

-Acoustic Analysis of Quarry Blast in Mongolia

Seismic and acoustic recordings are particularly important to help identifying and locating industrial blasting sources. We have analyzed seismo-acoustic signals from mine blast for 2000 and 2009 in order to determine detection seismo-acoustic signals of explosion by seismic and infrasound stations. Several large mines in the region routinely generate explosions that are detected seismically and with infrasound. The mine range in distance from 40-500 km from the seismic, infrasound array. In last few years mining activity in Mongolia significantly increased. All events identified as quarry blasts have occurred during daytimes between 03:00 p.m. and 08:00 a.m. GMT and on weekdays from Monday to Friday. The corresponding number of infrasound detection is found to be dependent upon the regional weather condition, which is included air temperature, epicentral distance, wind force and velocity. We present the seismic and infrasound IMS stations and some results of analysis.

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