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LAND COVER CLASSIFICATION OF MULTI-SENSOR IMAGES BY DECISION FUSION USING WEIGHTS OF EVIDENCE MODEL

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Abstract. This paper proposed a novel method of decision fusion based on weights of evidence model (WOE). The probability rules from classification results from each separate dataset were fused using WOE to produce the posterior probability for each class. The final classification was obtained by maximum probability. The proposed method was evaluated in land cover classification using two examples. The results showed that the proposed method effectively combined multisensor data in land cover classification and obtained higher classification accuracy than the use of single source data. The weights of evidence model provides an effective decision fusion method for improved land cover classification using multi-sensor data.

[Conference Paper](#) (PDF, 639 KB)

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