Developing a system of geospatial data sharing and visualization for disaster management in the Philippines

We have been conducting a collaborative research of Japanese and Philippine researchers to construct a system for disaster management in the Philippines. We focus on climatological data from numerous sensors with special attention to heavy rainfall. We also construct a database including various geospatial data for natural and social environments, and develop a prototype of data sharing and visualization system, which effectively connects the database and GIS (geographical information systems) and can be used for disaster management. The Japanese researchers contribute mainly to the applications of GIS and open source software based on their expertise. The Philippine researchers contribute to the applications of network and hardware based on their knowledge on information technology. The system, after further development for practical usage, will be used for preparation and mitigation of natural disasters in the Philippines.

Keywords: data sharing, data visualization, natural disasters, Philippines