

Geological Descriptive Model and AI Geo-Database of Coastal Area by Using Published data from National Public Research Institutes in Japan

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A lot of public research institutions including Geological Survey of Japan, National Institute of Advanced Industrial Science and Technology release the geological and groundwater data of the whole country. However, there is problems as the notation methods, and there is a correspondence of land and the sea area, and it is difficult to understand the data of the coastal area continuously. Then, it was planned to make the database of documents and papers in addition to the published data from former research institutions, to make geological descriptive model which seemed to be probable one, moving ahead step by step. In this research, we will see the method of modelling by using the data of public institutions, first of all. And then, the 3D model has been continuously increase of more probable by the document data etc. for the lack part and no matching section. The finally, we evaluate and show the groundwater flow system and its long-term stable area in the 3D geological model of the coastal area. It is thought that the result of the study contributes to the groundwater profit use in the coastal area, and digging up of lack data for development and unused water resource.

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