

MORPHOLOGY OF BROUTON BAY (SIMUSHIR ISLAND, THE KURILE ISLANDS)

D.N. Kozlov¹, V.A. Rashidov², I.G. Koroteev¹

¹Institute of Marine Geology and Geophysics FEB RAS, Yuzhno-Sakhalinsk

²Institute of Volcanology and Seismology FEB RAS, Petropavlovsk-Kamchatsky

The paper presents the results of Brouton Bay (Simushir Island, the Kurile Islands) echo-sounding investigations had been made in July 2011 during complex scientific and research expedition of FSBSO Institute of Marine Geology and Geophysics FEB RAS by means of «Lowrance LMS-527cDF iGPS» echo sounder with oscillator frequency of 50/200 kHz and built-in 12-channel GPS receiver. We worked out 57 km of depth sounding profiles and constructed Brouton Bay bathymetric map and 3D-model. The bay maximum depth comprised 250 m and the caldera total depth comprised about 700 m. Submarine slopes of the bay have an angle ~ 15-25° to the depths of 200-220 m, then they have an angle of 5-10° to the vast nearly flat bottom at the depths of 240-250 m.

Keywords: morphology, depth sounding, Brouton Bay, Uratman, Simushir Island.