## **ABSTRACT**

Wave height information is very important for ship navigation, harbor operational, offshore, and nearshore activities. In previous studies, wave height Forecasting has been done using wind data as training data to build a model. In this study, wave height forecasting were performed using the results of wind and wave data simulation as data train. Author decided to use WForSy v.1.0 or Wave Forecasting System v.1.0 as a tool to predict wave height in a particular location. WForSy is a software to predict Sea Wave Height for the next 7 days. This software is using simulation data that is produced by the Global Forecast System (GFS) by NOAA. The raw data that is downloaded from GFS will be processed and interpolated so that the wavefield in an area that is determined by the user is obtained. This program is written using Python and built on a Windows environment.

Keyword: Wave Height Forecasting, Simulation, WForSy.