

Detecting Heat Spot within the City using Drones

*Kotaro Iizuka¹, Yuki Akiyama¹

1. Center for Spatial Information Science, University of Tokyo

Various researches have been conducted relating to the heat in urban spaces. Although, majority of the work tends to observe the trend for the whole city or district, meaning that such works estimates heats in a relatively large administrative units. Conversely, there are still challenges that needs to overcome for observing the urban heat on a micro-scale units such as individual buildings and roads that forms the city. This work challenges in observing the thermal information utilizing drones and thermal camera onboard, and evaluates the possibility of estimating the heat trend at a micro scale level using multiple variables collected through drone and satellite. Further discussion will be made for the potential heating areas where high risk lies that could affecting the peoples health relating issues.

Keywords: Urban Heat Island, Drone, Random Forest