

Results of Detection and Location of Infrasound Events in Central Eurasia Using Data of IS46 Zalesovo Station Along with Data from the New Kurchatov Infrasound Array in Northeast Kazakhstan

KNDC (Kazakh National Data Center) acquires and processes data from seismic and infrasound stations located on the territory of Kazakhstan and adjacent Central Asia countries. At the present time, KNDC receives data from three infrasound arrays - IS31, IS46 and Kurchatov. The new infrasound array Kurchatov, North-East Kazakhstan, was installed on December 2010; IS46 Zalesovo infrasound array of the IMS located 560 km north-east of it has been operating since 2006. In 2010 – 2011, 38% of infrasound arrivals in REB are from IS46. Most IS46 arrivals associated with mining activity (Green 2011). Automated bulletins of infrasound detections are compiled in KNDC using infrasound stations data. The PMCC detector is used. Epicenters of infrasound events were located by known backazimuths from the stations IS46 and Zalesovo. First results of this technique application showed that data of these two stations allow to locate large number of infrasound sources quite accurately. In future, a database of ground truth events can be compiled for Central Eurasia using origin times for these events taken from seismic bulletins compiled in KNDC.

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