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seismicity in the area of nuclear test sites

Recently, a large amount of data, indicating induced seismicity in area of large underground nuclear tests (UNE), has been accumulated. Such studies were conducted on Amchitka Island (USA), Nevada Test Site (USA) and Semipalatinsk Test Site (USSR). Researchers considered three types of impacts: seismic activity associated with the destruction of the explosion cavity, induced tectonic activity in the upper crust and impact on natural seismicity of the region.

Analysis of induced seismicity in area of test sites around the world shows that UNE's aftershocks are recorded within several weeks after the conducted UNE, as well as after a long period, what specifies geodynamic processes in areas of nuclear test conducting. The manifestations of modern induced seismicity in the territory of the Punggye-ri Test Site (DPRK) are considered according to the data of the GS RAS regional network in the Far East of Russia, as well as the Degelen site (STS), according to the data of the NNC RK network. Weak earthquakes after a long period after nuclear tests are possibly associated with the migration of deep-seated fluids in the earth's crust and upper mantle, caused by the long-term intensive impact of explosions on the geological medium.

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