SEISMO-ACOUSTIC ANALYSIS OF QUARRY BLASTS IN THE IS31-AKTYUBINSK REGION AND THE INFLUENCE OF ATMOSPHERIC CONDITIONS ON INFRASONIC WAVE PROPAGATION

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IS31-Aktyubinsk infrasound station has been operating in Kazakhstan since 2001. A new Akbulak seismic array situated 188 km south-east IS31 began operating in 2003. It consists of 9 highly sensitive borehole seismic stations. Large quantity of industrial explosions required for mining operations is carried out in this region. Signals of those events are recorded both by the infrasound station and seismic array. Seismo-acoustic analysis of the blasts records in one of the chromite winning quarry is presented in the report. Data for the first six months of 2004 has been examined. Seasonal change of the atmospheric conditions influence onto the infrasonic wave propagation has been studied using records of infrasound and seismic components of the blasts signals.