放射性物質の分散に寄与する沿岸海洋変動過程: 瀬戸内海と遠州灘のケーススタディ Coastal ocean processes responsible for radionuclide dispersion: A case study for Seto Inland Sea and Enshu-nada

*升本 順夫¹、津旨 大輔²、郭 新字³、内山 雄介⁴、宮澤 泰正⁵
*Yukio Masumoto¹, Daisuke Tsumune², Xinyu Guo³, Yusuke Uchiyama⁴, Yasumasa Miyazawa⁵

1.東京大学大学院理学系研究科、2.一般財団法人 電力中央研究所、3.愛媛大学、4.神戸大学大学院工学研究 科、5.独立行政法人海洋研究開発機構

1.Graduate School of Science, The University of Tokyo, 2.Central Research Institute of Electric Power Industry, 3.Ehime University, 4.Graduate School of Engineering, Kobe University, 5.Japan Agency for Marine-Earth Science and Technology

Results from four different numerical models of radiocesium dispersion are compared in terms of key physical processes responsible for the dispersion. Two regions are selected as typical oceanic conditions of coastal region around Japan. One is the Seto Inland Sea, which can be considered as a semi-closed basin connecting to the open ocean through several passages, and the other is Enshu-nada, where open ocean influences may directly affect coastal region. Results indicate that, in addition to tidal residual currents, local wind forcing and isolated cold water in the deeper layer affect surface flow pattern and radiocesium dispersion in the Seto Inland Sea. On the other hand, intrusion of Kuroshio and a narrow eastward flow along the coast play important role in dispersion processes in the Enshu-nada area.

キーワード:沿岸海洋過程、放射性物質の分散

Keywords: coastal ocean processes, radionuclide dispersion