ID: Type: **Oral**

PTS Response to the DPRK Announced Nuclear Test

The Democratic People's Republic of Korea (DPRK) has announced that it conducted its third nuclear test. The seismic component of the CTBT verification system detected a clear signal from the expected test area in proximity to the locations of the previous tests in 2006 and 2009. The International Data Centre (IDC) estimated the magnitude at 4.9, which is larger than either of the previous tests (IDC magnitudes of 4.1 and 4.5, respectively). As this event was larger and more stations in the International Monitoring System (IMS) were sending data to the IDC than during the previous tests, more IMS stations detected the event. Detections were found on 96 IMS stations, two of which were infrasound stations, and 88 were used in the event location estimate reported in the Reviewed Event Bulletin (REB). The REB location uncertainty for this event is approximately 8 km. In preparation for the possibility that radionuclides might have been released, atmospheric transport modeling was used to estimate where a possible radionuclide release would be detectable. Although some close-by stations had some clear radionuclide detections, the radionuclide composition and activity levels were typical for the stations and demonstrated the importance of understanding the global radiological background.

Primary author: NIKKINEN, Mika (Comprehensive Nuclear-Test-Ban Treaty Organization)

Presenter: NIKKINEN, Mika (Comprehensive Nuclear-Test-Ban Treaty Organization)

Track Classification: Theme 2: Events and Their Characterization