



Macroseismic manifestations of the Romanian earthquake (September 24, 2016) on the territory of Ukraine.

Anna Kulynych and Volodymyr Illyenko

Institute of Geophysics of NAS of Ukraine, Geophysics, Kyiv, Ukraine (perfectzero@mail.ru)

Abstract presents the results of seismic interpretation of the earthquake that occurred on September 24, 2016 at 02h. 11min (local time) in Romania with magnitude 5.6 and was felt in different regions in Ukraine.

The essence of the work was, based on the spatial distribution of instrumental and macroseismic manifestation, to study the nature of investigated earthquake, its origin, parameters of focus and local attenuation laws of seismic shaking energy, which are necessary factors for predicting the magnitude and intensity of the future earthquakes. The seismotectonic situation in the epicenter of the earthquake was analyzed. The registered records of seismic waves and their spectrogram on the territory of Ukraine and global seismic networks were thoroughly processed. A scientific expedition collected data of macroseismic survey to study the distribution of seismic displays and detect the tangible effects of the earthquake. The maps of earthquake's manifestations in Kyiv region were plotted by visual observation and processing of information, which was obtained by a population survey and field studies. The research results are important for seismic protection of industrial facilities and people's lives against potential earthquakes from Vrancea area that can have a significant impact on Ukraine and border areas.