Land use/Land cover Mapping of the Urban Fringe by Optical and Microwave Remote Sensing Data

Jon-Hyun Park¹, Ketut Wikantika², Chung-Hyun Ahn¹, and Young-Kyu Yang¹

¹Image Processing Department ETRI-Computer & Software Technology Laboratory ²Center for Environmental Remote Sensing (CEReS). Chiba University, JAPAN

Texture is an important property of the remotely sensed data beside tone itself. Its inclusion in such land use/land cover classification is to improve the classification accuracy. This paper presents combined use of spectral information of SPOT HRV and the five textural features of JERS-1 SAR images for land use/land cover mapping at the urban fringe area. The five textural features are energy, contrast, variance, entropy, and correlation, which are considered the most relevant among the 14 originally proposed by Haralick et al.. They were used with spectral information simultaneously to differentiate and classify land use/land cover at the urban fringe.