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| *Title:* | SCE4: Crosscheck of Test 5.2 on Color prediction with Gain-Offset model | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Proposal | | |
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# Abstract

This contribution reports the crosschecking results for JCTVC-O0201 on color prediction with gain-offset model. The simulation results reportedly matched those provided by the proponents.

# Introduction

JCTVC-O0201 presents SCE4 test 5.2 results on color prediction with gain-offset model. The model operates on individual color planes. To facilitate integer calculation, a parameter describes the number of fraction bits used in the calculation in the parameter numFractionBits. For each channel a gain[c] and offset[c] are specified. The prediction is defined by

Pred[c][x][y] = (gain[c]\*In[x][y] + (1<<(numFractionBits-1))>> numFractionBits + offset[c]

# Experimental results

We received the source code from the proponents, implemented in SHM-3.0.1, and did a very quick code study to verify that the proposed method was implemented as described. We used the common conditions [1] in our experiments and ran simulations for the cases of AI-2x, RA-2x with SCE4 test sequences [2].

The results matched what was provided by the proponents and are summarized as follows

## RD performance



Please note that the coding time is not reliable.

# Conclusion

In this contribution, we have presented the results of our cross-check of JCTVC-O0201. The implemented algorithm is in line with the proponent’s description, and the simulation results also match those provided by the proponents.

# References

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