Discussion on Investigation Methods for Large-scale Landslide Disasters on Taiwan

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The catastrophic landslide disaster in Siao-Lin village induced by typhoon Morakot was given attention on disaster management and prevention for large-scale landslide events. This event reminds the authors to review the current works on large scale landslide susceptibility, especially the investigation methods. Firstly, the authors explored the investigation methods on landslide susceptibility in Taiwan, Hong Kong, and Japan. Areas with high susceptibility were clarified based on the current investigation data and were classified according to different scales respectively, including the basin scale, sub-catchment scale, and the hillslope scale. The results show the classification principles on major landslide susceptibility areas according to the overlaid information from landslide frequency and vulnerable residents with different scales. According to the process and compare with the historical landslide disaster, there are 10 major basins were determined in this study. The methods can be a good material for the slopeland authority when the quick survey on landslide susceptibility area is necessary.