

The first compilation of the Seamless Digital Geologic Map of Japan 1:200,000, and its application

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The Seamless Digital Geologic Map of Japan 1:200,000 (seamless geologic map) has been created as a basic geological information of Japan islands. This mapping project started in 2002 and will be finished in 2007. This map is the first geologic map at the scale of 1:200,000 covering the whole country with a standard legend.

The seamless geologic map is based on the 1:200,000 quadrangle geological sheet maps published by GSJ/AIST, and partly used the engineering geological map and geological maps published by the local governments. The standard legend for this seamless geologic map is classified based on the rock types and ages.

The process to produce the seamless geologic map is as follows. 1. Geologic maps are digitalized. 2. Each legend of the geological map is compared to the standard legend. 3. Discontinuous geologic boundaries between neighbor maps are harmonized with each other. If we are obliged to use outdated geologic maps for the seamless geologic map, the newest interpretation and geoinformation are added into conventional geoinformation. Thus the seamless geologic map may allow to be the latest geologic information.

The seamless geologic map is released on the AIST website (<http://www.aist.go.jp/RIODB/db084/>) as Research Information Database (RIO-DB). Everybody can access to view the seamless geologic map with stepless zoom on the web, and also can download raster images of the seamless geologic map. The seamless geologic map on website is layered by shaded DEM and road map based on data by Geographical Survey Institute for easy to indicate the location of the mapped area.

The map is simply drawn with the standard legend, so it is easy for people without special knowledge on geology to understand geoinformation on the map. In addition, you can change the zoom of this digital map quickly, and clip any parts of the map wherever you like. The map would be used in various situation, especially in education and popularization of geology and in application of interdisciplinary study on earthquakes and geochemistry.

The seamless geologic map will be updated frequently to provide the newest geoinformation. We hope the seamless geologic map is used by many people through the internet in future.