

# Toward a Taiwan Geophysical Station Information System

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## Abstract

To provide a better web service to the community for geophysical station information, we have utilized modern web technologies to establish an integrated station information system (SIS) through Internet. The current information content includes site description, coordinate, equipment, operating history and data/website links of seismic, GPS, strainmeter networks that are being operated by various organizations in Taiwan. In addition, we also include global broadband seismic networks in this system for possible seismological data browsing in the world. To present the information in different ways, we design 3 sub-systems to implement the visualization. The first one is the on-line database, which provides text mode interfaces for station query and administration. This sub-system is not only for general users, but also for project administrator, who can manage station information for individual array. We intend to collaborate with the TEC Instrument Center for future project deployment. The second one is the Google Map Service system. Taking advantage of the powerful Google Maps (GM), we combine the on-line database with the GM to display the searched results in a geographic framework. A route map of Taiwan can be superimposed on this system. The third one is Google Earth (GE) System. Users can download the free GE browser from Google website and setup the network link address to our SIS server to fetch the most updated station information. Some extra web map services are included in this system. Users are able to manage their own directories containing various on-line web services and even design their own deployment under this GE environment. A detail route map of Taiwan has been included. This station information system (SIS) will be posted in the TEC Data Center website soon. We provide open utility for colleagues to convert their station information into GE format, so that it can be displayed with SIS, simultaneously. In terms of this platform, we hope to promote the cooperation on information/data exchange between various organizations.