

An Analytical Survey of ASTC Encoding Techniques – Supplementary Materials

In-hyuk Jeong and Jae-Ho Nah

Sangmyung University, Seoul, 03016, South Korea

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The supplementary materials for this study are provided as a single compressed archive containing this PDF document along with the individual image files.

1 Numerical summary of Fig. 3 in the main document

For readers interested in the exact values behind the plots in Fig. 3, this supplementary document provides the corresponding data in Table 1.

2 Full-resolution images of Fig. 5 in the main document

For readers who wish to examine the image comparisons in Fig. 5 in greater detail, all the original high-resolution image files used in the figure are included directly within this compressed archive.

Table 1: Numerical summary of mean PSNR, FLIP, and encoding speed (MPixels/s) over the 64-image dataset. (Higher is better for PSNR and speed, while lower is better for FLIP)

Encoder	Format (& block size)	Mode	PSNR (dB)	FLIP	MPixels/s
astcenc	ASTC 4×4	fastest	45.94	0.0217	59.89
		fast	46.27	0.0213	46.16
		medium	47.03	0.0194	15.54
		thorough	47.44	0.0187	5.31
		verythorough	47.60	0.0184	1.85
		exhaustive	47.64	0.0184	0.99
	ASTC 6×6	fastest	39.27	0.0389	77.54
		fast	39.39	0.0385	61.67
		medium	40.10	0.0354	27.27
		thorough	40.80	0.0329	4.28
		verythorough	40.98	0.0325	1.06
		exhaustive	41.00	0.0325	0.67
	ASTC 8×8	fastest	35.48	0.0521	75.18
		fast	35.60	0.0513	61.32
		medium	36.56	0.0474	29.13
		thorough	37.14	0.0442	6.05
		verythorough	37.40	0.0436	0.75
		exhaustive	37.43	0.0436	0.54
ISPC_texcomp	ASTC 4×4	fast	46.24	0.0245	30.78
		slow	46.45	0.0244	4.37
	ASTC 6×6	fast	39.52	0.0387	37.20
		slow	39.74	0.0388	5.77
	ASTC 8×8	fast	35.99	0.0504	46.20
		slow	36.20	0.0502	7.65
QuickETC2-HQ	ETC2	default	37.41	0.0447	855.65
H-ETC2	ETC2	best	38.27	0.0396	116.13