Statement of the Problem

The amount of precipitation in Baguio City has become very unpredictable, to a point where landslides and flashfloods have become unforeseeable. The aim of the study is to provide a basic forecast about how much precipitation would fall on Baguio City on the succeeding year, based on the ten-year data gathered from PAGASA.

Significance of the study

This study can be a reference for preparations for certain agricultural activities like cultivating, planting, and harvesting. It can also be a reference as a precautionary measure for flash floods and landslides.

Scope and Delimitation

The study is limited only to analyzing rainfall amounts and no other weather factors. The study has been limited to only analyzing the rainfall amounts in Baguio City because it ensures the safety of the researchers and it gives the easiest access to the needed data. This study was also limited to determining the coefficients of the Holt-Winters additive seasonal model and not all the set of the equations in the model. This study is further delimited to the prediction of the average monthly rainfall for the months of 2012.

Definition of Terms

For clearer understanding of terms used in this study, below are the operational definitions of the terms used in this research paper.

Time series analysis concerns the analysis of data collected over time. Usually the intent is to discern whether there is some pattern in the values collected to date, with the intention of *short term* forecasting

Seasonality is defined to be the tendency of time-series data to exhibit behavior that repeats itself over regular periods.

Additive seasonality shows steady seasonal fluctuations, regardless of the overall level of the series.