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Romanian contribution to the CTBT monitoring during 2004 - 2008

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The National Institute for Earth Physics (NIEP, Bucharest) hosts the National Data Centre of Romania (ROM NDC), and operates the auxiliary seismic station Muntele Rosu (AS081, MLR) as part of International Monitoring System (IMS).
The paper presents the Romanian contribution in support of verification regime of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) during 2004–2008. Seismic data from MLR station have been provided directly to the International Data Centre (IDC) upon request at any time through on-line computer connections and VSAT transmission. The paper discusses the GCI link availability and data availability for MLR, as well as the usage of MLR data in the IDC.
Daily event bulletins are produced by ROM NDC, including the events located on the territory of Romania, and using seismic data recorded by the national seismic network. These bulletins are sent on a monthly basis to the IDC, and they offer good solutions for the events in Romania, due to the data provided by a dense network around the epicentral areas.
The IDC automated and reviewed event bulletins include events in whole world, based on processing data recorded by a network of seismic, hydroacoustic and infrasound globally distributed IMS stations. The solutions of the events that are located in these bulletins on the territory of Romania are compared with the ROM NDC bulletin solutions: epicentral location, depth, magnitude, error ellipse, and the results are presented in this paper. As a consequence of the superior coverage of stations on the Romanian territory, the NDC locations are better constrained.
In the last five years, ROM NDC participated in the first System-Wide Performance Test (SPT-1), as well as in the NDC Preparedness Exercises (NPE07 and NPE08). This paper shows some of the results achieved as part of these exercises.