

CLUSTERING OF RAINFALL DATA USING K-MEANS ALGORITHM

*Mohd Sham Mohamad*¹, *Yuhani Yusof*², *Ku Muhammad Na'im Ku Khalif*³ and *Mohd Khairul Bazli Mohd Aziz*⁴

1,2,3,4 Faculty of Industrial Sciences & Technology, Universiti Malaysia Pahang, Lebuhraya Tun Razak
26300 Gambang, Kuantan, Pahang, Malaysia

Abstract:

Clustering algorithms in data mining is the method for extracting useful information for a given data. It can precisely analyze the volume of data produced by modern applications. The main goal of clustering is to categorize data into clusters according to similarities, traits and behavior. This study aims to describe regional cluster pattern of rainfall based on maximum daily rainfall in Johor, Malaysia. K-Means algorithm is used to obtain optimal rainfall clusters. This clustering is expected to serve as an analysis tool for a decision making to assist hydrologist in the water research problem.

Keywords: Clustering; K-Means; Rainfall

ACKNOWLEDGMENT

The authors would like to thank the Department of Irrigation and Drainage Malaysia for providing the data of this research work. The authors also would like to acknowledge the Universiti Malaysia Pahang (UMP) for providing the internal research grant RDU1703265.