

## Development of seismic monitoring in Kyrgyzstan

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**Abstract** The data on the republican network of seismic stations continuously operating on the territory of Kyrgyzstan are presenting. The transition from analog to digital system of registration of seismic phenomena is considered as the next stage in the development of seismic monitoring in the republic.

**Keywords** Earthquake, seismic station, seismic waves, seismic monitoring, seismograms, epicenter, magnitude, focal mechanism.

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### References

- Abdrakhmatov, K.E., Beryozina, A.V., & Pershina, E.V. (2016). [Seismic monitoring system of the territory of Kyrgyzstan]. In *Sovremennye metody obrabotki i interpretatsii seismologicheskikh dannykh. Materialy XI Mezhdunarodnoi seismologicheskoi shkoly. Otv. red. A.A. Malovichko* [Modern methods of processing and interpretation of seismological data. Proceedings of the XI International Seismological Workshop. Ed. A.A. Malovichko] (pp. 10-14). Obninsk, Russia: GS RAS Publ. (In Russ.).
- Muraliev, A.M. [On the issue of the development of seismological observations in Kyrgyzstan]. In *Seismologicheskie nabliudeniia v Kyrgyzstane* [Seismological observations in Kyrgyzstan] (pp. 4-17). Bishkek, Kyrgyzstan: Publ. House "Ilim". (In Russ.).
- Muraliev, A.M., Dzhanzakov, K.D., Shukurova, R., Gessel, M.O., & Tulaganova, M.T. (2016). [Central Asia]. In *Zemletriaseniia Severnoi Evrazii, 2010 god* [Earthquakes of the Northern Eurasia, 2010] (pp. 127-136). Obninsk, Russia: GS RAS Publ. (In Russ.).
- Muraliev, A.M., Maldybayeva, M.B., Abdylidaeva, B.S., & Sabirova, G.A. (2018). [Mechanisms of Kyrgyzstan's earthquakes and the adjoining areas in 2012]. In *Zemletriaseniia Severnoi Evrazii* [Earthquakes of the Northern Eurasia, 2012. Issue of 21 (2012)] (pp. 444-448). Obninsk, Russia: GS RAS Publ. (In Russ.).
- Muraliyev, A.M., Maldybayeva, M.B., & Abdylidaeva, B.S. (2016). [Catalog of earthquakes focal mechanisms in Kyrgyzstan, 1946–2010]. In *Sovremennye metody obrabotki i interpretatsii seismologicheskikh dannykh. Materialy XI Mezhdunarodnoi seismologicheskoi shkoly. Otv. red. A.A. Malovichko* [Modern methods of processing and interpretation of seismological data. Proceedings of the XI International Seismological Workshop. Ed. A.A. Malovichko] (pp. 219-223). Obninsk, Russia: GS RAS Publ. (In Russ.).
- Vernon, F. (1992). Kyrgyzstan seismic telemetry network. *IRIS Newsletter*, 11(1), 7-9.
- Yudakhin, F.N. (Ed.). (1993). *Seismologicheskie nabliudeniia v Kyrgyzstane* [Seismological observations in Kyrgyzstan]. Bishkek, Kyrgyzstan: Publ. House "Ilim", 140 p. (In Russ.).
- Yudakhin, F.N., Mamyrov, E.M., Shvartsman, Yu.G., Ilyasov, B., & Muraliev, A.M. (1990). [Main results of work on earthquake prediction in Kyrgyzstan and prospects for their further development]. In *Tezisy dokladov Sovetsko-Kitaiskogo simpoziuma po prognozu zemletriaseniia* [Abstracts of the reports of the Soviet-Chinese Symposium on Earthquake Prediction] (pp. 5-7). Garm, Kyrgyzstan. (In Russ.).

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