



Subcrustal seismic activity in Romania (except Vrancea area)

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The study of earthquakes in Romania (without the Vrancea region) evidenced some seismic shocks placed at great depths, in upper mantle. So, in 1965-2006 time interval we localized 89 events in different tectonic units of our country as: Carpathian orogen (Southern and Eastern Carpathians), Precarpathian and Pannonian depressions and the Moesian Platform. The earthquakes foci were situated at depths of 60-239 km; all these quakes were placed without the know seismic active Vrancea region. For 16 intermediate shocks we determinated the focal mechanism based by the fault plane solution. In this analysis we considered the sign of P-wave arrivals at seismological stations. The tectonic stress inferred by this method indicated different directions of the tectonic forces generating the seismic shocks. Our study showed an active seismic activity at different levels of the upper mantle.