



JOINT WORKS OF IRIS DATA MANAGEMENT CENTER AND CENTRAL ASIAN COUNTRIES ON DATA EXCHANGE

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Modern digital observation systems have been installed and developed in Central Asia since the early 1990-s including Kyrgyz network KNET (1991), Kazakhstan monitoring network KAZNET (1994), Kazakhstan network SEME (2003), Uzbekistan seismic network (2003), Tajikistan seismic network (2005), Kyrgyzstan seismic network IS NAS KR KRNK (2007), Kyrgyz seismic network CAIAG KCNET (2008), Central-Asian seismic network GFZ CAREMON (2010). Before 2009, waveform exchange between Central Asian countries was almost absent, data were stored in different formats, and only two seismic networks KNET and KAZNET transferred data to IRIS DMC in SEED format.

On April 16 – 17, 2009 the Data Center of the Institute of Geophysical Research held an alignment meeting on seismic data exchange in Central Asia. The meeting was initiated by IRIS uniting the efforts of many countries in global seismic observations and data exchange between National and International Data Centers. Many well-known scientists and technicians from different seismological and geophysical organizations from seven countries: (USA, Germany, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, and Uzbekistan) participated. The representatives from all countries: agreed that it was necessary to establish cooperation among seismologists from all Central Asian countries in the field of harmonization of observation data, creation of a united system of data processing and exchange of seismic data between Central Asian networks and to the global seismological community through IRIS.

After the meeting, cooperation started between the IRIS DMC in the USA, KNDC in Kazakhstan and Data Center IS NAS KR in Kyrgyzstan aimed at retrospective generation of SEED-volumes of KRNK network and transfer of this data to IRIS DMC. Since 2010 the IRIS DMC has been receiving KRNK data in real time. After the meeting, the IRIS DMC has started to receive data from Tajikistan network and CAIAG.

The present work represents the information about seismic networks in the Central Asian region whose data are transferred to IRIS DMC, comparative analysis of dynamic parameters of seismic noise at different stations is conducted.

An important stage of the Project on coordination was establishing of the Regional Training Center on the premises of KNDC in Almaty (2010), where the employees from different seismological Centers of Central Asia receive information about seismic data exchange and storage formats, get acquainted with products of International, Regional and National Data Centers, master new software, and learn the methods of digital processing of seismic data. The idea establishing the Training Center was supported by Norwegian Seismological Center NORSAR and the International Data Center (CTBTO, Vienna).

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Due to the joint efforts of IRIS DMC, KNDC and seismological Institutes of Central Asian countries, the work on seismic data exchange in Central Asia that favors joint research in different fields was initiated.