ID: Type: **Poster**

3.3-P13. IDC Infrasound Pipeline initiative for technology development

The first atmospheric event built exclusively from infrasound arrivals was reported in the Reviewed Event Bulletin in 2003. Currently 48 infrasound stations from the IMS are installed and transmitting data to the IDC. The infrasound component of the IMS daily registers infragenic signals originating from various natural sources such as volcanic eruptions, earthquakes, meteorites entering the atmosphere and anthropogenic sources such as mining and accidental explosions. The IDC routinely processes infrasound data and creates automatic bulletins reviewed interactively. The IDC advances its methods and continuously improves its automatic systems. It focuses on enhancing the automatic system for the identification of valid signals and the optimization of the network detection threshold by identifying ways to refine signal characterization methodology and association criteria. The current operational system handles seismic, hydroacoustic, and infrasound technologies within one instance of the Global Association automatic association algorithm. The Infrasound Pipeline initiative consists in separating infrasound technology at the automatic association stage. An objective is to reduce the number of automatically associated infrasound arrivals that are rejected by analysts. This study prepares the way for implementing the next generation of automatic waveform association algorithms. Infrasound association is revisited to pursue a lower ratio of false alarms.

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Track Classification: 3. Advances in sensors, networks and processing