

Recurrence wave run up on a large volume semisubmersible

Abstract:

This paper addresses the problem of estimating the waves run up for a large semi-submersible production platform. Significant run-up evaluations on its squared-section columns were observed for the waves in operating design displacement. Some seed numbers generated JONSWAP waves in tank were used, and are generally regarded as a pure randomness in nature. Some identical sequences of relatively waves run up were found apart from one another for different seeds. This finding supports the recurrence of waves run up for the large semisubmersible platform.