Colorado State University (CSU) Atlantic Hurricane Season Forecast

Colorado State University (CSU) has issued its August forecast for the 2019 Atlantic Hurricane Season. The forecast calls for **14 named storms, 7 hurricanes, and 2 major hurricanes (Category 3+)** between the months of June and November. This total includes Subtropical Storm Andrea and Hurricane Barry. The updated forecast is generally unchanged from the June outlook, though now includes one more projected hurricane.

With the release of their forecast, CSU continues to predict near-normal tropical cyclone activity in the Atlantic Basin during the rest of the 2019 season. The group notes that sea surface temperatures in the eastern Tropical Atlantic remain cooler than normal, while the central Tropical Atlantic is slightly warmer than normal. This is in conjunction with stronger-than-normal vertical wind shear that has also been recorded in recent weeks across the Caribbean Sea. These mixed atmospheric and oceanic signals in the tropical Atlantic and Caribbean suggest conditions in line with a season closer to the historical norm.

CSU further notes that El Niño conditions are expected to further weaken in the coming weeks as sea surface temperatures in eastern Tropical Pacific have anomalously cooled and the central Tropical Pacific remain much warmer than normal (and is expected to remain warm through the peak of the season). This central Pacific warmth is likely to prevent upper-level winds from becoming too favorable for enhanced cyclogenesis in the Atlantic Ocean and Caribbean Sea since this Pacific pattern usually leads to increased vertical wind shear in the Caribbean. NOAA's Climate Prediction Center currently calls for a ~30 percent chance that El Niño will linger through the peak months of the season (August-October).

CSU indicates that there remains uncertainty within this forecast, but historical performance suggests that their two-thirds of their forecasts verify within one standard deviation of observed values and 95 percent verifying within two standard deviations of observed values.

As always, a reminder that it only takes one significant landfalling storm to entirely change the perception and resultant impacts of a hurricane season.

The tables on the next page show the CSU forecast, including probabilities of landfall on the United States mainland. The full report is available at CSU's Tropical Meteorology webpage (http://tropical.atmos.colostate.edu/).

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

Forecast Parameter	Average Year (1981-2010)	2019 (April 2019)	2019 (June 2019)	2019 (August 2019)
Named Storms	12.1	13	14	14
Named Storm Days	59.4	50	55	55
Hurricanes	6.4	5	6	7
Hurricane Days	24.2	16	20	20
Major Hurricanes	2.7	2	2	2
Major Hurricane Days	6.2	4	5	5
Accumulated Cyclone Energy (ACE)	106	80	100	105
Net Tropical Cyclone Activity	116%	90%	105%	110%

Source: Colorado State University

CSU Major Hurricane Landfall Probabilities (June 1 – November 30)

Forecast Parameter	Average Year	2019 (April 2019)	2019 (June 2019)	2019 (August 2019)
Entire U.S. Coastline	52%	48%	54%	53%
U.S. East Coast (including FL Peninsula)	31%	28%	32%	31%
U.S. Gulf Coast (FL Panhandle to Brownsville, TX)	30%	28%	31%	31%

Expected 43% risk of major hurricane tracking into the Caribbean (average is 42%)

Source: Colorado State University

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