ABSTRACT

Weather is the condition of the air in a place which includes conditions of temperature, humidity, and air pressure. The weather became a factor that is most difficult to predict, whereas the weather itself is very useful for many things, namely in the field of agriculture and aviation. Therefore, predictions about the weather conditions become very important because it can help people in beraktifitas.Salah the factors that influence the weather conditions are rainfall. Currently the rainfall can be predicted by several approaches, one approach with fuzzy data mining.

Therefore , in this final project will utilize fuzzy approach to data mining using fuzzy c -means algorithm and fuzzy system for predicting rainfall in the district of Bandung . The first stage is done is the normalization of rainfall data in advance to make the data be in the range of 0 to 1. Once obtained the result data normalization, the second stage was to group the data into several clusters with Fuzzy C-Means algorithm based on the degree of membership to get the center cluster , Centre cluster and the standard deviation will be used as input for building the stage fuzzification membership functions with fuzzy system. From this method , obtained prediction system which is formed using the parameters of optimal use of two cluster membership functions and rule base is generated from a priori algorithm as many as 10 rules with an error rate of 0.35 and accuracy by grouping classes by 75 %

Keywords : Fuzzy data mining, preprocessing, Fuzzy C-Means, fuzzy system, prediction, rainfall