## Analysis of Green Landscape Based on Spatial Data

## \*Takemura Yui<sup>1</sup>, Yoshikawa Shin<sup>2</sup>, Tanaka Kazunari<sup>2</sup>

1. Osaka institute of technology, 2. Osaka Institute of Technology

Our country is abundant in nature and the beautiful landscape has been formed through the ages. The green environment forming a beautiful landscape becomes the important landscape resource and the tourist resource in modern society. On the other hand, smart device is becoming increasingly popular. As a result, the users of social media have increased rapidly and enormous spatial data group has appeared in modern society.

In this study, the authors are going to investigate green landscape focused on the tourist spot. The green environment has become more important as a kind of landscape resource and tourist resource. The data contributed to social media is realistic data, because it is generated by human behavior. People visiting tourist spots have been contributed photographs to the photo community website. So, it is intended to understand the green landscape that people enjoy on a tourist spot.

First of all, the authors decide the area of the Nara-Park as a case study. And they built the database of the area and used Flicker and Panoramio as photo community websites for data collection. It is possible to extract attribute information including location information from the photo contributed on social media. These two photograph community websites are different in characteristics. The authors think that the most of users of Flickr are foreigners and the most of users of Panoramio are Japanese by understanding the photography positions obtained from each photograph community website and the route listed in a sightseeing magazine. And they understood the green environment in the small area by the spatial data acquired from the PentaDigiCAM. They grasped the good viewpoint field where the tourists visited by using the two kinds of data. In addition, they investigate the tourist route actually used by acquiring positional information and time information. Finally, they analyze the continuous green landscape actually viewed by the visible-invisible analysis from the tourist routes. In future, the authors are going to grasp the good viewpoint fields and tourist routes for the green

landscape in a whole Nara-Park by expanding the case study area.

Keywords: Green landscape, Tourist area, Social media