

# and Simulation of Improved Seismic Data using Adaptive Processing by National Data Centre Iraq

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All States Parties have convenient access to all International Monitoring System (IMS) data, International Data Center (IDC) products and all applications and scientific studies programmes used in the IDC of the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO). We took advantage of this as the Iraqi National Data Center. In this study most of the research and studies related to the analysis of seismic waves were reviewed using digital signal processing methods and artificial intelligence. Where the data of seismic waves are digitally analysed using modern digital analysis and processing methods to obtain faster analysis after to receive waveforms of the event through the use of classification intelligence algorithms. Data has been studied of the Arabian Sea earthquake seismic event on 26 October 2022 at 23:00:07 which was detected by two IMS monitoring technologies and non-IMS which is implemented in this work is the inclusion of analysis data using HA1 IMS (hydroacoustic station) with event location integration with seismic data for stations near that seismic event. As well as seismic event which was also studied and evaluated in Turkey, detected by IMS and non-IMS stations in IRIS on 23 November 2022 at 01:08:15.

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## Promotional text

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## Oral preference format

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Analysis of Seismic, Hydroacoustic and Infrasound Monitoring Data