

of Nordstream Explosions Using NDC in a Box Software

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Two seismoacoustic events occurred on 26 September 2022 close to Bornholm Island in the Baltic Sea. Both events were listed in the Reviewed Event Bulletin of CTBTO as they were detected with the International Monitoring System. As the events were classified as a critical event by the Austrian National Data Centre, the available data were analysed in detail. The earlier event, with a published body wave magnitude mb 3.1, at 00:03 UTC was recorded at three seismic stations and at the infrasound station IS26. The later event at 17:03 UTC with a body wave magnitude mb 3.2 was even recorded at seven seismic stations and at the two infrasound stations IS26 and IS43. Furthermore, the later event was detected at the Austrian infrasound station ISCO.

A first assessment of data, which were analysed by using the DTK-GPMCC, confirmed the explosive nature of the events due to extraordinary infrasonic detections. Further analysis was carried out using waveform analysis tools available within NDC in a box (GeotoolQt and Geotool). Seismic data of the events from 26 September 2022 were compared with data of a natural seismic event which occurred in Croatia on 1 October 2021 and the explosive character of the events could be confirmed.

Promotional text

Two seismoacoustic events occurred on 26th of September 2022 close to island Bornholm in the Baltic Sea. Assessment of data was done using Software provided by NDC-in-a-Box (dtkGPMCC, GeotoolQt and Geotool). Seismic data of the events was compared to a natural seismic event.

Oral preference format

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