EARTHQUAKE PRONE AREAS IN ROMANIA

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Abstract. The paper brings together all existing data related to seismic monitoring in order to characterize the earthquake-prone areas in Romania. A review of previous works on this subject is also carried out. The impetuous development of the Romanian seismic network in the recent years as number and quality of instruments makes it possible today to identify with a high degree of confidence the geometrical configuration of seismicity patterns able to generate strong earthquakes. At the same time, we are now able to separate the tectonic active zones from those contaminated by human activity and to define with higher accuracy the earthquake-prone areas. By increasing the range of magnitude completeness and by assessing specific variations in time and space of seismicity, the paper brings a significant contribution to improve our ability to evaluate seismic hazard in Romania.

Keywords: seismicity pattern, earthquake-prone area, earthquake catalogue, seismic hazard

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