

3.3-P35. The integrated waveform QC library

The seismic, hydroacoustic and infrasonic processing system installed at the International Data Centre (IDC) of the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) continually processes waveform data from the global International Monitoring System (IMS) network. In order to better address data quality issues, a dedicated waveform quality control application has been developed. This new algorithm takes over the responsibility of assessing waveform data quality from various independent applications such as the DFX signal detector, and persists the information to the database for the benefit of subsequent processing stages, -previously this information was being discarded. Since data quality information is now being recorded it is possible to re-construct at a later date the exact processing history and thereby duplicate earlier processing. The algorithm identifies several classes of problematic data including spikes, constant values, errant channel noise, authentication and timing problems. The option to repair the data or mask from further processing is at the discretion of the algorithm processing the data.

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