Research regarding landslide area extract technology using digital elevation model map

[Point]

In this research we tried landslide automatic extraction using digital elevation model map. We made comparison landslide distribution map made by interpretation of aerial photography, with geological formation distribution map made with calculation of DEM, and examined landslide automatic extraction algorithm. Based on the examination result, we divided research area according to the geological formation characteristics to arbitrary shape areas, and introduced extract algorithm of the areas considered as landslide migrations, because of the areas' slopes and over ground openness. By making comparison interpretation of aerial photography with automatic extraction result by DEM, we can extract relatively large transferred bodies, which have scarps and large surface areas, then, the possibility of landslide automatic extraction by DEM was verified.

Keyword   DEM, landslide distribution map, automatic extraction, regional division, over ground openness