



NOAA's update to the previous 2023 outlook in May covers the entire six-month hurricane season.

According to the new forecast, we can expect to see from 14 to 21 named storms with winds of 39 mph or greater. Of those, six to 11 of them could become hurricanes with winds of 74 mph or greater.

Out of those hurricanes, from two to five of them could become major hurricanes, the report said.

NOAA provides these ranges with a 70% confidence. These updated ranges include storms that have already formed this season.

**Impact of El Niño:** El Niño could return in 2023; what that means for the world's weather

A major hurricane is one where maximum sustained winds hit 111 mph or higher and is rated as Category 3, 4 or 5 on the Saffir-Simpson Scale. An average season typically spawns seven hurricanes.

A tropical storm contains wind speeds of 39 mph or higher and becomes a hurricane when winds reach 74 mph.

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# National Hurricane Center changes for 2023

This year the National Hurricane Center made some changes to extend forecasts and improve the way tropical weather is reported. Here's what's different.

- **Extended forecast:** One of the biggest changes is extending the long-range forecast from the previous forecast of two and five days to two and seven days. The actual visual forecast "cone" provided by the NHC will not be extended yet.
- **Invest numbers:** Invests, systems forecasters are watching as potential areas of development, have always been assigned a sequence of numbers and letters. That designation will now be part of the tropical outlooks.
- **Storm surge graphic:** While storm-surge graphics have been shown experimentally since 2020 on NHC's website, 2023 marks the first time they become fully operational. The graphic depicts peak storm surge forecast inundation values from the tropical cyclone advisory when storm-surge watches or warnings are in effect.
- **Watches and warnings removed from forecast advisory:** The warnings will still be part of the public advisory, but to avoid duplication and chances for errors, they'll be removed from the forecast advisory this year.
- **Forecast cone:** The size of the tropical cyclone track forecast error cone for the Atlantic basin will be about the same as compared to 2022.
- **Livestream broadcasts:** The National Hurricane Center will experimentally provide simultaneous livestream broadcasts via its YouTube, Facebook and Twitter accounts when there is a system in the tropics that may pose a threat to land.
- **Storm surge flooding map for Puerto Rico, Virgin Islands:** The potential storm surge flooding map issued by the National Hurricane Center that is currently produced for the U.S. Gulf and East Coasts will be expanded to include Puerto Rico and the U.S. Virgin Islands.
- **Pronunciation guide:** NHC is providing a site that describes exactly how to pronounce a storm.

Hurricanes receive a classification on the Saffir-Simpson Hurricane Wind Scale. The ranking — between one and five — depends on maximum sustained winds, with one being a minimal hurricane and five being the worst. The scale does not take into account other hazards, such as storm surge, rainfall flooding and tornadoes.

**Category 1:** Winds of 74-95 mph.

- Very dangerous winds will produce some damage. Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.

**Category 2:** Winds of 96-110 mph.

- Extremely dangerous winds will cause extensive damage. Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.

**Category 3:** Winds of 111-129 mph. Hurricanes with maximum sustained winds of 111 mph and higher are classified as major hurricanes.

- Devastating damage will occur. Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.

**Category 4:** Winds of 130-156 mph.

- Catastrophic damage will occur. Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.

**Category 5:** Winds of 157 mph and higher.

- Catastrophic damage will occur. A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.