Hurricane Sally will bring devastating floods to the Southern United States



Enlarge / The Atlantic tropics at 11am ET on Tuesday, September 15.

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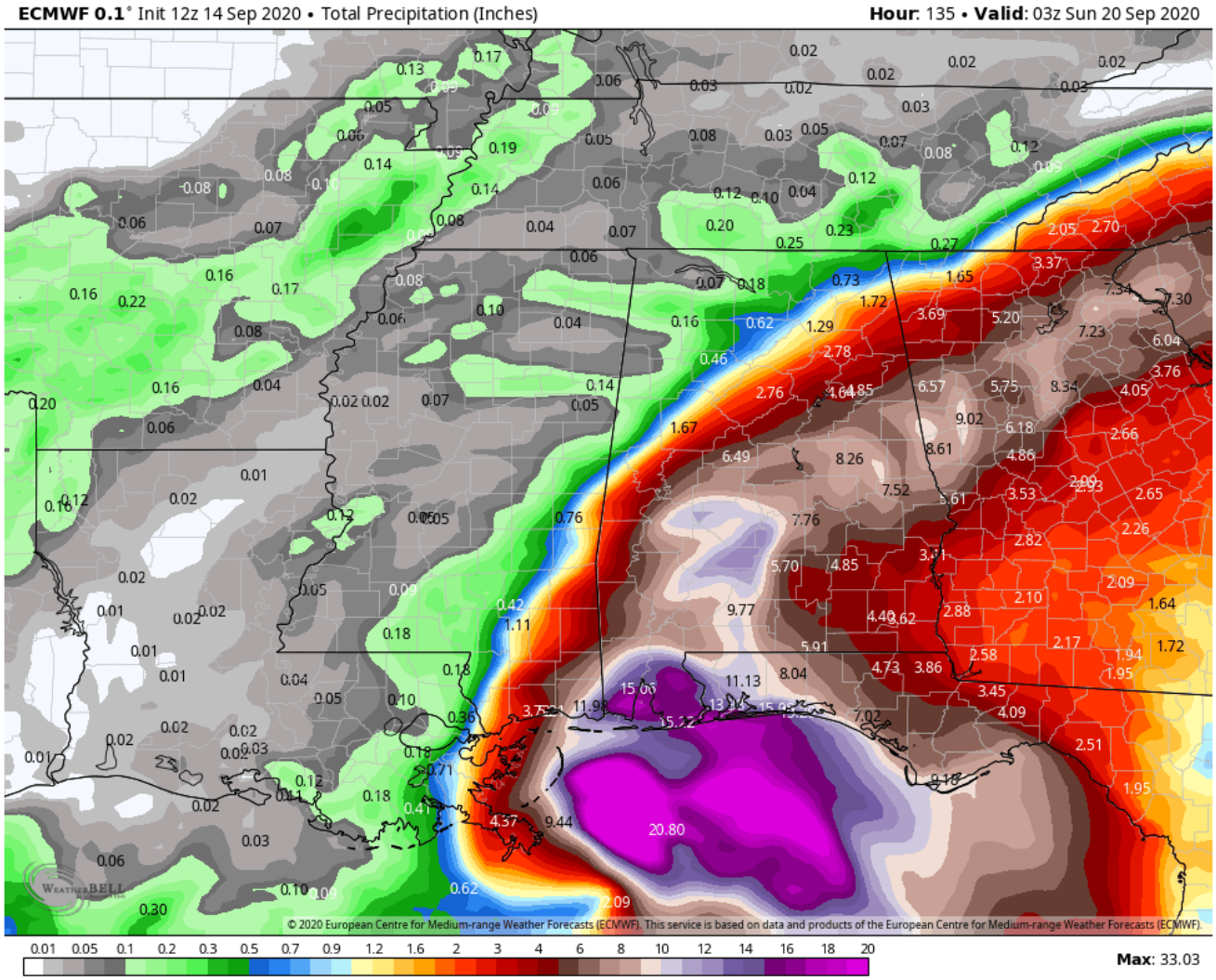
It is September 15, with more than two months remaining in the Atlantic hurricane season, and there is just one name left in the cupboard for tropical cyclones—Wilfred. And this storm will probably form off the coast of Africa in a day or two.

In some ways, this has been a truly bonkers year for Atlantic hurricane activity, and in other ways it has been fairly

pedestrian. But before assessing the climatology, it’s worth focusing on the one storm certain to have a direct impact on the United States, Hurricane Sally.

Sally’s flooding

Hurricane Sally has fortunately not intensified during the last 12 hours. Instead, it has weakened some, thanks to wind shear affecting the ability of its low-level and mid-level cores to align perfectly. This wind shear from its west, along with the upwelling of cooler water deeper in the Gulf, should prevent further strengthening today. The National Hurricane Center predicts the storm will have maximum sustained winds of 85mph when it comes ashore Wednesday morning along the Alabama coastline.



European model forecast of rain totals for now through Saturday.
Weather Bell
This is unquestionably good news, but it does little to mitigate the big threat from Sally, which is inland flooding due to extremely heavy rainfall. For much of Tuesday, the storm has been meandering just offshore from the Louisiana, Mississippi, and Alabama coastlines, and the hurricane center estimates its northward motion at just 2mph. This is near record lows in terms of storm movements across the northern Gulf of Mexico.

Any time a tropical storm or hurricane moves this slow, it allows the heaviest bands of thunderstorms to line up, nearly stationary, and bring flooding rains inland. For now, the strongest bands are just offshore, but they should begin to move inland today. Hurricane center forecasters predict "historic, life-threatening" flash flooding will occur along and just inland of the coast, from southern Mississippi through the western parts of the Florida Panhandle.

Sally probably won't produce the kinds of ultra-devastating floods that Texas saw in 2017 from Hurricane Harvey and 2019 from Tropical Storm Imelda. For parts of Houston and Beaumont, these storms brought in excess of four feet of rain. But widespread areas of 10 to 20 inches are likely along the northern Gulf coast, with isolated totals of 25 inches or higher possible before the storm lifts northeast in response to a trough of low pressure over the eastern United States.

As Sally moves inland, it will bring heavy rains across a swath of Alabama and northern Georgia. It's going to be a mess.

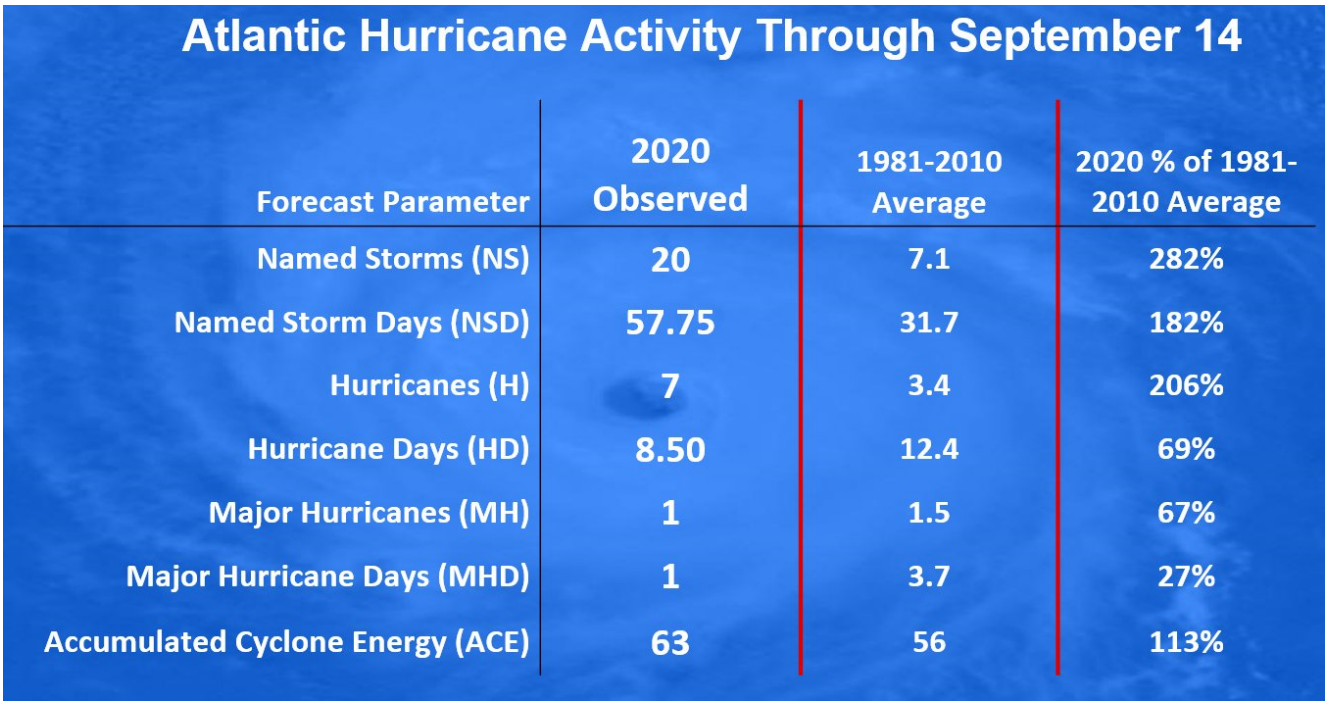
Wacky 2020 season

Unless Sally weakens unexpectedly, it will become the fourth hurricane to make landfall in the continental United States

this year, following Hanna, Isaias, and Laura. The record for hurricane landfalls in a year is five, which happened once, in 2005. That was a season that included the powerful, Katrina, Rita, and Wilma systems, among others.

This year may also rival 2005 in terms of total number of "named" storms that form, that is those that reach at least tropical storm status with sustained winds of 39mph or greater. The year 2005 holds the current record, with 28 named storms. So far, 2020 has 20 named storms, following the formation of Tropical Storm Vicky on Monday.

Vicky formed a full 21 days earlier than the 20th named storm of 2005, Tammy, so this year is on pace to break the record. After Wilfred, forecasters will begin using the Greek alphabet to name storms.



Atlantic hurricane activity through Monday.
Phil Klotzbach

As active as this season has been, however, by some measures it is a fairly standard year. In terms of "hurricane days," which measures the total number of days of active hurricanes, as well as "major hurricane days," and major hurricanes themselves, this year has actually seen below normal activity. This suggests that the majority of storms have been fairly

weak or short-lived, or both.

In terms of threats to the United States, none of the systems currently active beyond Sally appear to pose a direct threat. However, after Hurricane Paulette already struck Bermuda, Tropical Storm Teddy may threaten the island as a major hurricane early next week.

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