

ABSTRACT NO.: 518

TITLE: Comparing Eleven Years of Rainfall Data Between 1996 and 2006 for Piarco, Champs Fleurs and St. Augustine of Trinidad.

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This study served as a comparison of rainfall data for three locations in Trinidad over an eleven year period were compared. Ideally, a minimum of 30 years of data would comprise a complete data set for climate analysis. However, daily rainfall data between 1996 and 2006 were obtained for Piarco, St. Augustine and Champs Fleurs. From daily values, monthly sums were found and a time series for each location was generated using this data which showed the amount of measured rainfall over the eleven years. An Analysis of Variance (ANOVA) test was performed on the data set of daily values to statistically determine if any of the three locations had a significant difference from the other. The p-value that was determined from the ANOVA indicated that there existed a statistical difference among the group. The p-value from the ANOVA for all three locations was found to be 0.009. Hence there exists a significant difference among the three data sets used. Further ANOVA analyses were performed on Piarco and St. Augustine; Piarco and Champs Fleurs; and St. Augustine and Champs Fleurs. The resulting p-values were found to be 0.011, 0.006 and 0.860 respectively. Hence there was no significant difference in rainfall between St. Augustine and Champs Fleurs only, but there existed a difference between Piarco and St. Augustine and Piarco and Champs Fleurs.