

عنوان مقاله:

Simple Method for Semisubmersible's Motion Response Calculation

محل انتشار:

ششمین همایش بین المللی سواحل، بنادر و سازه های دریایی (سال: 1383)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

An approximate method based on Morrison approach is developed and is applied to predict the motion response of semi-submersible in oblique seas using small amplitude wave theory. The velocity forces and moments have been shown to be small and are therefore neglected. The damping coefficients are obtained from experimental results while added-mass is evaluated using known experimental and theoretical data. Also the interference effects of the various volume elements of the semi-submersible on the flow field are neglected. Comparison of this approximate method shows quite a good agreement with those carried out by other researcher or softwares except for pitch motion which gives a much higher prediction. Spectral analysis is discussed in detail and is applied in predicting the short-term and long-term extreme motion response. The shortterm extreme response is based on 50 and 100 years return design sea states while long-term prediction is based on the anticipated life of the semi-submersible.

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/3368>

