A STUDY OF THE URBAN HEAT ISLAND OF RIYADH, SAUDI ARABIA
Abdulaziz Mohammed Al-Alswilem
(mam Mohammad Bin Saud University

Abstract

Rapid urbanization in Riyadh, Saudi Arabia over the past few decades has been associated with large increases in local temperature. This paper examines the characteristics of the urban heat island (UHI) in this large Saudi city. To study this modification of the urban heat island, several methods have been used in this study: (1) comparison of rural against urban stations, therefore, daily, monthly and annual mean, minimum and maximum temperature were gathered and analysed for the time period; 1961-2003 for two selected stations in and near Riyadh city; (2) taking temperatures at thirty two points in the city by moving observations around different parts of the city; (3) studying the temporal series of temperature of stations that are engulfed by the city as it grows.