

AGU Fall Meeting 2011 Session Proposal

AGU Section/Focus Group: Natural Hazards

Potential Co-sponsors (5): Hydrology, Global Environmental Change, Public Affairs, Seismology, Volcanology Geochemistry & Petrology.

Session Title: Can Estimates of Rare Natural Events Be Well Done?

Estimating the likelihood of rare natural events is intrinsic to many societal decisions, such as siting of critical facilities around the world. Because rare events with high potential hazard occur infrequently, recurrence rate estimates often have large uncertainties that challenge confident probabilistic assessments. The record of historical events also may not represent an appropriate range of potential future events, especially for assessment timescales extending beyond decades. This session explores state-of-the-science approaches to evaluating the likelihood of rare natural events, including case studies of strongly episodic systems, novel statistical or probabilistic techniques, and deterministic bounds from physical modeling.

Conveners:

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Index terms:

4313 Extreme events

4306 Multihazards

4307 Methods

4315 Monitoring, forecasting, prediction