

Comparison of Climate Forecasts: Expert Opinions vs. Prediction Markets

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Expert elicitation is a method that is often used to estimate probability density functions for risk assessment. A very diverse set of opinions can sometimes be used to reach a consensus. The Third Santa Fe Conference on Global and Regional Climate Change brings together experts with a remarkably broad range of opinion about climate sensitivity. The poster session provides an opportunity to elicit and quantify the resulting breadth of expert opinion about the probability of various levels of future global warming. As an experiment, we will ask participants to go on the record with estimates of probability that the global temperature anomaly for calendar year 2012 will be equal to or greater than x , where x ranges in increments of $.05\text{ }^{\circ}\text{C}$ from $.30$ to $1.10\text{ }^{\circ}\text{C}$ (relative to the 1951-1980 base period, and published by NASA GISS). The result will be a matrix of probabilities, a set of 17 for each participant. These estimates will be compared to those aggregated by prediction market contracts.

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