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Title: [MIV] Crosscheck of m64807

Source: Jong-Beom Jeong, Jun-Hyeong Park, Jaeyeol Choi, Eun-Seok Ryu (SKKU)

Abstract

This document is a cross-check report on KETI's proposal m64807, adaptive patch packing block size. It was verified that the crosscheck results completely match those reports in m64807.

1 Introduction

KETI's contribution, m64807[1], suggests an adaptive patch packing block size adjustment method. In MIV CTC which uses TMIV15, patch size was changed from [16, 32] to [64, 128]. This can work as a large guard-band, but it can cause patch loss due to bigger patch size. The proposal addresses that by adaptively reducing the patch size, more patches can be included into atlases, thereby the BD-rate can be improved.

2 Experimental Results

The implementation of the proposal was based on TMIV v17.0[2]. The crosscheck experiments were conducted under the common test conditions (CTC) of the MIV[3]. Because the authors addressed that the patch loss occurs in sequence B02 (Chess), B03 (Guitarist), L02 (CBAbasketball), and W01 (Group), this experiment used the following sequences on 65 frames: B02 and L02. Experimental results of KETI and SKKU were exactly same, as shown in the attached excel template.

3 Conclusion

It was verified that the results matched exactly those reported by the proponent and the description in the proposed method in m64807 matches the implementation in the software.

4 References

[1] "Adaptive Patch Packing Block Size Adjustment", H. -H. Kim, S. -G. Lim, Y. Kim, Y. -H. Kim, ISO/IEC JTC1/SC29/WG4 input document m64807, October 2023, Hannover.

[2] "Test Model 17 for MPEG Immersive Video", A. Dziembowski, G. Lee, ISO/IEC JTC1/SC29/WG4 output document n00376, July 2023, Geneva.

[3] "Common Test Conditions for MPEG Immersive Video", A. Dziembowski, B. Kroon, J. Jung, ISO/IEC JTC1/SC29/WG4 output document n00372, July 2023, Geneva.