

[1]丁华,丁辉.遥感技术在滑坡灾害解译中的应用——以陕西省延安市子长县为例[J].自然灾害学报,2013,02:229-233.

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遥感技术在滑坡灾害解译中的应用——以陕西省延

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Title: Application of remote sensing technology to interpretation of landslide disaster: a case study of Zichang County, Shaanxi Province

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关键词: [波段组合](#); [数据融合](#); [滑坡灾害](#); [遥感解译](#)

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摘要: 遥感数据的波段组合、融合方法选择对滑坡灾害解译信息的获取具有重要的影响。为了减小坡解译的不确定性,以延安市子长县为研究区,基于SPOT 5数据进行了滑坡灾害解译影像选择,经波段组合分析,采用3种不同的融合算法,然后定性及定量地进行评价。分析结果表明,波段412组合能较好反映植被、裸地、道路、建筑物等信息,自然彩色变换波段组合能有效地识别红粘土地层;融合算法中,波段412组合主成分变换适用于滑坡灾害环境背景及承灾体解译,四则运算融合算法经自然彩色变换滑坡解译效果最好。

Abstract: Band combination and merge choice of remote sensing data has an important influence on the acquirement of landslide disaster interpretation information. Zichang County district of Yan' an City was selected as a study area for the study of landslides interpretation uncertainty reduction. Three different band combination and merge methods were considered based on SPOT 5 data to carry out the qualitative and quantitative evaluation. Results show that the best band combination is the band combination 412, which can reflect the information about vegetation, bare land, road and building etc, natural color transformation band combination may identify red clay layer efficiently. In merge algorithm, principal component alteration of band combination 421 is suitable for the interpretation of environmental background and disaster-affected body, and the

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merge algorithm of four fundamental operations has the best efficiency in the interpretation of landslide.

参考文献/REFERENCES

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