快报

基于概率分析的暴雨事件快速评估模型

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摘要　　通过对区域性暴雨事件历史资料的统计分析,利用平均降水量、降水强度和覆盖范围3个指标,建立了基于距离函数的暴雨事件快速评估模型。在建模过程中,对每个指标进行了正态化转化和正态性检验,并利用正态分布概率密度函数确立了各指标数年一遇的等级标准。采用定义域平移的办法,对模型中各指标的权重系数进行了调整。另外,应用此模型对2005年汛期3次区域性暴雨灾害进行了评估应用,结果表明,决策服务效果较好。

A rapid assessment model of torrential rain event based on probability analysis

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Abstract Based on the statistical analysis of regional torrential rain events,a rapid assessment model of torrential rain event was established by the controlling factors(average precipitation,rain intensity and cover range),and the distance function was employed.These factors were normalized and divided into different degrees according to the probability density function of the normal distribution.The weights of the controlling factors were determined by the movement of definition area(DA).In terms of the assessment model,3 regional torrential rain events during the flood season in 2005 were assessed.The results showed that the model was suitable for the assessment of torrential rain event.

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