Coastal oceanography

## Variability Of Sea Surface Chlorophyll-a, Temperature And Fish Catch W

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Indonesia as one of the largest maritime continent in the tropical area with the large diversity of local environment problems, is to be one of an ideal and important area to assess the ability of satellite data for the regional and local marine environmental study as well as marine productivity. The discussion focused on the case of the coastal area around Java, Lampung Bay and South Kalimantan as interesting area expressing the different environmental situation and representing the Indonesian seas region for marine productivity observation The observation of sea surface chlorophyll-a (SSC) and sea surface temperature (SST) in relation to fish catch variability within the Indonesian region were conducted by using satellite data of NOAA-AVHRR, SeaWiFs and Aqua MODIS. The result shows that Sea Surface Chlorophyll-a (SSC) and Sea Surface Temperature (SST) within Indonesian water vary among the region and affected by monsoonal system as well as local and regional environment. The similar situation was also shown on fish catch variability. Seasonal variation in fish productivity has a strong correlation with SSC variability. High fish productivity was well corresponded to high concentration of SSC and the productivity tended to decrease when the SSC concentration was reduced. High SSC variability in the coastal area of Java and Lampung Bay was governed by the upwelling evidence that induced high nutrient load into the sea surface during the southeast monsoon, while in the northern coastal area of Java and South Kalimantan, it was governed by high precipitation ocurred during the northwest monsoon that is generated by the enhancement of the nutrient load through the rivers and coastal discharge. Satellite data was to be an effective tool and applicable for marine productivity study as well as for identifying and assessing fish abundance in the tropical water area. Variability of marine productivity in the coastal area of Java, Lampung Bay and South Kalimantan was well corresponded to the Sea Surface Chlorophyll-a (SSC) variability. High concentration of SSC has been followed by increasing of fish abundance significantly. Keywords : Sea Surface Chlorophyll-a, Temperature, Fish Catch Variability, Indonesian Region, satellite data