

Infrasound Technology Workshop, DeBilt, Netherlands, 28-31 October, 2002

Preferred format: Powerpoint presentation with computer projector

Abstract submission, possible subject areas:

Data quality assurance and monitoring

Instrumentation monitoring

The Infrasound Data Extraction and Archiving System (IDEAS) used at Windless Bight, Antarctica (I55US) and Fairbanks, Alaska (I53US)

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Based on nearly two years of experience operating our CTBT Infrasound Station at Windless Bight, Antarctica (I55US) and the initial operation of our partially completed station at Fairbanks, Alaska (I53US), we recently undertook a major overhaul of our hardware and software systems for monitoring data quality and instrument state-of-health parameters. In June 2002 we developed and deployed the Infrasound Data Extraction and Archiving System (IDEAS) software package in response to lessons learned from each site. IDEAS is a robust, comprehensive tool for managing, monitoring and archiving the data flow from multiple infrasound stations. In four months of operation, IDEAS successfully processed and archived 100% of the available data from I55US without user-level intervention. Since IDEAS was designed to accommodate multiple sites, it seamlessly integrated the data stream from I53US the moment it became available. To assist the station operator, IDEAS also incorporates near real-time graphical displays of all important station state-of-health parameters, alarm functions and data flow, as well as an automated email alert system in the event of various station failures and/or anomalies. Beyond software upgrades, we have improved the ergonomics of our local facility in Fairbanks, allowing for efficient operation and monitoring of multiple stations.