

# Voxel Modeling of Geotechnical Information Using a Huge Number of Borehole Logs

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In urban areas, borehole logs play an important role in understanding a three-dimensional (3D) distribution pattern of subsurface geology. Recently, many borehole logs created for public construction works are open to the general public on the Web by national and local governments. However, there are few low-cost tools for constructing 3D model of subsurface geology using a huge number of borehole logs. The purpose of this study is to develop an open-source tool for easily constructing 3D model of geological/geotechnical information using borehole logs and to facilitate utilization of geoinformation in urban areas. As a first step of our work, we have developed a voxel modeling method of geotechnical information like lithofacies and standard penetration resistance (SPT N-value) using a huge number of open borehole logs. In this presentation, we will introduce summary of our method and show results of test calculations. This study was supported by JSPS KAKENHI Grant Number JP19K04004.

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