

Infrasound Reference Event Database Needs to be Revised

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The International Monitoring System (IMS) of the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) comprises four verification technologies that work in synergy to enable the detection, location, and identification of potential nuclear explosions. One of the four technologies is the infrasound which listen to corresponding sound waves. As of 2022, Fifty-three from sixty planned IMS infrasound stations are recording corresponding pressure fluctuations. In this regard and in order to support the National Data Centres (IDC) and infrasound analysts, the IDC produced on 9 July 2010 the Infrasound Reference Event Database (IRED) to collect, review and document infrasound events of special interest and to archive the data for each event into database tables to be used for training, testing and validation purposes. IRED contains 616 events grouped in 12 categories. In the last 12 years, infrasound stations detected more events of special interest which can be added to the database. New infrasound stations were certified after 2010 and recorded more interesting events. Moreover, some existing events in IRED need to be corrected. In this poster we will show that IRED needs to be revised and updated using existing events from the database and some new detected events.

Promotional text

It is time to revise the Infrasound Reference Event Database (IRED).

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Oral preference format

in-person

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