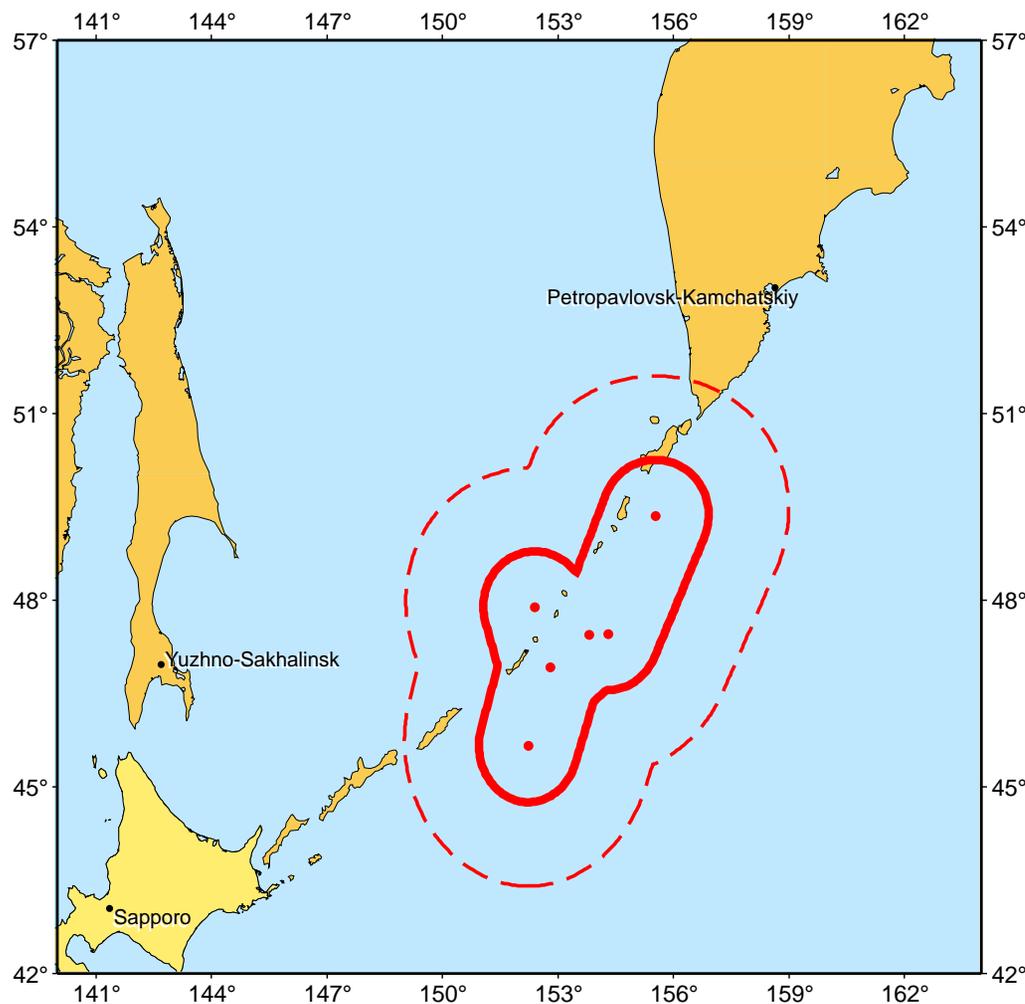


Experiment in prospective earthquake prediction using Reverse Tracing of Precursors (RTP) Prediction #20 (NP4), December 16, 2009



Red circles show the earthquakes that formed precursory chain on October 21, 2009. Area of alarm is shown by red contours: solid line test A, dashed line test B. Prediction for an earthquake of $M \geq 7.2$ covers the period October 21, 2009 to July 21, 2010.

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.

An earthquake with magnitude $M_w \geq 7.2$ is predicted to occur within the time interval 9 months, from October 21, 2009, to July 21, 2010 in the area shown by red lines in the figure: solid line shows the area of alarm in test A, dashed line in test B.

Estimated probability that a target earthquake will occur by chance in the time-area of the alarms #20 is less than 2% in test A and less than 5% in test B. Estimated probability of a false alarm 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 limitation. 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.