

of Seismic Records of Nuclear Tests Conducted at the Nop Lor Test Site

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During the years of nuclear tests, a network of seismic stations of the Institute of Seismology NAS KR operated on the territory of Kyrgyzstan, the data of which are very important for seismic monitoring purposes. Most of these stations were installed far from natural and anthropogenic sources of seismic noise, on bedrock, in specially equipped bunkers and tunnels. In addition, most of the nuclear explosions from the Asia test sites, as well as peaceful nuclear explosions on the territory of the USSR, were carried out at regional distances from the stations of the network. Metadata about seismic stations were collected, including coordinates refined by modern methods, amplitude-frequency responses, etc. More than 15 000 seismograms of nuclear explosions and earthquakes were scanned with a resolution of 1200 DPI, and the records are being digitized. According to historical seismograms, a seismic bulletin was created for seismic records of nuclear explosions from the area of the Lop Nor test site, magnitudes mb, mpv, MLH and energy class K were calculated. More than 500 seismograms were processed (1966-1996), and analysis of the dynamic parameters of seismic records of nuclear explosions depending on the explosive yield and the explosion environment were carried out.

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Promotional text

This analysis allowed to preserve and recovery the main parameters of the Lop Nor nuclear tests recordings, registered by the Kyrgyz system of seismic monitoring.

Oral preference format

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