

## عنوان مقاله:

efficient land -cover segmentation using meta fusion

## محل انتشار:

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## نویسندگان:

Hadi Mahdipour Hossein Abad - *Department of Marine Engineering, Khorramshahr University of Marine Science and Technology, Khorramshahr, Iran*

Morteza Khademi - *Electrical Engineering Department, Ferdowsi University of Mashhad, Mashhad, Iran*

Hadi Sadoghi Yazdi - *Computer Engineering Department, Ferdowsi University of Mashhad, Mashhad, Iran*

## خلاصه مقاله:

Most popular fusion methods have their own limitations; e.g. OWA (order weighted averaging) has linear model and summation of inputs proportions in fusion equal to 1 limitations. Considering all possible models for fusion, proposed fusion method involve input data confusion in fusion process to segmentation. Indeed, limitations in proposed method are determined adaptively for each input data, separately. On the other hand, land-cover segmentation using remotely sensed (RS) images is a challenging research subject; due to the fact that objects in unique land-cover often appear dissimilar in different RS images. In this paper multiple co-registered RS images are utilized to segment landcover using FCM (fuzzy c-means). As an appropriate tool to model changes, fuzzy concept is utilized to fuse and integrate information of input images. By categorizing the ground points, it is shown in this paper for the first time, fuzzy numbers are need and more suitable than crisp ones to merge multi-images information and segmentation. Finally, FCM is applied on the fused image pixels (with fuzzy values) to obtain a single segmented image. Furthermore mathematical analysis and used proposed cost function, simulation results also show significant performance of the proposed method in terms of noise-free and fast segmentation.

## کلمات کلیدی:

Fusion; Land-cover Segmentation; Multiple High-spatial Resolution Panchromatic Remotely Sensed (HRPRS) (Images; Fuzzy C-means (FCM)

## لینک ثابت مقاله در پایگاه سیویلیکا:

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