

Infrasound technology - status and projects

The IDC advances its methods and continuously improves its automatic system for the infrasound technology. The IDC focuses on enhancing the automatic system for the identification of valid signals and the optimization of the network detection threshold by identifying ways to refine signal characterization methodology and association criteria. Alongside these efforts, the IDC and its partners also focuses on expanding the capabilities in NDC-in-a-Box (NiaB), which is a software package specifically aimed at the CTBTO user community, the National Data Centres (NDC).

An objective of this presentation is to illustrate the latest efforts by IDC to increase trust in its products, while continuing its infrasound specific effort on reducing the number of associated infrasound arrivals that are rejected from the automatic bulletins when generating the reviewed event bulletins. A number of ongoing projects at the IDC will be presented, such as: - improving the detection accuracy at the station processing stage by introducing the infrasound signal detection and interactive review software DTK-(G)PMCC (Progressive Multi-Channel Correlation) and by evaluating the performances of detection software; - development of the new generation of automatic waveform network processing software NET-VISA to pursue a lower ratio of false alarms over GA (Global Association) and a path for revisiting the historical IRED. The presentation also focuses on a number of areas for improvement that the IDC identified for its infrasound system.

Primary author: MIALLE, Pierrick (CTBTO Preparatory Commission)

Presenter: MIALLE, Pierrick (CTBTO Preparatory Commission)

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