

2022 Peril Predictions

Hurricane

Hurricane season officially begins June 1st through November 30th. The National Hurricane Center (NHC) outlook begins May 15th.

2021 set a record with twenty-one named storms, seven hurricanes and four major hurricanes, making it the third most active season on record. The four major hurricanes were Grace, Ida, Larry and Sam. Damages totaled over \$70 Billion, making the 2021 season the fourth costliest on record, with over 90% of damage coming from just one storm, Major Hurricane Ida, which made landfall in Louisiana in late August.

The 2022 Atlantic hurricane season is forecast to be the seventh straight **well-above-average season**. Additionally, forecasters predict an **above-average** probability for major hurricane landfalls along the U.S. coastline and Caribbean regions. La Nina's current weather pattern is a contributing factor to the predicted well-above-average season. Water temperatures remain similar to the 2020 and 2021 years. The Caribbean and Gulf of Mexico waters are also observed to be 'warmer than normal'. *"With this season set up as a rare "triple-dip" La Niña (and the absence of an El Nino), the Southwest and Latin American coastlines can expect to have similar conditions, regarding the Pacific basin hurricane season, as the 2020 and 2021 seasons," as stated by AccuWeather.*

Predictions and historical season averages are provided by the following and may be updated throughout the season. NOAA is set to release their prediction on May 24th during a news conference.

Forecaster	Named Storms	Hurricanes	Major Hurricanes	Impact / Activity Level	Contributors
Colorado State	19	9	4	The likely absence of El Niño as the major reason for the "above average" hurricane season; activity will be about 130% of the average season. 2022's hurricane season is exhibiting characteristics similar to 1996, 2001, 2008, 2011, 2017 and 2021. All had "above-average" hurricane activity, per Phil Klotzbach	Philip J. Klotzbach Michael M. Bell, and Jhordanne Jones
The Weather Company	20	8	4	Four of which are predicted to reach at least Cat 3 strength. The outlooks cite neutral to cool El Niño-Southern Oscillations (ENSO) conditions and warmer than average water temperatures in the Caribbean and subtropical Atlantic as indicators for the active hurricane season. active. Similar to 2021, nothing like 2020.	Dr Todd Crawford, Chief Meteorologist
NC State University	17-21	7-9	3-5	Above-average in the Atlantic basin both on a long-term and near-term basis; Gulf of Mexico to see an active season with 3-6 named storms forming in the region with 2-5 becoming hurricanes and 1-2 a major hurricane	Lian Xie, Professor of Marine earth & sciences
University of Arizona	14	7	3	Slightly Above-average hurricane season over Atlantic Ocean. also predict an accumulated cyclone energy, or ACE, index of 129 units. The ACE index provides a value for the combined strength and duration of a storm.	Kyle Davis and Xubin Zeng
Tropical Storm Risk - (Dept of Space & Climate Physics, UCL (University College London), UK	18	8	3	TSR anticipates a season with activity close to the 1991-2020, 30-year norm level. The forecast tercile probabilities (1991-2020 data) for the 2022 North Atlantic hurricane season ACE index are as follows: a 36% probability of being upper tercile (>155)), a 42% likelihood of being middle tercile (75 to 155)) and a 22% chance of being lower tercile	Professor Mark Saunders and Dr Adam Lea
WeatherBELL Analytics	18-22	6-10	2-4	A similar year in the pre-satellite, pre-warm era (since the Super Niño of 1997) would likely see 80% of our forecasted numbers. ACE per storm will again be below pre-satellite, pre-warm era values.	Joseph D'Aleo
Accuweather	16-20	6-8	3-5	Predicting an above-normal season in terms of tropical activity in the Atlantic, as well as a higher-than-normal chance that a major hurricane could make landfall in the mainland US, Puerto Rico and the U.S Virgin Islands.	Dan Kottlowksi, AccuWeather's top hurricane expert
**New Historical Season Averages (1991-2020)	14	7	3		

**NOAA's Climate Prediction Center (CPS) uses 1991-2020 as the new 30yr period of record

Wildfire

Provided by: Predictive Services - National Interagency Fire Center (NIFC)
Outlook Period – May through August 2022

By U.S. Region:

Northwest:

- Very low fire risk through May. However, elevated risk continues in central Oregon, continuing into June.
- For July, the elevated risk will expand into southwest Oregon and central Washington before significant fire potential increases to encompass most of the geographic area in August.

Northern California:

- Significant fire potential is expected to be above normal across the Bay Area, Mid Coast-Mendocino, and Sacramento Valley-Foothill PSAs for May.
- A further expansion of above normal significant fire potential is forecast across most elevations during June through August.

Southern California:

- Significant fire potential will be near to slightly below normal across the area from May through August.

Hawaii:

- Significant fire potential is projected to be above normal May through August across the leeward sides of the islands due to cured and curing herbaceous fuels, intensifying drought, and periods of enhanced trade winds.
- Temperatures throughout the region are expected to be above average from May through July due to above average SST anomalies with equal chances for above or below normal temperatures in August.



Fire Potential
Outlook_May 2022

Full report by NIFC:

Tornado

According to Mark Ellinwood, Operational Meteorologist at WeatherBug (Earth Networks), *"Historically, an active early season and quieter late season generally brings the overall number of tornadoes down, so I would lean slightly toward a quieter season overall."*

Estimates below/near/above based on 511 tornadoes (1991-2010 average) for meteorological spring.

- Below normal season: 40% (less than 470 tornadoes)
- Near normal: 35% (between 470 & 550 tornadoes)
- Above normal: 25% (above 550 tornadoes)



US Tornado 2022
Outlook

Full report by Mark Ellinwood: