SAR to Optical

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Table I
DATA CROPPED TO 64X64, CHANNELS KEPT RAW

Model	MAE ↓	RMSE ↓	PSNR (dB) ↑	SSIM ↑
pix2pix	68.06	291.62	37.54	0.9545
SwinUnet	41.58	181.62	41.11	0.9687
UMamba	35.14	158.47	42.67	0.9757
SiMaVP	**31.41**	**139.95**	**43.75**	**0.9797**

Table II
DATA CROPPED TO 64X64, ONLY CHANNEL 0 IS USED

Model	MAE ↓	RMSE ↓	PSNR (dB) ↑	SSIM ↑
pix2pix	70.48	300.88	37.10	0.9490
SwinUnet	47.65	203.04	40.15	0.9648
UMamba	33.60	149.58	42.96	0.9749
SiMaVP	**30.09**	**134.05**	**44.14**	**0.9812**

***Abstract*—**
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I. INTRODUCTION

The Mamba architecture [1].

II. RELATED WORK

III. METHODOLOGY

IV. DATASETS & EXPERIMENTAL SETUP

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ACKNOWLEDGEMENT

REFERENCES

[1] A. Gu, T. Dao, A. Rudra, B. Recht, and T. B. Hashimoto, "Mamba: Linear-time sequence modeling with selective state spaces," *arXiv preprint arXiv:2312.00752*, 2024.

Table III
DATA CROPPED TO 64X64, ONLY CHANNEL 1 IS USED

Model	MAE ↓	RMSE ↓	PSNR (dB) ↑	SSIM ↑
pix2pix	69.78	298.66	37.25	0.9491
SwinUnet	45.00	194.12	40.54	0.9662
UMamba	38.83	175.52	41.92	0.9739
SiMaVP	**32.12**	**143.12**	**43.58**	**0.9787**