

## **Comparative analysis of the waveforms of the North Korean nuclear tests obtained by the seismological method at the Alibek station**

The article is devoted to a comparative analysis of the waveform of nuclear tests based on data obtained the Alibek station. The station successfully registered nuclear tests that took place at North Korea and made a significant contribution to the detection and evaluation of explosion parameters at International Data Centers. In the waveform picture of the explosions, both similar and distinctive features are observed, which, among other things, is determined by different power and mechanisms of conducting nuclear explosions. Similar features in all cases are: intense secondary wave Pg; practical absence of pronounced Sn waves; the presence of Lg –wave. Distinctive features are associated with the Rayleigh surface wave - for one event, the wave is almost absent, and for others it has different intensities. The analysis of waveform and assessment of the dynamic characteristics of the waves suggest that the records of the seismic event not only correspond to the known general characteristics of the records of underground nuclear explosions, but also complement the data obtained in other regions of the Earth.

**Primary author:** KURBANOV, Kakajan (Institute of Seismology and physics of atmosphere)

**Presenter:** KURBANOV, Kakajan (Institute of Seismology and physics of atmosphere)

**Track Classification:** Theme 2. Events and Nuclear Test Sites