
National Oceanic and Atmospheric Administration (NOAA)

Atlantic Ocean Hurricane Season Forecast

Overview

The National Oceanic and Atmospheric Administration (NOAA) has issued its forecast for the 2022 Atlantic Ocean Hurricane Season. Forecasters within the U.S. governmental agency are projecting **14-21 named storms, 6-10 hurricanes, and 3-6 major hurricanes (Category 3+)** between the months of June and November for the Atlantic Basin.

Forecast Details

NOAA's report indicates that there are multiple factors for the Atlantic hurricane season forecast, which suggests above-normal activity for the seventh consecutive season:

- An anticipated continuation of La Niña conditions through the peak development months of August, September, and October. ENSO probability models currently indicate a 58% chance that La Niña conditions will continue through the hurricane season, and a 38% chance that ENSO-neutral conditions may be in place during the peak months. As a reminder, La Niña conditions were present during the peak of the hurricane seasons in 2020 and 2021. Three consecutive years with La Niña during ASO is unusual and represents a small percentage of the overall historical record. Twenty-nine (29) percent of past instances where August / September / October met the threshold for La Niña in two consecutive years also had a third year which met the criteria.
- La Niña conditions favor more cyclogenesis in the Atlantic Ocean. These favorable conditions often enhance atmospheric (low wind shear) and oceanic (warmer-than-normal sea surface temperature) conditions in the Atlantic Ocean's Main Development Region (MDR). It also signals a more conducive African easterly jet, weaker vertical wind shear, and an enhanced West African monsoon that can lead to more tropical cyclones. It would also likely mean seasonal activity at the middle or upper end of NOAA's predicted ranges.
- The set of atmospheric and oceanic conditions that have produced the ongoing high-activity era for Atlantic hurricanes since 1995 are largely still in place. As noted previously, this includes warmer sea surface temperatures and weaker trade winds in the MDR.

NOAA provides the following probabilities for the 2022 Atlantic Hurricane Season: 65% of an above-normal season, a 25% chance of a near-normal season, and a 10% chance of a below-normal season.

As a reminder: Above or below average hurricane season forecasts are often a poor predictor of seasonal economic or insured losses. Landfall location, intensity, and coastal / inland storm behavior are the predominant loss correlation drivers.



NOAA Atlantic Basin Hurricane Season Forecast (June 1 – November 30)

Forecast Parameter	Average (1991-2020)	2022 (May Forecast)
Named Storms	12	14-21
Hurricanes	6	6-10
Major Hurricanes	3	3-6
ACE Range (Median) – 1950-2020	75.4-130%	115-200%
Chance for an Above-Normal Hurricane Season	33%	65%
Chance for a Near-Normal Hurricane Season	33%	25%
Chance for a Below-Normal Hurricane Season	33%	10%

Source: NOAA

Historical Forecast Verification

NOAA Atlantic Hurricane Season Forecast Validation: Last 15 Years

Year	Named Storms			Hurricanes			Major Hurricanes		
	May	Aug	Actual	May	Aug	Actual	May	Aug	Actual
2007	13-17	13-16	15	7-10	7-9	6	3-5	3-5	2
2008	12-16	14-18	16	6-9	7-10	8	2-5	3-6	5
2009	9-14	7-11	9	4-7	3-6	3	1-3	1-2	2
2010	14-23	14-20	19	8-14	8-12	12	3-7	4-6	5
2011	12-18	14-19	19	6-10	7-10	7	3-6	3-5	4
2012	9-15	12-17	19	4-8	5-8	10	1-3	2-3	2
2013	13-20	13-19	14	7-11	6-9	2	3-6	3-5	0
2014	8-13	7-12	8	3-6	3-6	6	1-2	0-2	2
2015	6-11	6-10	11	3-6	1-4	4	0-2	0-1	2
2016	10-16	12-17	15	4-8	5-8	7	1-4	2-4	4
2017	11-17	14-19	17	5-9	5-9	10	2-4	2-5	6
2018	10-16	9-13	15	5-9	4-7	8	1-4	0-2	2
2019	9-15	10-17	18	4-8	5-9	3	2-4	2-4	3
2020	13-19	19-25	30	6-10	7-11	14	3-6	3-6	7
2021	13-20	15-21	21	6-10	7-10	7	3-5	3-5	4
2022	14-21			6-10			3-6		

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