

Fig.11. show the result compare to [9] for Lena image

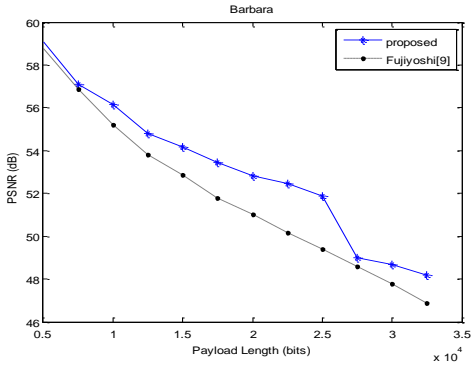


Fig.12. show the result compare to [9] for Barbara image

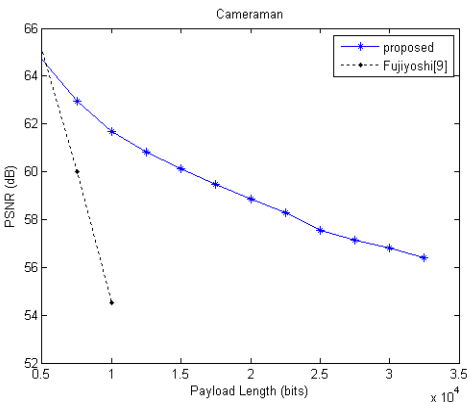


Fig.13. show the result compare to [9] for Cameraman image

V. CONCLUSIONS

In this paper, we have proposed a reversible watermarking method without using a location map to solve overflow and underflow problems during embedding process and extracting process. The concept is to find predicted threshold value and histogram shifting scheme exploit the predicted threshold to embedding data. We find a relationship between predicted threshold value and prediction error. This feature helps us achieve the paper goal of location map free watermarking

method with better image quality. Capacity control achieves better image quality with different payload length that other location free method is failed to do. The image capacity and quality are great improved in the location map free scheme.

ACKNOWLEDGEMENT

This paper is the partial result of project NSC100-2632-E-366-001-MY3. We would like to thank the supporting of Ministry of Science and Technology, R.O.C., also thank the value advices of Miss Yu-Hsiu Huang and Prof. Chun-Hung Richard Lin.

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