INTERNATIONAL ORGANISATION FOR STANDARDISATION ORGANISATION INTERNATIONALE DE NORMALISATION ISO/IEC JTC1/SC29/WG04 MPEG VIDEO CODING

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Title [GSC] JEE 6.2 MIV DSDE anchor generation

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1 Introduction

This input provides a summary of the MIV DSDE anchor generation results for Choreo (M-NC2), as well as the crosscheck results for Cinema (M-NC3), HauntedLamp (M-NC5), and Bartender (M-NC1).

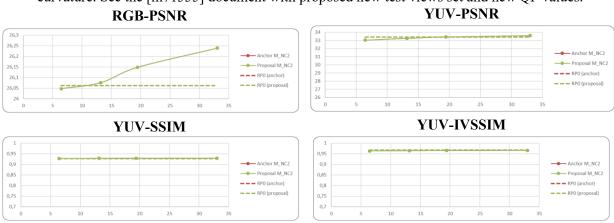
2 Test conditions

The results were generated based on the test conditions outlined in JEE document [1] with the test/training views and initial frames specified in CTC document [2].

3 Results

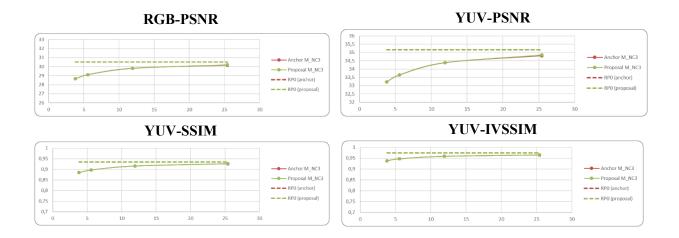
· Choreo - dark

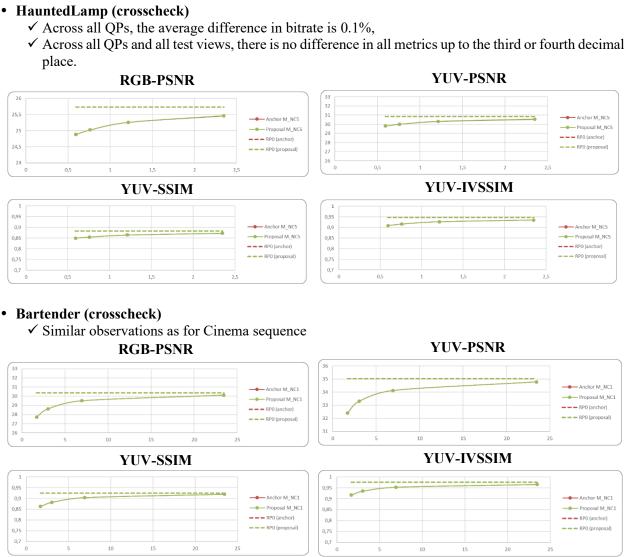
- ✓ Across all QPs and all test views, the bitrate and all metrics values are identical.
- ✓ With current setting of test views and QPs [21, 25, 28, 34] obtained RD-curves show no curvature, and they may not be suitable for calculating the BD-rate.
- ✓ QP1, QP2 and QP3 have higher quality than QP0.
- ✓ QP tuning cannot provide better RD-curves.
- ✓ It was observed, that changing the test views without changing QP values can lead to minimal RD-curvature. See the [m71555] document with proposed new test views set and new QP values.



Cinema (crosscheck)

- ✓ Across all QPs the bitrate values are almost identical (minor difference due to difference in VVenC compile platform)
- ✓ Across all QPs and all test views, the average difference in RGB-PSNR and YUV-PSNR is 0.01dB,
- ✓ Across all QPs and all test views YUV-SSIM and YUV-IVSSIM are identical up to the third or fourth decimal place.





Recommendations

- Change the CTC test views for Choreo(dark) sequence and generate anchor.
- Create a v8.0 tag of IVDE repository (internal and public MPEG repository)

5 References

- [1] Description of JEE 6.2 on anchor generation, ISO/IEC JTC 1/SC 29/WG 04 N00585, Kemer, November, 2024
- [2] Common test conditions on Gaussian splat coding, ISO/IEC JTC 1/SC 29/WG 04 N00582, Kemer, November, 2024
- [3] Proposal for new test views for the Choreo (dark) sequence, ISO/IEC JTC 1/SC 29/ WG 04 M71555