

Abstract

Pakistan is the world's only country with the exclusive range of altitude ranging from sea level to the second highest mountain ranges in the world. This distinguishes it by allowing it to have a unique range of climates across its many areas, including considerable temperature variations and significant geographical rainfall variances. The objective of this study is to monitoring of climatic regions for Punjab Province of Pakistan from the database of 26 meteorological stations by using GIS and statistical techniques. The climatic variables used in the koppen-Geiger climate classification for different analysis. The result demonstrate the two basic climatic classes in Punjab namely B and C as well as their sub- categories. We used spatial Proximity Analysis to regionalize the Punjab's climatic regions using Thessien Polygon Analysis. We produced the maps of climatic regions by using 30 years annually area weighted Precipitation and Temperature dataset of 26 meteorological Stations by using GIS. Also used the spatial Analyst overlay tool for model builder and Weighted Overlay Analysis. Linear regression technique used for the Statistical data analysis and finding the results that shows in trend lines and graphs that show the parametric relationship by using statistical Technique. In the end result model is generated by overlay analysis for zone identification is named as "Proposed Climatic Zone" (PCZ) model.