

T1.5-P27. Kazakhstan monitoring system: merging opportunities to solve global, regional, and local tasks

Geophysical monitoring system has been built in Kazakhstan under the support of CTBTO, AFTAC, and other organizations. Twelve seismic and 2 infrasound stations as well as National Data Center receive data, which is used to solve global, regional and local tasks. The quality of damaging data preparation on nuclear explosions has been improved for the on-site implementation in support of CTBT, due to scientific innovations in the processing of seismic and infrasound data as well as creation and use of archive records of historical nuclear explosions' base. The technology of obtaining improved seismic data at regional distances, which are used during the construction of a new map of seismic zoning of Kazakhstan (in cooperation with the Institute of Seismology of Kazakhstan), during the study of characteristics of the earthquakes occurred on the territory of Central Asia and Kazakhstan, for the purposes of assessing seismic conditions in the regions of increased responsibility (Semipalatinsk Test Site), etc., has been modeled. The data is used for studying and monitoring of seismic-tectonic circumstances in the responsible facilities location areas (VVR-K reactor, Ulba Metallurgical Plant, etc.). The monitoring results are used in other contexts as well, for example, for quarry explosions' control, flares, etc.

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