# Overview of the CSEP-Japan: The Japanese node of the collaboratory for the study of earthquake predictability

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Collaboratory for the Study of Earthquake Predictability (CSEP) is a global project of earthquake predictability research. The primary purposes of the CSEP is to develop a virtual, distributed laboratory ? a collaborator ? that can support a wide range of scientifically objective and transparent prediction experiments in multiple natural laboratories. The final goal of this project is to investigate, through experiments, the intrinsic predictability of earthquake rupture mechanisms. The experiments have to be fully specified and conducted in controlled environments, called testing centers.

One major focus of the Japanese earthquake prediction research plan 2009-2013 is testable earthquake forecast models. So, the Earthquake Research Institute joined the CSEP and installed in an international collaboration a testing center as CSEP-Japan for rigorous evaluation of earthquake forecast models.

A total of 91 models were submitted from USA, Switzerland, Italy, New Zealand and Japan. And CSEP-Japan started the prospective experiments from 1 November 2009. The models are currently under test in 12 categories, with 3 testing regions (so-called All Japan, Mainland and Kanto) and 4 testing classes of different time spans (1day, 3 month, 1 year and 3 years). We evaluate the performance of the models in the official suite of tests defined by the CSEP (L, M, N, S, R, T and W tests) against authorized catalogue compiled by Japan Meteorological Agency of time delay of 6 months.

CSEP-Japan testing center has conducted 92, 7 and 3 rounds tests for 1 day, 3 month and 1-year testing classes, respectively. Yokoi et al. will report the test results in detail in this session. An outline of the experiments and activities of the CSEP-Japan are accessible on our Web site: http://wwweic.eri.u-tokyo.ac.jp/ZISINyosoku/wiki.en/wiki.cgi.

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