On estimation of displacement and deformation in the tidal wave using the digital records of seismometers STS-2 and KSESH-R

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Abstract. The paper proposes the method of getting displacements in the tidal waves from the records of broad-band seismometers STS-2 and KSESh-R, and estimating the vertical or volume deformation of the massif. The method is based on bandpass filtering of the records in the range from 28.6 hours to 6.9 hours. The coefficient for estimation of the vertical deformation of the massif is obtained theoretically using the program for tidal calculations ETERNA 3.0.

Keywords: deformation, tidal wave, seismometer.