



## **Instrumental water level measurements in the Sea of Okhotsk shelf and analysis of the results**

**A.G. Chernov** (1,2), A.A. Kurkin (1), A.O. Lukhnov (1), D.P. Kovalev (2), G.V. Shevchenko (2)

(1) Nizhny Novgorod State Technical University, Nizhny Novgorod, Russia, (2) Institute of Marine Geology and Geophysics, FEB RAS, Yuzhno-Sakhalinsk, Russia

The results of measurements of water level in the area of a channel, that interconnects Izmenchivoe lagoon on Sakhalin island and the Sea of Okhotsk, are discussed. Four autonomous bottom-leaving sensors were involved to record hydrostatic head pressure with 1-second resolution. The data were acquired allows to estimate sea disturbance characteristics in a variety of weather conditions including strong storm and calm sea. Also stable low-frequency oscillations with a period about 80 minutes (and 0.5-fold with a period of 40 min) and amplitude of 10 cm were distinguished. Presumably, they are associated with seiche, generated between Svobodnyi and Terpeniya capes. Storm wave influence for local area sediment transportation was investigated. Edge waves with 80-second period were found. Measurements were performed within the support of the grant of RFBR, No 06-05-64087.