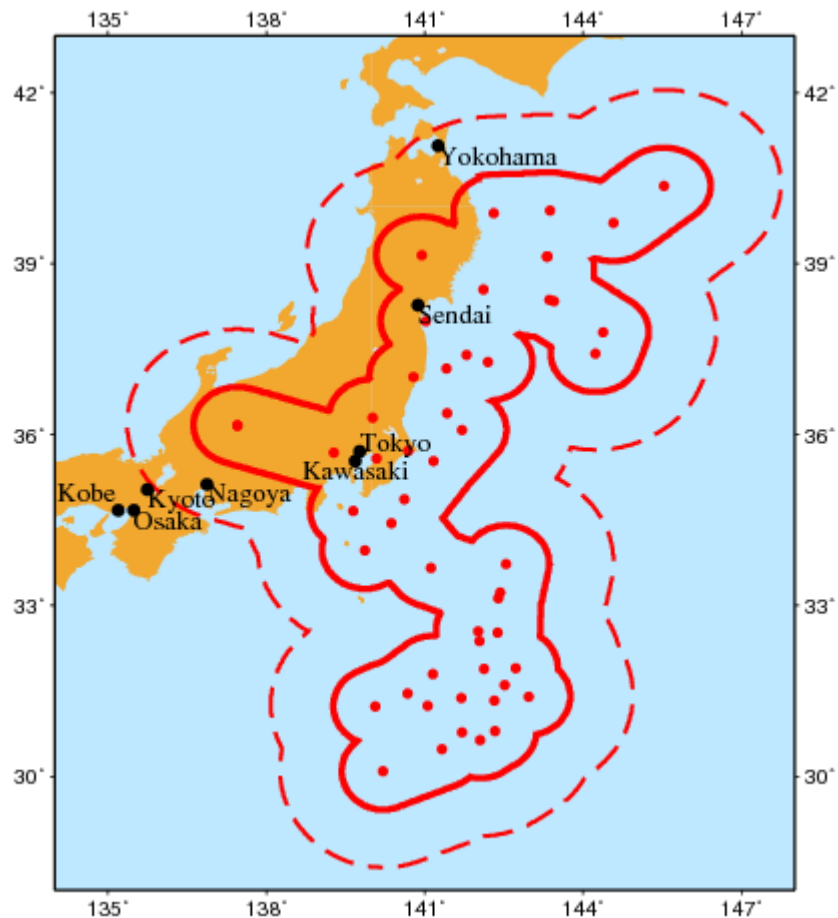


Experiment in prospective earthquake prediction using Reverse Tracing of Precursors (RTP)

Prediction #23(JP), March 12, 2011



Red circles show the earthquakes that formed precursory chain on March, 7, 2011. Area of alarm is shown by red contours: solid line test A, dashed line test B.

Starting from October 1, 2005 we test in parallel two versions of the prediction algorithm. Test A concerns exactly the same algorithm as before. In test B we made one change: we increased by factor 2.5 the value of the numerical parameter, R , thus expanding the area of alarm.

At least one earthquake with magnitude $M_w \geq 7.2$ is predicted to occur within the time interval 9 months, from March 7, 2011. Area of alarm is shown in the figure. Please note that this issue, due to a small technical delay of the data accessibility, was prepared already after two earthquakes, $M=7.2$, March 9, 2011, and $M=8.9$, March 11, 2011. Both earthquakes will not be considered as successful predictions. However, the alarm is not called off.

Estimated probability that a target earthquake will occur at random in the total time-area of the alarm is less than 12% in both tests A and B.

Estimated probability of a false alarm estimated by the method does not exceed 50% in both tests.

Reminder. As you know, earthquake predictions should be released to the public or media only by a proper disaster management authority. Otherwise, prediction may trigger profiteering and disruptive anxiety of population. Accordingly, we open an access to our predictions only to professionals who agreed to comply with the above limitations. This restriction is lifted and prediction becomes publicly available when a target earthquake occurs in the area of alarm, or when the alarm expires, independently of was it correct or wrong