ACCURACY ASSESSMENT OF SPECRAL LIBRARY IN HYPERSEPCTRAL IMAGE CLASSIFICATION

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Abstract: Classification of hyperspectral images using spectral libraries so far failed to find its proper position. The main reasons are experimental spectra and effortlessness of atmospheric conditions on spectral signature of phenomena which are available in spectral library. In this paper, library and ground spectra has been used as hyperspectral images classification input. Spectral angle display, Maximum probability and adaption filter has been used as classification result comparison. The main purpose of this article is accuracy evaluation of library spectra compared with ground ones as input of hyperspectral images classification methods input. Hence the output of each method compared to a reference image and indicated that due to time and cost required to ground spectra preparation, library spectra are adequately accurate for hyperspectral image classification.