URBAN HEAT ISLAND PHENOMENA IN MAJOR TOWNS OF PENINSULAR MALAYSIA: AN ANALYSIS USING REMOTE SENSING TECHNIQUE

Ab.Latif Ibrahim, Mazlan Hashim, Abd. Wahid Rasib, Wan Hazli Wan Kadir Department of Remote Sensing Universiti Technologi Malaysia Skudai Johor Bahru 81310 Malaysia E-mail : <u>latif@fksg.utm.my</u>

> Aziz Abd.Majid, Chan Ngai Weng University Sains Malaysia E-mail : <u>amaziz@usm.my</u>

Recent development on urbanization in Malaysia has altered tremendously the land surface, where most of the naturally vegetated surfaces have been modified. The naturally vegetated surfaces have been changed and are replaced by building and paved streets. These land surface changes affect the absorption of solar radiation, the surface temperature, and evaporation rate and heat storage. Apart from that, human activities in major urban areas have also produce emissions of heat, water vapor, and pollutants that can directly impact the temperature, humidity, visibility, and air quality in the atmosphere above the urban areas. In fact, urbanization alter just about every element of climate and whether in the atmosphere above and also in the surrounding areas. Due to very rapid urban and industrial program proposed by the Malaysian Government to ensure the status of develop nation by the year 2020, most of the major towns has been experiencing such changes. The main focus of this paper is to highlight results of the study on the effect of rapid urban development of two major town in Malaysia, that is Penang and Johor Bahru on surface temperature, which is normaly known as the urban heat island. Remote sensing data has been used for the purpose of the assessment of urban heat island..