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广东台风灾情预测系统研究(PDF)

Title:	Research on typhoon disaster condition forecasting system of Guangdong Province

作者: 陈仕鸿; 隋广军; 阳爱民

广东外语外贸大学, 广东 广州 510006

Author(s): CHEN Shihong; SUI Guangjun; YANG Aimin

Guangdong University of Foreign Studies, Guangzhou 510006, China

摘 要: 准确预测台风灾情对防台减灾具有重要意义。研究了广东省台风灾情的一种预测系统。该系统将广东省划分为4个区域,引入区域灾害易损性和台风路径类型作为评估因子,采用非线性的GA-BP神经网络,通过2000-2006年广东省台风数据训练和测试,建立了台风灾情预测模型。系统采用C＃+Arc Engine进行二次开发,形成了一种集成GIS功能的台风灾情预测系统,以期为防台减灾工作提供决策辅助。

Abstract: Forecasting accurately typhoon disaster condition is very important for preventing typhoon and reducing disaster. This paper studied a typhoon disaster condition forecasting system of Guangdong Province. To build the forecasting model, the system divided Guangdong Province into four areas, introduced the vulnerability of regional typhoon disasters and typhoon paths as evaluation factors, adopted the nonlinear GA-BP neural network, and trained and tested typhoon data of Guangdong Province between 2000 and 2005. The built system used the C#+Arc Engine for post development and finally formed a typhoon forecasting system that integrates the function of GIS, aiming to provide decision aids for the preventing typhoon and reducing disaster work.

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工具/TOOLS

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