Compression of videos results in mosquito and flickering artifacts. This paper illustrates the reduction of flickering and mosquito artifacts using adaptive fuzzy filter and bilateral filter and
their comparison. Adaptive fuzzy filter is a motion compensated spatiotemporal filter applied to
the inter-frame and intra-frame pixels for the reduction of artifacts. Bilateral filter depends on the
combination of two parameters – intensity and spatial distance. We have calculated and plotted
the graph for PSNR values for the comparison of the two. Experimental results show that the
reduction of artifacts using bilateral filter gives better image quality and better robustness.
Experimental results illustrating the performance of the two techniques are presented and
evaluated.

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**Index Terms**

Computer Science  
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Artifact reduction  adaptive fuzzy filter
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