

Assessment of Planet Image for Land Cover Mapping Using Soft and Hard Classifiers

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Abstract : Planet image is a new data source from planet lab. This research is concerned with the assessment of Planet image for land cover mapping. Two pixel based classifiers and one subpixel based classifier were compared. Firstly, rectification of Planet image was performed. Secondly, a comparison between minimum distance, maximum likelihood and neural network classifications for classification of Planet image was performed. Thirdly, the overall accuracy of classification and kappa coefficient were calculated. Results indicate that neural network classification is best followed by maximum likelihood classifier then minimum distance classification for land cover mapping.

Keywords : planet image, land cover mapping, rectification, neural network classification, multilayer perceptron, soft classifiers, hard classifiers

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