

**MOORING CURRENT OBSERVATIONS ON THE SEA OF OKHOTSK'S SHELF OF URUP AND
KUNASHIR ISLANDS (KURIL RIDGE)**

SHEVCHENKO George *, KANTAKOV Gennady ** and CHASTIKOV Valery **

*Institute of Marine Geology & Geophysics FEB RAS,

**Sakhalin Research Institute of Fisheries & Oceanography, Yuzhno-Sakhalinsk, Russia

Shevchenko_zhora@mail.ru

Our knowledge about dynamic processes in the area adjacent to South Kuril Islands is very limited because of mooring current observation lack. The information related currents in this region were obtained from satellite-tracked drifters (Rabinovich, Thomson, 2001; Ohshima et al, 2005). To investigate currents in this region, Sakhalin Institute of Fisheries and Oceanography Institute installed two moorings on the shelf of Urup and Kunashir Islands in 2003. Experimental studies of dynamic processes were continued during 2004-2005 in the areas adjacent to Kunashir Island. Tidal constituent is strongly dominated on the northern shelf of Urup Island, especially in east-directed component. Tidal currents are almost rectilinear and very steady. Stable east-directed residual current with average velocity 10-12 cm/s we found from April till September. It means outflow Okhotsk Sea water to Pacific Ocean through Urup Strait during this period. We found significant amplification of current in October and November, the current direction became northeast. Autumn typically is a time of atmospheric fields changing to so-called winter monsoon with strong northwesterly wind; however we did not find this changing in fall 2003 from reanalysis data. Another cause of current amplification probably followed besides baroclinic effect. But noted phenomena still unclear because no salinity sensors at the moorings. Temperature maximum (8-9°C) was found in second half of October (about two times higher than in August). Similar current amplification was observed near Ekaterina strait in September-October. We found tides weakening in this time also.