Overview of the Japanese National Data Centre-1 (NDC-1)

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Japan Weather Association (JWA) is working as the Comprehensive Nuclear-Test-Ban Treaty (CTBT) National Data Centre-1 (NDC-1) of Japan which is in charge of analysis on waveform data, operation and maintenance of seismic and infrasound stations in Japan. There are two main roles of NDC-1: 1: technical adviser to the national authority (MOFA) from the view point of seismic and infrasound analysis, and 2: station operator of IMS stations (PS22, AS51-AS55 and IS30). And there are three main activities of NDC-1 as technical adviser: 1: if the suspicious event would occur, we would try to clarify its characteristics and report its results to the MOFA via the secretariat, 2: we sometimes do 1-week integrated operational exercise hosted by the secretariat on the assumption that the situation would be, and 3: we are paying efforts to improve our analytical capability of SHI data and explanation capability by using the national exercises.

This poster introduces the integrated operational exercise and the event discrimination analysis results of the 6th DPRK nuclear test as of the real analysis results in particular.

The integrated operational exercise is conducted by NDCs, integrating the data and analysis addressed by NDCs, and reporting to the CTBT National Operating System of Japan. These exercises have been implemented 27 times since 2009 and 30areas were selected for regions and countries. And our event discrimination analysis takes mainly three methods: 1: regional P/S ratio, 2: P/S spectral ratio and 3: mb: Ms.

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