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signs at tunnel portals after underground nuclear tests at Semipalatinsk Test Site

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One of the possible manners to conduct a clandestine, unannounced underground nuclear explosion may be a test in a tunnel under a mountain. At the Semipalatinsk test site (STS) of the Soviet Union, 209 underground nuclear tests were conducted in the tunnels. Radioactive noble gas (RNG) release of various intensities occurred at ~40% of the tests. In 1996, the Khlopin Radium Institute conducted a survey at the former STS of about 40 tunnels portals before their final closure. The radiation background was measured, gamma spectra were recorded, rock and soil were sampled for radiochemical analyses. The report will present data on contamination of the surveyed tunnel portal areas by radionuclides Cs-137, Sr-90 and others, and compare them with data on the radiation situation during nuclear tests (RNG release). Remaining radioactive traces are the most important sign during on-site inspection.

Promotional text

Report is content the information about radioactive contamination of area near tunnel portal as consequences underground nuclear test. This information is needed for elaboration OSI method.

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