2024 Atlantic Hurricane Season Prediction Market Bulletin

MARCH 14, 2024

As the number of organisations issuing predictions of Atlantic hurricane activity increases so does the usefulness of CRUCIAL's prediction market which can aggregate disparate forecasts, along with the views of its expert participants as to their credibility, into a unified probability forecast.

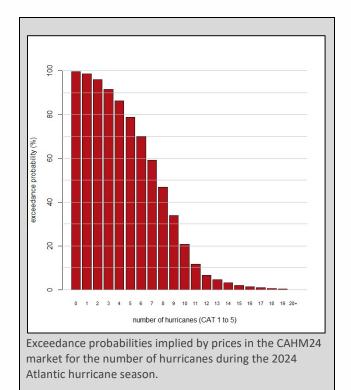
Summary of the forecast implied by recent prices in the CAHM24 prediction market for the number of hurricanes during the 2024 Atlantic hurricane season compared with climatological values for different look-back periods.

DATE: 2024-03-14					
STATISTIC	CAHM	CLIMATE			
	24	10yrs	20yrs	50yrs	100yrs
MEAN	8.1*	7.7	7.7	6.6	6.1
10 th PERCENTILE	4	5.8	3.9	3.0	3.0
MEDIAN	8	7.0	7.0	6.5	6.0
90 th PERCENTILE	12	10.4	12.2	10.0	9.1
PROB(> 10)	20%	10%	15%	8%	7%
PROB(> 12)	6%	10%	10%	4%	2%

*The CAHM24 mean places all probability weight in the ≥ 20 'tail' on 20. Hence the mean should be interpreted as " ≥ 8.1 ".

Contrast with ARTEMIS 2024 Hurricane Season Summary

The reinsurance portal, ARTEMIS, maintains an excellent summary page of forecasts for the 2024 hurricane season at https://www.artemis.bm/2024-atlantic-hurricane-season/. As of this month three organisations have issued forecasts. Tropical Storm Risk are predicting 9 hurricanes, Weatherbell are predicting 14-16 while the European Centre for Medium Range Weather Forecasting (ECMWF) are predicting 9 hurricanes, although their prediction only runs to September 30 and not the end of the official hurricane season on November 30. The Barcelona Supercomputing Centre's forecast comparisons will become available in April. https://seasonalhurricanepredictions.bsc.es/.



What is CAHM24?

CAHM24 is a prediction market in which participants (individuals and teams) from academia and the private sector, with expertise relevant to seasonal hurricane forecasting, can buy and sell contracts whose pay outs depend on the number of hurricanes that occur during the 2024 Atlantic hurricane season (Jun. 1st to Nov. 30th 2024). Participants do not pay to take part, instead they are given credits with which to trade but, after the market has been settled, they will receive cash rewards based on the credits they accumulate. CRUCIAL is an initiative to demonstrate how prediction markets, with expert participants, can be used to forecast climate-related risks.

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