

Scientific Applications of IDC and IMS Products: Earthquake Research and Tsunami Warning in Sri Lanka

Although the primary purpose of the products of International Data Center (IDC) and the International Monitoring System (IMS) of Comprehensive Nuclear-Test Ban Treaty (CTBT) verification regime is to verify compliance with the Treaty effectively, those products can be used in scientific and civil applications such as research on earth structure, earthquake monitoring and tsunami warning. The Seismic Data Monitoring Center at GSMB, Sri Lanka also benefited by the products of IDC and the IMS products. The main function of the Seismic Data Monitoring Center at the GSMB is to provide accurate and prompt seismic activity data for relevant authorities especially of impending tsunamigenic event and to be used later for research purposes. Presently, it retrieves raw seismic data from IDC server and the GFZ server and analyse using Seiscomp3 software. The national data center receives raw data from seismic station around Indian Ocean from the IDC and these data is being analyzed to determine the earthquake parameters include location, depth, magnitude etc. The accuracy of these results is compared with the products of IDC and used for tsunami warning and later in research on seismicity in and around Sri Lanka.

Primary author: THALDENA, Sanjeevani Nilmini Bandara (Geological Survey and Mines Bureau (GSMB))

Presenter: THALDENA, Sanjeevani Nilmini Bandara (Geological Survey and Mines Bureau (GSMB))

Track Classification: Theme 5. CTBT in a Global Context