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# of high-mountain glaciers in the territory of Tien-Shan by stations of the International Monitoring System

At KNDC, data from Makanchi's PS23 array revealed a large number of similar events with sources in the area of large glaciers in Tien-Shan. All events are in the 185-190 back-azimuth range at a distance of 550 km south of the station. The size of the epicentre area were about 90x90 km. Daily and seasonal variations in the number of events recorded were revealed, and their energy and magnitude was estimated.

At the end of 2023, three seismic and one infrasound stations were installed near glaciers on the Kazakh side to study the impact of climate change on the cryosphere. Seismo-acoustic recording will be carried out during 2023-2028. All seismic stations record well the events associated with processes in the glaciers. Data processing has been carried out and a seismic event bulletin has been compiled. Event magnitudes are mb≤3.5, energy classes K≤8.4. The possibility of studying glaciers remotely using permanent seismic and infrasound stations is shown. The data of seismic arrays for 20 years of observations are processed by the PMCC to search for regularities of seismic processes in glaciers related to climate change and to compare them with the results of studying the state of glaciation of Tien-Shan glaciers by different technologies.

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