大阪湾における溶存有機物の起源推定および紀伊水道外域への流出経路の可視化

Estimation of origin of dissolved organic matter in Osaka Bay and the visualization of its outflow toward the outer Kii Channel

*小林 志保[1]、中田 聡史[2]、山本 圭吾[3]、秋山 聡[3]、上田 幸男[4]、湯浅 明彦[4]、原田 慈雄[5]、御所 豊穂[5]、渕 真輝[2]、生田 健吾[1]、田中 祐一[1]、石坂 丞二[6]
*Shiho Kobayashi[1], Satoshi Nakada[2], Keigo Yamamoto[3], Satosih Akiyama[3], Yukio Ueta[4], Akihiko Yuasa[4], Shigeo Harada[5], Toyoho Gosyo[5], Masaki Fuchi[2], Kengo Ikuta[1], Yuuichi Tanaka[1], Joji Ishizaka[6]

1. 京都大学、2. 神戸大学、3. 大阪府環境農林水産総合研究所、4. 徳島県水産研究所、5. 和歌山県水産試験場、6. 名古屋大学
1. Kyoto University, 2. Kobe University, 3. Research Institute of Environment, Argiculture and Fisheries, Osaka Prefecture, 4. Fishries Research Division, Tokushima Prefecture, 5. Fishries Research Division, Wakayama Prefecture, 6. Nagoya University

Studying the behavior of dissolved organic matter (DOM) in coastal seas would assist environmental water management. In this study, field observations to investigate the biogeochemical cycle of dissolved organic carbon and nitrogen (DOC, DON) were conducted in Osaka Bay in February, May, August and November from 2015 to 2017. A remote sensing of the absorption coefficient of colored dissolved organic matter (aCDOM) obtained from geostationary ocean color images (GOCI) as an index for the distributions of DOM was also conducted. The results for a stable isotope of DOC and the relationship between DOC and DON suggested that DOM is generated around the head of Osaka Bay in summer in addition to those supplied from rivers. The results both from field observation and satellite image showed that DOM spreads from Osaka Bay to outer Kii Channel along the coast of Tokushima Prefecture, while the distributions of DOM in inner Kii Channel vary depending on Kuroshio path.

キーワード：溶存有機物、安定同位体比、リモートセンシング
Keywords: dissolved organic matter, stable isotope, remote sensing

