

其它

城市防汛预警决策支持系统研究及应用

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摘要:

由于济南经济增长和城市规模的扩大,城市防洪问题日益突出,在广泛收集济南市地理数据、工情数据、历史水雨情数据和灾情数据基础上,建设水雨情自动采集系统和防汛信息数据库。研究城市洪水仿真模型,预测河道洪水演进过程和低洼地区积水状况。建设了城市洪水预案库,为将来可能发生的汛情提供参考,研究汛情简报自动生成和预警发布机制。基于上述研究,开发了济南市防汛GIS平台,实现实时预报洪水过程及可能造成的淹没情况,为快速决策提供科学依据。

关键词: 城市防汛 预警决策支持系统 洪水仿真 预案库 汛情简报

Study of urban early-warning decision-making support system of flood control and its application

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Abstract:

In recent years, city flood control is too increasingly outstanding with urban economics and scope increasing rapidly in Jinan. The government not only puts emphasis on the engineering measure, but also non-engineering measure development. All kinds of data were gathered including geography data, water facilities, historical rainfall and water data and flood disaster data. Rainfall and water auto-collection systems were built. Predicting the evolving course of river flood and the water accumulating depth of the low-lying region were based on the urban flood simulation model. Flood control pre plan database was developed for providing consultation for future analogous flood disasters. Flood briefing and flood issuing mode were studied. GIS flat was developed based on the above-mentioned works for providing decision-making foundations.

Keywords: urban flood control early warning decision-making support system flood simulation information pre plan database flood briefing

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