## Attempt to distinguish river water influencing concentration of chlorophyll *a* off Miho Peninsula

\*Akihiko Tanaka<sup>1</sup>, Kyoko Takashima<sup>2</sup>, Gen Fukuda<sup>2</sup>, Takaaki Katsumata<sup>1</sup>, Hiroyuki Tan<sup>1</sup>, Masato Niki<sup>2</sup>, Daisuke Takahashi<sup>2</sup>

1. Liberal Arts Education Center, Shimizu Campus, Tokai University, 2. School of Marine Science and Technology, Tokai University

In Suruga Bay, ocean color remote sensing shows that relatively higher chlorophyll a concentration in the western area than in the eastern part. One reason is that many large rivers flowing into Suruga Bay exist more in the west than the eastern side of Suruga Bay. The Miho Peninsula is located at the western part of Suruga Bay, that there are mouths of the Fuji River and the Okitsu River in the north, and the mouth of the Abe River in the south. High chlorophyll a concentration is also observed off Miho Peninsula. From the chlorophyll a concentration image by ocean color remote sensing, which river that influence high concentration of chlorophyll a off Miho Peninsula can be empirically discriminated, whereas it is sometimes difficult to distinguish with chlorophyll a concentration image. In Suruga Bay, the Ferry Fuji (Suruga Bay Ferry) cruises 4 times a day to Shimizu Port and Toi Port. It has been suggested that the current in the normal direction of the course can be estimated from the AIS (Automatic Identification System) information of the Ferry FUJI. Since the route of the Suruga Bay ferry is approximately in the east-west direction, it is possible to obtain the flow in the north-south direction. In this study, we attempt to distinguish river water affecting chlorophyll a concentration off Miho Peninsula by adding information of current estimated from AIS information to Chlorophyll a concentration image in the Suruga Bay.

Keywords: Ocean color remote sensing, Suruga Bay, AIS