

The Performance of Heaving Bodies

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Abstract

The Caribbean region has been identified as a favourable area for the exploitation of wave energy. A cost effective approach to the development of this resource is to use hard skinned heaving bodies. A mathematical model for heaving bodies is developed and used to determine the performance for such bodies under the Eastern Caribbean wave regime for rectangular, circular and elliptical geometries. The results indicate that performance is a strong function of the dimensionless frequency parameter. As the wave regime is seasonal, active tuning is indicated for extraction optimization.