

Tidal effects in the seismicity of Avachinsky volcano

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Abstract The gravitational interaction between the Earth, the Moon and the Sun is of a periodic nature, acting on a global scale and causing terrestrial and sea tides. The study of seismicity variations associated with lunisolar tides is a traditional task of seismology. The purpose of the presented study is to study the relationship between the number of volcanic earthquakes and the level of tidal loads using the example of Avachinsky volcano, located in the southeast of Kamchatka. The effect of an increase in the intensity of the flow of volcanic earthquakes with an increase in the level of the sea tide and ebb has been established. Recordings of the vertical component of the mass displacement channel of the CMG-3TB seismometer were used in the work.

Keywords Tide, volcanic earthquakes, seismometer CMG-3TB.

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