Remote Sensing and Bio-optical properties in Mayagüez Bay

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The Mayagüez Bay, a semi enclosed bay in the west coast of Puerto Rico, presents spatial and temporal variations in phytoplankton pigments and suspended sediments mainly driven by the action of local rivers discharge. This study aims to use remote sensing applications for land-sea interface analyses and a better understanding of the bio-optical properties. Various Remote Sensing and GIS based analyses were used to address our objectives, which have included the use of MODIS data for TSS estimations, interpolation analyses of bio-optical properties and the development of GIS web-based databases.