

## Water mass characteristics in the Strait of Malacca using ocean data view.

### ABSTRACT

The main purpose of this project was to identify the pattern of water masses in Malacca Strait. The physical properties of seawater investigated were water temperature, salinity and dissolved oxygen over the Monsoon season. Ocean data view software was used to process the data and to create contour visualizations. Data from world ocean database were taken from 1900 to 2005. The results show the significant low salinity input from West coast Peninsular Malaysia in Northeast Monsoon season. During Southwest Monsoon period, there was an intrusion of high saline water from Andaman Sea to the Strait. The blowing of Southwesterly wind may push seawater from Indian Ocean and Andaman Sea intruding the Strait from the Northern sector. The Strait also were found to be more stratified in warmer condition. However, Southern sections are more homogeneous in every season indicating better mixing. This further study can improve the better understanding of seasonal water mass variation in the Strait of Malacca.

**Keyword:** Water mass; Strait of Malacca; Ocean Data View; ODV; Sea surface temperature.