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, the Korea Seismo-Infrasound Array installed at PS31

Korea Institute of Geoscience and Mineral Resources (KIGAM) has installed an infrasound sensors since May 2014 on the existing eight seismic stations of PS31 called KSRS which is composed of 26 seismic sensors with a 40-km aperture. The installed acoustic sensors are collocated with the seismic stations of KSRS. This changes part of KSRS into a seismo-infrasound array, the Korea Seismo-Infrasound Array (KSIAR). The aperture of KSIAR is 6.8 km. The data from KSIAR except that from the site KS06 is being transmitted in real time to KIGAM with VPN and internet line. The analysis on seismo-acoustic signals has been performed since the installation of acoustic gauges. The utilization of an array process called Progressive Multi-Channel Correlation (PMCC) detects seismo-acoustic signals caused by various sources including small explosions in relation to constructing local tunnels and roads as well as large scale surface explosions in regional distance ranges. The seismo-acoustic signals recorded by KSIAR are supplying useful information for discriminating local and regional man-made events from natural events.

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