



Landslide Hazard Zonation of Tehran Quadrangles (1:250000) Using Fuzzy Set

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Recognition of landslide prepared zones , is one of the great measures in the hazard management.

In this study , thematic layers have been created in GIS from the most effective factors in landslide event , consisting:slope rate, aspect, lithology, precipitation rate, earthquake acceleration, fault, anticline, river and road. All parameters have determined in different layers, except the last four parameters Which are demonstrated in two different layers.

The fault and anticline have enclasped in one layer , road and river enclasped in another layer.

After the layer's fraction get their weights, the area were zoned by Fuzzy sets.

In classical zonation we have used Inherent properties of numbers(absolute numbers)but, apply of Fuzzy sets by considering the range of numbers rather than absolute numbers, provides a better analysis of the effects of various factors in the landslide event and the result is more applicable.

The landslides index map has been summarized by the geology maps, aerial photos, field researches and results of Fuzzy zonation.

Keywords: Landslide hazard zonation , Fuzzy sets , GIS.