

Simultaneous relocation of the seismicity of the Pannonian Basin using Bayesloc

We relocated all events in the Pannonian Basin with the iLoc location algorithm using travel-time predictions from RSTT, a global, three-dimensional velocity model of the crust and upper mantle to provide accurate single event locations and to identify ground truth events. Using the iLoc locations as initial hypocenters and several hundred confirmed quarry blasts and mine explosions that qualify for ground truth as benchmark locations we relocate the entire seismicity of the region simultaneously with the bayesloc multiple event location algorithm. We show that the results present an improved view of the seismicity of the region.

Primary author: CZECE, Barbara (MTA Research Centre for Astronomy and Earth Sciences)

Presenter: CZECE, Barbara (MTA Research Centre for Astronomy and Earth Sciences)

Track Classification: Theme 2. Events and Nuclear Test Sites