Kanto 3 month testing class results of CSEP Japan

*Hiroshi Tsuruoka¹, Naoshi Hirata¹

1. Earthquake Research Institute, Tokyo Univ.

We report about 3 month testing class results of Kanto test region of CSEP Japan. We show the results of three models: RI10K, HISTETAS5PA and HISTETAS5PA1205. HISTETAS5 PA1205 is a model submitted to the Japan test center after the Tohoku-oki earthquake. The test results are about 40 rounds evaluated from 1 November 2009.

From the standard test results of CSEP, RI10K did not pass the S-test in the round of 2017/5 / 1-8 / 1. In addition, there were some rounds that did not pass N-Test in all models when the number of observed earthquakes was relatively small. Calculating the average of information gain values per earthquake for each model in all rounds was 1.419, 1.168, 1.162 for HISTETAS5PA1205, HISTETAS5PA, and RI10K respectively. Regarding the forecast of the number of earthquakes, HISTETA5PA1205 predicts the number of observation earthquakes well.

From the results of multiple rounds, forecast number of earthquakes improvement directly leads to improvement of an earthquake forecast model. Moreover, a model characteristic can be showed well by evaluating the spatial forecast performance and the performance of forecast number of earthquakes.

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