[JJ] Evening Poster | H (Human Geosciences) | H-TT Technology & Techniques

## [H-TT17]Geographic Information Systems and Cartography

convener:Mamoru Koarai(Earth Science course, College of Science, Ibaraki University), Kazunari Tanka(Department of Civil Engineering and Urban Design, Faculty of Engineering, Osaka Institute of Technology), Kazuhiko Nakamura(東京大学空間情報科学研究センター)

Thu. May 24, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe) This session discusses various methods which acquire, store, analyze and visualize geospatial data, and presents the outcomes of empirical studies using GIS or mapping methods. The session also deals with applications of digital data, GIS, and mapping to various fields of earth and planetary science and human society. All presentations and discussion of this session are made in Japanese.

## [HTT17-P01]Consideration of topographic expression for Geopark maps - Case study of the North Ibaraki Geopark

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Geopark is preserving a scientifically valuable topography, a stratum, ecology, culture, history, and archeology. Geopark utilizes these sources for education, study and tourism (Geo tourism), aim at regional vitalization. Geopark is distributing many maps as a pamphlet to tourists. Mokudai and Koarai (2011) suggested that there are some problems in Geopark maps. Maps don't explain geographical background. Maps don't express topography well. Geological maps and Land Condition Maps are not used in Geopark maps. The purpose of this study is to create a map that improved some problems in Geopark map. So the authors classified and evaluated maps that are used at Geopark, and they considered elements that need in Geopark maps.

The authors classified and evaluated maps that are used at 23 areas of Geopark in Japan. They carried out survey that using 3 questionnaires, to know that best how to express topography. As a result, they decided essential elements of create a Geopark map. Studied areas are Lake Senba Geosite, Omiya Terrace Geosite, and Tanakura Fault Geosite in the North Ibaraki Geopark. In these areas, the authors created maps, compared and considered.

As a result of questionnaires, it is thought that people ask a map that can understand story of Geopark well. People prefer maps that can understand intuitively topography. Essential elements of Geopark map are (1)how to express topography to understand geomorphology and geostory well, (2)thematic information (geological map and geomorphological map). The authors created some maps that have these elements.

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