## Abstract

The Japan Maritime Self Defense Force (JMSDF) quickly began disaster relief operations from the sea at the coast of Sanriku after the Great East Japan Earthquake. We observed in situ situation of our activity area because we had to estimate the impact

of the advection and diffusion of the radioactive substance in the sea. Two survey ships "Wakasa" and "Nichinan" of IMSDF observed the temperature, salinity and current in detail at the wide area of offshore Sanriku and 30 NM distant from Fukushima

No.1 Nuclear Power Plant (NPP), Tokyo Electric Power Company in April and May 2011. No strong current exist in the area

near Fukushima No.1 NPP. Southward current with tidal component dominate during the observation. The upwelling current is

also observed along the continental slope off the coast of Sanriku. These data will be provided as the initial value of the simulation

study on the diffusion of the radioactive substance and the spatiotemporal reference value that simulation model should resolve.