

GEO-DB Project and Integrated Geological Map Database (GeoMapDB)

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<http://iggis1.muse.aist.go.jp/>

Geological Survey of Japan (GSJ) is now promoting GEO-DB project, which integrates all kinds of geological contents in GSJ. GSJ introduced a new Integrated Geological Map Database (GeoMapDB) in Sep., 2006 (<http://iggis1.muse.aist.go.jp/>). The GeoMapDB is based on a WebGIS technology, which makes it possible to browse, overlay and search geological maps online. The purpose of this database is to make many kinds of geological maps produced by GSJ accessible to the general public. The database contains geological maps with scales ranging from 1:2 million to 1:25,000. The database includes the 1:2 million geological map of Asia, 1:1 million geological map of Japan (3rd edition), 1:200,000 seamless digital geological map of Japan 1:200,000 geological map of Japan (raster at 150 dpi and vector formats), 1:50,000 quadrangle series (raster format), and the 1:25,000 environmental geologic map of the Tsukuba Science City (raster and vector formats). It is possible to search information using the attribute tables of maps in vector format. Legends and cross sections of the 1:50,000 quadrangle series and environmental map of Tsukuba city are available. Links to Quaternary volcanoes are also available. Links to other databases, such as geological literature, outcrop information, dating, geological sample databases would also be made available soon. Three dimensional (3D) display of the viewing area is also possible. Downloading viewing image at 150 dpi and original files in raster and vector formats is possible. Web Mapping Service (WMS) for the 1:2 million geological map of Asia, 1:1 million geological maps of Japan and 1:200,000 seamless digital map of Japan is available. Thus, overlapping borehole data and landslide data from other agencies and overlaying on the Google Earth map is possible. GSJ decided to contribute the data from GeoMapDB to the OneGeology project (<http://www.onegeology.org/>), which aims to make 1:1 million digital geological map of the world using WFS. Collaboration with the GEO Grid project (<http://www.geogrid.org/>) is another major activity of the GSJ for the next several years.