

Two questions related to short- and long-term prediction of the so-called Tokai earthquake

GELLER, Robert J.^{1*}

¹UTokyo, Earth Planet. Sci.

In the 1970s there was widespread discussion suggesting that a large subduction zone earthquake was imminent in the Tokai district (the so-called "Tokai earthquake"), but the "Tokai earthquake hypothesis" was not stated in a testable form. About 40 years have passed, but no such event has occurred in Tokai. Under those circumstances it seems justifiable to conclude that the hypothesis has been falsified. That does not mean that Tokai is not at risk, just that the risk is not greater than other tectonically similar regions.

Under the Large Scale Earthquake Countermeasures Act (LECA), which was enacted in 1978, an organization for monitoring possible "precursors" and issuing short-term alarms was established. But no reliable precursors have ever been found. LECA should therefore be repealed and the monitoring organization abolished.

Reference:

Geller, R.J., 1997, Earthquake prediction: a critical review, GJI, 131, 425-450.

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