

I'm actually in Puerto Rico today for a conference on the situation here after Hurricane Maria. Since hurricanes are on my mind, I wondered what the forecast for this year looks like. As it turns out, the headlines give significantly different takes on what to expect. Here is a sample of news stories, all issued within a few weeks of each other:

"Near-Average 2018 Atlantic Hurricane Season Expected" (weather.com)

13 named storms, 6 hurricanes, 2 at Cat 3 or above. (in-house estimate)

"The 2018 hurricane season could be as busy as the 2017 season." (CNN)

14 named storms, 7 hurricanes, 3 at Cat 3 or above. (Colorado State estimate) (The 2017 season was 17 named storms, 10 hurricanes and 6 at Cat 3).

"2018 Hurricane Season Will Bring Another Battery Of Storms" (NPR)

14 named storms, 7 hurricanes, 3 at Cat 3 or above. (Colorado State Univ. estimate)

"'Significantly' above average 2018 hurricane season forecast by NC State" (Artemis)

14-18 named storms, 7-11 hurricanes, 3-5 Cat 4 or above. (N.C. State Univ. estimate)
Artemis is a site specializing in insurance-related issues.

"2018 Atlantic hurricane outlook: 4 US impacts predicted amid another active season" (Accuweather)

12 to 15 tropical storms, 6-8 hurricanes, 3-5 major hurricanes. (in-house estimate)

"Scientists Predict Record-breaking 2018 Hurricane Season" (HowStuffWorks.com)

Despite the headline, the article itself is a measured discussion of the uncertainties relating to hurricane predictions.

If you dig a little deeper,, you get a better sense of the uncertainties. The Colorado State [report](#), for instance, says there is a 67% chance that the number of hurricanes will be between 5-9, placing its forecast at 7. So there is also a 33% chance that the number will turn out to be outside this range. Since the standard deviation is 2, there's something like a 95% probability that the actual number will be between 3 and 11. (Table 4, p. 18). CSU's press release is less nuanced, which is probably what many journalists looked at, is less

nuanced. The title of the press release says: “Slightly above-average 2018 Atlantic hurricane season predicted by CSU team.” Unfortunately, if the NC State team issued a more detailed report to go with their forecast, it didn’t seem to be accessible online anywhere I looked.

According to one scientist, you shouldn’t put much faith in these April estimates:

“April forecasts of hurricane season activity are low-skill, since they must deal with the so-called “spring predictability barrier.” April is the time of year when the El Niño/La Niña phenomenon commonly undergoes a rapid change from one state to another, making it difficult to predict whether we will have El Niño, La Niña, or neutral conditions in place for the coming hurricane season.”

He does [say](#), however, that CSU’s “late May/early June forecasts have shown considerable skill over the years” – “skill” meaning here ability to predict deviations from a baseline. NOAA’s first shot at prediction will come around that time, too.

There are some lessons here about modeling. First, a lot of nuance gets lost in the pipeline from scientists to journalists to headline writers. Second, as Nate Silver has loudly complained ([here](#), for instance), journalists tend not to pay much attention to uncertainties, giving readers a false sense of certainty. Uncertainties make for dull copy.

Hopefully, 2018 won’t be nearly as bad as 2017. While that would be good news, it would come with one unfortunate consequence. Many people will conclude that 2017 was just a fluke, and hence that there’s no need to worry about repeats of Hurricanes Harvey, Maria, and Irma. Because of that sense of complacency, people won’t be prepared when we *do* get a really nasty hurricane season again. that would be unfortunate.