

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

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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.

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