



1 Wind wave dimensions estimation based on ANNs

M. Mavrova-Guirguinova, K. Gualev

Department of Hydro-engineering, University of Architecture, Civil Engineering and Geodesy,
Sofia, BULGARIA (margir@mbox.contact.bg)

Wave patterns, height, period, length, depend on wave inducing factors- wind velocity and duration on the wave fetch and water depth. The knowledge of the wind wave dimensions is quite important for the correct freeboard design against overtopping, wave pressure calculations, failure dam analysis, and flood control. In this paper, the collected experimental data were used for training and testing multilayer perceptron networks. The results obtained from the ANN models can be used for mean values prediction of the wind wave patterns.