

in seismoacoustic GT database creation at Kazakh NDC

Kazakh infrasound network consists of tree arrays: IS31 at the west of Kazakhsatn, Kurchatov at the north-east and Makanchy at the east. Kazakh NDC also processes the data of the neighbor IS46 array, Altay, Russia. North Kazakhstan and neighboring part of Russia have got very high mining activity. Signal detection and its source location is automatically performed at Kazakh NDC since June 2014. The method of the seismoacoustic GT database creation was described at [Smirnov 2016] on ITW 2016. The technique was later improved, it was suggested to use Lg waves [e.g. Slinkard et al. 2014] for the seismic event correlation and historical Google Earth images for the mining activity estimation. The results of the improved technique approbation with the data of the Ekibastuz, Mykain and Akbastau quarries show that the technique applicability strongly depend on the quarry geometrical dimensions. The improved technique finally was applied to the several mining regions at the Central Asia.

Primary author: SMIRNOV, Alexandr (Kazakhstan National Data Centre)

Presenter: SMIRNOV, Alexandr (Kazakhstan National Data Centre)

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