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it possible to hide the DPRK explosions in the Tohoku earthquake signals as noise?

The DPRK test-site is within regional distances from the Tohoku earthquake fault. No DPRK explosion was conducted during the time when the highest amplitude Tohoku seismic signals travelled over the globe. The conduction of an underground nuclear test near and just after one of the largest earthquakes ever is a well-known evasion scenario. Seismic data from the IMS stations is available for the Tohoku event and six DPRK explosions. One can mix waveforms and check if such a scenario was or will be possible. Various segments of the Tohoku signals are considered for masking the DPRK tests. The detection procedures were similar to those at the IDC and waveform cross-correlation (WCC) was applied to reduce the detection threshold. The largest DPRK6 event is not possible to hide in the Tohoku noise even when WCC is used, but all other events are not detectable. This evasion scenario is viable because the post-seismic activity is extremely high. The IMS/IDC detection capability was tested with a magnitude 5.5 Tohoku aftershock. The detection threshold was estimated for such an event mimicking an underground test. When co-located with an $M_w=9.0$ earthquake, a nuclear test of $m_b=6.0$ would be completely hidden.

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