

ID: **O2.1-319** Type: **Oral** 

## of aftershocks of explosions in the DPRK at teleseismic distances

Research into monitoring underground explosions under the Comprehensive Nuclear-Test-Ban Treaty (CTBT) focuses on fully utilizing International Monitoring System (IMS) data to detect events of interest to the CTBT regime. For example, the Punggye-ri test site in the DPRK has been experiencing aftershock activity caused by large underground explosions for the past eight years. The use of waveform cross-correlation (WCC) at IMS stations allows for the detection of several times more weak seismic events at the site than standard International Data Center (IDC) methods. In the five and a half years since the sixth explosion, WCC has detected 30 events that meet IDC bulletin criteria. Over the past year and a half, there has been an increase in post-seismic emission, resulting in the detection of an additional 31 events of unknown origin. The official bulletin of the IDC contains only 11 of the 61 events found by the WCC method.

## E-mail

ivan.o.kitov@gmail.com

**Primary author:** KITOV, Ivan **Co-author:** Mrs SANINA, Irina

Presenter: KITOV, Ivan

Session Classification: O2.1 Characterization of Treaty-Relevant Events

Track Classification: Theme 2. Monitoring events and Nuclear Test Sites: T2.1 Characterization of

**Treaty-Relevant Events**