

EARTH OBSERVATION SYMPOSIUM (B1)
Biodiversity (6)

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INTER-SEASONAL CHANGE OF VEGETATION COVER AND SURFACE TEMPERATURE
DISTRIBUTION: A CASE STUDY OF ONDO STATE, NIGERIA.

Abstract

This study employs Landsat ETM+ satellite imagery to access the inter-seasonal variations of Surface Temperature and Vegetation cover in Ondo State in 2013. Air temperature data for year 2013 acquired from 3 synoptic meteorological stations across the state were analyzed. The Single-channel Algorithm was used to extract the surface temperature maps from the digital number embedded within the individual pixel. To understand the spatio-temporal distribution of Surface Temperature across the various land-use types (vegetation, built-up, rock-outcrop, swamp and water body), 200 sample points were randomly chosen, so that each land-use covers 40 points. Hence, the study shows the existence of pockets of Urban Heat Islands (UHI) that are well scattered all over the state, which proves the capability and reliability of Satellite remote sensing for environmental studies.