

10:00 AM EDT Tuesday, May 31, 2022 Southern Gulf of Mexico Low (60%) Impacts Possible Late This Week

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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 Area of Development During the Next 5 Days (LINK)



A large and complex area of low pressure is expected to develop near the Yucatan Peninsula and the northwestern Caribbean Sea in a couple of days, partially related to the remnants of Agatha from the eastern Pacific. Despite strong upper-level winds over the area, this system could become a tropical depression while it moves northeastward over the southeastern Gulf of Mexico late this week.

Regardless of development, locally heavy rainfall is possible across southern Florida and the Florida Keys by the end of the week. This system should be monitored throughout the week. The first name on the list is Alex.

*Formation chance through 48 hours...low...10%

*Formation chance through 5 days...medium...60%

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.



Anything that develops near the Yucatan Peninsula is going to be pulled east or northeast toward Cuba, the Bahamas, and South Florida late in the week. The exact track will depend on where the system specifically develops.

FDEN



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 will be high across the Gulf of Mexico over the next couple of days (as denoted by the red colors) which looks to prevent significant development of this system.

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Dry Air & Saharan Dust

Is the environment favorable for the system?

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



GOES-16: SAHARAN AIR LAYER TRACKING PRODUCT 12:00 UTC 31 MAY 2022 UW-CIMSS/NOAA-HR

Sea Surface Temperatures & Anomalies

30 86

²⁹ 84

82

50W

Is the ocean favorable for the system?



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Model Forecasts - Friday

Area of Potential Low Pressure Development

An area of low pressure will be developing near the Yucatan Peninsula near Wednesday or Thursday.

The system will begin to move east or northeast by the end of the week making its closest approach to South Florida on Friday and Saturday.

Notable impacts to Florida are NOT expected through Thursday afternoon.





Rainfall Totals Next 7 Days

Ending 8 AM ET Tuesday



- **Through Thursday night**, a widespread 1-3" of rain is forecast across South Florida and along the West Coast, with more isolated totals in North Florida.
- Localized areas could see 4-5" over the next few days, but the flood threat will be localized and confined to urban areas.
- Heavier rainfall is possible in South Florida Friday and Saturday depending on the exact track of the developing low near the Yucatan Peninsula.
- A widespread 4-8" is currently being forecast for this weekend, with localized areas of 12+".
- These rainfall totals could increase or decrease depending on the exact track!!



Flash Flood Outlooks Fri./Sat.

From the Weather Prediction Center (LINK)



Saturday/Saturday Night



Heavy rainfall late in the week could result in flash flooding on Friday and Saturday across South Florida and the Florida Keys. Urban areas in Southeast Florida will be most at risk of impactful street flooding.



Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line HIGH: > 50% SLGT: 10%-20% MDT: 20%-50% MRGL: 5%-10%



Overall Summary

Southern Gulf of Mexico Low

- An area of low pressure is expected to develop near the Yucatan Peninsula over the next few days.
- By Friday and Saturday, the area of low pressure is likely to move east or northeast toward Cuba, the Bahamas, and South Florida/Keys.
- The environment over the Gulf of Mexico may allow some development of the area of low pressure into a tropical depression or storm, but a significant wind event is not anticipated. Heavy rain will be the main threat.
- The National Hurricane Center has a 10% (low) chance of development in the next 48 hours, but a 60% (medium) chance of development over the next 5 days.

Florida Outlook:

- Impacts to Florida, if any, are not expected through Thursday night.
- While it is too early to determine the specifics of any impacts, if they do occur, heavy rainfall is likely to be the main threat, with gusty winds and waterspouts/tornadoes possible as an additional threat.
- The first name on the list for the 2022 season is Alex.
- Unrelated to the tropics, rain chances will remain high across the Florida Peninsula through mid-week. Heavy rainfall with localized flooding in urban areas and a few severe thunderstorms are possible again this afternoon.

The next briefing packet will be provided Wednesday morning. For the latest information on the tropics, please visit the National Hurricane Center website at <u>www.hurricanes.gov</u>.



TROPICAL UPDATE



Created by:

Michael Spagnolo, Deputy State Meteorologist <u>Michael.Spagnolo@em.myflorida.com</u> State Meteorological Support Unit Florida Division of Emergency Management

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