Reinvestigation of correlation between groundwater anomalies and earthquakes carried out by an amateur network in Japan

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An amateur volunteer group for an earthquake prediction, "the catfish club", had monitored groundwater levels and the temperature of thermal water to detect earthquake precursor signals since 1976. More than 200 participants in Kanagawa, Tokyo, Shizuoka, and some prefectures monitored them. Their sampled data are sent to the office of the catfish club, and the summarized reports were published every month. Oki and Hiraga (1988) reported the probably predicted events such as the 1978 Izu-Ohshima kinkai earthquake (M 7.0) and the 1978 Miyagiken-Oki earthquake (M 7.4). In this study, we statistically evaluate the anomaly appearance rate, the earthquake occurrence rate, and the probability gain using the data from 1977 to 1987.

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