



Tropical Update



11:30 AM EDT

Tuesday, June 20, 2023

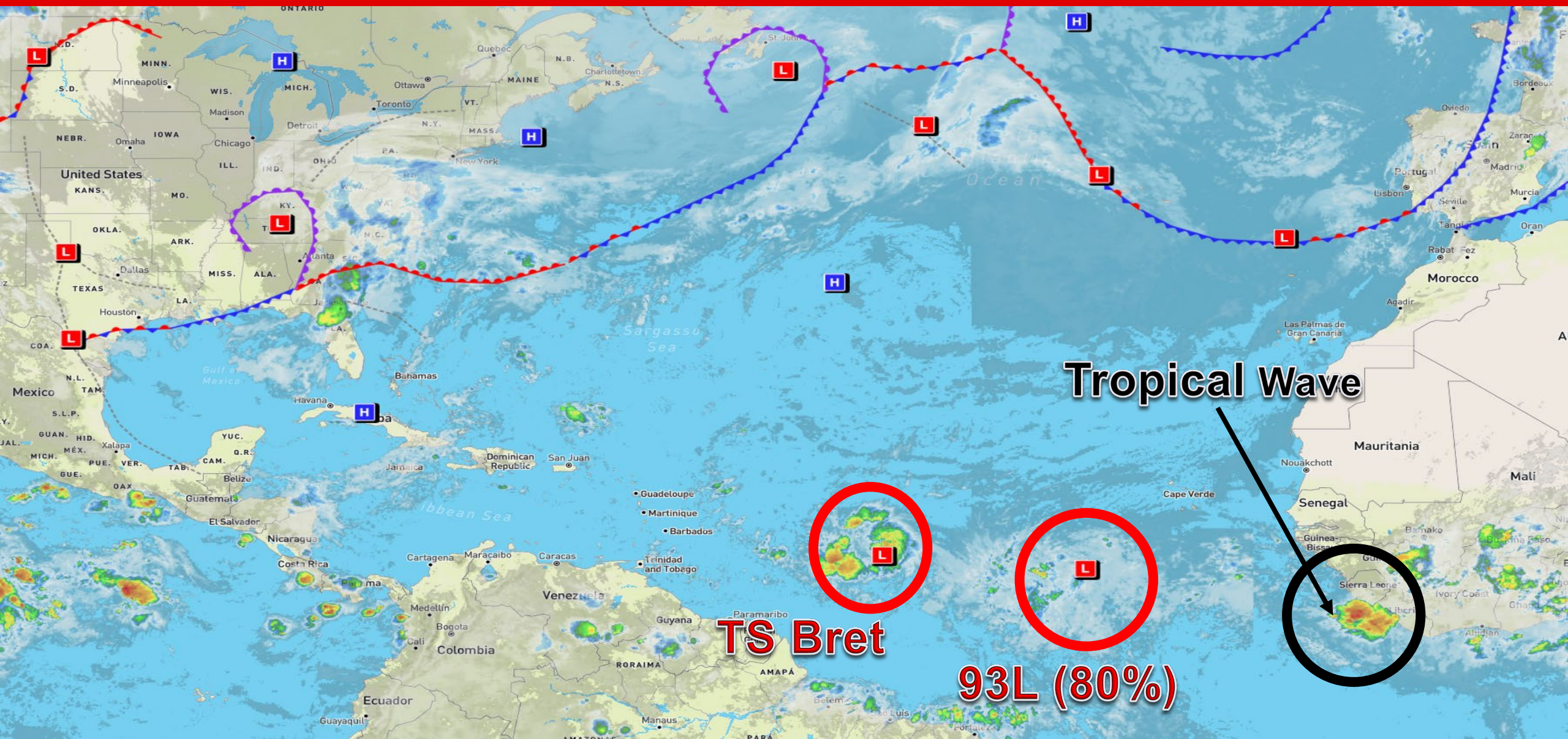
Tropical Storm Bret & Invest 93L (80%)

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

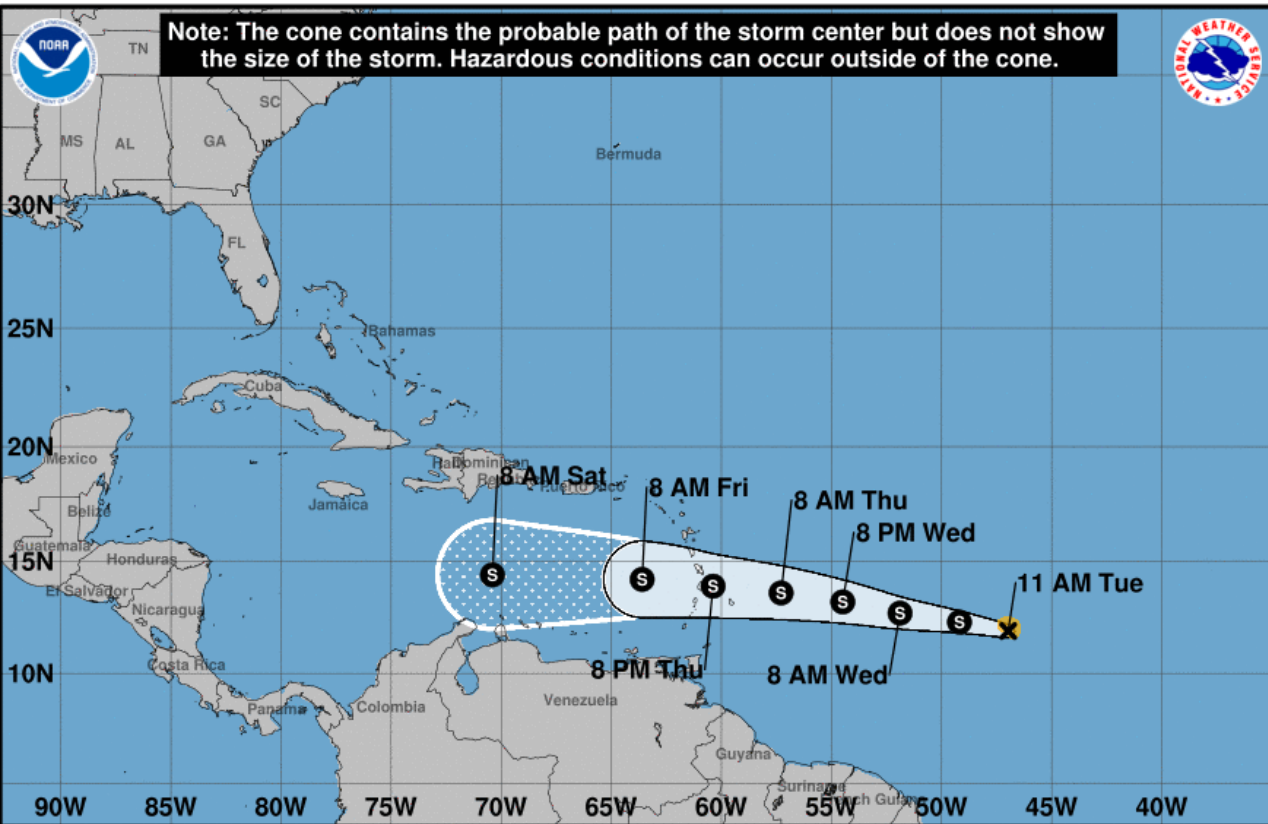
Chance of development: — None — Low — Medium — High





Forecast Cone

Tropical Storm Bret ([LINK](#))



Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



Tropical Storm Bret
Tuesday June 20, 2023
11 AM AST Advisory 5
NWS National Hurricane Center

Current information: x
Center location 11.9 N 47.0 W
Maximum sustained wind 40 mph
Movement W at 21 mph

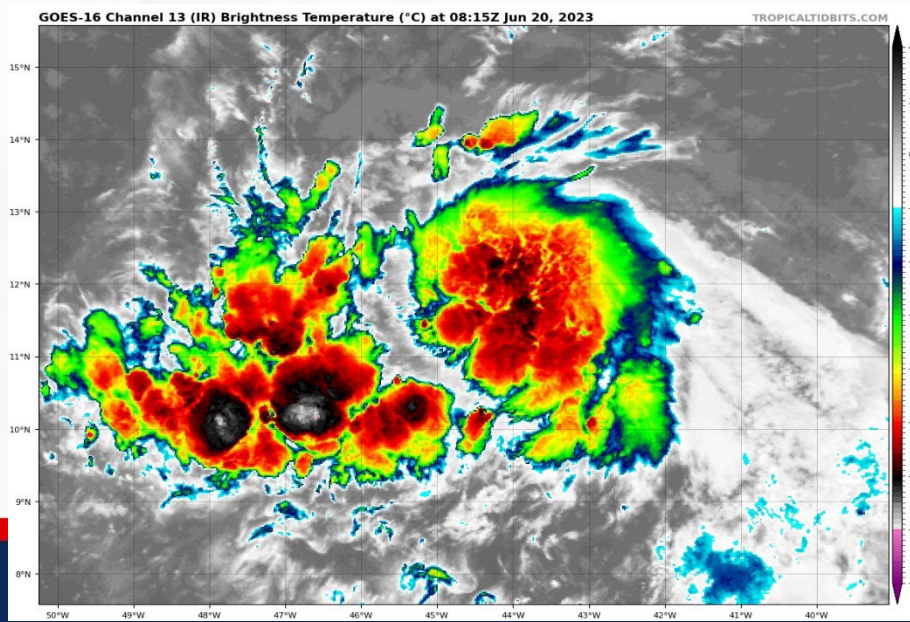
Forecast positions:
● Tropical Cyclone ○ Post/Potential TC
Sustained winds: D < 39 mph
S 39-73 mph H 74-110 mph M > 110 mph

Potential track area: Day 1-3 Day 4-5
Watches: Hurricane Trop Stm
Warnings: Hurricane Trop Stm
Current wind field estimate: Hurricane Trop Stm

- **Location:** 945 miles E Windward Islands
- **Maximum Sustained Winds:** 40 mph
- **Current Movement:** W at 21 mph
- **FL Watches/Warnings:** None

Bret is moving toward the west near 21 mph, and this general motion is expected to continue for the next several days. On the forecast track, the center of Bret could move across portions of the Lesser Antilles Thursday afternoon through Thursday night. Maximum sustained winds are near 40 mph with higher gusts. Some strengthening is forecast during the next couple of days. Bret is expected to be a tropical storm when it reach the Lesser Antilles Thursday.

Bret does not pose a threat to Florida over the next 5-7 days, at least.





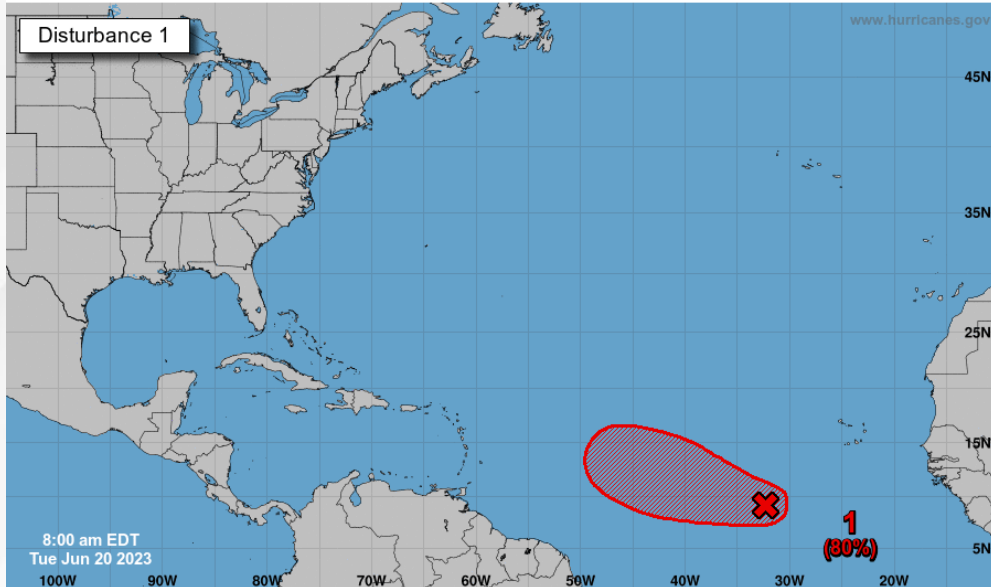
Tropical Weather Outlook

Disturbance 1 – Invest 93L ([LINK](#))

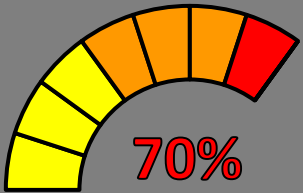


Seven-Day Graphical Tropical Weather Outlook

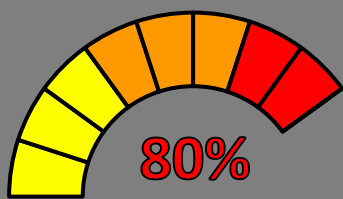
National Hurricane Center Miami, Florida



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



5 Day Formation

Showers and thunderstorms are gradually showing signs of organization in association with a tropical wave located several hundred miles southwest of the Cabo Verde Islands. Environmental conditions appear conducive for further development of this system, and a tropical depression will likely form during the next couple of days while the system moves westward at 10-15 mph across the eastern and central tropical Atlantic.

Invest 93L poses no threat to Florida over the next 7-10 days, at least.

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

* Formation chance through 7 days...**high...80 percent.**



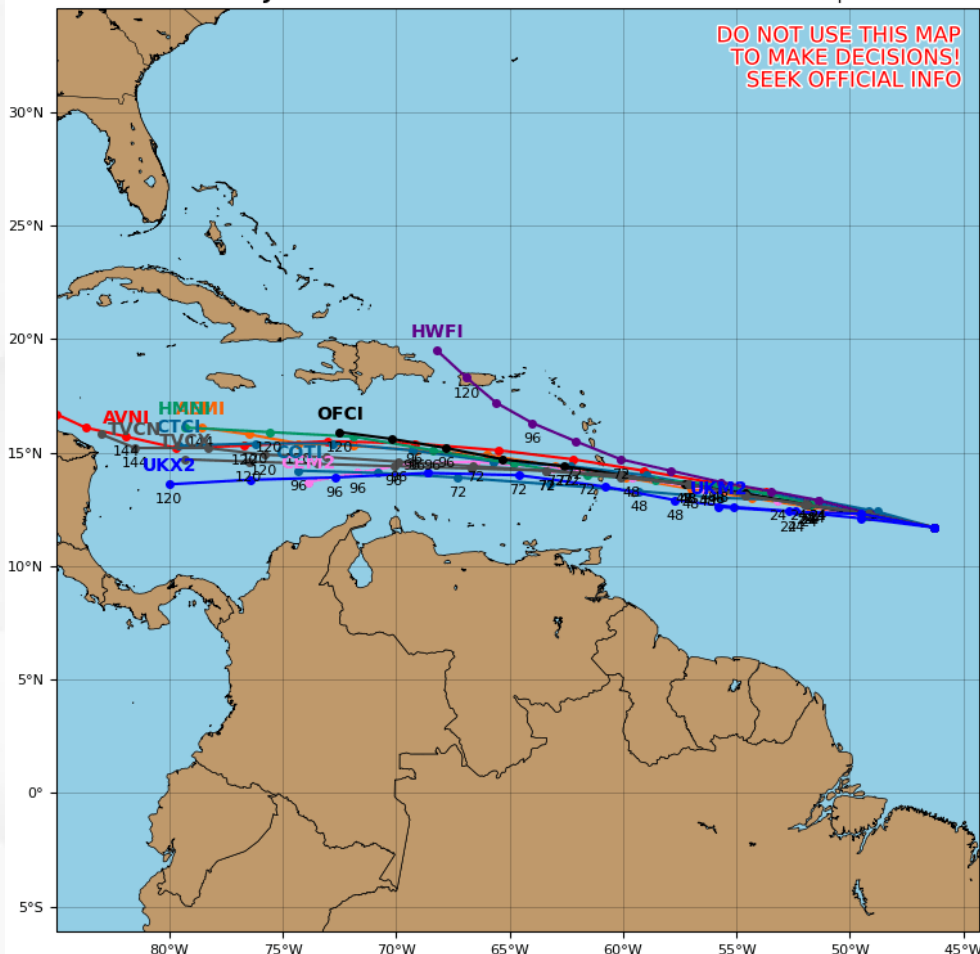
Model Forecasts – Next 5 Days

Tropical Storm Bret

Tropical Storm BRET Model Track Guidance

Initialized at 12z Jun 20 2023

Levi Cowan - tropicaltidbits.com



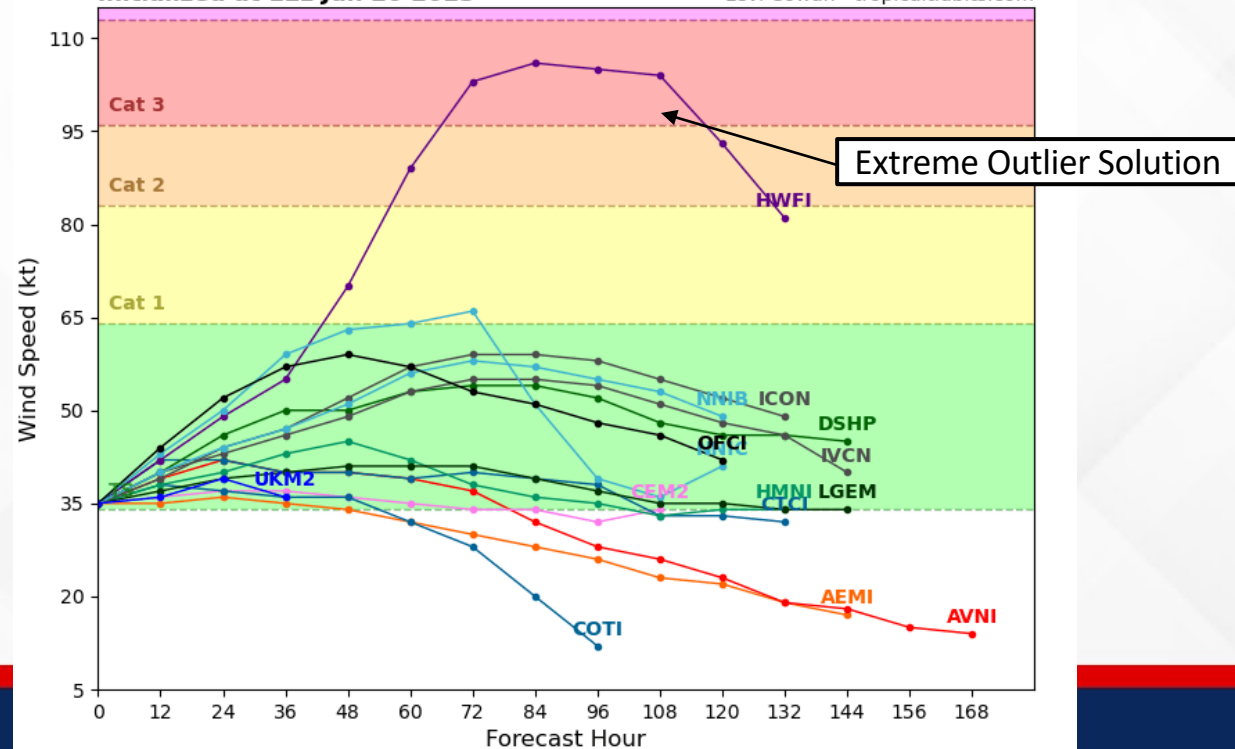
Computer models are in better agreement with the forward motion of Bret over the next 5-7 days. Consensus across the models keep Bret weaker and on a more westerly track, and unable to gain much latitude.

Bret's forecast intensity has decreased, and keeps the system below hurricane strength. Both atmospheric and oceanic conditions are favorable for some strengthening over the next day or two, and Bret may become a strong tropical storm over the next couple of days.

Tropical Storm BRET Model Intensity Guidance

Initialized at 12z Jun 20 2023

Levi Cowan - tropicaltidbits.com





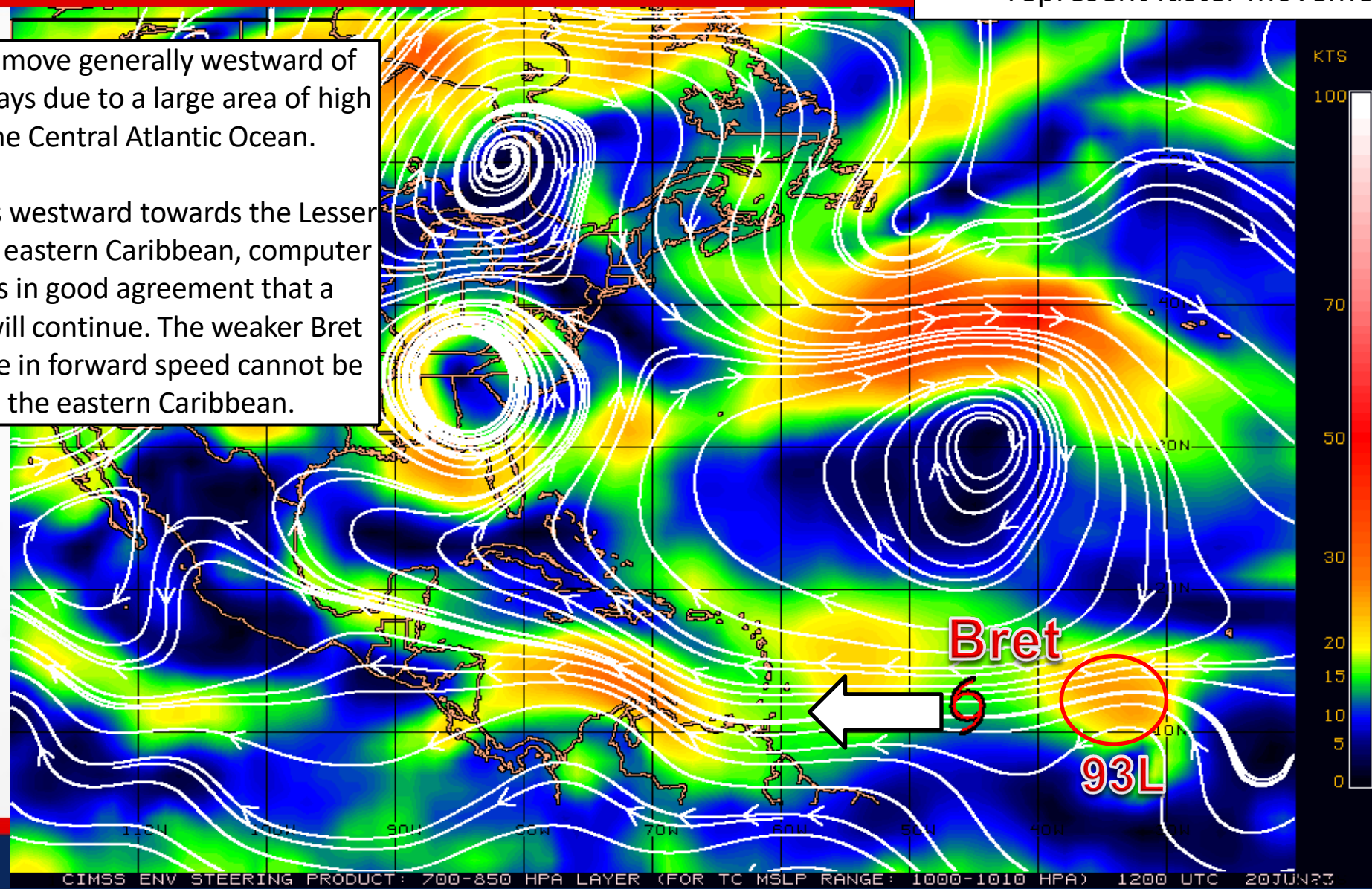
Steering Currents

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.

Bret is expected to move generally westward of the next couple of days due to a large area of high pressure over the Central Atlantic Ocean.

As the system moves westward towards the Lesser Antilles and into the eastern Caribbean, computer model guidance is in good agreement that a westward motion will continue. The weaker Bret remains, an increase in forward speed cannot be ruled out over the eastern Caribbean.



Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

Slow Moving Storm

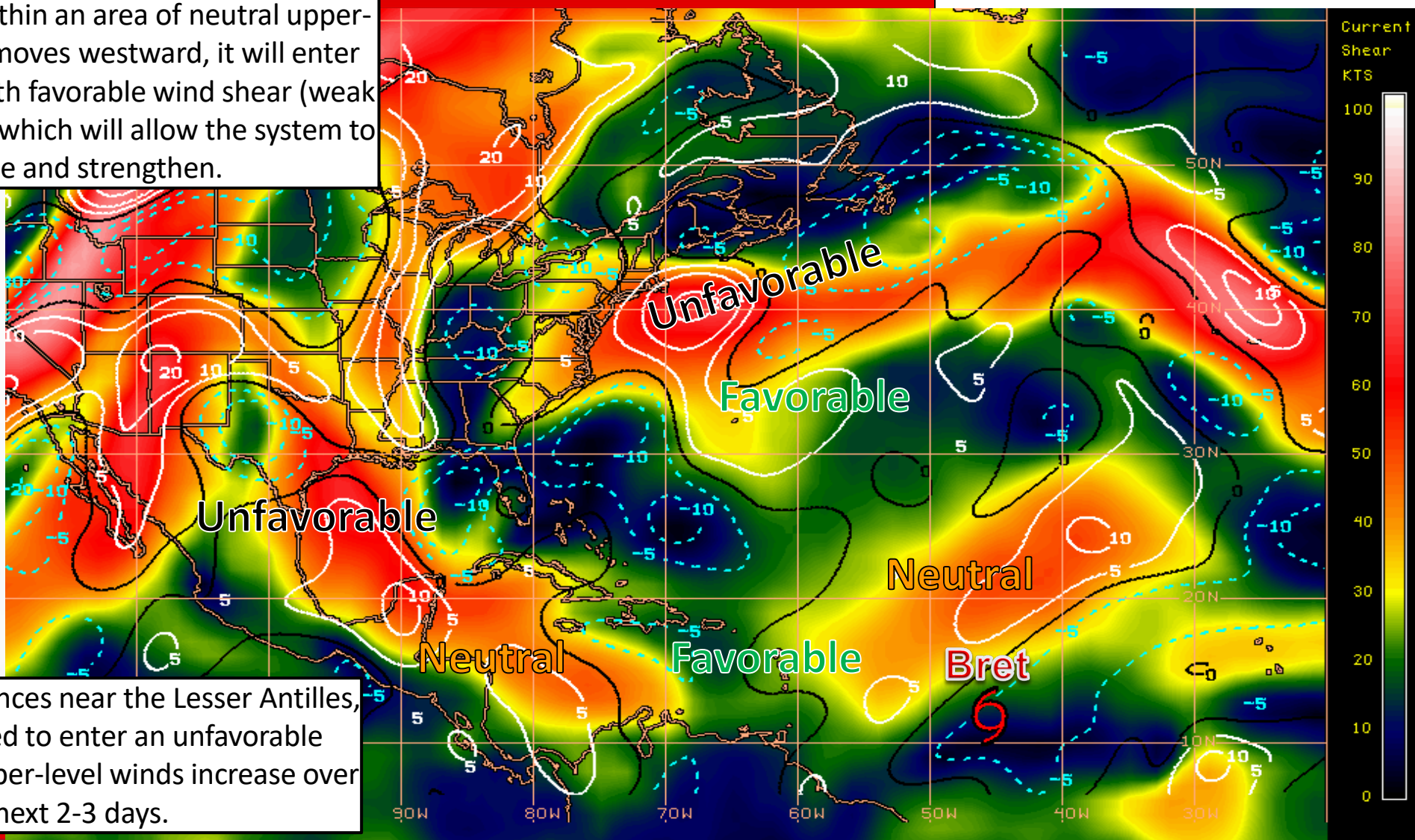


Wind Shear

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).

Bret is currently within an area of neutral upper-level winds. As it moves westward, it will enter an environment with favorable wind shear (weak upper-level winds) which will allow the system to organize and strengthen.



HIGH Shear
(Unfavorable)

HIGH Shear
(Unfavorable)

MODERATE
Shear
(Neutral)

LOW Shear
(Favorable)

As the system advances near the Lesser Antilles, Bret is anticipated to enter an unfavorable environment as upper-level winds increase over the next 2-3 days.



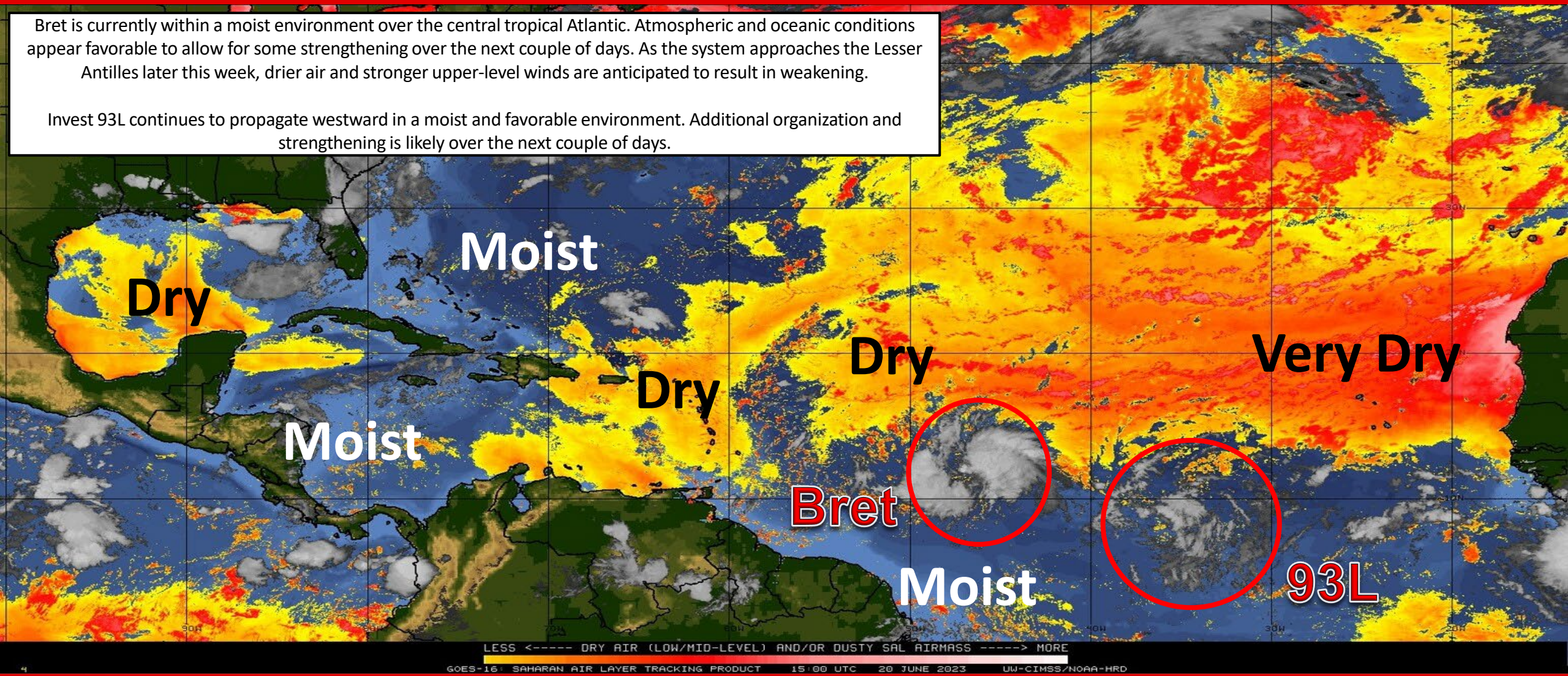
Dry Air & Saharan Dust

Is the environment favorable for the system?

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

Bret is currently within a moist environment over the central tropical Atlantic. Atmospheric and oceanic conditions appear favorable to allow for some strengthening over the next couple of days. As the system approaches the Lesser Antilles later this week, drier air and stronger upper-level winds are anticipated to result in weakening.

Invest 93L continues to propagate westward in a moist and favorable environment. Additional organization and strengthening is likely over the next couple of days.



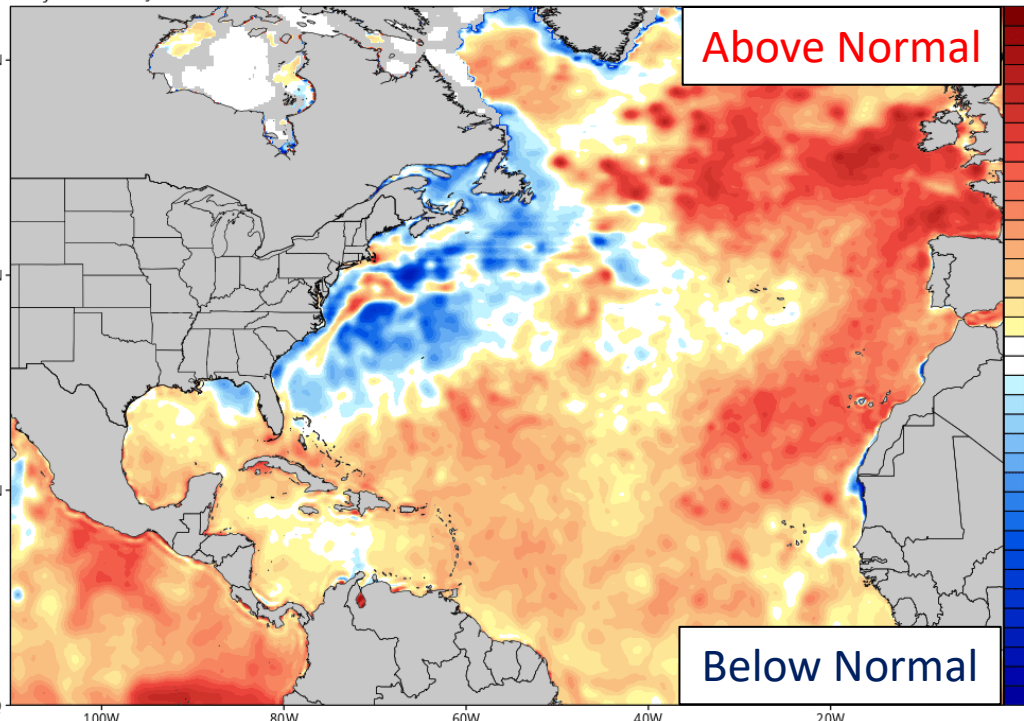


Sea Surface Temperatures & Anomalies

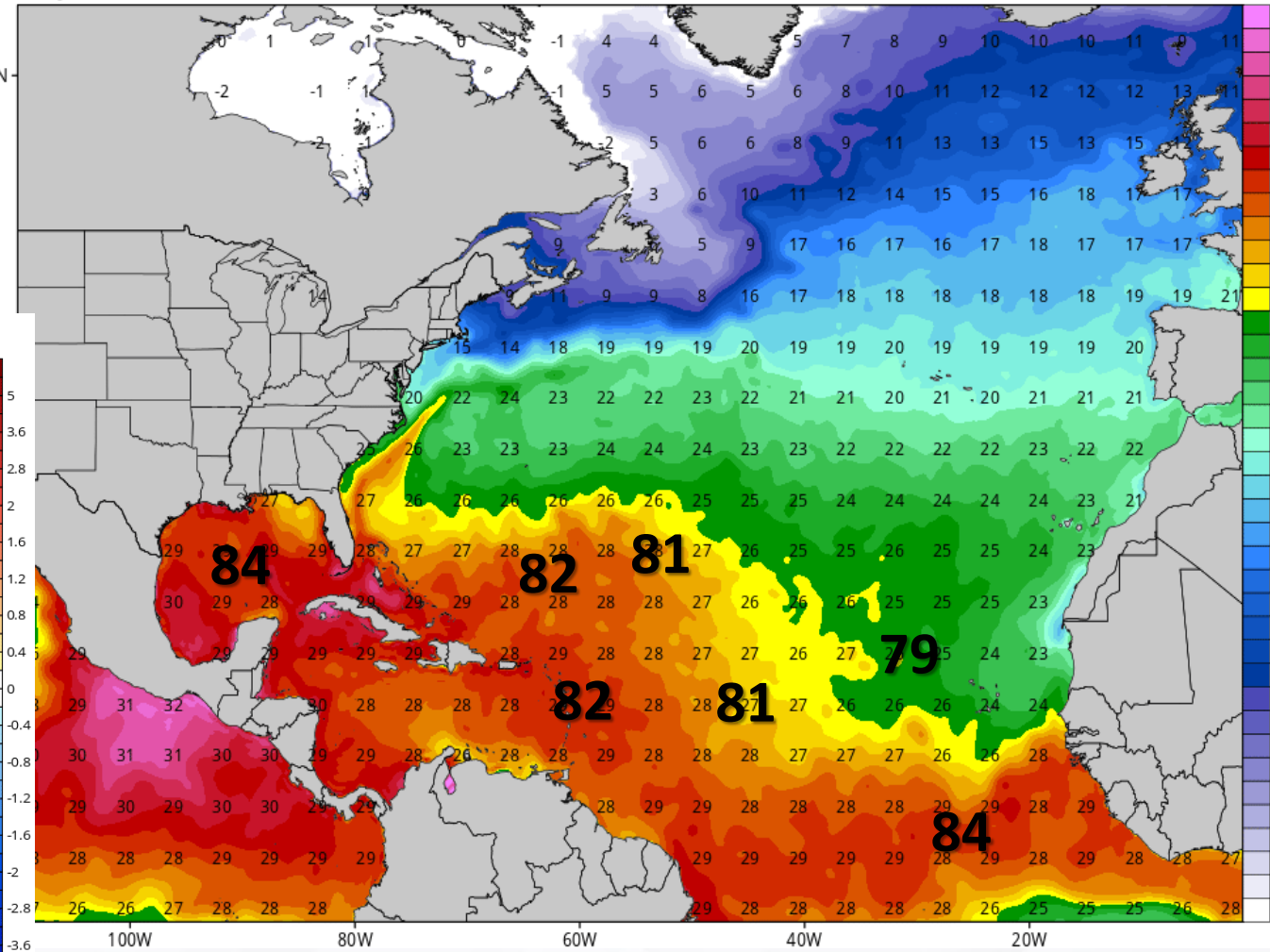
Is the ocean favorable for the system?

Abnormally warm ocean temperatures for this time of year are warm enough to support development across the Tropical Atlantic. Temperatures near Tropical Storm Bret and Invest 93L are running 1 to 2-degrees above normal for this time of year.

CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)
Analysis Time: 06z Jun 20 2023



CDAS Sea Surface Temperature (°C)
Analysis Time: 06z Jun 20 2023

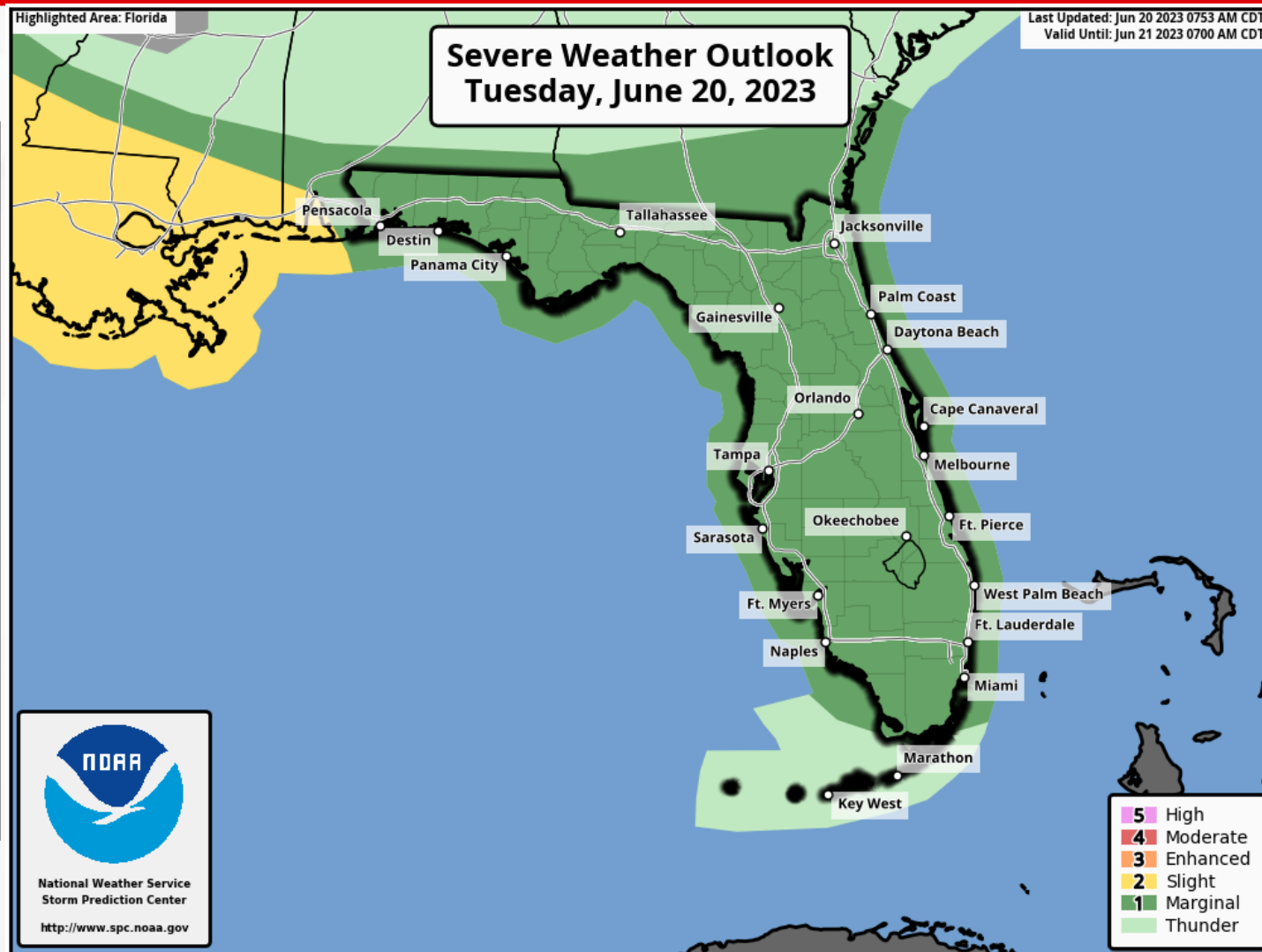


°F
90
88
86
84
82
81
79
75
72



Severe Weather Outlook - Today

From the Storm Prediction Center

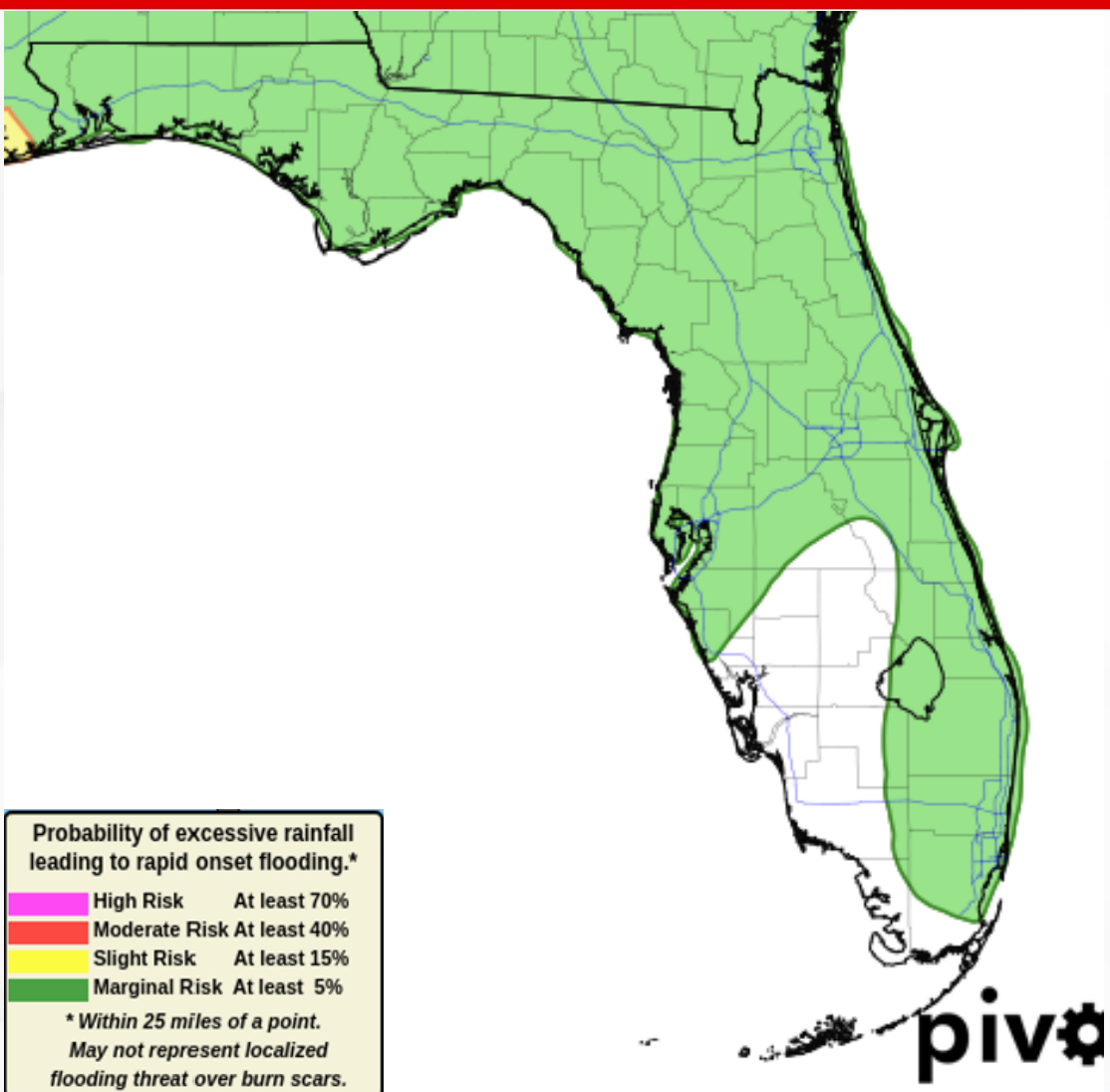


Lingering showers and thunderstorms from an upper-level disturbance will continue to push eastward across the Suwannee River Valley and Northeast Florida this afternoon. Additional scattered to numerous showers and thunderstorms are anticipated to develop during the peak heating hours of the day. The Storm Prediction Center (SPC) is outlooking a **Marginal Risk (level 1 of 5) for Severe Weather** across the Sunshine State as **strong to severe thunderstorms** may develop. These thunderstorms will be capable of producing frequent lightning, damaging wind gusts (45-60 mph), small hail (dime to quarter size), and heavy downpours. Shower and thunderstorm activity is anticipated to push eastward throughout the day and into the evening hours, with isolated showers and thunderstorms continuing into the overnight hours.



Flash Flood Outlook - Today

From the Weather Prediction Center



Understanding WPC Excessive Rainfall Risk Categories

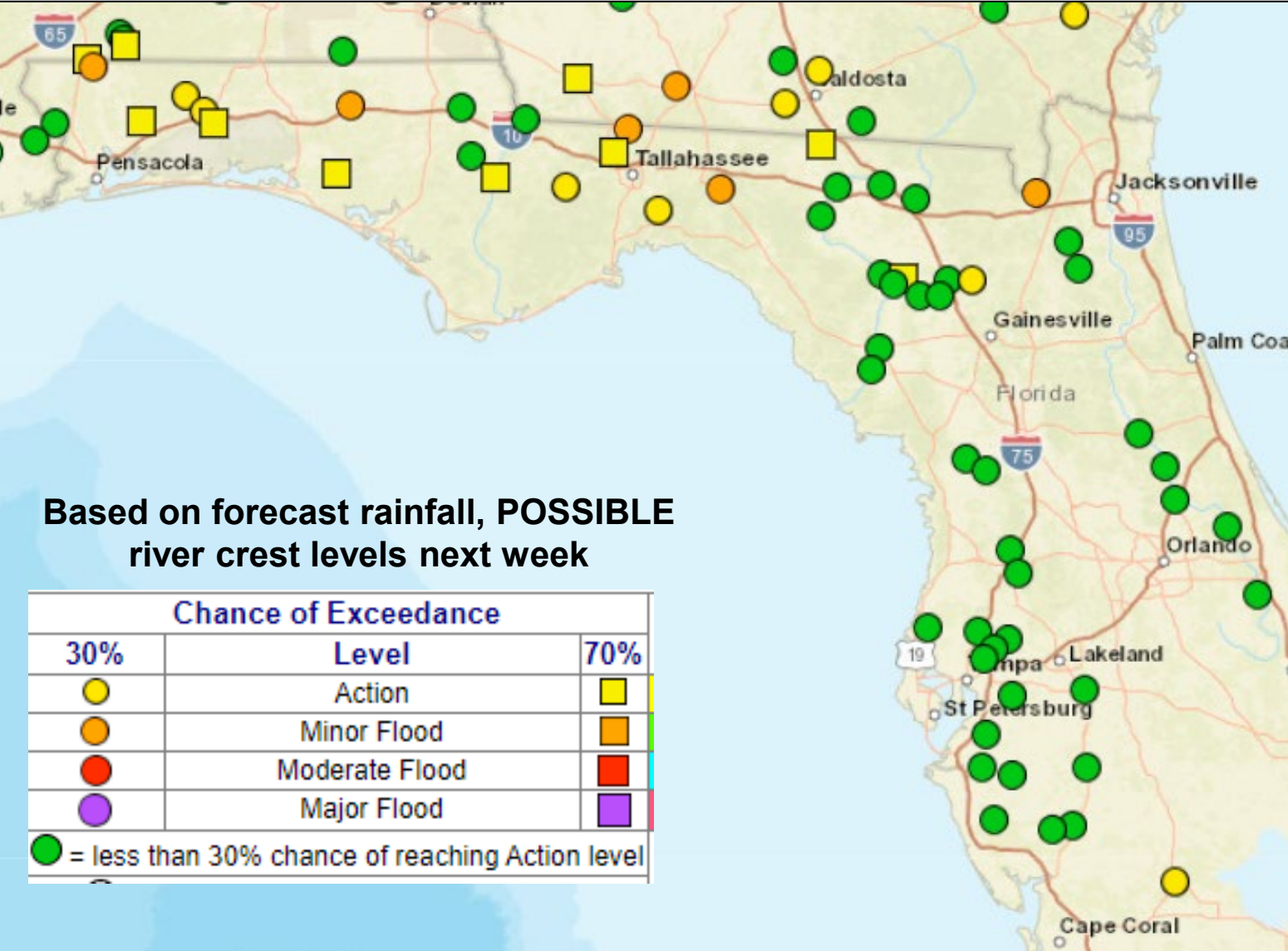
No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected. @NWSWPC	Isolated flash floods possible Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Scattered flash floods possible Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash floods likely Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	Widespread flash floods expected Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.
Flash flooding near me?	Flash Flooding	Flash Flooding	Flash Flooding	Flash Flooding
	NO Flash Flooding	Flash Flooding	Flash Flooding	Flash Flooding
 WEATHER PREDICTION CENTER				

Ground and soils remain saturated due to several rounds of heavy rainfall over the last several days. With the wet pattern expected to continue, additional rounds of showers and thunderstorms can be expected to continue. The Weather Prediction Center (WPC) is outlooking a **Marginal Risk (level 1 of 4) for Flash Flooding** across majority of the state, except for a portion of the interior Peninsula through Southwest Florida. **Instances of ponding and localized flooding** will be possibly within onset heavy rainfall, especially for areas that have seen an abundance of rainfall. Urban and low-lying/poor drainage areas cannot be ruled out localized flash flooding. *Additional Flood Warnings and Flash Flood Warnings may be issued as conditions warrant.*



Possible River Flooding

Chance of River Flooding Based on Range of Forecasted Rainfall



Based on forecast rainfall, POSSIBLE river crest levels next week

Chance of Exceedance		
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
= less than 30% chance of reaching Action level		

Heavy and intense rainfall across the Panhandle and Big Bend have allowed several rivers and creeks to see an increase in water levels. Rises in water levels have been observed across the Apalachicola, Flint, Choctawhatchee, Ochlockonee, and Suwannee Basins are anticipated to rise into Action Stage (bank-full).

A **River Flood Warning** is in effect for the [Ochlockonee River at Concord](#) as abundant rainfall has allowed water levels to rise into **minor flood stage**. Water levels are expected to remain elevated through today and overnight, before falling below flood stage on Wednesday. The [Aucilla River near Lamont](#) could rise into **minor flood stage** with the anticipated rainfall through the rest of the week.



Summary

Tropical Storm Bret:

- With the 11:00 AM advisory, Tropical Storm Bret is located 945 miles east of the Windward Islands with maximum sustained winds of 40 mph with stronger gusts.
- Bret is moving toward the west near 21 mph, and this general motion is expected to continue for the next several days. On the forecast track, the center of Bret could move across portions of the Lesser Antilles Thursday afternoon and night.
- Some strengthening is forecast during the next couple of days, and Bret is expected to be a tropical storm when it reaches the Lesser Antilles.
- Computer model guidance is suggesting Bret will enter an area of strong upper-level winds as it enters the eastern Caribbean, which will prevent the system from further strengthening.
- *Tropical Storm Bret poses no direct threat to Florida over the next 5-7 days, at least.*

Invest 93L (Eastern Tropical Atlantic Wave):

- A tropical wave, located several hundred miles south-southwest of the Cabo Verde Islands, continues to show signs of organization.
- Environmental conditions appear conducive for further development of the system, and a tropical depression will likely form during the next couple of days as it generally moves westward at 10-15mph. *93L poses no threat to Florida over the next 7-10 days, at least.*
- The next name on the list is Cindy.

Florida Outlook:

- The anomalous wet and active weather pattern continues across the Sunshine State as the Storm Prediction Center (SPC) is outlooking a Marginal Risk (level 1 of 5) for Severe Weather.
- Scattered to numerous showers and thunderstorms can be anticipated to develop during the afternoon and evening hours, in which some may be strong to severe.
 - The primary threats associated with these thunderstorms include frequent lightning, damaging wind gusts (45-60 mph), small hail (dime to quarter size), and heavy downpours.
- The Weather Prediction Center (WPC) is outlooking a Marginal Risk (level 1 of 4) for Flash Flooding nearly statewide as abundant moisture will give way to several rounds of heavy rainfall. With saturated grounds and soils, and additional rainfall anticipated today through the middle of the week, instances of ponding and localized flooding will be possible during onset heavy rainfall. *Flood Warnings and Flash Flood Warnings may be issued as conditions warrant.*
- Additional watches and warnings may be issued as conditions warrant as scattered showers are anticipated to continue through the evening; please ensure you have multiple ways to receive weather alerts!

The next briefing package will be issued on Wednesday. For the latest information, please visit the [National Hurricane Center website](#).



Tropical Update



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