Comparison of aerosol characteristics over the Bay of Bengal and the Arabian Sea using IRS-P4 Ocean Color Monitor

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Ocean Color Monitor (OCM) aboard IRS-P4 Satellite has been used to retrieve aerosol optical depth (AOD) in the Bay of Bengal and the Arabian Sea. We have retrieved AOD using IRS P4 OCM data at wavelength 555nm and 865nm during summer and winter season for the period 2000-2005. Characteristics of AOD and angstrom coefficient along the eastern and western coasts at 1 degree latitude interval at three different locations (25, 50 and 100km) from the coast have been studied. AOD is found to vary significantly from north to south towards deep sea. The Arabian Sea shows more aerosol loading compared to the Bay of Bengal especially during summer season due to influx of mineral dust from arid and desert regions of Middle East, Africa (Sahara) and Thar (India). We have carried out validation of OCM derived AOD using same day overpass of MODIS level 2 (10km resolution) that shows reasonable correlation.