

OCEAN OPTICS XXIV

Valamar Lacroma Dubrovnik Hotel | Dubrovnik, Croatia | October 7–12, 2018

<https://oceanopticsconference.org>

Monday, October 8

Poster Session 1

16:00–18:00

Poster 37

VALIDATION OF SATELLITE-BASED SEA SURFACE SALINITY (SSS) AROUND KOREAN COASTAL WATERS IN TERMS OF THE COMPARISON WITH THE MODEL-BASED MAPPING

Retrieving sea surface salinity (SSS) from satellite remote sensing is still challenging especially near the coast due to its spatial and temporal resolution compared to the dynamic variations of coastal water characteristics. As SSS can be a good indicator of short- or long-term changes in ocean environment and consequently the climate changes, many attempts have been made to mapping SSS in the wide area of ocean surface, although little has been successful particularly in the coastal area. In this study, satellite-derived coloured dissolved organic matter (CDOM) from the Geostationary Ocean Colour Imager (GOCI) of the surface water in the coastal area in the mid-western coastal area of Korean peninsula was applied to the mapping SSS, based on the well-known idea that CDOM absorption property has a strong correlation with SSS in the area that influenced by freshwater inflow. Empirical relationships between CDOM absorption and SSS are derived from in-situ measurement collected at the Gyeonggi-bay located in the middle of the west coast of Korean peninsula. The results were compared and validated with that from a model-based mapping.

Jongkuk Choi, KIOST, jkchoi@kiost.ac.kr

Deuk Jae Hwang, KIOST, ghkdemrwo@kiost.ac.kr

Joo-Hyung Ryu, KIOST, jhryu@kiost.ac.kr

Young-Ho Kim, KIOST, yhkim@kiost.ac.kr