        The heights of the tides at a particular location and at a particular time
are often needed. Direct observation of the heights of the tides can only be made at
some limited number of sites. Therefore to forecasting the heights of the tides at other
locations, methods have to be developed to give predicted heights. Two methods will
be reviewed, Least Square Best Fit model and the Data Assimilation method.
        The latter method is called the Data Assimilation method. This method
is based on the use of the equation of fluid motion as constraints as the values of the
parameters in a model which will approximate the full set of hydrodynamic equations.
        To compare the two methods, we have analyzed the observation data on
the tidal height at three stations, Pak Nam Tachin , Ko Sichang and Hua-Hin in 1996.
The sum square error method has been used to determine which techniques provides
for both prediction.