Urban Heat Island in Phoenix

Phoenix is known to have an urban heat island that significantly increases minimum and maximum temperatures, with areas of the city experiencing dramatic increases in temperature from day to day and season to season. This phenomenon is due to the presence of the city of Phoenix itself and its surrounding urbanization. The heat island is evident over the city, with the warmest temperatures occurring during the summer months. This warming effect is caused by the absorption of solar radiation by the urban surfaces, leading to an increase in surface temperature and air temperature. The heat island is more pronounced during the day and less so during the night, due to the heat being stored during the day and released during the night.

The Urban Heat Island

The Urban Heat Island is a phenomenon that occurs in urban areas due to the absorption of solar radiation by the urban surfaces, leading to an increase in surface temperature and air temperature. This phenomenon is more pronounced during the day and less so during the night, due to the heat being stored during the day and released during the night.

RS Scene Data Processing: Surface Temperature and Vegetation Indices

Surface reflectance indexes and vegetation indices were estimated from the RS data.

Regional Phoenix Analysis of Weather Station-Derived Air Data and Remotely Sensed Temperature and SAVI

Regional analysis of weather station-derived air data is used to remotely sense temperature and SAVI. This analysis is used to determine the relationship between air temperature and vegetation indices, and to identify areas with high and low air temperatures.

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