
[JJ] Evening Poster | M (Multidisciplinary and Interdisciplinary) | M-GI General Geosciences, Information Geosciences & Simulations

[M-GI26]Earth and planetary informatics with huge data management
convener:Ken T. Murata(National Institute of Information and Communications Technology), Takeshi Horinouchi(Faculty of Environmental Earth Science, Hokkaido University), Rie Honda(高知大学自然科学系理工学部門, 共同), Susumu Nonogaki(Geological Survey of Japan, National Institute of Advanced Industrial Science and Technology)

Mon. May 21, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

Increasingly large and complex data are produced by observations and numerical simulations in earth and planetary sciences. The target of this session is to discuss a broad range of practices and new knowledge of informatics, international standard and modelling, including techniques for large-scale data processing and numerical simulation, data preservation and publication, data transfer and collection and other data technologies with a vision to advance an emerging data-intensive science, namely "geoplanetary informatics".

[MGI26-P06]Web Sharing System of Two- and Three-dimensional Geological Data using Free and Open Source Software

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Keywords:Web sharing, Geological map, Borehole log, Three-dimensional geological model, Free and Open Source Software

Recently, Web sharing of subsurface geospatial information has received increasing attention because of its importance in disaster mitigation / prevention. The purpose of this study is to establish technology to share two- and three-dimensional (2D / 3D) geological information on the Web using Free and Open Source Software. For this purpose, we developed a web sharing system of borehole logs, geological maps, and geological cross-sections. This system allows the users (1) to map locations of borehole logs with a 2D geological map, (2) to browse a surface-based 3D geological model, and (3) to generate a cross-section from 3D geological model. Leaflet JavaScript library is used for mapping locations of borehole logs and 2D geological maps. Borehole logs and 3D geological model are downloadable as a XML format and a VRML format respectively. This study was supported by JSPS KAKENHI Grant Number JP16K21677.