



## **Variability of Total Electron Content [TEC] Fluctuations at Akure, South Western Nigeria**

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### **Abstract**

Increasing application of Global Navigational Satellite Systems GNSS has further strengthened interest in understanding of ionospheric variability as a result of its impact on GNSS signals. GNSS offer a remarkable new way to study ionospheric structure and associated perturbations. This paper reports the investigation of the variability of TEC as observed from a dual frequency GPS receiver system located at a terrestrial point, Akure, a station within the Equatorial anomaly region. Diurnal and seasonal variations of TEC were examined. The diurnal variation in TEC demonstrates a steep increase with the rising of the Sun towards the maximum value between 13:00 and 16:00 LT and then decline towards the sunset around 16:00 LT.

**Keywords:** GNSS, TEC, equatorial anomaly, ionosphere