



TROPICAL UPDATE



3:00 PM EDT

Wednesday, June 1, 2022

Invest 91L – Southern Gulf of Mexico Low (80%)

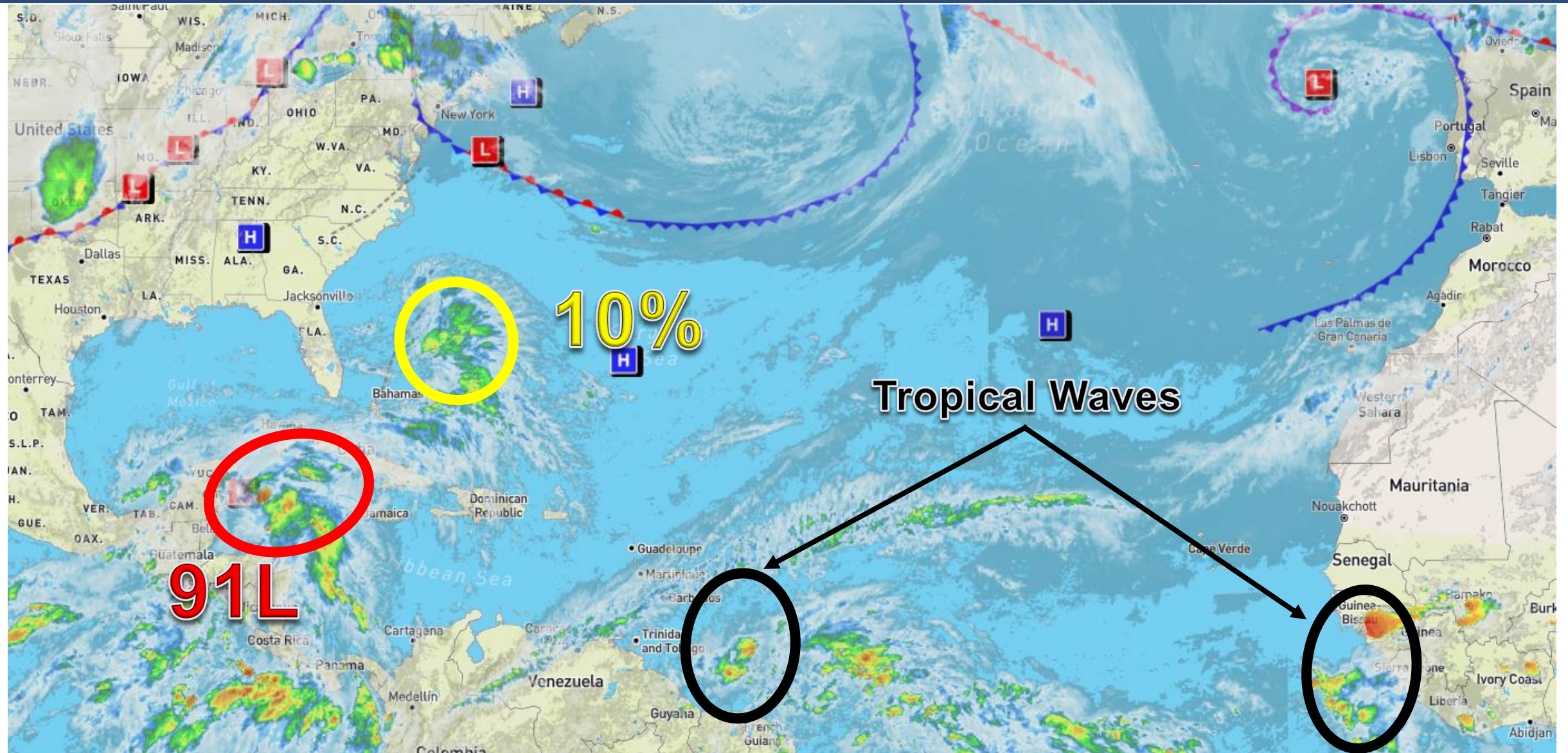
Heavy Rain Likely Late This Week – South Florida

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





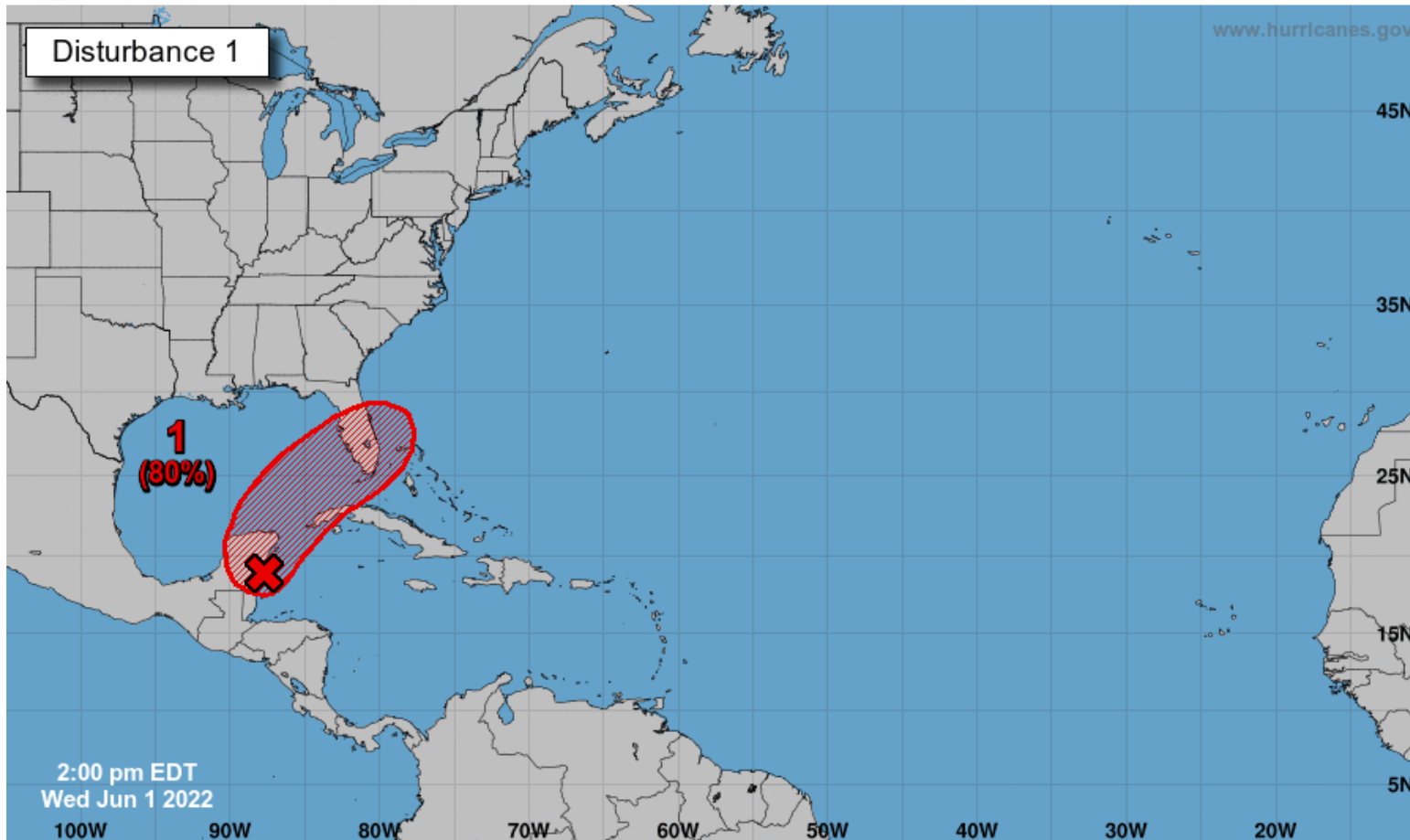
Tropical Weather Outlook

Possible Area 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

A large area of disorganized showers and thunderstorms located over the northwestern Caribbean Sea and Yucatan Peninsula is associated with a broad area of low pressure, now identified as Invest 91L. Environmental conditions appear conducive for gradual development, and this system is likely to become a tropical depression while it moves northeastward over the northwestern Caribbean Sea and southeastern Gulf of Mexico during the next couple of days.

Regardless of development, locally heavy rainfall is likely across southern Florida and the Florida Keys on Friday and Saturday. This system should be monitored throughout the week. The first name on the list is Alex.

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

***Formation chance through 5 days...high...80%**

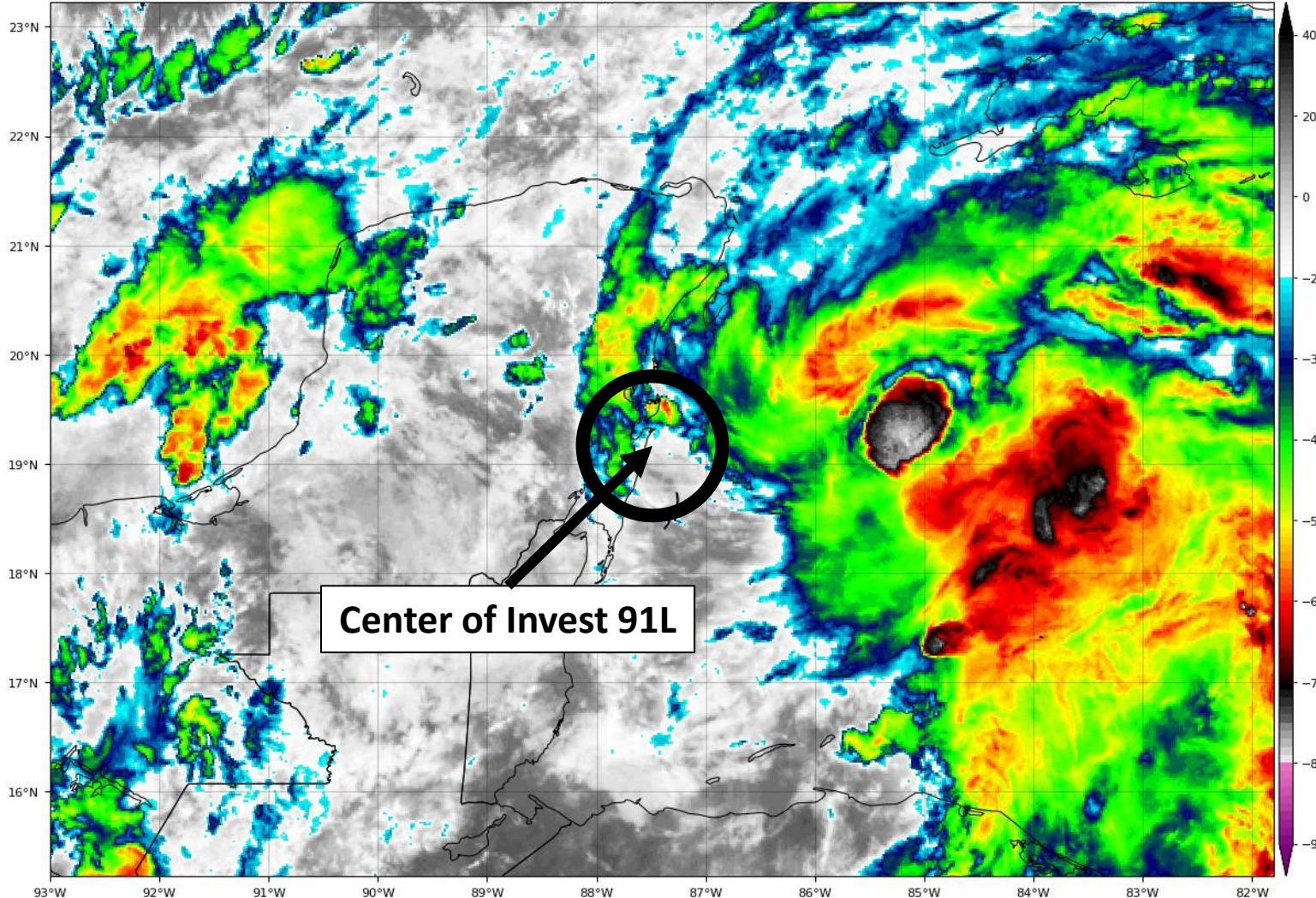


Satellite Imagery

Invest 91L

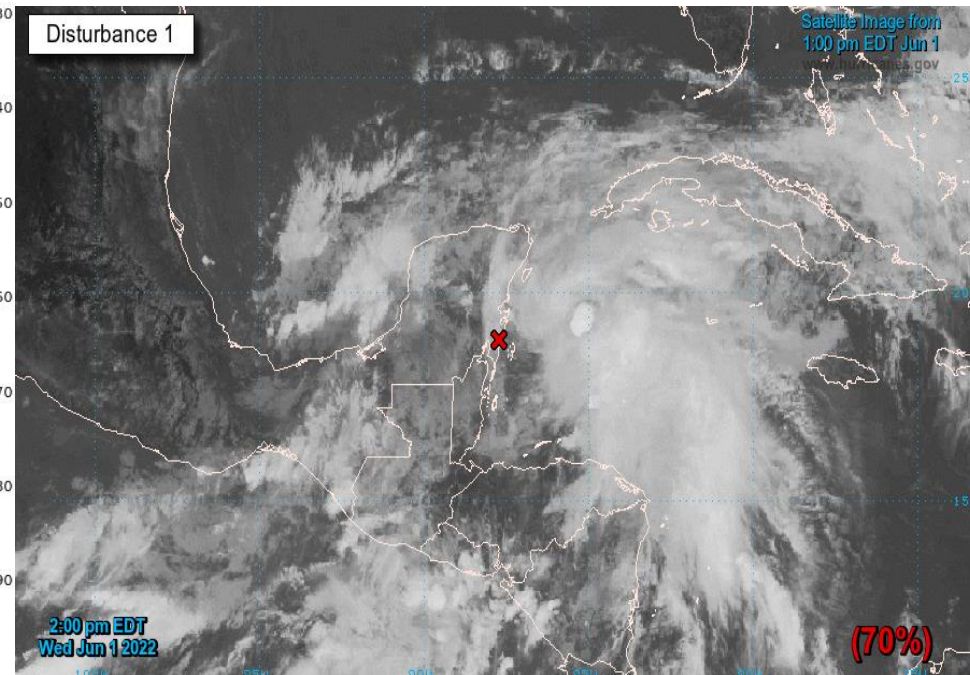
GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 17:15Z Jun 01, 2022

TROPICALTIDBITS.COM



Center of Invest 91L

The area of low pressure in the western Caribbean is currently broad and disorganized with all of the thunderstorms (reds and whites) on the eastern side. It will gradually organize over the next few days, but most of the rain and storms are likely to remain on the eastern half of the system.

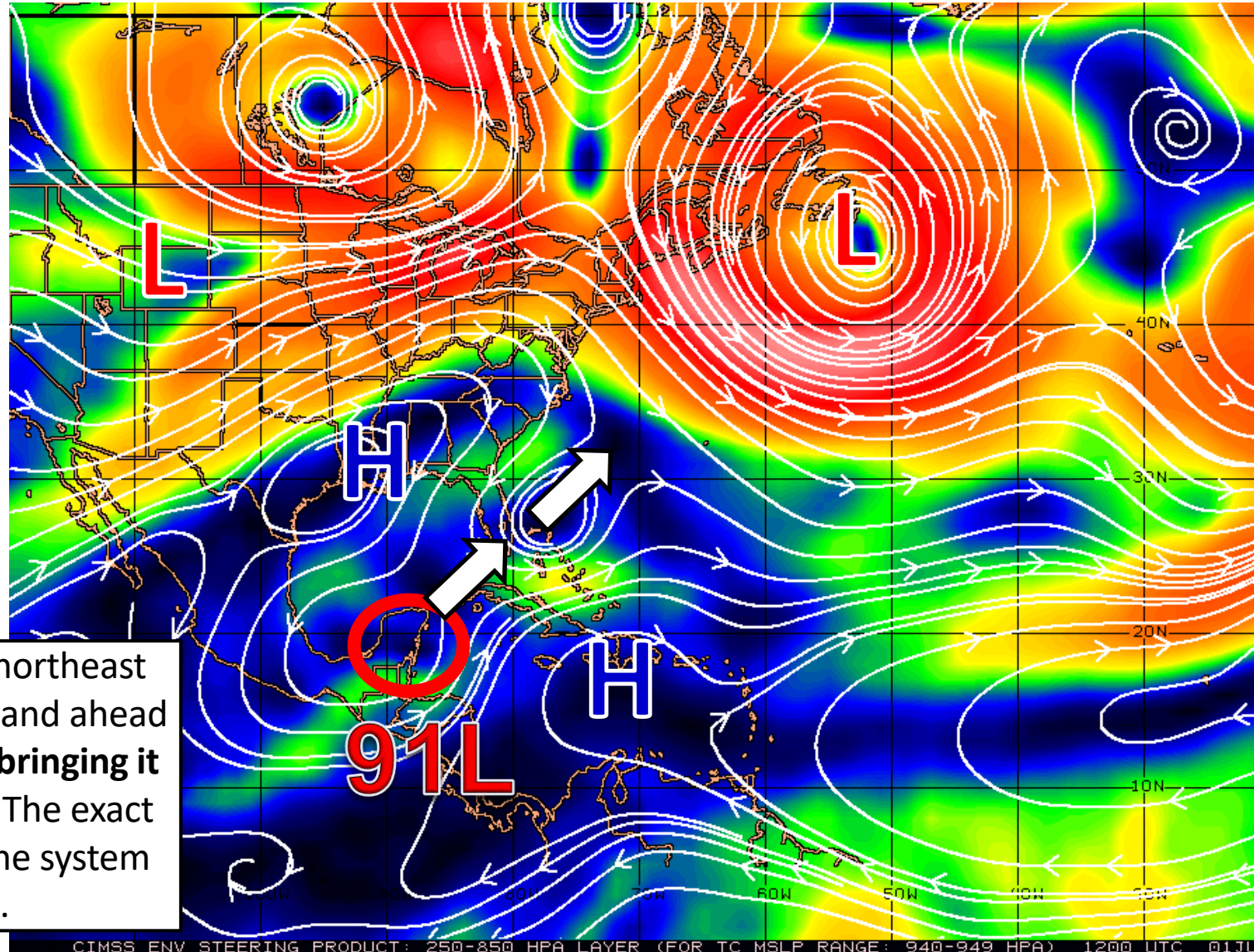




Steering Currents

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.



Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

Slow Moving Storm

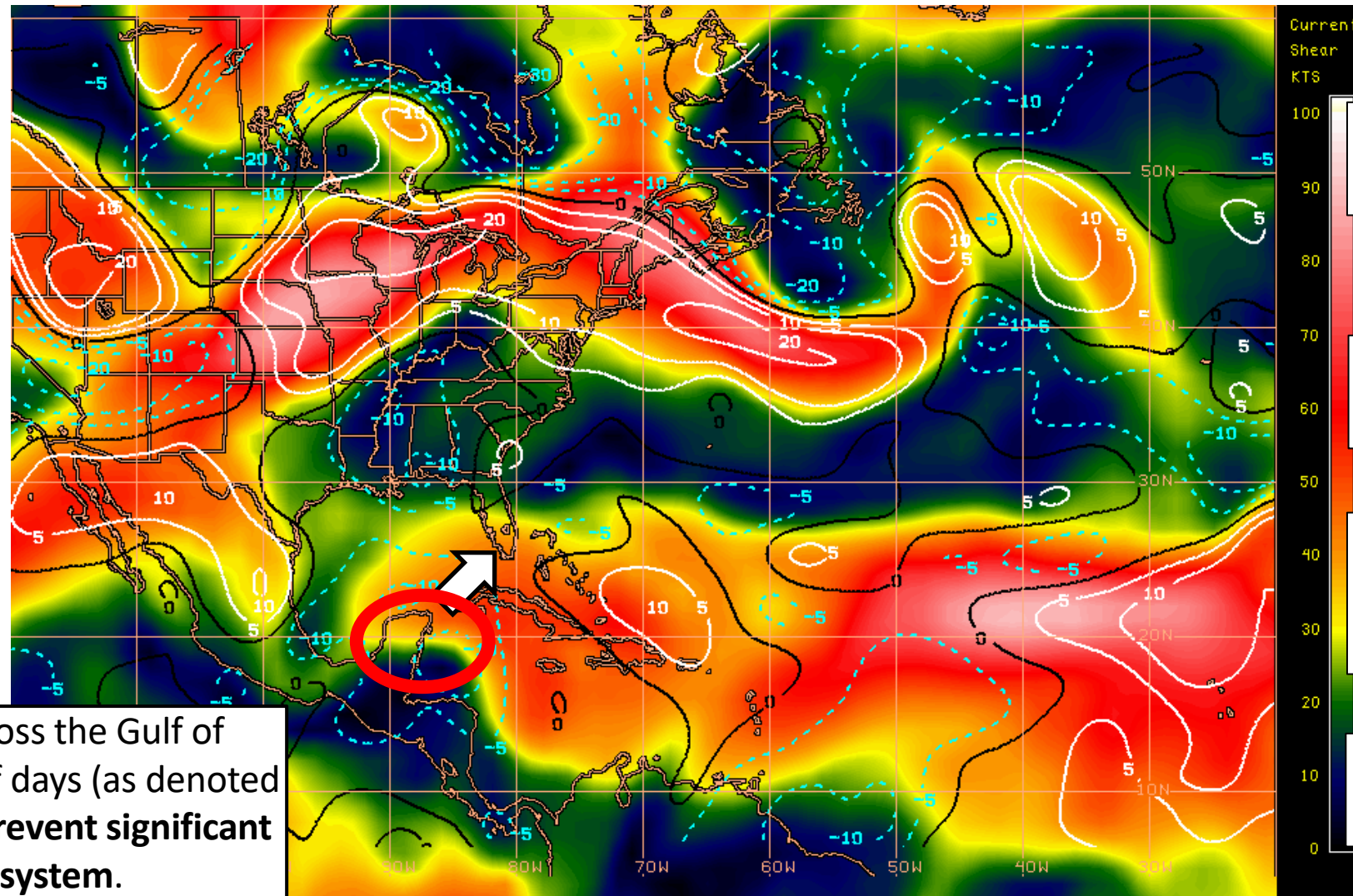
The system will move to the northeast around areas of high pressure and ahead of an approaching cold front, **bringing it near or across South Florida**. The exact track will depend on where the system specifically develops.



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).



- HIGH Shear (Unfavorable)
- HIGH Shear (Unfavorable)
- MODERATE Shear (Neutral)
- LOW Shear (Favorable)

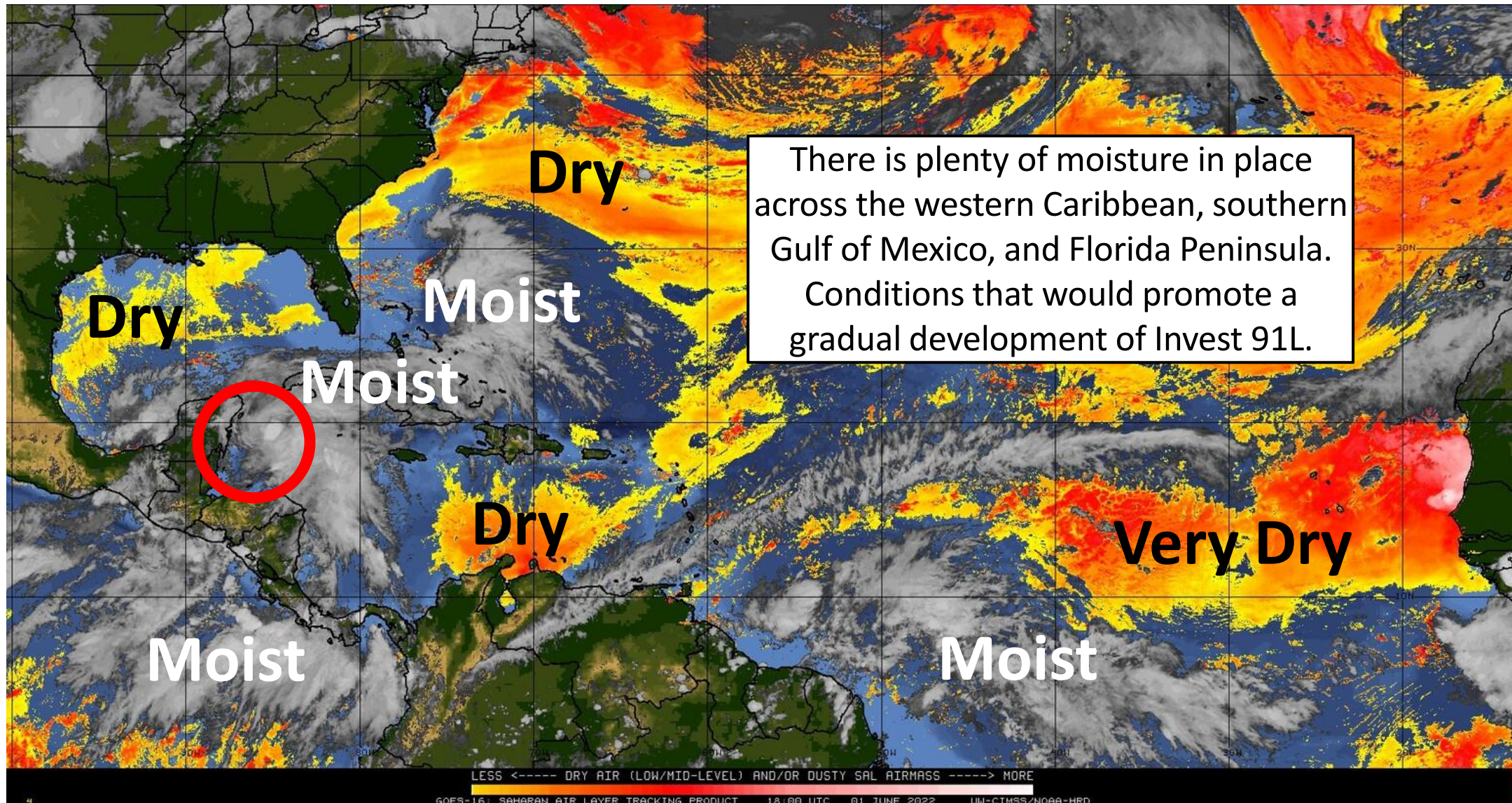
Wind shear will be high across the Gulf of Mexico over the next couple of days (as denoted by the red colors) which will **prevent significant development of this system.**



Dry Air & Saharan Dust

Is the environment favorable for the system?

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





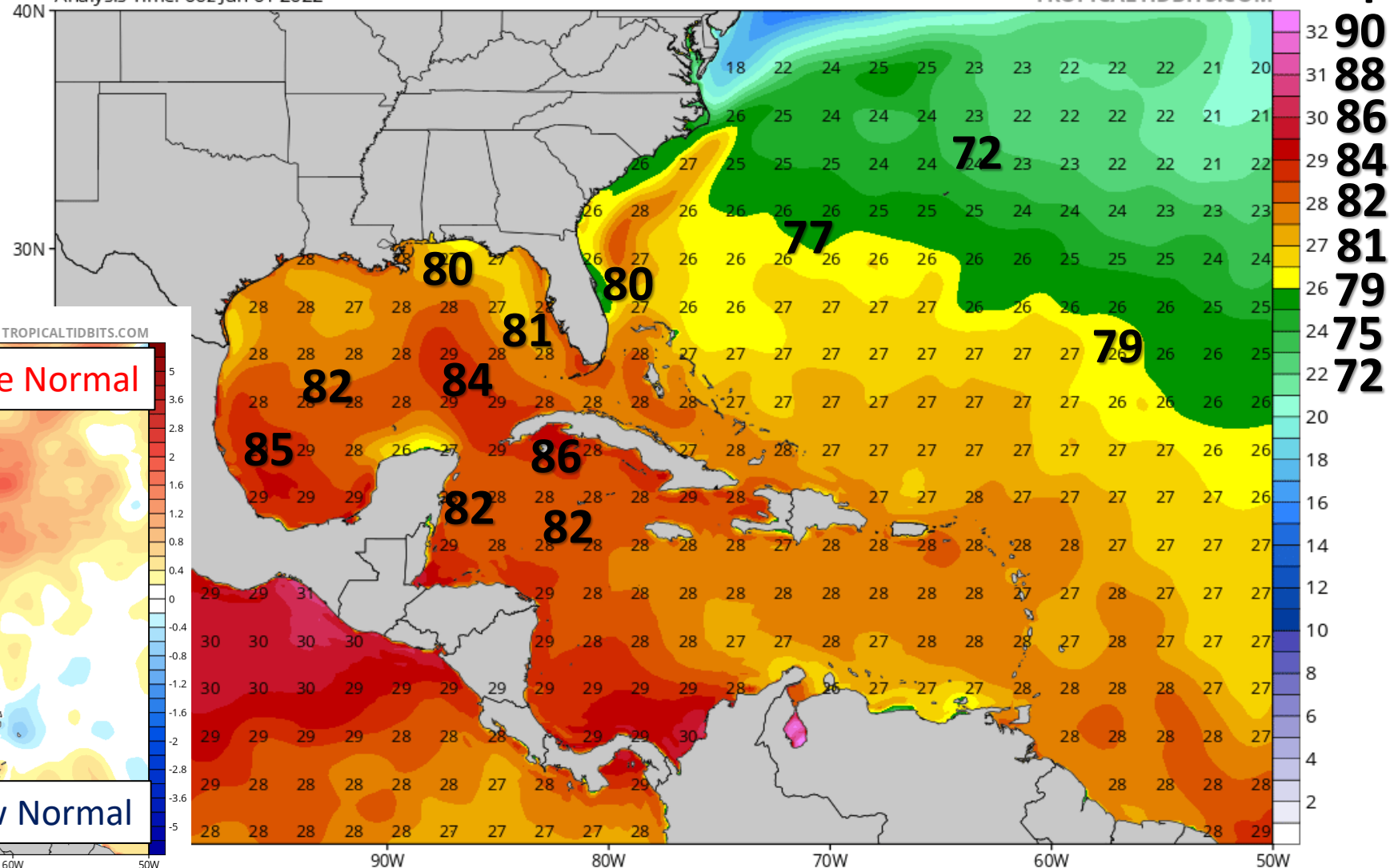
Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

In addition, water temperatures are warm enough to support tropical development across the Gulf of Mexico, Caribbean, and western Atlantic. Water temperatures are running a few degrees above normal for this time of year.

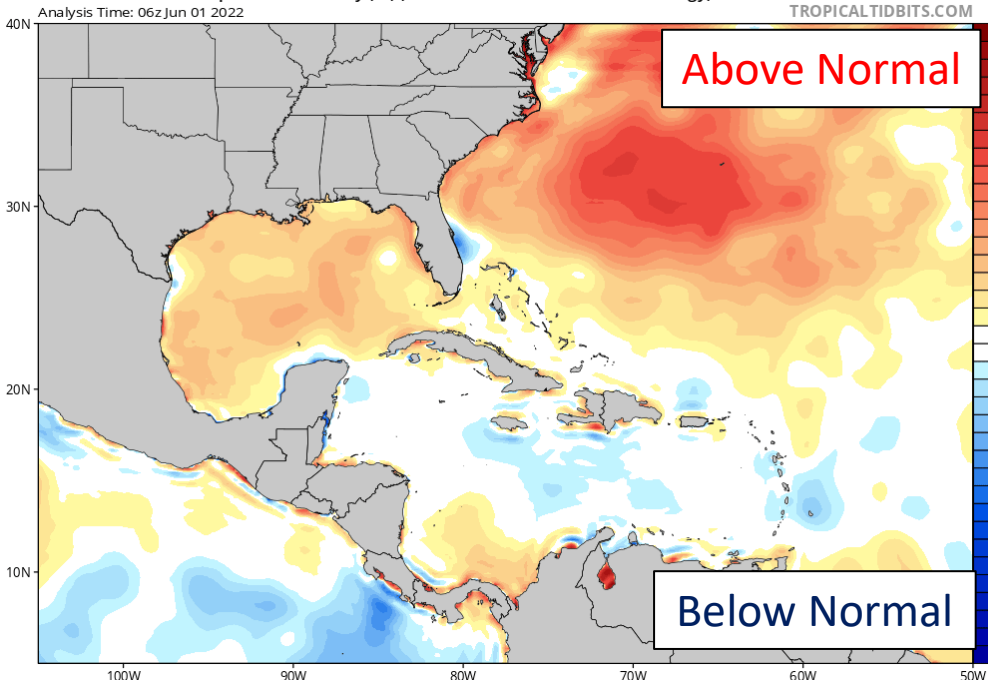
CDAS Sea Surface Temperature (°C)

Analysis Time: 06z Jun 01 2022



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

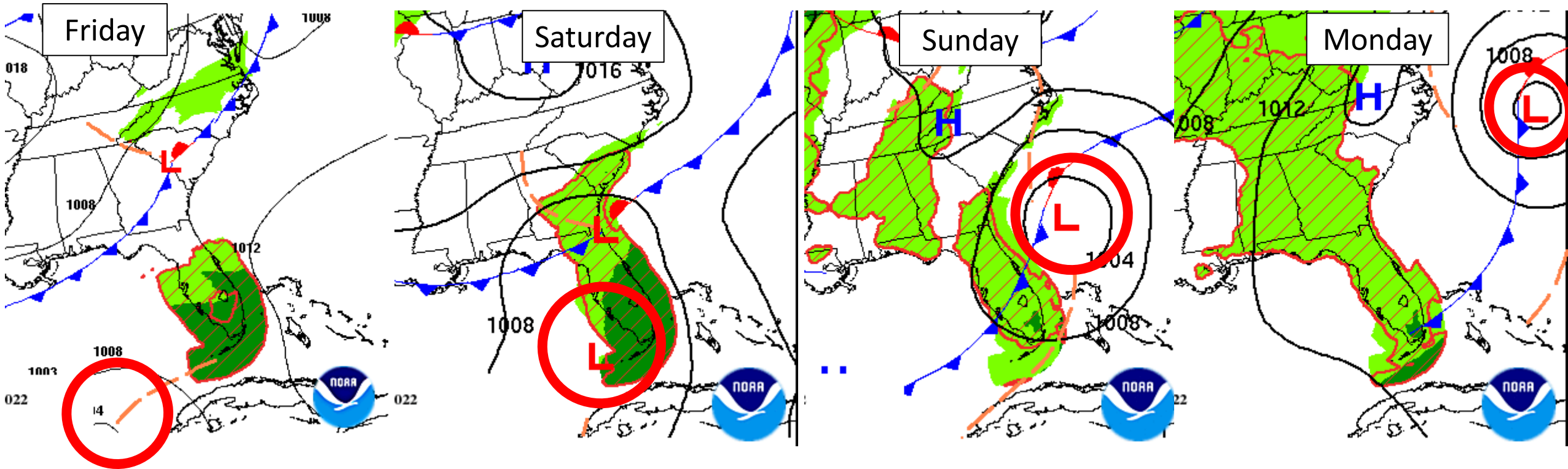
Analysis Time: 06z Jun 01 2022





Forecast Weather Maps - Track

Through the Upcoming Weekend



The heavy rain threat begins early Friday morning and continues into the day on Saturday. The low will make the closest approach to Florida on Saturday before moving offshore and away from Florida on Sunday.



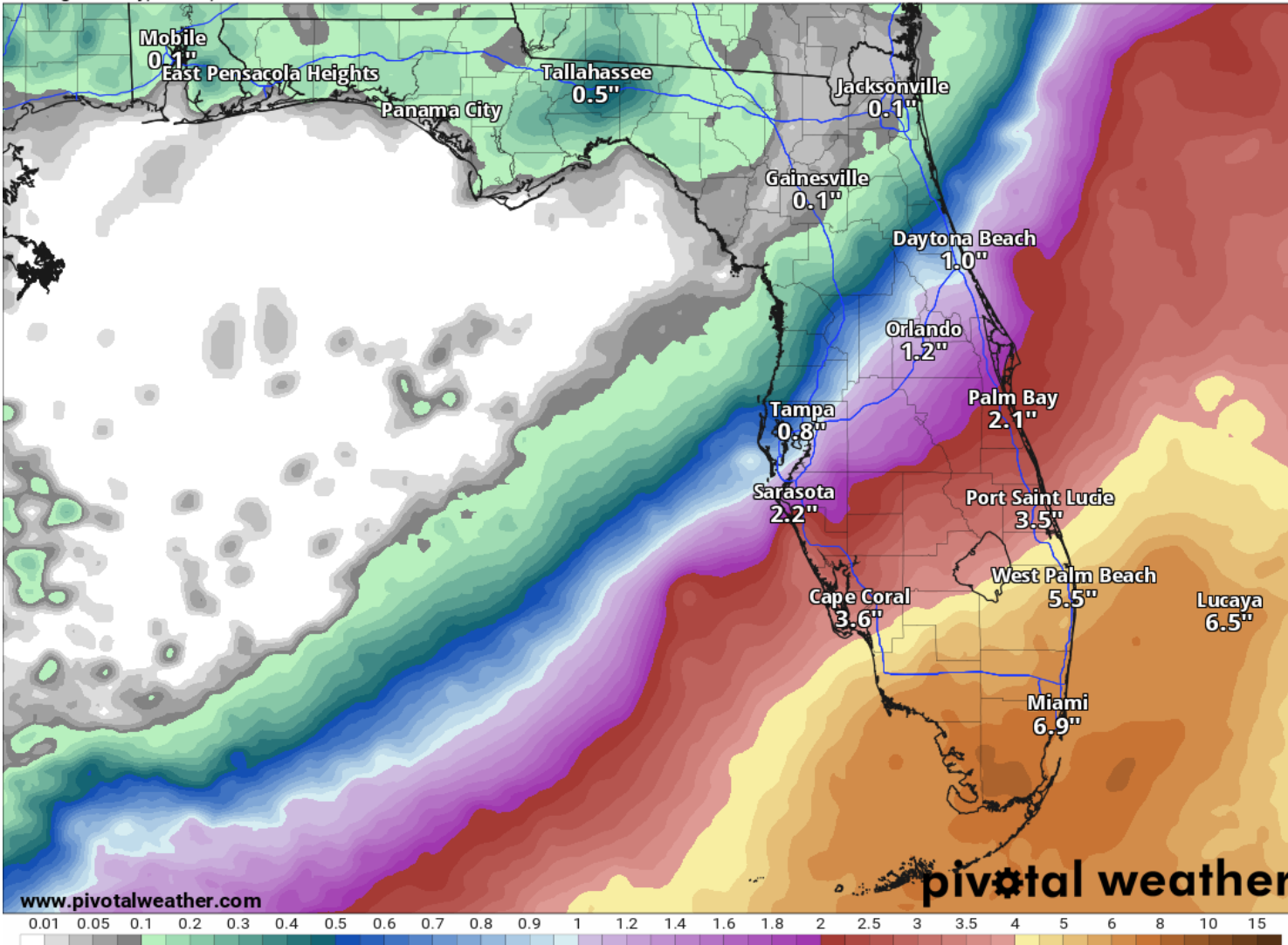
Rainfall Totals Next 5 Days

Ending 8 AM ET Monday

120-Hour Precipitation (in)

Ending Monday, Jun. 6, 2022 at 8 a.m. EDT

Init: Wed 2022-06-01 12z WPC



- **Through Thursday night**, a widespread 1-2" of rain is forecast across South Florida and along the West Coast, with more isolated totals in North Florida.
- Localized areas could see 3-4" over the next two days, *but the flood threat will be localized and confined to urban areas.*
- Heavier rainfall is expected in South Florida Friday and Saturday depending on the exact track of the developing low near the Yucatan Peninsula.
- **A widespread 4-8"** is currently being forecast for this weekend, with localized areas of 12+".
- *These rainfall totals could increase or decrease depending on the exact track!!*



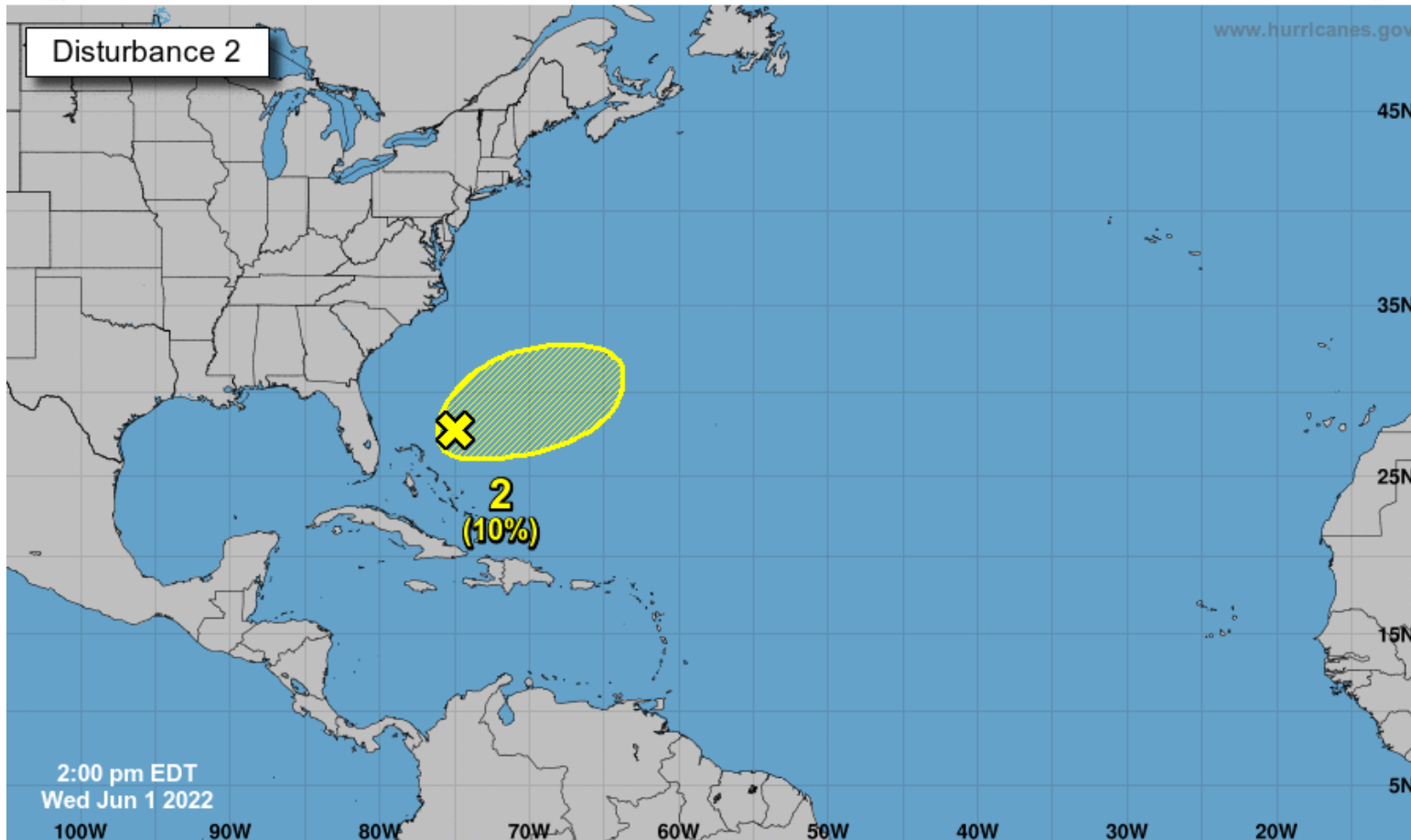
Tropical Weather Outlook

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



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



A weak surface trough located around 150 miles northeast of the northwest Bahamas is producing disorganized shower activity as it interacts with an upper-level trough.

Surface pressures are currently high across the area, and significant development of this system appears unlikely as it moves generally east-northeastward over the next several days **away from the southeastern United States.**

This system poses no threat to Florida.

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

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

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



Overall Summary

Invest 91L - Southern Gulf of Mexico Low

- An area of low pressure, now identified as Invest 91L, is developing near the Yucatan Peninsula and will move northeast toward South Florida this weekend.
- The environment over the Gulf of Mexico may allow some development of the area of low pressure into a tropical depression or storm, but a significant wind event is not anticipated. Heavy rain will be the main threat.
- The system will move east of Florida on Sunday and into the open waters of the Atlantic by Monday.
- The National Hurricane Center has a **70% (high) chance** of development in the next 48 hours, and an **80% (high) chance** of development over the next 5 days.
- If it becomes a Tropical Depression, it will be designated number “One” and if it strengthens into a Tropical Storm it will be “Alex”.

Bahama Low

- A weak area of showers is located about 200 miles east of the Bahamas. This system could develop as it moves east away from land.
- The National Hurricane Center has a **10% (low) chance** of development in the next 48 hours and 5 days.
- This system poses no threat to Florida.

Florida Outlook:

- Impacts to Florida are not expected through Thursday afternoon.
- While it is too early to determine the specifics of any impacts, if they do occur, heavy rainfall is likely to be the main threat, with gusty winds, rip currents, and waterspouts/tornadoes possible as additional threats.
- A widespread 4-8” of rain is forecast for South Florida and the Florida Keys Friday and Saturday with locally higher amounts. Flash flooding is possible, and a Flood Watch will likely be issued for the area on Thursday.

The next briefing packet will be provided Thursday morning. For the latest information on the tropics, please visit the National Hurricane Center website at www.hurricanes.gov.



TROPICAL UPDATE



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State Meteorological Support Unit

Florida Division of Emergency Management

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