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that caused an infrasound signals in East Siberia

Seismoacoustic effects of the Hovsgol earthquake of December 5, 2014 (51.37N, 100.63E, MW=4.9) and Khoitogol earthquake of March 29, 2019 (51.71N, 101.54E, MW=4.7) were studied. Earthquakes occurred in the southwestern part of the Baikal rift system: the first event located in the Hovsgol basin at 3 km depth, the second – in the Khoitogol basin at the depth 10 km. An acoustic signals were registered by the infrasound station "Tory" located 175 km from the Hovsgol event and 100 km from Khoitogol events. The results of modelling of the surface displacements caused by the Hovsgol earthquake and high effective velocity of propagation of infrasound signal indicate that its occurrence is not caused by the downward movement of the Earth's surface in the epicentral region but by the effect of the secondary source locared on the northern slopes of the Khamar-Daban ridge. The interaction of surface waves with the regional topography is proposed as the most probable mechanism of formation of the infrasound signal. In opposity, the simple waveform of the second signal, its travel time and duration give reason to believe that the signal observed was caused by surface movement in the epicentral region of the Khoitogol earthquake.

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