



Session 34

The intricate links between seismicity, tectonics and actual ground motions: new results from the databases of seismic and GNSS networks in South – Eastern Europe

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Intense seismic activity is recorded in the South-Eastern Europe both in the crust and at intermediate depths. Despite this activity, the causes of the relative neotectonic movements of the ground inside the principal tectonic plates or subplates are still under debate. The significant increase of the number of seismic stations distributed all over this area, in parallel with the recent expansion of GNSS networks, has provided an excellent set of databases to investigate and model the intricate links inside the complex, interrelated geophysical system consisting of active faults, neotectonic motions and associated seismicity and volcanism. Of particular interest is the stress distribution and coupling effects between different parts of the crust and the upper mantle, including the subcrustal nest of earthquakes in the Vrancea region of Romania and the overriding crustal seismicity.

This session primarily targets scientific observations and modelling related to understanding the links between present day seismology, geodynamic evolution and neotectonics in Southeast Europe first at intermediate levels, but also at crustal levels all over this region. We also invite new disciplinary and especially interdisciplinary research approaches in a wide spectrum, including seismology, neotectonics, GNSS-based models, focusing on unravelling the tectonic evolution of the orogenic systems (such as the Carpathians in Romania), as well as their relations with the nearby platforms and active zones of plate convergence.