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Trends in International Data Centre Infrasound Analysis

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The Comprehensive Nuclear Test-Ban Treaty Organization (CTBTO) uses infrasound to measure acoustic impulses in the atmosphere that could be indicative of an atmospheric nuclear test or explosion. However, many other events analysed by analysts at the International Data Centre (IDC) and appear in IDC products such as the Reviewed Event Bulletin. Examples include gas pipeline explosions, rocket launches, volcanoes, meteors, and many others. In the past several years, two new infrasound stations were introduced to the network: IS20, in the Galápagos Islands (2018), and IS25, in Guadeloupe (2020). Here, we show some examples of the new perspectives that these stations give on events such as the recent activity from the Sangay volcano and regional rocket launches respectively. We also describe our experience with the recent (2022) upgrade in the analysis software to a newer version called DTK-GPMCC. By showing these salient events and giving some insight into the software used by analysts, we hope to present a picture of how infrasound analysis currently looks at the IDC.

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Promotional text

The IDC analyst team shows how they integrate new stations and new software into infrasound analysis of atmospheric disturbances, in support the CTBTO's mission to eliminate nuclear weapons testing worldwide.

Oral preference format

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