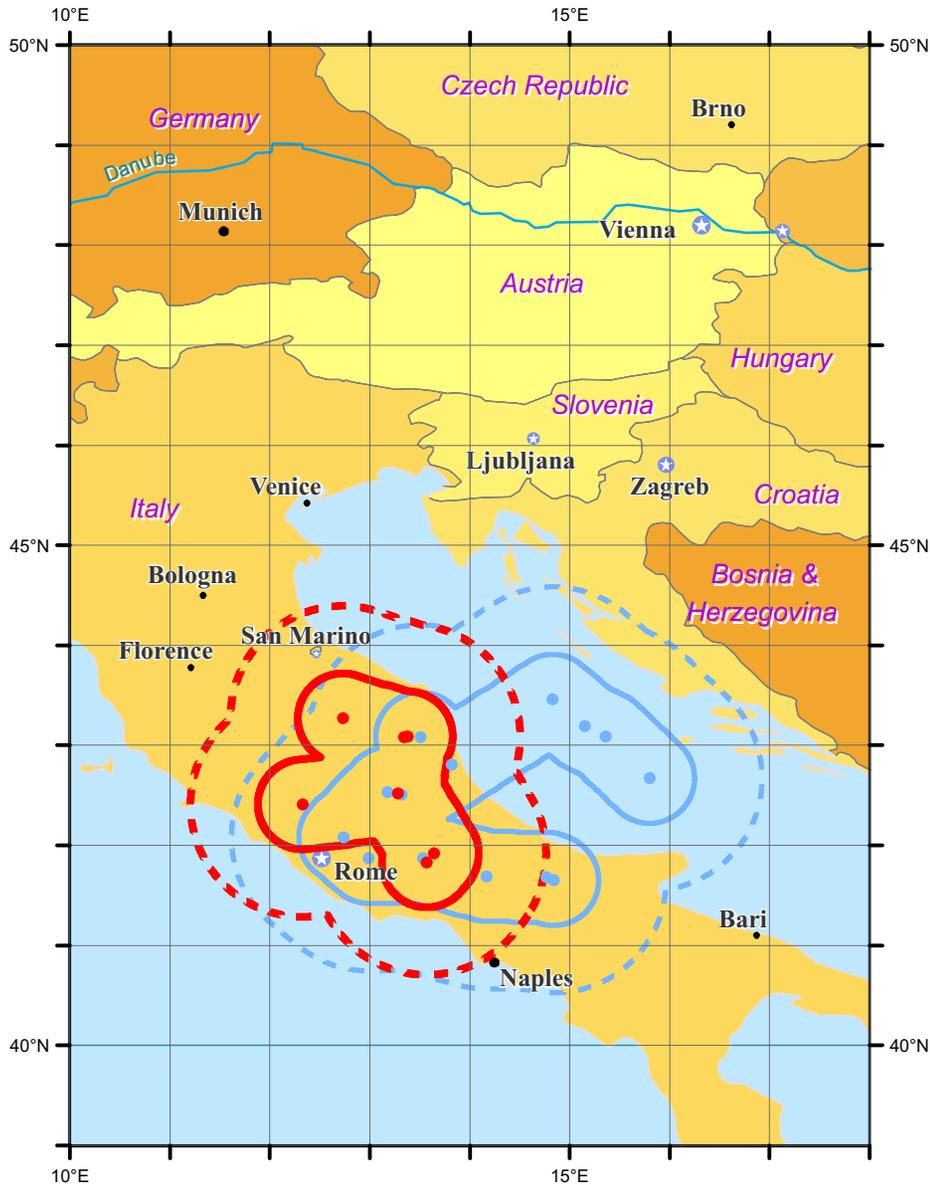# Experiment in prospective earthquake prediction using Reverse Tracing of Precursors (RTP) Prediction #8a, October 1, 2005

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 >= 5.5 (maximal value among four listed in the EHDF format of the PDE catalog) is predicted to occur within the time interval 9 months, from 00:00 GMT May 6, 2005, to 00:00 GMT February 6, 2006. Area of alarm is shown in the figure. This alarm extends in a smaller area Prediction #8, previously issued on January 29, 2005.

Estimated probability that a target earthquake will occur at random in the total time-area of the extended alarm is less than 9% in test A and less than 10% in test B. Estimated probability of a false alarm does not exceed 50% in both tests.

Red circles show the earthquakes that formed new precursory chain on May 5, 2005. Area of alarm is shown by red contours: solid line is for test A, dashed line is for test B. This alarm extends previously issued prediction #8. Similar notations in blue correspond to that prediction; test B was done in retrospect.

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.