

Listening of a Baltic gas Explosion

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This study provides an overview of a civil application of International Monitoring System (IMS) data to assist in disaster mitigation. Two infrasound arrays coupled with seismic stations of the IMS recorded the with Baltic Sea gas explosion on 26 September 2022. Underwater eruptions generate air waves and pressure waves that can cause fluctuations in the different layers of the atmosphere. Analysis of the event was done using GPMCC to test the operational readiness of these IMS stations. The parameters studied were phase, frequency, magnitude, azimuth and slowness which were observed to be consistent with theoretic values. The combined interpretation of seismic and infrasound signals was used to obtain the location of the event. The study concludes that at local and regional distances the IMS network is operational ready in a timely manner to contribute data towards a safer environment.

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Promotional text

The International Monitoring System network is operational ready in a timely manner to contribute data towards a safer environment.

Oral preference format

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