

MAY 20, 2024

The Atlantic hurricane season officially begins on June 1. This season is predicted to one of, if not the most, active on record.

The implied probability, according to prices in the CAHM24 expert prediction market, of more than 10 hurricanes has increased in the last week from 35% to 44% while the chances of more than 12 hurricanes has doubled from 9% to 18%. The chances that the record of 15 hurricanes set in 2005 will be equaled or exceeded has also ticked up to 4.5%.

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.

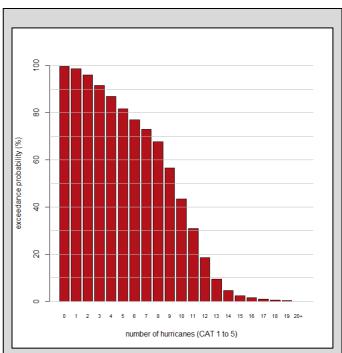
| DATE: 2024-05-19 | | | | | |
|-----------------------------|------|--------------|-------|-------|--------|
| STATISTIC | CAHM | CAHM CLIMATE | | | |
| | 24 | 10yrs | 20yrs | 50yrs | 100yrs |
| MEAN | 9.4* | 7.7 | 7.7 | 6.6 | 6.1 |
| 10 th PERCENTILE | 4 | 5.8 | 3.9 | 3.0 | 3.0 |
| MEDIAN | 10 | 7.0 | 7.0 | 6.5 | 6.0 |
| 90 th PERCENTILE | 13 | 10.4 | 12.2 | 10.0 | 9.1 |
| PROB(> 10) | 44% | 10% | 15% | 8% | 7% |
| PROB(> 12) | 18% | 10% | 10% | 4% | 2% |

*The CAHM24 mean places all probability weight in the \geq 20 'tail' on 20. Hence the mean should be interpreted as " \geq 9.4".

Manifold Markets

Manifold Markets is running a play-money prediction market for the number of hurricanes in 2024. Its modal prediction is for around 11 or 12 hurricanes, but it suffers from an "overround", with implied probabilities across all outcomes summing to over 200%. This is a problem seen in markets that lack arbitrageurs or a well-designed automated market maker.

https://manifold.markets/MickBransfield/how-many-hurricanes-in-2024



Exceedance probabilities implied by prices in the CAHM24 market for the number of hurricanes during the 2024 Atlantic hurricane season.

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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