



REDEFINING MOBILITY



JCTVC-D430 Evaluation of entropy slices

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Entropy slices

- Evaluate the performance of entropy slices proposed in “Entropy Slices for Parallel Entropy Coding”, JCTVC-C256.
 - Software provided by JCTVC-C256
 - TMuC v0.7
 - JCTVC-B300 coding configuration
 - Disable MDDT, ROT, EDGE_BASED_PREDICTION, PLANAR_INTRA
 - Test configurations
 - Reference: no slices
 - Entropy slice: one entropy slice per LCU row
 - Simulated standard slices*: one standard slice per LCU row
- (*) Use entropy slice headers

Results

Case 1: Entropy Slices

	Intra		
	Y BD-rate	U BD-rate	V BD-rate
Class A	0.1	0.0	0.1
Class B	0.1	0.1	0.1
Class C	0.1	0.0	0.1
Class D	0.1	0.1	0.0
Class E	0.6	0.8	-0.2
All	0.2	0.2	0.0
Enc Time[%]	100%		
Dec Time[%]	99%		

Case 2: Simulated Standard Slices

	Intra		
	Y BD-rate	U BD-rate	V BD-rate
Class A	1.7	1.6	1.7
Class B	2.1	2.0	2.0
Class C	2.3	2.0	2.1
Class D	1.4	1.3	1.3
Class E	4.9	5.5	4.3
All	2.4	2.4	2.2
Enc Time[%]	86%		
Dec Time[%]	99%		

	Random access		
	Y BD-rate	U BD-rate	V BD-rate
Class A	3.0	4.7	4.1
Class B	5.2	6.9	5.5
Class C	4.7	5.9	5.9
Class D	4.1	4.8	4.8
Class E			
All	4.5	5.8	5.2
Enc Time[%]	99%		
Dec Time[%]	101%		

	Random access		
	Y BD-rate	U BD-rate	V BD-rate
Class A	3.6	5.3	4.8
Class B	6.4	8.4	7.2
Class C	5.7	7.0	7.0
Class D	4.7	5.2	5.4
Class E			
All	5.4	6.8	6.3
Enc Time[%]	97%		
Dec Time[%]	101%		

	Low delay		
	Y BD-rate	U BD-rate	V BD-rate
Class A			
Class B	4.6	7.3	6.3
Class C	3.7	4.9	4.8
Class D	3.8	3.9	3.8
Class E	15.1	14.2	12.9
All	6.1	7.2	6.5
Enc Time[%]	96%		
Dec Time[%]	99%		

	Low delay		
	Y BD-rate	U BD-rate	V BD-rate
Class A			
Class B	5.0	8.0	7.0
Class C	4.1	5.6	5.6
Class D	3.9	4.1	4.0
Class E	15.4	14.6	13.5
All	6.4	7.7	7.1
Enc Time[%]	96%		
Dec Time[%]	99%		