

Challenging to utilize the infrasound technologies for civil and science application

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Japan Weather Association (JWA) is working as the Comprehensive Nuclear-Test-Ban Treaty (CTBT) National Data Centre-1 (NDC-1) of Japan which is in charge of analysis on waveform data, operation and maintenance of infrasound and seismic stations in Japan.

We observed infrasonic signals two times from underground nuclear test in DPRK. From the perspective of nuclear test monitoring, it is important to analyze and study the infrasonic signals from a variety of natural phenomena to discriminate the signal from explosion. On the other hand, that kind of studies are also important for civil and science application of infrasound technologies. We also observed infrasound from large tsunami at the time of 2011 off the Pacific coast of Tohoku Earthquake. If the signals from such hazardous phenomena can be detected immediately, it will be very helpful to alert the occurrence of disaster or approach of hazardous phenomena.

This triggered us to build our own observation network in Japan. We are challenging to utilize the infrasound technologies for civil and science application as well as nuclear test monitoring.

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