

Nearshore Wave Modelling at Dameitta Promontory

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Abstract

The Nile delta has been eroding since the construction of the High Aswan Dam. The beach erosion rates are highest at the Nile promontories. An integrated shore protection scheme should be established to combat the sea advance. The design of such protection schemes requires an accurate description of the nearshore wave conditions along the study area. This paper describes a study undertaken to provide nearshore wave data in the vicinity of the Dameitta promontory. The nearshore wave conditions were calculated using measured wave data covering a period of five years. The measuring station was located at a depth of seven meter. An iterative scheme was developed to calculate the offshore wave conditions corresponding to the nearshore wave data.