Abstract

Mangrove is a community of plants that live between sea and land that is affected by the tides. In addition to functioning as a habitat of living things, mangrove forests also serves to reduce long waves and short waves. The effectiveness of waves attenuation by mangrove forests is still the concern of experts. This Final Project will investigate the effectiveness of regular and irregular wave damping by mangrove forests using numerical methods. The model that used in this Final Project is Staggered Grid Variational Boussinesq wave model. To investigate the effectiveness of model, a comparison of the simulation results with the results of laboratory experiments at TU.Braunsweig will be conducted.

Keywords: Mangrove, Staggered Grid Variational Bousinessq.