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Geostatistical Analysis of Rainfall Temperature and Evaporation Data of Owerri for Ten Years

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ABSTRACT

Rainfall, evaporation and temperature data of Owerri for ten years (Figure 1) (1998-2007) were acquired. The data were analyzed using standard statistical measures and climatological normal (Figure 2). The results show that the rainfall pattern exhibits some oscillations indicating annual bimodal distribution of rainfall. The temperature reached its lowest value of 27.75°C in 1999. Thereafter, a steady increase in temperature was noticed. From 2002, some variation in evaporation data was observed. The potential evapotranspiration shows some correlation with temperature. This variation in weather parameters may be attributed to climate change.

KEYWORDS

Evapotranspiration; Rainfall; Temperature; Oscillations; Precipitation; Surface Runoff; Recharge; Water Balance

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