

Variasi suhu permukaan daratan di kampus Universitas Indonesia menggunakan analisis citra = Variation of land surface temperature in University of Indonesia using image analysis

Agung Rudiarto, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20413077&lokasi=lokal>

Abstrak

[Universitas Indonesia memiliki keberagaman fasilitas untuk menunjang aktifitas perkuliahan yang memiliki variasi tutupan lahan. Universitas Indonesia sebagai tempat beraktifitas dapat mewakili sebuah kota dalam lingkup yang lebih kecil. Variasi tutupan lahan mempengaruhi adanya variasi suhu permukaan. Penelitian ini bertujuan untuk mengetahui pola spasial variasi suhu permukaan daratan. Penelitian ini menggunakan pendekatan keruangan (spasial) untuk menganalisis variasi suhu permukaan daratan dan pendekatan ekologi untuk menganalisis keterkaitan antara suhu permukaan daratan dengan kehijauan kanopi vegetasi (NDVI) dan kerapatan atap bangunan (NDBI). Data suhu permukaan dihasilkan dari citra penginderaan jauh. Penelitian ini menggunakan citra Landsat 8 untuk memperoleh data suhu, kehijauan kanopi vegetasi, dan kerapatan atap bangunan. Hasilnya menunjukkan suhu maksimum permukaan daratan di kampus UI Depok pada tahun 2013 dan tahun 2014 mencapai 35oC dan mempunyai suhu minimum 21oC. Variasi suhu permukaan sejalan dengan variasi tutupan lahannya. Semakin rendah kehijauan tutupan kanopi vegetasinya maka semakin tinggi pula suhu permukaan daratannya, begitu juga sebaliknya semakin tinggi kerapatan atap bangunannya maka semakin tinggi pula suhu permukaan daratannya.

;University of Indonesia has a diversity of facilities to support the activities of the lectures that have variations in land cover. University of Indonesia as a place of activity can represent a city within a smaller scope. Variations in land cover affect surface temperature variations. This study aims to determine the spatial patterns of land surface temperature variations. This study uses a spatial approach (spatial) to analyze the variations in the temperature of the land surface and ecological approach to analyze the relationship between the land surface temperature vegetation canopy greenness (NDVI) and the density of the roof of the building (NDBI). Surface temperature data generated from remote sensing imagery. This research use Landsat 8 to obtain temperature data, greenish vegetation canopy, and the density of the roof of the building. The results show the maximum surface temperature of land in UI Depok campus in 2013 and 2014 reached 35°C and have a minimum temperature of 21°C. Land surface temperature variations changes in line with variations in land cover. The lower greenish vegetation canopy cover, the higher the temperature of the land surface, on the contrary the higher density of the roof of the building, the higher the temperature of the land surface.

;University of Indonesia has a diversity of facilities to support the activities of the lectures that have variations in land cover. University of Indonesia as a place of activity can represent a city within a smaller scope. Variations in land cover affect surface temperature variations. This study aims to determine the spatial patterns of

land surface temperature variations. This study uses a spatial approach (spatial) to analyze the variations in the temperature of the land surface and ecological approach to analyze the relationship between the land surface temperature vegetation canopy greenness (NDVI) and the density of the roof of the building (NDBI). Surface temperature data generated from remote sensing imagery. This research use Landsat 8 to obtain temperature data, greenish vegetation canopy, and the density of the roof of the building. The results show the maximum surface temperature of land in UI Depok campus in 2013 and 2014 reached 35°C and have a minimum temperature of 21°C. Land surface temperature variations changes in line with variations in land cover. The lower greenish vegetation canopy cover, the higher the temperature of the land surface, on the contrary the higher density of the roof of the building, the higher the temperature of the land surface.

;University of Indonesia has a diversity of facilities to support the activities of the lectures that have variations in land cover. University of Indonesia as a place of activity can represent a city within a smaller scope. Variations in land cover affect surface temperature variations. This study aims to determine the spatial patterns of land surface temperature variations. This study uses a spatial approach (spatial) to analyze the variations in the temperature of the land surface and ecological approach to analyze the relationship between the land surface temperature vegetation canopy greenness (NDVI) and the density of the roof of the building (NDBI). Surface temperature data generated from remote sensing imagery. This research use Landsat 8 to obtain temperature data, greenish vegetation canopy, and the density of the roof of the building. The results show the maximum surface temperature of land in UI Depok campus in 2013 and 2014 reached 35°C and have a minimum temperature of 21°C. Land surface temperature variations changes in line with variations in land cover. The lower greenish vegetation canopy cover, the higher the temperature of the land surface, on the contrary the higher density of the roof of the building, the higher the temperature of the land surface.

, University of Indonesia has a diversity of facilities to support the activities of the lectures that have variations in land cover. University of Indonesia as a place of activity can represent a city within a smaller scope. Variations in land cover affect surface temperature variations. This study aims to determine the spatial patterns of land surface temperature variations. This study uses a spatial approach (spatial) to analyze the variations in the temperature of the land surface and ecological approach to analyze the relationship between the land surface temperature vegetation canopy greenness (NDVI) and the density of the roof of the building (NDBI). Surface temperature data generated from remote sensing imagery. This research use Landsat 8 to obtain temperature data, greenish vegetation canopy, and the density of the roof of the building. The results show the maximum surface temperature of land in UI Depok campus in 2013 and 2014 reached 35°C and

have a minimum temperature of 21°C. Land surface temperature variations changes in line with variations in land cover. The lower greenish vegetation canopy cover, the higher the temperature of the land surface, on the contrary the higher density of the roof of the building, the higher the temperature of the land surface.

]