

method is more accurate than FCM.

Table.1. Evaluation of tissue segmentation in terms of Jaccard Similarity Coefficients (%)

noise level	tissue	FCM	our method
5%	WM	82.56	92.03
	GM	71.79	85.42
7%	WM	69.17	89.49
	GM	55.73	80.68

4 Conclusion

In this paper, we have presented a novel fuzzy C-means method based on the spatial similarity information. The method was formulated by modifying the distance function to compensate for noise by using both the non-local information and SSIM. Experimental results have shown that our method can outperform original FCM for the images with noise.

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