Results from Earthquake Forecast Testing in the Collaboratory for the Study of Earthquake Predictability

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The Collaboratory for the Study of Earthquake Predictability (CSEP) aims to improve our understanding about the physics and predictability of earthquakes through rigorous and prospective testing of earthquake forecast models. The system-science character of earthquake prediction research demands an open and collaborative structure for experimentation in a variety of fault systems and tectonic regions. Several CSEP Testing Centers are being developed to provide adequate infrastructure for predictability research. The first began operations at the Southern California Earthquake Center on 1 September 2007, and we are currently running prospective, automated evaluations of more than 40 models for California, the western Pacific region, and globally. During the last year, CSEP Testing Centers in New Zealand and Japan started operations and participation in CSEP. In this presentation, we provide an overview of the testing metrics employed and share and discuss initial results from all testing regions.