



Dynamic stress drop for selected seismic events from Rudna copper mine

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This presentation reports the preliminary results of the dynamic stress drop studies for the selected mining induced seismic tremors. The used methodology relies on the inspection of the properties of the relative source time functions (STF) estimated by the Empirical Green Function technique. For the current, preliminary analysis events with an uniform and also azimuth dependent distribution of STF amplitudes were selected. For both groups of events the calculated dynamic stress drops show relatively weak azimuthal dependence. Nevertheless for the events exhibiting stronger directivity pattern the rupture direction coincides generally with the larger values of the dynamic stress drops. We have noticed that the average, over all recording channels, dynamic stress drop is larger than the static stress drop. We have also find out that in one case the very large dynamic stress drop coincides with extremely low rupture velocity.