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## Geospatial analysis on topography and archaeological sites in Kayseri, Turkey: A preliminary result

Yuichi S. Hayakawa<sup>1\*</sup>, Ryoichi Kontani<sup>2</sup>, Hiroshi Sudo<sup>3</sup>, Yuji Yamaguchi<sup>4</sup>, Fikri Kulakoglu<sup>5</sup>

<sup>1</sup>The University of Tokyo, <sup>2</sup>Notre Dame Seishin University, <sup>3</sup>Okayama Orient Museum, <sup>4</sup>Doshisha University, <sup>5</sup>Ankara University

Landform is a fundamental factor that affects cultural activities of human beings, and such effects on the artificial remains such as road position and settlement distribution can more strongly be reflected in ancient periods than in the modern periods. Here we investigate the spatial relationships between archaeological settlements (B.C. 3000-1000) and landforms in Kayseri region in central Anatolia Highland, Turkey. The data of landforms were acquired by both the field measurement and remote sensing techniques: The field topographic measurement comprise the use of LRF (Laser Range Finder) and DGPS (Differential Global Positioning System), which enables on-site quick ( $10^1$ - $10^2$  minutes for a  $10^4$ - $10^6$  m<sup>2</sup> area) acquisition of detailed topographic data with a submeter-order accuracy. Some of these detailed topographic data suggest the existence of buried buildings and walls, which had never been identifiable by existing low-resolution topographic datasets. Satellite imagery data are also used to obtain the broad-scale topographic data in the area. A DEM produced from ALOS PRISM imagery data is used to identify characteristic landforms around the archaeological sites. Using these materials we discuss the historical, temporal changes in the archaeological site locations in relation to the landforms.

Keywords: LRF, DGPS, DEM, ALOS PRISM, geoarchaeology