



Seismic observations of the disastrous water–stone flow in the Kyngarga river on June 27–29, 2014 (Russia)

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The previous results of the seismic studies on the disastrous water-stone debris flow passing down the Kyngarga River (Republic of Buryatia) on June 27–29, 2014, according to data of the Arshan seismic station, are presented. The spectrum-polarization analysis of seismograms showed that the period of the flow activity of debris was accompanied by a change in the properties of microseisms. Two components appeared in the velocity spectrum: the high-frequency component (22–48 Hz) associated with the motion of the solid fraction of the debris flow and the low-frequency component (0.35–0.45 Hz) associated with the water displacement. The registered elastic vibrations are the surface waves polarized in a horizontal plane with an apparent northeastern orientation. This work was supported in part by the Russian Foundation for Basic Research and the Government of Irkutsk oblast, project no. 17-45-388088.