

TROPICAL UPDATE 10 AM EDT Thursday, August 25, 2016 Invest 99L (80%) & Hurricane Gaston

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.

Atlantic Basin Satellite Image

12:00 25-AUG-2016 GMT @Copyright WSI Corporation http://www.wsi.com





Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida





Current Disturbances and Two-Day Cyclone Formation Chance: 🗱 < 40% 🗱 40-60% 🗰 > 60% Tropical or Sub-Tropical Cyclone: O Depression 🥑 Storm ∮ Hurricane ⊗ Post-Tropical Cyclone × Remnants



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida





Tropical Cyclone Formation Potential for the Five-Day Period Ending at 8:00 am EDT Tue Aug 30 2016 Chance of Cyclone Formation in Five Days: Low < 40% Medium 40-60% High > 60% X indicates current disturbance location; shading indicates potential formation area.



Steering Currents



If the system does not strengthen and remains weak, it will be influenced by the steering currents in the lower parts of the atmosphere. A weak 99L is likely to continue drifting west and keep a more southerly track overall. A more southerly track will take 99L close to South Florida and the Keys, but it would most likely be a minimal system. The high pressure over the southeastern U.S. will shift to the east northeast over the next few days and will establish an easterly wind pattern over and around Florida. A stronger 99L is more likely to take a more northern track and move to the east coast of Florida.

Invest 99L Model Track Guidance

Initialized at 12z Aug 25 2016

Levi Cowan - tropicaltidbits.com



Invest 99L Model Intensity Guidance

Initialized at 12z Aug 25 2016

Cat 5

Wind Speed (kt)

Levi Cowan - tropicaltidbits.com

Note: Statistical models (SHF5, SHIP, DSHP, LGEM) are based on historical relationships between hurricanespecific information, such as the location and time of year, and the behavior of historical hurricanes. Due to their simplicity, statistical models are generally less skillful

GFNI is the Navy's GFDL dynamical model, which is showing a Cat 3 hurricane, because of a northerly track that has the storm going to the east of Florida.



Sea Surface Temperatures Near 99L



Invest 99L Water Vapor Image

As 99L moves into the Bahamas it will enter an environment that is more conducive for development this weekend.

Dry air to the west of 99L and wind shear over the system are prohibiting development at this time.

Saturated

Dry

icron 1

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

Currently there is moderate wind shear affecting 99L, which is causing the storms to be pushed southeast. Once 99L moves into the southeastern and central Bahamas

environmental conditions there are more

favorable for development.

60 50 Gaston 30 20 10

Shear Tendency (KTS) Over Past 24 Hours GOES-EAST 24 HOUR WIND SHEAR TENDENCY PRODUCT

Increasing -1200 UTC

25AUG16

UW-CIMSS

Decreasing

Current Shear KTS 100

90

Current Rainfall Forecast



Forecast Rainfall Total – Next 7 Days



Hurricane Gaston 5 AM EDT Thu Aug 25 2016 Position 19.5 N 43.3 W Maximum Winds 75 mph Gusts 90 mph Movement NW at 17 mph Minimum Pressure 988 mb (29.17 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 1:38 PM UTC 9:38 AM EDT

wunderground.com



Summary:

- An area of low pressure associated with a tropical wave located near the Turks and Caicos Islands, designated as Invest Area 99L, remains disorganized with showers and thunderstorms displaced to the south and east of the apparent center of low pressure.
- Dry air to the west of the system and wind shear over the low is currently preventing any development from taking place.
- However, atmospheric conditions in the Bahamas are more favorable for development.
- As a result, the system has a 50% (medium) chance of development within 48 hours, but a 80% (high) chance of development through the next five days.
- Computer track models are in better agreement but still lack consistency, which is common with weak and developing systems.
- The range of possibilities is between a Southeast Florida impact and a northern track up the spine of the Peninsula to a track through the Florida Straits and into the central Gulf of Mexico. Most show a track in between those scenarios, with a track towards southern Florida and then a northern turn parallel to the western Peninsula.
- Also, there is still disagreement in the models regarding the possible intensity of 99L.
- 99L is currently producing tropical storm force winds in the associated thunderstorm activity. If these storms were to consolidate around the center of low pressure, then the system could be designated as a tropical storm.
- If that occurs, an official forecast track cone will become available, and details on any possible impacts to Florida will begin to be estimated.
- The next name on the 2016 Atlantic Storm name list is Hermine (pronounced Er-meen).
- We will continue to monitor the progress of this system for the possibility of tropical development and will have a better idea of where this system is headed and how strong it might be once it passes through the Bahamas in 24-48 hours.

- Elsewhere, Gaston was upgraded to the 3rd hurricane of the season overnight and as of 5am EDT Thursday, was located over 2,380 miles southeast of Florida with maximum sustained winds at 75 mph.
- Fluctuations in intensity are possible as it moves west-northwest to northwest over the next few days before turning north next week.
- No further areas of tropical cyclone development are expected in the Atlantic basin within the next five days.

Florida Outlook:

- At this current time, Invest 99L poses a *probable threat* to Florida.
- Models continue to struggle in forecasting both the possible track and intensity of this system so intense monitoring is recommended.
- Regardless of development, it does appear that portions of southern and central Florida may see at least an increasing threat of heavy rainfall and increase in rip currents as the system nears the Bahamas this weekend.
- Additional impacts may also occur depending on the exact path and intensity of the disturbance.
- Any impacts to the Big Bend and Panhandle are contingent on the eventual track and strength of 99L. Any specific impacts are considered to be low confidence at this time.
- Gaston does not pose a threat to Florida or the U.S.

Another briefing packet will be issued on Thursday morning. For more information on this system, please visit the NHC website at <u>www.nhc.noaa.gov</u>



TROPICAL UPDATE

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