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using continuously recorded seismic data from the Dongbei Seismograph Network (DBN) in northeast China installed and operated by Kin-Yip Chun, University of Toronto, Canada

- Our poster reports work on the detection, location, and magnitude, of more than 1000 seismic events that occurred in a six-year period (June 2004 to Sept 2010) in the general area (within about 500 km) of nuclear test explosions carried out in 2006 – 2017 by the DPRK.
- This background level of activity (~200 events per year) is significantly higher than is generally assumed.
- But first, we reviewed the main results we have obtained over the last 20 years in the development and application of what we and others have called **Precision Seismology**, used to obtain catalogues (lists) of seismic events that are distinctively better than traditional catalogues based upon phase picks.
- Our results and methods are important for several completely different reasons. They can support
 - Improved monitoring of earthquakes and explosions, in areas with significant background activity;
 - Improved prospects for deterministic interpretation of better event catalogues (aka earthquake prediction);
 - and note that tomographic studies improve with more detailed information on seismic sources.