

Infrasonic signals from natural phenomena observed by infrasound stations in Japan

At the time of the 2011 off the Pacific coast of Tohoku Earthquake, several microbarographs around focal region recorded pressure changes excited in tsunami source region. After that, Japan Weather Association(JWA) have started experimental infrasound observation at two stations in Ofunato city and Shima district to study infrasound monitoring technique for detection of large tsunami generation and other disaster like severe storm, tornado and so on. Since a variety of phenomena can excite infrasound, infrasonic signals are frequently observed at Japanese IMS station I30JP and two JWA's infrasound stations mentioned above. It is our goal in the future to detect and identify such natural phenomena by observed signals, and it will help to distinguish between signals from explosion and natural phenomena as well. In this presentation, we will introduce some cases of detected signals traveling from known sources such as volcanic eruption and fireball(bolide). Through the analysis on observed signals from a variety of phenomena, it is expected to accumulate useful information for application to source identification and propagation characteristics of signals.

Primary author: OTSU, Takayuki (Japan Weather Association (JWA))

Presenter: OTSU, Takayuki (Japan Weather Association (JWA))

Track Classification: Analysis of Sources and Scientific Applications