

Reevaluation of experimental predictions for the Izu Islands earthquakes in 2000

ken'ichiro Yamashina[1]

[1] Earthq. Res. Inst., Univ. Tokyo

Seismic activity was attempted to predict in the Izu Islands in 2000, as discussed before. Based on an assumption that the occurrence of a pair of earthquakes with similar magnitudes may signal an impending major earthquake, 13 out of 25 imminent predictions were successful between 15 July and 23 October 2000. For predictions with an alarm period of 4 hours, for example, 5 out of 11 were successful. Such a success rate is expected only to have a probability of about 1%, if the seismic activity did not change before and after the time of prediction. In addition, based on the present method, 4 out of 5 major earthquakes with a magnitude of 6 could be predicted, including those during the test period from 27 June to 14 July. Considering the total length of the alarm period, there was only a probability of about 1%, if the occurrence of events with a magnitude of 6 was random and independent of the present rule.