LAYOUT EVALUATIONS
FOR ELSUKHNA PORT EGYPT

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ABSTRACT:

As a part of the Egyptian Government’s plan to develop the Northwest of the Gulf of Suez zone construction of a new port, at Elsukhna area was introduced. This project required a lot of studies to reach to a successful design. One of major design studies was the study of wave conditions, which was made to ensure a suitable protection from waves to the berthing and tug basins.

The design of the port layout required also mathematical models of wave generation in the Gulf of Suez and wave propagation from a zone offshore Elsukhna area to the breakwaters, inner basins and quays.

The evaluations are based on a large number of parameters related to the Sea state such as spectral significant wave height, mean period, mean direction, angular dispersion, breaking wave ratio and radiation. Results are presented in a graphical form.

KEYWORDS: The study of wave conditions.