

## Using SNS Log Data in Understanding Geopark Visitors

\*Tanaka Seiya<sup>1,2</sup>, Yuzuru ISODA<sup>1</sup>, Takashi KIRIMURA<sup>3</sup>

1. Graduate School of Science, Tohoku University, 2. Tokachidake Geopark Promotion Council, 3. Kogakkan University

Geopark visitors not only visits specific geo-sites but also to various places to see landscapes and to do various activities. It is therefore difficult to understand who they are, and what they do within Geopark. While questionnaires and interviews are the main methods to gather behavioral data, these methods are only able to take the sample at specific time and place. Previous studies that analyzes visitors in Geopark have not solved these problems. This study presents the analysis of geo-tagged posts on Twitter, a popular social networking service (SNS), of the users who visited Biei-Kamifurano in Hokkaido, Japan, where geopark designation is being pursued.

This study's target is two-fold. To understand where visitors to Biei-Kamifurano come from, by finding the center of the user's posts but with a robust estimate that remove the effect of user's occasional trips away from home. After distinguishing visitors and local residents, locations where visitors visited (and posted) within Biei-Kamifurano is revealed. This study considers how the behavioral information of the visitors retrieved by these methods can be used to various aspects such as "geo-conservation", "local promotion and tourism" and "disaster prevention".

Keywords: Geopark, Geotourism, Social Networking Service, Behavior Analysis, Big Data