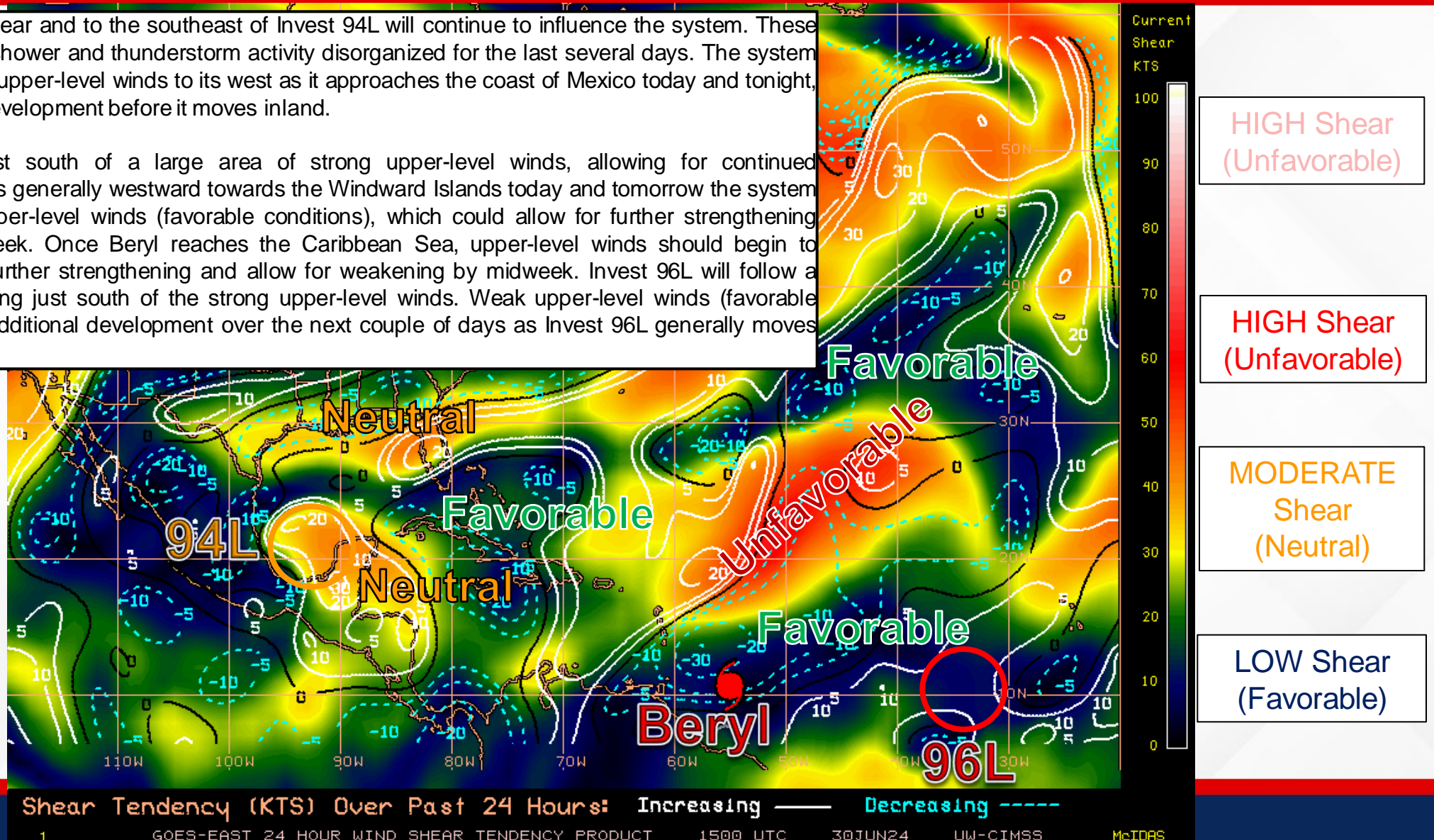
Wind Shear

Is the environment favorable for the system?

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).

Moderate upper-level winds near and to the southeast of Invest 94L will continue to influence the system. These upper-level winds have kept shower and thunderstorm activity disorganized for the last several days. The system could tap into more favorable upper-level winds to its west as it approaches the coast of Mexico today and tonight, which may allow for further development before it moves inland.

Hurricane Beryl remains just south of a large area of strong upper-level winds, allowing for continued strengthening. As Beryl moves generally westward towards the Windward Islands today and tomorrow the system will remain within weaker upper-level winds (favorable conditions), which could allow for further strengthening through early part of this week. Once Beryl reaches the Caribbean Sea, upper-level winds should begin to increase which should limit further strengthening and allow for weakening by midweek. Invest 96L will follow a similar path to Beryl, remaining just south of the strong upper-level winds. Weak upper-level winds (favorable conditions) should allow for additional development over the next couple of days as Invest 96L generally moves westward.

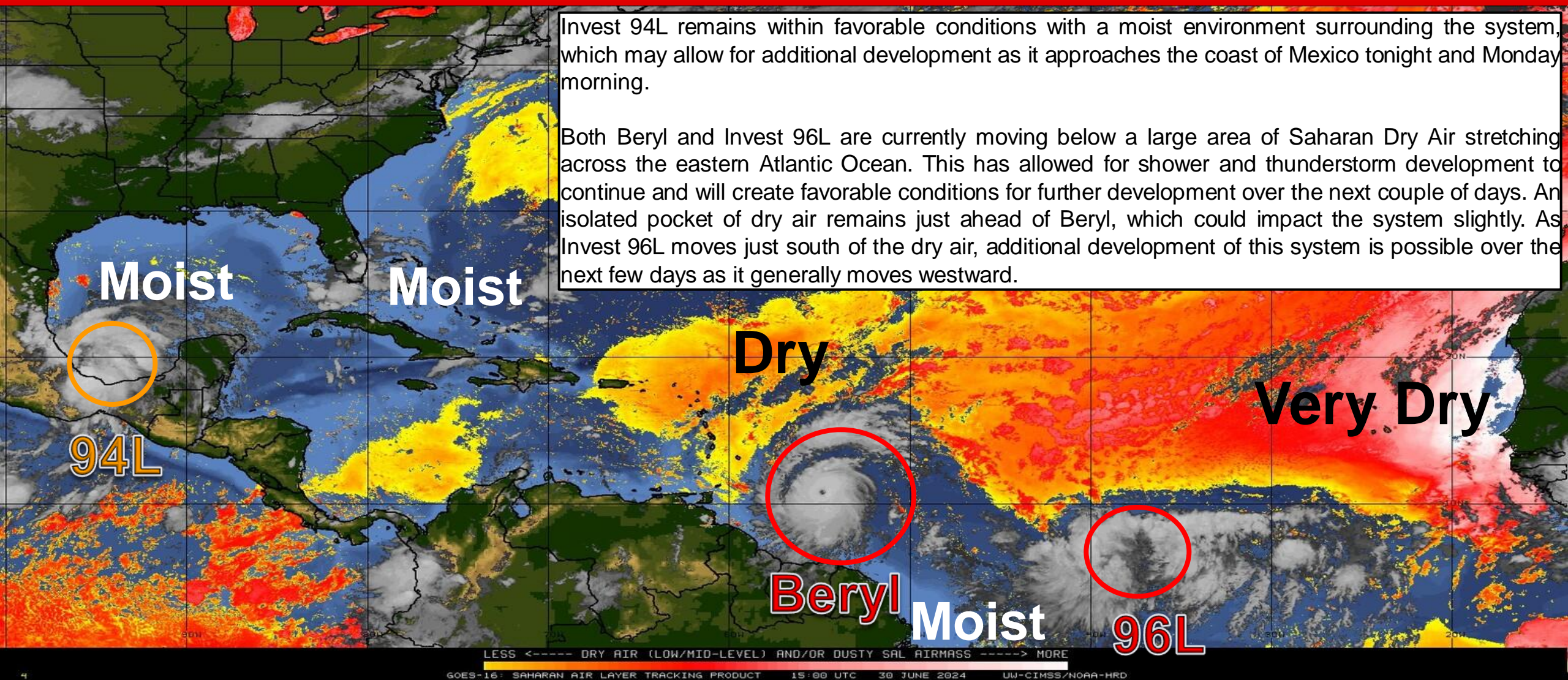




Dry Air & Saharan Dust

Is the environment favorable for the system?

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

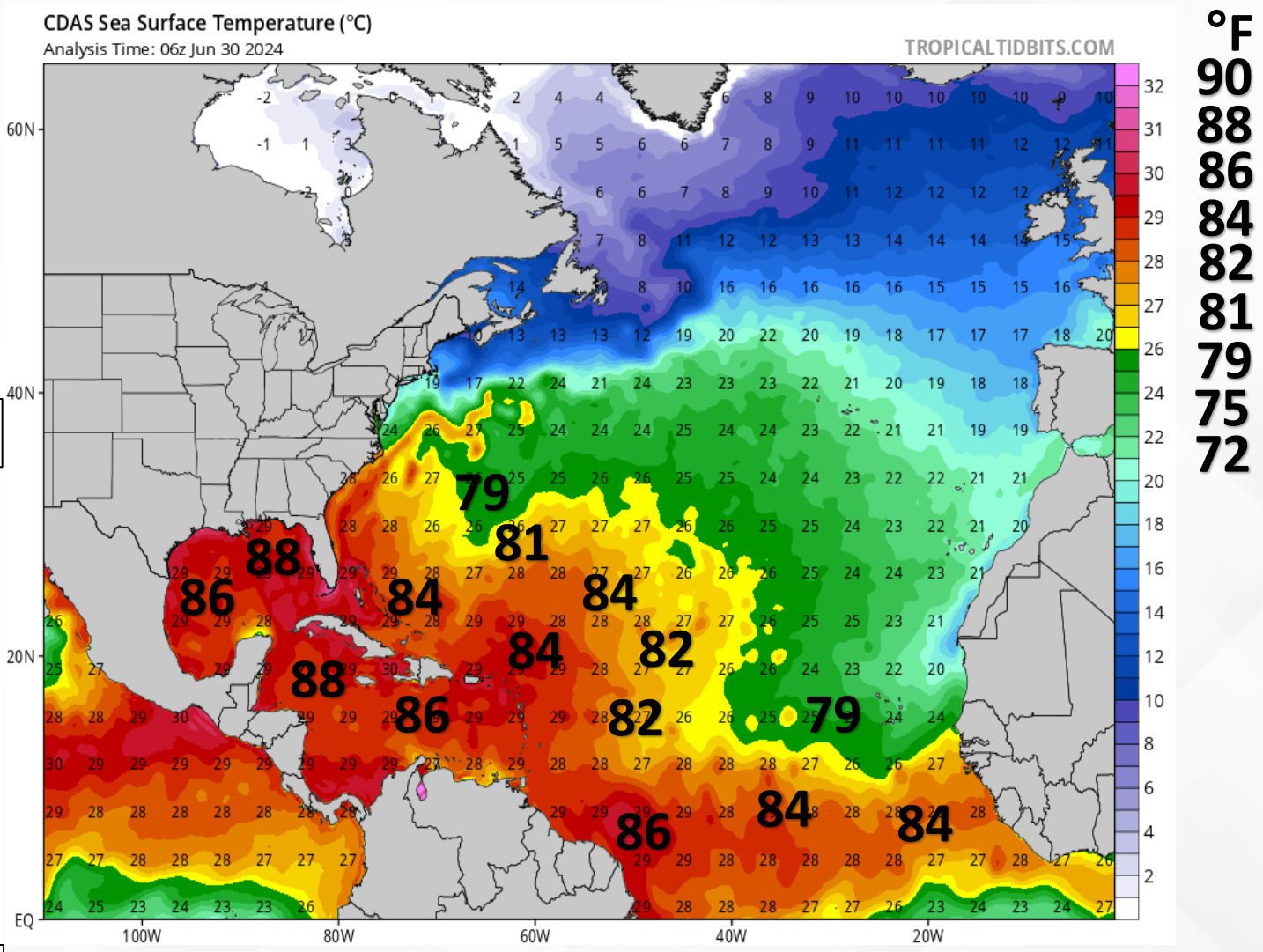
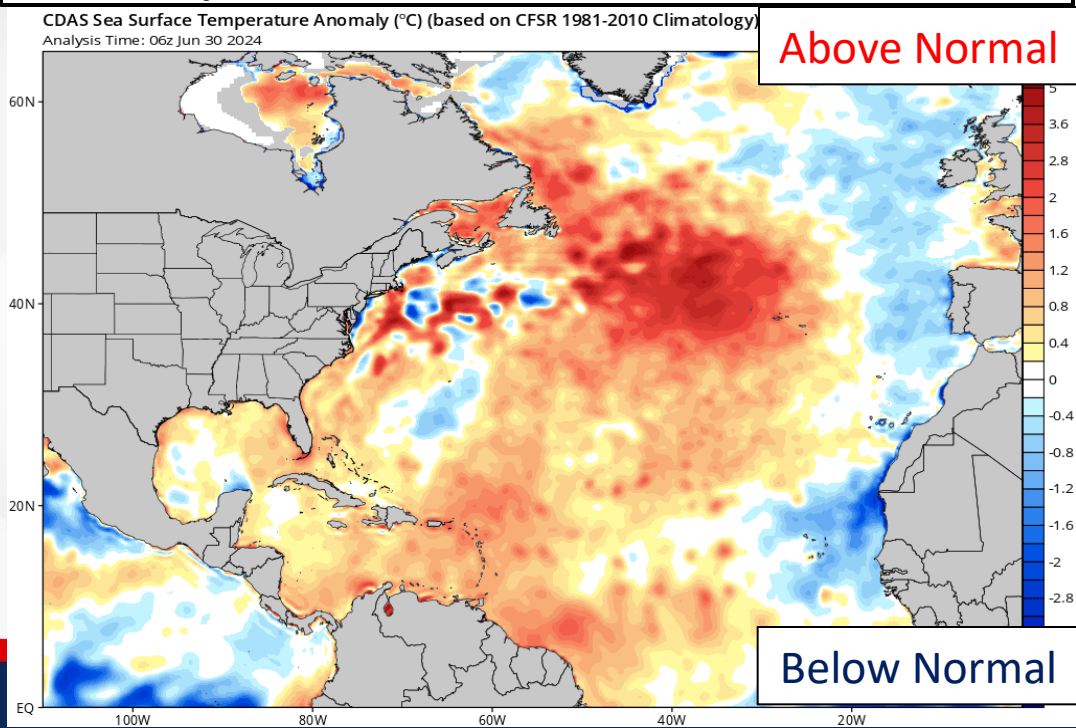




Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Temperatures across the Atlantic Basin are supportive of tropical cyclone development. Waters across the deep tropical Atlantic and Gulf of Mexico 0.5 to 1.5-degrees above normal for this time of year.





Summary

Major Hurricane Beryl:

- As of 11:00 AM EDT, the center of Hurricane Beryl was located about 350 miles east-southeast of Barbados with maximum sustained winds near 130 mph, making it a dangerous category 4 hurricane.
- A continued quick westward to west-northwestward motion is expected during the next few days, and on the forecast track, Beryl is expected to move across the Windward Islands Monday morning and across the southeastern and central Caribbean Sea late Monday through Wednesday.
- Some additional strengthening is forecast through tonight, and Beryl is expected to be an extremely dangerous category 4 hurricane before it reaches the Windward Islands.
- *Beryl poses no threat to Florida over the next 5-7 days, but this system will be monitored this weekend into next week.*

Invest 94L – Southwestern Gulf of Mexico:

- An area of low pressure located over the southern portion of the Bay of Campeche is producing disorganized showers and thunderstorms.
- Environmental conditions appear to be favorable for further development, and a short-lived tropical depression could form before the system moves inland on Monday morning.
- Hurricane Hunter aircraft is scheduled to investigate the system later today.
- National Hurricane Center is outlooking a **medium (50%) chance of development** over the next 48 hours and 7 days.
- *This system poses no direct threat to Florida but will bring elevated ocean swells and a high risk for rip currents along Panhandle beaches today and through early next week..*

Invest 96L – Eastern Tropical Atlantic:

- Showers and thunderstorms continue in association with an area of low pressure several hundred miles southwest of the Cabo Verde Islands.
- Environmental conditions appear conducive for additional development of this system.
- A tropical depression is likely to form by the middle part of this week while it moves generally westward at 15-20 mph across the eastern and central tropical Atlantic.
- The National Hurricane Center is outlooking a **medium (40%) chance of development** over the next 48 hours, and a **high (70%) chance of development** over the next 7 days.
- *This system poses no threat to Florida over the next 7-10 days but will continue to be monitored*

Florida Outlook:

- Abundant moisture will bring scattered to numerous showers and thunderstorms across the state throughout the afternoon and evening along the sea breeze collisions, with the help from a frontal boundary approaching the Mid-Atlantic U.S.
- Organized severe weather is not expected; however, isolated strong to locally severe thunderstorms capable of producing frequent lightning, gusty winds (40-50 mph) and torrential downpours will be possible throughout the afternoon and evening.
- The Weather Prediction Center (WPC) is outlooking a Marginal Risk (level 1 of 4) for Flash Flooding throughout much of the state, extending along the I-10 corridor and the western Peninsula, where abundant moisture will fuel showers and thunderstorms that could bring localized flash flooding for urban and low-lying/poor drainage areas.
- Heat Advisories will go into effect late this morning along the far western Panhandle due to heat index values of 108-110 this afternoon. Heat index values across the state will reach the upper 90s to middle 100s.
- The next name on the list is Chris (*kris*).

The next briefing packet will be issued Monday Morning. For the latest information, please visit the [National Hurricane Center website](#).



Tropical Update



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State Meteorological Support Unit

Florida Division of Emergency Management

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