ID: Type: **Poster**

PECULIARITIES OF THE WAVE PATTERN OF ATMOSPHERE AND SURFACE EXPLOSIONS FORM THE REGION OF LOP NOR TEST SITE BY DATA OF SEISMIC AND INFRASOUND OBSERVATIONS

At the moment, the researches in the field of seismic and infrasound monitoring are very interested in historical air nuclear tests. This interest is first of all connected with the task on detecting and discriminating nuclear tests within the CTBT, calibration and creation of reference events database for the existing IMS network et al. Lop Nor Test Site is located at Xinjiang province, about 600 km south-eastward of Kazakhstan-Chinese border. In 1964-1996 there were 47 nuclear tests, including 3 surface, 19 atmospheric and 25 underground explosions. During the nuclear tests conducting period, on the territory of Central Asia there was a monitoring network consisting of sensitive seismic stations and microbarographs with analog and digital recording. The records of atmosphere and surface explosions from Lop Nor region recorded by analog seismic stations at regional distances were analyzed as well as records of a microbarograph installed on the territory of Talgar Observatory (northern Tien Shan). Interesting is that infrasound signals from large atmosphere explosions were recorded by the microbarograph and long-period seismometer, and sometimes by a strainmeter. The dynamic parameters of seismic and infrasound records of nuclear explosions depending on the explosion yield and source type were analyzed.

Primary author: SOKOLOVA, Inna (Institute of Geophysical Researches)

Presenter: SOKOLOVA, Inna (Institute of Geophysical Researches)

Track Classification: Sources and Scientific applications