

## Detailed bathymetry of the epicentral region of the Tokachi-oki Earthquake

# Azusa Nishizawa[1]; Hiroshi Hashiguchi[1]; Takashi Tozaki[1]; Tetsuro Tsuru R/V Kairei KR03-14 Shipboard Scientific Party[2]

[1] Hydrogr. & Oceanogr. Dep., JCG; [2] -

<http://www1.kaiho.mlit.go.jp/>

Detailed multi-beam bathymetric data in/around the source region of the Tokachi-oki Earthquake off southeast Hokkaido, Japan were compiled. These consist of 1993 off Tokachi, 1996 off Kushiro, 1997 and 1999 off Erimo, and 2003 off Tokachi bathymetric survey data obtained by the SeaBeam 2000 system on S/V Meiyo, Hydrographic and Oceanographic Department, Japan Coast Guard. The multi-beam data acquired by R/V Kairei, JAMSTEC before and after the 2003 Tokachi-oki Earthquake (M 8.0) were added to the dataset. Almost full coverage data were achieved for the region between off Erimo and off Nemuro from the continental shelf to the inner slope of the Kuril Trench. There are several submarine canyons and spurs characterizing the deep sea terrace off Tokachi.

The aftershock distribution of the 2003 Tokachi-oki Earthquake was superimposed on this detailed seafloor topographical map. Most of the epicenters were located in the deep sea terrace between the Minami-Erimo canyon (tentative name) and the Kushiro canyon. The map also shows that the large earthquakes with magnitudes greater than 6 occurred at the seaward limit of the deep sea terrace.