

# Japan Geoscience Union Meeting 2011

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## Typhoon Disaster Database System

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When typhoon disasters occurred, the organizations for disaster management of national and local governments corrected the disaster information, and published the disaster reports. Information on past typhoon disasters is important for mitigation of future disasters. The disaster reports published by the organizations are stored in the public libraries. Some reports are found on the Web page of the organizations. However, these reports are widely distributed, it is very difficult to see many reports. Therefore, we have developed the typhoon disaster database system (<http://ccwd05.bosai.go.jp/DTD/>) to store data on typhoons and associated disasters in Japan. Anyone can access the system through the internet.

The system is composed of 3 servers, the database server, the geographic information system (GIS) server, Web server. The database server stores information on typhoons and associated disasters occurred in Japan since 1951, list of disaster reports, list of organizations for disaster management of local governments, and list of typhoon or disaster homepage. The GIS server provides GIS functions which display information with regard to typhoon tracks and disasters on a map through web browser.

The database stores the typhoon number, name, GLIDE number, track data, central pressure, maximum wind speed, outline, sea level pressure map, satellite image map, precipitation map for typhoon related information. The database also stores the affected area address, date, the kind of disaster, damage number, and outline of damage.

We can search the typhoon and associated disasters in Japan, and browse these information on web browser. We can select typhoon to specify typhoon number or name, period, the affected area, or typhoon passing points. The outline page of selected typhoon shows information of the description of typhoon, maps, and time series line graphs of the central pressure and the maximum wind speed. The geographical information page of selected typhoons shows typhoon tracks and the affected area and/or damaged points of associated disasters by using WebGIS functions.

We will continue to collect and store information of typhoon and associated disaster, and we have a plan to update the hardware and software to contribute to provide the typhoon disaster information.

Keywords: Typhoon disasters, Database, Internet, WebGIS