

# Utilizing Emerging Geo-Imaging Technologies for the Management of Tropical Coastal Environments

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## **Abstract**

The Caribbean coastal zone is an environmentally sensitive area that is under intense pressure from a number of natural events and man-made activities. Beside the requirement to monitor these highly dynamic events and activities, there is also need for timely policy decisions to guide appropriate strategies and to ensure sustainable development. However, major obstacles in this endeavor include lack of data and understanding of factors controlling the processes involved. This paper argues that the gap in data and information in terms of the time and space dynamics of the coastal environment can be managed through the adoption of remote sensing technology. It reviews current progress and innovative trends in the field of remote sensing theory and technology. The paper also examines the use of the new imagery data as an up to date and affordable source of information for establishing the necessary baseline information for coastal management for in the Caribbean region.

**Keywords:** Tropical coastal environment, management, remote sensing, photogrammetry