

HSR-Diff: Hyperspectral Image Super-Resolution via Conditional Diffusion Models

Supplementary Material

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1. Results of $\times 8$ and $\times 16$ Experiments

Methods	PSNR \uparrow	SSIM \uparrow	SAM \downarrow	ERGAS \downarrow
UTV-TD [5]	47.43	0.9986	1.47	1.081
UAL [6]	49.71	0.9995	0.95	0.546
BRResNet [2]	52.70	0.9996	1.10	0.441
CMHF-Net [4]	49.73	0.9996	0.99	0.406
Fusformer [1]	50.99	0.9995	0.97	0.374
UAL-DMI [3]	53.10	0.9997	0.67	0.346
HSR-Diff	54.22	0.9998	0.57	0.286

Table 1: Averaged PSNR, SSIM, SAM, and ERGAS of compared methods on Chikusei (the upscaling factor is 8). The \uparrow or \downarrow indicates higher or lower values corresponding to better results.

Methods	PSNR \uparrow	SSIM \uparrow	SAM \downarrow	ERGAS \downarrow
UTV-TD [5]	46.38	0.9963	1.68	0.854
UAL [6]	49.52	0.9995	0.96	0.318
BRResNet [2]	51.69	0.9996	1.11	0.221
CMHF-Net [4]	48.33	0.9995	1.13	0.282
Fusformer [1]	50.55	0.9994	1.05	0.223
UAL-DMI [3]	52.37	0.9996	0.72	0.235
HSR-Diff	53.71	0.9998	0.63	0.193

Table 2: Averaged PSNR, SSIM, SAM, and ERGAS of compared methods on Chikusei (the upscaling factor is 16). The \uparrow or \downarrow indicates higher or lower values corresponding to better results.

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2. Visual Quality Comparison

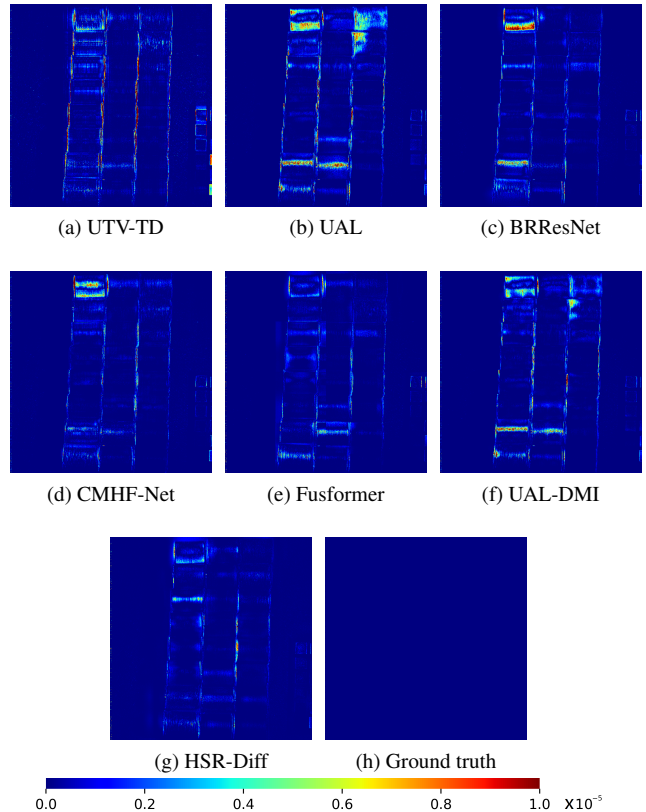


Figure 1: Visual quality comparison (residual heatmaps) for fused HSIs of all competing methods on the *thread_spools* image of CAVE.

References

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