



# TROPICAL UPDATE



11:00 AM EDT

Tuesday, June 15, 2021

Tropical Storm Bill off East Coast

Bay of Campeche Low – Invest 92L (70%)

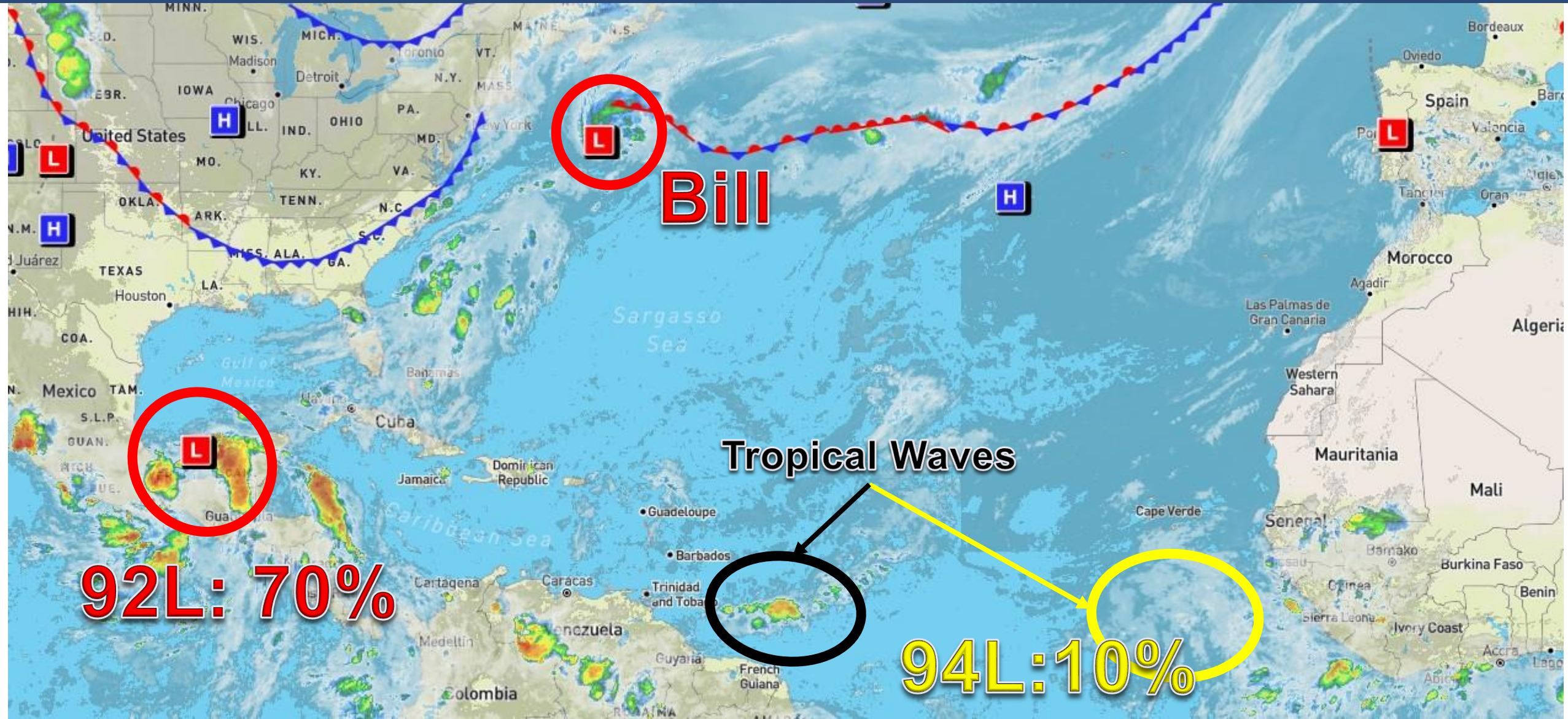
West Africa Tropical Wave – Invest 94L (10%)

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







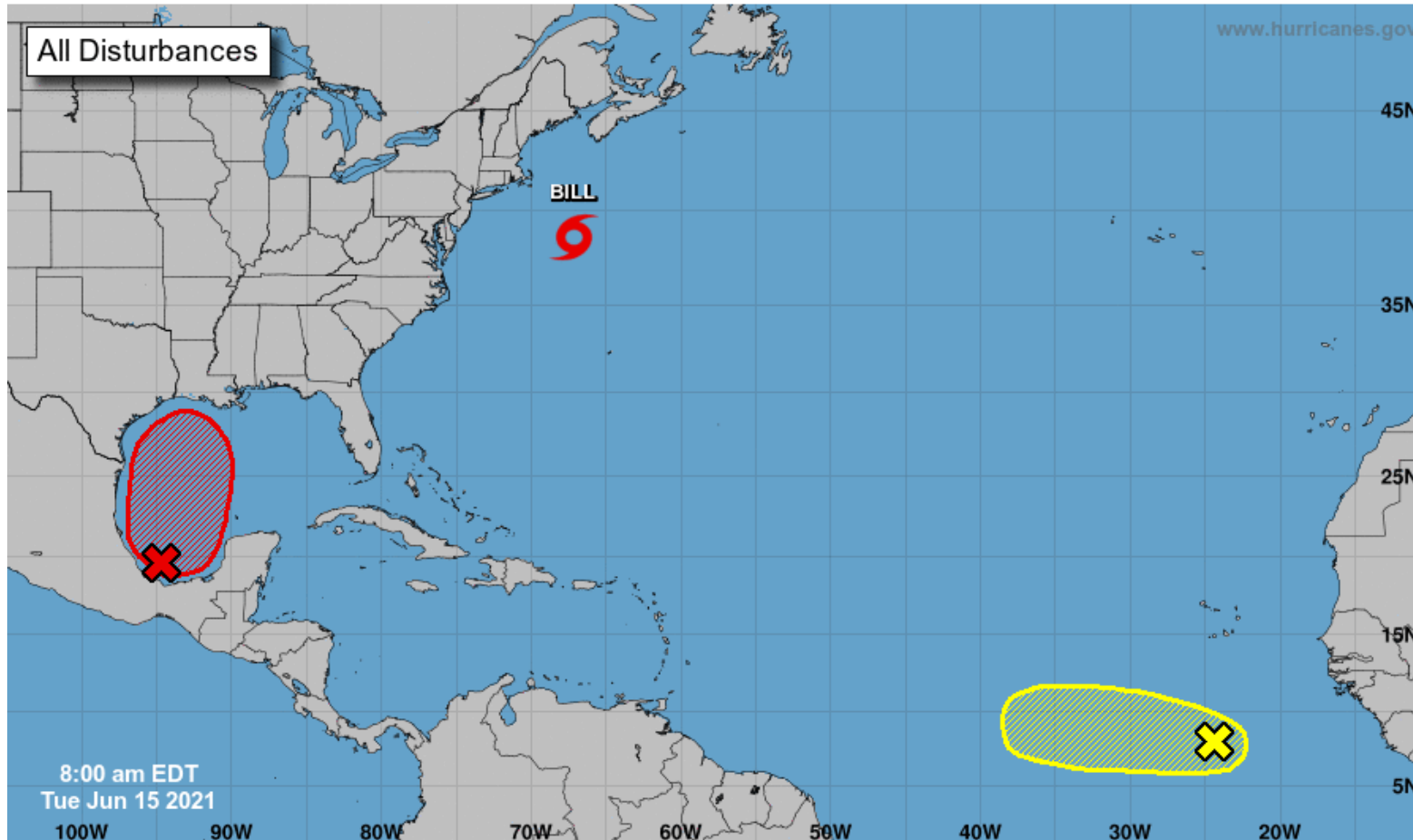
# 5-Day Tropical Weather Outlook

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



## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



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



# 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 1

1  
(70%)

8:00 am EDT  
Tue Jun 15 2021

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

✕ < 40% ✕ 40-60% ✕ > 60%

Disorganized showers and thunderstorms continue over the Bay of Campeche and southern Mexico in association with a broad low pressure area. This system is expected to move little during the next day or two, and any development should be slow to occur during that time period.

However, the disturbance should begin to move northward by Thursday, and a tropical depression is likely to form late in the week when the low moves across the central or northwestern Gulf of Mexico. *Regardless of development, heavy rains could begin to impact portions of the northern Gulf Coast on Friday.*

***This system should be monitored for any possible impacts late this week or this weekend in the Panhandle.***

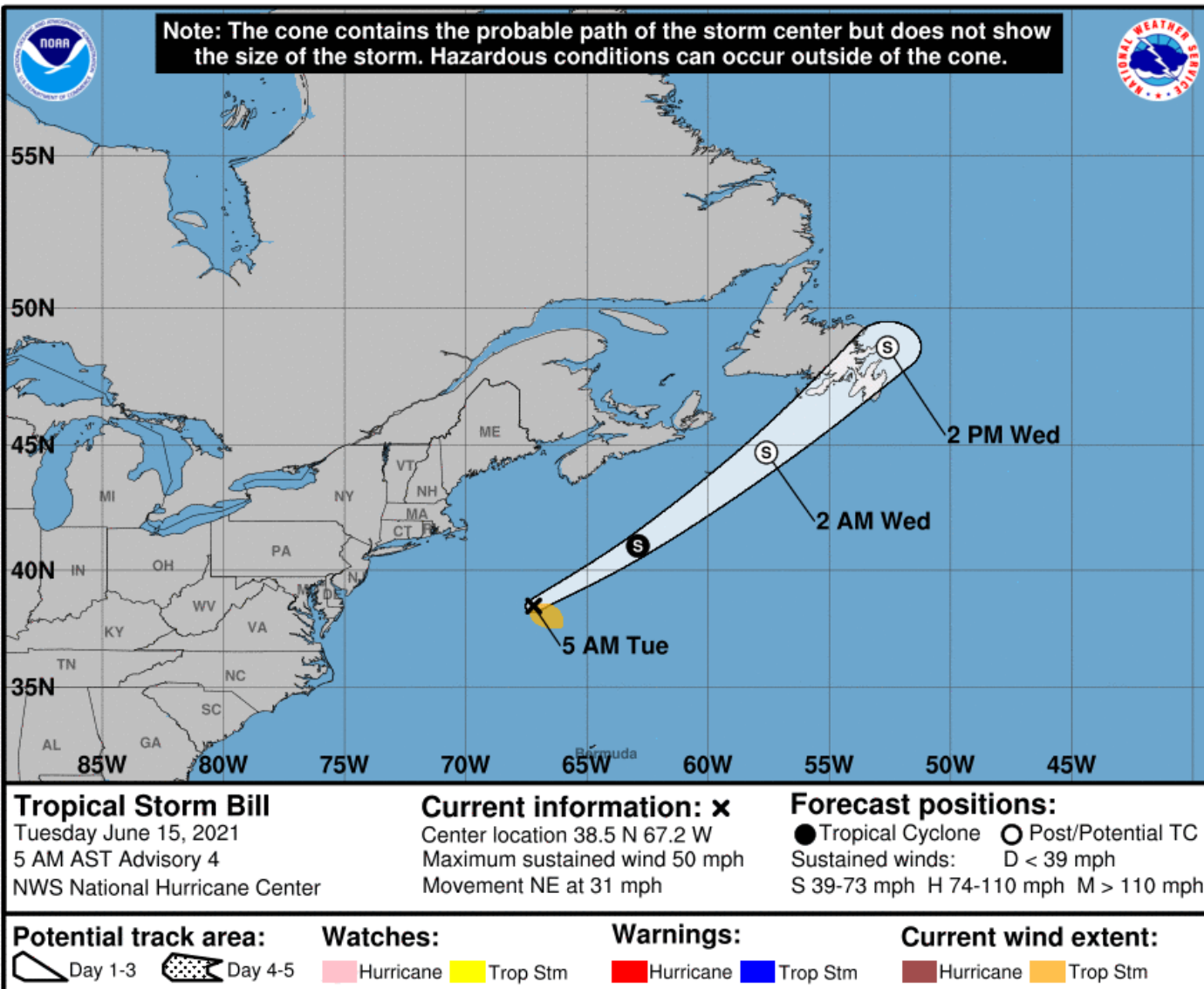
**\*Formation chance through 48 hours...low...20%**

**\*Formation chance through 5 days...high...70%**



# Official Forecast Track – Bill

From the National Hurricane Center – ([LINK](#))



- Tropical Depression Two strengthened into Tropical Storm Bill overnight.
- As of 5 AM ET, the center of Bill is about 240 miles southeast of Nantucket, Massachusetts and moving to the northeast at 31 mph.
- Maximum sustained winds are around 50 mph.
- Bill is likely near peak intensity and will begin to weaken tonight as it moves over the cold waters of the North Atlantic.
- **This system poses no threat to Florida.**



# 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 2

2  
(10%)

8:00 am EDT  
Tue Jun 15 2021

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

Showers and thunderstorms have decreased and become less organized during the past several hours in association with a tropical wave located a few hundred miles south of the Cabo Verde Islands. Development, if any, should be slow to occur during the next couple of days while the wave moves westward. Thereafter, a combination of dry air aloft and strong upper-level winds should limit the chances of formation when the wave reaches the central tropical Atlantic.

**This system poses no threat to Florida over the next 7 days at least**, and is not expected to survive the hostile conditions in the central Atlantic.

**\*Formation chance through 48 hours...low...10%**

**\*Formation chance through 5 days...low...10%**





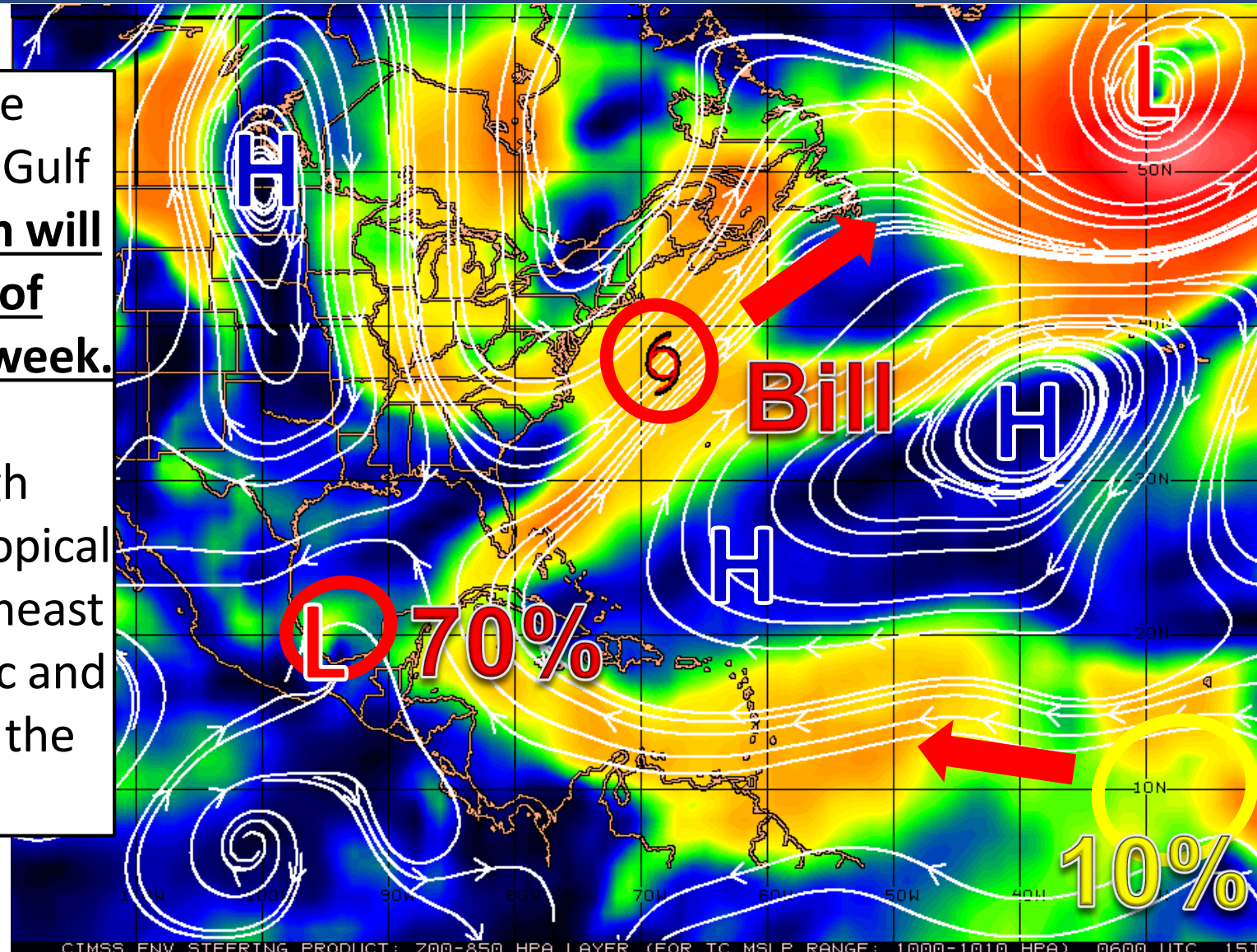
# Steering Currents

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.

With high pressure blocking most of the Gulf of Mexico, **the system will remain in the Bay of Campeche until mid-week.**

A large area of high pressure will move Tropical Storm Bill to the northeast into the North Atlantic and the tropical wave to the west.



KTS

100

70

50

30

20

15

10

5

0

Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

Slow Moving Storm



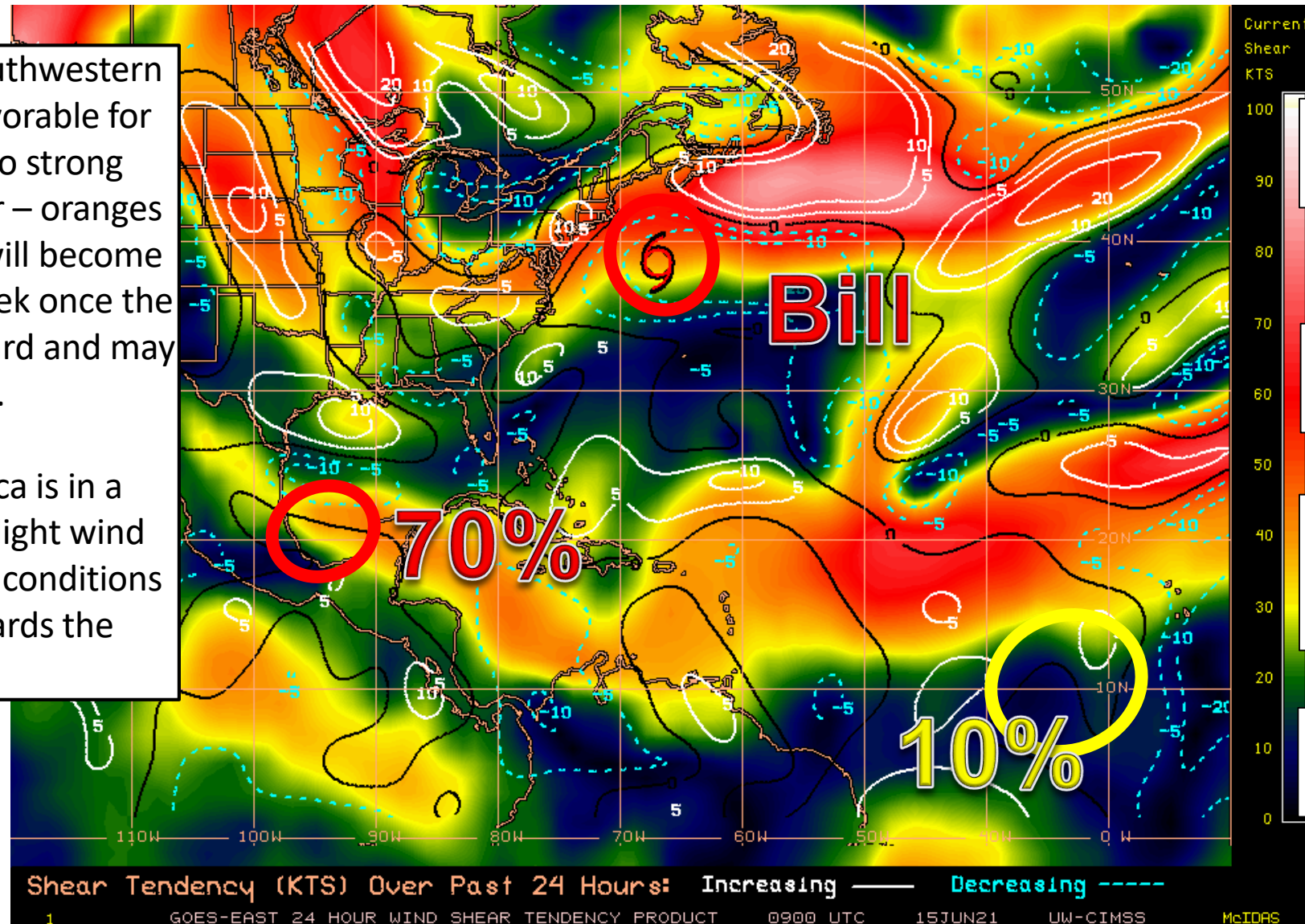
# Wind Shear

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).

The environment over the southwestern Gulf of Mexico remains unfavorable for tropical development due to strong upper-level winds (wind shear – oranges and reds). The environment will become more favorable later in the week once the system starts to move northward and may allow development.

The tropical wave near Africa is in a favorable environment with light wind shear but near dry air. Hostile conditions loom as it heads west towards the Caribbean.



HIGH Shear  
(Unfavorable)

HIGH Shear  
(Unfavorable)

MODERATE  
Shear  
(Neutral)

LOW Shear  
(Favorable)





# Sea Surface Temperatures & Anomalies

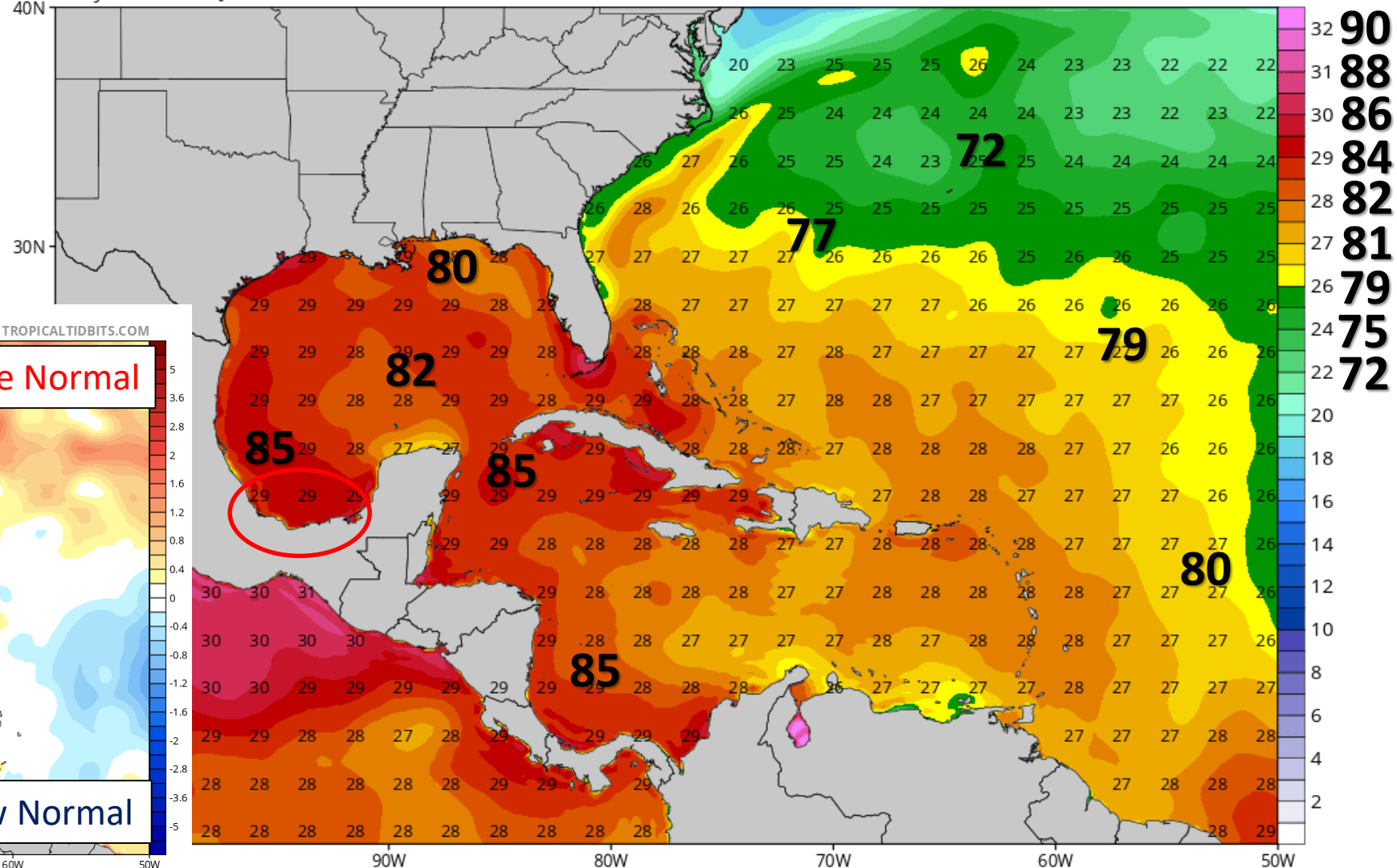
Is the ocean favorable for the system?

Water temperatures are warm enough to support tropical development in the Gulf of Mexico and are running slightly above normal for this time of year.

Ocean temperatures near Africa are actually below normal, and may be contributing to the recent weakening of the tropical wave.

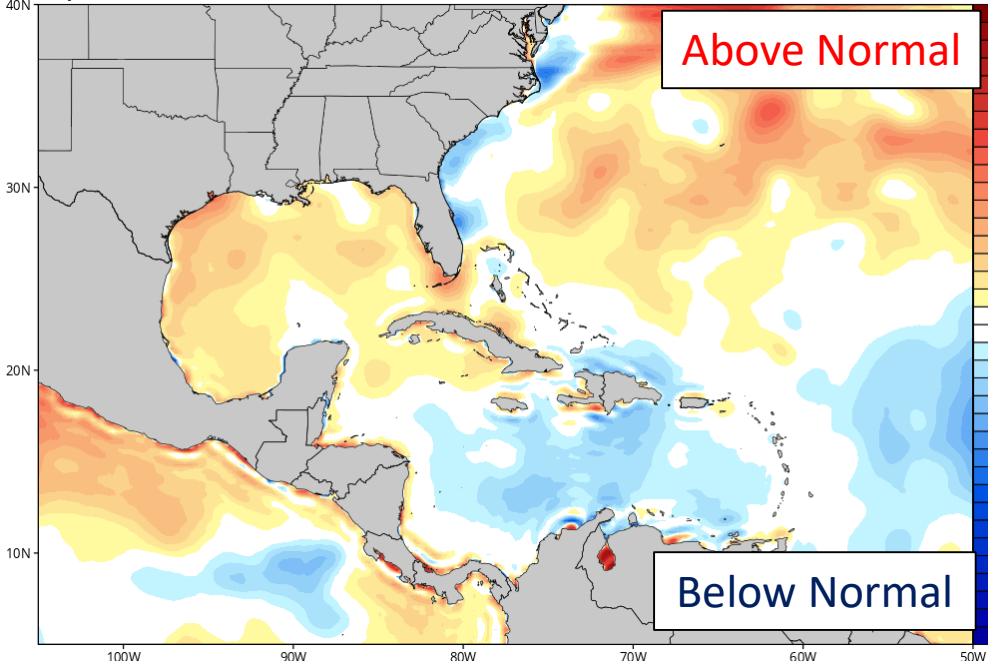
CDAS Sea Surface Temperature (°C)

Analysis Time: 00z Jun 15 2021



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

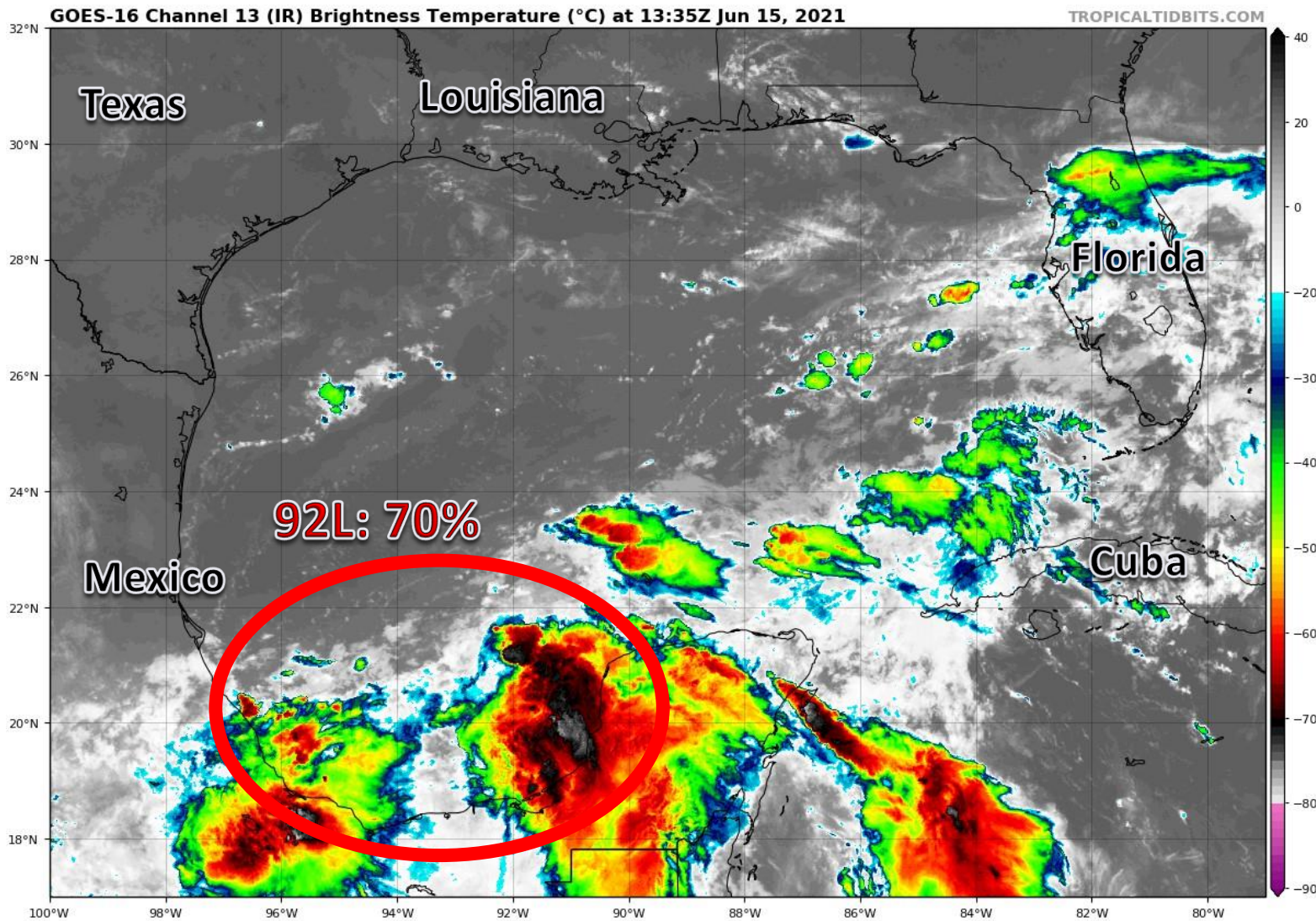
Analysis Time: 00z Jun 15 2021



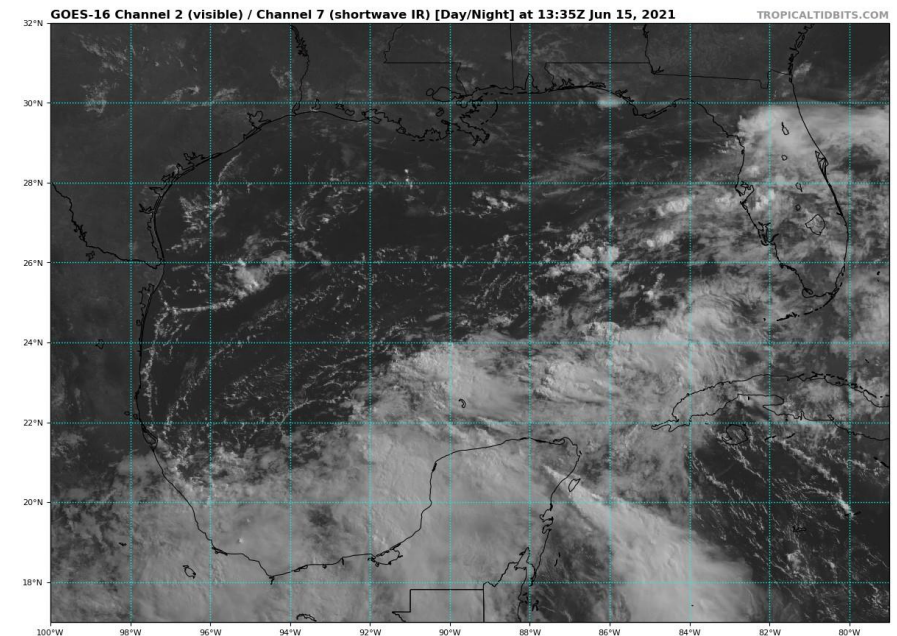


# Satellite Imagery

## Gulf of Mexico – Invest 92L



The system is currently disorganized with multiple areas of showers and thunderstorms within the broad circulation. Development of this system will be slow to occur as it moves little through Wednesday.



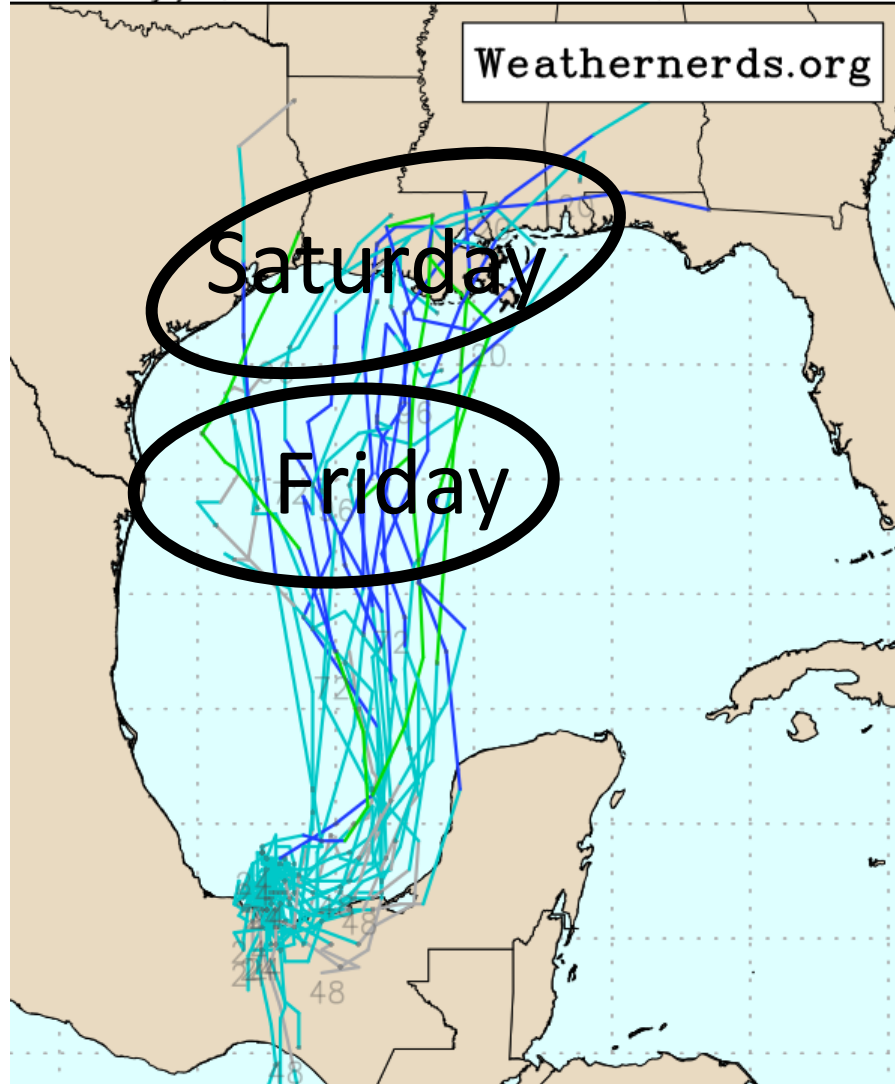




# Model Forecast Tracks Next 5 Days

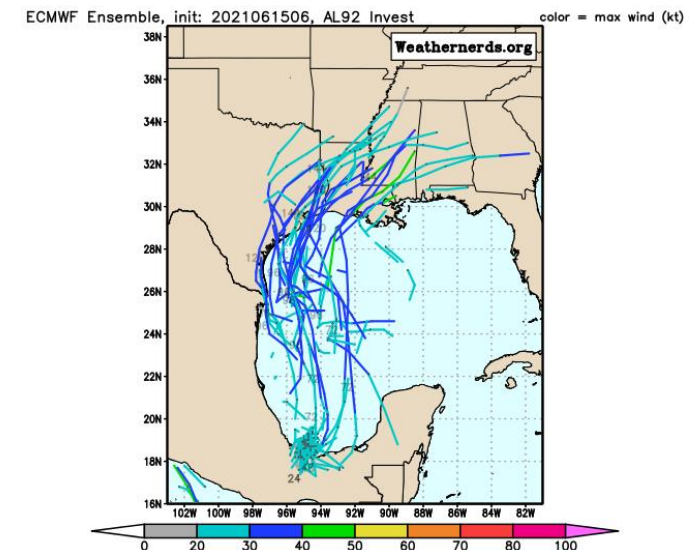
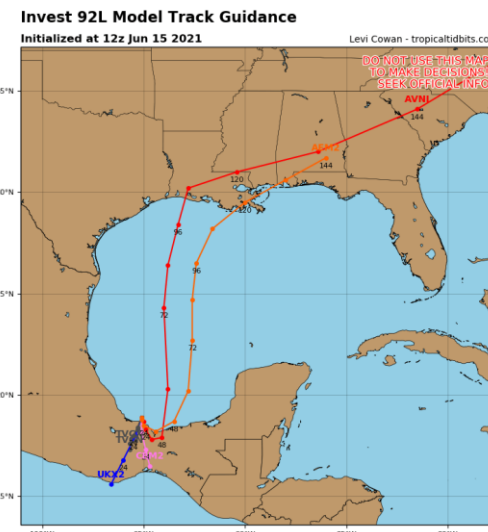
## Ensemble Models – Invest 92L

h only) , init: 2021061506, AL92 Invest



Model guidance is in agreement about the system meandering in the southwestern Gulf of Mexico until later in the week (Thursday). Then, by the weekend, there is considerable spread across the western Gulf as the system begins to lift northward toward Texas and Louisiana.

**Regardless of development, this system will likely be lopsided with most of the rainfall being (well) east of the center. Heavy rainfall is possible in the Panhandle even with “the center of the storm” tracking into western Louisiana.**





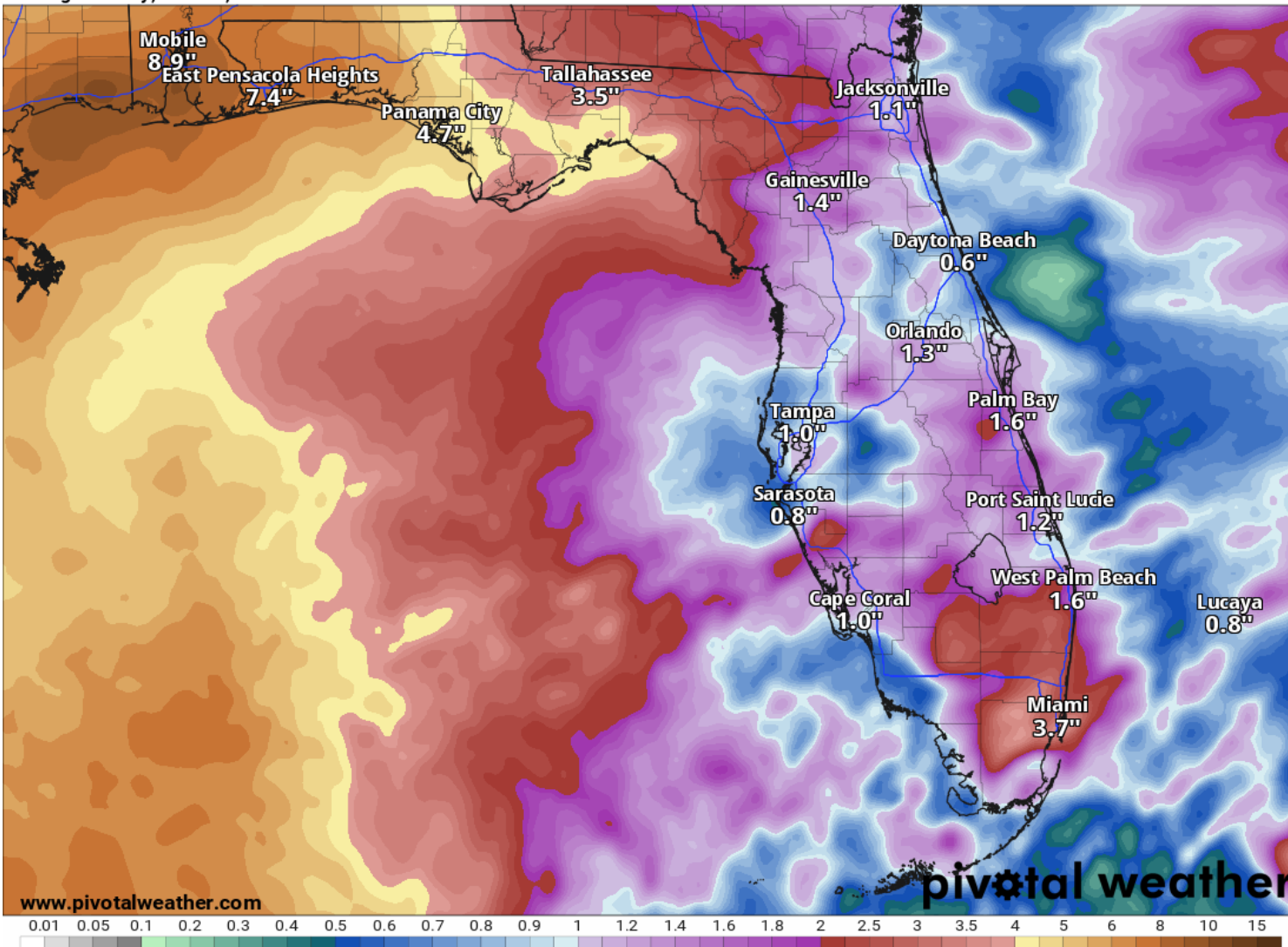
# Rainfall Totals Next 7 Days

Ending 8 AM ET Tuesday

7-Day Precipitation (in)

Ending Tuesday, Jun. 22, 2021 at 8 a.m. EDT

Init: Tue 2021-06-15 12z WPC



A widespread 4-8" of rain is currently forecast across the Panhandle over the next 7 days—a majority of which is associated with the system that develops in the western Gulf of Mexico late in the week. Locally higher totals are possible.

**These rainfall totals are highly dependent on the track and organization of the system, both of which are unknown at this time.**

The rainfall across the Peninsula is associated with thunderstorms over the next few days and is not related to the tropical system.



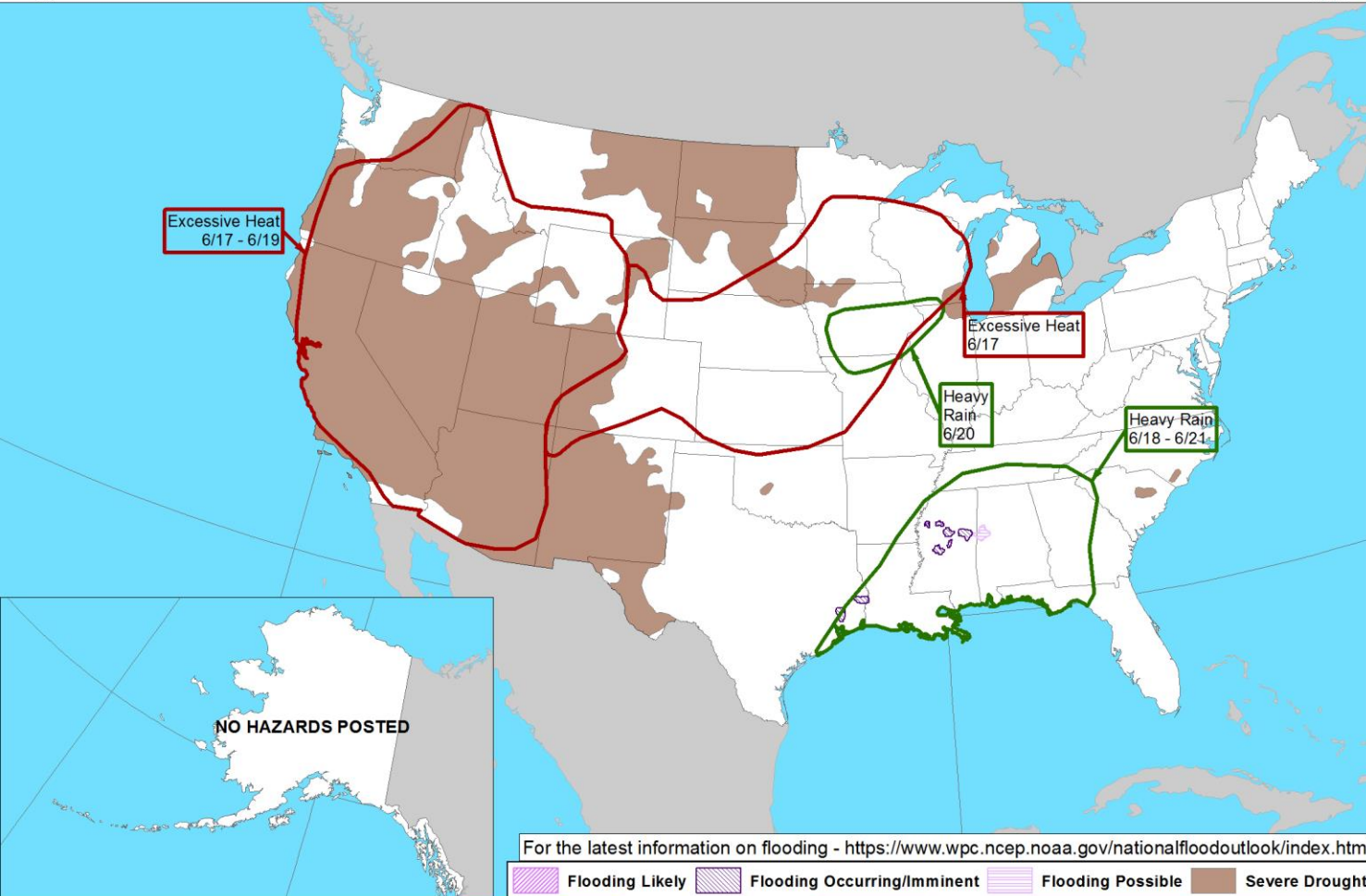


# Hazard Outlook

From the [Weather Prediction Center](#)



Day 3-7 U.S. Hazards Outlook  
Valid: 06/17/2021-06/21/2021



Locally heavy rainfall is possible this weekend across the Panhandle and western Big Bend, depending on the track of the possible tropical system.



# Overall Summary

## **Tropical Storm Bill (formerly Tropical Depression Two)**

- Tropical Depression Two strengthened into Tropical Storm Bill overnight.
- As of 5 AM ET, the center of Bill is about 240 miles southeast of Nantucket, Massachusetts and moving to the northeast at 31 mph.
- Maximum sustained winds are around 50 mph.
- Bill is likely near peak intensity and will begin to weaken tonight as it moves over the cold waters of the North Atlantic.

## **Bay of Campeche Low – Invest 92L**

- An area of disorganized, disturbed weather over the Bay of Campeche will slowly meander for another day or two before moving northward across the western Gulf of Mexico.
- This system may become better organized late in the week, and a tropical depression could form by Thursday or Friday in the southwestern Gulf of Mexico as the system moves northward.
- This weekend, the system will move inland and track Northeast across the southeastern United States.
- The National Hurricane Center gives this system a 20% (low) chance of formation during the next 48 hours, but a 70% (high) chance of formation during the next 5 days.

## **West Africa Tropical Wave – Invest 94L**

- Showers and thunderstorms have decreased and become less organized during the past several hours in association with a tropical wave located a few hundred miles south of the Cabo Verde Islands.
- Development, if any, should be slow to occur during the next couple of days while the wave moves westward.
- Thereafter, a combination of dry air aloft and strong upper-level winds should limit the chances of formation when the wave reaches the central tropical Atlantic.
- The National Hurricane Center gives this system a 10% (low) chance of formation during the next 48 hours and 5 days.





# Overall Summary

## Florida Outlook:

- Tropical Storm Bill poses no threat to Florida as it moves towards the cold waters of the North Atlantic.
- The tropical wave near Africa poses no threat to Florida over the next 7 days, if at all. It is expected to dissipate in the hostile environment of the Central Tropical Atlantic.
- The system in the southwestern Gulf of Mexico (Invest 92L) should be monitored for potential impacts in the Panhandle starting on Friday and continuing into the weekend.
- With this system likely being lopsided, most of the rainfall will be on the eastern side, which could bring heavy rainfall to the Panhandle even with a landfall in western Louisiana.
- It is too early to give specific details on exact rainfall amounts and consequent flash/river flood threats, but first guess forecasts are calling for 4-8".
- Dangerous rip currents are expected along Gulf Coast beaches by the end of the week and through the weekend.
- It remains too early to give specifics on any other impacts (wind, tornado, coastal flooding), but a significant wind and surge event is not anticipated at this time.
- The next name on the list is Claudette (klaw-DET).

The next briefing packet will be issued late this afternoon. 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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