Geophysical Research Abstracts
Vol. 16, EGU2014-11933, 2014
EGU General Assembly 2014

Evaluation of Infrasound-Events Reported in the REB 2013

ulrike mitterbauer
ZAMG, Geophysics, Wien, Austria (u.mitterbauer@zamg.ac.at)

The International Monitoring Network (IMS) of the Comprehensive Test Ban Treaty Organization (CTBTO) consists of seismic, infrasound and hydroacoustic stations. In addition to the seismic and hydroacoustic detections, there are a large number of infrasound signals detected at the IMS infrasound stations and used to build events in the Reviewed Event Bulletin (REB).

An investigation was conducted for all events recorded in the entire year of 2013 for improving the technology knowledge at the Austrian National Data Center (NDC). For the training purpose, this study covers various sources, i.e. explosions, volcanoes, meteorites, ultrasonic flights and tectonic earthquakes. Waveforms of selected events were firstly compared with the reference signals. To better understand the frequency properties of the signals, an analysis was performed in the frequency domain. Repeated signals from certain regions were extracted, studied and categorized. A comparison was carried out between the REB events and the events registered by a mobile Infrasound-Array which was temporarily deployed in the Northern Austria in 2013. The mean purpose of this presentation is to initialize discussions with the Infrasound-Community about the methods used and conclusions obtained in this study.