"Tweedie Hidden Markov Random Field and the Expectation-Method of moments and Maximization algorithm for Brain MR Image Segmentation" by Mouna Zitouni, Mourad Zribi and Afif Masmoudi

It is with great pleasure that we resubmit to you a revised version of our manuscript entitled "Tweedie Hidden Markov Random Field and the Expectation-Method of moments and Maximization algorithm for Brain MR Image Segmentation". We are very thankful to the editor in chief and the anonymous reviewers for their interest in our work and the precious time they devoted to the thought reading of our research work. We greatly appreciate the constructive suggestions we have already received as far as our paper is concerned. We are extremely motivated and highly interested to publish our work in your esteemed journal. For this reason, we tried to comply literally with the reviewed comments so as to improve the quality of the paper. You will notice that our research work is clear and more coherent than the previous version. It is noteworthy that the entire manuscript was polished and corrected by an English teacher who is specialized in translation and language correction. We aspire that the introduced refinements would be appreciated in a way that you deem it worthy and appropriate for publication in your journal. You find

enclosed a point by point description how each comment is addressed.

Reviewer : 1

1. Figure 1 (a) and (4)- Specify how much noise is added to the image? mean and variance.

The noise added to the image in Figure 1 (b) is the Tweedie noise with mean 3 and variance 0.8 and for Figure 4 we added Tweedie noise with mean 2 and variance 0.76.

- 2. Peak signal to noise ratio is misspelled as Pic signal to noise ratio. Thank you for your insightful remark. Ok, done. We have corrected it.
- Figure 9 Show the original images before the segmented images. Whether external noise is added to the MR brain images also?
 Yes, external noise is added to the MR brain images also. We incorporated this detail in the manuscript in page 14.
- 4. The effect of varying the intensity of noise (variance) on PSNR values could be analyzed.

Varying the intensity of noise (variance) on the synthetic image has influence on the PSNR values but always we have good results with our proposed method.

Reviewer : 2

1. Check for typo errors and image resolution. Thanks a lot for your thoughtful remark. We have gone through the manuscript again and rechecked it according to your recommendation.