

Tide Model set up in Singapore Straits

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2-dimensional model system for coastal and estuarine hydraulic developed by Danish Hydraulic Institute (DHI) was used in Singapore Straits which connects three large water bodies, i.e. South China Sea, Andaman Sea contribution through Malacca Strait and Java Sea. The boundary conditions for tide current hydraulic model were exclusively assessed and analyzed based on tide constituents including amplitude and phase from existing measurement tide data. The hydraulic models were set up in this paper after calibration and validation for simulation in these areas. The parameters including friction force, viscosity coefficient are also given a detail assessment for application in this numerical model. The model set up in this study can be regarded as a standard procedure used in other areas.