



Large Scale Landslide Database System Established for the Reservoirs in Southern Taiwan

Tsai-Tsung Tsai (1), Kuang-Jung Tsai (2), and Chjeng-Lun Shieh (3)

(1) Department of Hydraulic and Ocean Engineering, National Cheng Kung University, Tainan, Taiwan. (victor@dprc.ncku.edu.tw), (2) Department of Land Management and Development, Chang Jung Christian University, Tainan, Taiwan. (kjtsai@mail.cjcu.edu.tw), (3) Department of Hydraulic and Ocean Engineering, National Cheng Kung University, Tainan, Taiwan. (shieh@dprc.ncku.edu.tw)

Typhoon Morakot seriously attack southern Taiwan awaken the public awareness of large scale landslide disasters. Large scale landslide disasters produce large quantity of sediment due to negative effects on the operating functions of reservoirs. In order to reduce the risk of these disasters within the study area, the establishment of a database for hazard mitigation / disaster prevention is necessary. Real time data and numerous archives of engineering data, environment information, photo, and video, will not only help people make appropriate decisions, but also bring the biggest concern for people to process and value added. The study tried to define some basic data formats / standards from collected various types of data about these reservoirs and then provide a management platform based on these formats / standards. Meanwhile, in order to satisfy the practicality and convenience, the large scale landslide disasters database system is built both provide and receive information abilities, which user can use this large scale landslide disasters database system on different type of devices. IT technology progressed extreme quick, the most modern system might be out of date anytime. In order to provide long term service, the system reserved the possibility of user define data format /standard and user define system structure. The system established by this study was based on HTML5 standard language, and use the responsive web design technology. This will make user can easily handle and develop this large scale landslide disasters database system.