

Experimental estimate of a relation between sea wave energies and the Earth's crust microdeformations

Grigory I. DOLGIKH, Stanislav G. DOLGIKH, Sergei N. KOVALEV,
Vladimir V. OVCHARENKO, Vladimir A. CHUPIN, Vyacheslav A. SHVETS,
and Sergei V. YAKOVENKO

V.I. Ilyichev's Pacific Oceanological Institute,
Far-Eastern Branch of Russian Academy of Sciences, Vladivostok, Russia
e-mail: dolgikh@poi.dvo.ru

Abstract

The experimental data in the microseismic frequency range obtained using the seismo-acoustic-hydrophysical measurement complex are analyzed. The emphasis is put on estimating the ratio between the energy of surface sea wind waves in the area of the Japan Sea where the complex was located and the Earth's crust microdeformations in this frequency range. The experimental evaluate obtained allow us to estimate the energy re-distribution at the hydrosphere-lithosphere boundary.

Key words: laser strainmeters, seismo-acoustic-hydrophysical complex, sea wind waves, microseisms.