# Changing Seasonal Rainfall Patterns in Trinidad: Myth or Reality?

*R.J. Stone*

## Abstract

Seasonal rainfall amounts at five stations in Trinidad were statistically analysed to detect the presence of deterministic components such as trends, jumps and cycles in the data series. The statistical procedures employed were the sample auto-correlation function, the runs test of randomness and the Wald-Wolfowitz test of independence. The results show that all the rainfall data series are both random and stationary at the 5% significance level indicating the absence trends, jumps and cycles. Consequently, these results demonstrate that the recent claims of changing seasonal rainfall patterns in Trinidad due to global warning (drier dry seasons, wetter wet and transitional seasons) have no valid statistical basis, are inaccurate and therefore misleading. In addition, the study provides evidence to support the use of frequency analysis as the appropriate statistical method for predicting seasonal rainfall amounts in Trinidad.