

COMPARISON OF OBJECT BASED AND PIXEL BASED CLASSIFICATION METHOD FOR GREEN SPACE IDENTIFICATION

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The development of remote sensing technology, especially in the improvement of image processing in high resolution imagery, bring out more efficient technology in image interpretation and classification, called digital classification method that refer to computer usage to classify spectral identity from an image to some different classes. There are two kinds of digital image classification method, the object-based and pixel-based. This study made comparison of object based and pixel based classification method use WorldView-2 high-resolution satellite imagery as the data source to extract the information of urban green spaces area in Mulyorejo and Sukolilo subdistricts of Surabaya, East Java. which always perform rapid development growth, so that the mapping and evaluation of green space area needs to be done.

The average of object based user accuracy is 92,95%, producer accuracy is 95,22% and kappa coefficient is 0,92. Meanwhile, the average of pixel based user accuracy is 92,95%, producer accuracy is 88,26% and kappa coefficient is 0,87. It can be concluded that the object-based classification method produced better accuration than the pixel based classification.

Keyword : Object Based, Pixel Based, Classification, Green Space