



Re-establishing seismic monitoring aimed at intermediate-term prediction of strong earthquakes in Armenia

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The first results encouraging seismic monitoring aimed at prediction of the strong earthquakes were obtained as early as in 1986 when using seismic catalog "Earthquakes in USSR". Regretfully, the continuity of this data base has been violated at the collapse of the Soviet Union. Unlike the decline of seismic observations in other former Soviet Republics, the regional seismic network of Armenia has managed to overcome the hardships keeping reliable reports on every magnitude 3 earthquake in the region. A comprehensive analysis of the earthquake catalogs available from Armenia and neighboring countries results a conclusion on feasibility to re-establish monitoring intermediate-term middle-range precursory changes of seismic activity at least inside the territory between 42-48°N and 38-42°E. The data available is suitable for monitoring the times of increased probability of strong (magnitude 6.0-6.9) and major (magnitude 7.0-7.9) earthquakes in the region by means of the intermediate-term earthquake prediction algorithm M8. The achieved results are stable to variations of data and parameters of the original version of M8 algorithm. This allows us to setup and start anew the real-time prediction experiment in Armenia and surroundings from January 2007.