

Observation of coastal regions using satellite ocean color remote sensing

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Although the main objective of satellite ocean color remote sensing is to estimate chlorophyll *a* concentration, the other data products such as light absorption and scattering coefficients representing inherent optical properties (IOPs) have also been provided from space agencies. By a combination of the data from other satellite sensors, higher-level data products such as primary production have also become available. In coastal areas, however, optically complicated water masses due to a large amount of non-algal particles and/or colored dissolved organic matter (CDOM) may induce significant overestimation errors in chlorophyll *a* concentration. The use of light absorption or scattering coefficients is one of the solutions to reduce such errors, and these IOPs have also been applied for the retrieval of phytoplankton size/group and particle size distribution. In this presentation, we will introduce these relevant studies as well as the water mass classification technique we have been developing using CDOM absorption coefficients.

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