

2.2-P04. Application of the local seismic observation data for the common exercise in East Asia Regional NDC Workshop 2014

As a part of East Asia Regional NDC Workshop 2014 Mongolia, the common exercise took place in regards to event location and discrimination of the seismic event presumed mining explosion near China-DPRK border.

This event was so small (ML=2.0) that only 2 seismic stations, KSRS and USRK, could detect seismic signals in IMS seismic observation network. Interestingly, 1 IMS Infrasound station, I45RU detected infrasonic signal from this small event. On the other hands, non-IMS local seismic network data was available such as NECESSArray (NorthEast China Extended SeiSmic Array) project, which had deployed seismometers over North-Eastern China as Japan-China-US joint academic project at that time, and Korean local data kindly provided by KIGAM. Some participants of common exercise found that signals from this event were detected at many stations in such non-IMS network, and it indicated that these local/regional seismic data could contribute largely to determine more reliable event location. IMS seismic network is not designed for detecting small-scale nuclear test far less than 1kt. Therefore it seems to be effective to use non-IMS observation data near hypocenter for detecting such a small event presumed man-made explosion. In this presentation, we would report on our analysis result.

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Track Classification: 2. Events and their characterization