

An Investigation of Trends and Variability of Rainfall in Shillong City

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Abstract : This study aims to investigate and analyse the trends and variability of rainfall in Shillong and its nearby areas, located in Meghalaya hills of North-East India; which is geographically a neighbouring area to the wettest places of the Earth, i.e., Cherrapunji and Mawsynram. The analysis of variability and trends to annual, seasonal, monthly and daily rainfall was carried out, using the data collected from the IMD station at Shillong; thereby attempting to highlight whether rainfall in Shillong area has been increasing or decreasing over the years. Rainfall variability coefficient is utilized to compare the current rainfall trend of the area with its past rainfall trends. The present study also aims to analyse the frequency of occurrence of extreme rainfall events over the region. These studies will help us to establish a correlation between the current rainfall trend and climate change scenario of the study area.

Keywords : trends and variability of rainfall, annual, seasonal, monthly and daily rainfall, rainfall variability coefficient, extreme rainfall events, climate change, Shillong, Cherrapunji, Mawsynram

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