

The M2 event and its foreshocks monitored at 100m distance - Semi-controlled Experiment in SA Gold Mine (22)

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To see what's going on during the rupture process, observation at closed distance is very important. In South African gold mine M2 with foreshock sequence were observed in 100m hypocentral distance with 15kHz sampling and 132dB dynamic range. The seismogram of M2 was complicated and we could see initial phase while that of foreshocks is simple. We determined the focal mechanism of one of the foreshocks by supposing a point source model. It was normal fault with strike almost parallel to the mining face. We are going to investigate the rupture process of M2 event and nucleation process using the mechanism and distributions of its foreshock sequence.