







Learning to Think Outside the Box: Wide-Baseline Light Field Depth Estimation with EPI-Shift

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$$(y) = l(x, y) + R_{l(x,y)}(x, y)$$



Center View Ground Truth

- EPI-Shift improves the quality at **extreme disparities**
- textured or reflective areas



Center View

- camera array
- invariance

REFERENCES

- *ACCV*, 2016.
- field images. In CVPR, 2018.





EpiNet

Ours

EpiNet BadPix Ours BadPix

• U-Net component improves the overall smoothness especially in non-



EpiNet

Ours

• Evaluation on real light fields recorded by a wide-baseline cross-shaped

• EPI-Shift **enables** inference on those recordings due to its disparity range

[1] K. Honauer, O. Johannsen, D. Kondermann, and B. Goldluecke. A dataset and evaluation methodology for depth estimation on 4d light fields. In

[2] C. Shin, H.-G. Jeon, Y. Yoon, I. S. Kweon, and S. J. Kim. Epinet: A fullyconvolutional neural network using epipolar geometry for depth from light