



Object oriented classification for land cover mapping

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Abstract: We applied an object-oriented image analysis approach to high resolution image in order to improve the land cover classification accuracy. Remotely sensing image, Aster was used to carry out the image classification. During the implementation, we tested three different sets of parameters for image segmentation and classified the image with the nearest neighbor classifier. The outcome show that the object-oriented approach classify land cover with an overall accuracy 94%(Kappa 0.9),which is higher than the traditional pixel-based approach. The results of this preliminary analysis suggest that the object-oriented approach effectively avoid the annoying salt-and pepper effect, highly improve the classification accuracy, update the database of GIS timely.

Key Words: object-oriented, image segmentation, classification accuracy