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OF THE WAVE PATTERN OF HISTORICAL ATMOSPHERIC NUCLEAR EXPLOSIONS ACCORDING TO THE DATA OF CENTRAL ASIAN STATIONS

A large number of records of nuclear tests conducted at various test sites and different environments around the world remain in the archives of historical analog seismograms in the Seismological Agencies of Central Asian countries. At the same time, not enough attention has been paid to the study of the features of the wave pattern of atmospheric nuclear explosions in comparison with underground nuclear explosions. The available legacy records are extremely important in connection with the task of nuclear tests detection and discrimination within the framework of the CTBT-related activity, creation and calibration of a database of reference events for the current IMS stations, and other tasks.

An analysis of the dynamic and kinematic parameters, using historic seismic and infrasound records, of atmospheric nuclear explosions conducted at the Lop Nor (with a maximum power of $Y_{\max}=4$ Mt), the Semipalatinsk Test Site ($Y_{\max}=1.6$ Mt) and the Novaya Zemlya Test Site ($Y_{\max}=58$ Mt), is presented in the report. A comparison (at regional and teleseismic distances) of waveform patterns was made for tests conducted in the atmosphere, on the surface and underground.

E-mail

annaberezina8@gmail.com

In-person or online preference

Primary author: Ms BEREZINA, Anna (Institute of Seismology, National Academy of Sciences of the Kyrgyz Republic)

Co-authors: Ms SOKOLOVA, Inna (Geophysical Survey Russian Academy of Sciences); MACKEY, Kevin (Michigan State University (MSU)); Ms ARISTOVA, Irina (National Nuclear Center of the Republic of Kazakhstan); Ms PERSHINA, Elena (Institute of Seismology, National Academy of Sciences of the Kyrgyz Republic); NIKITENKO, Tatiana (Institute of Seismology of National Academy of Sciences of Kyrgyz Republic)

Presenter: Ms BEREZINA, Anna (Institute of Seismology, National Academy of Sciences of the Kyrgyz Republic)

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