TROPICAL UPDATE

11:00 AM EDT

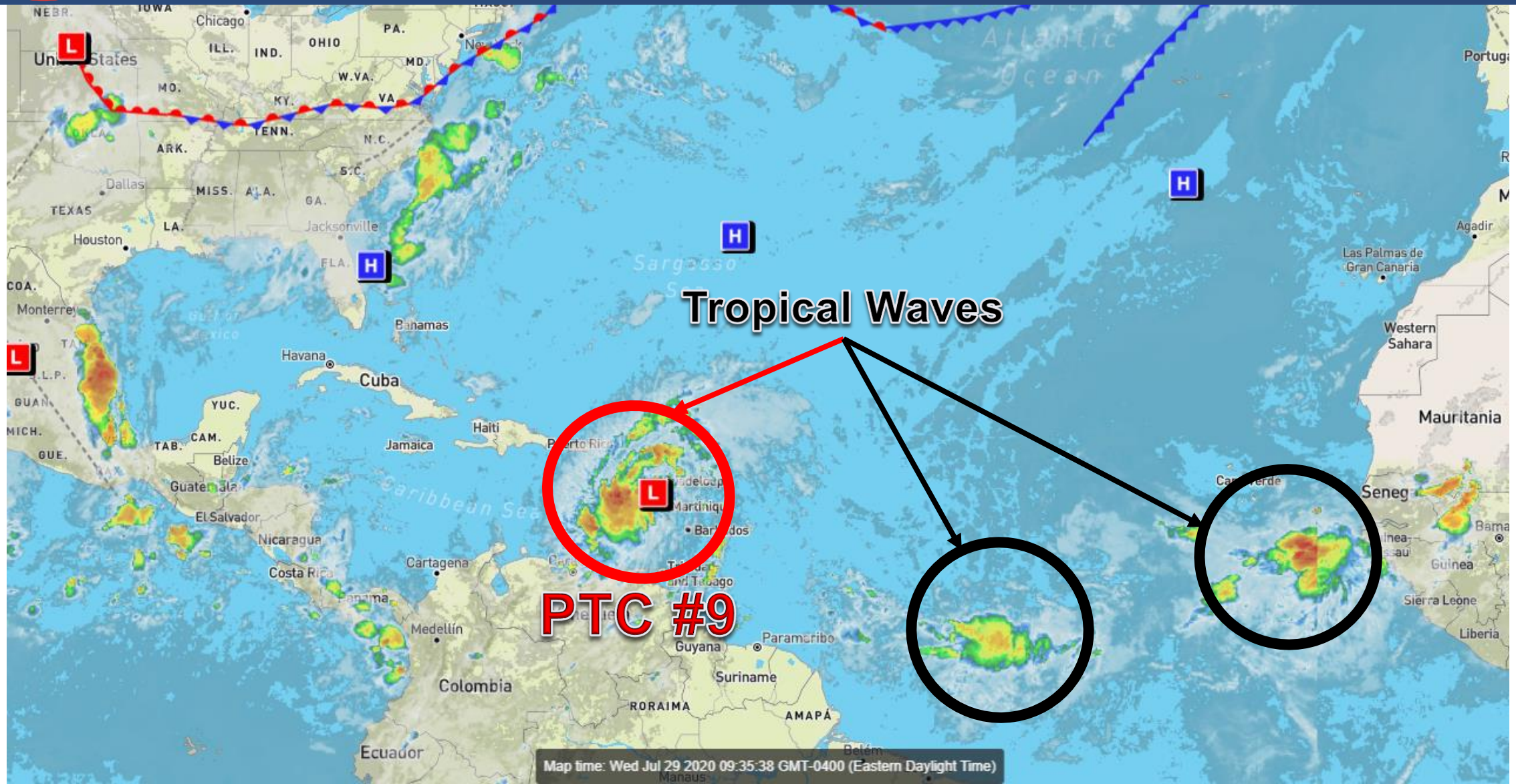
Wednesday, July 29, 2020

Potential Tropical Cyclone Nine (90%)

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.

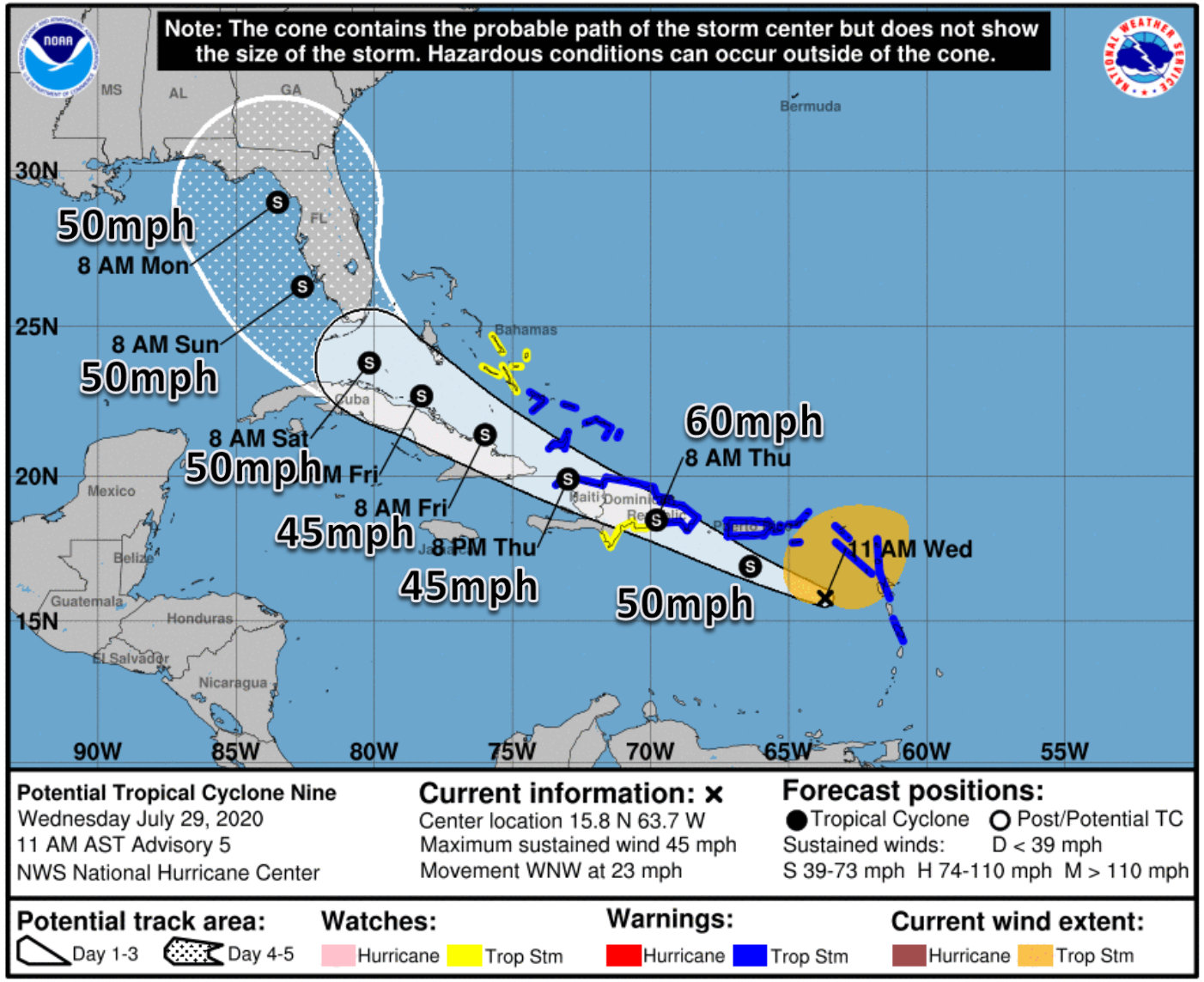
Atlantic Basin Satellite Image

Chance of development: None Low Medium High



Official Forecast Track

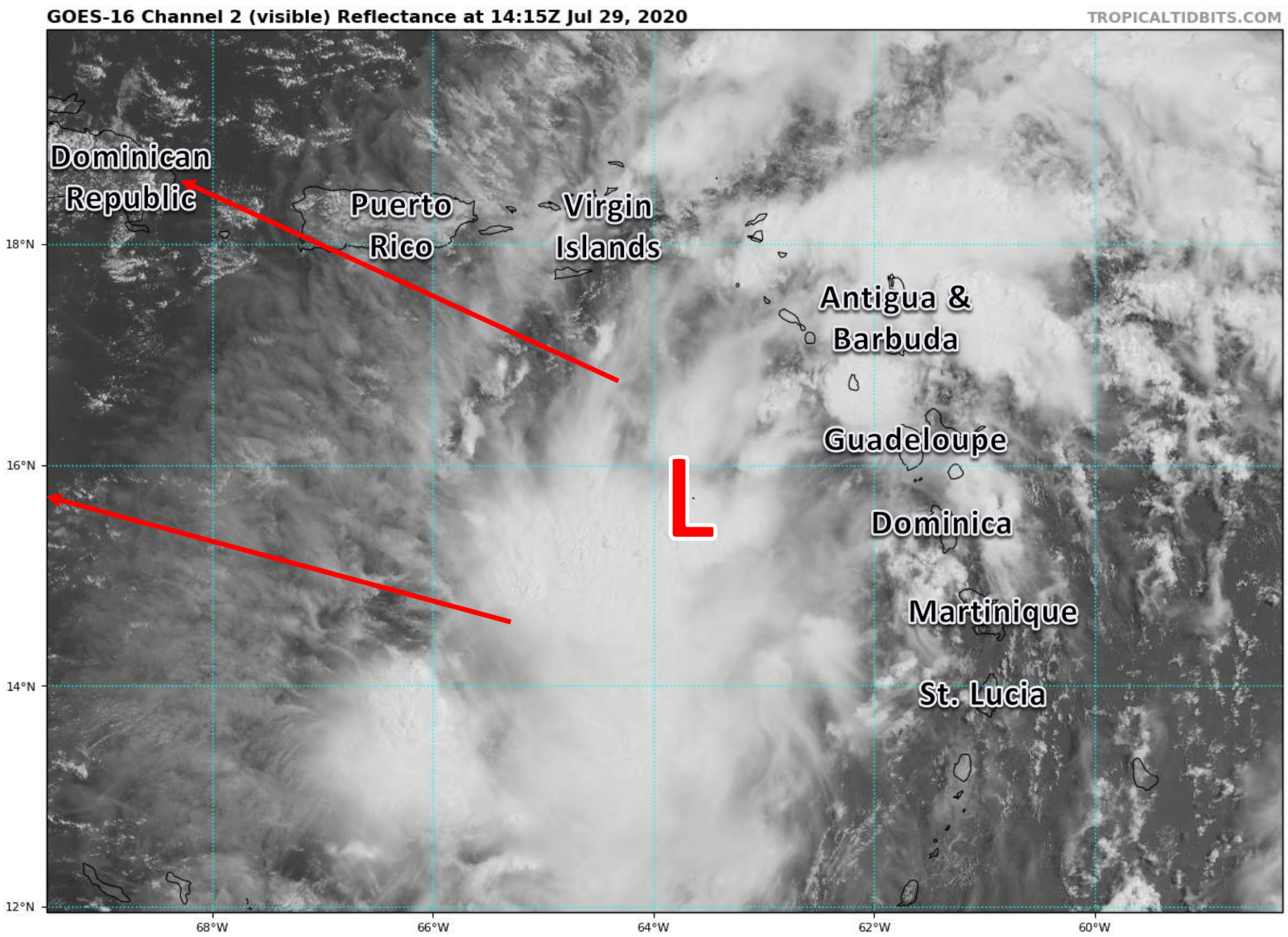
From the National Hurricane Center – PTC #9



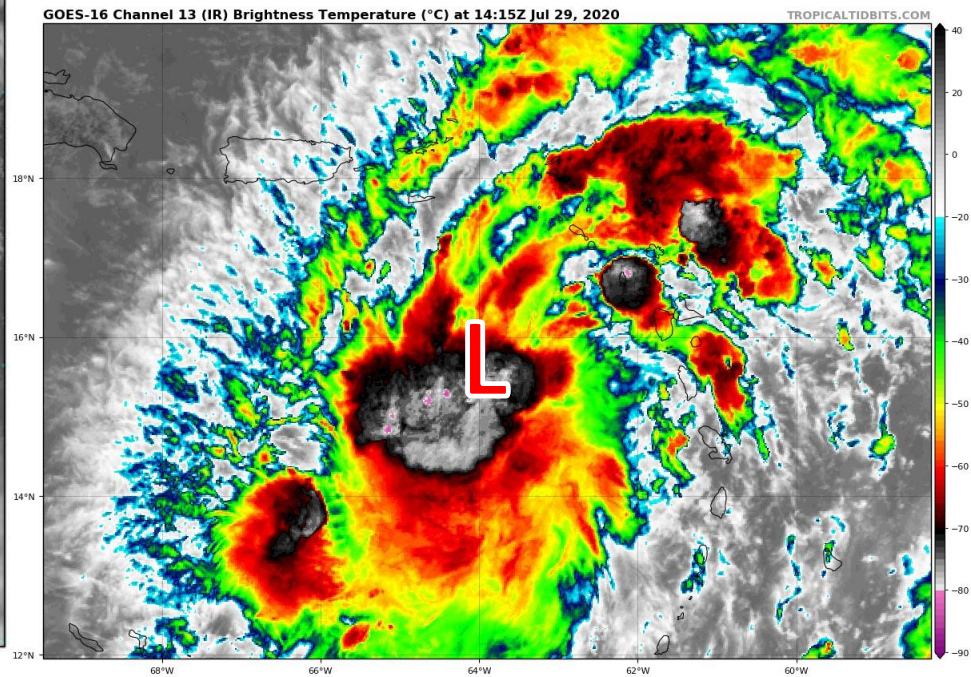
- The center of Potential Tropical Cyclone Nine is estimated to be about 240 miles southeast of San Juan, Puerto Rico.
- Maximum sustained winds are around 45 mph.
- Potential Tropical Cyclone Nine is racing to the west-northwest at 23 mph, and a west-northwest movement is expected over the next few days
- The system will likely make landfall on Hispaniola Thursday morning, then move near or over Cuba Friday, and approach the Florida Keys on Saturday

Satellite Imagery

Central Atlantic – PTC #9



The system continues to have a large, broad circulation. It continues to consolidate on the southwest side and a low pressure area has continued to form. However, Air Force Reserve Hurricane Hunters have not found a circulation well defined enough to designate it Tropical Storm Isaias.

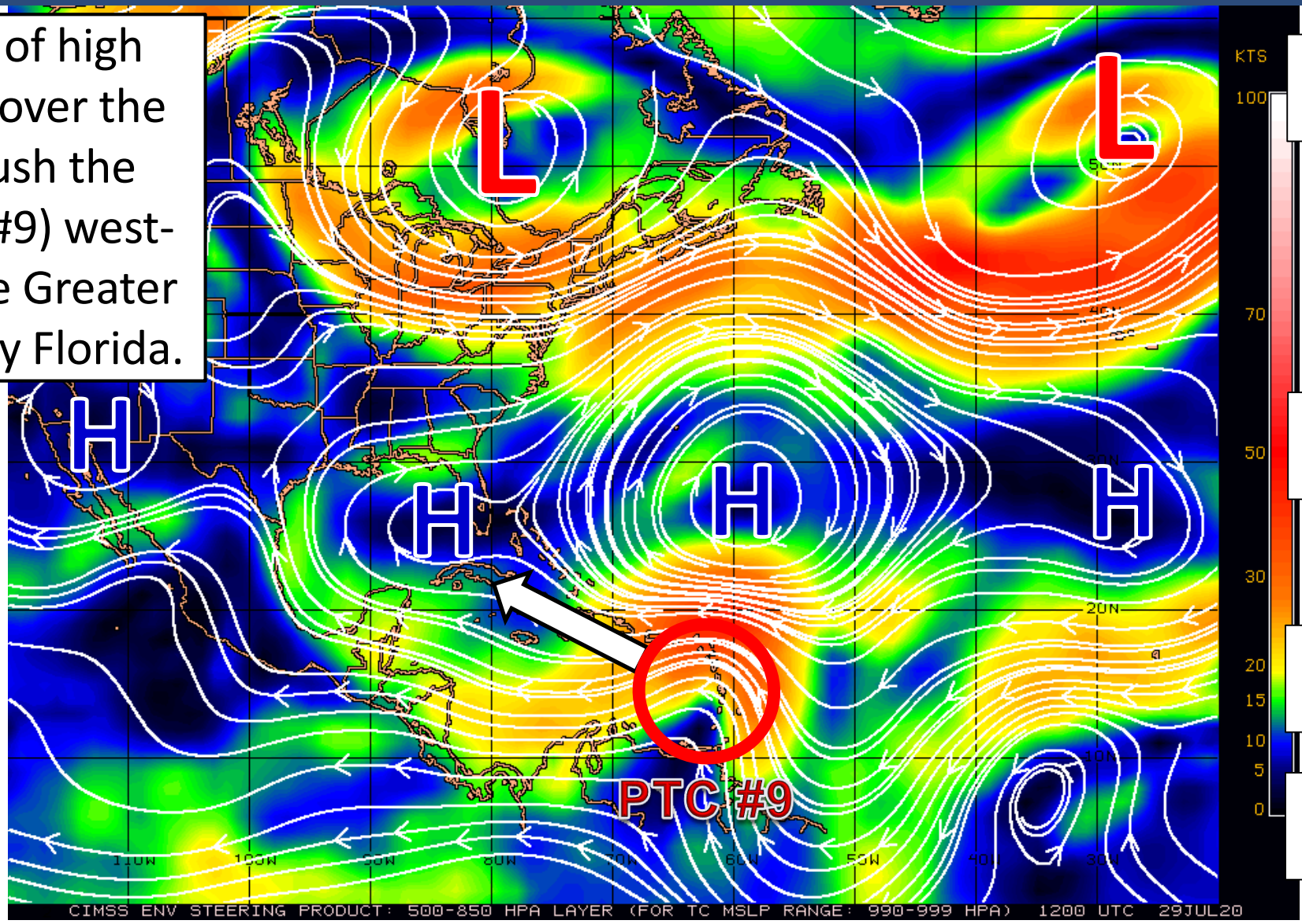


Steering Currents

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.

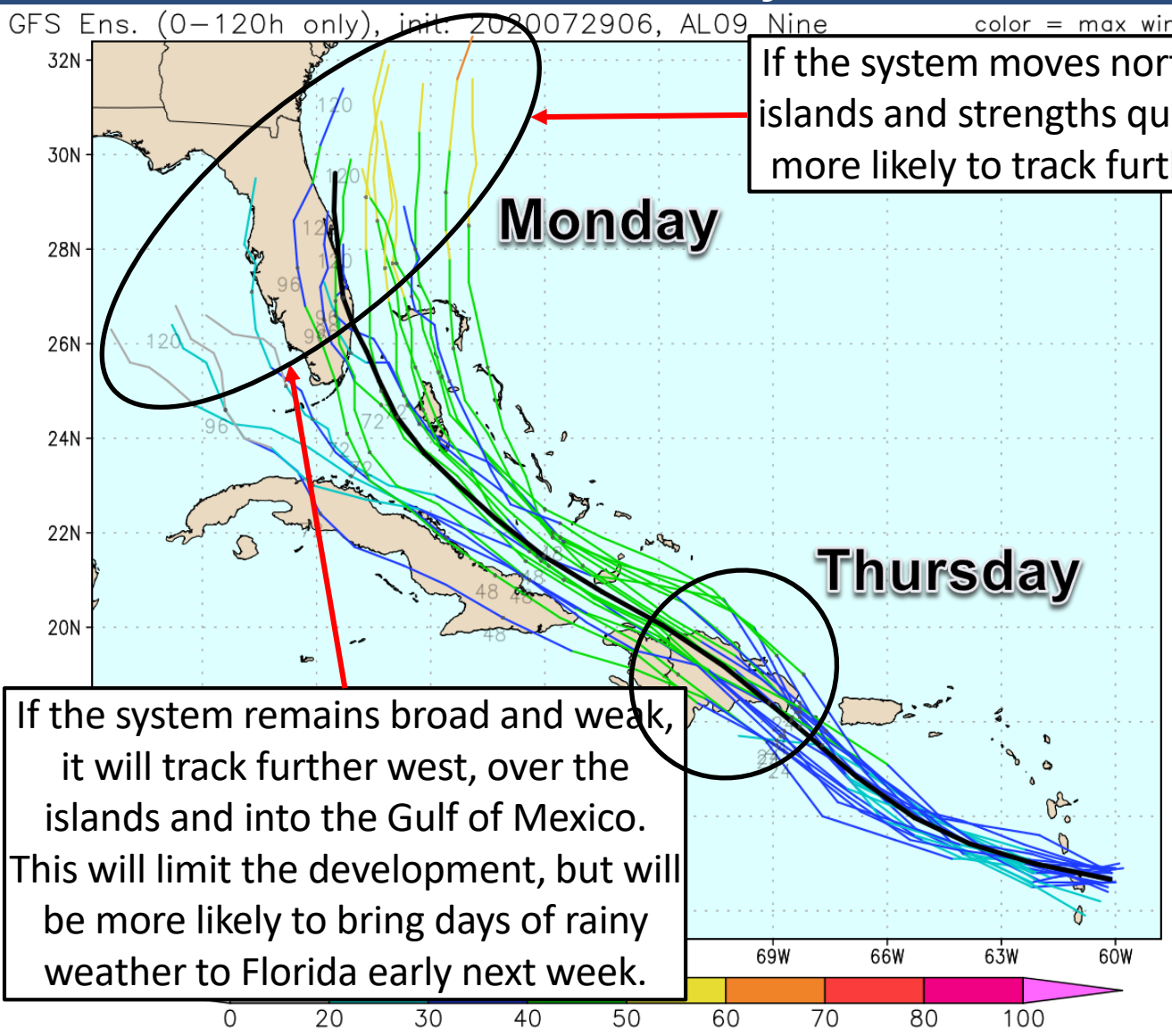
A large, strong area of high pressure is centered over the Atlantic. This will push the tropical system (PTC #9) west-northwest toward the Greater Antilles and eventually Florida.

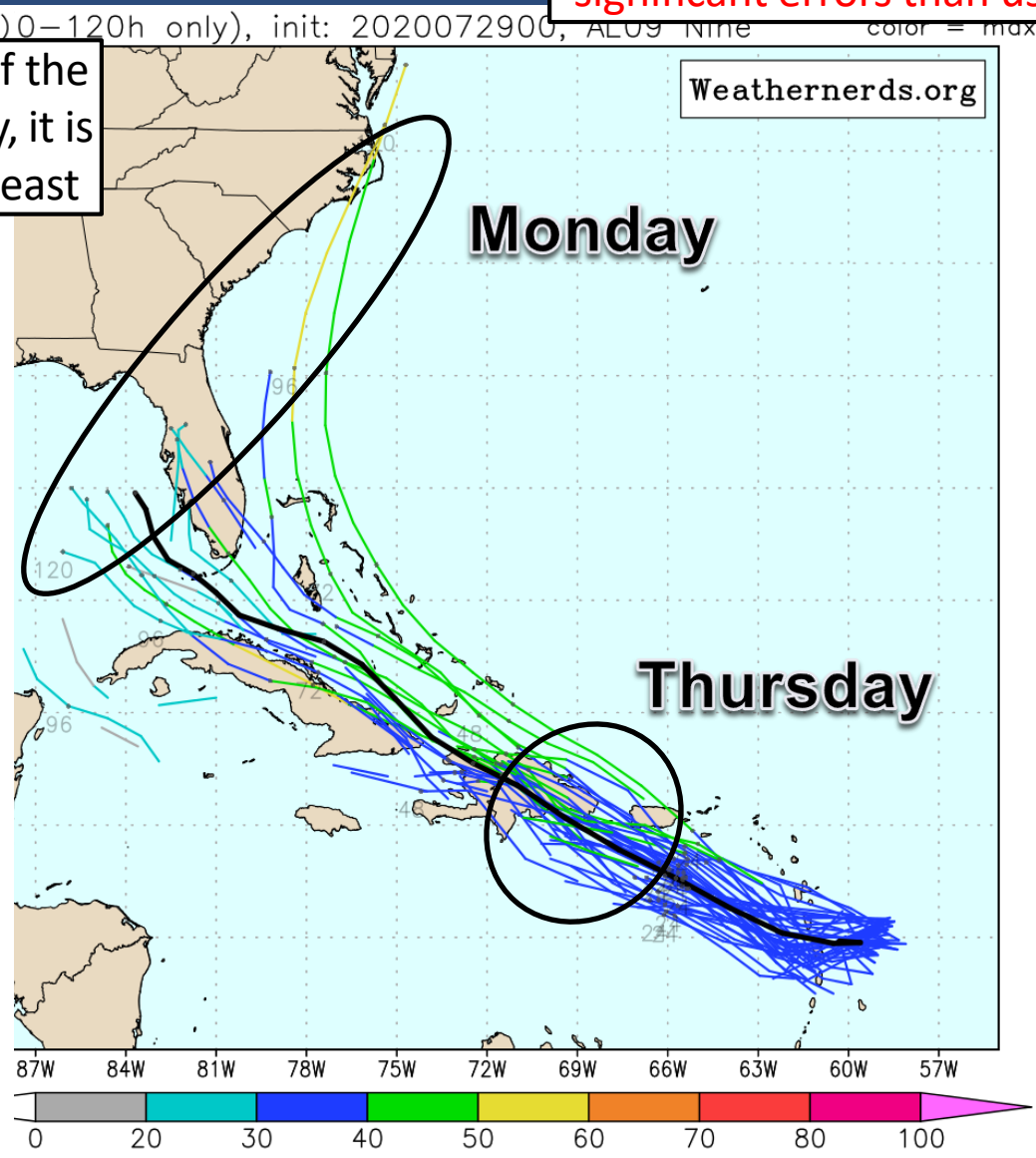


Model Forecast Tracks

Ensembles, Dynamical, and Statistical Models

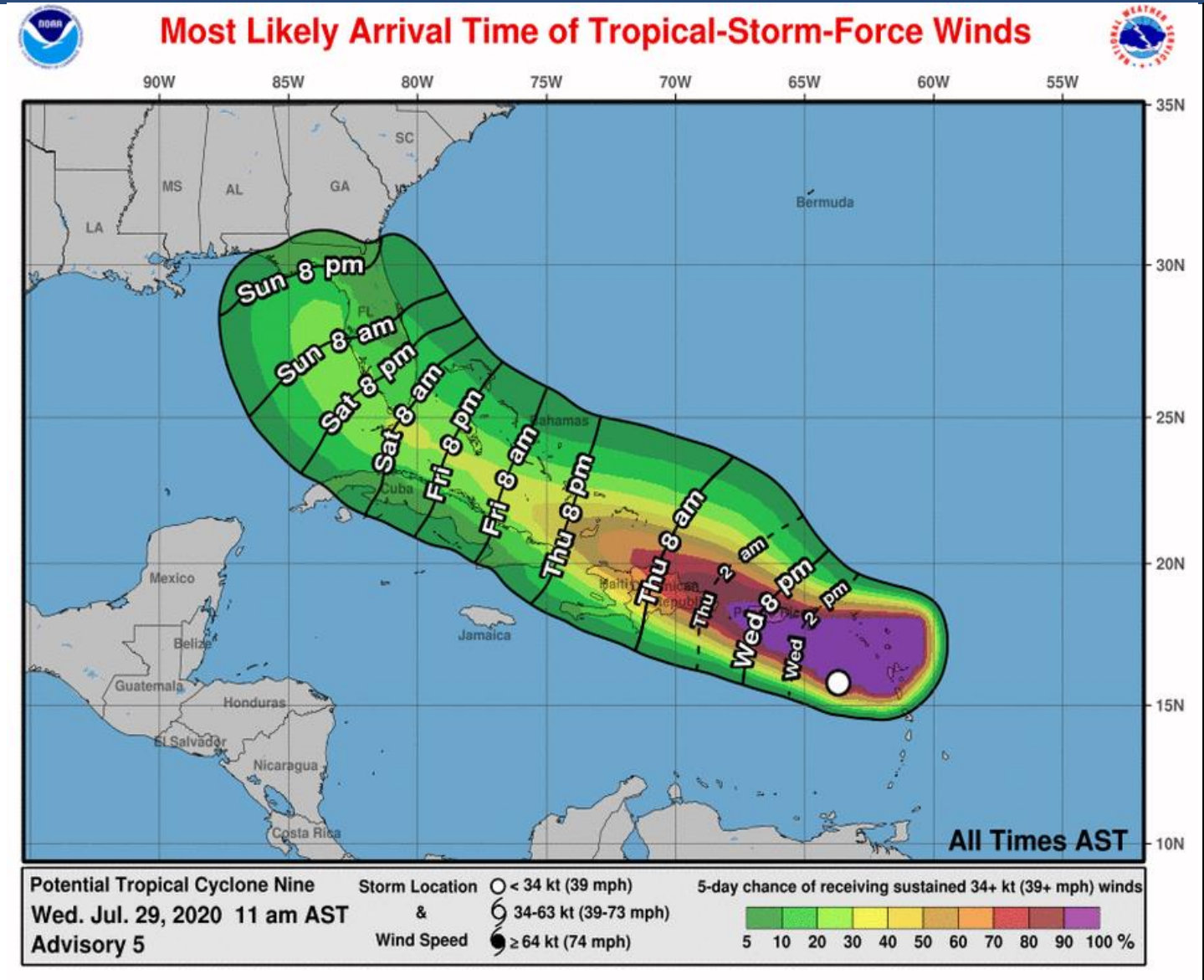
Until a more defined center forms, these models tracks are only guessing the starting location and are prone to more significant errors than usual





Time of Arrival & Wind Speed Probabilities

MOST LIKELY Time of Arrival of Tropical Storm Force Winds (>39 mph)



Key West: 25%
Miami: 14%
Naples: 26%
West Palm Beach: 17%
Ft. Lauderdale: 21%
Ft. Pierce: 13%
Daytona Beach: 8%
Orlando: 9%
Tampa: 19%
Jacksonville: 6%
Apalachicola: 13%
Tallahassee: 8%
Panama City: 10%
Pensacola: 3%

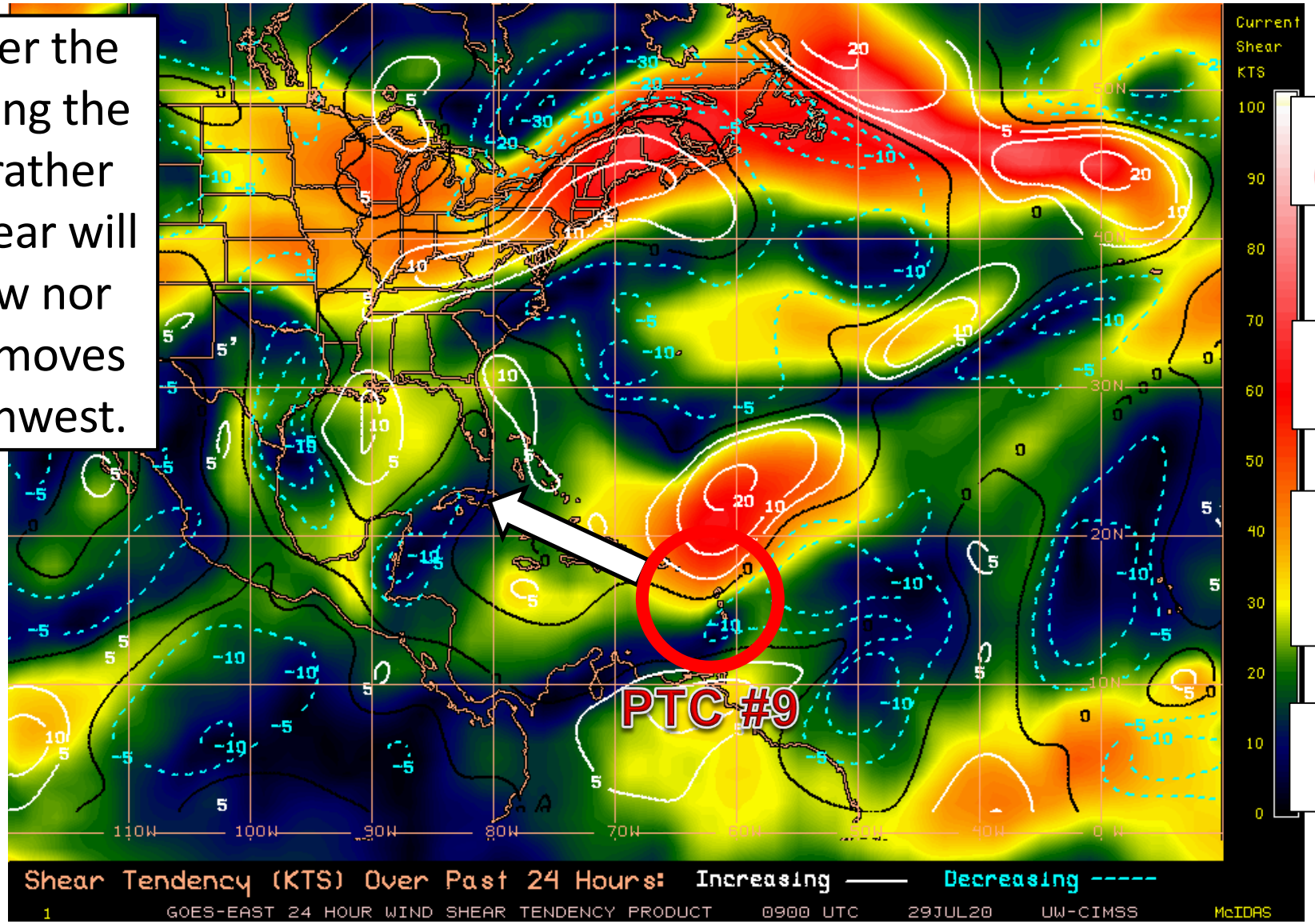
The most likely chance of tropical storm force winds starting will be Saturday Night in Southeast Florida, but could arrive AS EARLY AS Friday night if the track speeds up.

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.

Wind shear is high over the system, which is keeping the system in check and rather disorganized. Wind shear will not be particularly low nor particularly high as it moves toward the west-northwest.



HIGH Shear (Unfavorable)

HIGH Shear (Unfavorable)

MODERATE Shear (Neutral)

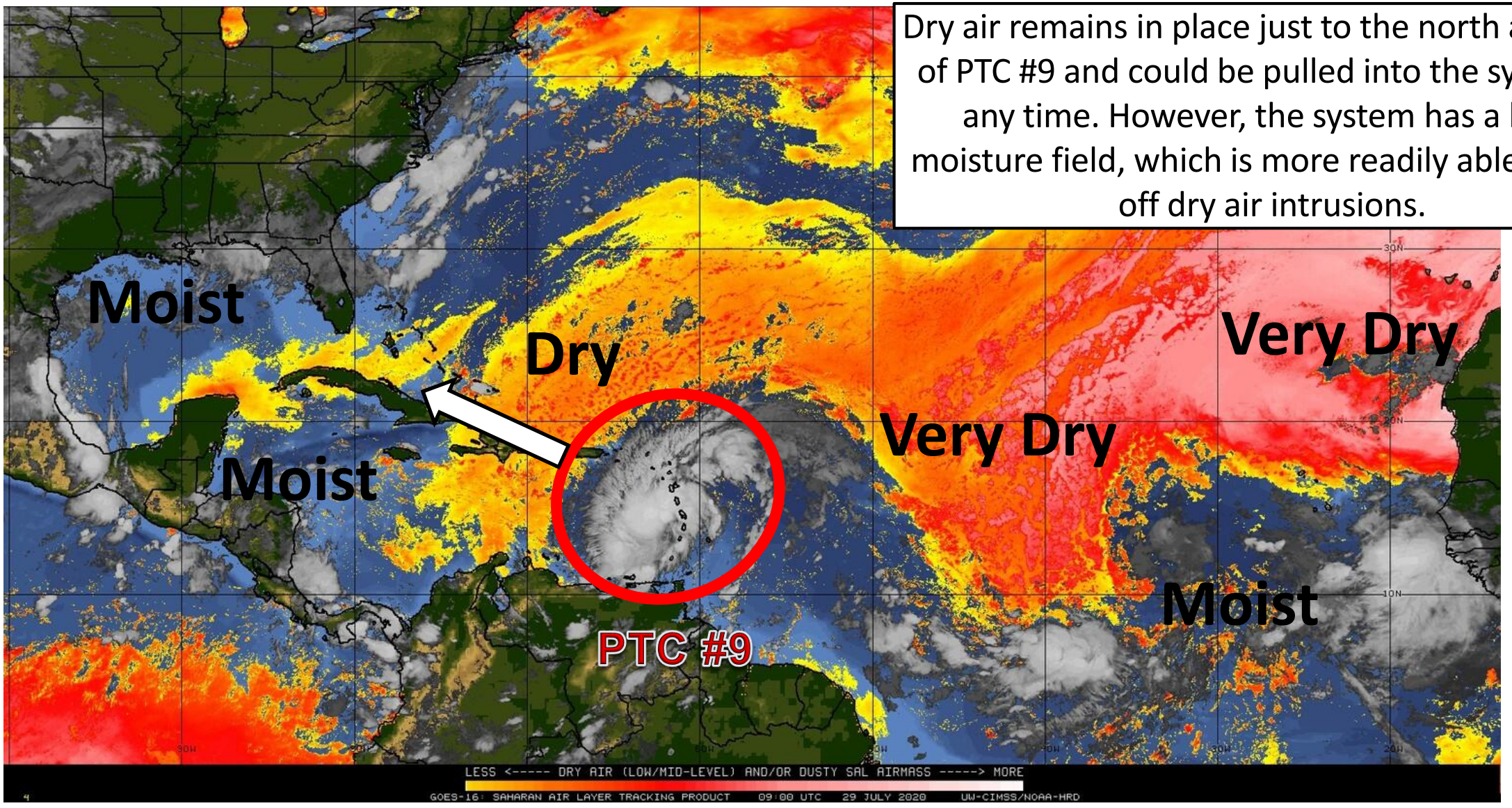
LOW Shear (Favorable)

Dry Air & Saharan Dust

Is the environment favorable for the system?

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

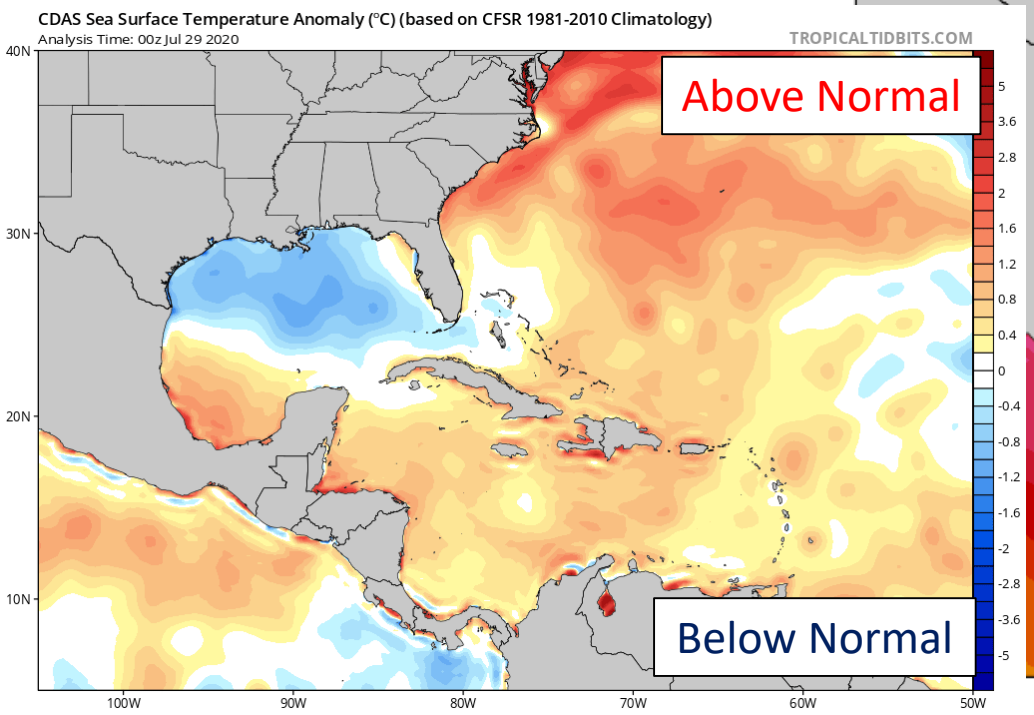
Dry air remains in place just to the north and west of PTC #9 and could be pulled into the system at any time. However, the system has a large moisture field, which is more readily able to fend off dry air intrusions.

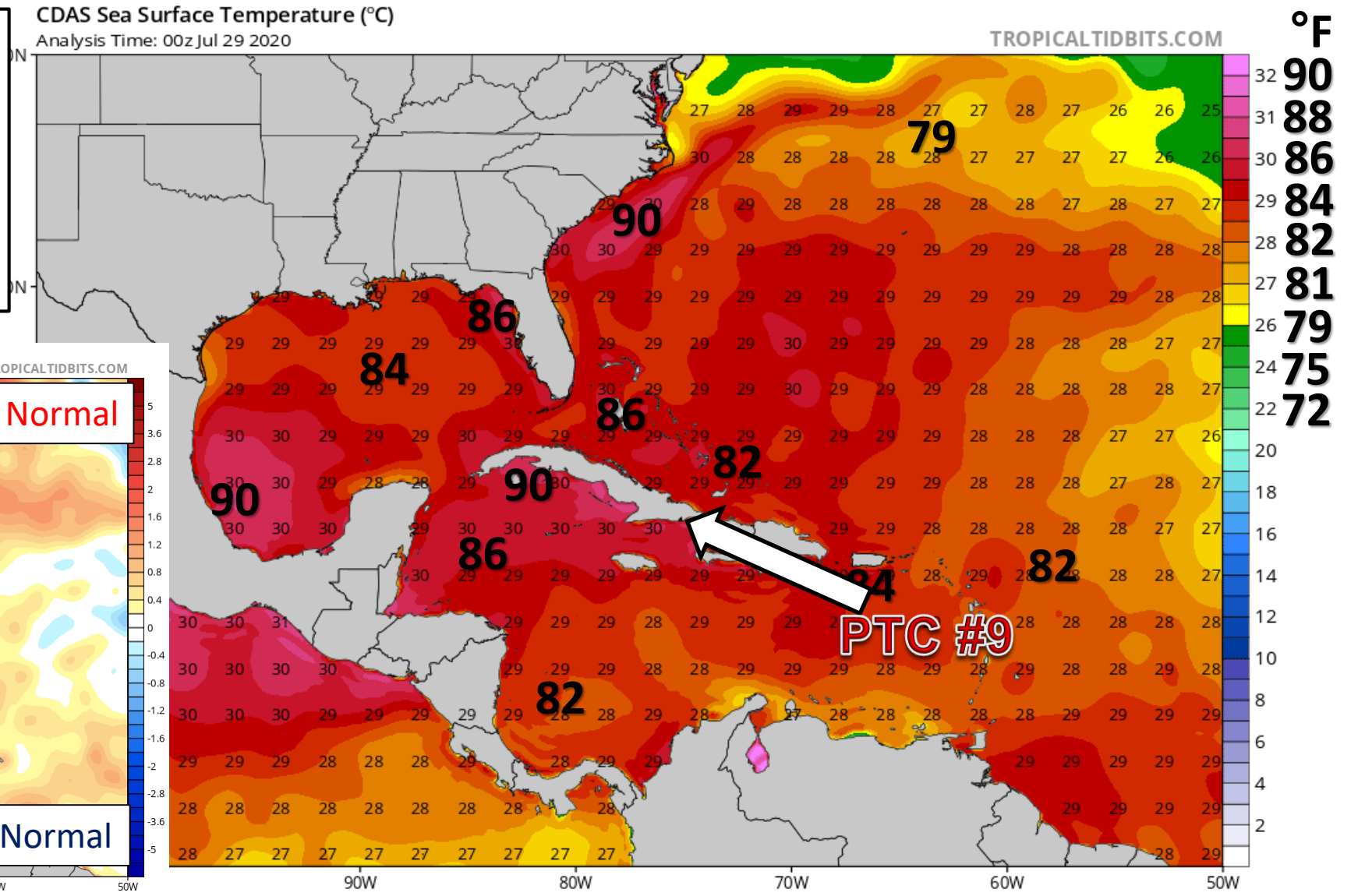


Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

Water temperatures are supportive for tropical development across the entire Atlantic basin, and will continue to warm as PTC #9 moves west. Water temperatures are above normal across much of the Atlantic.

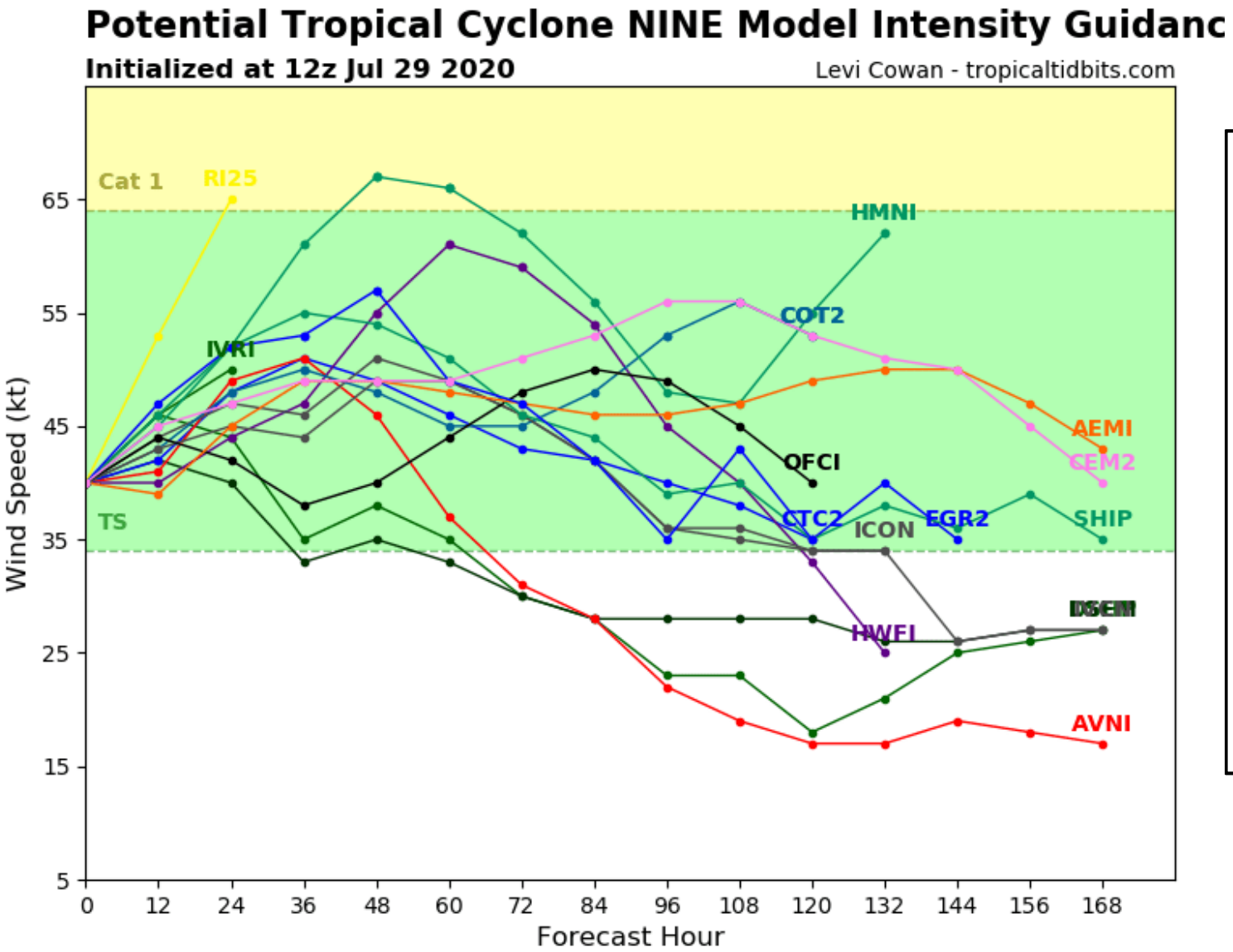




Model Forecast Intensity

Dynamical and Statistical Models – PTC #9

Until a more defined center forms, these models tracks are prone to more significant errors than usual



Gradual organization is forecast by most models as the system moves to the northwest.

Most models keep this PTC #9 at tropical storm intensity. However, this forecast would be highly dependent upon land interaction with Hispaniola and Cuba and future wind shear or dry air interactions.

Key Messages

From the National Hurricane Center

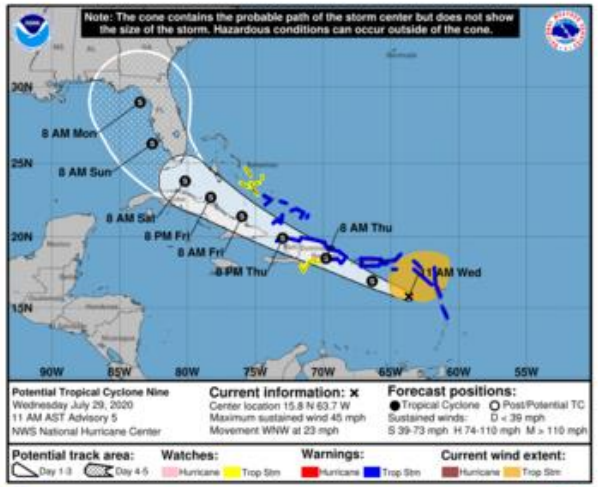
Key Messages for Potential Tropical Cyclone Nine

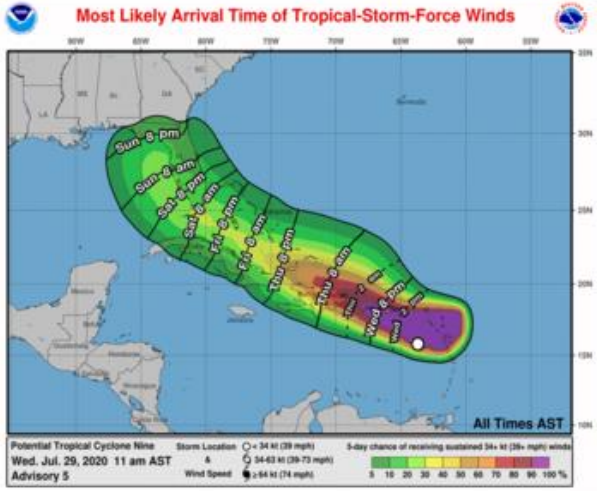
Advisory 5: 11:00 AM AST Wed Jul 29, 2020

1. Potential Tropical Cyclone Nine will produce heavy rains and potentially life-threatening flash flooding and mudslides across the northern Leeward Islands, the Virgin Islands, Puerto Rico, and the Dominican Republic.

2. Tropical storm conditions are likely across portions of the Leeward Islands, the Virgin Islands, and Puerto Rico today and will spread westward to portions of the Dominican Republic, Haiti, and the southeastern Bahamas and Turks and Caicos on Thursday and Thursday night. Tropical Storm Warnings are in effect for these areas. Do not focus on the details of the track forecast, as rainfall and wind hazards will extend far from the center of the system.

3. The details of the long-range track and intensity forecasts remain more uncertain than usual since the system does not have a well-defined center and it is expected to move near or over portions of the Greater Antilles later this week. However, this system could bring some rainfall and wind impacts to portions of Cuba, the central and northwest Bahamas, and Florida later this week and this weekend. Interests there should monitor its progress and updates to the forecast over the next few days.

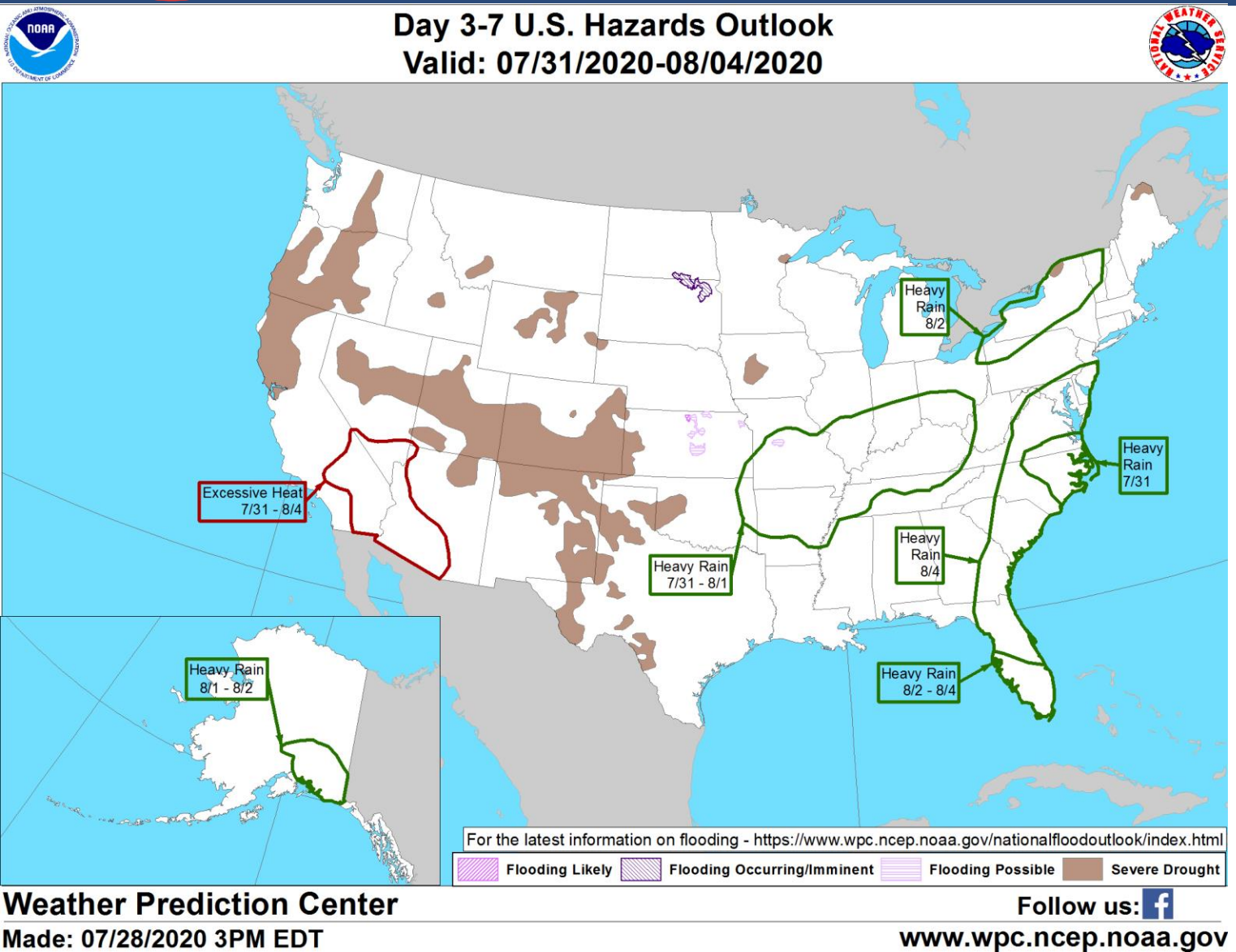




For more information go to hurricanes.gov

Hazard Outlook Next Week

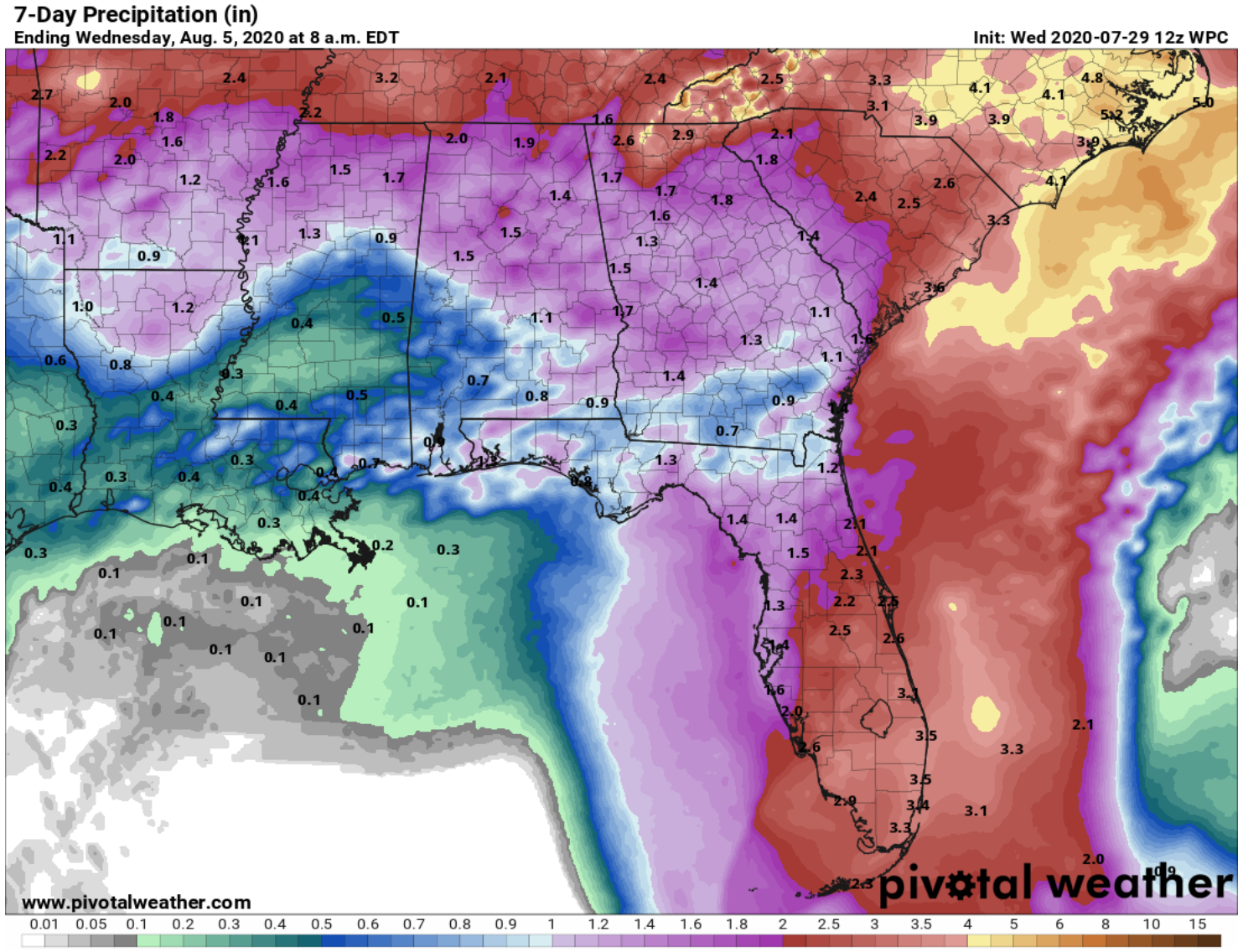
From the Weather Prediction Center



With the storm turning north and slowing down, multiple days of a heavy rain threat seem possible across the Florida Peninsula early next week.

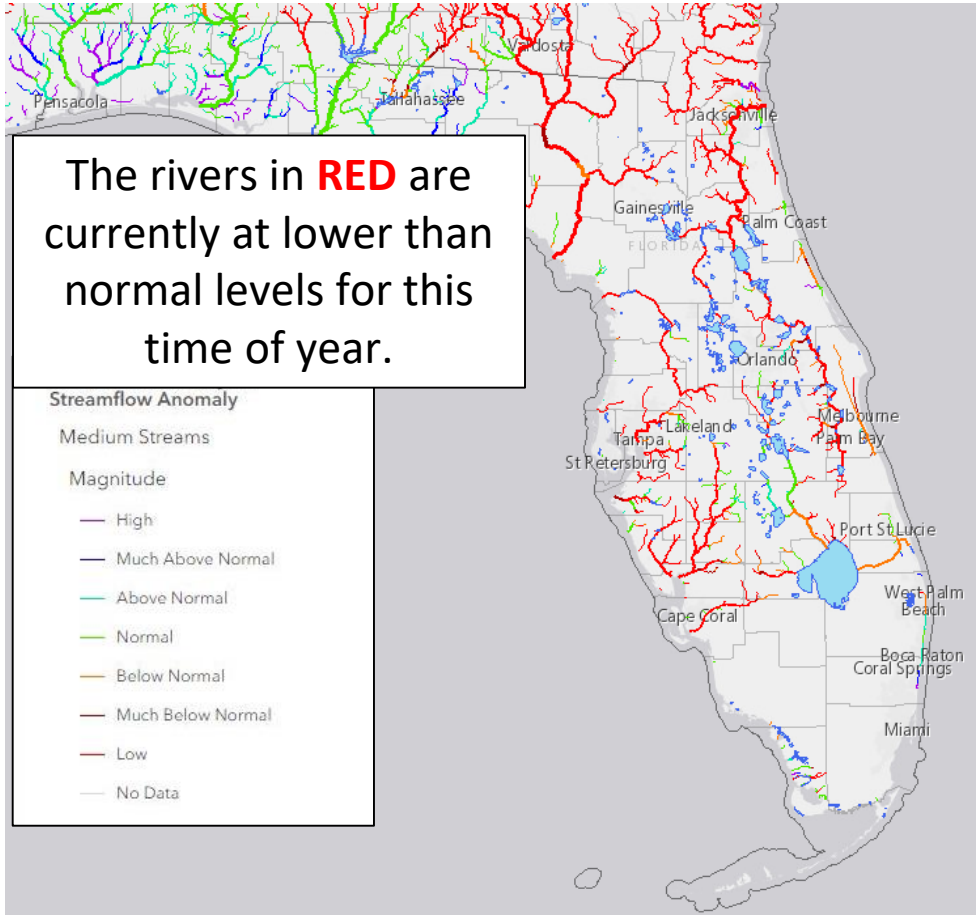
Forecast Rainfall Totals Next 7 Days

- About 2-5” of rain are possible south of I-4
- Localized totals double these amounts will be possible.
- Rainfall totals and consequent flash flood threat will be dependent on track of PTC 9 / Isaias



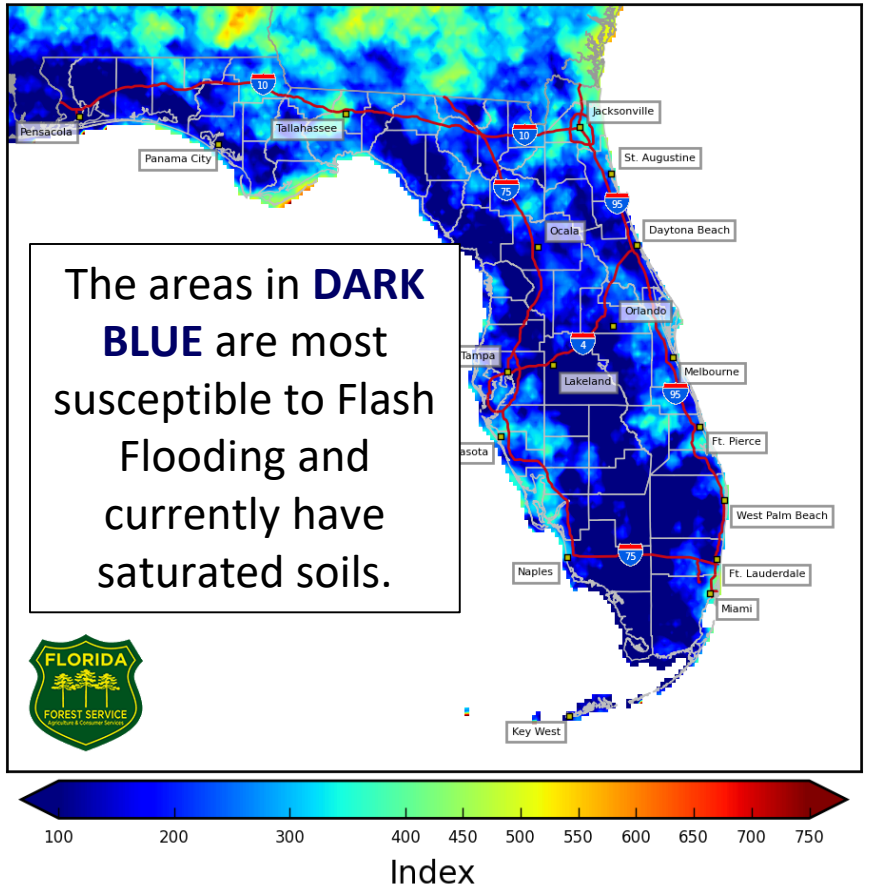
Streamflow Anomaly – Soil Moisture

KB Drought Index – Full Report from the Florida Forest Service



The rivers in **RED** are currently at lower than normal levels for this time of year.

4 km Resolution KBDI
Statewide
July 28, 2020



The areas in **DARK BLUE** are most susceptible to Flash Flooding and currently have saturated soils.

Streamflows are near the below normal across the entire Peninsula, but soils remain quite saturated. If heavier rainfall occurs, then flash flooding will be a concern.

Most rivers are able to handle 3-5” of rainfall, but flooding concerns may rise if heavier rainfall occurs.

Overall Summary

Potential Tropical Cyclone Nine

- Hurricane Hunters investigated the system this morning and still have not found a well-defined circulation. However, the system continues to organize and a tropical storm is still forecast to form today or tonight (90% chance).
- The next name on the list is Isaias (ees-ah-EE-ahs).
- The system will continue to move west and west-northwest over the northeastern Caribbean through the next day or so, arriving in Hispaniola Thursday morning, the Bahamas or Cuba by Friday, and the Keys by Saturday. Impacts may arrive before the center arrives
- Maximum sustained winds are near 45 mph, and some gradual strengthening is possible until landfall in Hispaniola.
- The track near the mountainous islands of the Greater Antilles and the potential for unfavorable wind shear and dry air over the next couple days makes the intensity forecast more uncertain than usual at the moment. The forecast keeps PTC #9 at tropical storm intensity after emerging from Hispaniola through its impact on Florida.
- The system is likely to slow down as it approaches Florida this weekend.
- Changes in the track and intensity forecast should be expected over the next few advisories as the system develops.

Overall Summary

Florida Outlook:

- **PTC #9 poses a direct threat to Florida starting as early as Friday night, but more likely beginning Saturday.**
- Heavy rainfall of 2-5” with localized totals possibly double that will be possible across Central & South Florida. It is too early to tell what rainfall impacts may occur in North Florida.
- Soils remain saturated from the fairly active wet season across much of the Peninsula, which could lead to an elevated flash flood threat this weekend and early next week.
- Streamflows in the Peninsula are running near to below normal, and it may take more than 4-6” of rain to cause issues along the rivers in the Peninsula.
- The threat of tropical storm force winds across the state is increasing, but exactly where tropical storm force winds occur is uncertain.
- If the storm passes to the west of the Peninsula, then there may be an isolated tornado threat across the Peninsula.
- It remains too early to get specific about storm surge impacts to the state, but this will continue to be monitored.
- Elevated surf and dangerous rip currents will be likely at most Florida beaches this weekend.

The next briefing packet will be issued this evening with the 5 PM advisory. 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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