

Quantification of earthquake Predictability and detailing of entropy-based scores for evaluating earthquake forecast

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In earthquake forecasting, there is a significant gap between complete randomness and complete deterministic. This presentation begins by discussing how to quantify predictability and outlining the current state of earthquake predictability from an information-theoretic perspective. It then explores scoring criteria based on information entropy, referencing the scoring methods used by the CSEP testing center, specifically by introducing the marginal score and conditional score. The report illustrates how these scores are calculated and what quantitative relationships are between them.

