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analysis in the International Data Centre Operations

Routine analysis of infrasound data began in early 2010. Since then, analysts at the International Data Centre have reviewed more than 117,700 automatically built SEL3 infrasound events and included 62,700 events in the Late Event Bulletin (LEB). Of these, 34,800 events met the Reviewed Event Bulletin (REB) event criteria. Analysing infrasound data presents several challenges. These include distinguishing between noise and signal, obtaining preliminary location based on one-station observations, or identifying signals generated by the same source that travelled different paths to detecting stations. Most of the events included in the REB are seismic in nature, originating from stationary short-duration sources such as earthquakes or mining blasts. Another challenge in infrasound event analysis is that infrasound sources often move (i.e. bolides) or produce long-duration signals (i.e. erupting volcanoes). This presentation will focus on the procedures used to analyse infrasound events in IDC Operations along with examples of challenges encountered during infrasound analysis.

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