

TROPICAL UPDATE



11:00 AM EDT Friday, October 2, 2020 Tropical Depression #25 Eastern Caribbean Wave (30%)

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.



Tropical Weather Outlook

Possible Areas of Development During the Next 5 Days (LINK)

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Steering Currents

What is Moving the Systems?

Color denotes the movement speed through the atmosphere and thin white lines denote direction. Tightly clustered white lines represent faster movement as well.





Wind Shear

Is the environment favorable for the systems?

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.

TD 25 is in an area of low wind shear for now, but it will increase as it moves northward. The eastern Caribbean is not as favorable due to strong wind shear, but conditions could become favorable in the central and western Caribbean.



Dry Air & Saharan Dust

Is the environment favorable for the systems?

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



GOES-16: SAHARAN AIR LAYER TRACKING PRODUCT 12:00 UTC 02 OCTOBER 2020 UW-CIMSS/NOAA-HR

Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

CDAS Sea Surface Temperature (°C)

Water temperatures are supportive for tropical development across the entire Caribbean, with very warm, deep water. The recent stretch of storms has cooled waters in the northern Gulf of Mexico and near Bermuda.



Official Forecast Track

From the National Hurricane Center – Tropical Depression #25



- The center of Tropical Depression #25 is located about 220 miles southeast of Cozumel, Mexico.
- Maximum sustained winds are at 35 mph.
 Some additional strengthening is forecast, and TD 25 will likely become a tropical storm by Saturday morning.
- TD 25 is moving northwest at 9 mph, and a gradual turn toward the north-northwest is expected this weekend, followed by a west to west-southwest turn early next week.
- TD 25 will likely be near the Yucatan Peninsula on Saturday



Western Atlantic

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:35Z Oct 02, 2020



TD 25 (red circle) is producing a large area of rather disorganized showers and storms. However, the circulation has become sufficiently organized to become a tropical depression.

TROPICALTIDBITS

A strong, early-season cold front has stalled over the southern Gulf of Mexico.

The cold front will shear TD 25 once it moves into the southern Gulf of Mexico, causing it to weaken and turn back toward the west or southwest.

The next wave (yellow circle) remains very disorganized.





Understanding WPC Excessive Rainfall Risk Categories

No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected
www.wpc.ncep.noaa.gov @NWSWPC	Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.
Flash flooding near me?	1.5.1.1	(A, C, A)	C654163	235 J 12
WEATHER PREDICTION CENTER				

- Some flash flooding will be possible over the next several days from a stalled front over South Florida.
- The front will nudge northward, bringing the heavy rainfall and flash flood threat northward over Central & Northeast Florida



Flood Watches in Effect

Martin & St. Lucie Counties:

Until 4 PM ET Friday

<u>Coastal/Metro Palm Beach,</u> <u>Coastal/Metro Broward, Coastal/Metro</u>

Miami Dade Counties:

Through Sunday Evening

Areas along parts of the Treasure Coast and Southeast Florida saw 3-7" of rain overnight. Additional heavy rainfall could result in flooding.





Rainfall Totals Next 7 Days *UNRELATED TO THE TROPICS*

7-Day Precipitation (in) Ending Friday, Oct. 9, 2020 at 8 a.m. EDT



- Little to no rainfall across the Panhandle and western Big Bend over the next week.
- Heavy rainfall is expected in the Peninsula from this weekend into early next week.
- A widespread 2-5" expected, locally 6-10"+.
- About 1" or less is expected in the eastern Big Bend and Northeast Florida

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Tropical Weather Outlook

Possible Area of Development During the Next 5 Days (LINK)



A tropical wave over the eastern Caribbean Sea is producing a large area of disorganized showers and thunderstorms, accompanied by locally heavy rainfall and gusty winds.

This wave is forecast to move westward at 15 to 20 mph during the next several days, and environmental conditions could become a little more conducive for development when the system is over the central or western Caribbean Sea early next week.

This system should be monitored early next week, but poses no immediate threat to Florida.

*Formation chance through 48 hrs...low...near 0% *Formation chance through 5 days...low...30%



Overall Summary

Tropical Depression #25 (former Invest 91L)

- Invest 91L has become sufficiently organized to be classified as a tropical depression.
- The center of Tropical Depression #25 is located about 220 miles southeast of Cozumel, Mexico, moving northwest at 9 mph.
- Maximum sustained winds are near 35 mph. Additional strengthening is forecast, and TD 25 will likely become a tropical storm by Saturday morning. The next name is Gamma.
- TD 25 will move north-northwestward this weekend then turn west or west-southwestward once it reaches the north end of the Yucatan Peninsula.

Lesser Antilles Wave

- Another tropical wave over the eastern Caribbean Sea will quickly move westward over the next few days.
- Conditions could become slightly more favorable for development in the central or western Caribbean early next week.
- This system has a 0% (low) chance of formation over the next 48 hours, but a 30% (low chance) in 3-5 days.

Florida Outlook:

- Neither TD 25 nor the wave in the eastern Caribbean will have direct impacts to Florida over the next 5 days, but they should continue to be monitored.
- A stalled cold front and the nearby tropical moisture from TD 25 will create a several day stretch of high rain chances across the Florida Peninsula
- Flood Watches are in effect along the Treasure Coast into Southeast Florida from St. Lucie County to Miami-Dade County.
- A widespread 3-6" of rain has already fallen with localized totals of 6-12". An additional 3-6" of rainfall with locally 6-10"+ is expected through the weekend into next week
- The heavy rainfall and flood threat will spread northward into Central Florida this weekend into next week. 3-5" of rainfall will be possible across Central and Northeast Florida.

The next briefing packet will be issued this afternoon if TD 25 is upgraded to a tropical storm. Otherwise, the next packet will be issued on Saturday. For the latest information on the tropics, please visit the National Hurricane Center website at <u>www.hurricanes.gov</u>.



TROPICAL UPDATE



Created by:

Cameron Young, Assistant State Meteorologist <u>Cameron.Young@em.myflorida.com</u> State Meteorological Support Unit Florida Division of Emergency Management

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