

ABSTRACT

Monsoon depression tracks have a great impact on success and failure rate of summer monsoon precipitation in Pakistan. In this study, different tracks of monsoon depressions are represented which has an impact on geography of the areas especially its economics, social and cultural activities. GIS technology is used first time for preparing maps of monsoon depression tracks in this study. Correlation has been found between the presence or absence of monsoon depression and recorded rainfall amount. Years of highest rainfall and lowest rainfall are selected and nature of LPSs is observed during these years. Different causes behind direction change of monsoon depression in India and Pakistan are discussed in this study.

This study is to analyze temperature and rainfall trends in between era of 1960 to 2010 of Bahawalpur District and 1950 to 2010 of Multan District through regression analysis. Graphs are plotted to diagnose the trends of both variables in both Districts through the regression analysis. Analysis depicts a clear change in rainfall and temperature trends. Total Rainfall in both districts is increasing. In Bahawalpur District there average temperature is decreasing while in Multan District average temperature is increasing. Minimum temperature has increase and maximum temperature has decrease in both districts. Observations have revealed that decreasing maximum temperature and increasing rainfall have positive impacts on study area. But increase in minimum temperature is actually alarming for the both districts. Impacts of changing trends of temperature and rainfall on climate are discussed in this study.