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Geo-information DB System for the KNPP Sites

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A successful geo-information Database (DB) system consisting of a series of data input, analysis, evaluation and result presentation processes is required a set of reliable geological input data, which are taken from the long-term multidisciplinary studies based on various geological fields such as structural geology, petrology, geo-chronology, stratigraphy, geomorphology and etc.

The geo-information DB system, in particular including neo-tectonic faults, developed from this study includes a fault data set integrated from a long-term, multidisciplinary neo-tectonic research project carried out at and around Korean Nuclear Power Plant (KNPP) sites. The computer processing program has the functions of a simple, unified data input, GIS-based data storing and presentation. It also inputs separately the locations of fault outcrops and stores the spatial features of physiography, general geology, neo-tectonic faults together. The base map and images are of vector (scales of 1/5,000, 1/25,000 and 1/250,000) and raster topographic (1/50,000 and 1/250,000) and geologic maps (1:50,000), Satellite images with TM coordinates of NASA, and shade relief map based on DEM data and topographical vector maps (1/25,000). The processing system is built based on Map Object, one of the broadly used GIS soft wares.

The fault geo-information DB system works in the Windows environment of a desktop computer or a notebook for an easy use in the office or in the field.