

滑坡风险评价的理论与方法研究

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THEORY AND METHOD FOR LANDSLIDE RISK ASSESSMENT-CURRENT STATUS AND FUTURE DEVELOPMENT

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摘要 作为防灾减灾的重要措施之一,滑坡风险评价已经成为近年来国际上滑坡研究的热点,并形成了较为完备的滑坡风险管理体系。国内的滑坡风险研究则起步较晚,滑坡风险评价的关键支撑技术体系尚未建立。本文对滑坡风险评价中的关键理论和方法进行梳理,阐述了国际滑坡风险评价的理论框架和技术流程,介绍了国内外滑坡易发性、危险性和风险评价的最新进展,评述了滑坡易发性评价、扩展范围预测、频率分析以及承灾体易损性评价的主要方法,阐明了现阶段滑坡风险评价的重点领域和前沿科学问题,并对滑坡灾害的风险评价提出了三点展望。

关键词: 滑坡 风险 易发性 危险性 易损性 扩展范围 频率

Abstract: As one of the most promising tools for landslide hazard prevention and mitigation, risk assessment has been a hot research topic in recent years. A relatively complete international landslide risk management system has been proposed. However, the domestic research in this field is rather weak and the key support technology system for landslide risk assessment has not been established. This paper investigates the key theory and method for landslide risk assessment, describes the theoretical framework for landslide risk analysis and management and reviews the recent advances in landslide susceptibility, hazard and risk assessment. Then, different approaches for assessing landslide susceptibility, runout, frequency, vulnerability and risk are examined and compared. At the end, this paper illustrates the key areas and cutting-edge scientific issues for landslide risk assessment and three prospects in this area are proposed.

Key words: Landslide Risk Susceptibility Hazard Vulnerability Runout Frequency

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