THE COMPARISON OF CHEBYSHEV POLYNOMIAL AND PADE APPROXIMATION IN MODELLING THE RAINFALL VOLUME IN MALAYSIA

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ABSTRACT

Around the world, one of the most difficult subjects is the forecasting of rainfall. Since rainfall is essential to agriculture, forecasting it is important for our company's economics to thrive. In water resource engineering, such as efficient management of flood, drought, and mitigation, rainfall forecasting is crucial. Chebyshev Polynomials and Pade Approximation were the methods which are employed in this work. The goal of this study is to make the comparisons of outcomes of rainfall volume in some states in Malaysia such as Terengganu, Selangor and Perlis using those two methods. The accuracy of each method were estimated using the absolute errors. The finding proves that Pade approximation is the best method in predicting the rainfall volume in Malaysia. Then the whole study of this study is based on the data which provided by the Department of Statistics Malaysia.

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TABLE OF CONTENTS