

Tropical Update



11:00 AM EDT

Sunday, September 29, 2024

Helene Recovery Weather

Hurricane Isaac & Tropical Storm Joyce

Invest 90L (80%), Western Caribbean Sea and Gulf of Mexico (50%), & Eastern Atlantic Tropical Wave (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 <u>www.hurricanes.gov</u>.





Hurricane Isaac From the National Hurricane Center (NHC)



- Location: 575 miles NW of the Azores
- Maximum Sustained Winds: 75 mph; Category 1
- Current Movement: NE at 12 mph

A northeast motion is expected to continue during the next couple of days, followed by a turn toward the north-northeast on Tuesday. Continued weakening is forecast over the next few days. Isaac is forecast to become a post-tropical cyclone on Monday.

Isaac poses no threat to Florida.



Tropical Storm Joyce From the National Hurricane Center (NHC)



- Location: 975 miles ENE of the Northern Leeward Islands
- Maximum Sustained Winds: 45 mph
- Current Movement: NW at 6 mph

This general northwestward motion is expected to continue today with a turn toward the north anticipated on Monday and Tuesday. Joyce is likely to start weakening later today and could become a tropical depression on Monday and a remnant low on Tuesday.

Joyce poses no threat to Florida.



Tropical Weather Outlook Disturbance 1 – Eastern & Central Tropical Atlantic (Invest 90L)



Showers and thunderstorms associated with an elongated area of low pressure located a few hundred miles west-southwest of the Cabo Verde Islands have become better organized since yesterday. Environmental conditions are conducive for gradual development of this system, and a tropical depression is likely to form during the early or middle part of this week while the system initially moves westward and then northwestward across the eastern and central tropical Atlantic.

This system poses no direct threat to Florida over the next 7-10 days at least.

Chance of development through 48 hours... **medium...60%** Chance of development through 7 days...**high...80%**

Tropical Weather Outlook Disturbance 2 – Western Caribbean Sea & Gulf of Mexico



A broad area of low pressure located over the western Caribbean Sea is producing disorganized showers and thunderstorms. Environmental conditions appear to be conducive for gradual development, and a tropical depression could form around the middle part of this week while the disturbance meanders toward the west-northwest. This system is then expected to move northwestward into the Gulf of Mexico during the latter portion of this week, and interests in the northwestern Caribbean Sea and along the U.S. Gulf Coast should monitor its progress.

This system poses no direct threat to Florida through the next 5 days, but trends with its development and across computer models will continue to be monitored.

Chance of development through 48 hours...low...near 0%. Chance of development through 7 days...**medium...50%**

Ensemble Forecast Computer Models Disturbance 2 – Western Caribbean Sea & Gulf of Mexico



There is a <u>wide range of possibilities</u> in the eventual path and timeline of the western Caribbean low pressure next week, with little to no agreement across the forecast computer models – large changes and shifts in the model guidance can be expected.

- Computer forecast models have been hinting at showers and thunderstorms becoming increasingly organized near Central America early next week.
- There is a decent signal that a more concentrated area of low pressure could form over the western Caribbean Sea early next week; however, much development or
 uptick in organization will likely be slow at first through into the midweek timeframe.
- There remains considerable disagreement across forecast computer model ensembles, so it is important to not only look at one-run model solutions as large shifts in the computer models can be expected in the coming days until a more defined system forms.

Tropical Weather Outlook Disturbance 3 – Eastern Atlantic Tropical Wave



A tropical wave located near the coast of western Africa is currently producing limited shower activity. Some gradual development of this system is possible during the next several days while it moves slowly westward or west-northwestward over the eastern Atlantic Ocean.

This system no threat to Florida at this time.

Chance of development through 48 hours...low...near 0% Chance of development through 7 days...low...20%

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.

Dominant areas of high pressure over both the eastern Atlantic and the southwestern Atlantic will provide steering influences for all tropical disturbances in the Atlantic basin. Invest 90L and Tropical Storm Joyce will be steered around the southern and KTS western periphery of an area of high pressure, with Hurricane Isaac following suite to the north-northeast around the area of high pressure. **Fast Moving** Storm A strong high pressure system located near the Bahamas will allow for any tropical disturbance over the northwestern Caribbean to move generally northwestward into the Gulf of Mexico. From this time, additional pressure patterns over the U.S. will need to be monitored regarding the eventual forward motion of this system later next week. S C C **Fast Moving** Storm **OVC**e 80° **Typical Moving** Storm Slow Moving Storm FOUO - For Government Official Use Only



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.

There are pockets of stronger upper-level winds (wind shear) over the eastern and central tropical Atlantic. The Curren ihear presence of stronger upper-level winds may work to limit the extent of development of the disturbances over the eastern Atlantic. Isaac will likely move into an area with unfavorable conditions for additional strengthening, and Joyce will likely continue to weaken over the next 3 to 5 days under the influence of strong upper-level winds. **HIGH Shear** (Unfavorable) The western Caribbean Sea and Gulf of Mexico are generally supportive environments for tropical development featuring a weak upper-level wind regime. Saac **HIGH Shear ANOLS** (Unfavorable) MODERATE Favorab Shear (Neutral) Vice LOW Shear (Favorable) 0 60 W FOUO - For Government Official Use Only ENDENCY PRODUCT Increasing -Decreasing 0900 UTC 29SEP24 UW-CIMSS MeIDAS

Dry Air & Saharan Dust Is the environment favorable for the system?

Moist

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

Much of the tropical Atlantic remains within a moist and favorable environment for tropical development. Isaac and Joyce may begin to experience a less support environment with pockets of drier air. The deep tropical Atlantic, northwestern Caribbean, and southern Gulf of Mexico are dominated with generally moist and favorable conditions.

Very Dry

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

OVCE

Moist

ALL IN

GOES-16: SAHARAN AIR LAYER TRACKING PRODUCT 12:00 UTC 29 SEPTEMBER 2024 UW-CIMSS/NOAA-HRU

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Isaac

Rain Chances, High Temperature & Feels-Like Temperature



Rainfall Totals – Next 7 Days From the Weather Prediction Center (WPC)

7-Day Precipitation (in) Ending Saturday, Oct. 5, 2024 at 8 p.m. EDT



- A band of moisture across the North-Central Peninsula will allow scattered to numerous showers and thunderstorms to continue across much of Central Florida today through the weekend while drier in filtering in elsewhere limits activity.
- A large are of high pressure building in over the Midwest U.S. will shift over the Eastern U.S. early to mid week allowing for the return of a more typical summertime weather pattern.
- Widespread rainfall totals near 1-3" can be expected statewide over the next 7 days with locally higher totals upwards of 3-5" possible.

Flash Flood Outlooks – Today

From the Weather Prediction Center (WPC)



- The Weather Prediction Center (WPC) is outlooking a **Marginal Risk (level 1 of 4) for Flash Flooding** along and north of the I-4 corridor through the Northern Peninsula today.
- Deep moisture remains draped across North-Central Florida as high pressure over the Atlantic strengthens and builds westward over the Florida Peninsula, allowing for more typical summertime weather pattern along the Peninsula.
- This activity will likely train across the state and will be capable of producing locally heavy downpours.
- Locally heavy downpours along urban and lowlying/poor drainage areas and over saturated grounds may give way to localized instances of flooding.
 - Coastal and low-lying areas along Florida's Gulf Coast will remain vulnerable to additional rounds of rainfall thanks to recent and lingering flooding and saturated grounds.

FDEM *

Current & Forecast River Conditions

From the National Weather Service



A **River Flood Warning** remain in effect along the <u>St. Johns River at Astor</u> as water levels very slowly decline but remain within **minor flood stage** due to trapped tides within the river basin.

Numerous **River Flood Warnings** have also been issued across the Big Bend as water level rises have begun to rise from widespread heavy rainfall observed before and from Hurricane Helene.

Moderate flooding is ongoing along the <u>Sopchoppy River near Sopchoppy</u> as water levels gradually decline.

Water levels along the <u>Ochlockonee River near Concord (CR-12</u>) have risen into <u>Minor</u> Flood Stage and are forecast to continue gradually rising, reaching <u>Moderate Flood Stage</u> late this weekend or early next week.

Along the <u>Apalachicola River near Blountstown</u>, water levels have reached <u>Minor Flood</u> <u>Stage</u> are expected to continue gradually rising into next week.

Water levels have risen into Action Stage along the <u>Chattahoochee River at George W.</u> <u>Andres Lock and Dam, Aucilla River at Lamont (US-27)</u>, <u>Apalachicola River at Woodruff</u> <u>Dam</u>, and the <u>Ochlockonee River near Havana</u> and water levels are forecast to continue rising, reaching <u>Minor Flood Stage</u> later this weekend and into next week.

Numerous other local river creeks, and waterways have seen water level rises in response to locally heavy rainfall and widespread rainfall from Hurricane Helene, with many within Action Stage to Minor Flood Stage. For more details, please visit the <u>River Forecast Center</u>.



River Flood Warnings

From the National Weather Service

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River Gauge 🚽	County(ies) Affecte	Current Level 🔽	Crest Level 🔽	Record Leve	Status 🔽	Crest Da	Warning Expire
Apalachicola River at Woodruff Dam	Calhoun, Gadsden, Jackson, Liberty	Action: 62.38 ft	Minor: 65.80 ft	76.30 ft	Rising	1-Oct	0213 CDT 4-Oct
Apalachicola River near Blountstown	Calhoun, Franklin, Gulf, Liberty	Minor: 19.02 ft	Minor: 22.10 ft	28.60 ft	Rising	2-Oct	Until Further Notice
Aucilla River at Lamont (US-27)	Jefferson, Madison, Taylor	Action: 52.21 ft	Minor: 54.00 ft	58.80 ft	Rising	2-Oct	Until Further Notice
Chattahoochee River at George W. Andrews Lock and Dam	Jackson	Action: 103.18 ft	Minor: 111.90 ft	128.30 ft	Rising	30-Sep	0412 CDT 2-Oct
Ochlockonee River near Concord (CR-12)	Gadsden, Leon	Action: 36.98 ft	Moderate: 39.90 ft	45.70 ft	Rising	30-Sep	Until Further Notice
Ochlockonee River near Havana (US-27)	Gadsden, Leon	Action: 22.50 ft	Minor: 29.00 ft	35.10 ft	Rising	1-Oct	Until Further Notice
Sopchoppy River near Sopchoppy	Wakulla	Moderate: 31.07 ft	Moderate: 33.17 ft	36.80 ft	Falling	Crested	Until Further Notice
St. Johns River at Astor	Volusia, Lake	Minor: 2.46 ft	Minor: 2.70 ft	4.70 ft	Falling	Crested	Until Further Notice

Last Updated: 2302 EDT 9/28

For more details on the hydrographs as well as impact statements, click the links for each river gauge.



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Hurricane Isaac:

- As of 11:00 AM EDT, Hurricane Isaac is located about 575 miles northwest of the Azores and moving northeastward at 12 mph.
- This general motion is expected to continue during the next couple of days, followed by a turn toward the north-northeast on Tuesday.
- Maximum sustained winds have decreased to near 75 mph, and continued weaking is forecast over the next few days.
- Isaac is forecast to become a post-tropical cyclone on Monday.
- Isaac poses no threat to Florida.

Tropical Storm Joyce:

- As of 11:00 AM EDT, Tropical Storm Joyce is located about 975 miles east-northeast of the Northern Leeward Islands and moving northwestward at 6 mph.
- This general motion is expected to continue today with a turn toward the north anticipated on Monday and Tuesday
- Maximum sustained winds are near 45 mph, and Joyce is likely to start weakening later today and could become a tropical depression on Monday and a remnant low on Tuesday.
- Joyce poses no threat to Florida.

Eastern and Central Tropical Atlantic (Invest 90L):

- Showers and thunderstorms associated with an elongated area of low pressure located a few hundred miles west-southwest of the Cabo Verde Islands have become better organized since yesterday.
- Environmental conditions are conducive for gradual development of this system, and a tropical depression is likely to form during the early or middle part of this week while the system initially moves westward and then northwestward across the eastern and central tropical Atlantic.
- This system poses no direct threat to Florida over the next 7-10 days at least.
- The NHC is outlooking a medium (60%) chance of development over the next 48 hours, and a high (80%) chance of development over the next 7 days.

Western Caribbean Sea and Gulf of Mexico:

- A broad area of low pressure located over the western Caribbean Sea is producing disorganized showers and thunderstorms.
- Environmental conditions appear to be conducive for gradual development, and a tropical depression could form around the middle part of this week while the disturbance meanders toward the west-northwest.
- This system is then expected to move northwestward into the Gulf of Mexico during the latter portion of this week, and interests in the northwestern Caribbean Sea and along the U.S. Gulf Coast should monitor its progress.
- This system poses no direct threat to Florida through the next 5 days, but trends with its development and across computer models will continue to be monitored.
- The NHC is outlooking a low (near 0%) chance of development over the next 48 hours, and a medium (50%) chance of development over the next 7 days.

The next briefing packet will be issued on Monday morning. For the latest information, please visit the National Hurricane Center website.



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Eastern Atlantic Tropical Wave:

- A tropical wave located near the coast of western Africa is currently producing limited shower activity.
- Some gradual development of this system is possible during the next several days while it moves slowly westward or west-northwestward over the eastern Atlantic Ocean.
- This system no threat to Florida at this time.
- The NHC is outlooking a low (20%) chance of development over the next 7 days.

The next names on the list are Kirk (kurk) and Leslie (LEHZ-lee).

Florida Outlook:

- Scattered to numerous showers and thunderstorms can be expected across much of Central Florida and into southern portions of the Northern Peninsula with the sea breezes this
 afternoon and evening thanks to high pressure building in from the Atlantic and deep moisture remaining over portions of the state.
- The Weather Prediction Center (WPC) is outlooking a Marginal Risk (level 1 of 4) for Flash Flooding along and north of the I-4 corridor through the Northern Peninsula today as this activity will likely train across the state and will be capable of producing locally heavy downpours.
 - Locally heavy downpours along urban and low-lying/poor drainage areas and over saturated grounds may give way to localized instances of flooding.
 - Coastal and low-lying areas along Florida's Gulf Coast will remain vulnerable to additional rounds of rainfall thanks to recent and lingering flooding and saturated grounds.
- · Heat Advisories may be necessary for portions of South Florida and the Keys as heat indices likely approach or reach advisory criteria.
- Numerous River Flood Warnings have also been issued across the Big Bend as water level rises have begun to rise from widespread heavy rainfall observed before and from Hurricane Helene; riverine flooding will likely continue to be a concern for several river over the next several days or even weeks.
 - Moderate flooding is occurring and forecast to continue along the Sopchoppy River near Sopchoppy, and the Ochlockonee River near Concord (CR-12) is now within Minor Flood Stage and forecast to rise into Moderate Flood Stage.
 - Minor flooding is occurring along the Apalachicola River near Blountstown and water levels along the Chattahoochee River at George W. Andres Lock and Dam, Aucilla River at Lamont (US-27), Apalachicola River at Woodruff Dam, and the Ochlockonee River near Havana are forecast to reach Minor Flood Stage late this weekend into next week.
 - Minor flooding continues along the St. Johns River at Astor due to trapped tides.
- · Water levels along Florida Gulf Coast beaches and the Keys continue to gradually subside following impacts from Hurricane Helene.
 - While coastal flooding is not anticipated elsewhere today along Florida Gulf Coast beaches, elevated water levels and localized instances of minor coastal flooding may linger near and during times of high tide.
 - A Coastal Flood Statement remains in effect for Bayside communities of the Upper Keys as minor saltwater flooding remains possible during high tide hours.

The next briefing packet will be issued on Monday morning. For the latest information, please visit the National Hurricane Center website.



Tropical Update



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