

产品类成果

洪水风险图编制软件平台

【创新性】

国内第一套具有自主知识产权的洪水风险图编制全过程软件平台，该平台包含了风险图编制的各个环节所需的软件和技术工具，分别是：洪水分析软件、洪灾损失评估软件、避洪转移分析软件、风险图绘制软件和风险图管理与应用系统。其中，洪水分析软件融合了5大计算引擎，研发了6大关键技术，保证该软件能够适用我国所有的洪水类型的模拟；损失评估软件以自主研发的损失评估模型为核心，为国内首套标准化的洪灾损失评估产品；避洪转移分析软件实现了转移安置方案及转移路线的优化分析；绘制系统是国内水利行业首个专业制图软件产品。

【影响力】

各款软件纳入了国家防办洪水风险图编制软件名录；洪水分析软件、洪水风险图绘制系统、洪水风险图管理和应用系统等产品进入水利部先进实用技术推广指导目录；该套软件平台在全国洪水风险图编制620余个项目中得到应用，用户达130余家，覆盖范围约50万平方公里，涉及防洪保护区、蓄滞洪区、洪泛区、城市、水库、中小河流等各类编制对象。



主要完成人：向立云、马建明、李娜、刘舒、张大伟、徐美、王艳艳、丁志雄、喻海军、万洪涛
受奖单位：减灾中心

FLOOD RISK MAPPING SOFTWARE PLATFORM

【Innovation】

As China's first software platform for the flood risk mapping whole-process with independent intellectual property rights, this platform contains software and technical tools required in all links of the risk mapping, namely flood analysis software, flood disaster loss evaluation software, flood escaping and transfer analysis software, flood risk mapping software and the flood risk map management and application system. Among them, the flood analysis software has integrated five calculation engines and developed six key technologies, so

as to make the software applicable to the simulation of all flood types in China; the flood disaster loss evaluation software is the first standardized flood risk loss evaluation product in China based on the independently-developed loss evaluation model; the flood escaping and transfer analysis software has achieved the optimization and analysis of transfer and relocation plans and transfer routes; the flood risk mapping software is the first professional graphics software product in China's water resources field.

【Influence】

The software platform has been included into the directory of flood risk mapping software, which was issued by the Office of the State Flood Control and Drought Relief Headquarters. Additionally, products such as the flood analysis software, the flood risk mapping software, the flood risk map management and application system have been listed into the promotion and guidance directory of advanced practical technologies, which was issued by the Ministry of

Water Resources. This software platform has been applied in over 620 flood risk mapping projects across the country by up to nearly 130 institutions, with the area of about 500,000 square kilometers, covering various kinds of regions, such as flood protection areas, flood storage and detention areas, flood plain, urban areas, reservoirs and medium and small rivers.

Main Contributor : Xiang Liyun, Ma Jianming, Li Na, Liu Shu, Zhang Dawei, Xu Mei, Wang Yanyan, Ding Zhixiong, Yu Haijun, Wan Hongtao
Award-winning Unit : Research Center on Flood and Drought Disaster Reduction

