December 2011 since the study was proposed before several months before the year 2012 ended.

Instrumentation and Data Collection

The data was then summarized and classified by year on Microsoft Excel. However, the amount of rainfall for May 2006 was missing, so a statistical method called Bootstrapping method was done to generate a forecasted value.

Bootstrapping method is a method developed by B. Efron on 1979. It is a computer-based method for assigning accurate sample estimates. This method allows estimation of the sample distribution of almost any value using only very simple methods (Varian 2005). Using R-statistics, a computer statistical software, bootstrapping method was used to generate an estimate for May 2006.

The data from January 2001 to December 2005 was used to generate an estimate for May 2006, through R-statistics. Then, a time-series analysis was conducted. A time-series analysis is a method used to obtain an understanding of the forces, which produced the data. The time series analysis is a set of data used and collected sequentially at fixed intervals of time. The amount of rainfall , is a time series data, which is measured and recorded at successive time intervals.

Protocol

The time series analysis and forecasting will be done using a statistical software called R-statistics. R is a free software environment for statistical computing and graphics. It compiles and runs on a wide variety of UNIX platforms, Windows and MacOS.