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The research and application of earthquake disaster comprehensive evaluation based on multi - source earthquake disaster information

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All disaster relief operations of the government after a destructive earthquakeare dependent on earthquake disaster information,including command decision [U+3001] rescue force deployment [U+3001] dispatch of relief suppliesetc. Earthquake disaster information is the most important requirements during earthquake emergency response and emergency disposal period. The macro disaster information, including distribution of disaster area [U+3001] personnel casualty scale etc,determines the disaster relief scale and response level.The specific disaster information determines the process and details of specific rescue operations.
In view of the importance of earthquake disaster information, experts have been devoted to the study of seismic hazard assessment and acquisition,mainly from two aspects: improving the pre-assessment accuracy of the disaster and enriching the disaster information acquisition means. The problem is that the experts have carried out in-depth research from a certain aspect, they usually focus on optimizing pre evaluation method [U+3001] refining and updating basic data [U+3001] establishing new disaster information access channels,while ignoring the comprehensive use of various methods and means [U+3002]
According to several devastating earthquake emergency disposal experience of Sichuan Province in recent years, this paper presents a new earthquake disaster comprehensive evaluation technology, in which multi-disaster information source coordination, multi-faceted research field expert's complementarity coordination, rear and on-site coordination, multi-sectoral multi-regional coordination were taken into account. On this basis, Earthquake disaster comprehensive evaluation system with expert experience has been established. Based on the pre-assessment, the system can combine the background information of the disaster area such as seismic geological background and socioeconomic backgrounds, with disaster information from various sources to realize the fusion and mining of multi-source heterogeneous earthquake disaster information;to give full play to experts in various fields to achieve long-range real-time disaster expert collaborative judgment; finally realize real-time dynamic correction of earthquake disaster,so as to provide more timely, comprehensive, accurate and detailed earthquake disaster information for earthquake emergency disposalwork. The system has been applied in several earthquake emergency work,such as LiTang 4.9 and 5.1 earthquake in Sichuan Province and Jiuzhaigou 7.0 earthquake in sichuan province . It provides an important support for the intensity delineation and earthquake emergency disposal.