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## seismicity for parts of the northern Korean peninsula

Tens of papers have reported small seismic events at shallow depth in and near the northern regions of the Democratic People's Republic of Korea. They often characterize the events as aftershocks of specific nuclear test explosions (NTEs). Here, we report an analysis of about six years (2004 to 2010) of seismic data recorded by the Dongbei Seismographic Network (DBSN) that in addition to such NTE aftershocks finds low-magnitude seismic events occurring in significant numbers (several hundred per year), in or near these northern regions. The events appear also to entail natural background seismicity, and blasting activity. The DBSN was installed and operated under the leadership of Kin-Yip Chun (see his papers in the October 2009 issue of the Bulletin of the Seismological Society of America, also doi: 10.1785/0120160111 for some details of the network and its uses). The DBSN data archive has been openly available in recent years (currently at Earthscope). We describe simple discriminants that help distinguish between natural and anthropogenic seismic events for this dataset. Our research demonstrates a capability to study small seismic events (below magnitude 3) in regions of significant activity using methods of detection, location, and discrimination based on the use of whole waveforms.

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