

11 AM EDT Friday, August 23, 2019 Tropical Depression Chantal, Invest 98L (70%), Invest 99L (20%)

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



Steering Currents

KTS <u>Chanta</u> A large, sprawling high pressure area across the 0 0 Atlantic will cause 98L to move northwest over the next 24 hours then turn north and northeastward ahead of a cold front (pink line). 99L will continue moving west-northwestward over the next several days. Chantal is weakening while looping around in the north Atlantic.

> CIMSS ENV STEERING PRODUCT: 700-850 HPA LAYER (FOR TC MSLP RANGE: 1000-1010 HPA) 0900 UTC 23AUS19

20

15

10

5



North Atlantic Sea Surface Temperatures and Anomalies



Dry Air & Saharan Dust

Chantal

Drv

Very Dry

98L Dry Very

Moist

Dry

Abundant dry, dusty air continues across much of the Atlantic. Dry air is near and ahead of 99L, which will help inhibit development. Chantal is deeply embedded in dry air.

Moist

LESS <----- DRY AIR (LOW/MID-LEVEL) AND/OR DUSTY SAL AIRMASS ----> MORE



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



5N

20W

X > 60%



Surface and radar data indicate that a weak area of low pressure is located just east of the upper Florida Keys and the southeastern coast of the Florida Peninsula. This system is producing a large area of disorganized cloudiness and showers that extends primarily northeast of the center over the northwestern Bahamas and the adjacent Atlantic Ocean. The low is forecast to move near or over the Florida Peninsula through tonight, which should limit development during that time. Environmental conditions appear conducive for development once the system moves northeastward back over the Atlantic waters on Saturday. A tropical depression is likely to form this weekend or early next week while the low moves from near the coast of east-central Florida to offshore of the southeastern United States coast. Regardless of development, locally heavy rains are possible over the northwestern Bahamas and southern and central Florida through this weekend.

*Formation chance through 48 hours...medium...40 percent. *Formation chance through 5 days...high...70 percent.

30W

🔀 40-60%

Hurricane

40W

 \times < 40%

50W

Current Disturbances and Five-Day Cyclone Formation Chance: Tropical or Sub-Tropical Cyclone: O Depression Storm Post-Tropical Cyclone or Remnants



Invest 98L Satellite Image

Most of the showers and thunderstorms remain displace off to the east and northeast of the ____ center (yellow X). This system has become better organized since yesterday. However, land interaction over the next 24-48 hours will inhibit development until it moves back into the Atlantic this weekend.



Florida Radar as of 9:45 AM EDT

A few isolated showers have moved onshore along the East Coast. More showers and thunderstorms will develop this afternoon with the daytime heating. Additionally, the West Coast sea breeze will be pinned near the West Coast. The collision of the easterly flow from 98L and the West Coast sea breeze will allow for slow-moving thunderstorms across interior parts of the Peninsula this afternoon. Locally heavy rainfall is possible across much of South Florida today.

Forecast Weather Maps with Fronts



Invest 98L will move near or over the Florida Peninsula today and Saturday before moving offshore late Saturday or Sunday. At the same time, a cold front will move southward toward the Gulf Coast, which will steer 98L (or whatever becomes of the system) northeastward early next week, paralleling the U.S. East Coast. Locally heavy rainfall will be possible across Central and South Florida over the weekend.

Invest 98L Model Tracks

After 98L moves offshore of the Florida Peninsula later this weekend, it will continue to move northeastward between the U.S. East Coast and Bermuda next week.





Invest 98L Model Intensity Guidance



Rain Chances Into Early Next Week



Rain chances will increase in South Florida today as Invest 98L moves near or over South Florida. 98L will then turn northward on Saturday and northeastward Saturday night into Sunday and move back offshore into the Atlantic later this weekend. In addition to 98L, a cold front will also move southward into North Florida, enhancing rain chances across the northern part of the state.



Some locally heavier rainfall may occur, possibly resulting in some localized flooding given saturated soils from recent heavy rain events. There is a **Marginal Risk of flash flooding** (level 1 of 4) for South Florida today. Current forecasts are for 1-3" of rainfall over the next 3 days with locally higher amounts of 4-6". However, a more inland track would bring heavier rainfall onshore.

Rainfall Totals Next 3 Days



Model Forecast Rainfall Totals Next 2 Days



These two computer models show a slightly more westerly track with the heaviest rainfall right along the East Coast or just offshore. A more westerly or inland track could bring the heaviest rainfall onshore. These models show localized totals of 4-8" in some places.





Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida







Invest 99L Satellite Image

- Showers and thunderstorms have
- increased over the last 24 hours. The
- wave is also more
 organized than it was
 at this time yesterday.

Invest 99L Model Tracks

Invest 99L will generally move westward or west-northwestward over the next several days. If it maintains its organization, it could reach the Lesser Antilles in about 7

days.





Summary

Tropical Depression Chantal

• Tropical Depression Chantal is located about 765 miles west of the Azores and moving to the south-southeast at 7 mph. Maximum sustained winds are at 30 mph. Chantal will likely dissipate tonight.

Invest 98L

- A tropical wave just off the coast of the upper Florida Keys and Miami-Dade County has become better organized.
- The wave is expected to move near or over South Florida today and Saturday, then move back into the Atlantic later this weekend and parallel the U.S. East Coast through next week.
- 98L is likely to become a tropical depression over the weekend or early next week after moving back offshore over the Atlantic.
- This system has a 40% (medium) chance of formation during the next 48 hours and a 70% (high) chance of formation during the next 5 days.
- Regardless of development, locally heavy rainfall is possible across South and Central Florida over the weekend, which could lead to some minor flooding.
- If 98L becomes a tropical storm, the next name on the list is Dorian.

Invest 99L

- A tropical wave about 1400 miles east-southeast of the Windward Islands has become better organized over the last 24 hours.
- This system will continue to move westward or west-northwestward at 15 mph over the next several days and approach the Lesser Antilles in 5-7 days.
- This system has a 10% (low) chance of formation during the next 48 hours and a 20% (low) chance of formation during the next 5 days.

Florida Outlook:

- Tropical Depression Chantal poses no threat to Florida or the United States. Invest 99L also poses no threat to Florida or the U.S. at this time.
- Locally heavy rainfall is possible across South Florida today and across Central and South Florida over the weekend. As a cold front approaches, rain chances will increase further across much of the state.
- Current rainfall totals across the Peninsula are 1-3" this weekend with locally higher totals of 4" possible. However, if 98L moves farther inland, higher rainfall totals may occur along the East Coast.
- Due to antecedent saturated soil conditions across the Peninsula, some isolated flooding is possible, especially in low-lying, poor drainage, or urban areas. There is a Marginal Risk of flash flooding today in South Florida.
- Onshore winds may be occasionally gusty. This combined with waves around 2-3' may result in at least a moderate rip current risk for East Coast beaches this weekend.
- Due to recent rainfall, several Big Bend and West Coast rivers remain in minor flood stage, but have generally crested and are falling.

The next tropics packet will be issued this afternoon. For the latest information on the tropics, please visit the National Hurricane Center website at <u>www.hurricanes.gov</u>. For the latest flood updates, see the latest products from your local National Weather Service, the <u>Southeast River Forecast Center</u>, and the <u>Weather Prediction Center</u>.



TROPICAL UPDATE



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