

T2.2-P09. Discussion of a claimed explosion on 12 May 2010 in North Korea

Claimed seismological evidence of an explosion in North Korea, at about 0009 hours on 12 May 2010 (UTC), has been published by Zhang and Wen in Seismological Research Letters (Jan 2015). This is of great interest to those, who had studied the seismicity of the North Korean test site for days prior to May 12 (which radionuclide studies had identified as the time period of the source of anomalous radionuclide signals), and had not found seismological evidence. The data used by Zhang and Wen are from stations in China about 80 to 200 km from the claimed event. But their data are not currently available for open research. We have found some confirming evidence of an explosive event at the claimed time and place, using openly available data. Signals are hundreds of times smaller than those of the small nuclear explosion of October 2006. The fact that such small candidate explosions can potentially be detected is itself remarkable. Estimates of their yield are surely quite uncertain. This presentation, which is associated with a poster giving additional details (see Koch et al., this meeting), will discuss several issues raised by the capability of various networks to detect such tiny explosions.

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