Development of e-learning materials for GIS exercises in Japan and their outcomes

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We have been conducting a project to develop GIS exercise materials for Japanese university students. In this project, we distribute the materials on the Internet via GitHub. The learning contents in the materials are divided into four sections according to the target of learning: 1) basic operations of GIS software, 2) equipment usage for field data collection, 3) utilization of Web GIS, and 4) GIS programming with Python. Explanation of GIS analyses in the materials consists of short text descriptions and screen-captured images showing data processing using free GIS software packages such as QGIS. We also provided sample data compiled from open data for the exercises. Users can learn GIS using the materials with free of charge. The online materials have been utilized in not only universities but also industries, governments, and groups of citizens in Japan. In this presentation, we introduce the construction and operation of the materials, and demonstrate how they worked in the community.

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