Dehazing using Non-Local Regularization with Iso-Depth Neighbor-Fields

Supplemental Material

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Korea Advanced Institute of Science and Technology (KAIST)

Comparison

Effect of Combining NNFs with Other Methods

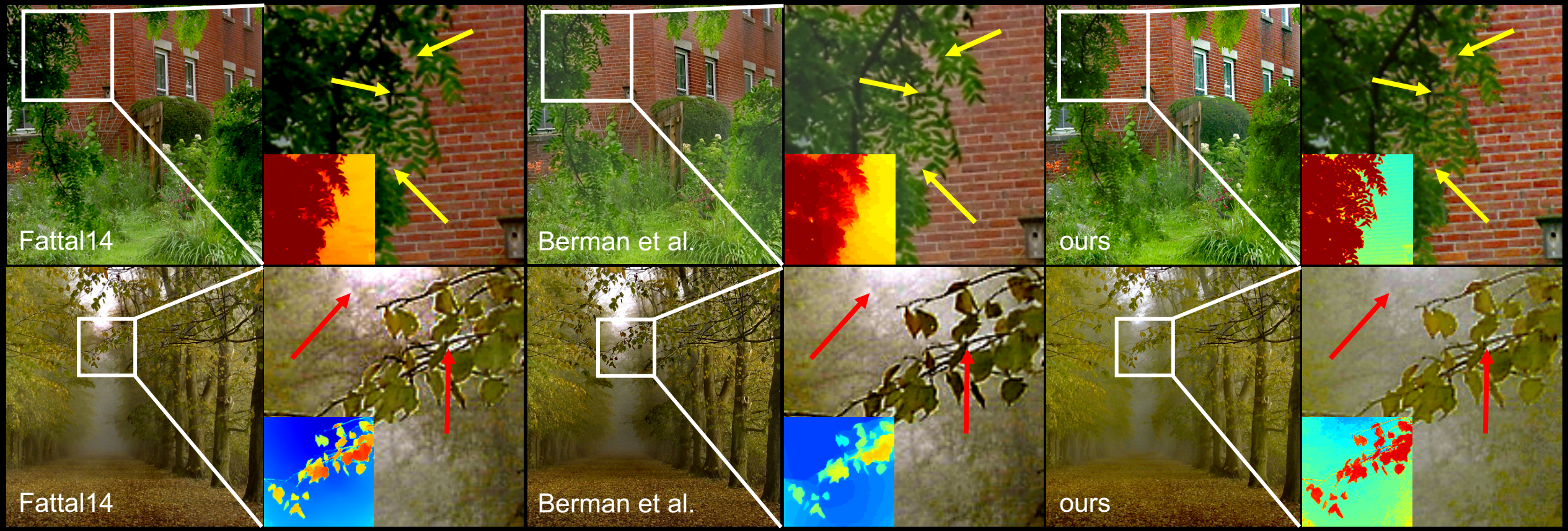

Figure 5 in the paper

Internal Comparison

Effect of Combining NNFs

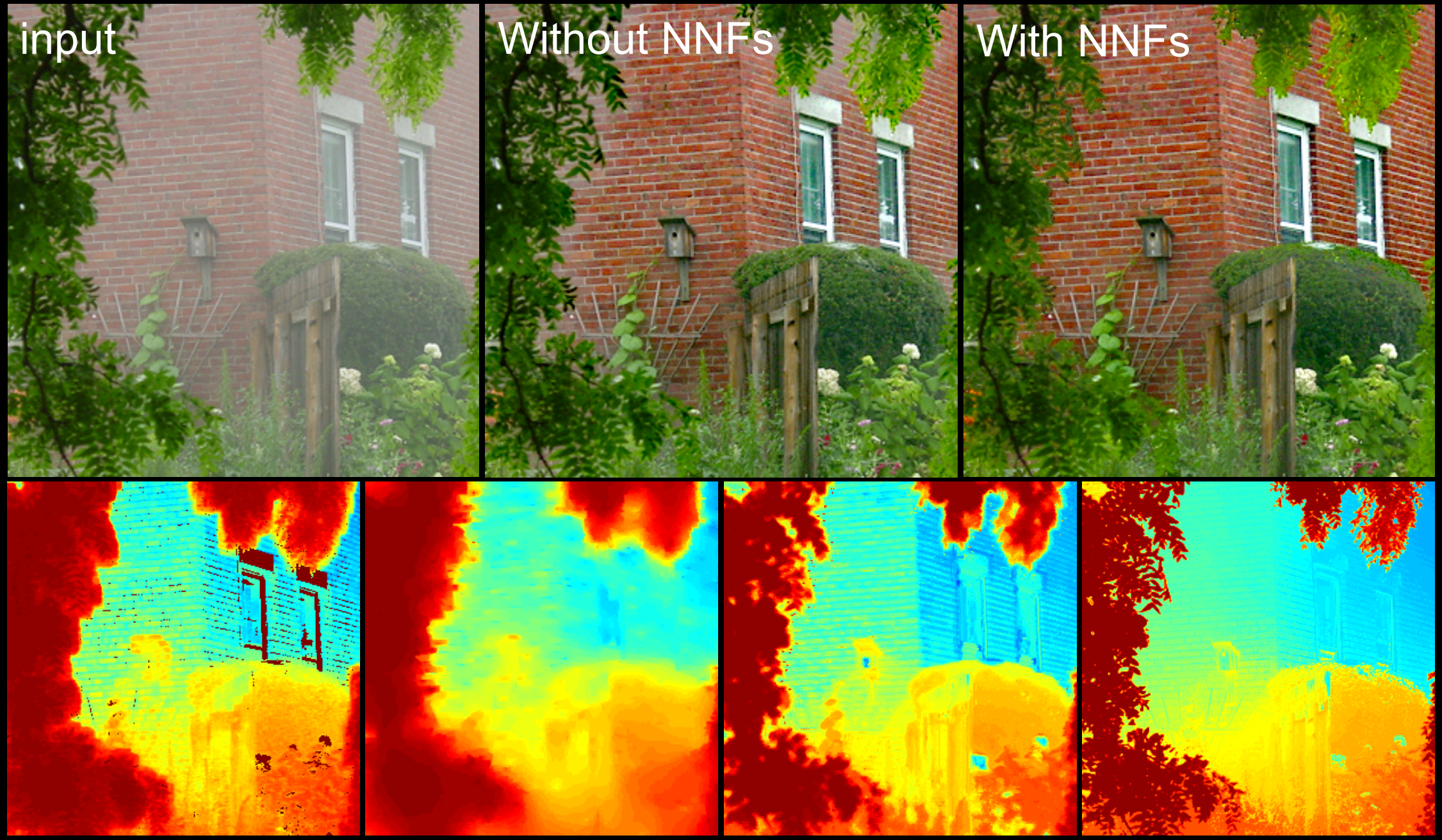

Figure 6 in the paper

Comparison

Regularization

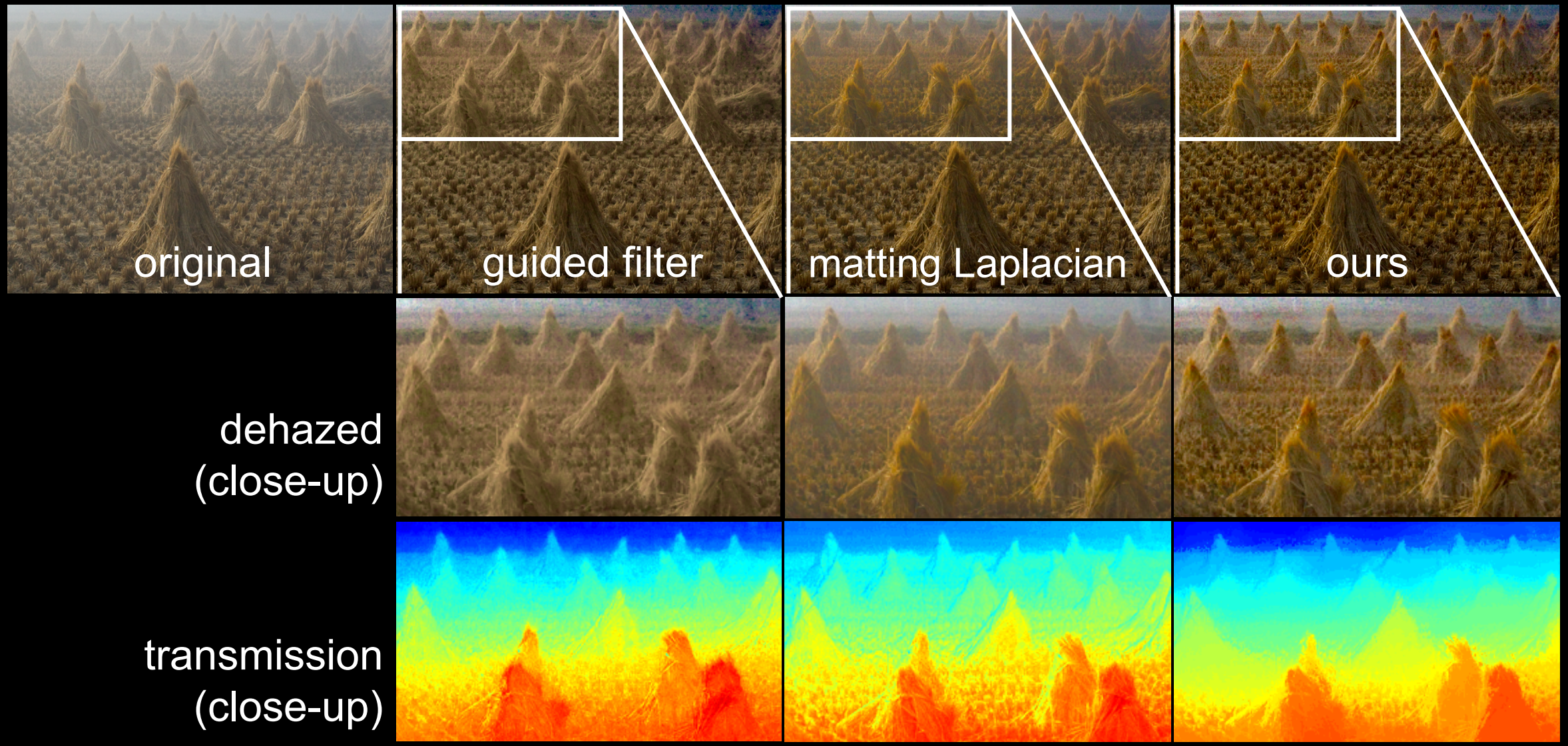

Figure 7 in the paper

Qualitative Comparison

Single Image Dehazing

Figure 8 (extended) in the paper

input
He et al.
Fattal14
Berman et al.
ours
our transmission
close-up
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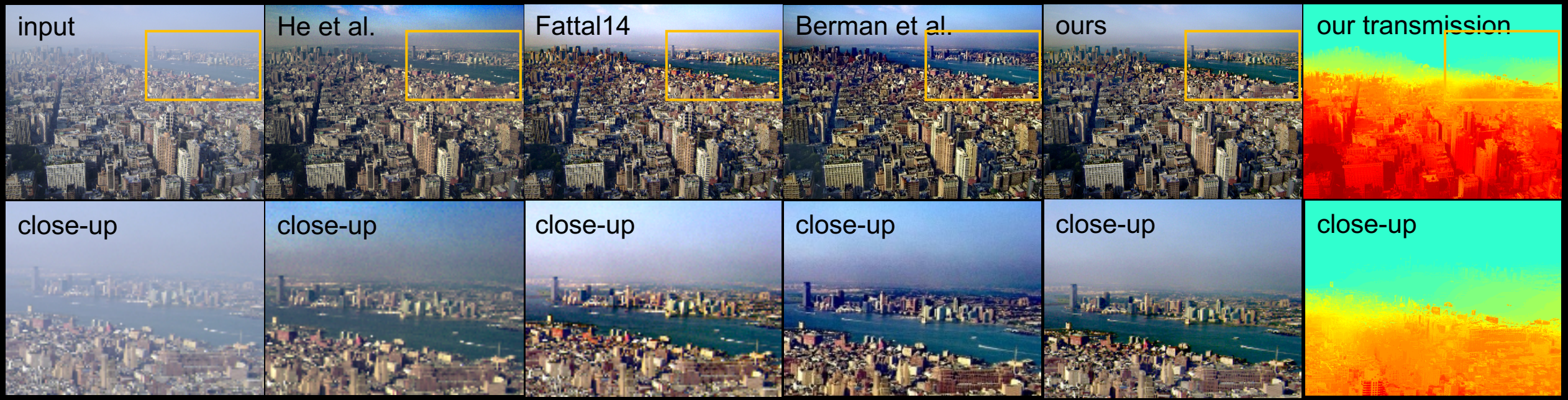
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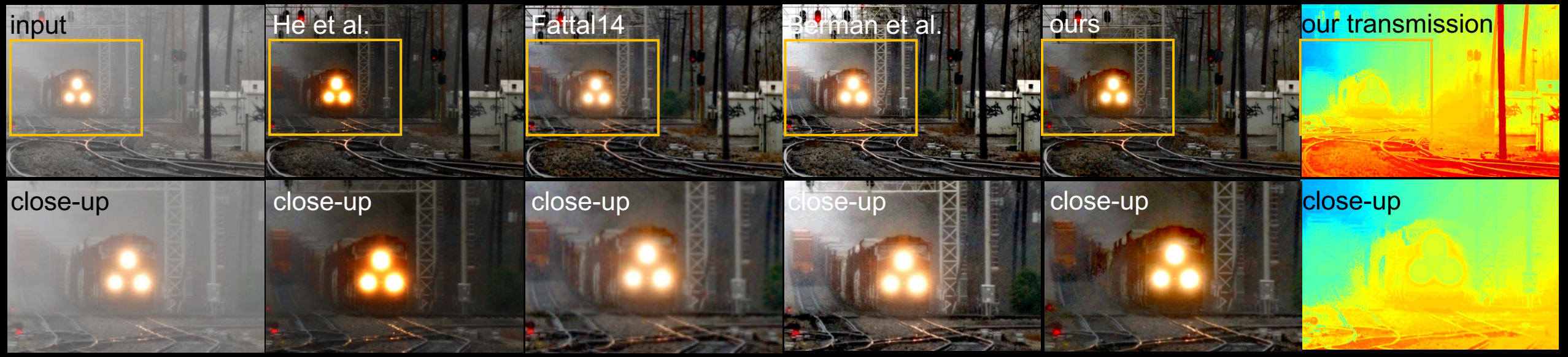
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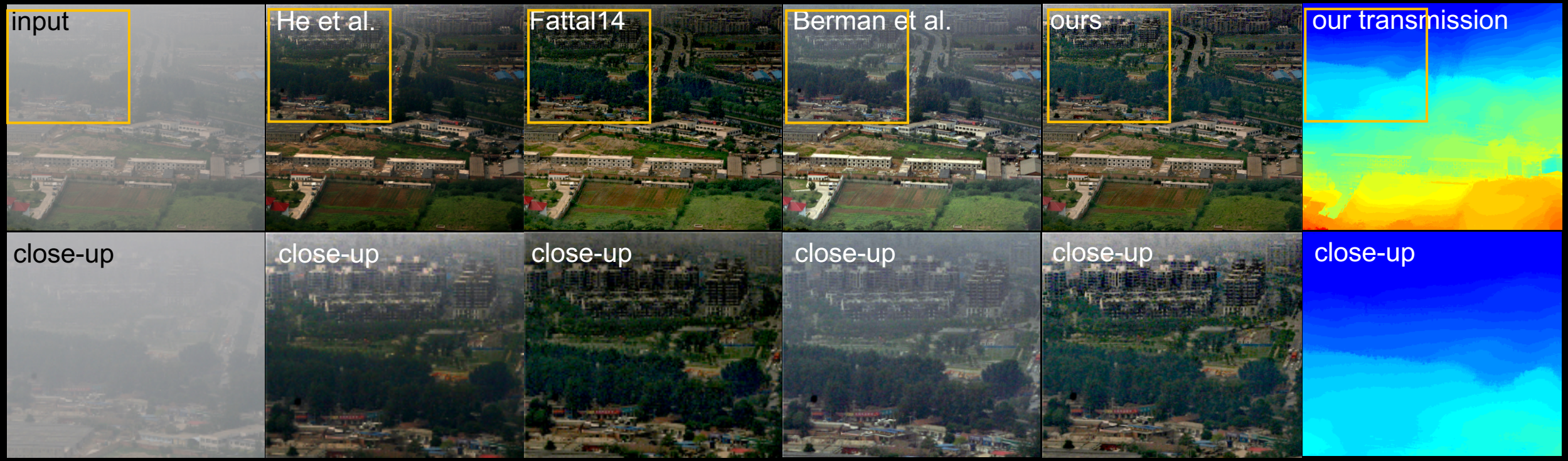
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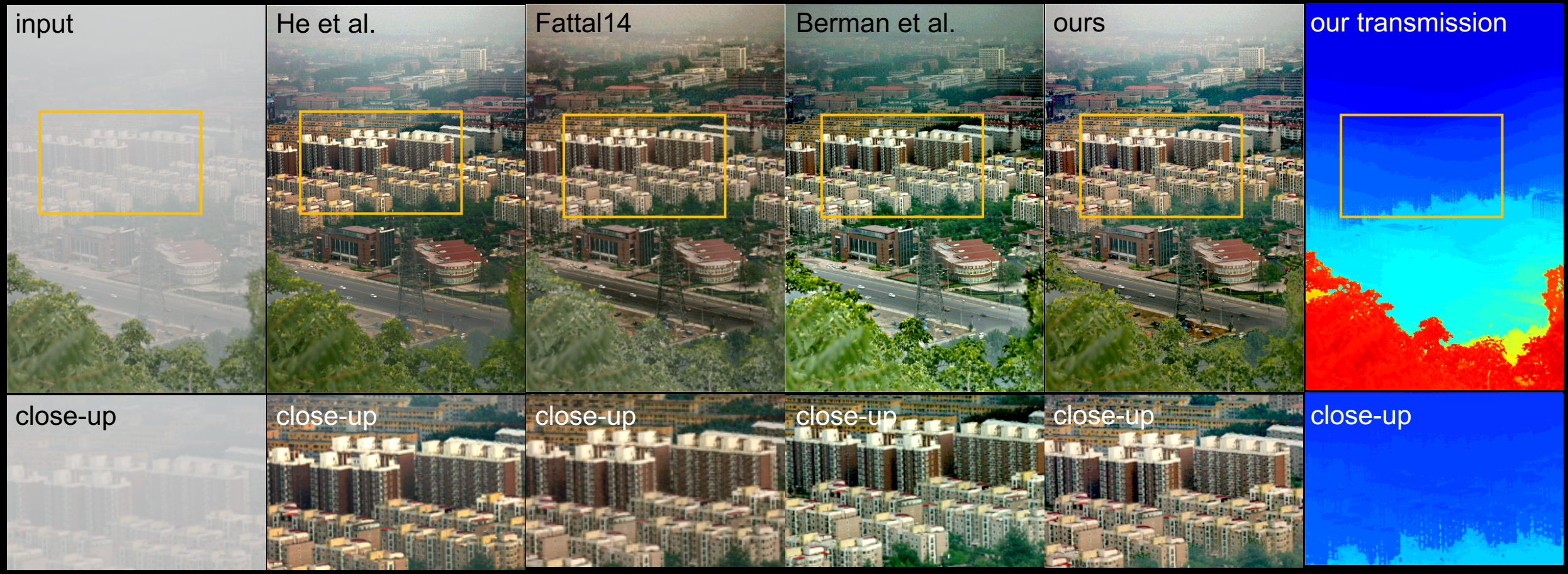
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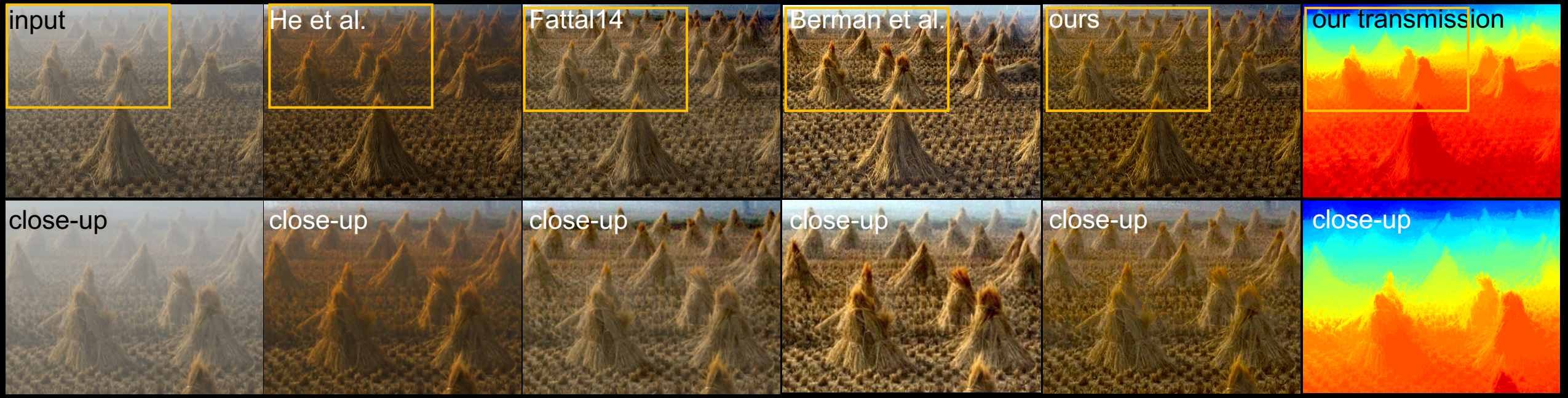
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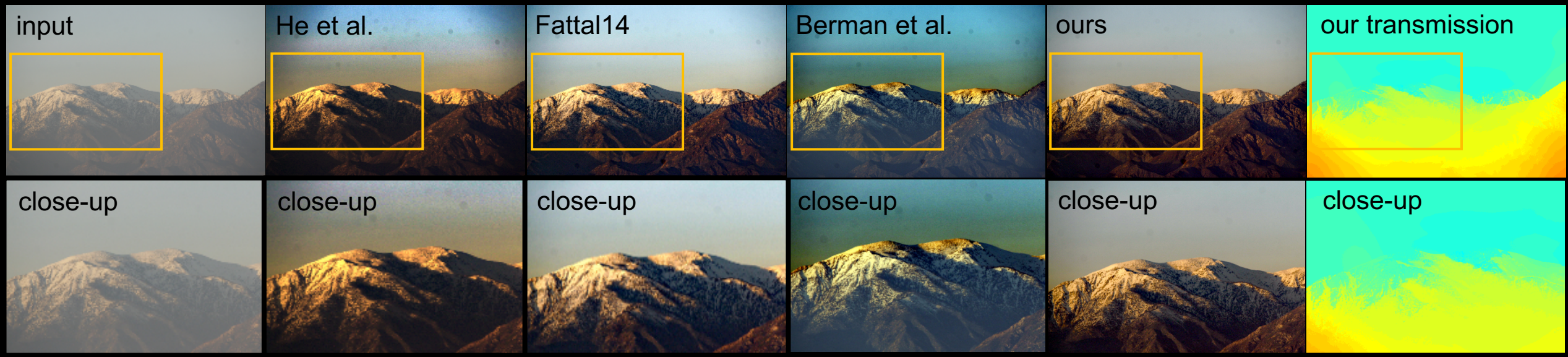
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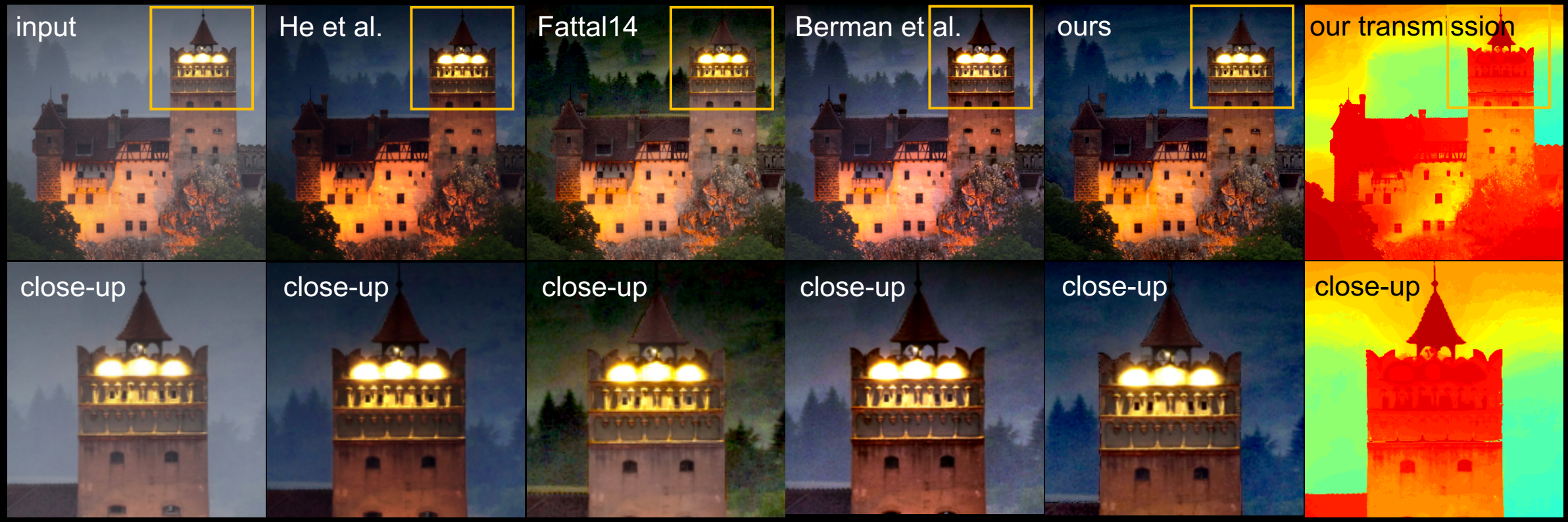
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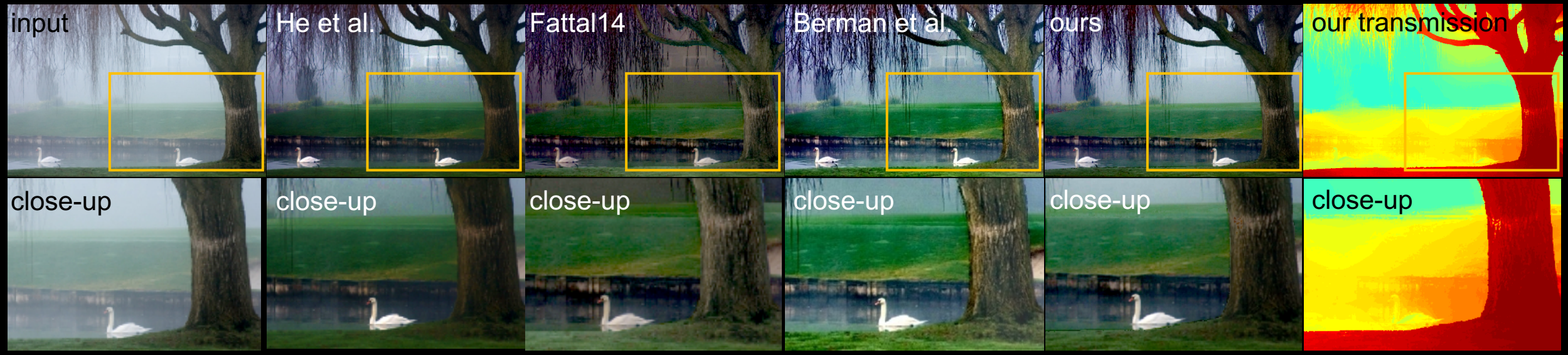
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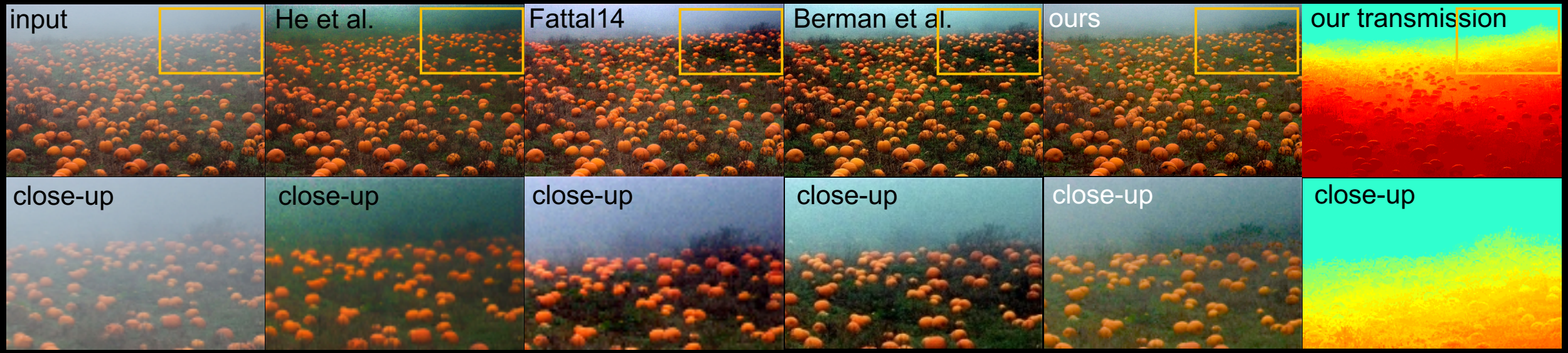
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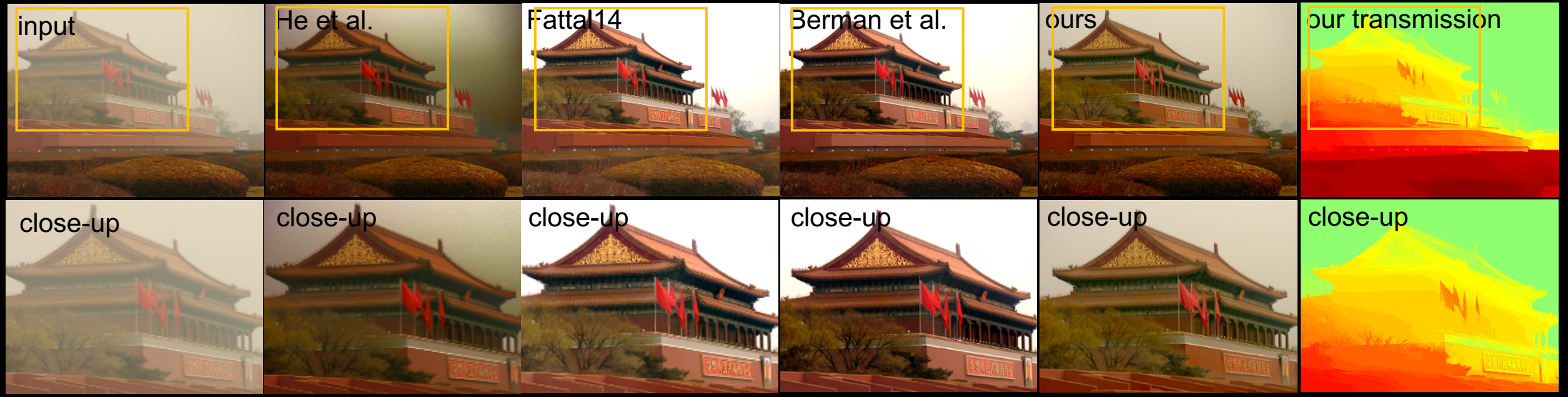
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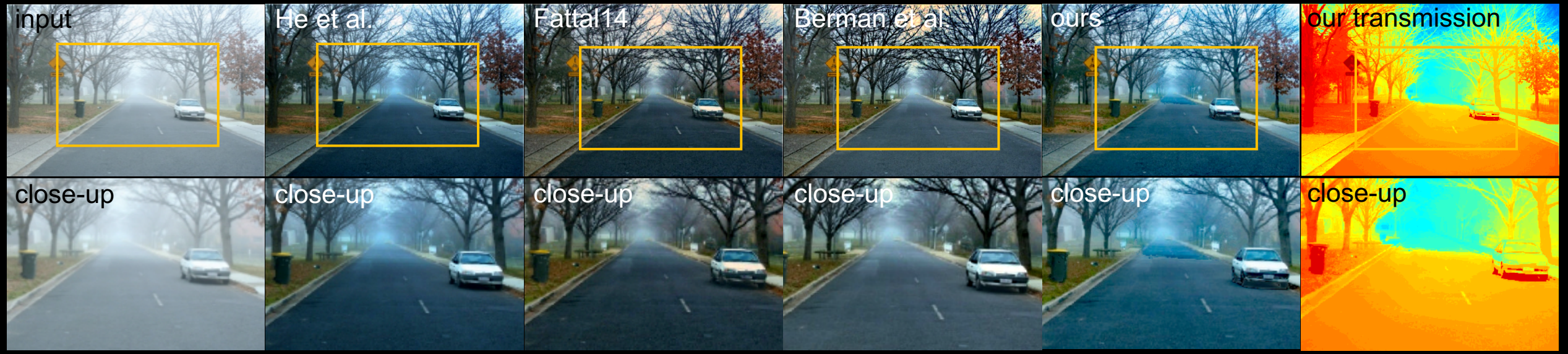
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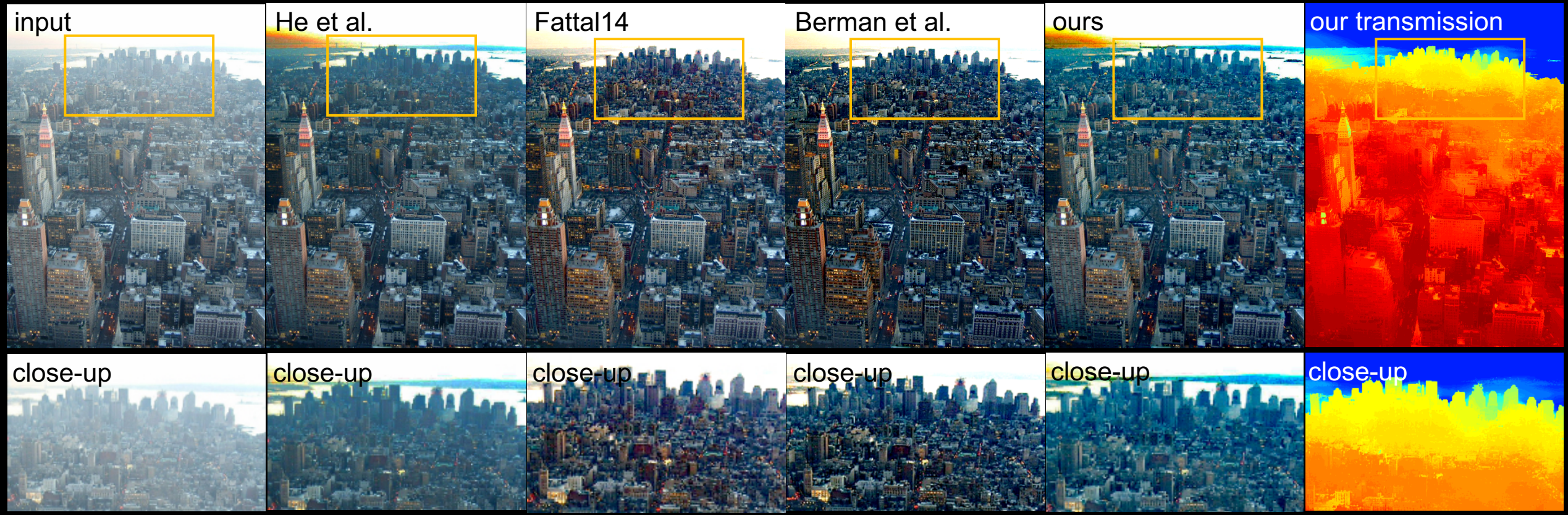
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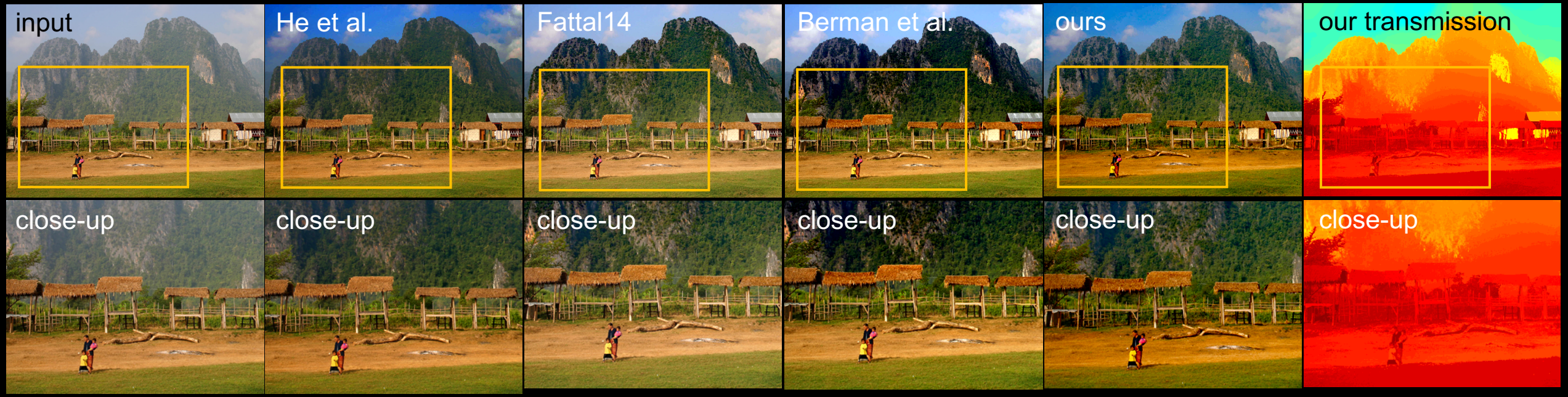
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Berman et al.
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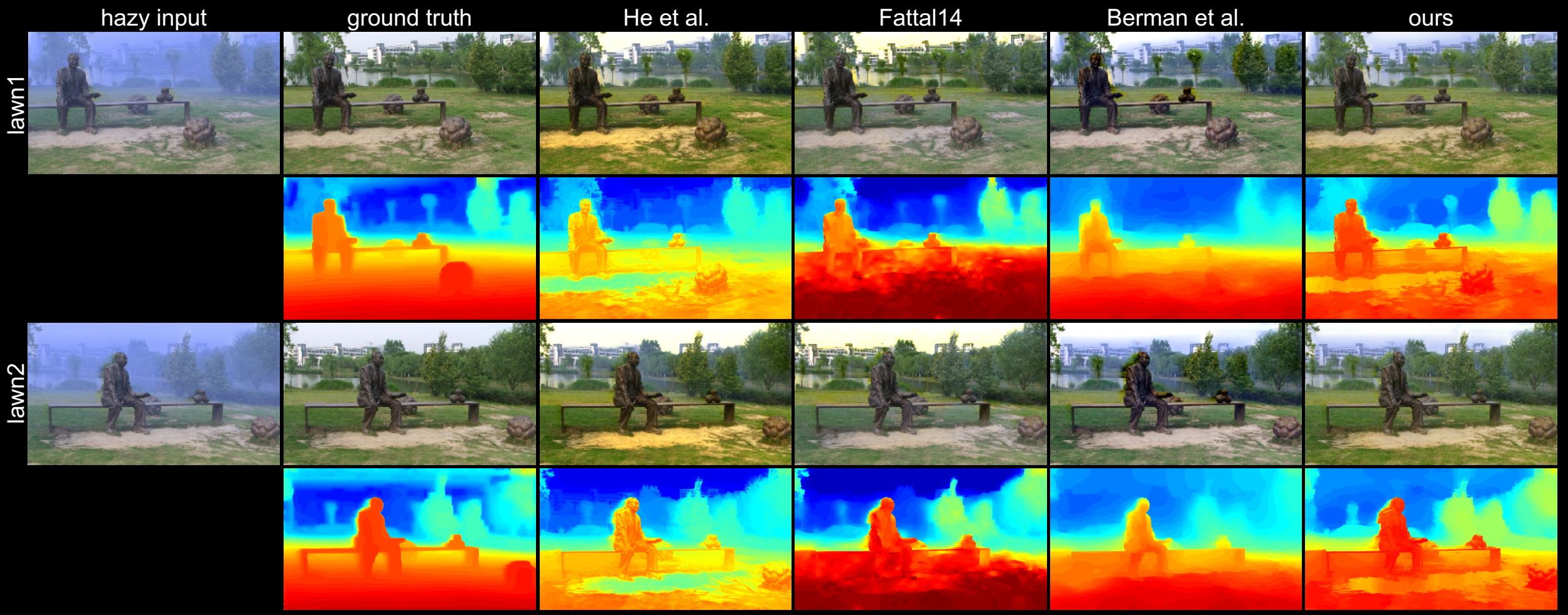
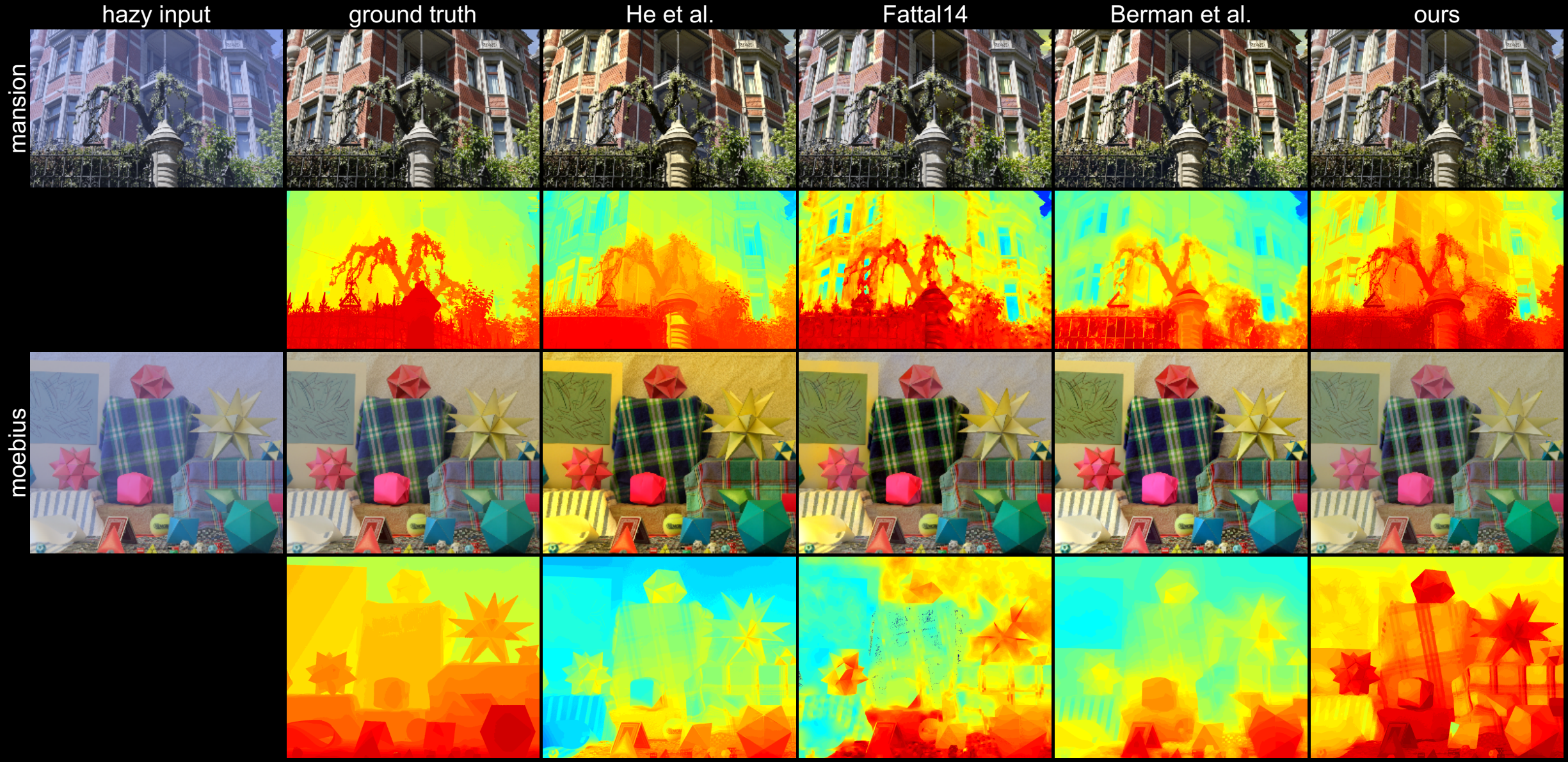
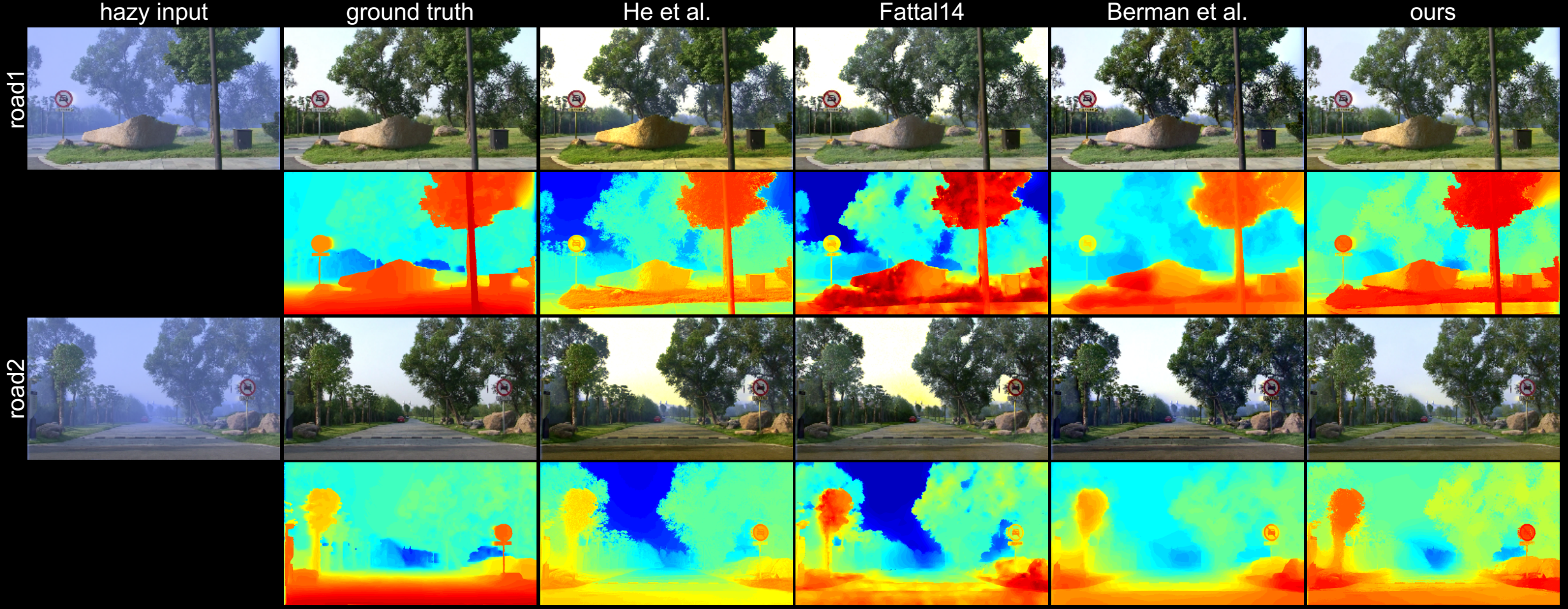
Quantitative Comparison

Single Image Dehazing

Figure 9 (extended) and Table 2 in the paper


hazy input
ground truth
He et al.
Fattal14
Berman et al.
ours
lawn1
lawn2


hazy input
ground truth
He et al.
Fattal14
Berman et al.
ours
mansion
moebius


hazy input
ground truth
He et al.
Fattal14
Berman et al.
ours
road1
road2

L1 error

	He et al.	Fattal14	Berman et al.	ours
church	0.0711/0.1765	0.1144/0.1726	0.1152/0.2100	0.1901/0.1854
couch	0.0631/0.1146	0.0895/0.1596	0.0512/0.1249	0.0942/0.1463
flower1	0.1639/0.2334	0.0472/0.0562	0.0607/0.1309	0.0626/0.0967
flower2	0.1808/0.2387	0.0418/0.0452	0.1154/0.1413	0.0570/0.0839
lawn1	0.1003/0.1636	0.0803/0.1189	0.0340/0.1289	0.0604/0.1052
lawn2	0.1111/0.1715	0.0851/0.1168	0.0431/0.1378	0.0618/0.1054
mansion	0.0616/0.1005	0.0457/0.0719	0.0825/0.1234	0.0614/0.0693
moebius	0.2079/0.3636	0.1460/0.2270	0.1525/0.2005	0.0823/0.1138
reindeer	0.1152/0.1821	0.0662/0.1005	0.0887/0.2549	0.1038/0.1459
road1	0.1127/0.1422	0.1028/0.0980	0.0582/0.1107	0.0676/0.0945
road2	0.1110/0.1615	0.1034/0.1317	0.0602/0.1602	0.0781/0.1206
average	0.1181/0.1862	0.0839/0.1180	0.0783/0.1567	0.0836/0.1152

(l1 error of estimated transmission/l1 error of estimated dehazed image)

Internal Comparison

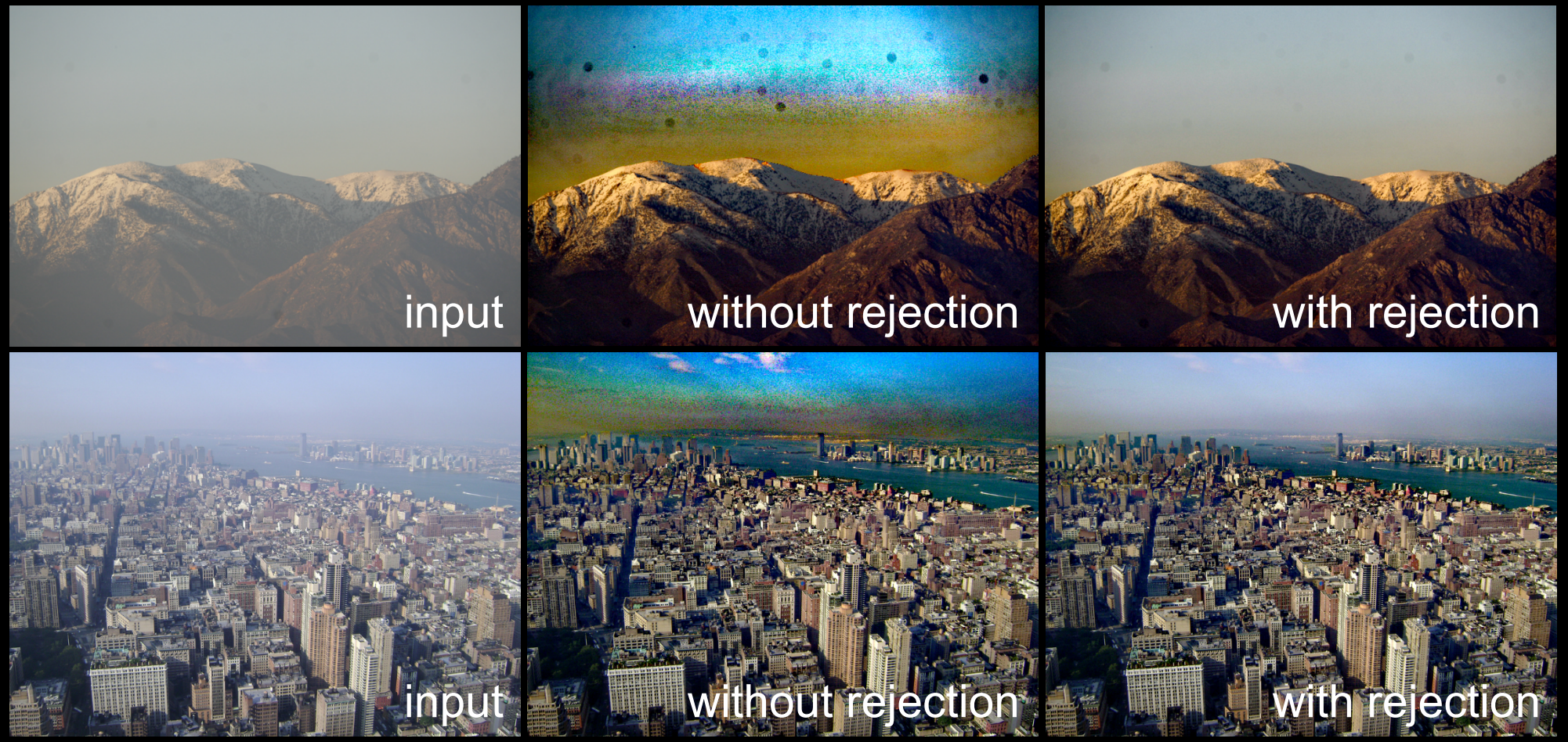
Various Patch Sizes

Our choice

Figure 10 in the paper

Internal Comparison

Impact of Outlier Rejection



Narrow angle outlier rejection

Figure 11 in the paper

Dehazing using Non-Local Regularization with Iso-Depth Neighbor-Fields

Supplemental Material

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