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Reverse tracing of precursors: first results and lessons of the ongoing experiment in the months-in-advance prediction of large earthquakes

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We summarize here the results and implications of the first almost 3 years of the experiment in advance earthquake prediction by Reverse Tracing of Precursors ("RTP") approach. Prediction is based on premonitory seismicity patterns suggested by data analysis and theoretical modeling. Experiment, started in June 2003, covers so far the territories of California, Japan, Italy, and Eastern Mediterranean, each with adjacent seismically active areas; nine predictions were put on record. We overview correct and wrong predictions, the implications for further development of prediction algorithm, and possibilities to extend experiment to other regions, including northern part of Circum-Pacific belt and Vrancea. To evaluate prediction results we suggest three schemes of analysis, each complementary to others. Although the current results are not yet sufficient for any statistical conclusions, it is better to set up the evaluation rules in advance. Also, those schemes might be useful for the evaluation of similarly formulated predictions.