

Boosting the Performance of Video Compression Artifact Reduction with Reference Frame Proposals and Frequency Domain Information

Supplementary file

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Table 1. Overall BD-BR reduction (%) of test sequences with the HEVC baseline as an anchor. Calculated at QP = 22, 27, 32, 37 and 42.

Sequence		AR-CNN [2]	DnCNN [8]	Li et al. [4]	DCAD [5]	DS-CNN [6]	MFQE 1.0 [7]	MFQE 2.0 [3]	STDF [1]	same QE	IQE
A	Traffic	7.40	8.54	10.08	9.97	9.18	14.56	16.98	21.19	22.11	26.99
	PeopleOnStreet	6.99	8.28	9.64	9.68	8.67	13.71	15.08	17.42	20.59	24.25
B	Kimono	6.07	7.33	8.51	8.44	7.81	12.60	13.34	17.96	22.73	25.01
	ParkScene	4.47	5.04	5.35	5.68	5.42	12.04	13.66	18.10	20.67	25.00
	Cactus	6.16	6.80	8.23	8.69	8.78	12.78	14.84	21.54	22.65	25.33
	BQTerrace	6.86	7.62	8.79	9.98	8.67	10.95	14.72	24.71	25.85	28.98
	BasketballDrive	5.83	7.33	8.61	8.94	7.89	10.54	11.85	16.75	21.35	23.14
C	RaceHorses	5.07	6.77	7.10	7.62	7.48	8.83	9.61	15.62	16.12	17.99
	BQMall	5.60	7.01	7.79	8.65	7.64	11.11	13.50	21.12	23.90	26.81
	PartyScene	1.88	4.02	3.78	4.88	4.08	6.67	11.28	22.24	22.81	26.92
	BasketballDrill	4.67	8.02	8.66	9.80	8.22	10.47	12.63	15.94	18.32	20.13
D	RaceHorses	5.61	7.22	7.68	8.16	7.35	10.41	11.55	15.26	18.76	20.93
	BQSquare	0.68	4.59	3.59	6.11	3.94	2.72	11.00	33.36	31.84	39.08
	BlowingBubbles	3.19	5.10	5.41	6.13	5.55	10.73	15.20	23.54	23.86	28.76
	BasketballPass	5.11	7.03	7.78	8.35	7.49	11.70	13.43	18.42	21.65	24.37
E	FourPeople	8.42	10.12	11.46	12.21	11.13	14.89	17.50	22.91	22.61	26.48
	Johnny	7.66	10.91	13.05	13.71	12.19	15.94	18.57	24.55	24.60	27.82
	KristenAndSara	8.94	10.65	12.04	12.93	11.49	15.06	18.34	23.64	24.40	27.51
Average		5.59	7.36	8.20	8.89	7.85	11.41	14.06	20.79	22.49	25.86

Tab. 1 shows the results of BD-BR reduction of test sequences with the HEVC baseline as an anchor. All BD-BR are calculated with QP {22, 27, 32, 37, 42}, except that STDF [1] is done with four QPs.

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