عنوان مقاله:

IMPACT OF INDICES FOR ESTIMATION OF AREA UNDER WHEAT CULTIVATION USING ASTER IMAGES

محل انتشار:

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تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

This paper demonstrates that ASTER images can be an important remotely sense data for estimation of area under wheat cultivation in which there are small areas in the context of imaging scene. Experiments were carried out to show the effectiveness of indices like soil index and NDVI for image classification in the district of Marvdasht, South Iran. The number of spectral classes including different types of wheat and similar classes are revealed based on the result of unsupervised classification and field data surveying. Having generated indices, different classifiers like minimum distance, parallel pipe and maximum likelihood classifiers with applying spectral bands and indices are used. Analysis over pair-wise class discriminant measures like Bhattacharyya distances showed that which spectral bands and indices are proper for discrimination of wheat from similar classes. Moreover, accurate classifier is selected in terms of overall accuracy over test data. Experimental results demonstrate remarkable improvement in the .classification accuracy after choosing accurate classifier and efficient indices

کلمات کلیدی:

Classification, Indices, Feature ranking