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## 贡献权重叠加法的滑坡危险度区划研究(PDF)

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**Title:** Study on landslide hazard zonation using contributing weight overlay method

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**关键词:** [权重](#); [叠加](#); [滑坡](#); [区划](#)

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**摘要:** 介绍的贡献权重叠加的滑坡危险度区划方法, 是基于GIS技术将环境本底因子对滑坡发育的贡献作用进行量化统计后, 通过贡献率与权重的转换, 分别计算这些因子的自权重和互权重, 再与每一个因子叠加。该方法的特点是评价模型简单, 选取的因子指标可以直接从数值图件和野外调查中获得, 定量化效果明显。

**Abstract:** Contributing weight overlay model can be used as a kind of landslide hazard zonation methods. It is a GIS-based pixel-by-pixel analysis. Firstly, the method determines the event-controlling parameters and divides them into subtypes, then, calculates statistical correlations between the subtypes and landslide inventory, compares the number, area, and volume of landslides occupied by the factors subtypes with the number, area and volume of landslides in the factors. Contribution ratios of subtypes of different factors will be got. By using equalization and normalizing processes to the contribution ratio, it is possible to calculate every factor's self-weight and mutual-weight. Finally, through making an overlay by multiplying contribution ratios, self-weights and mutual-weights, the level of regional-scale landslide hazard can be determined. This method is simple and easy to use. Event-controlling factors can be obtained from digital maps or field survey directly. Quantitative effect is satisfied.

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