

## **Analysis Spectral and Focal Mechanism of Likely Nuclear Explosion in North Korea January 2016**

Characters from the initial impulse wave signals coming from the explosion is compression or trending upward in the early phase of the earthquake is recorded while the earthquake wave signal has an initial impulse can vary the compression or dilation (trending down) depending position relative to the source of the earthquake station. In the case of North Korea's nuclear test in 2016. When viewed from this characteristic, it is clear that the recording of seismic waves on January 6, 2016 at 01:30:01 UTC about coming from the explosion. However unique seismograph recordings of a nuclear test in 2016 have recorded a large surface waves. It can be seen visually on the waveform, the spectral waveform and spectrogram. It is quite interesting because it is contrary to the opinion that the explosion would not result if surface waves or surface waves will not be too big. Especially Rayleigh surface waves (ground roll) can be formed by the explosion of dynamite on reflection seismic for exploration. Shift or slip allowed formed as a consequence of North Korea's nuclear test in 2016, the static displacement is the key why surface waves are formed by quite big.

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