

**Abstract**

Wave prediction is needed for operational activity of large ship navigation such as tanker. In addition, wave predictions are needed for offshore platform operations requiring accurate prediction of wave height for design engineering and daily operational activities. The wind pressure factor of the sea can produce ocean waves. High waves or wave height are one part of the waveform, there are three parts of the wave i.e. wavelength, wave period and high wave. Waves that have been propagated by the sea occur because it is resurrected by the wind. One important parameter of ocean waves is the high wave, where this wave height is strongly influenced by wind forces, on this final task the high wave will be predicted by using wind data by the SVR method. Support Vector Regression (SVR) is a variant of the Support Vector Machine (SVM) that can be used in a regression case (Regression). The accuracy of this surge prediction is calculated by default using Root Mean Squared Error (RMSE).

*Keywords: Wave Prediction, Java Sea Waves, Support Vector Regression (SVR).*