

Abstract

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Urbanization in modern cities cause heat island phenomenon mainly due to decreasing amount of green coverage not only at the edge of urbanized areas but inside of urbanized areas. Eco-friendly urban planning would be one of the choices to mitigate heat island phenomenon and increase the green coverage. This research analyses the surface temperature distribution of urban residential areas in Nagoya city. Our result reveals that the smaller building coverage ratio and floor area ratio are which may produce more parks and green areas, the lower surface temperatures become. In addition, clusters of trees significantly lower surface temperatures.

I investigated the town planning-related measure about green preservation and creation in an established city area. And I proposed about green arrangement in the habitation space of the big city where the heat island effect is remarkable.