



TROPICAL UPDATE

10 AM EDT

Tuesday, May 22, 2018

Invest Area 90L

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.nhc.noaa.gov.



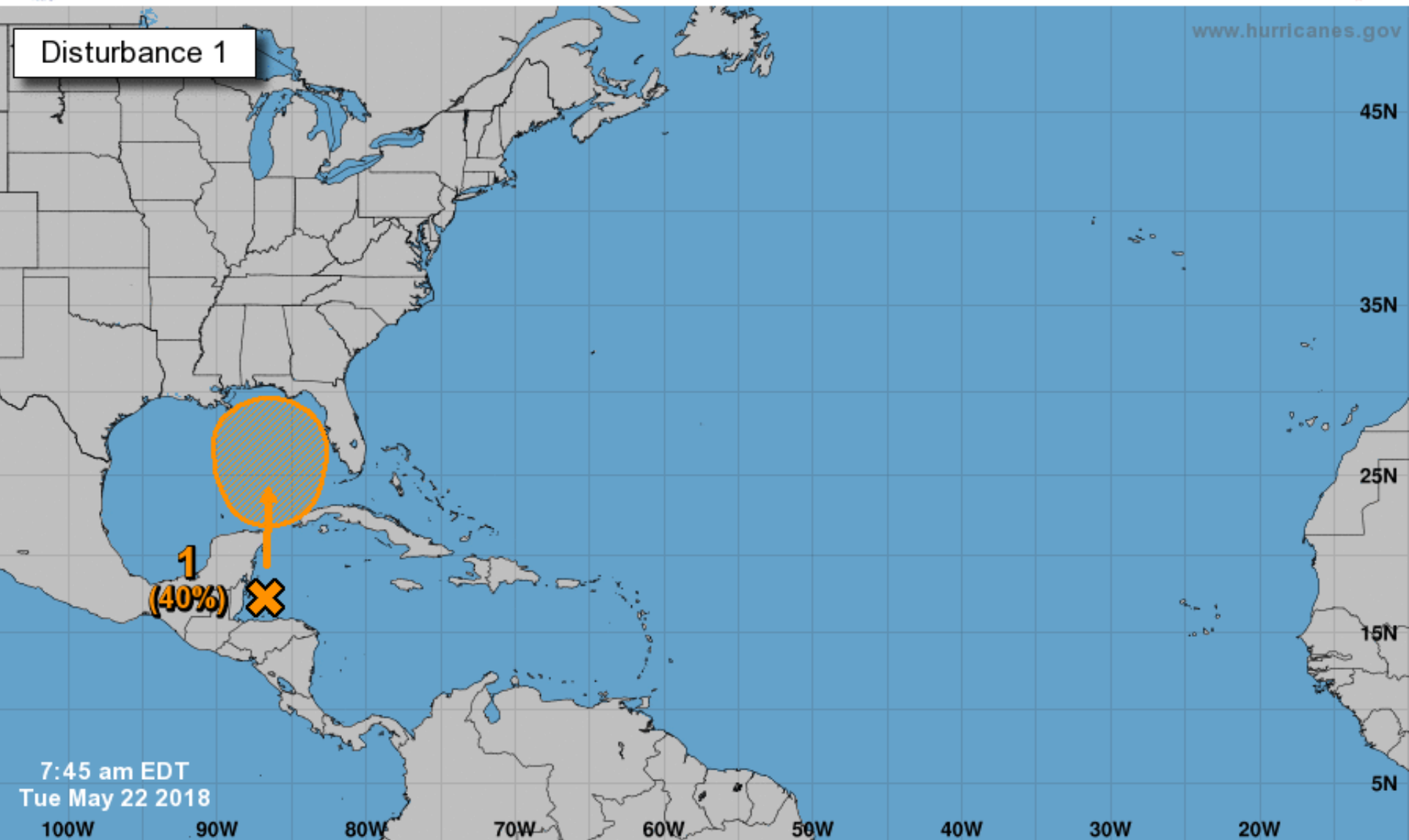
Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



www.hurricanes.gov

Disturbance 1

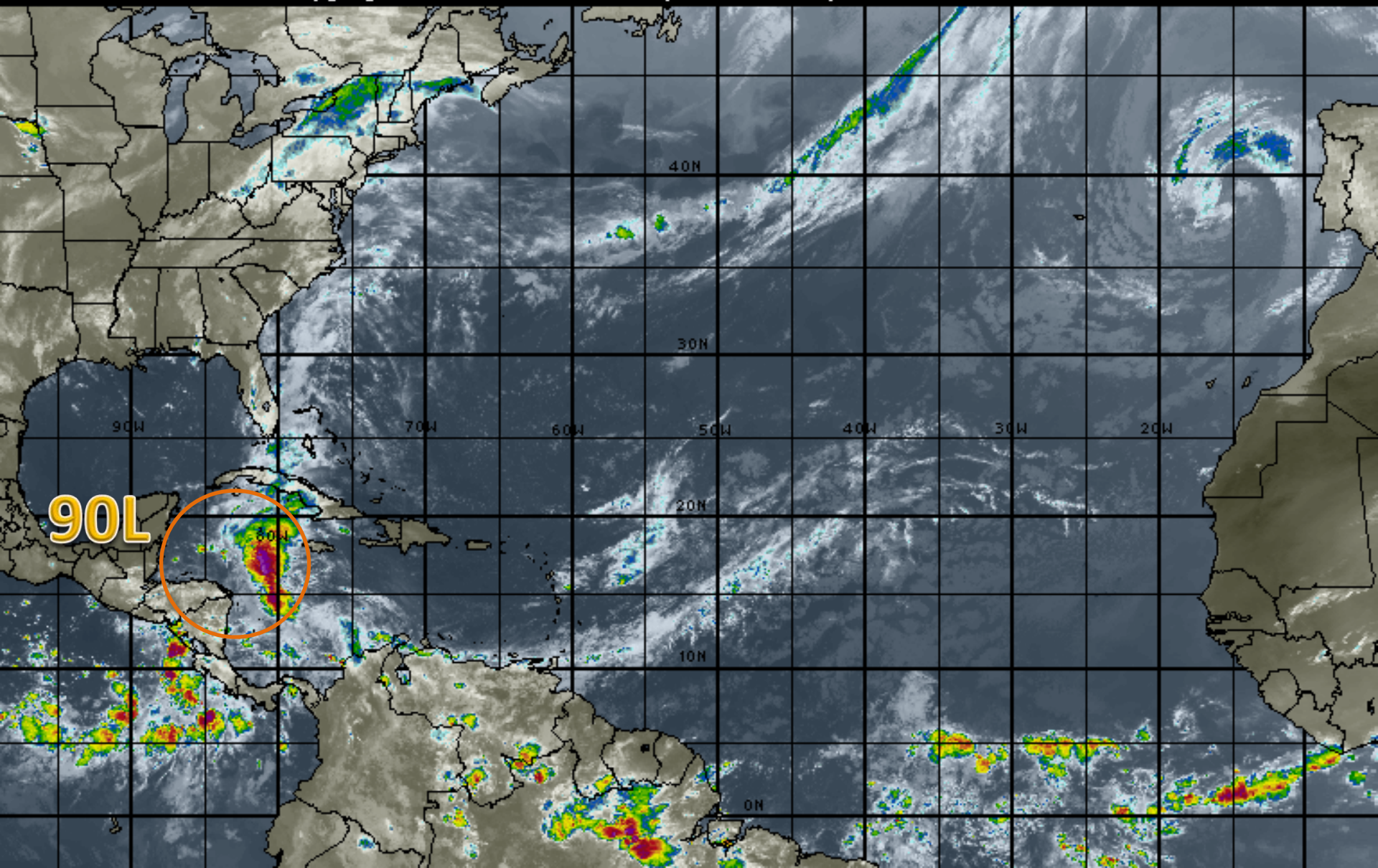


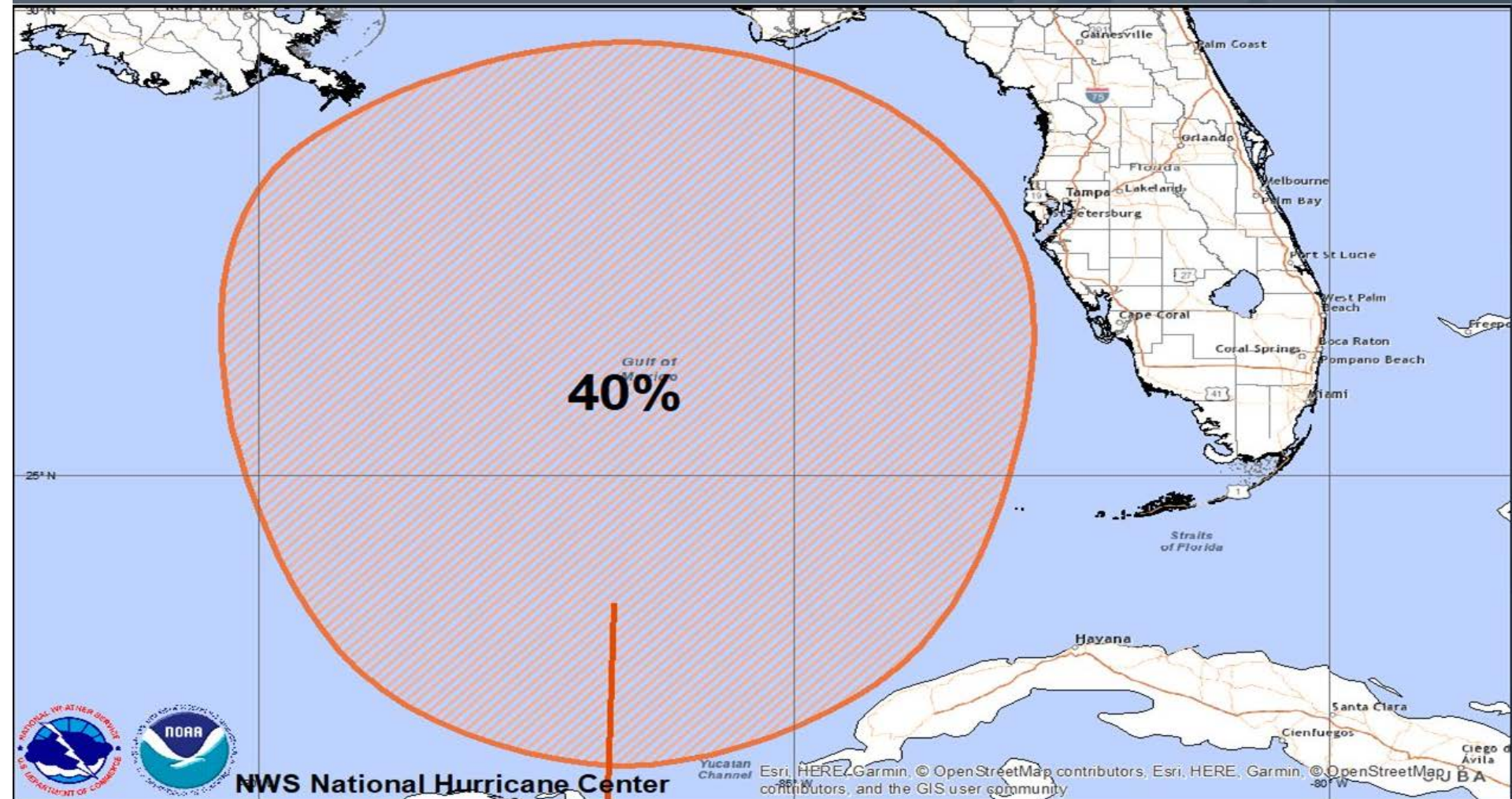
7:45 am EDT
Tue May 22 2018

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

Atlantic Basin Satellite Image

12:00 22-MAY-2018 GMT Copyright © 1998-2018 WSI Corporation <http://www.wsi.com>





Tropical Weather Outlook Five Day Formation Chances

Tuesday May 22, 2018

07:44 AM ET

NWS National Hurricane Center



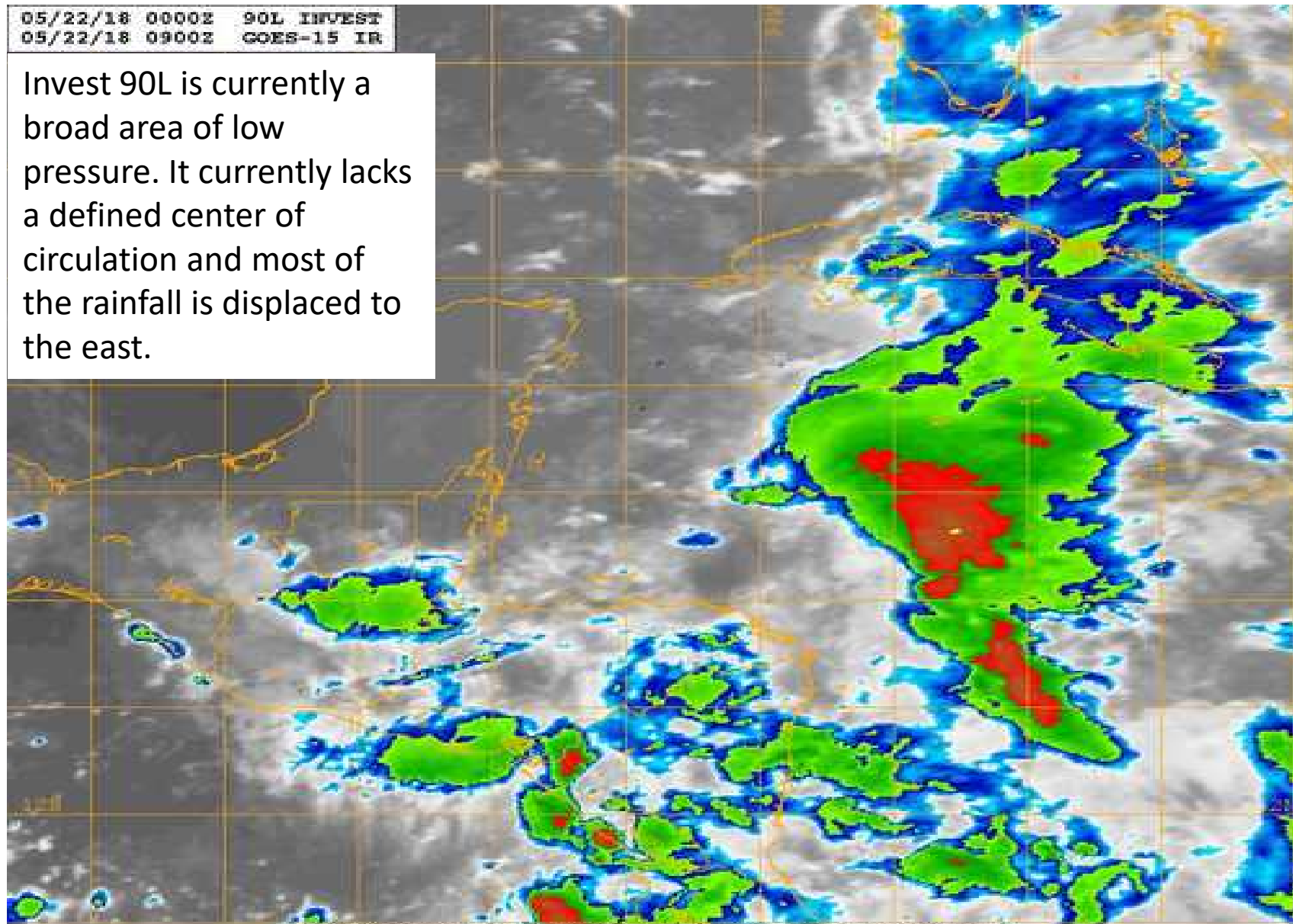
X indicates disturbance location;
shading indicates potential formation area.

- Formation chance through 48 hours is **low, or near 0%**
- Formation chance through five days is **medium, or 40%**

90L Infrared Satellite

05/22/18 0000Z 90L INVEST
05/22/18 0900Z GOES-15 IR

Invest 90L is currently a broad area of low pressure. It currently lacks a defined center of circulation and most of the rainfall is displaced to the east.



Naval Research Lab http://www.nrlmry.navy.mil/sat_products.html
IR Temperature (Celsius)



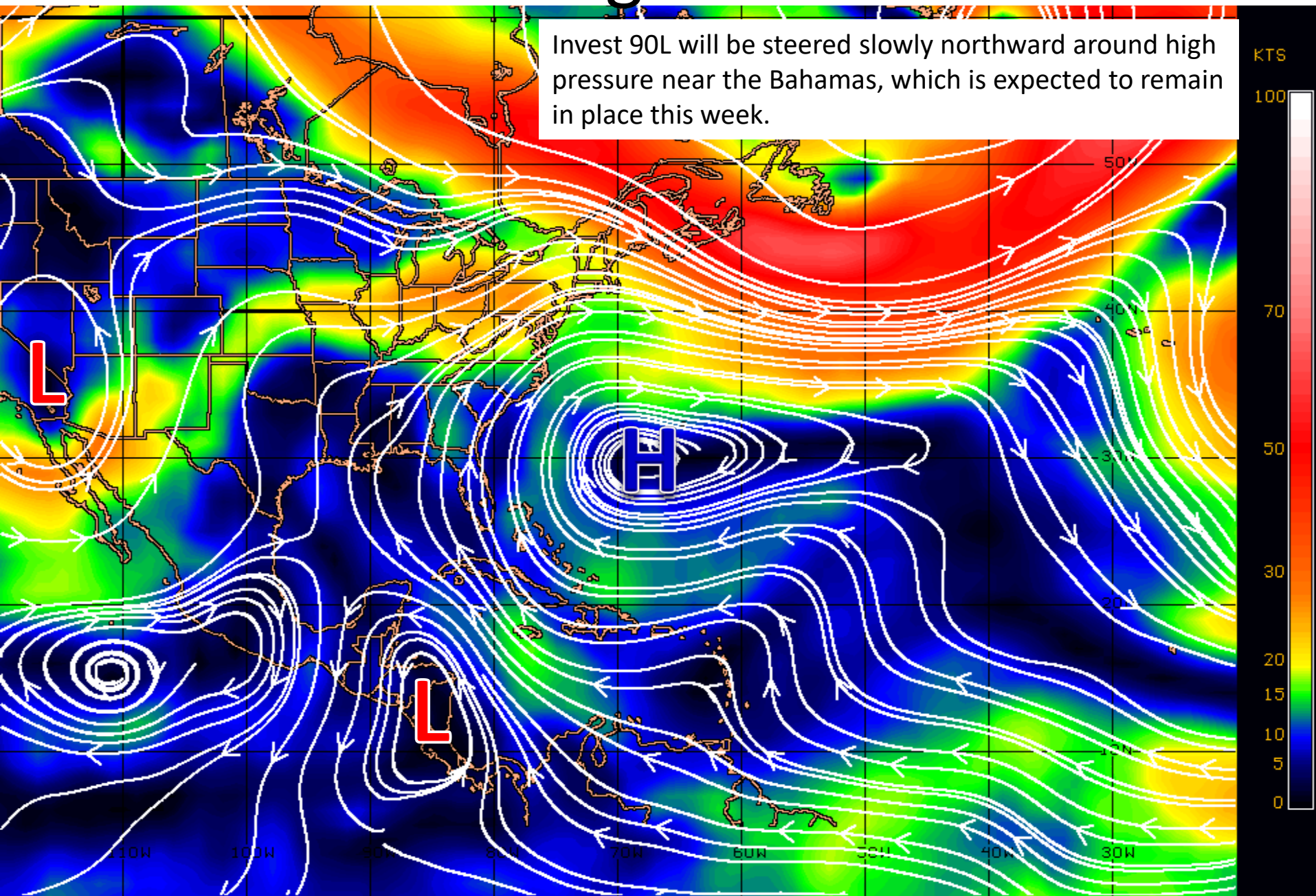


A non-tropical low pressure system over Alabama is pulling tropical moisture northward into the state, but is not directly associated with Invest 90L.

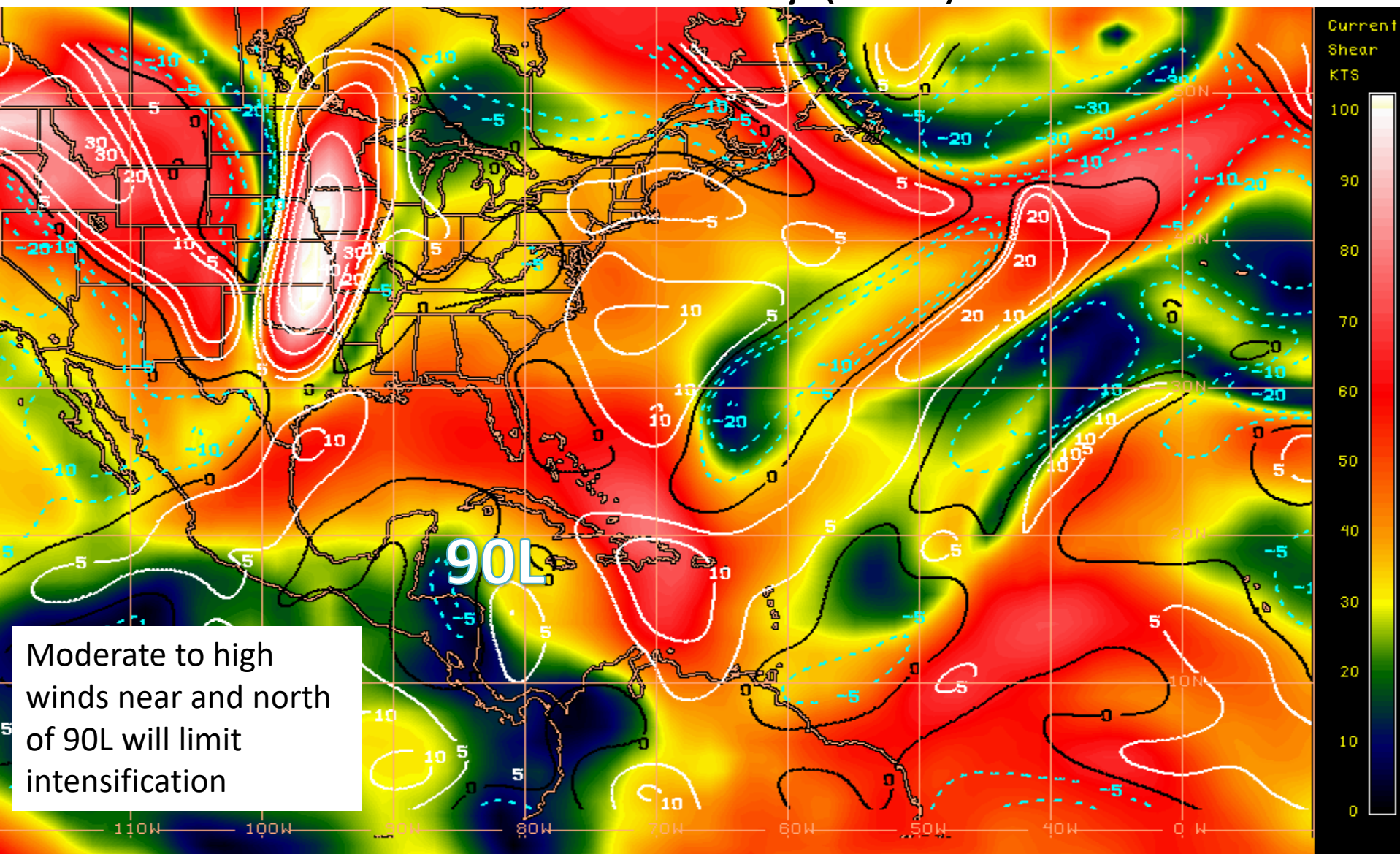


Steering Currents

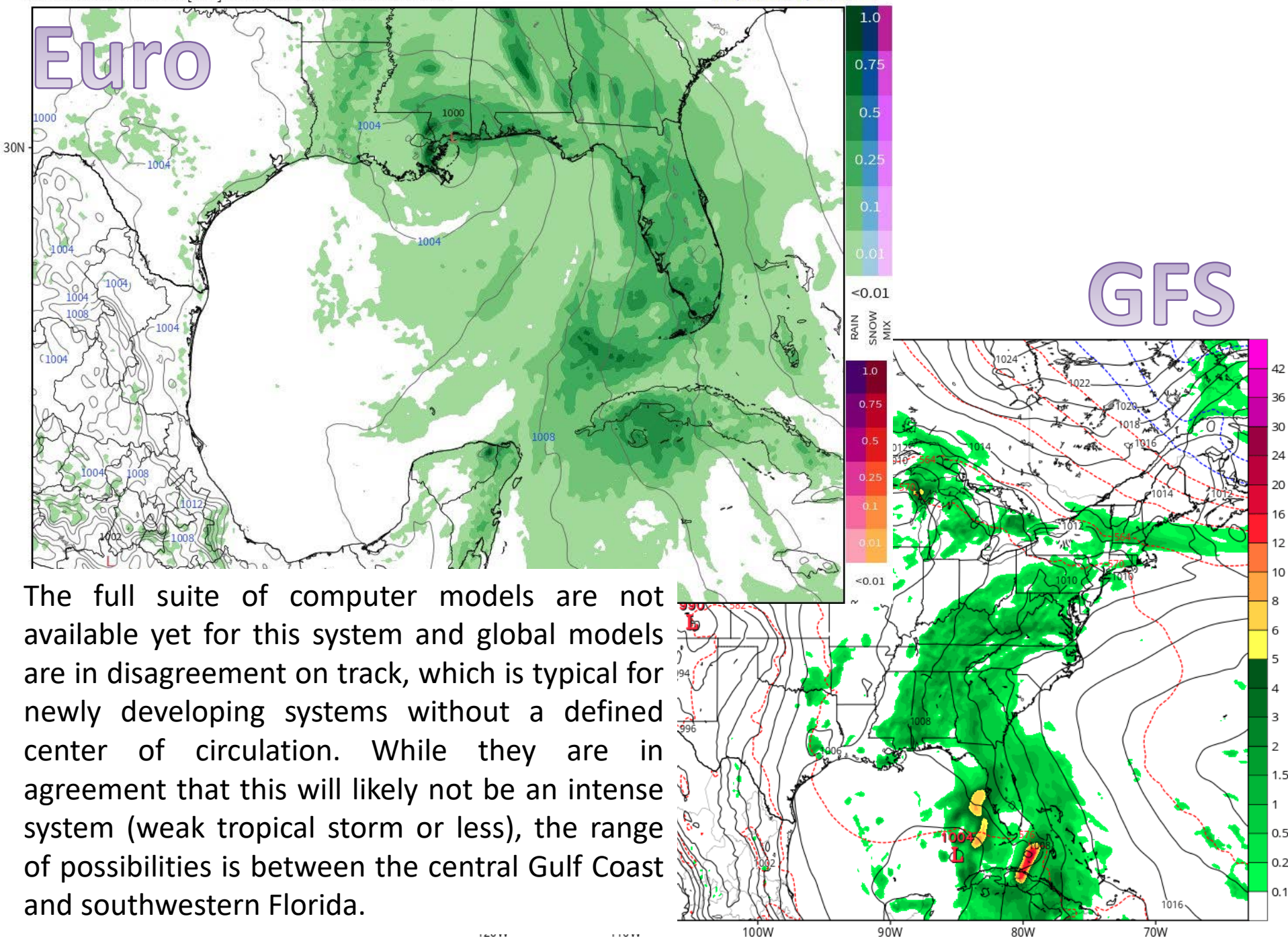
Invest 90L will be steered slowly northward around high pressure near the Bahamas, which is expected to remain in place this week.



Current Wind Shear (shaded) and Shear Tendency (lines)

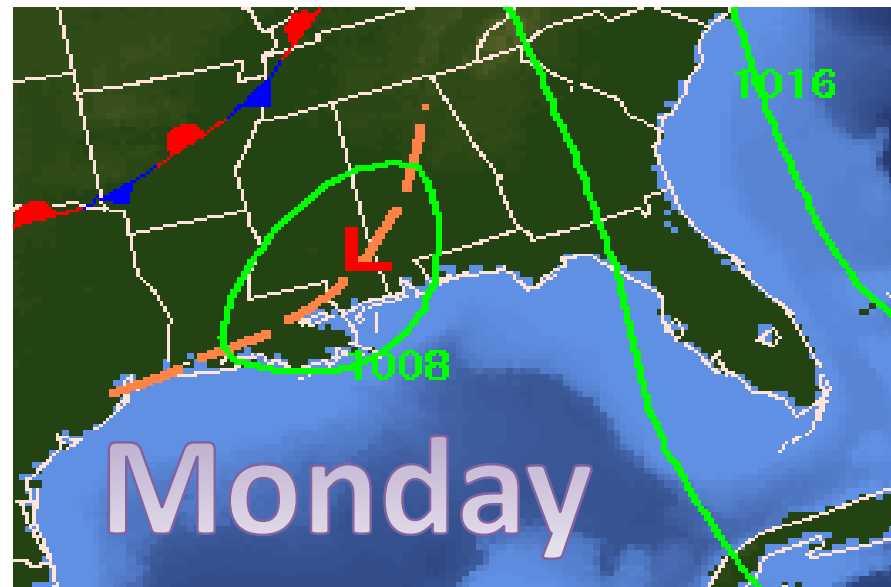
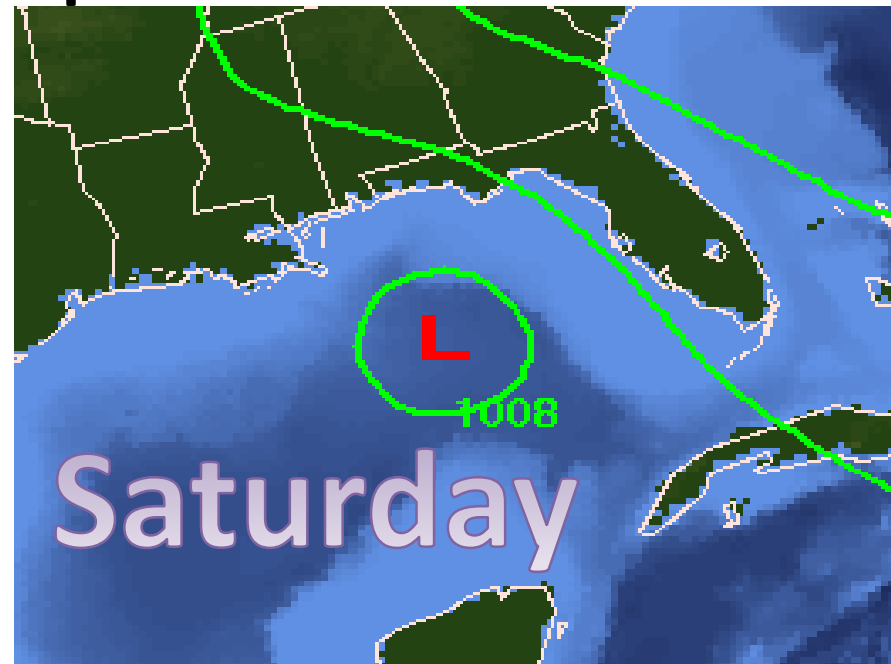
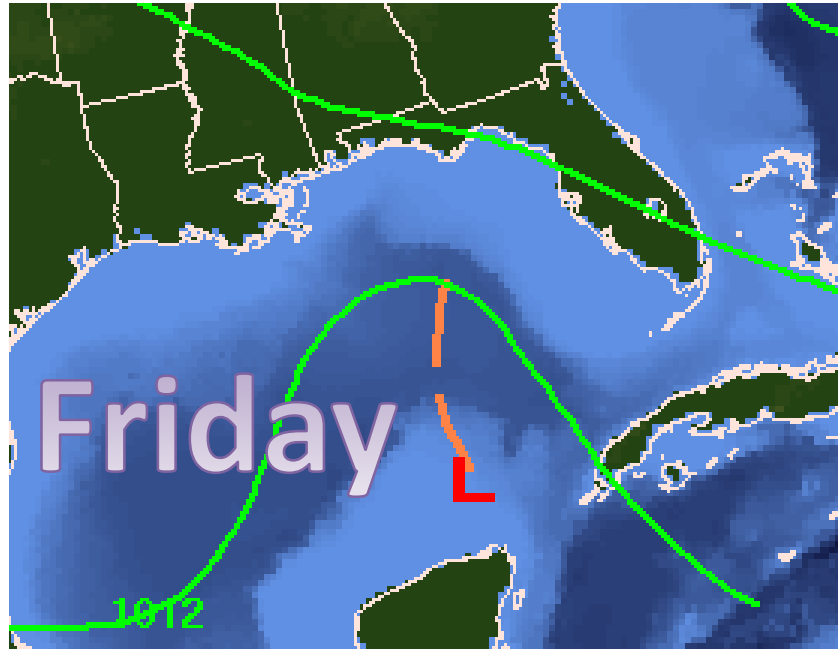


Shear Tendency (KTS) Over Past 24 Hours: Increasing — Decreasing ----



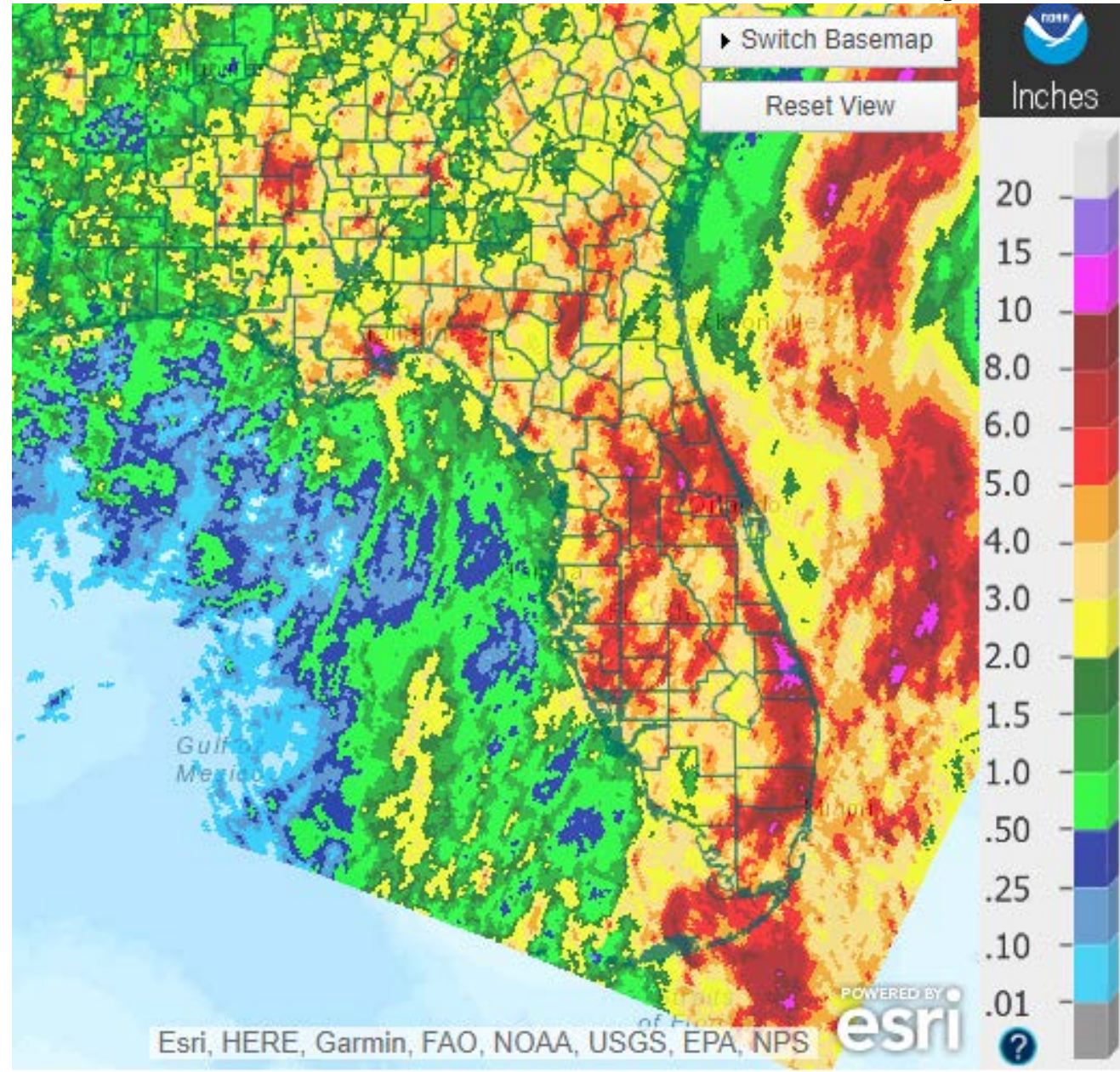
The full suite of computer models are not available yet for this system and global models are in disagreement on track, which is typical for newly developing systems without a defined center of circulation. While they are in agreement that this will likely not be an intense system (weak tropical storm or less), the range of possibilities is between the central Gulf Coast and southwestern Florida.

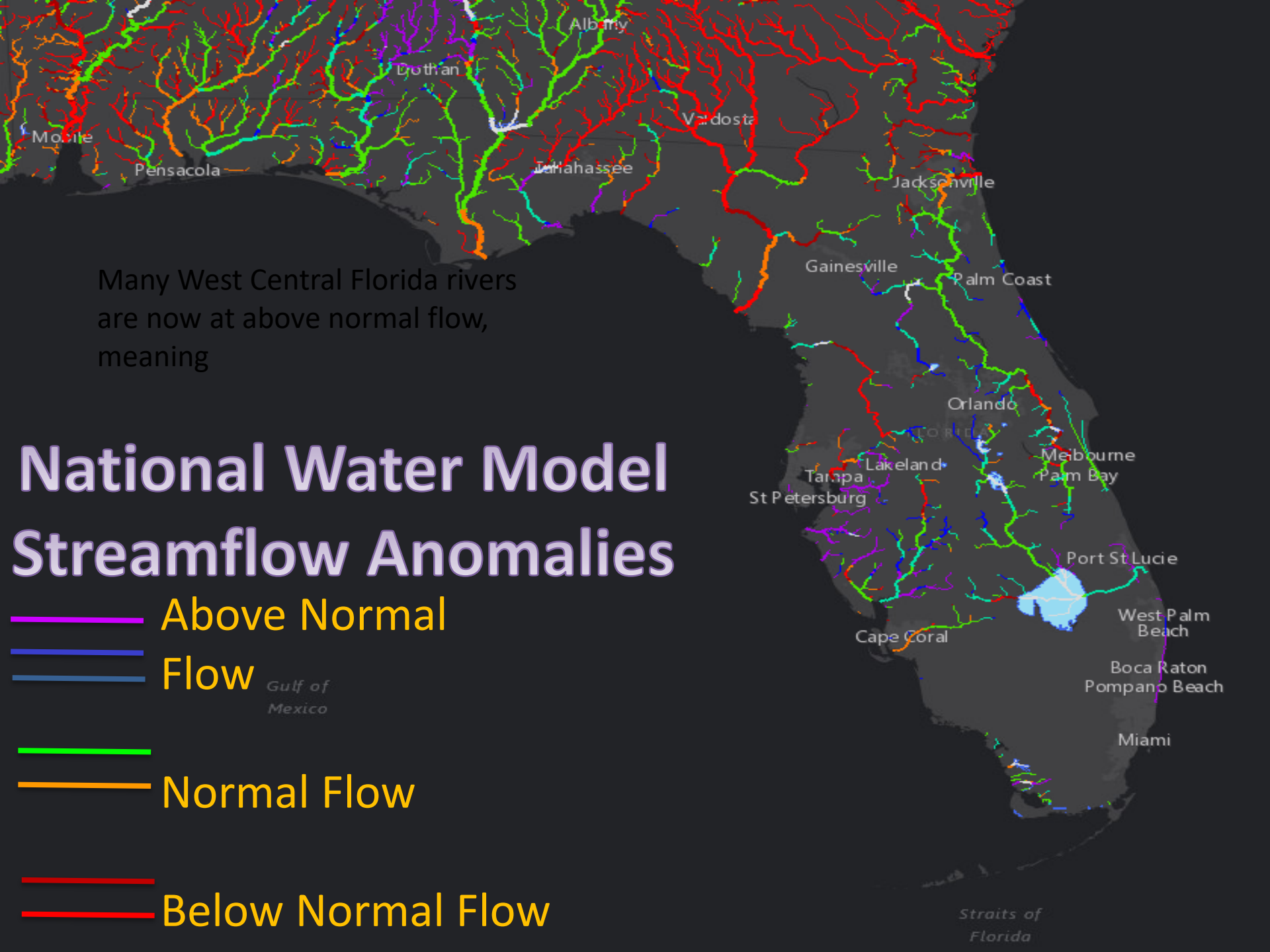
Forecast Weather Map – This Weekend



Observed Rainfall Over Past 7 Days

All of Florida has had well above normal rainfall over the past 7-10 days. This results in saturated grounds that will reduce the amount of time and rain needed to create flood conditions.



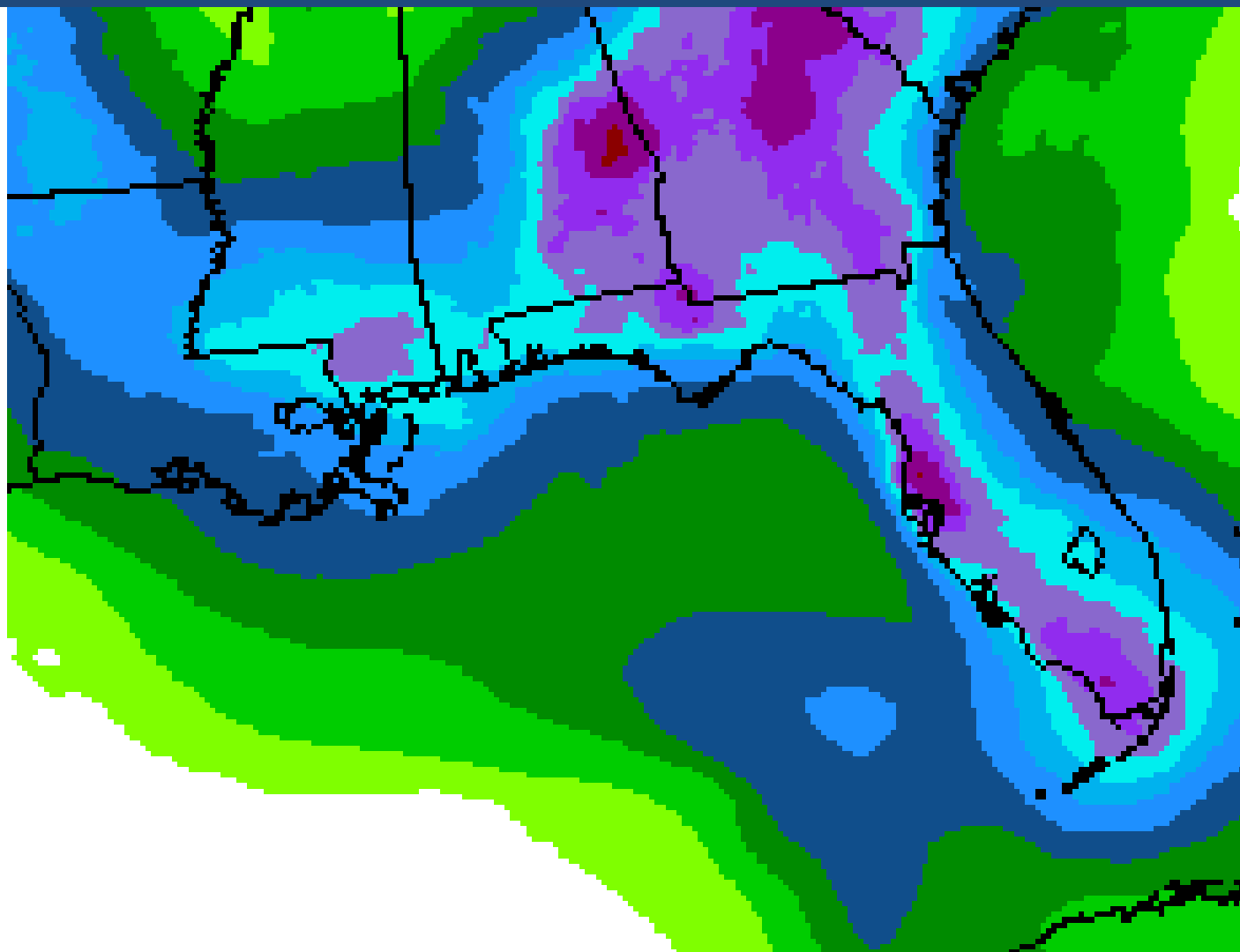
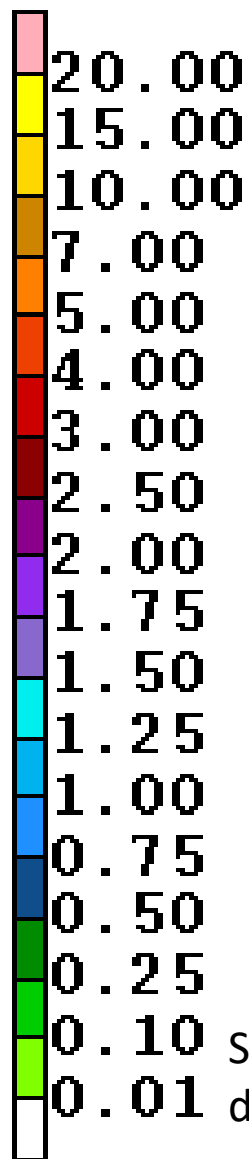


Many West Central Florida rivers
are now at above normal flow,
meaning

National Water Model Streamflow Anomalies

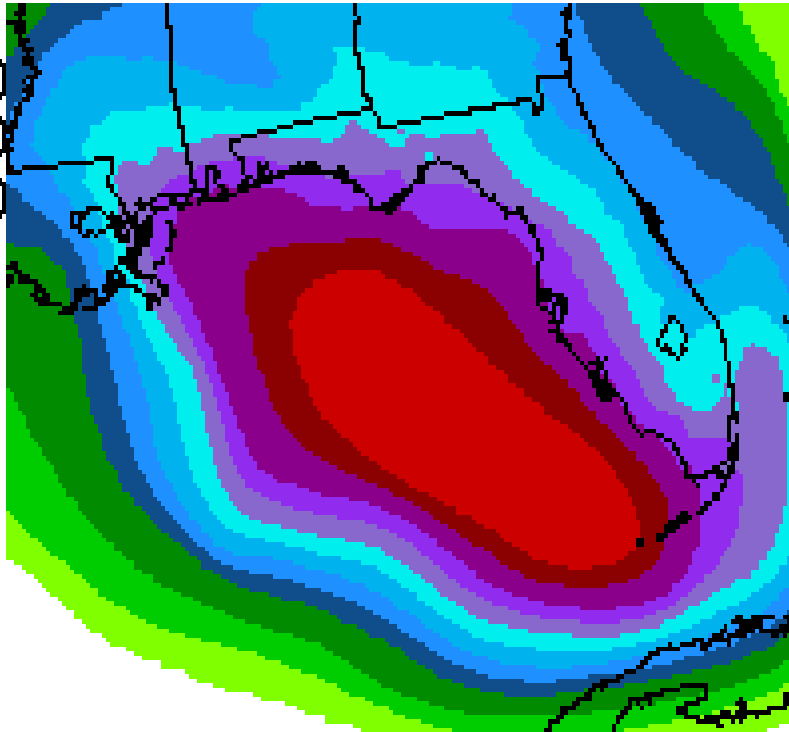
-  Above Normal
-  Flow
-  Normal Flow
-  Below Normal Flow

Forecast Total Rainfall Accumulations for next 3 Days

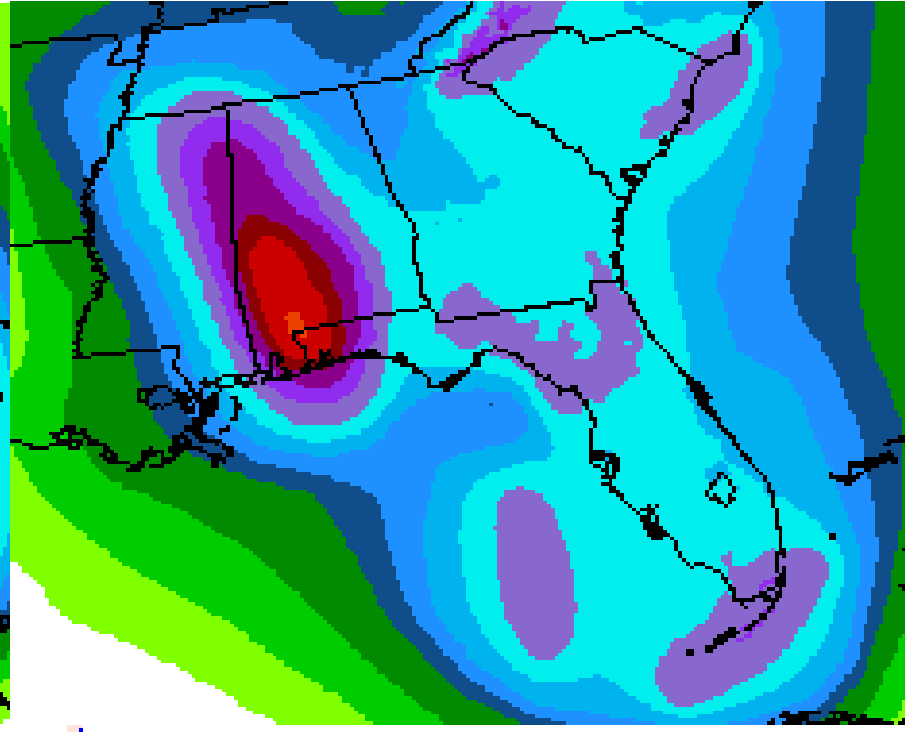


Soggy conditions will continue this week with rain amounts of 1-3" over the next 3 days. This does not account for locally higher totals, which could reach 4" or more.

Forecast Total Rainfall Accumulations



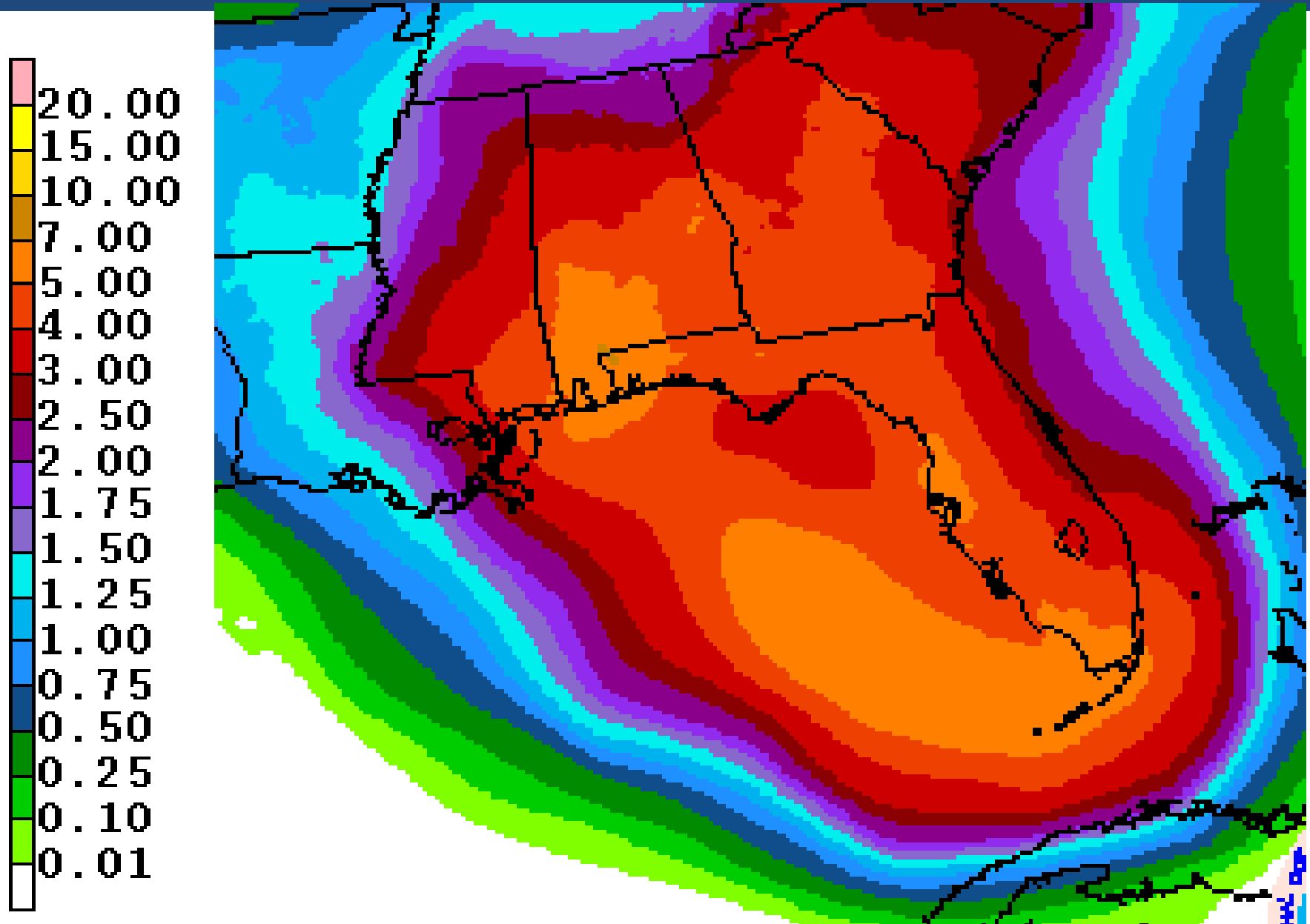
Friday-Saturday



Sunday-Monday

The rain from 90L will begin to affect Florida on Friday and continue through the weekend. **RAINFALL AMOUNTS WILL DEPEND ON THE STRUCTURE AND TRACK OF 90L, WHICH COULD BE HIGHER THAN WHAT IS SHOWN.** At this time, rainfall amounts of 3-6" inches with isolated higher totals of 6 to 10 inches are possible. This could result in street flooding and river flooding.

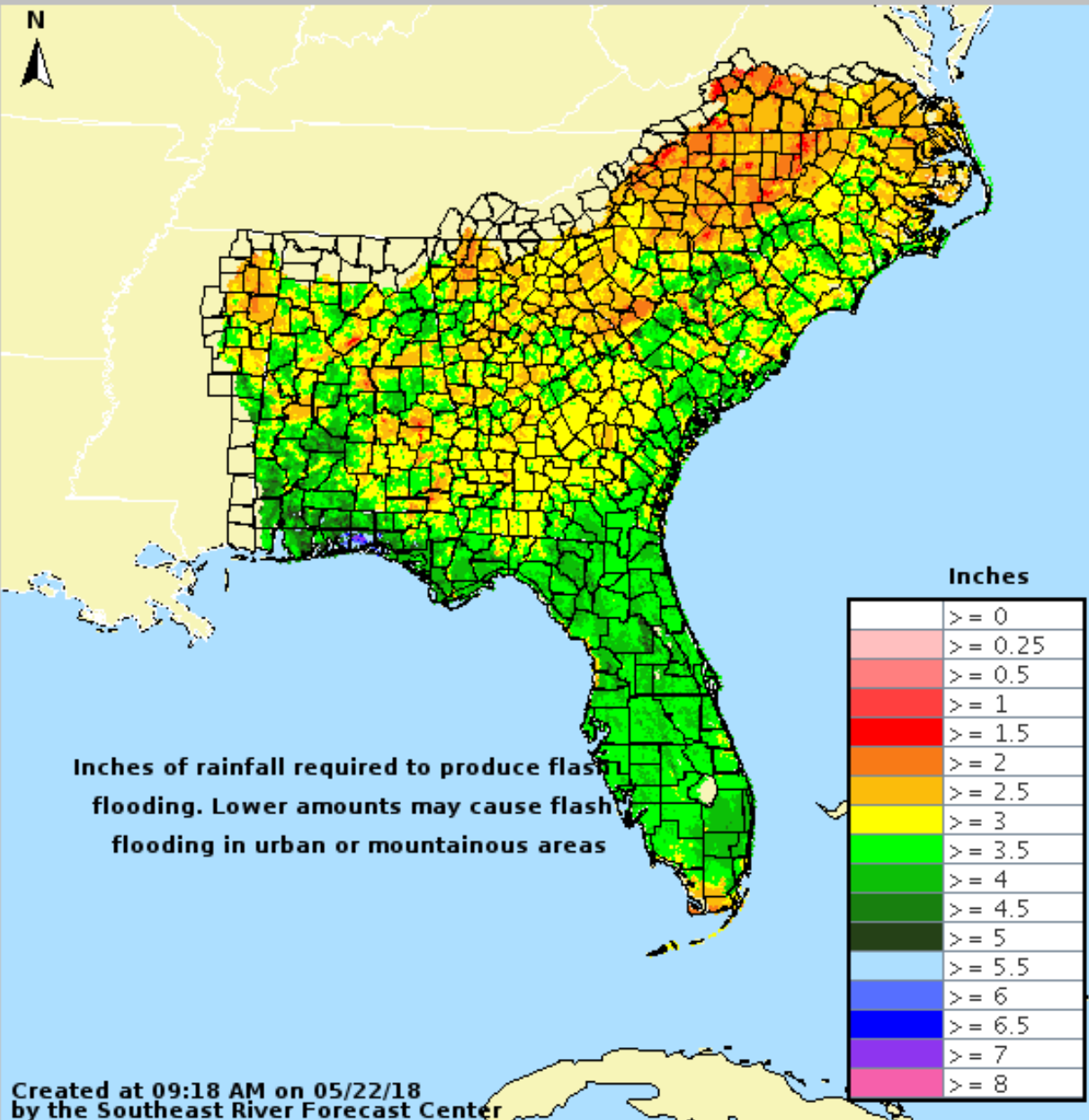
Forecast Total Rainfall Accumulations for next 7 Days



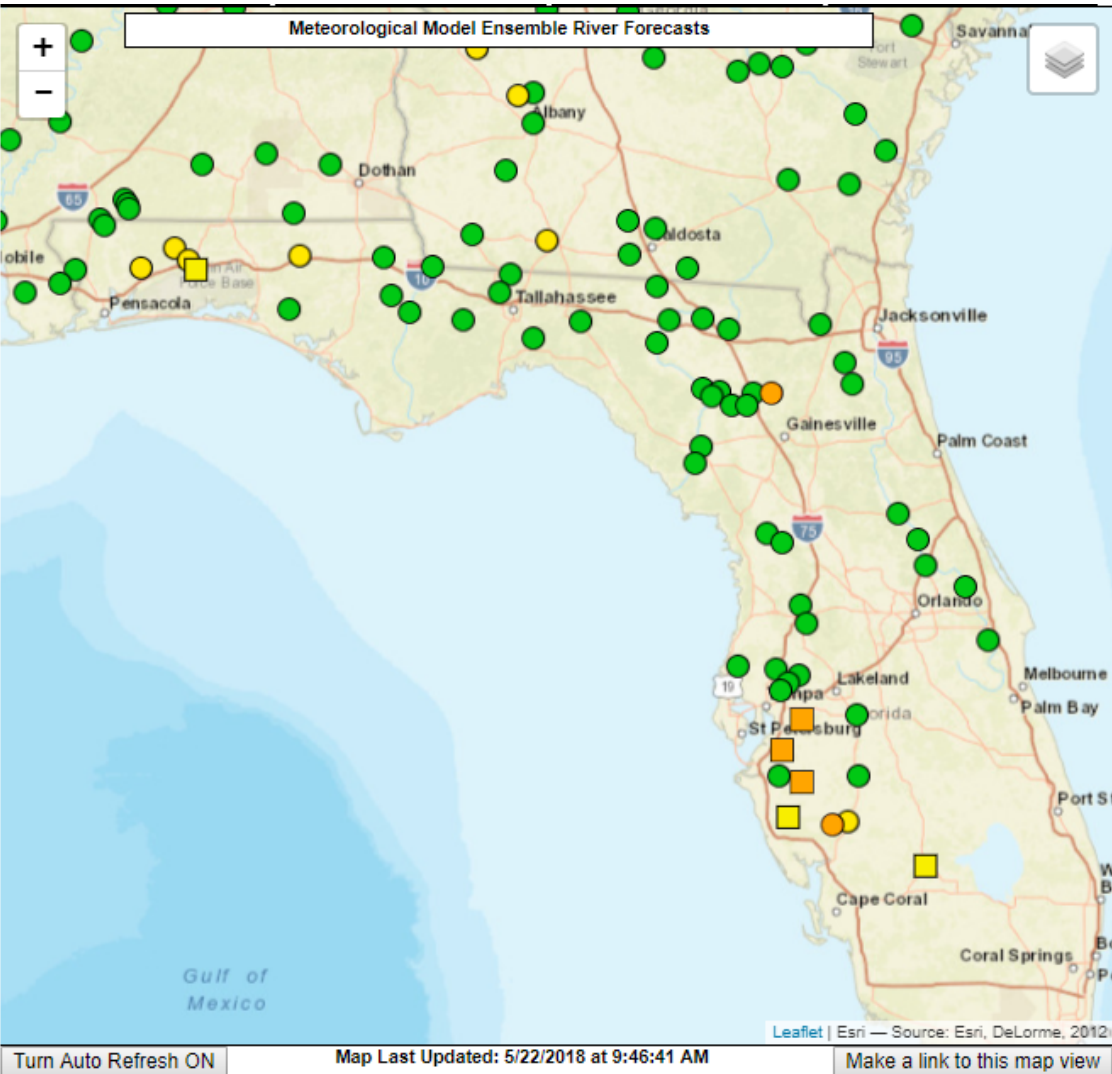


3-hr Flash Flood Guidance

Valid: 05/22/2018 @ 09:18 AM

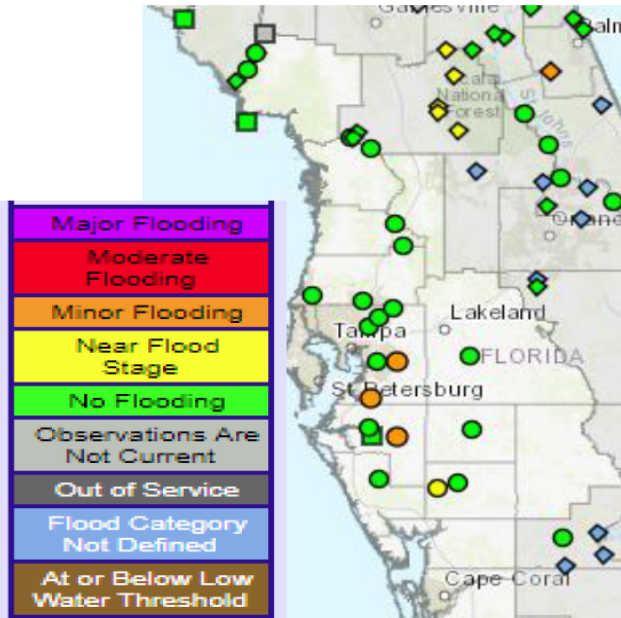


- Since soils are already saturated, any additional heavy rain (generally 3-4" in less than 3 hours) will cause flash flooding issues.
- Lower amounts, or 3-6" over a longer time period can still cause flooding of roads and low-lying areas.



In addition to the flash flooding potential, minor to moderate flooding on area rivers will be possible, but this will ultimately be dependent on where the heaviest rain falls. The areas for concern are currently in West Central Florida, the Florida Panhandle, and the Santa Fe River basin and Paynes Prairie State Park.

| News Legend | | |
|---|----------------------------|---|
| News Items less than 24 hours old | News Items 1 to 7 days old | No current News Items |
| Map Legend | | |
| Chance of Exceedance | | River Forecast Centers |
| 30% | Level | 70% |
| ● | Action | ■ Middle Atlantic River Forecast Center |
| ● | Minor Flood | ■ Northeast River Forecast Center |
| ● | Moderate Flood | ■ Ohio River Forecast Center |
| ● | Major Flood | ■ Southeast River Forecast Center |
| ● = less than 30% chance of reaching Action level | | |
| ○ = no critical levels defined for this point | | |



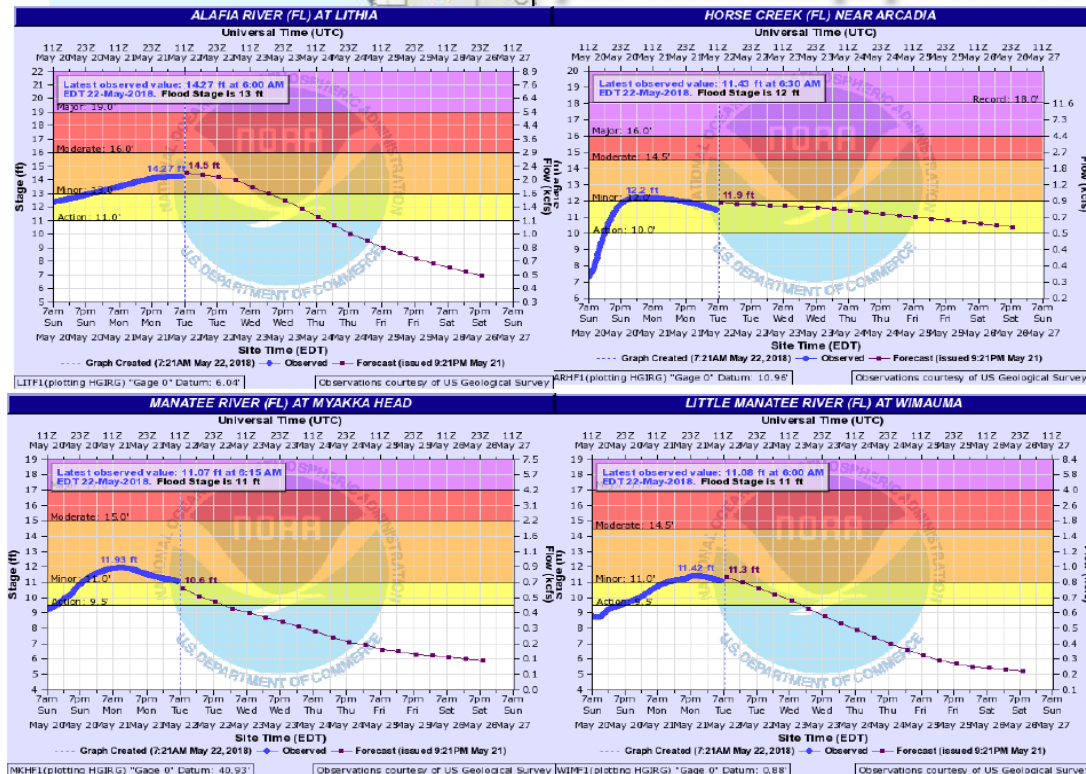
River and streams are running high from recent rainfall.
Current rivers in flood stage:

- Alafia – Lithia
- Little Manatee – Wimauma
- Manatee River – Myakka Head
- Horse Creek- Near Arcadia (Action Stage)

Current river forecasts can be found at :

<https://water.weather.gov/ahps2/forecasts.php?wfo=TBW>

- Note: hydrograph forecasts only account for anticipated rainfall over the next 48 hours. Although a recession is forecast, additional rises this weekend are likely.



Summary

- A broad surface low centered just east of Belize, now named Invest 90L, is producing a large area of cloudiness and showers in the northwestern Caribbean Sea.
- This system is currently disorganized, and therefore has a large degree of uncertainty in regards to development and track.
- While strong upper-level winds and dry air aloft are expected to limit organization during the next couple of days, some gradual subtropical or tropical development is possible late this week while the system moves slowly northward into the central or eastern Gulf of Mexico.
- The full suite of computer models are not available yet for this system and global models are in disagreement on track, which is typical for newly developing systems, and the range of possibilities lies between the central Gulf Coast and southwestern Florida.
- Regardless of where the storm moves, upper level winds will continue to push a majority of the associated storminess to the east of the center of the system and across Florida.
- The first name on the 2018 Atlantic Storm name list is Alberto.

Florida Outlook:

- Regardless of development, locally heavy rainfall and flooding will be the main concern during the next several days, especially this weekend.
- Widespread rainfall amounts of 3-7" are expected along the Florida Gulf Coast, with locally higher amounts of 10+" possible.
- Flash Flood Watches are not in effect, but could be issued later this week.
- River flooding will also be a concern for portions of the state. River Flood Warnings are currently in effect for the Alafia River and Manatee River at Myakka Head. Additional river flood warnings will be possible.
- Increased wave heights of 2-5' are also expected along the Panhandle coast and will lead to a high risk of rip currents for the holiday weekend.

Another briefing packet will be issued Wednesday morning. For more information on this system visit the NHC website at www.nhc.noaa.gov



TROPICAL UPDATE

Created by:

Amy Godsey, Chief State Meteorologist
amy.godsey@em.myflorida.com

State Meteorological Support Unit
Florida Division of Emergency
Management

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