



Revised parameters of the 26th November 1829 Vrancea earthquake by re-evaluating macroseismic data

Maria Rogoza, Mircea Radulian, and Dragos Toma-Danila
National Institute for Earth Physics, Magurele, Ilfov, Romania

The historical information on macroseismic effects of the earthquake that occurred on November 26, 1829 in the Vrancea zone (Romania) is reconsidered. Vrancea is one of the most active seismic sources in Europe, located at the bending zone of the South-Eastern Carpathians. The major events (magnitude above 7) that occur in this confined source are generated at intermediate depth and produce specific patterns of damage over extended areas. Four events with magnitude above 7 were reported during 19th century in Vrancea: in 1802, 1829, 1838, 1893 and 1894. The 1829 earthquake was felt in many areas. New information extracted from annals of time, notes on the religious books, etc. allowed a better constrain of the macroseismic distribution associated with this event. The comparative analysis with the effects recorded during recent major Vrancea earthquakes (1940, 1977, 1986) is used to estimate the hypocenter depth and specific source directivity effects.