Seasonal and spatial variability of satellite derived Chlorophyll-a and sea surface temperature in the Sofala Bank, Mozambique Shelf

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Sofala Bank (16-21oS, 34-40oE) is the most important shrimp ground along the Mozambique Shelf. Shrimp catches have been declining, in part due to environmental conditions. In this study we use monthly satellite derived chlorophyll-a concentration (Chl-a), a proxy of phytoplankton biomass, at 9 km resolution from the Sea-viewing Wide Field-of-view Sensor (SeaWiFS) and sea surface temperature (SST) at 4 km resolution from the Advanced Very High Resolution Radiometers (AVHRR) to investigate seasonal and spatial variability of Chl-a and SST over Sofala Bank for the period January 1998- December 2009. The study area was subdivided into 4 subareas to investigate the zonal and meridional patterns. Preliminar results showed strong inshore-ofshore gradients during the year. The northern region showed the lowest Chl-a . The Chl-a lack seasonality while the SST exibithed a seasonal cycle with the maximum in February-March and a minimum in July-August with.