

## Introduce of Smart Tiles System Architecture for Seamless Geological Map of Japan and contribute the new website

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The Geological Survey of Japan (GSJ), AIST started creating the 1:200,000 seamless digital geological map of Japan in 2001, and contribute it on a website from 2002. The map is based on the 1:200,000 geological quadrangle maps that have been published by GSJ since the 1950s. The geology of the maps was updated by checking the latest geological data and adjusted the stratigraphic and structural discordance among the original maps using Geographic Information System (GIS) software. We devised a system architecture, SmartTile System Architecture, to use this digital geological map through the Internet comfortably, and built a website by using it. Pyramid tiles, PHP, and SVG (Scalable Vector Graphics) are mainly used for implementing SmartTile System Architecture in seamless digital geological map of Japan. We started updating our website with the SmartTile System Architecture in October 2011, and since then, website visits have increased dramatically.

Keywords: SmartTile, Seamless geological map, Google map, Tablet PC, Smartphone, SVG