

eruptions recorded in the IDC bulletins

Infrasound is one of the three waveform technologies of the Comprehensive Test Ban Treaty (CTBT) verification regime. Its primary application is to detect and locate atmospheric nuclear tests. The International Monitoring System (IMS) network also records other sources of infrasound signals like bolides, spaceflight activity, sonic booms, volcanic eruptions, quarry blasts, earthquakes, etc.

Volcanic eruptions listed in the International Data Centre (IDC) bulletins were typically detected by infrasound IMS network as pure infrasound events. In cases of seismo-acoustic events, seismic and infrasound signals were normally related to different processes related to volcanic activity. As volcanic ash poses danger to aviation, remote observation of active volcanoes is an important civil application of the CTBT verification regime.

Volcanic events included in IDC bulletins were recorded either as a sequence of short duration signals (e.g. Sakurajima) or long-lasting activity (e.g. Eyjafjallajökull). Long-lasting activity is more difficult to be included as events in the IDC bulletins but may be more interesting for civil applications. The aim of this presentation is to show examples of volcanic eruptions recorded at the IMS network to facilitate future analysis of these sources of infrasound signals.

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