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Study on updating of Lushan county earthquake emergency basic data based on national census data and its Application

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Limited by basic data timeliness to earthquake emergency database in Sichuan province, after the earthquake disaster assessment results and the actual damage there is a certain gap. In 2015,Sichuancompleted the province-census for the first time which including topography, traffic, vegetation coverage, water area,desert and bare ground,traffic network, the census residents and facilities,geographical unit, geological hazard as well asthe Lushan earthquake-stricken area's town planning construction and ecological environment restoration. On this basis, combining with the existing achievements of basic geographic information data and high resolution image data, supplemented by remote sensing image interpretation and geological survey,Carried outdistribution and change situation of statistical analysis and information extractionfor earthquake disaster hazard-affected body elements such as surfacecoverage,roads, structuresinfrastructurein Lushan county before 2013 after 2015.At the same time, achieved thetransformation and updating from geographical conditions census data to earthquake emergency basic datathroughresearch their data type, structure and relationship.Finally,based on multi-source disaster informationincludinghazard-affected body changed data and Lushan 7.0 magnitude earthquake CORS networkco-seismal displacement field, etc.obtaining intensity control points through information fusion.Then completed the seismic influence field correction and assessed earthquake disasteragainthroughSichuan earthquake relief headquarters technology platform.Comparedthe new assessment result [U+FF0C]original assessment result and actual earthquake disaster loss which shows that the revised evaluation result is more close to the actual earthquake disaster loss. In the future can realize geographical conditions census data to earthquake emergency basic data's normalized updates, ensure the timeliness to earthquake emergency databasemeanwhileimprove the accuracy of assessment of earthquake disaster constantly.