

B7 **Evaluation of Chlorophyll retrieval algorithm using an intermittently closed tidal estuary:
The Chilaw lagoon in the west coast of Sri Lanka**

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Abstract: High-resolution chlorophyll-a concentration (Chl-a) maps in Chilaw lagoon, Sri Lanka, were generated using previously developed algorithms for Landsat and ASTER data in Negombo estuary, Sri Lanka. The in-situ data obtained from January to August 2001 in the lagoon were used to evaluate the algorithms. Trend of the Chl-a concentrations can be explained using changes of the lagoon environment during a study period of 1987 to 2011. High-resolution ASTER and Landsat Chl-a distribution maps could be derived more precisely by further correction of the algorithms, which will be useful in the determination of localized effects in tropical lagoon environments.

Keywords: chlorophyll-a, Chilaw lagoon, in-situ measurement, Landsat, ASTER/VNIR