

Seismotectonic hazard map of Hungary - the result of collaboration between geomorphologists, geophisicists and arcitects

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Seismotectonic hazard map of Hungary is a recent result of 4 years long collaboration between industrial and academic researchers. Seismology, geodynamics, 3D model of the lithosphere and other maps led to the final synthesis of our final result. This map includes the representation of the young deformations based on the detailed interpretation along tens of kilometers of industrial seismic surveys as well as relocation of earthquakes of the last 25 years. Catalogue of historical earthquakes has been created and represented on the map. Based on our widespread geophysical-geological knowledge, root zones of active faults have been identified. More than 100 measurements of the shear wave velocity of the uppermost 30 m rock have been derived and collected. These results were compared with geomorphologic parameters of the measurement sites. Based on these initial data set, correspondence of topographic gradient between Vs30 have been established. High risk features (alluvial and lacustrine lowlands; foothills) have been identified based on our borehole database.