



Urban Heat Island in Ankara

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In this study, the seasonal variation of the surface temperature of Ankara urban area and its environment have been analyzed by using Landsat 7 image. The Landsat 7 images of each month from 2007 to 2011 have been used to analyze the annual changes of the surface temperature. The land cover of the research area was defined with supervised classification method on the basis of the satellite image belonging to 2008 July. After determining the surface temperatures from 6-1 bands of satellite images, the monthly mean surface temperatures were calculated for land cover classification for the period between 2007 and 2011. According to the results obtained, the surface temperatures are high in summer and low in winter from the air temperatures. All satellite images were taken at 10:00 am, it is found that urban areas are cooler than rural areas at 10:00 am. Regarding the land cover classification, the water surfaces are the coolest surfaces during the whole year. The warmest areas are the grasslands and dry farming areas. While the parks are warmer than the urban areas during the winter, during the summer they are cooler than artificial land covers. The urban areas with higher building density are the cooler surfaces after water bodies.