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# 基于信息扩散理论的自然灾害风险评估系统设计与

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Title: Design and realization of natural disaster risk assessment system based on information diffusion theory

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关键词: 信息扩散理论; 自然灾害; 风险评估; ArcGIS Engine

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摘要: 基于信息扩散理论,从风险评估的角度,对黑龙江省各市县的低温冷害、旱涝灾害进行了风险评估与综合区划研究。以ArcGIS Engine 9.3为GIS开发组件,以Visual C#.NET2005为开发语言,开发了黑龙江省自然灾害风险评估系统,实现了对低温冷害、旱涝灾害分布和风险等级评估,以利于进行灾害风险评价和区划,为农业生产趋利避害、防灾减灾提供参考。

Abstract: From the viewpoint of risk assessment and based on information diffusion theory, a risk assessment and zoning research on low temperature and cold damage, drought and flood disaster was carried out for cities and counties of Heilongjiang Province in this paper. A natural disaster risk assessment system for Heilongjiang Province was developed based on ArcGIS Engine 9.3 and Visual C#.NET 2005. The system realized the disaster distribution and risk grade assessment of low temperature and cold damage, drought and flood disaster, which was beneficial to disaster risk evaluation and zoning. It can provide a reference to preventing disaster and mitigating disaster in the field of agricultural production.

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