Abstract Details

<u>AOGS 1st Annual Meeting</u> > <u>Ocean and Atmospheres</u> > Optical variability of the Upper Gulf Thailand and its in-water algorithms using regression and neural network >

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 - **Title:** Optical variability of the Upper Gulf of Thailand and its in-water algouusing regression and neural network

Abstract:

The Upper Gulf of Thailand is complex case-2 water characterized by fresh water inflow from 4 major rivers. Municipalities and industries a as many activities including agriculture, aquaculture and fishery coex along the Upper Gulf. Hence monitoring of its water quality is crucial coastal management. In order to apply ocean color for monitoring, su algorithm for the Upper Gulf must be developed. Optical characteristi surveyed for the first time in this area in 2003-2004 in 4 cruises duri southwest monsoon, post-southwest monsoon, northeast monsoon a southwest monsoon using profiling reflectance radiometer. This paper presents in situ data for the reflectance and interprets the observed variability in terms of hydrodynamic processes. Measurement of the concentration of chlorophyll a, suspended solid and the absorption co of colored dissolved organic matter were used in development of in-w algorithms for the retrieval of these water quality parameters for the Gulf of Thailand. Both regression technique and neural network were order to assess the applicability of the newly-developed algorithms.

Presentation Mode: Poster

Keywords: Upper Gulf of Thailand, in-water algorithm, chlorohyll a, suspended s absorption coefficient, CDOM, regression, neural network

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