Weather events forecasting in Kota Kinabalu using a fuzzy rule-based system

ABSTRACT

A weather forecast is a prediction of weather phenomena in the future by collecting as much data as possible. Major worldwide climate studies include the breakthrough and interpretation of complicated weather patterns in order to successfully forecast varied weather events. It is quite complex to screen so many parameters from several factors to discover precise weather conditions. In this paper, a fuzzy rule-based system (FRBS) is applied for weather forecasting in Kota Kinabalu. There are 234 fuzzy rules being developed as the FRBS are constructed along and successfully implemented in MATLAB. Based on the results, the comparison between actual and forecast data shows moderate precision as the accuracy level is higher than the level of error analysis