**عنوان مقاله:**

Time Steps, Water Level, and Space-Grid Intervals Sensitivity Analysis of SWAN Numerical Model in Persian Gulf Zone

**نویسندگان:**

Fouad Salimi - *Department of Civil Engineering, University of Hormozgan, Bandar Abbas, Iran*

Javad Mohammadbagheri - *Department of Civil Engineering, Amirkabir University, Tehran ۱۱۳۴, Iran*

**خلاصه مقاله:**

The SWAN model which is one of the most important and usable numerical models for waves modeling is investigated due to the computational time steps and space-grid intervals in Persian Gulf zone. Also, due to the impact of tides on the waves' specifications, the impact of water level is investigated too. For this purpose, the SWAN Model is run by time steps of 300, 600, and 1200 seconds and water levels of +1, 0, and -1 meters and also the space-grid intervals of 0.5, 0.2, 0.1, and 0.05 degrees. Finally, it is concluded that by considering the appropriate situation of numerical modeling accuracy and run time, the model computational time steps of 1200 seconds and space-grid intervals of 0.1 degrees is suitable for waves modeling in Persian Gulf by using SWAN numerical model. Moreover, it is concluded that the changes of Persian Gulf's water level doesn't have any special impact on the significant wave heights.

**کلمات کلیدی:**

Persian Gulf; Sensitivity Analysis; SWAN Numerical Model

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