

PRECIPITATION EXTREAME

*Md. Shoriful Islam¹

1. S Islam.

Precipitation extreme is one of the major evidence among all the natural calamities as a result of climate change. The global precipitation has increased at an average rate of 0.08 inch per decades which indicate a major threat to the future decades. There are several causes observed for extreme precipitation event over the last century, the rising of global temperature which is the main culprit for increasing evaporation rate that leads a significant role in extreme precipitation event. Other' s factors such as decreasing humidity and increasing wind speed that' s also plays important role in promoting evaporation rate. Finally it can be say that the more heat, more moisture causes more evaporation which leads to more precipitation event The consequences of extreme precipitation event are already known to all. It may occur frequent flood in deferent region over the world. A recent study has shown that approximately 82000 people' s affected and 26000 km² is flooded per year in Bangladesh due to monsoon flood. The extreme precipitation event creates negative impact on economic, agriculture and environment regions and also directly impact on storm water management and public health. The weather forecasting will contribute to reduce the agriculture, economic, environmental impact by predicting the extreme precipitation event occurrence time of future decades. It will also help to take necessary steps against future natural clematises. In this study a complete data analysis of daily and sub-daily precipitation, temperature and humidity of different rain gauge station in Bangladesh from 1961 to 2014 has done to determine the maximum extreme region. By using MATLAB TSAF toolbox, A time series analysis and forecasting of daily and sub-daily precipitation has done. This analysis will contribute to the global community to determine the present condition of precipitation rate of Bangladesh and will help to take global precautionary measures against the future precipitation extreme.

Keywords: Precipitation, Temperature, Humidity