

Technology at the IDC – projects and achievements

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In 2001, the first data from an IMS infrasound station arrived at the IDC. The IDC infrasound processing system was in a premature state and a multi-year development effort was initiated, which led to the completion in 2010 to the first operational infrasound automatic processing and interactive analysis systems. In thirteen years the IDC produced over 45,000 infrasound events reviewed by expert analysts.

In an effort to continue advancing methods, improving its automatic system and providing software packages to authorized users, the IDC focused on redesigning the station processing and interactive review systems. This led to the development of DTK-(G)PMCC promoted to IDC operational environment on 01 July 2022. The software package is available in NDC-in-a-Box (NiaB) to authorized users.

In complement, an infrasound model was developed for the automatic waveform network processing software, NET-VISA, with an emphasis on the optimization of the network detection threshold by identifying ways to refine signal characterization methodology and association criteria.

Those major endeavours allow for the enhancement of the IDC processing system, to reduce workload of analysts and to continuously increase the quality of IDC bulletins. Progresses will be illustrated with notable infrasound events since promotion of the new Operational software.

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Promotional text

Review of one year of the new infrasound station processing system in IDC Operations

Oral preference format

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