



Tropical Update



8:30 AM EDT

Friday, September 23, 2022

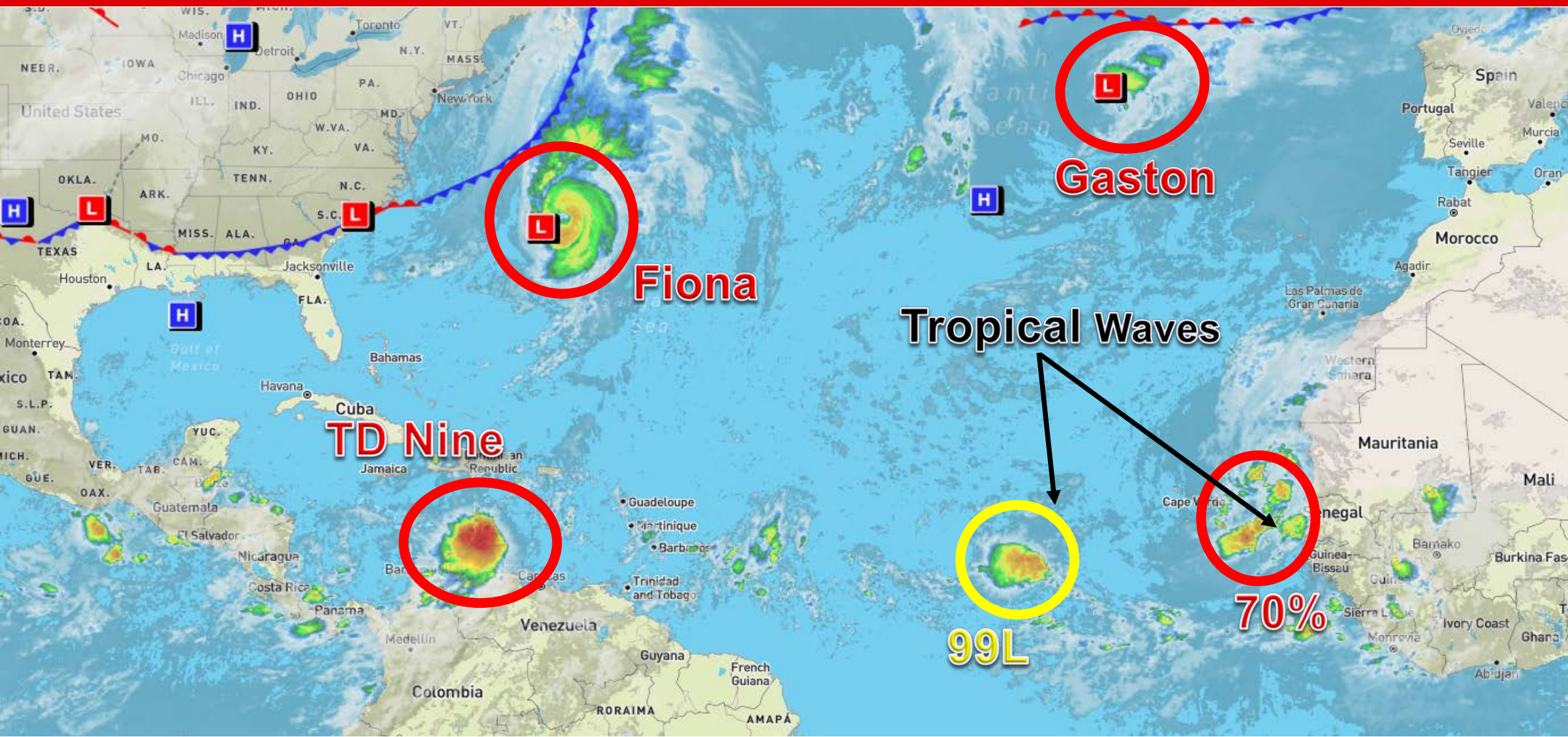
Tropical Depression Nine, Major Hurricane Fiona, Tropical Storm Gaston, & Eastern Atlantic Tropical Waves

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

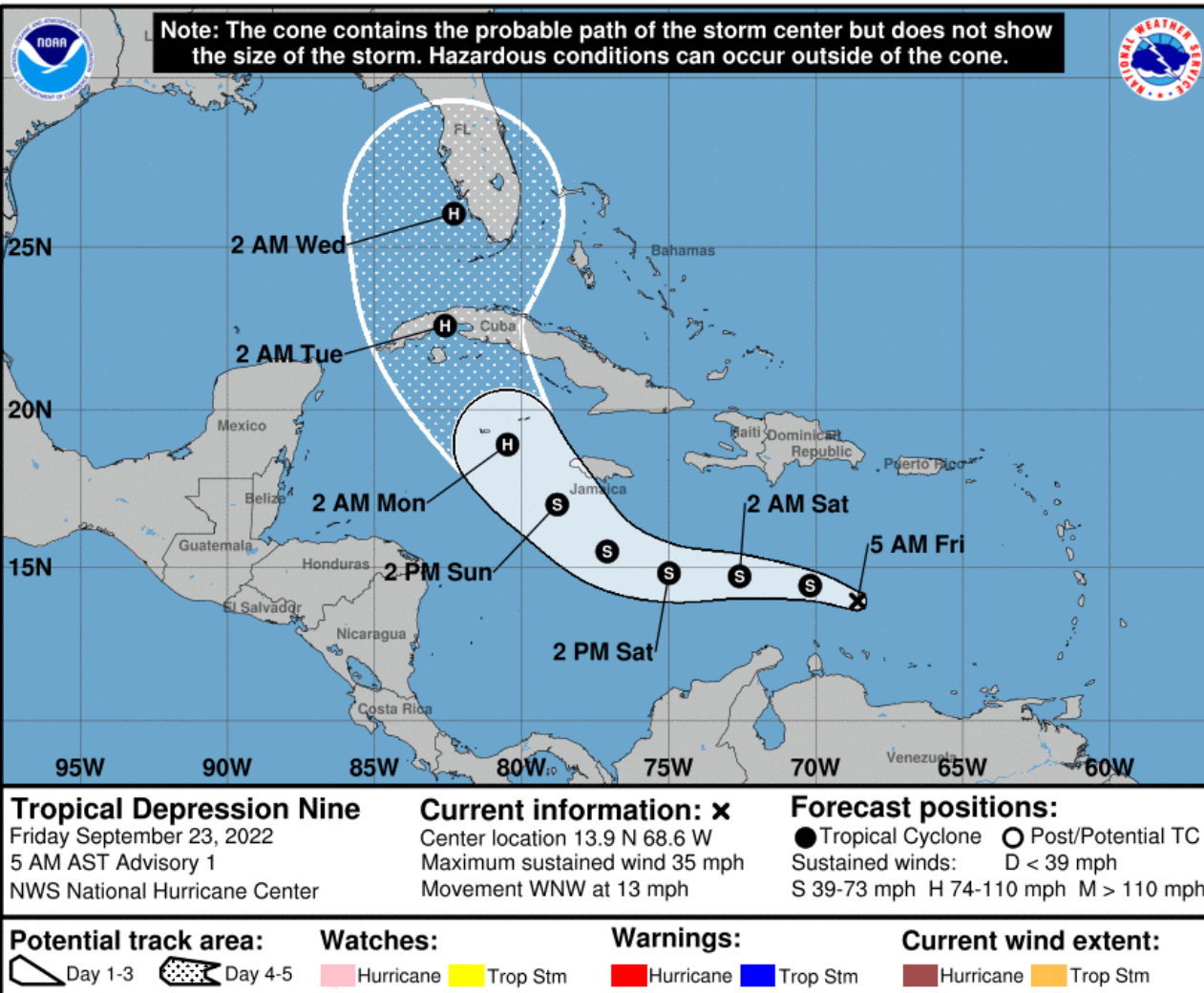
Chance of development: None Low Medium High





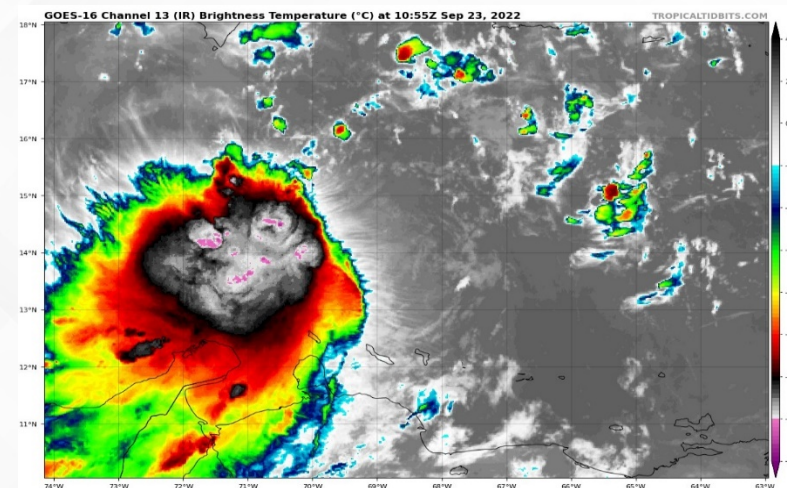
Forecast Cone and Satellite Imagery

Tropical Depression Nine ([LINK](#))



- **Location:** 615 miles east-southeast of Kingston, Jamaica
- **Maximum Sustained Winds:** 35 mph
- **Current Movement:** WNW at 13 mph
- **FL Watches/Warnings:** None

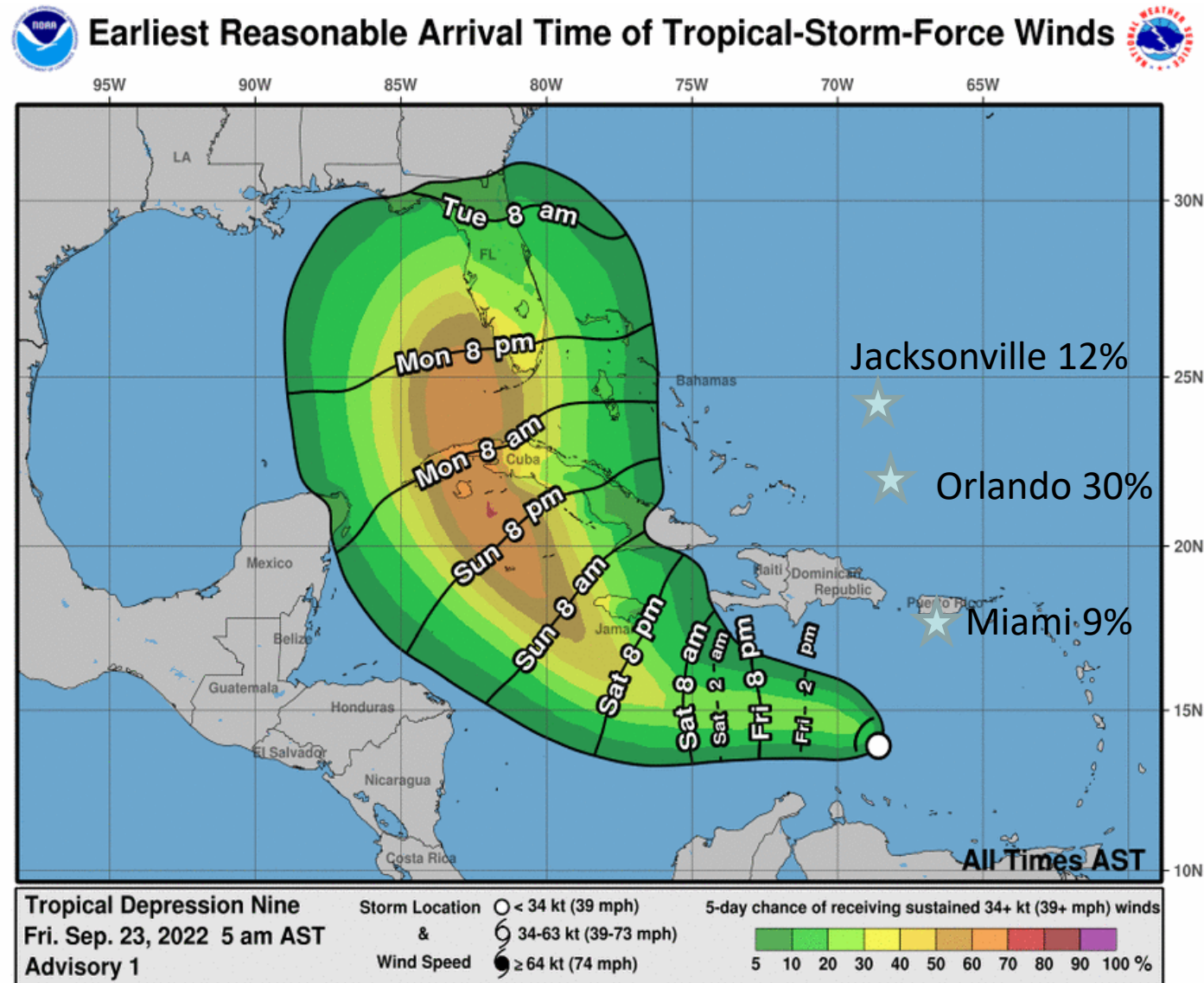
A turn more westward is forecast over the next day or so followed by a turn back to the west-northwestward and northwest by this weekend. Only slow intensification is forecast over the next day or so, followed by a more significant intensification over the weekend and early next week. *Tropical Depression Nine poses no threat to Florida over the next 3 days. Outer rain bands could begin to progress northward to South Florida and the Keys Monday, with tropical storm-force winds beginning as early as Monday afternoon and evening.*





Time of Arrival & Wind Speed Probabilities

EARLIEST REASONABLE Time of Arrival of Tropical Storm Force Winds (>39 mph)



Key West: 60%
Marathon: 53%
Homestead ARB: 30%
Miami: 29%
Naples: 53%
Fort Myers: 37%
Tampa: 36%
West Palm Beach: 34%
Orlando 22%

The most likely chance of tropical storm force winds starting will be Monday night into Tuesday along the Florida Keys and southern Florida Peninsula, but could be AS EARLY AS Monday afternoon and evening.



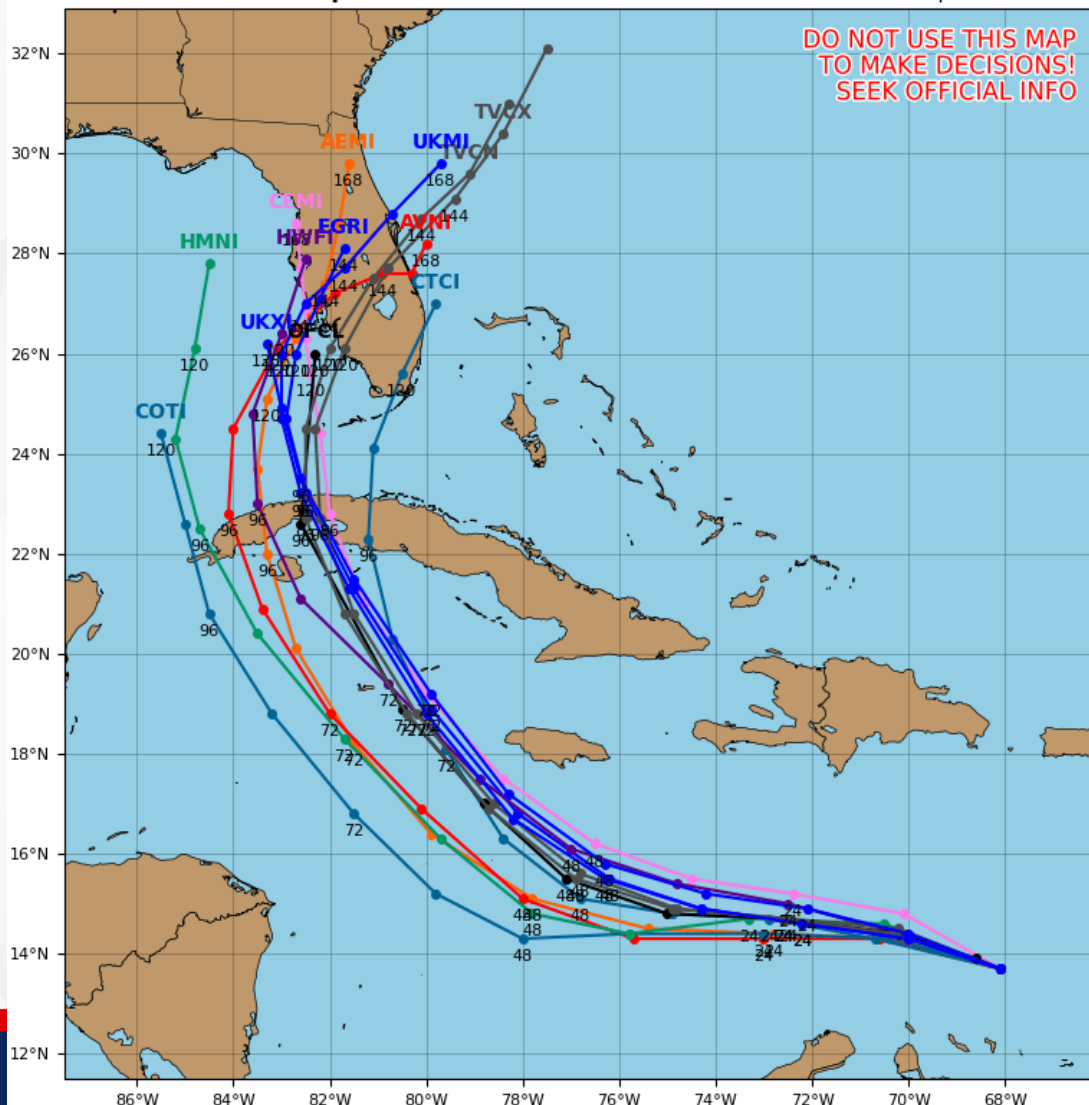
Model Forecasts – Next 5 Days

Tropical Depression Nine

Tropical Depression 09L Model Track Guidance

Initialized at 06z Sep 23 2022

Levi Cowan - tropicaltidbits.com



Computer models are in fairly good agreement, in the short-term, that TD #9 will bend back more westward under the influence of an area of high pressure over the southwestern Atlantic. Over the next 48 hours, we turn our attention to an upper-level disturbance over the eastern United States amplifying southward. Larger track spread begins to take shape after 48 hours and increases through the 4–5-day timeframe.

There is some model agreement that a turn back toward the west-northwest and northwest will take shape this weekend. TD #9 looks to approach the southern coast of Cuba in the next 3-4 days, and emerge over the southeastern Gulf of Mexico early next week.



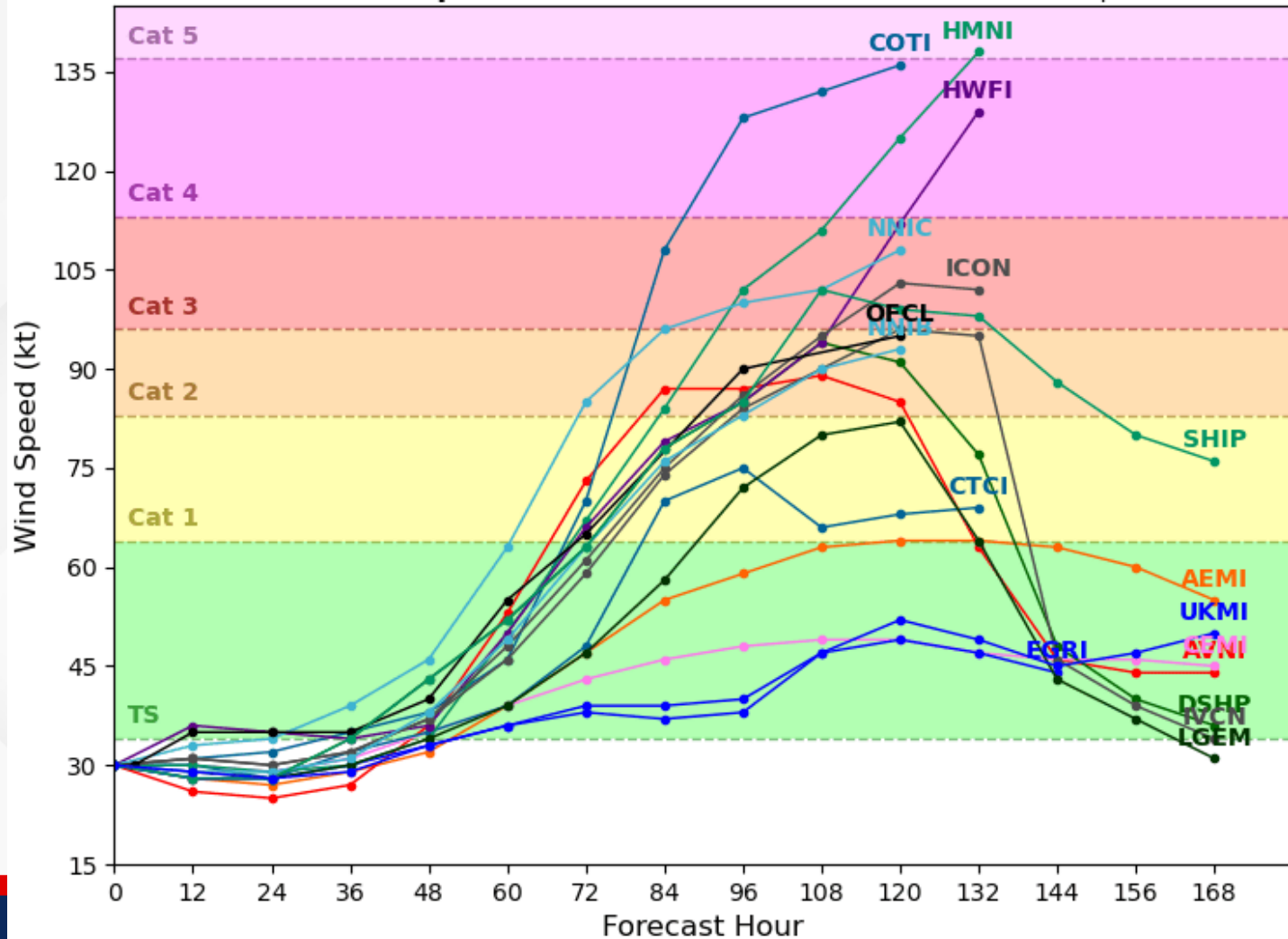
Model Forecast Intensity

Dynamical and Statistical Models

Tropical Depression 09L Model Intensity Guidance

Initialized at 06z Sep 23 2022

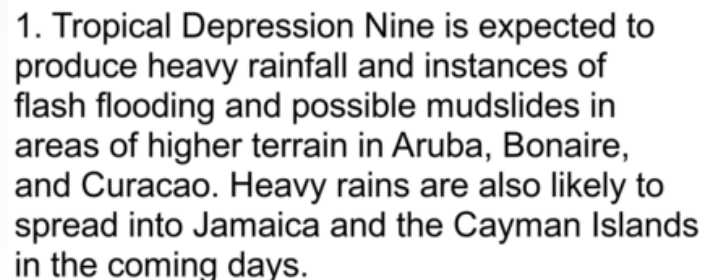
Levi Cowan - tropicaltidbits.com



Much of TD #9's shower and thunderstorm activity remain displaced off to the west-southwest of its center. This structure is due to persistent northeasterly upper-level winds. However, as TD #9 moves westward, computer models are in decent agreement that conditions will be favorable for some intensification.

Current model guidance shows that TD #9 may strengthen into a tropical storm in the next 36-48 hours, with additional strengthening thereafter.

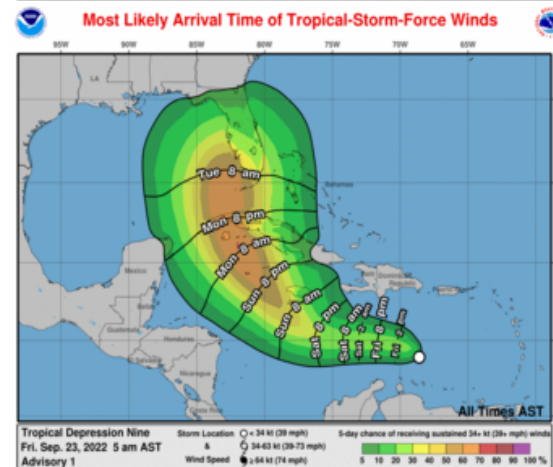
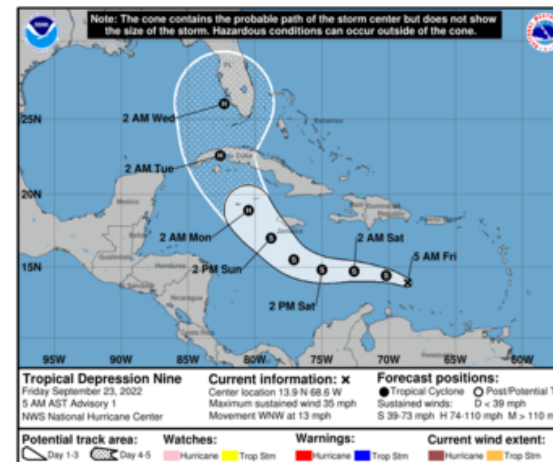
There is model disagreement with respect to the system's maximum forecast intensity as additional land interactions with Cuba may interrupt the system's strengthening early next week; however, there is agreement that TD #9 may have the ingredients necessary to strengthen into a hurricane in the next 72 hours.



2. The depression is expected to approach Jamaica and the Cayman islands as an intensifying tropical storm. Watches and warnings for these locations may be required in subsequent forecast cycles.

3. This system is forecast to approach western Cuba and enter the southeastern Gulf of Mexico by the end of the forecast period.

Interests in Cuba and those along the Eastern Gulf Coast of the United States should closely monitor this system, though at this juncture forecast uncertainty remains fairly high.

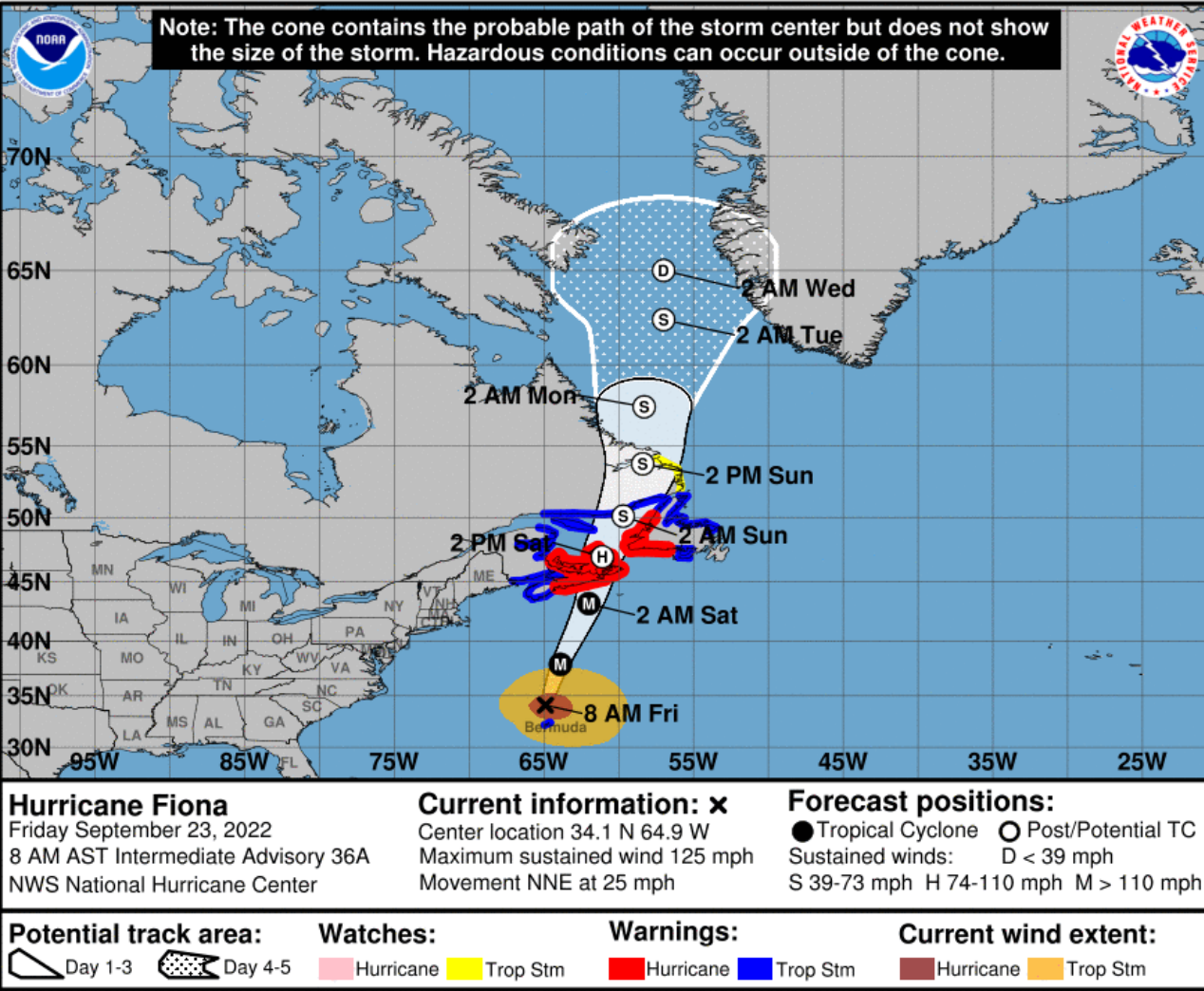


For more information go to hurricanes.gov



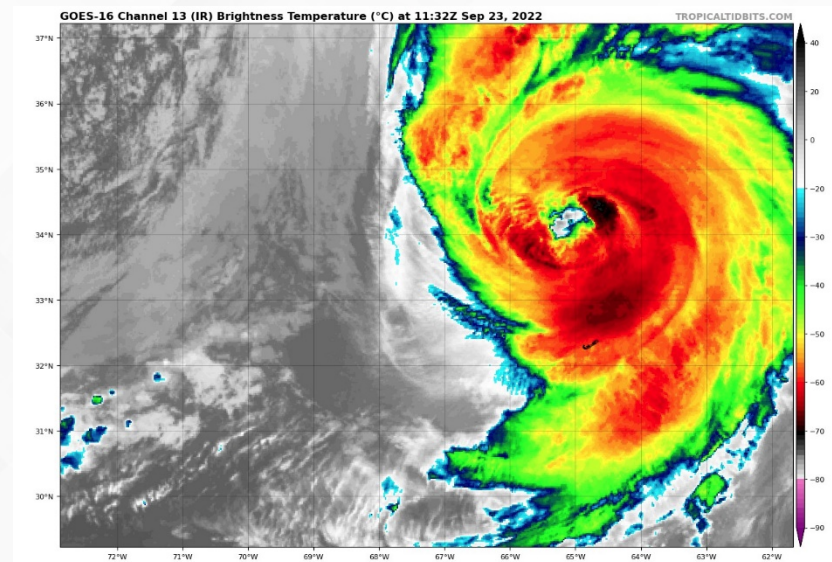
Forecast Cone & Satellite Imagery

Major Hurricane Fiona ([LINK](#))



- **Location:** 125 miles north of Bermuda
- **Maximum Sustained Winds:** 125 mph, Category 3
- **Current Movement:** NNE at 25 mph
- **FL Watches/Warnings:** None

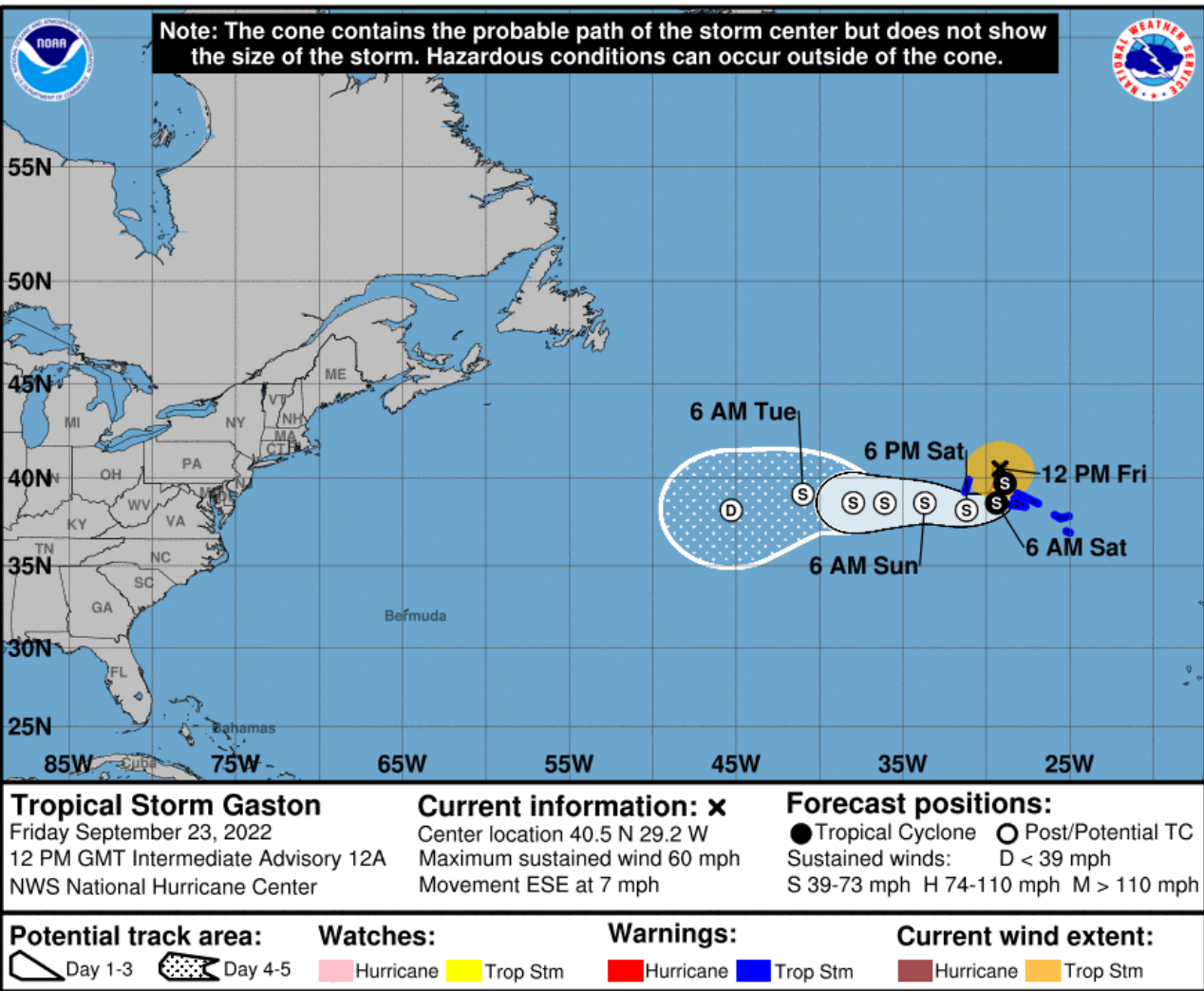
A north-northeastward or northeastward motion with an additional increase in forward speed is expected today. Some reduction in forward speed with a turn toward the north is forecast tonight through Sunday. Some slight weakening is forecast today, however Fiona is forecast to be a large and powerful post-tropical cyclone with hurricane-force winds when it approaches and moves over Nova Scotia. *Fiona poses no direct threat to Florida, but dangerous beach and boating conditions can be expected along the East Coast through the weekend.*



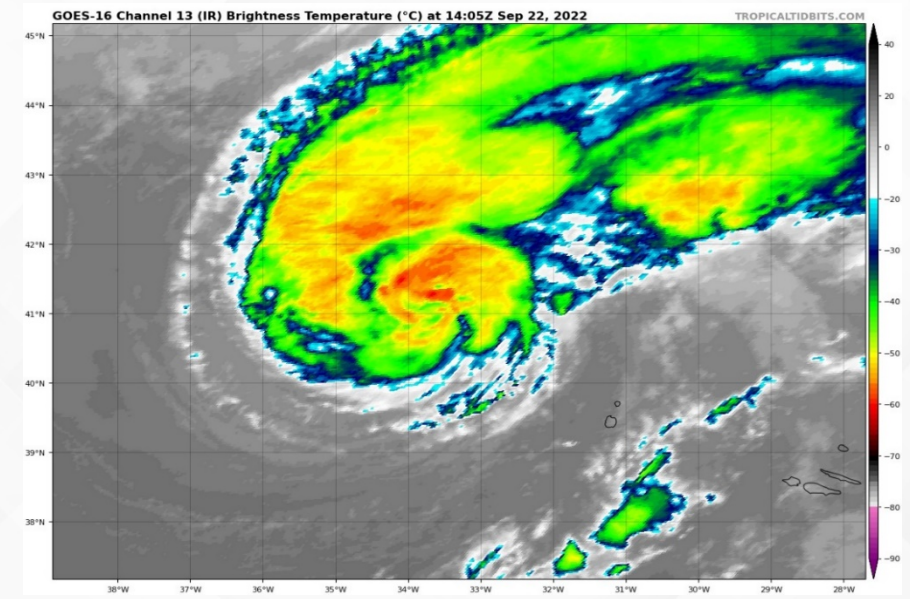


Forecast Cone and Satellite Imagery

Tropical Storm Gaston ([LINK](#))



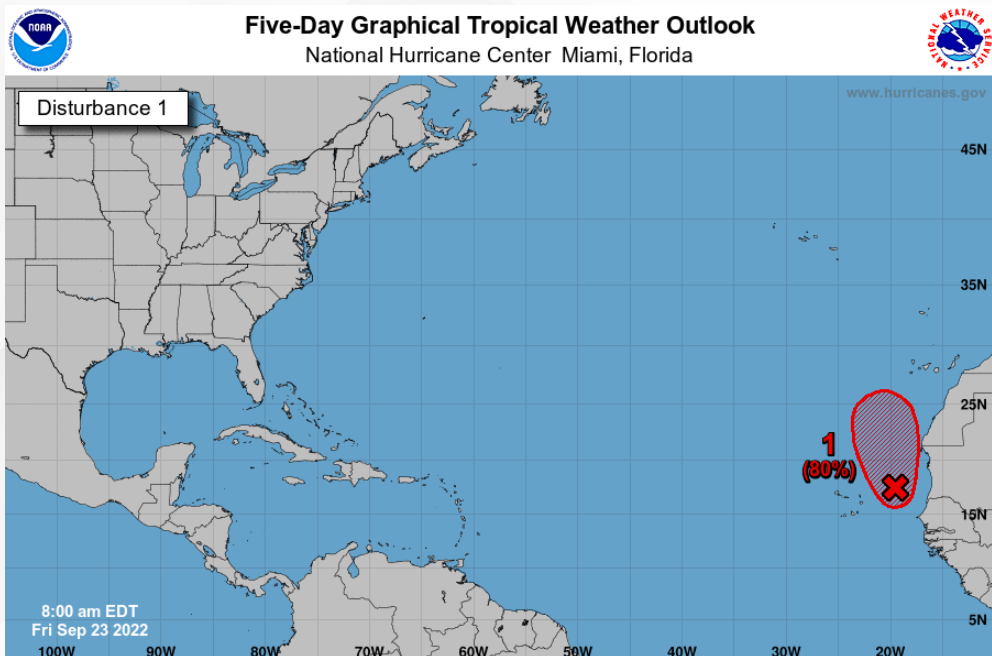
- **Location:** 135 miles north-northwest of the central Azores
 - **Maximum Sustained Winds:** 60 mph
 - **Current Movement:** ESE at 7 mph
 - **FL Watches/Warnings:** None
- A slower southeastward motion is forecast today followed by a southward, and then southwestward motion tonight and early Saturday. Gradual weakening is expected over the next few days. *Gaston poses no threat to Florida.*



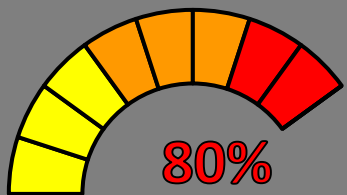
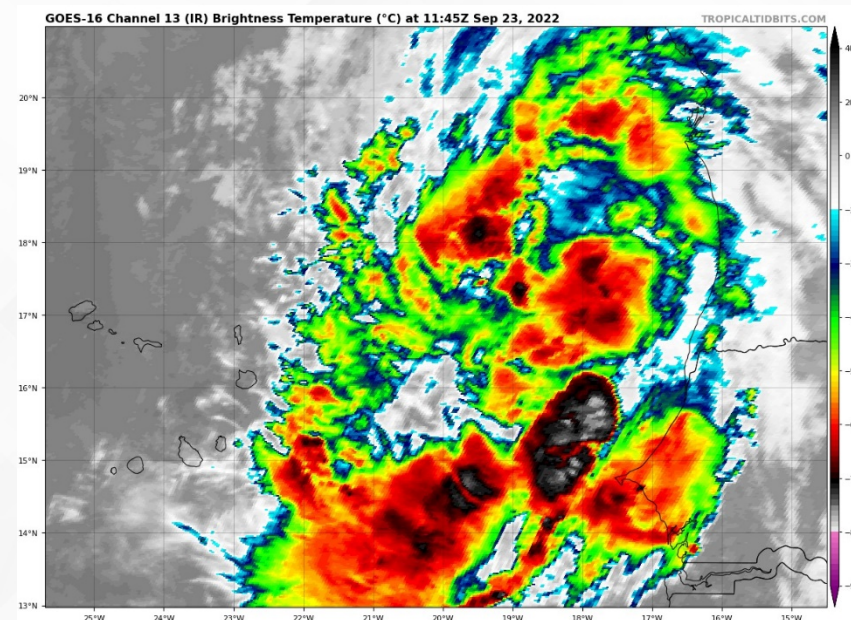


Tropical Weather Outlook

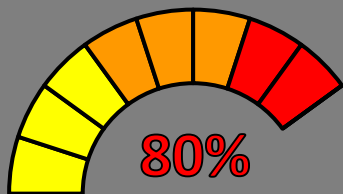
Disturbance 1 – Invest 90L ([LINK](#))



Shower and thunderstorm activity associated with an area of low pressure off the west coast of Africa is showing increased signs of organization. Environmental conditions are forecast to be generally conducive for further development during the next day or so, and a tropical depression is likely to form while the system moves northward at about 10 mph. *Invest 90L system poses no threat to Florida.*



48 Hour Formation



5 Day Formation

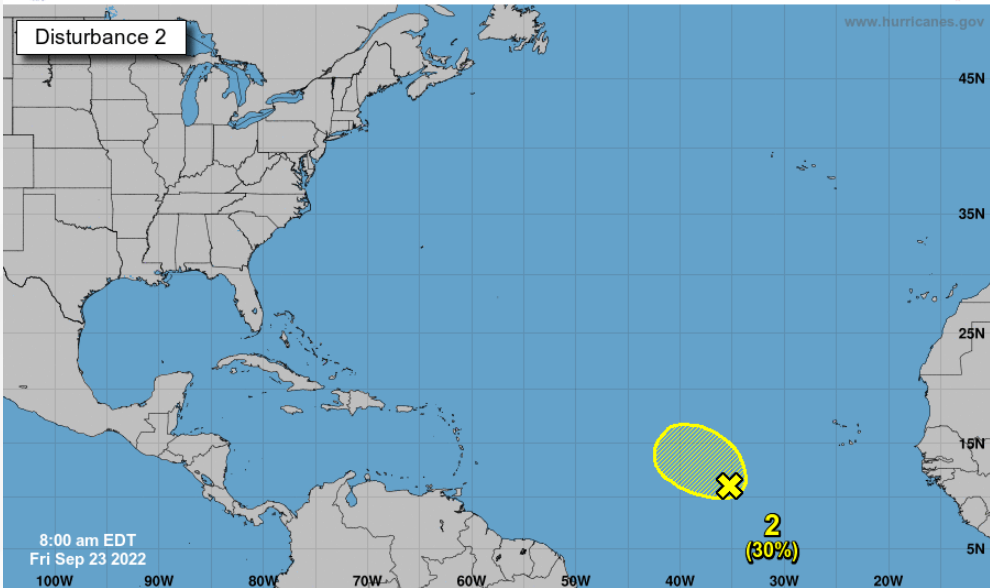


Tropical Weather Outlook

Disturbance 2 – Invest 99L ([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



20%

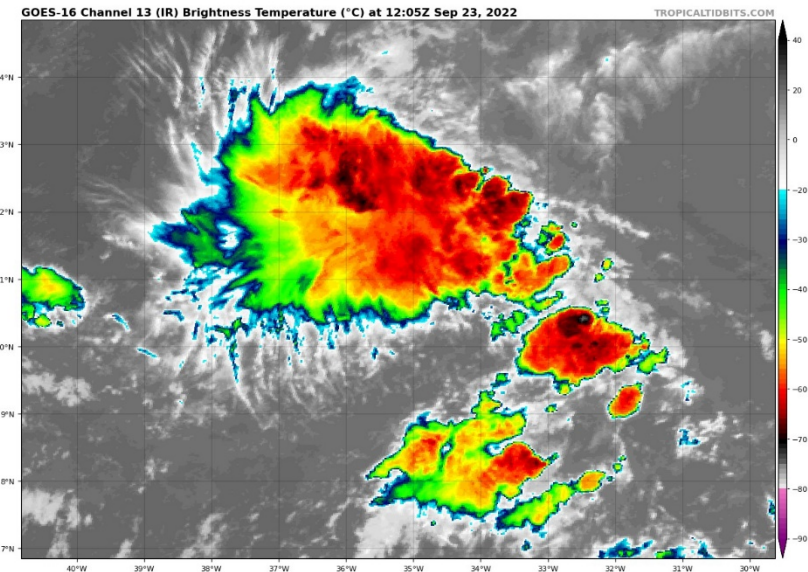
48 Hour Formation



30%

5 Day Formation

A broad area of low pressure located several hundred miles west-southwest of Cabo Verde Islands continues to produce some disorganized shower and thunderstorm activity. Despite marginal environmental conditions, some slow development of this system is possible over the next several days while it drifts northwestward or northward over the central tropical Atlantic. *Invest 99L poses no threat to threat.*





Summary

Tropical Depression Nine:

- At 5:00 AM Friday, Invest 98L strengthened into Tropical Depression Nine. The system is located 615 miles east-southeast of Kingston, Jamaica and moving west-northwestward at 13 mph.
- A turn more westward is forecast over the next day or so followed by a turn back to the west-northwestward and northwest by this weekend.
- Maximum sustained winds are near 35 mph, with higher gusts. Only slow intensification is forecast over the next day or so, followed by a more significant intensification over the weekend and early next week.

Major Hurricane Fiona:

- At 8:00 AM Friday, Fiona is located about 125 miles north of Bermuda and moving north-northeastward at 25 mph.
- A north-northeastward or northeastward motion with an additional increase in forward speed is expected today.
- Some reduction in forward speed with a turn toward the north is forecast tonight through Sunday.
- Some slight weakening is forecast today, however Fiona is forecast to be a large and powerful post-tropical cyclone with hurricane-force winds when it approaches and moves over Nova Scotia.

Tropical Storm Gaston:

- At 8:00 AM Friday, Gaston is located about 135 miles north-northwest of the central Azores and moving east-southeastward at 7 mph.
- A slower southeastward motion is forecast today followed by a southward, and then southwestward motion tonight and early Saturday.
- Gradual weakening is expected over the next few days.

Invest 90L:

- Shower and thunderstorm activity associated with an area of low pressure off the west coast of Africa is showing increased signs of organization.
- Environmental conditions are forecast to be generally conducive for further development during the next day or so, and a tropical depression is likely to form while the system moves northward at about 10 mph.

Invest 99L:

- A broad area of low pressure located several hundred miles west-southwest of Cabo Verde Islands continues to produce some disorganized shower and thunderstorm activity.
- Despite marginal environmental conditions, some slow development of this system is possible over the next several days while it drifts northwestward or northward over the central tropical Atlantic.

Florida Outlook:

- Fiona and Gaston pose no direct threat to Florida and there are no wind or surge watches in effect for Florida.
- However, ocean swells and persistent easterly flow from Hurricane Fiona will continue dangerous beach and boating conditions along Florida's East Coast into the weekend.
- Tropical Depression Nine poses no threat to Florida over the next 3 days. Outer rain bands from the system may make their way to southern Florida throughout the day Monday, with tropical storm-force winds beginning along the Florida Keys as early as Monday afternoon.
- The next names on the list are Hermine (*her-MEEN*) and Ian.

The next briefing packet will be issued Friday Afternoon. For the latest information, please visit the [National Hurricane Center website](#).



Tropical Update



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State Meteorological Support Unit

Florida Division of Emergency Management

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