Contour plots for selected IMBLEND modes

Keep in mind that most of these modes accept an AMOUNT parameter
Adjusting AMOUNT can vary behavior significantly
Unless specified otherwise, AMOUNT=1.
'scaleadd', 'scalemult', and 'contrast' also vary with image mean

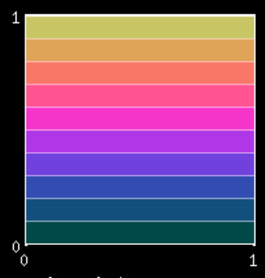
Intensity map overview
R-BG Contrast map overview
R vs BG Meridian map overview
Soft Light comparisons

Parameter Sweeps

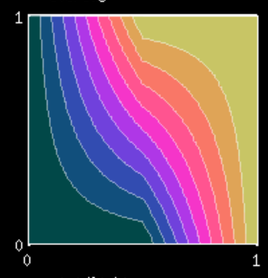
- Soft Light eb2
- Color Dodge
- Color Burn
- Linear Dodge
- Linear Burn
- Soft Dodge
- Soft Burn
- Easy Dodge
- Easy Burn
- Glow
- Heat
- Gleat
- Helow
- Scale Add
- Scale Mult
- Contrast
- Curves
- Hard Mix
- Overlay
- Super Light
- Pin Light
- Pnorm
- Lighten RGB

INTENSITY MAPS FOR NONCOMPONENT BLEND MODES

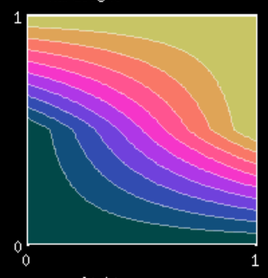
normal



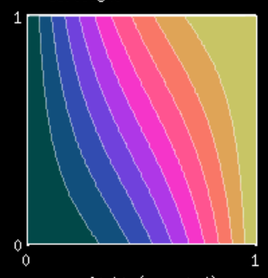
overlay



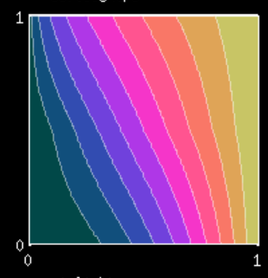
hardlight



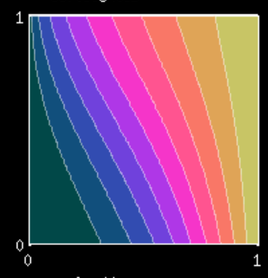
softlight



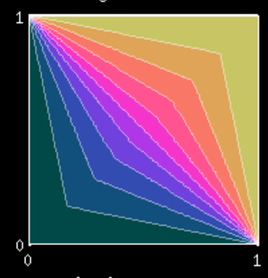
softlightps



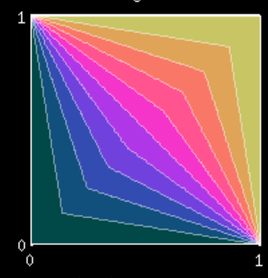
softlighteb



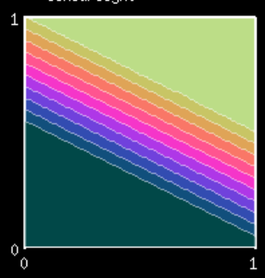
flatlight



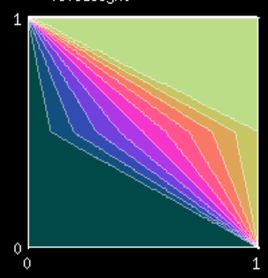
softflatlight



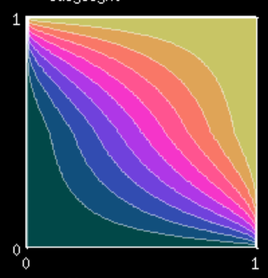
linearlight



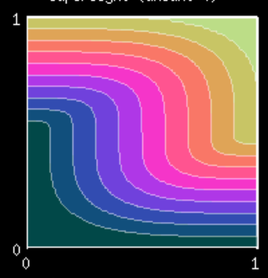
vividlight



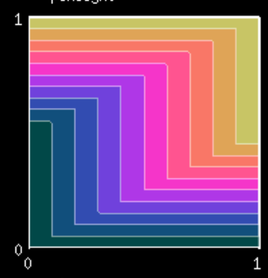
easylight



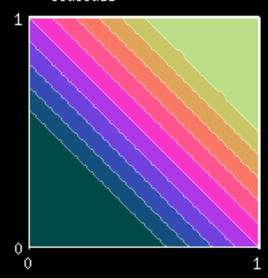
superlight (amount=4)



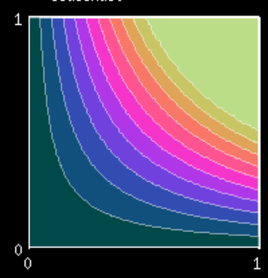
pinlight



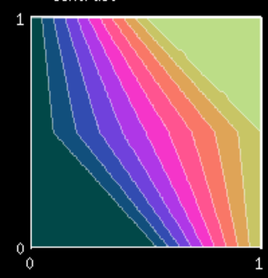
scaleadd



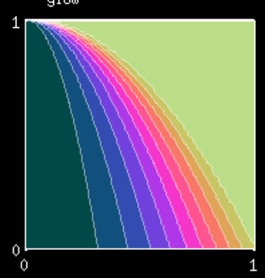
scalemult



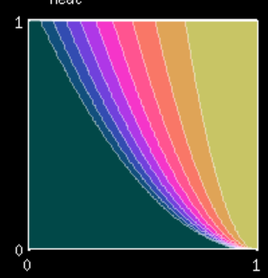
contrast



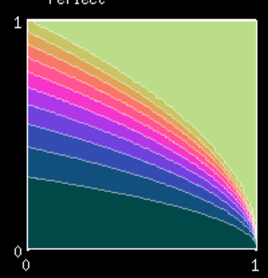
glow



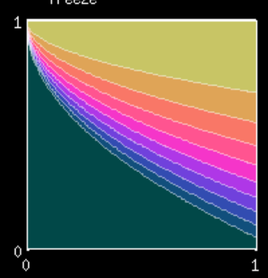
heat



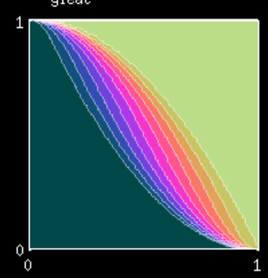
reflect



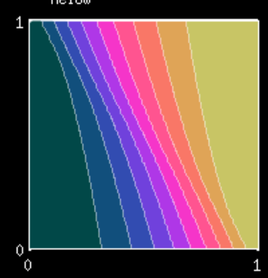
freeze



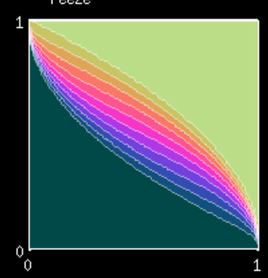
gleat



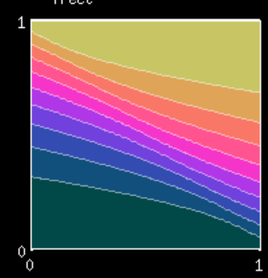
helow



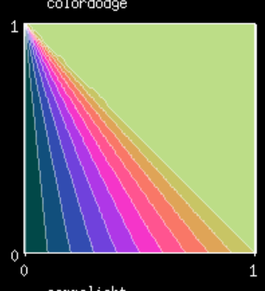
reeze



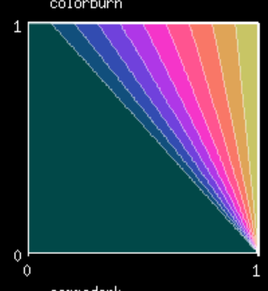
frect



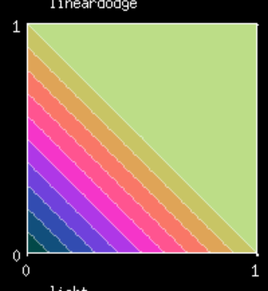
colordodge



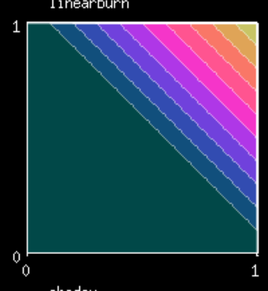
colorburn



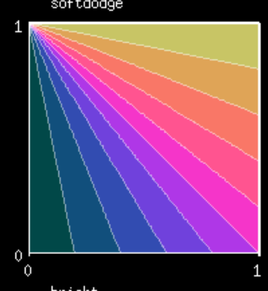
lineardodge



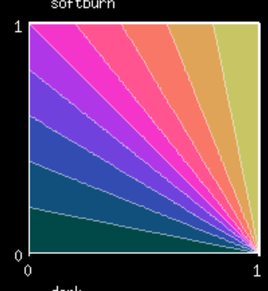
linearburn



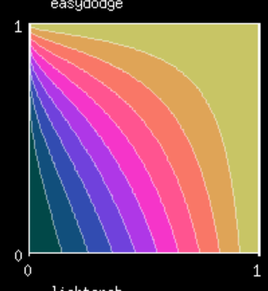
softdodge



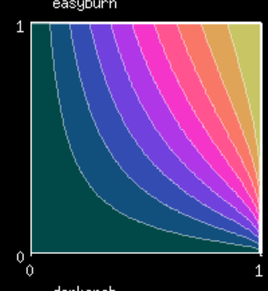
softburn



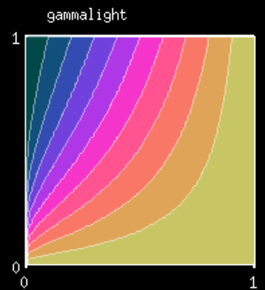
easydodge



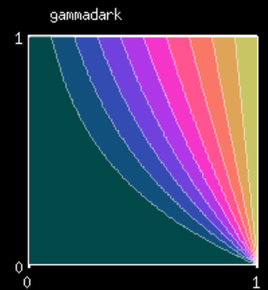
easyburn



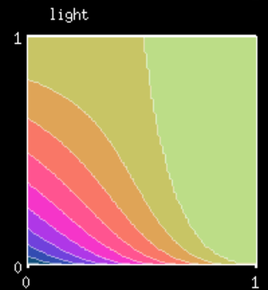
gammalight



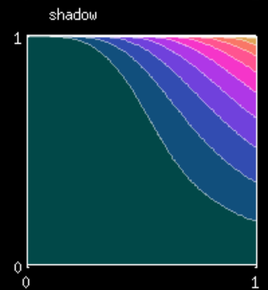
gammadark



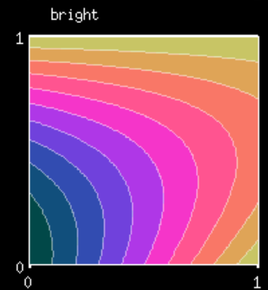
light



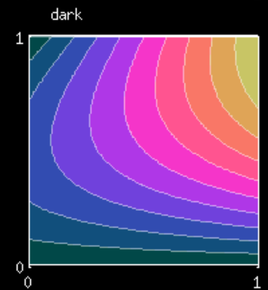
shadow



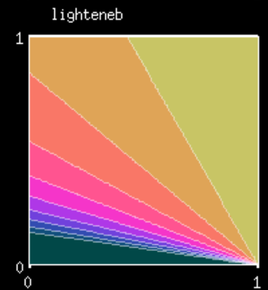
bright



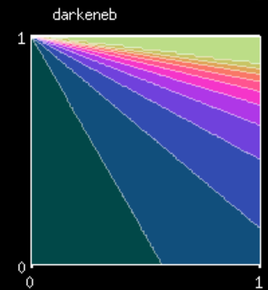
dark



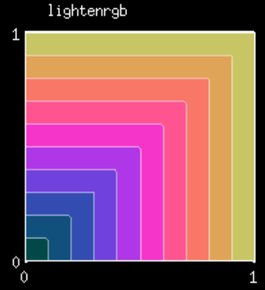
lighteneb



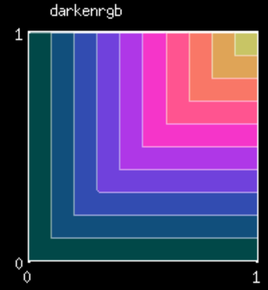
darkeneb



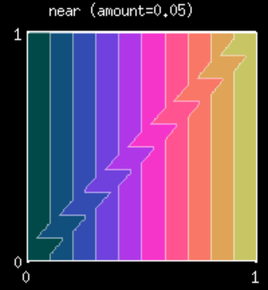
lightenrgb



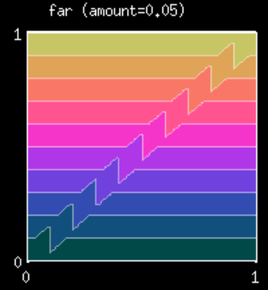
darkenrgb



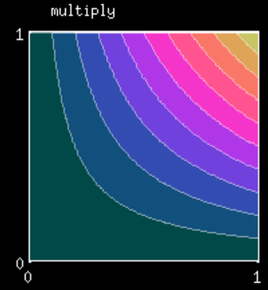
near (amount=0.05)



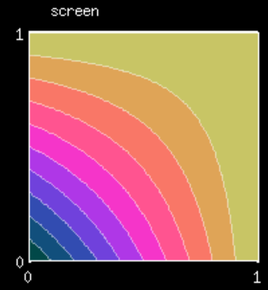
far (amount=0.05)



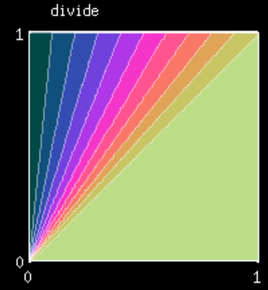
multiply



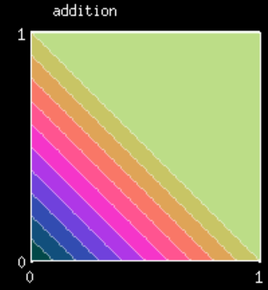
screen



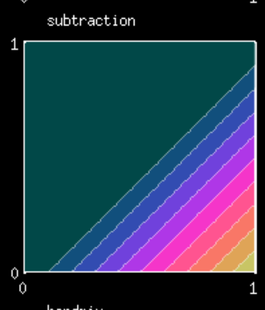
divide



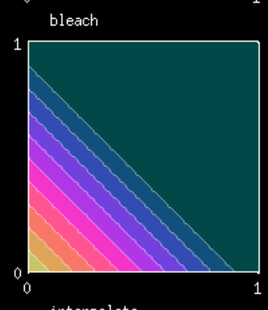
addition



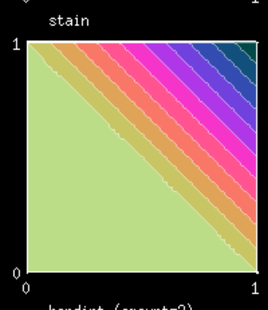
subtraction



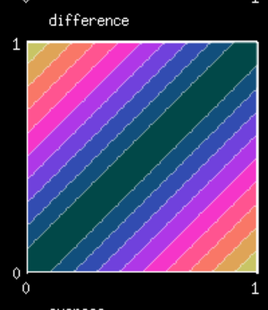
bleach



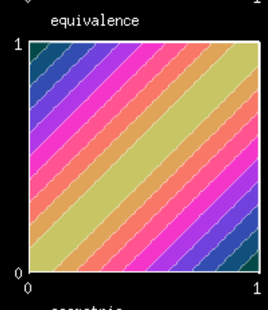
stain



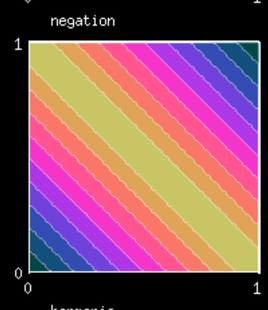
difference



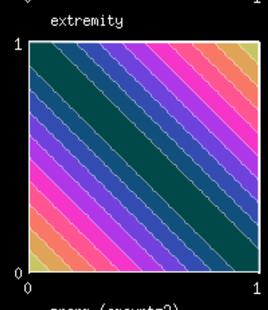
equivalence



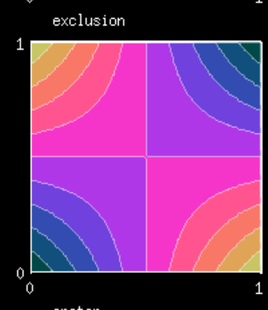
negation



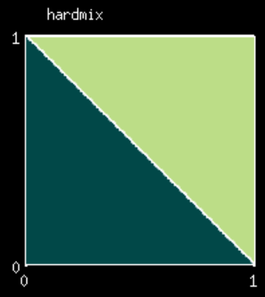
extremity



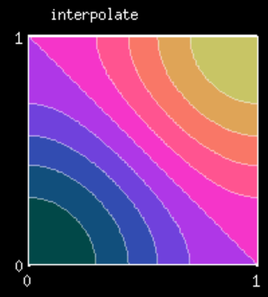
exclusion



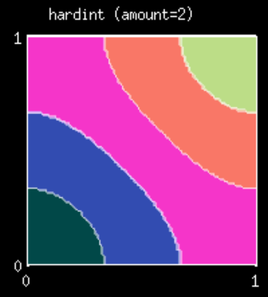
hardmix



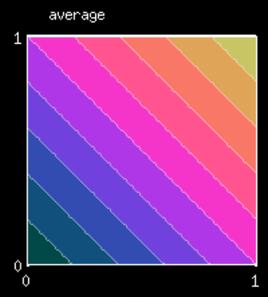
interpolate



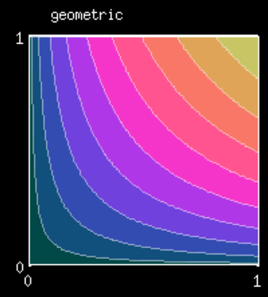
hardint (amount=2)



average



geometric



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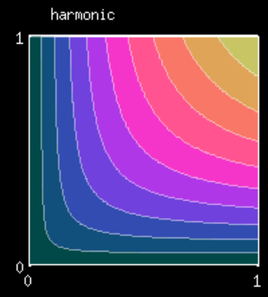
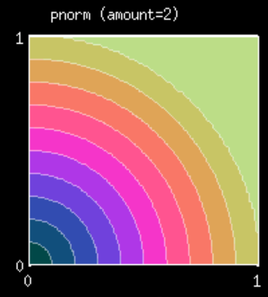
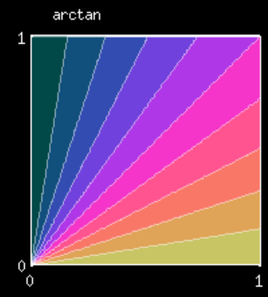


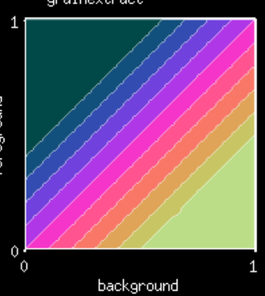
pnorm (amount=2)



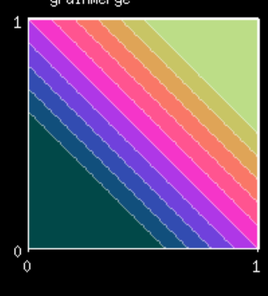
arctan



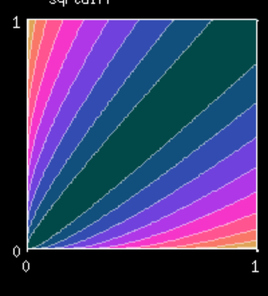
grainextract



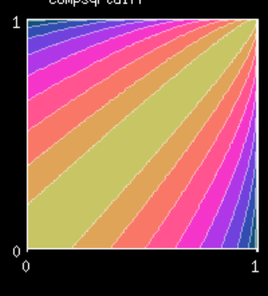
grainmerge



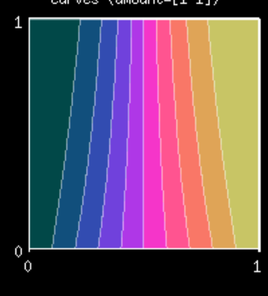
sqrtdiff



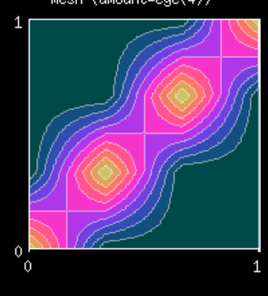
compsqrtdiff



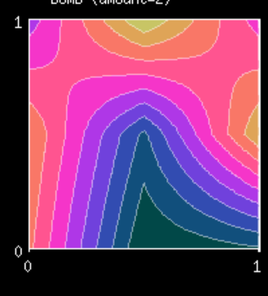
curves (amount=[1 1])



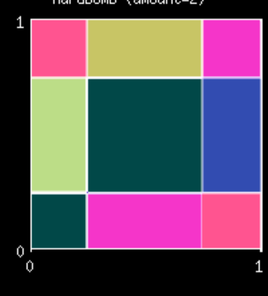
mesh (amount=eye(4))



bomb (amount=2)

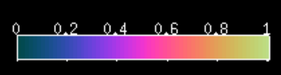


hardbomb (amount=2)



foreground

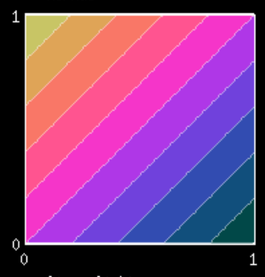
background



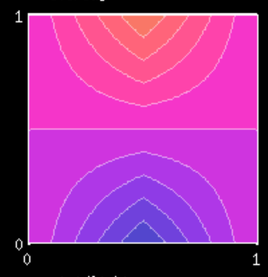
Z = Result

CONTRAST MAPS FOR NONCOMPONENT BLEND MODES

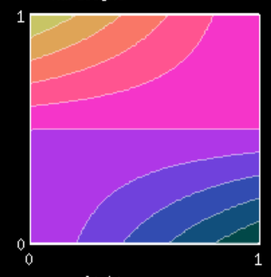
normal



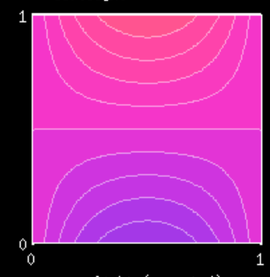
overlay



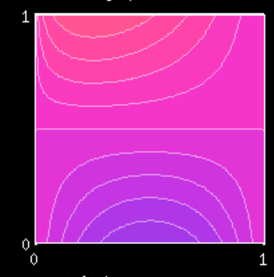
hardlight



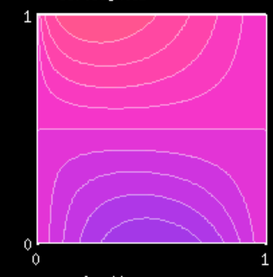
softlight



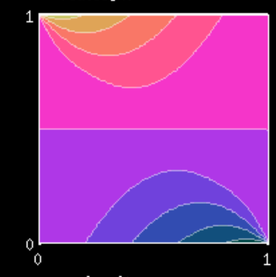
softlightps



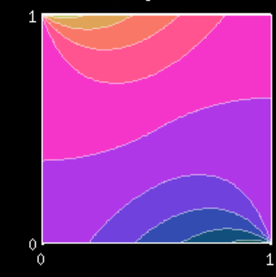
softlighteb



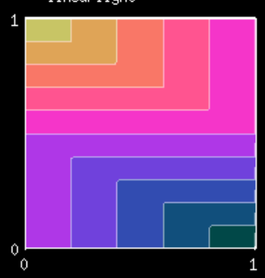
flatlight



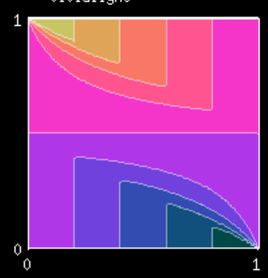
softflatlight



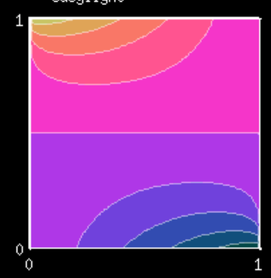
linearlight



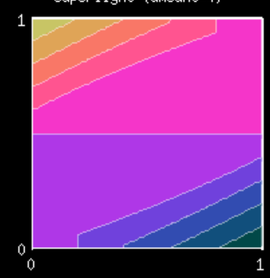
vividlight



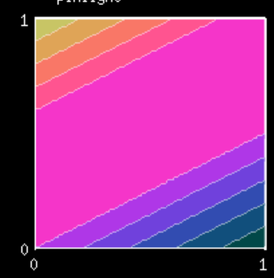
easylight



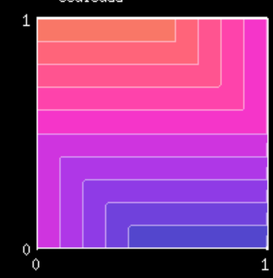
superlight (amount=4)



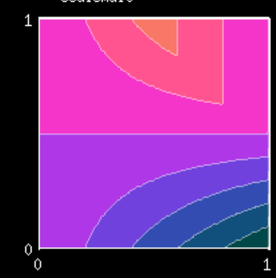
pinlight



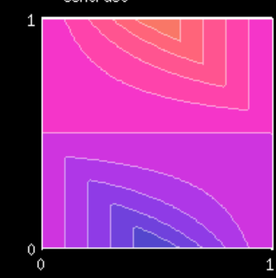
scaleadd



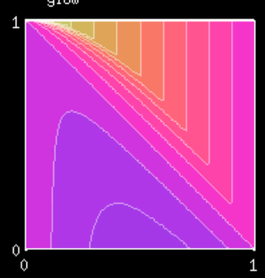
scalemult



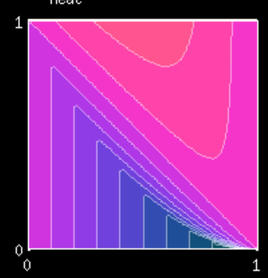
contrast



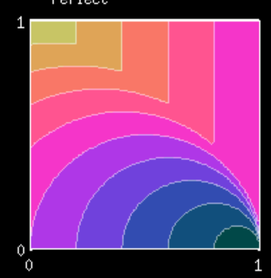
glow



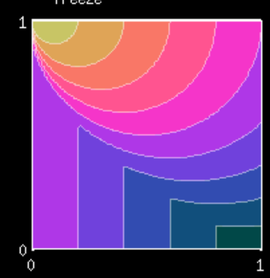
heat



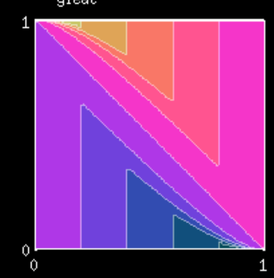
reflect



freeze



gleat



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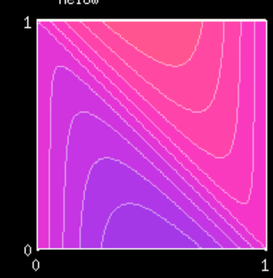
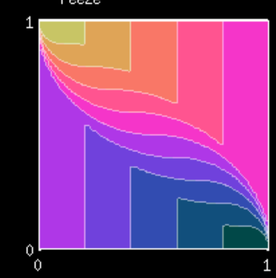
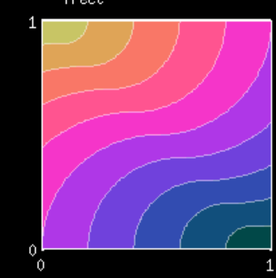


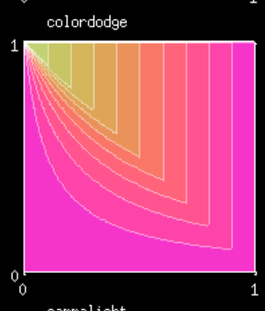
reeze



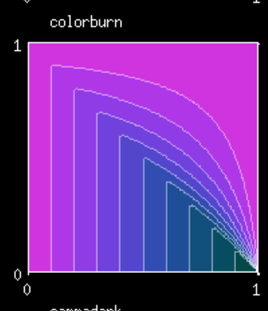
frect



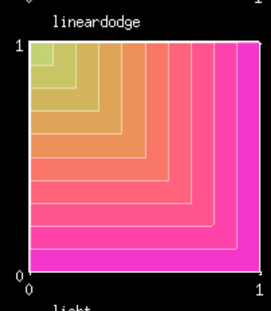
colordodge



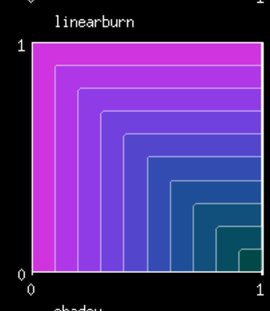
colorburn



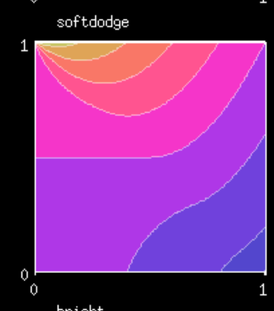
lineardodge



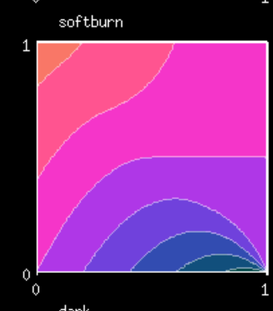
linearburn



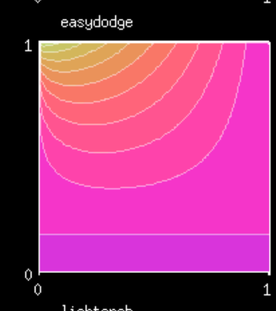
softdodge



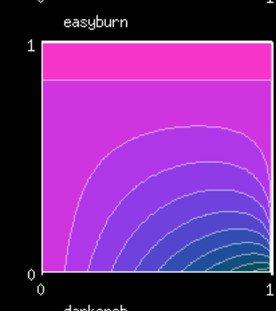
softburn



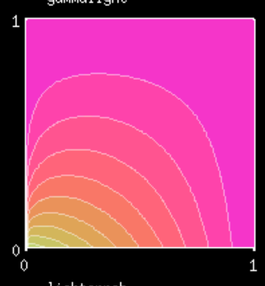
easydodge



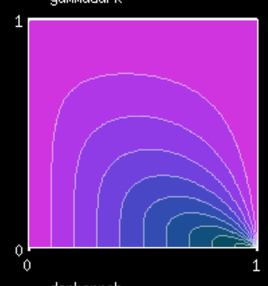
easyburn



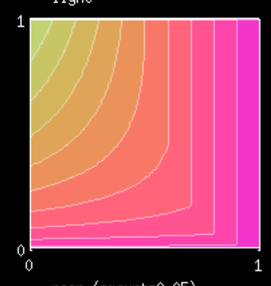
gammalight



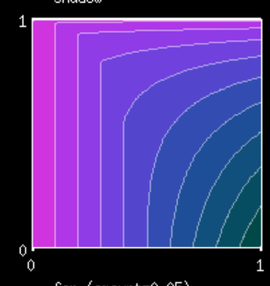
gammadark



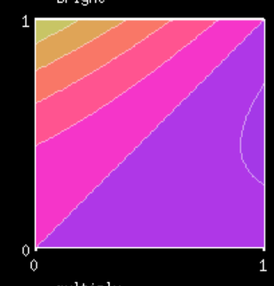
light



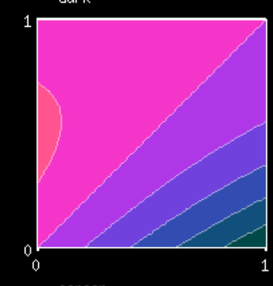
shadow



bright



dark



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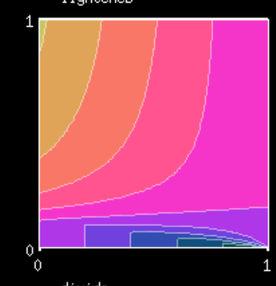
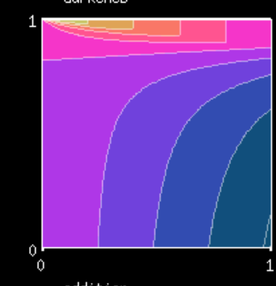
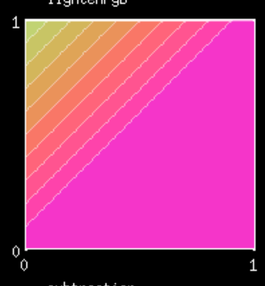


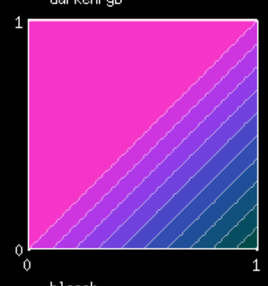
darkeneb



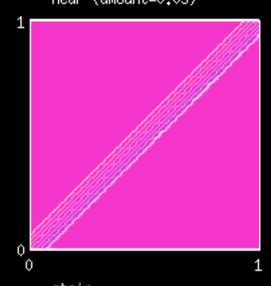
lightenrgb



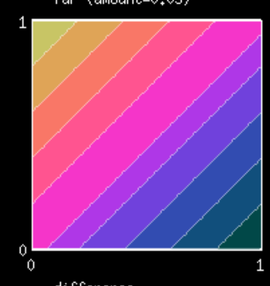
darkenrgb



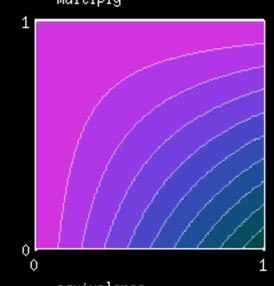
near (amount=0.05)



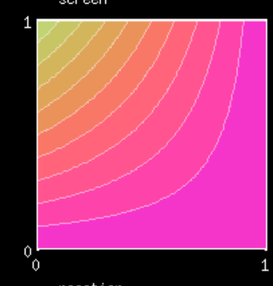
far (amount=0.05)



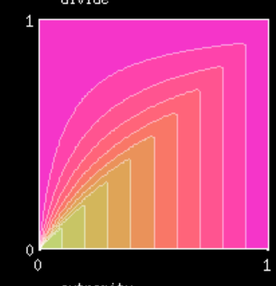
multiply



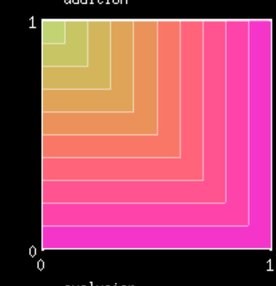
screen



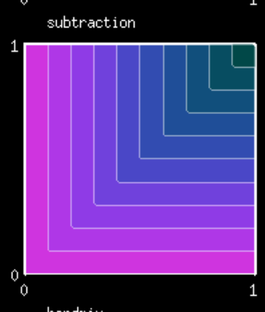
divide



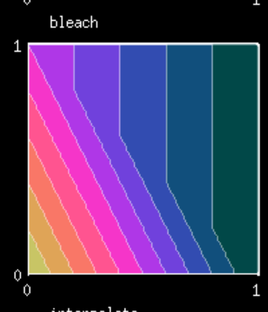
addition



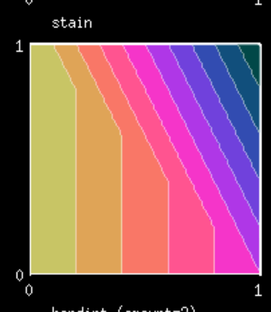
subtraction



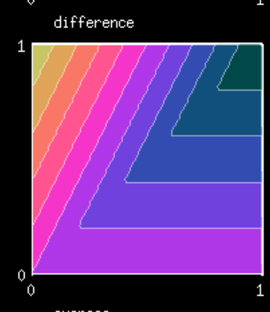
bleach



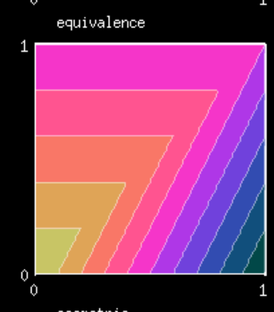
stain



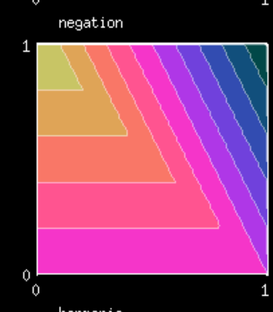
difference



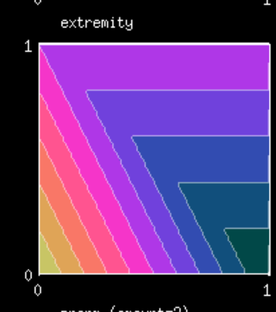
equivalence



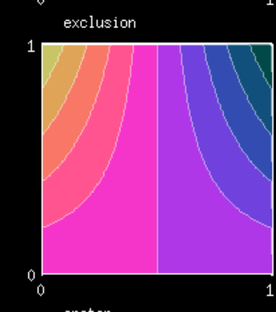
negation



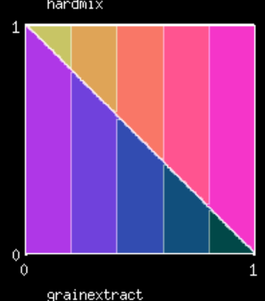
extremity



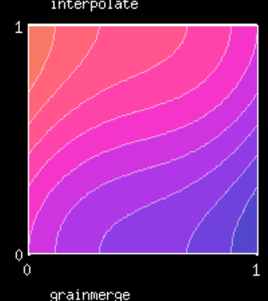
exclusion



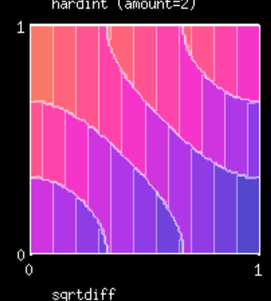
hardmix



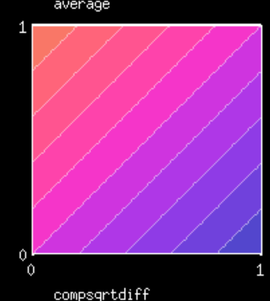
interpolate



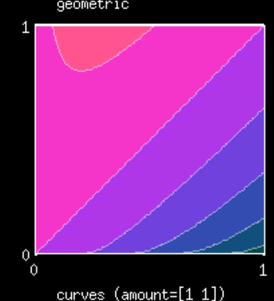
hardint (amount=2)



average



geometric



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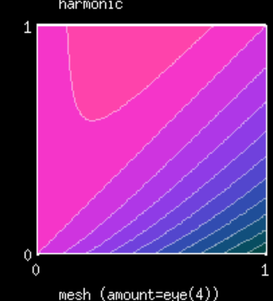
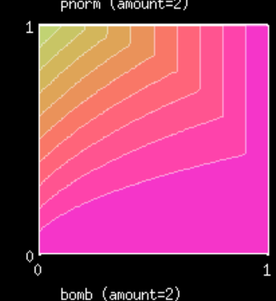
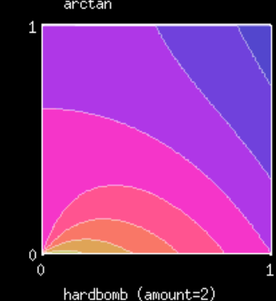


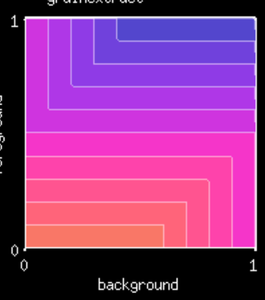
pnorm (amount=2)



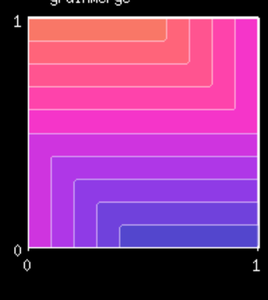
arctan



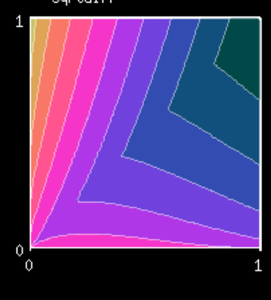
grainextract



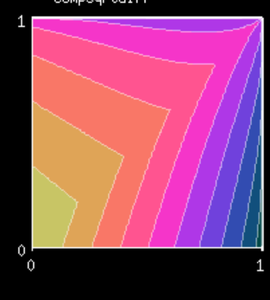
grainmerge



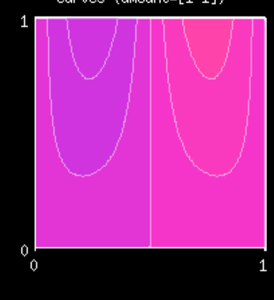
sqrtdiff



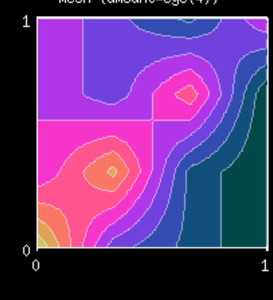
compsqrtdiff



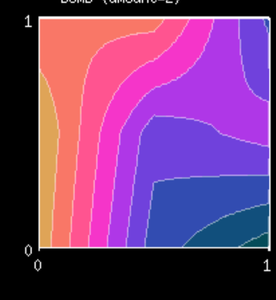
curves (amount=[1 1])



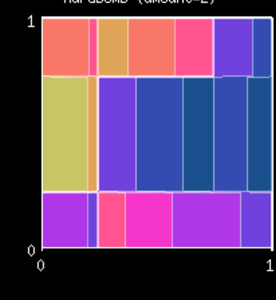
mesh (amount=eye(4))



bomb (amount=2)



hardbomb (amount=2)



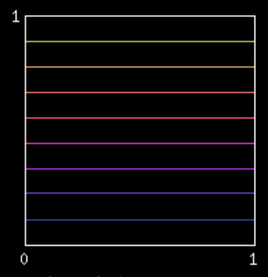
foreground

background

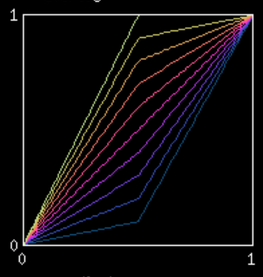
Z = Result - Background

MERIDIAN MAPS FOR NONCOMPONENT BLEND MODES

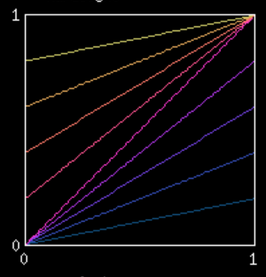
normal



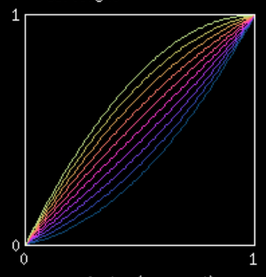
overlay



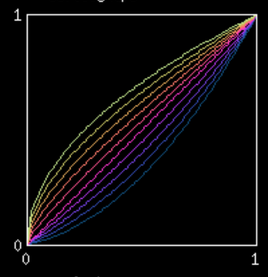
hardlight



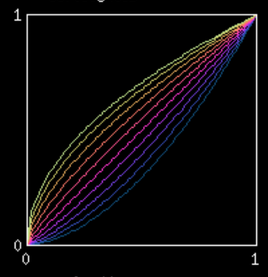
softlight



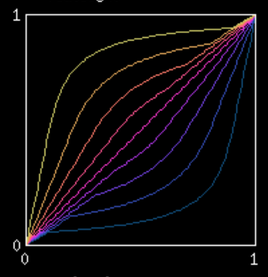
softlightps



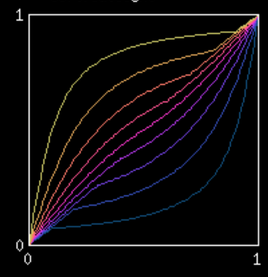
softlighteb



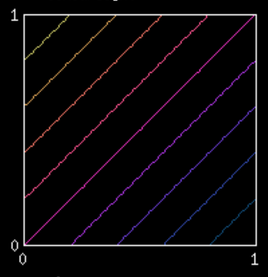
flatlight



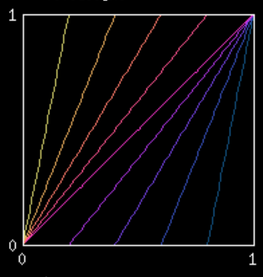
softflatlight



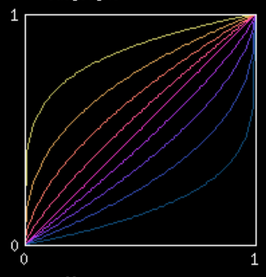
linearlight



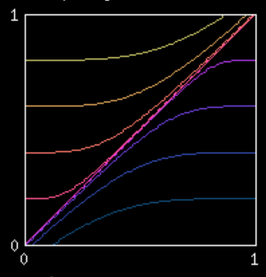
vividlight



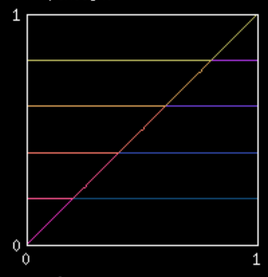
easylight



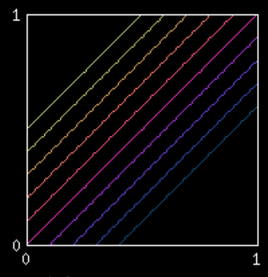
superlight (amount=4)



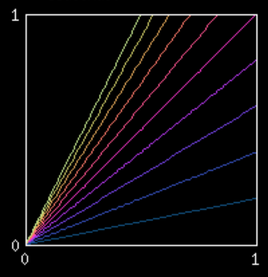
pinlight



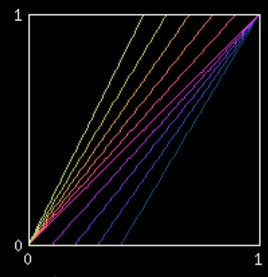
scaleadd



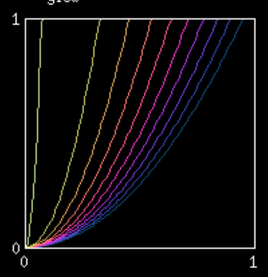
scalemult



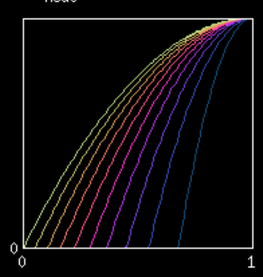
contrast



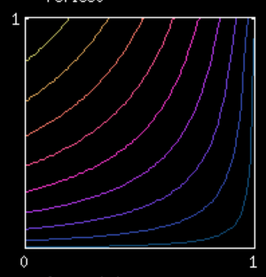
glow



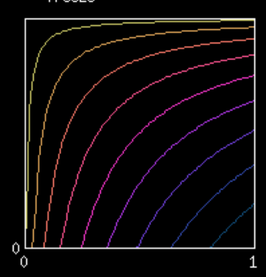
heat



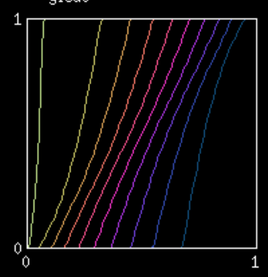
reflect



freeze



gleat



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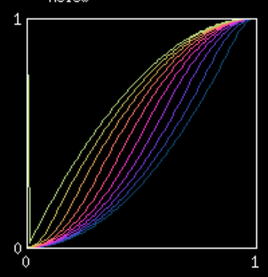

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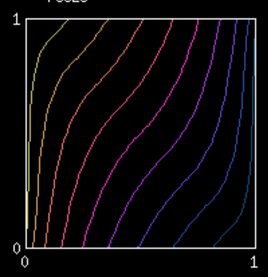

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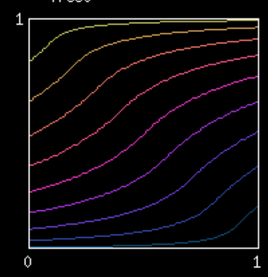

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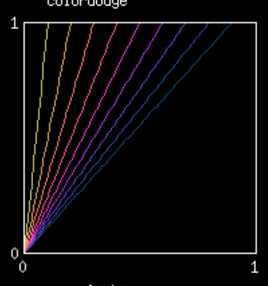
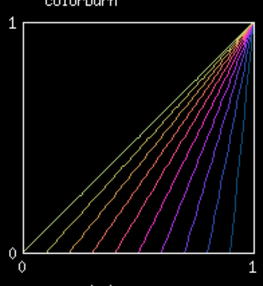
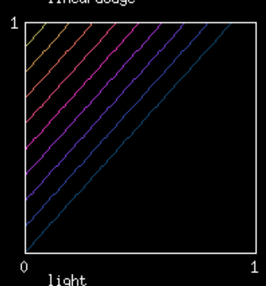


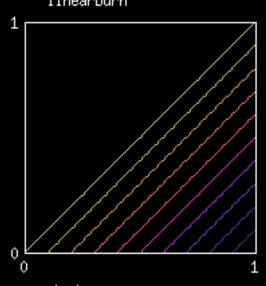
colorburn



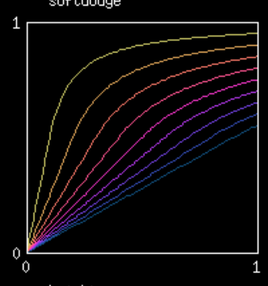
lineardodge



linearburn



softdodge



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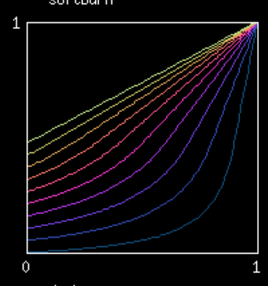
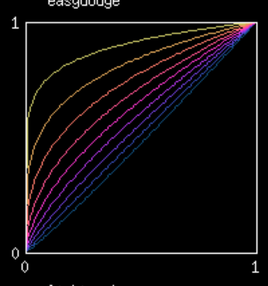


easydodge



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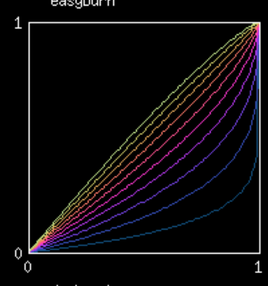
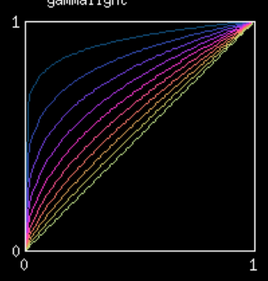


gammalight



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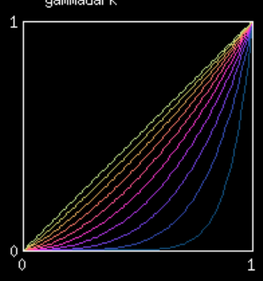
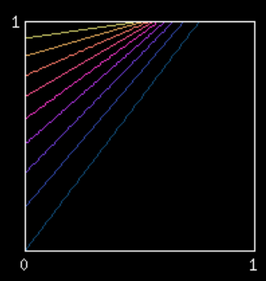


light



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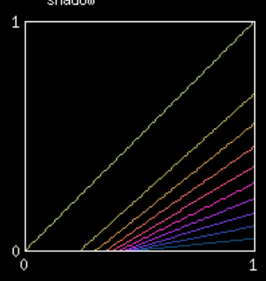
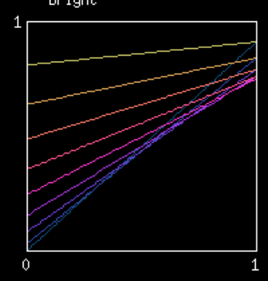


bright



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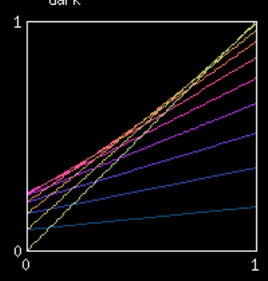
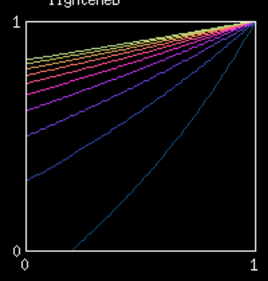


lighteneb



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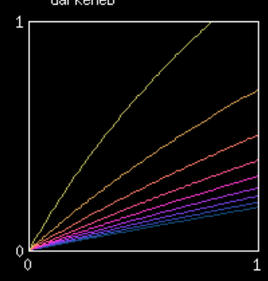
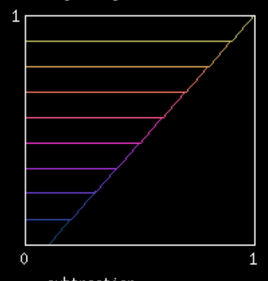


lightenrgb



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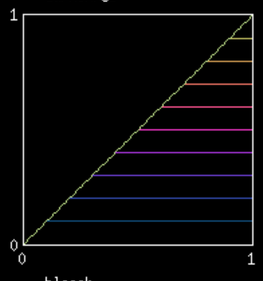
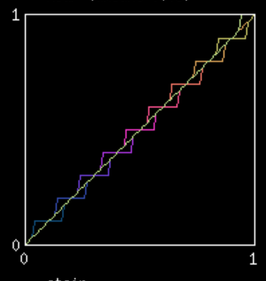
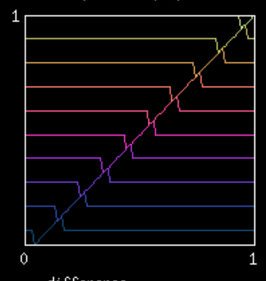


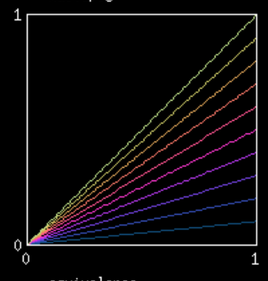
near (amount=0.05)



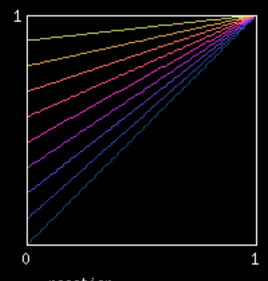
far (amount=0.05)



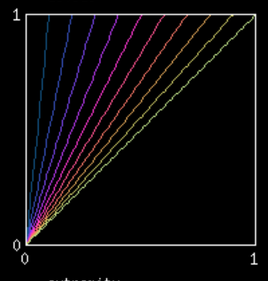
multiply



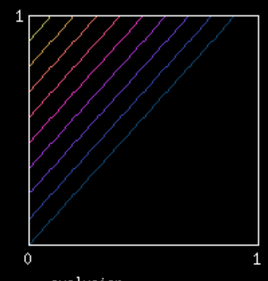
screen



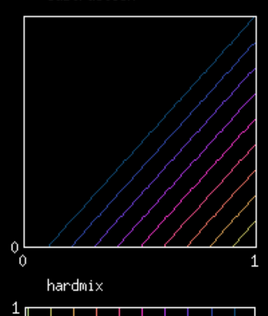
divide



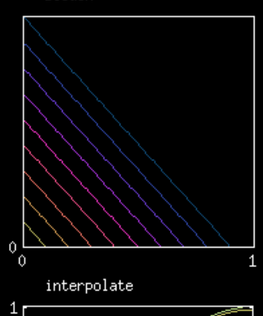
addition



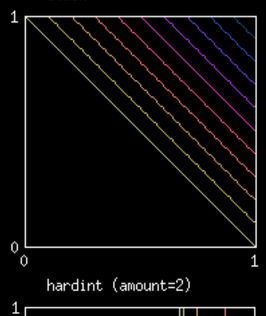
subtraction



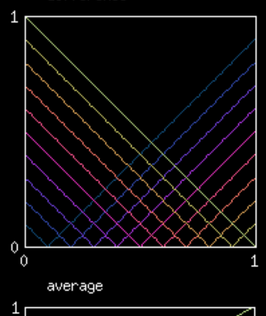
bleach



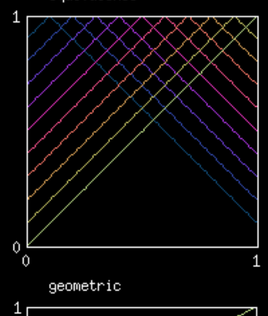
stain



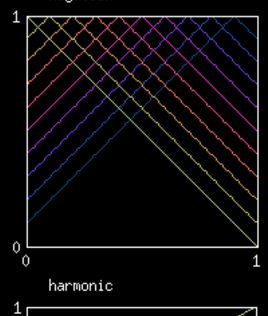
difference



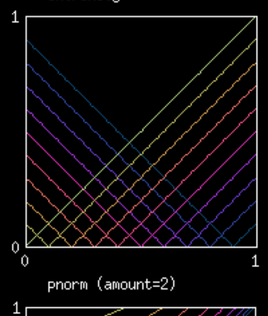
equivalence



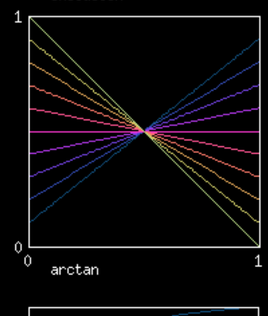
negation



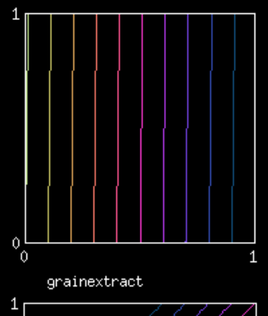
extremity



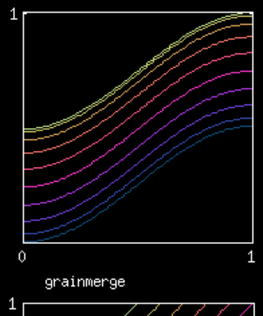
exclusion



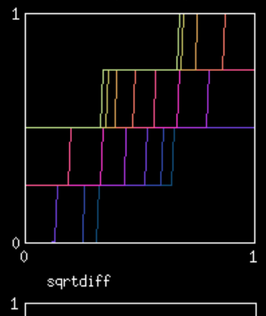
hardmix



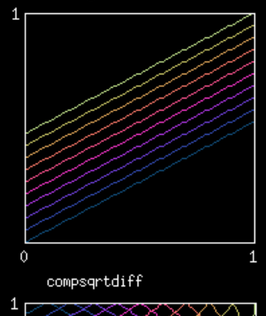
interpolate



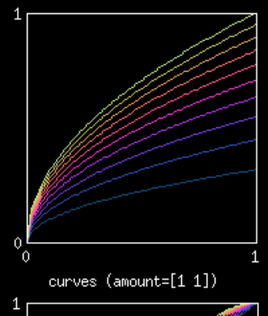
hardint (amount=2)



average



geometric



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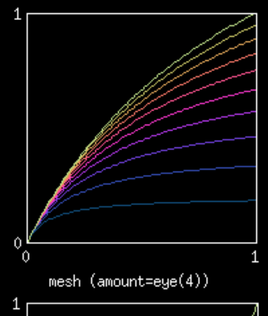
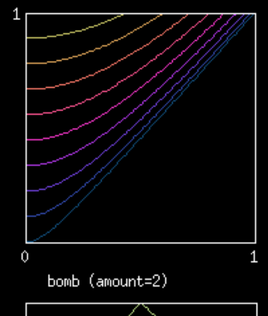
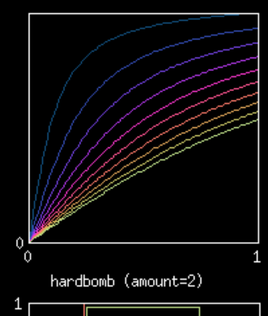


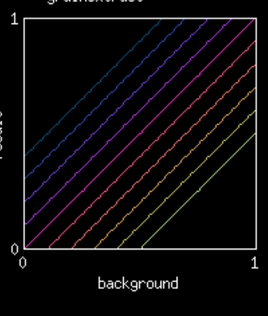
pnorm (amount=2)



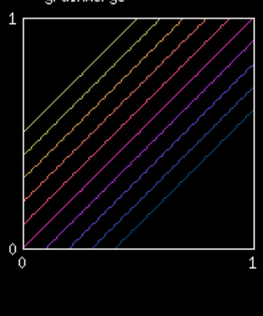
arctan



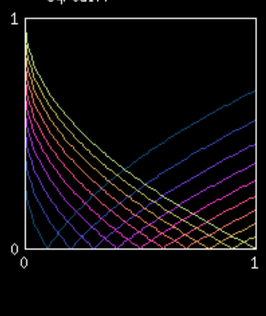
grainextract



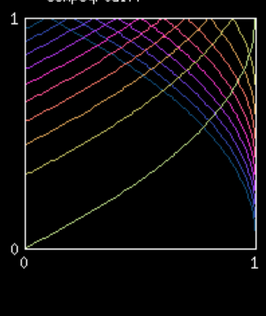
grainmerge



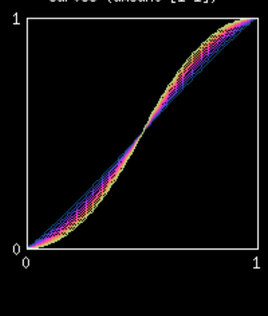
sqrtdiff



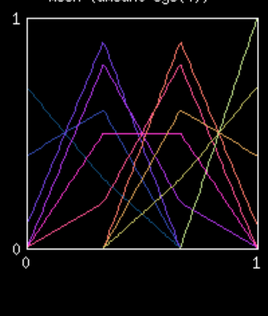
compsqrtdiff



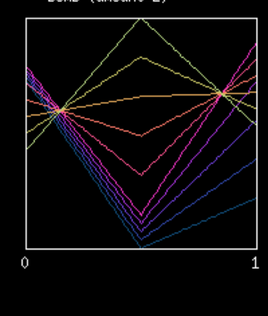
curves (amount=[1 1])



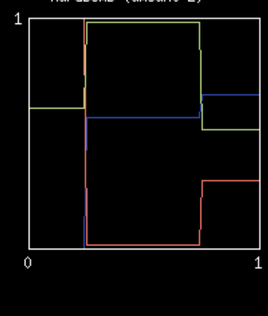
mesh (amount=eye(4))



bomb (amount=2)

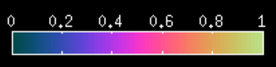


hardbomb (amount=2)

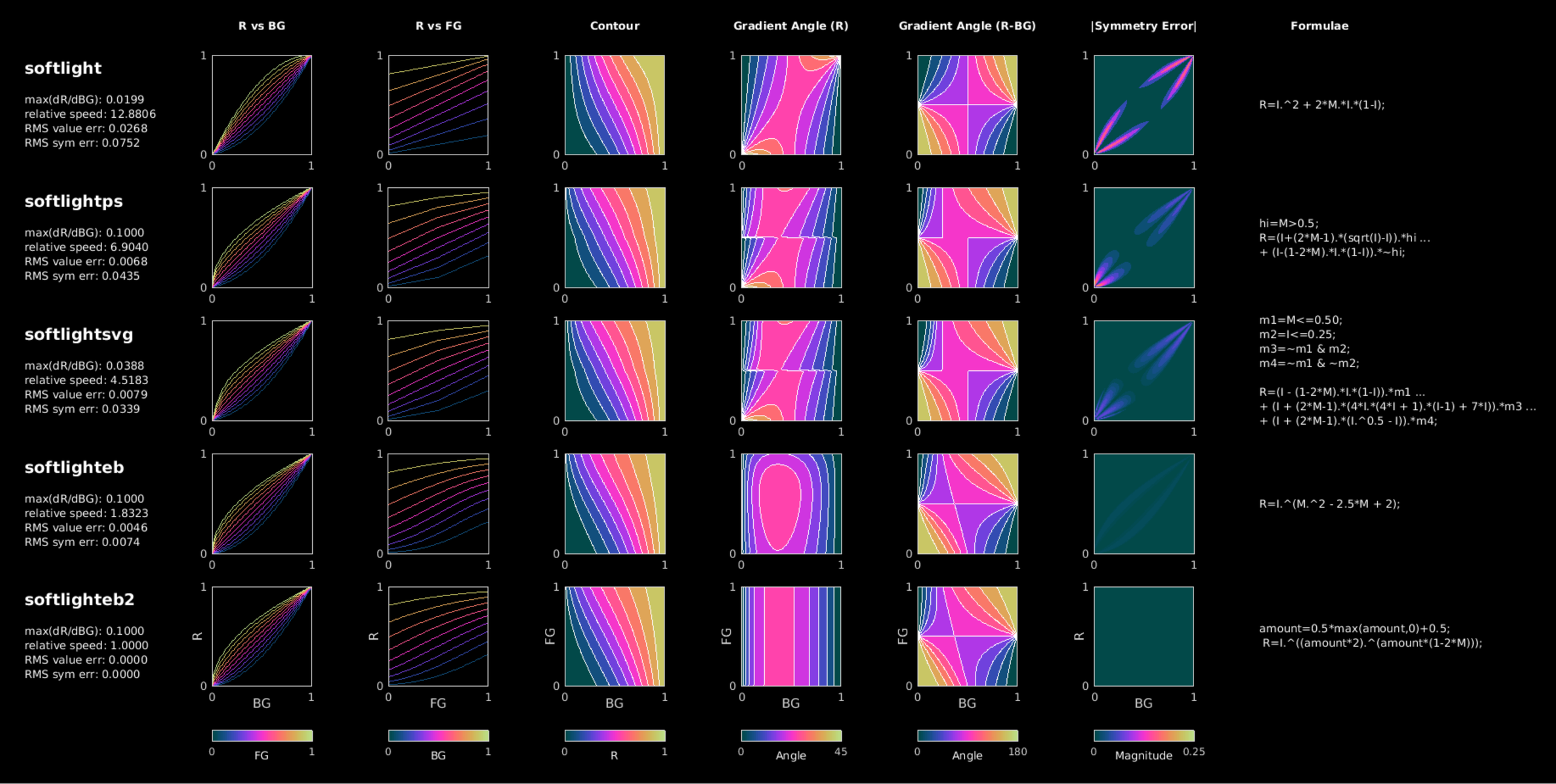


result

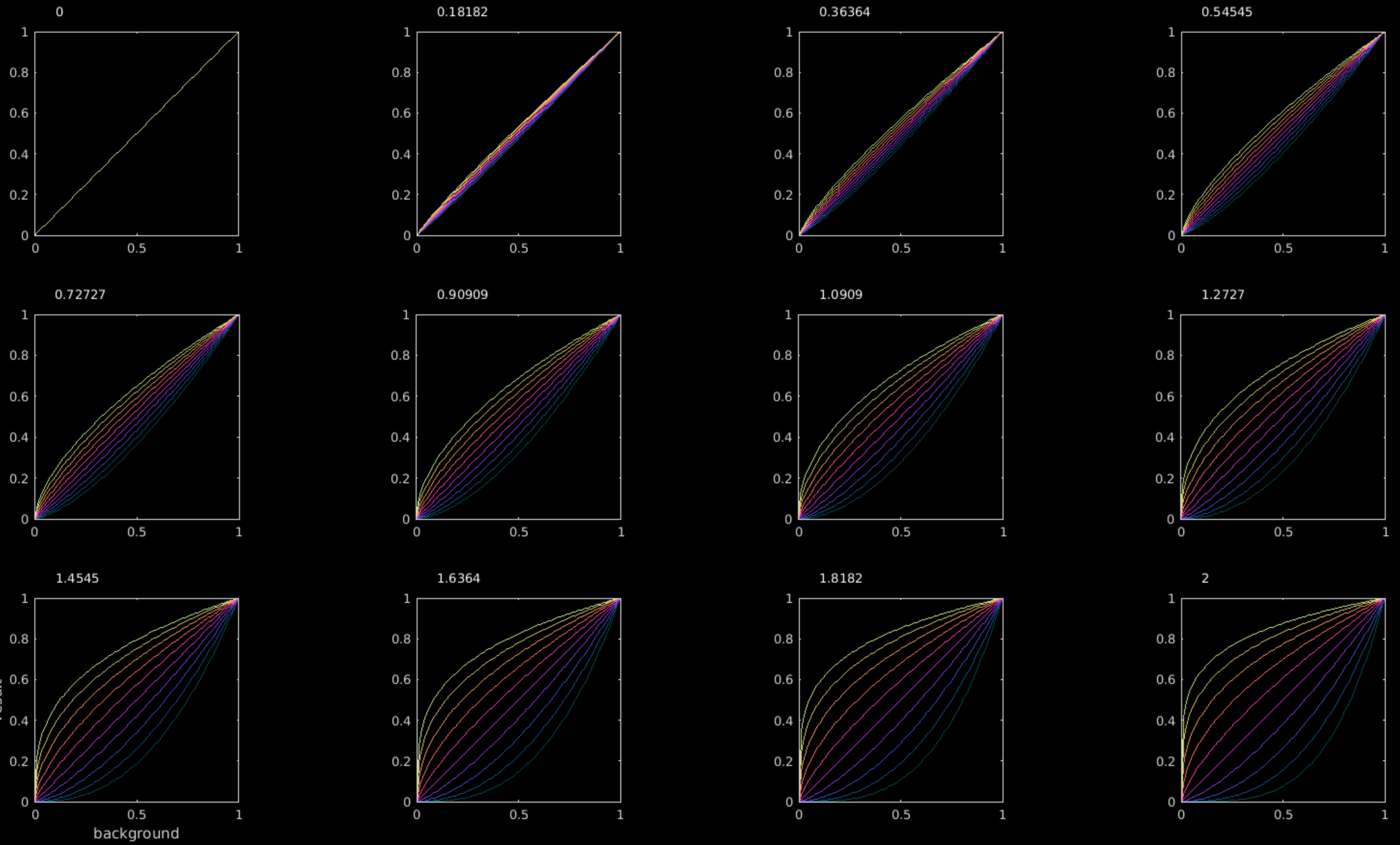
background



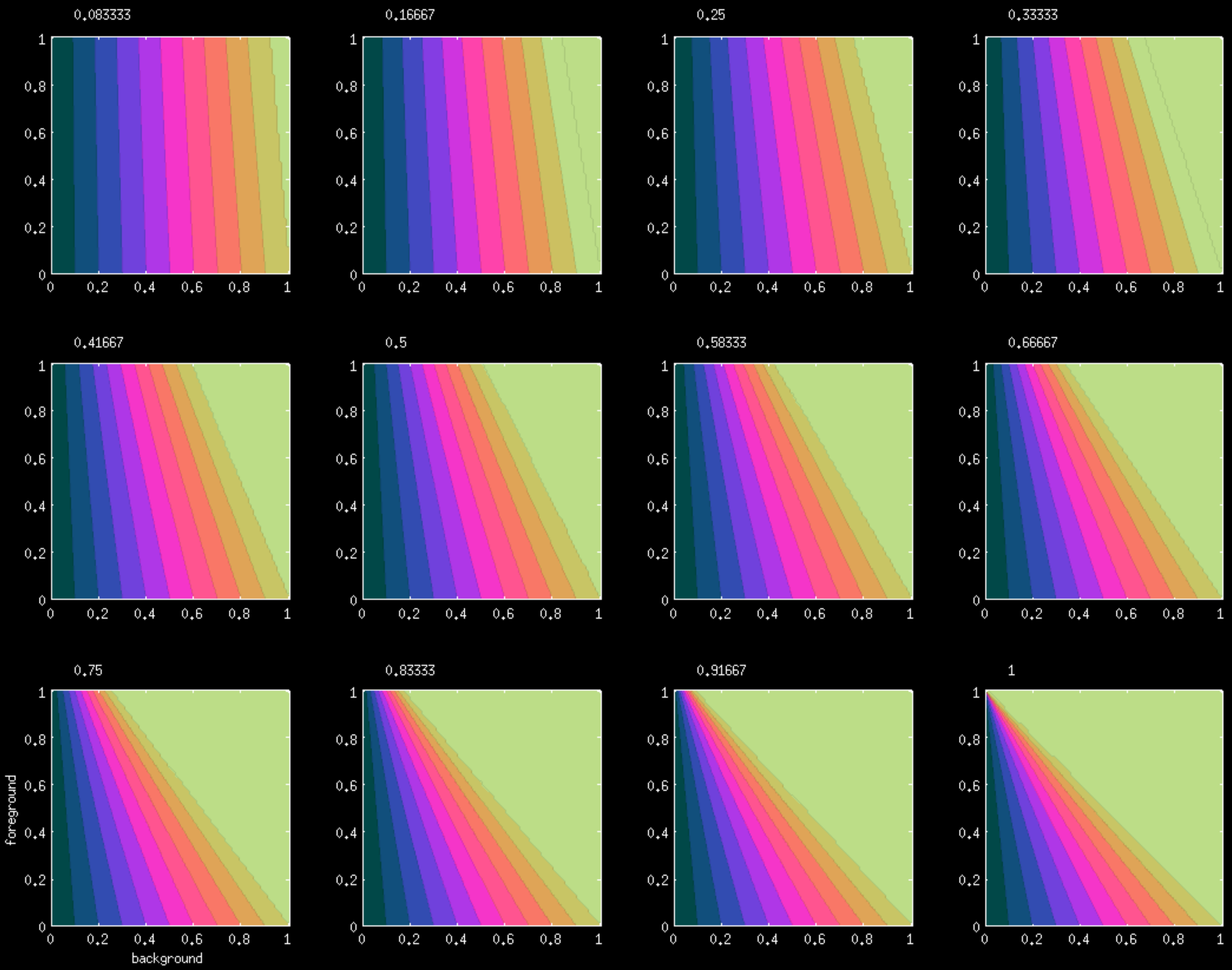
Z = Foreground


R vs BG
R vs FG
Contour
Gradient Angle (R)
Gradient Angle (R-BG)
|Symmetry Error|
Formulae
softlight
max(dR/dBG): 0.0199
relative speed: 12.8806
RMS value err: 0.0268
RMS sym err: 0.0752
R=I.^2 + 2*M.*I.*(1-I);
softlightps
max(dR/dBG): 0.1000
relative speed: 6.9040
RMS value err: 0.0068
RMS sym err: 0.0435
hi=M>0.5;
R=(I+(2*M-1).*(sqrt(I)-I)).*hi ...
+ (I-(1-2*M).*I.*(1-I)).*~hi;
softlightsvg
max(dR/dBG): 0.0388
relative speed: 4.5183
RMS value err: 0.0079
RMS sym err: 0.0339
m1=M<=0.50;
m2=I<=0.25;
m3=~m1 & m2;
m4=~m1 & ~m2;
R=(I - (1-2*M).*I.*(1-I)).*m1 ...
+ (I + (2*M-1).*(4*I.*(4*I + 1).*(I-1) + 7*I)).*m3 ...
+ (I + (2*M-1).*(I.^0.5 - I)).*m4;
softlighteb
max(dR/dBG): 0.1000
relative speed: 1.8323
RMS value err: 0.0046
RMS sym err: 0.0074
R=I.^(M.^2 - 2.5*M + 2);
softlighteb2
max(dR/dBG): 0.1000
relative speed: 1.0000
RMS value err: 0.0000
RMS sym err: 0.0000
amount=0.5*max(amount,0)+0.5;
R=I.^((amount*2).^(amount*(1-2*M)));
R
FG
BG
Angle
Magnitude
0
1
45
180
0.25

softlighteb2



colordodge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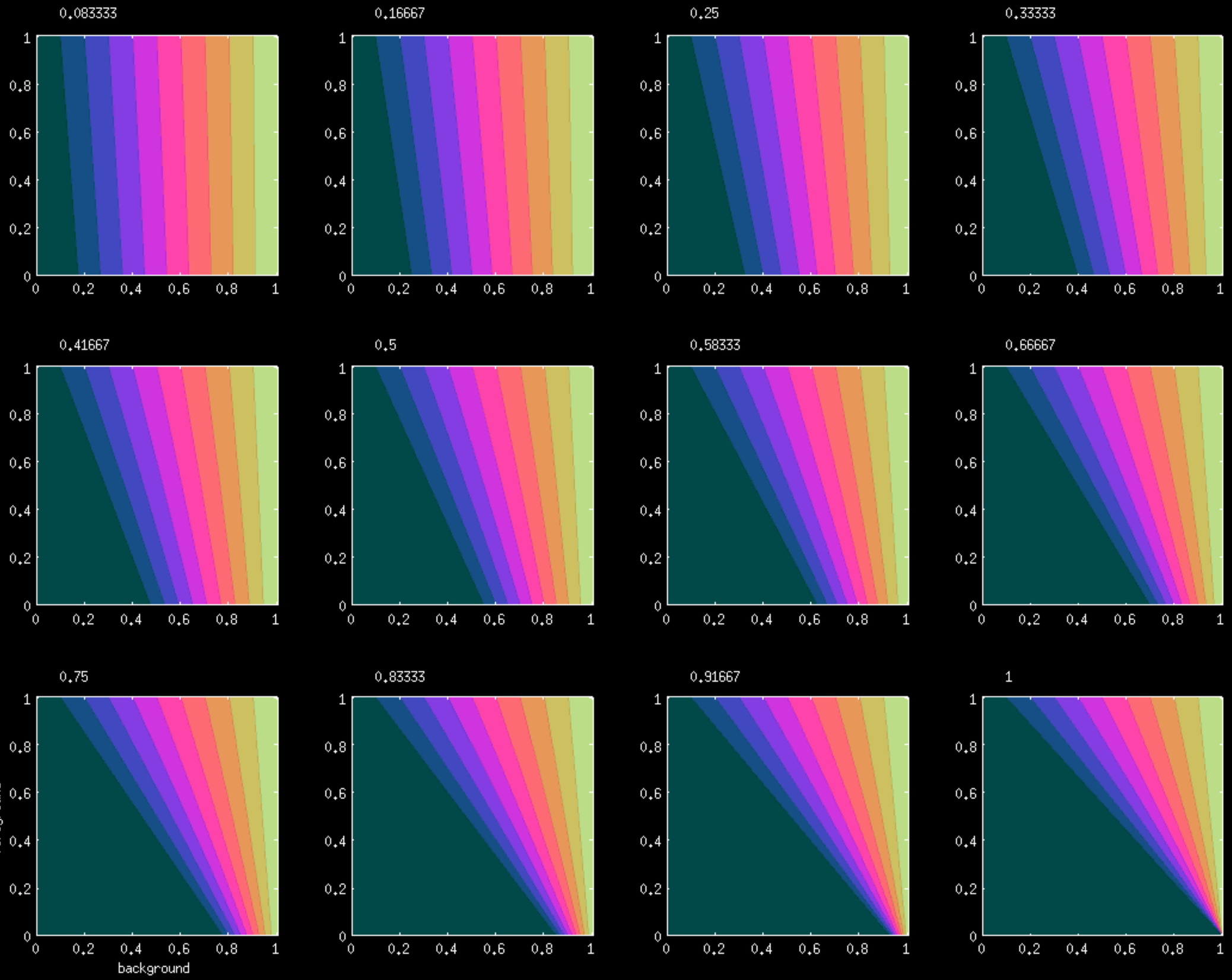
0.25
0.33333
0.41667
0.5
0.58333
0.66667
0.75
0.83333
0.91667
1
foreground
background
0
0.2
0.4
0.6
0.8
1

colorburn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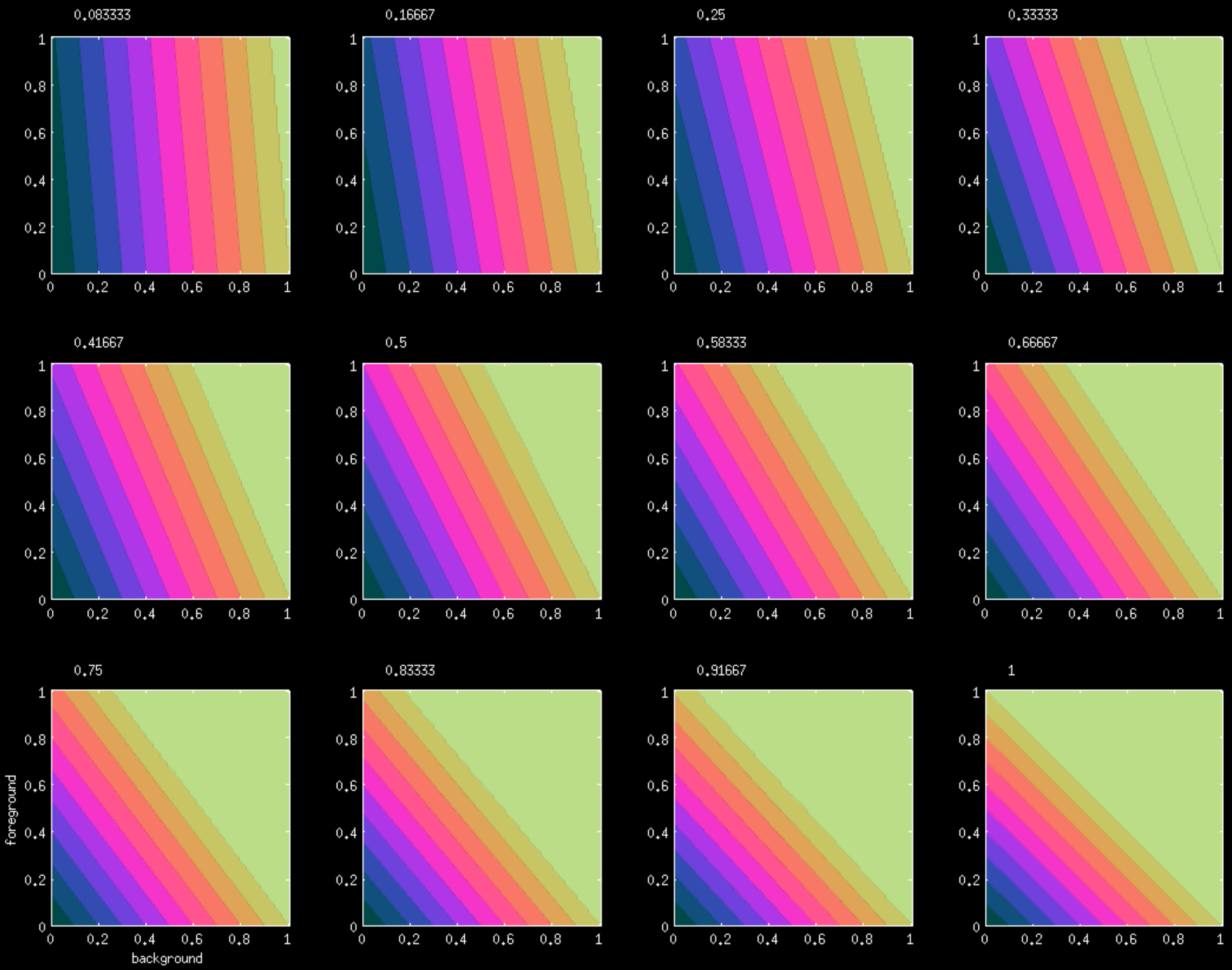
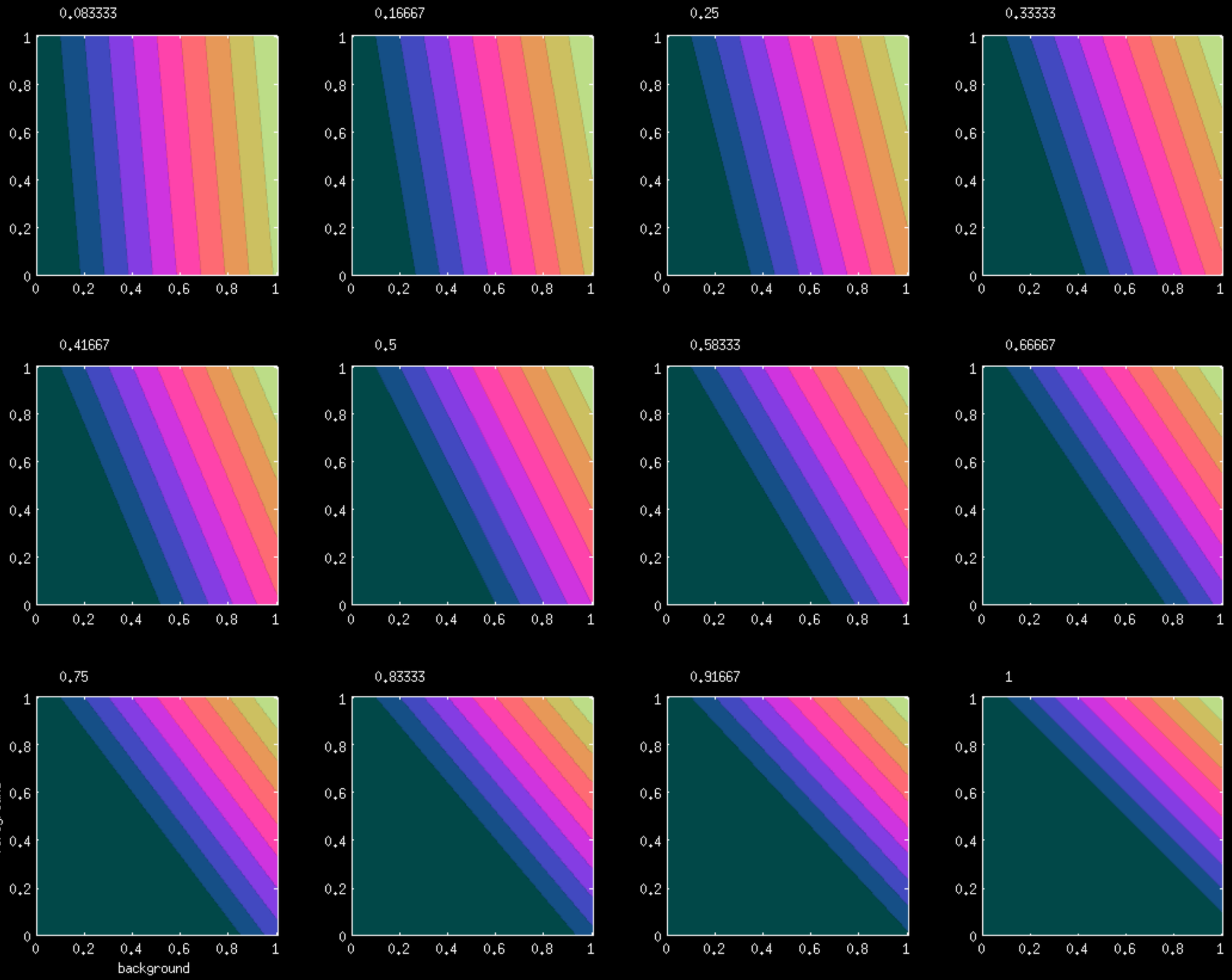
0.5
0.58333
0.66667
0.75
0.83333
0.91667
1
foreground
background
0
0.2
0.4
0.6
0.8
1

lineardodge



linearburn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0.66667
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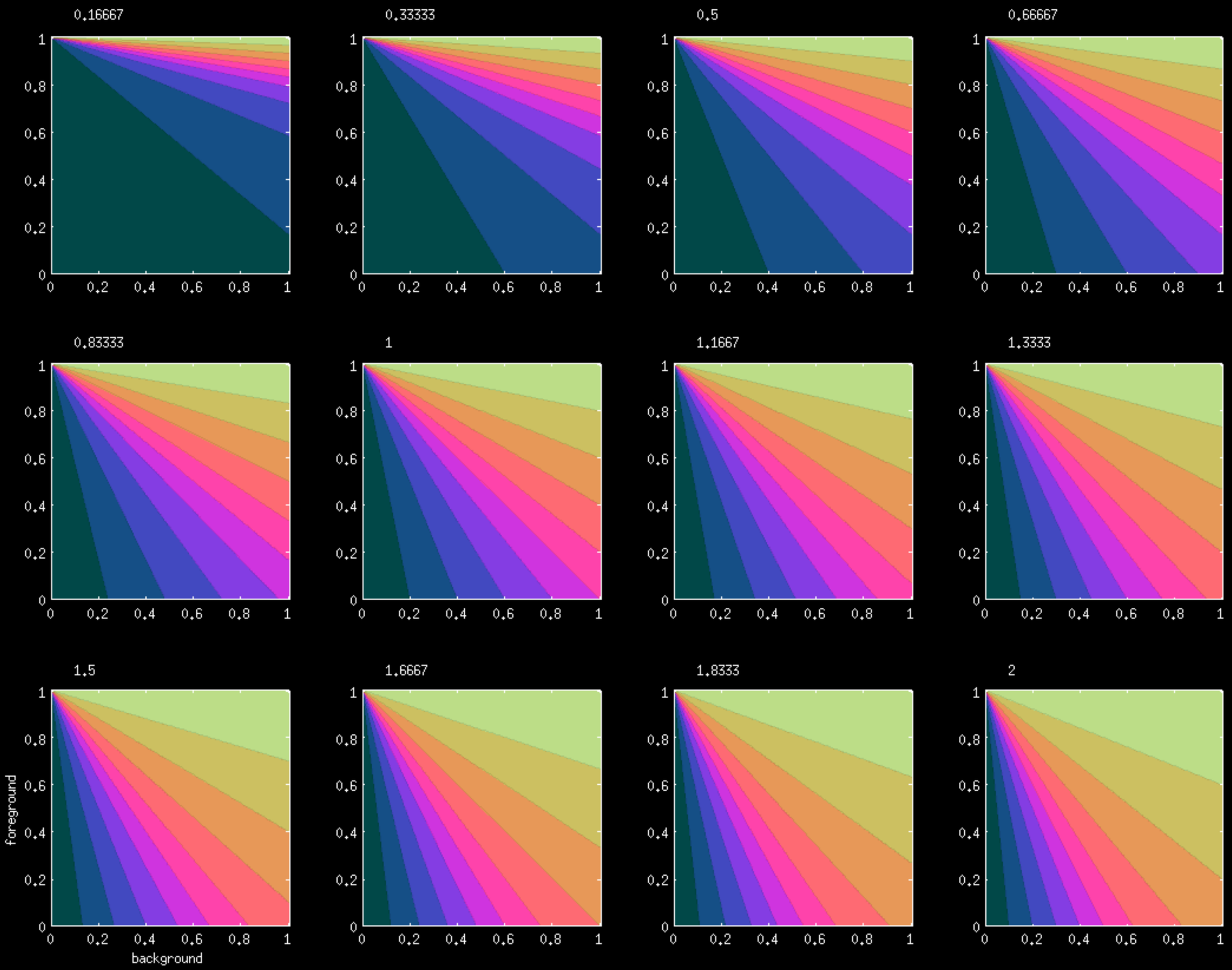
foreground
background
0
0.2
0.4
0.6
0.8
1

softdodge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foreground
background
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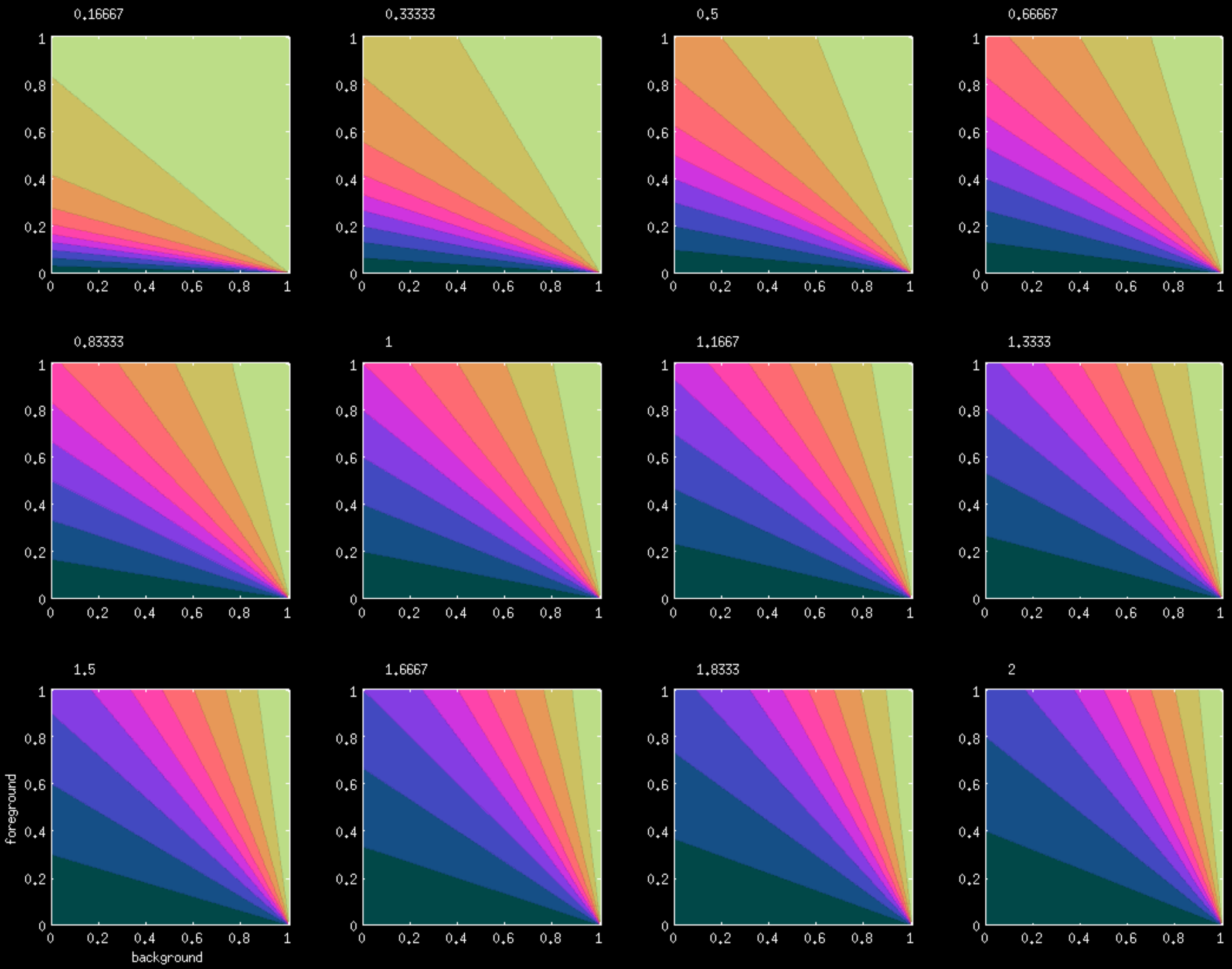
0.2
0.4
0.6
0.8
1

softburn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0.83333
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1.3333
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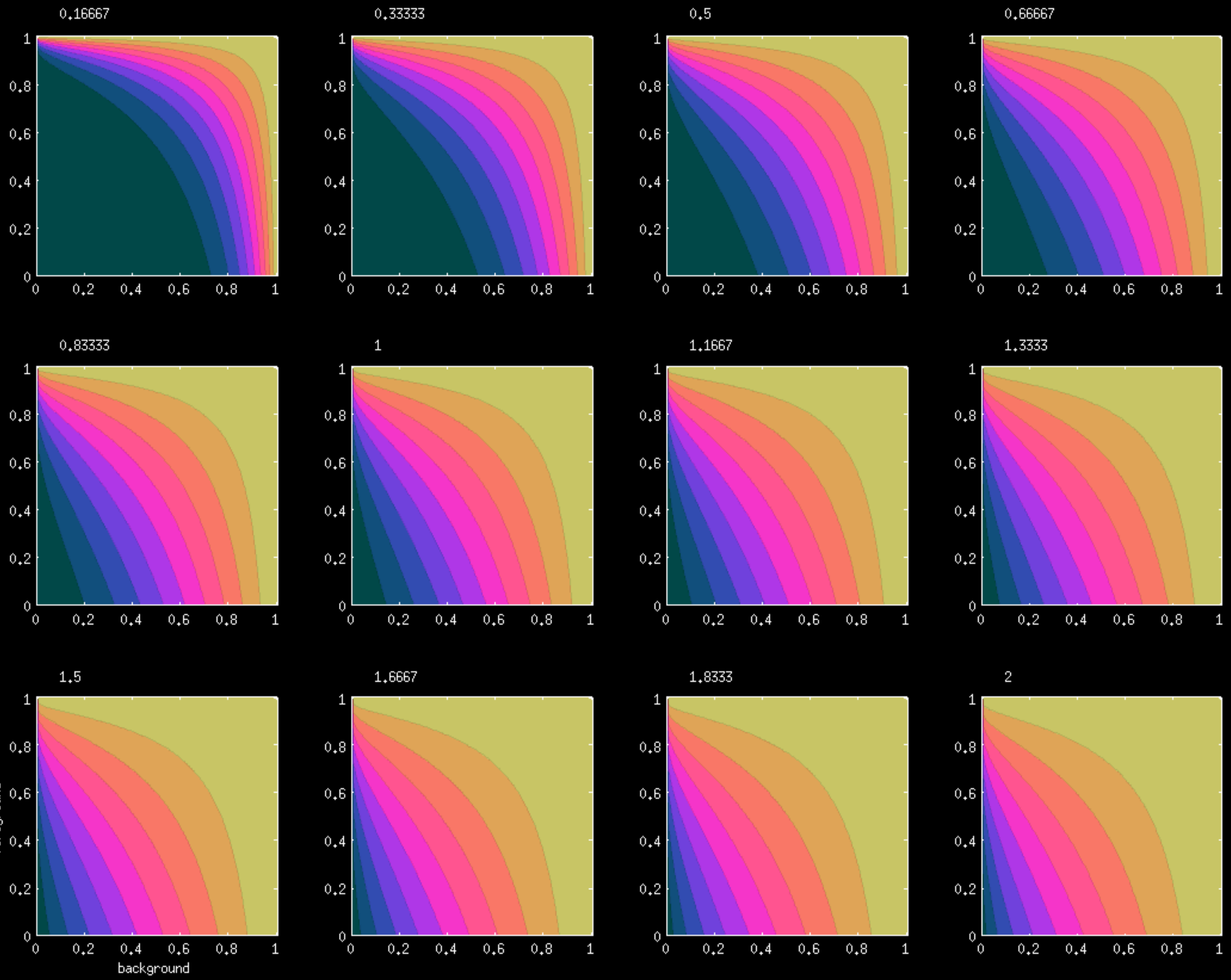
1.8333
2
foreground
background
0
0.2
0.4
0.6
0.8
1

easydodge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0.66667
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1
1.1667
1.3333
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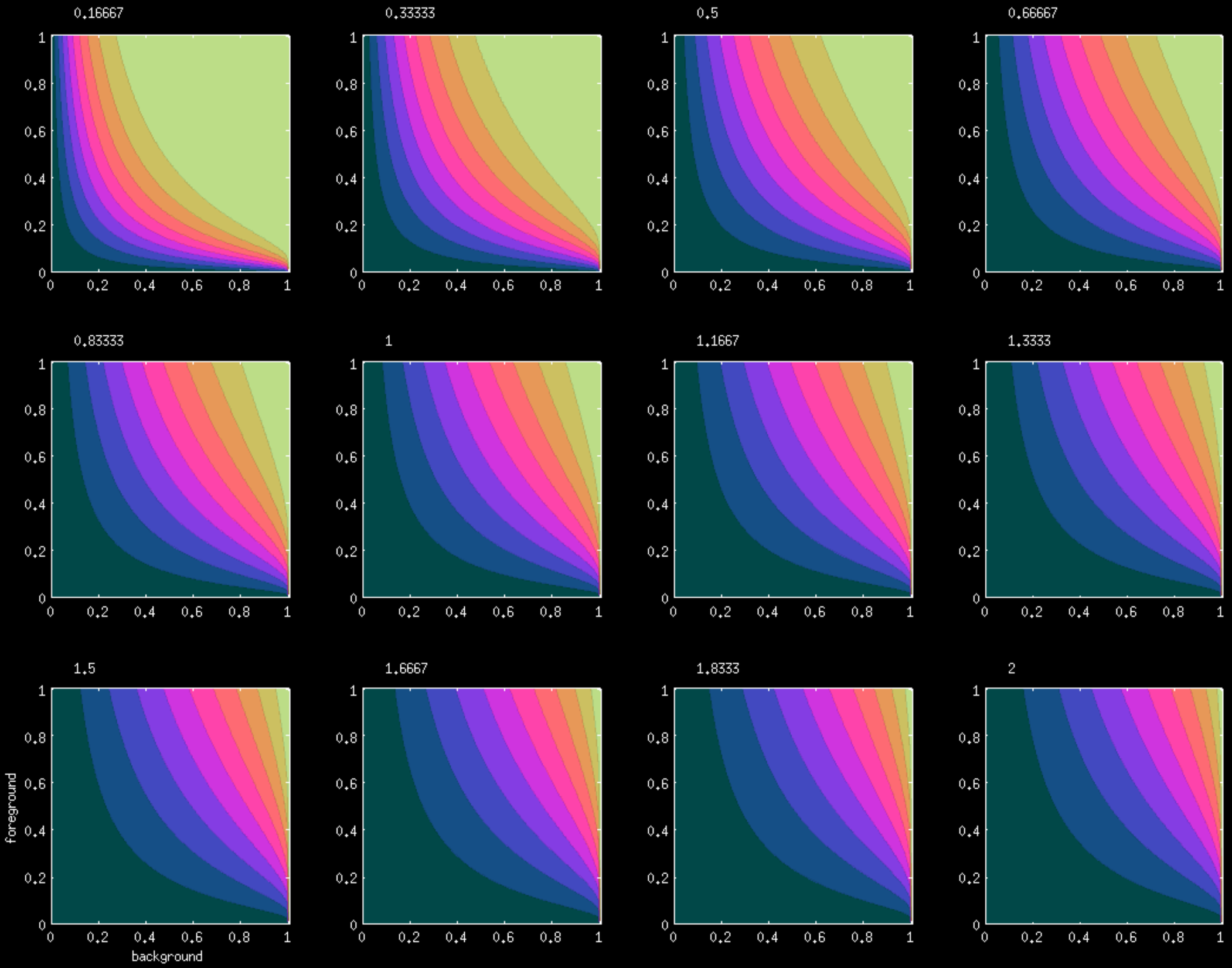
1.8333
2
foreground
background
0
0.2
0.4
0.6
0.8
1

easyburn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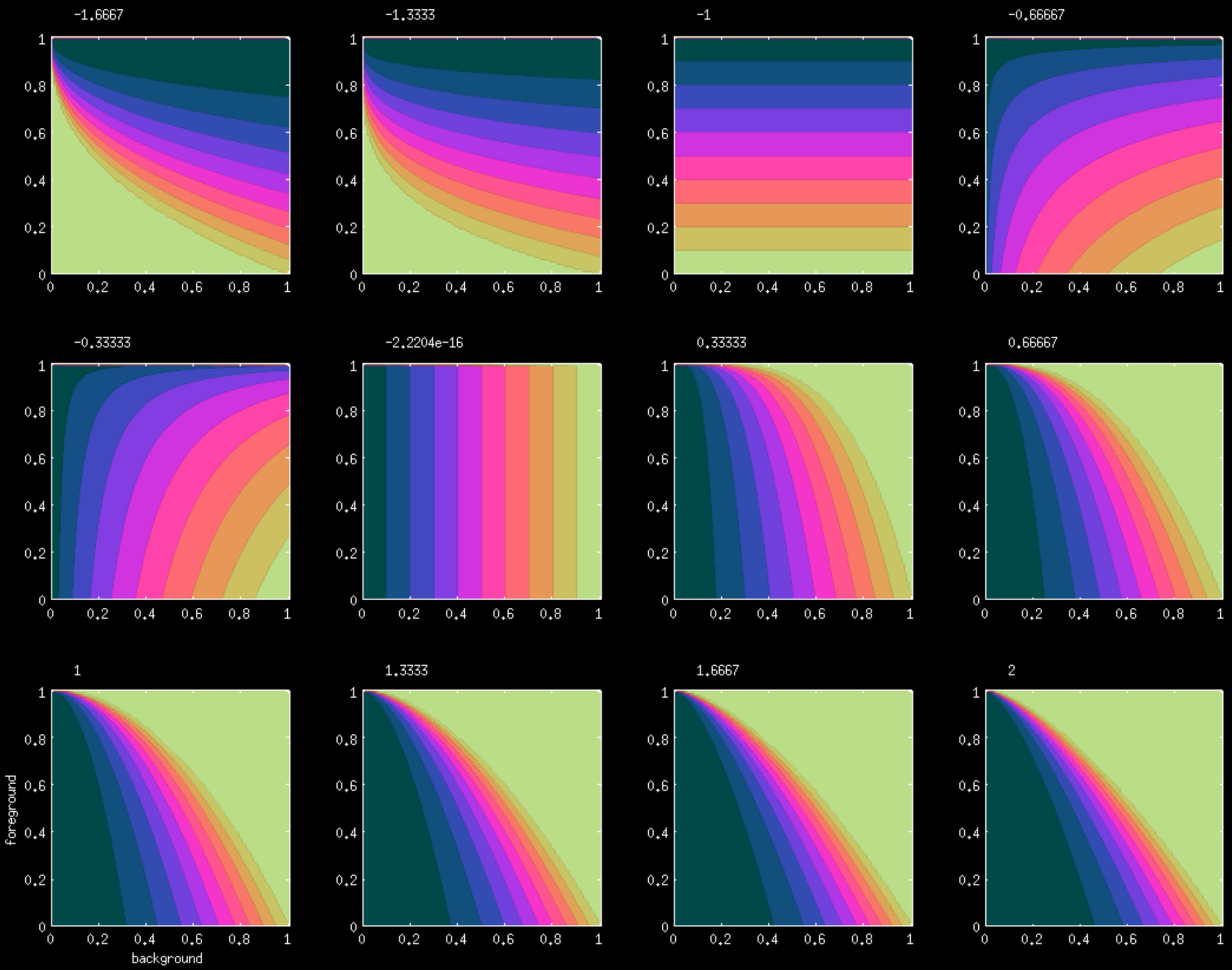
0.66667
0.83333
1
1.1667
1.3333
1.5
1.6667
1.8333
2
foreground
background
0
0.2
0.4
0.6
0.8
1

glow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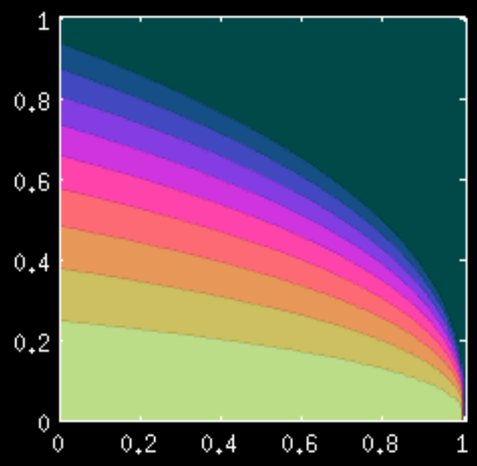
-1
-0.66667
-0.33333
-2.2204e-16
0.33333
0.66667
1
1.3333
1.6667
2
foreground
background
0
0.2
0.4
0.6
0.8
1

heat

-1.6667



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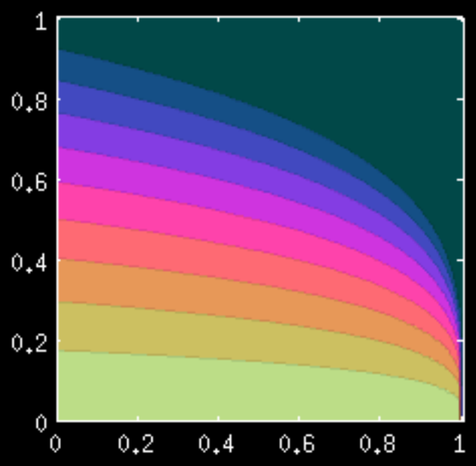

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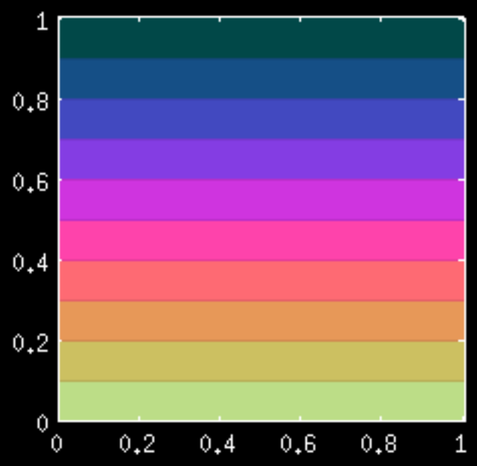

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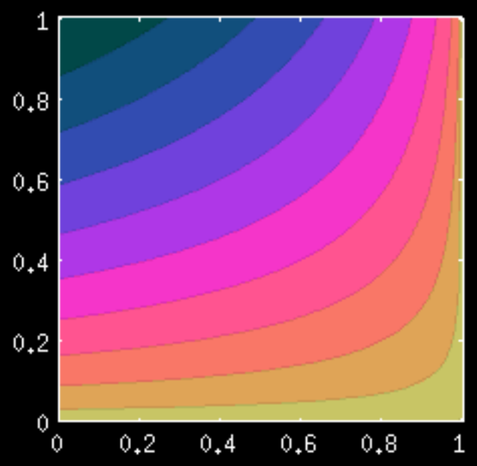

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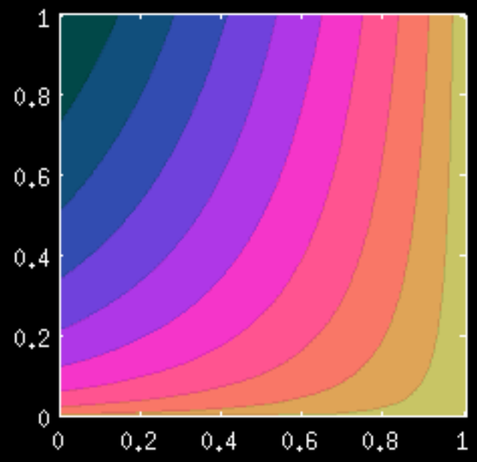

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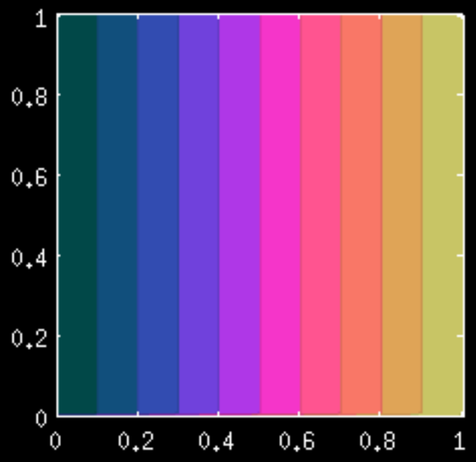

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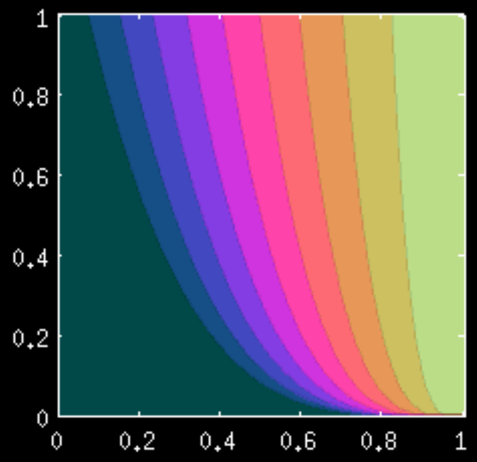

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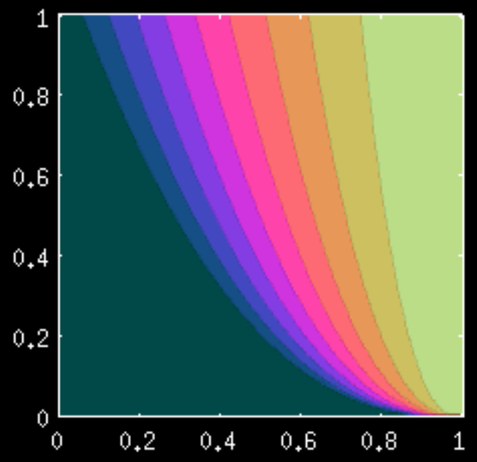

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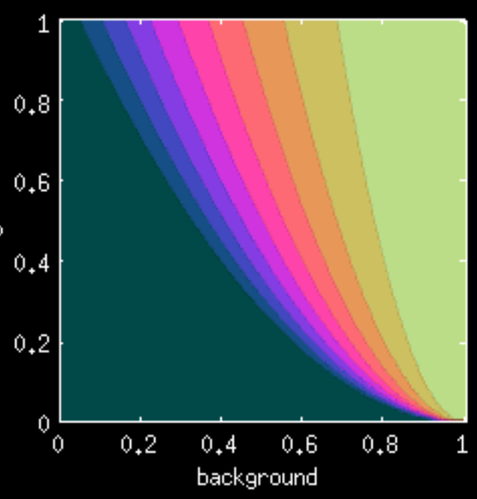

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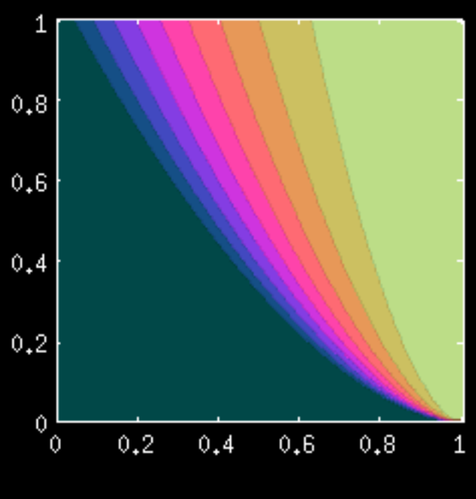

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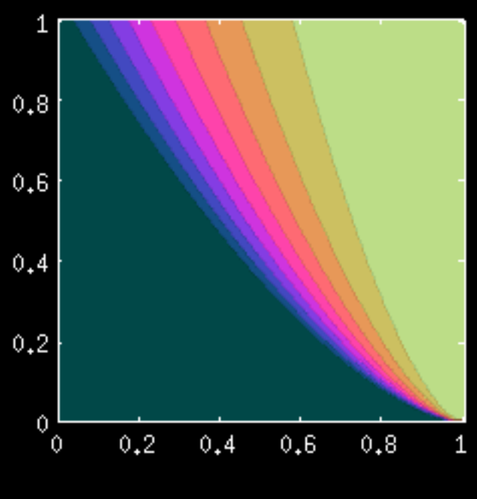

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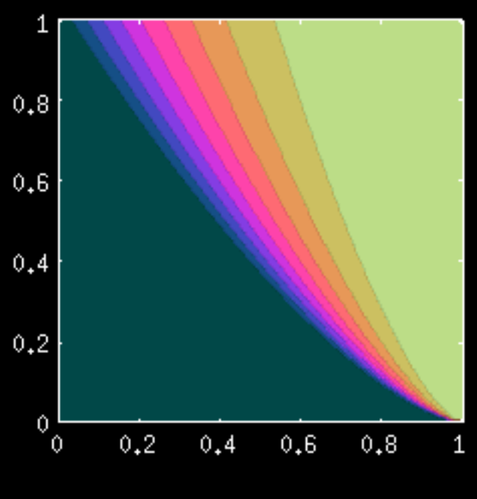
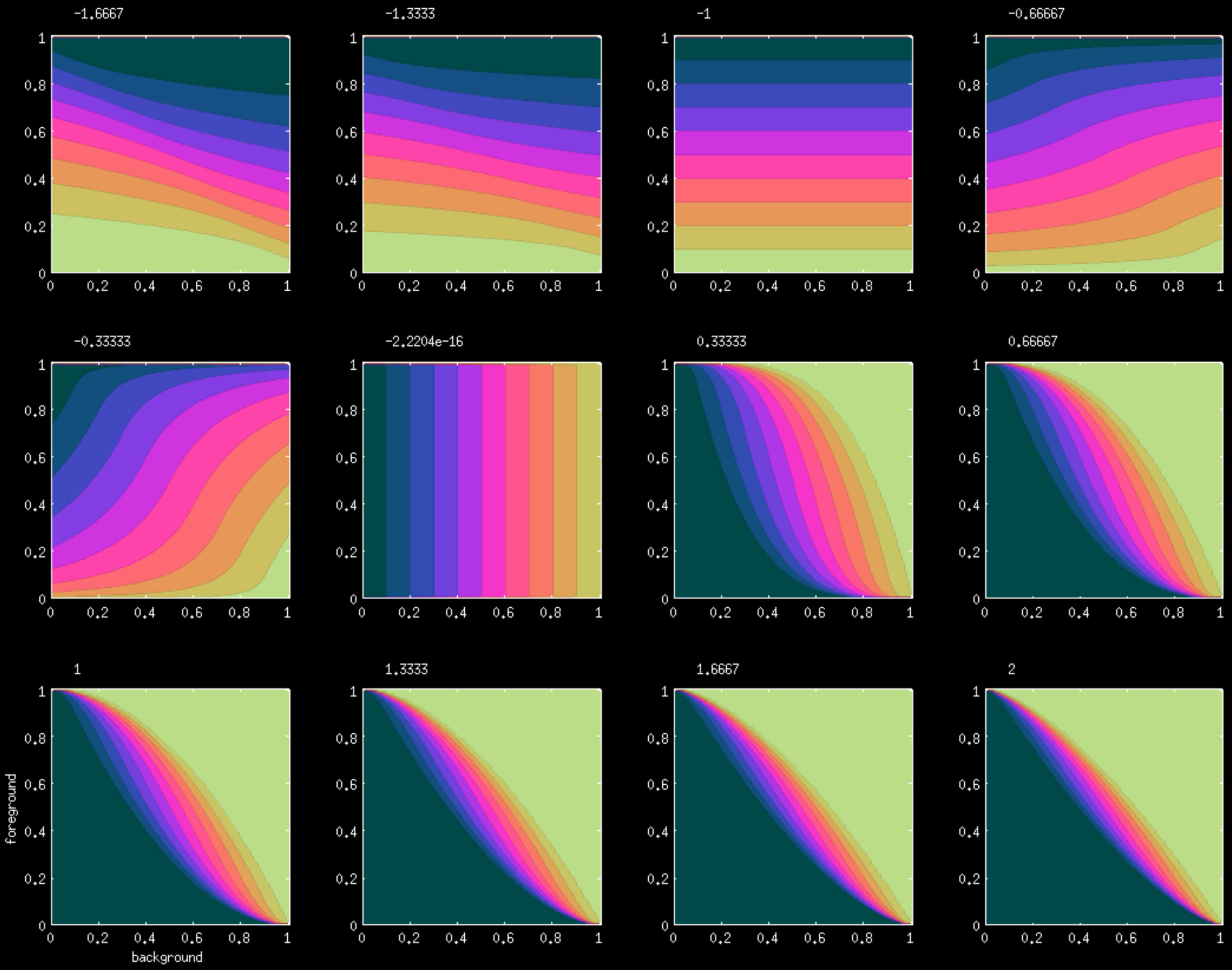


gleat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-1
-0.66667
-0.33333
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0.33333
0.66667
1
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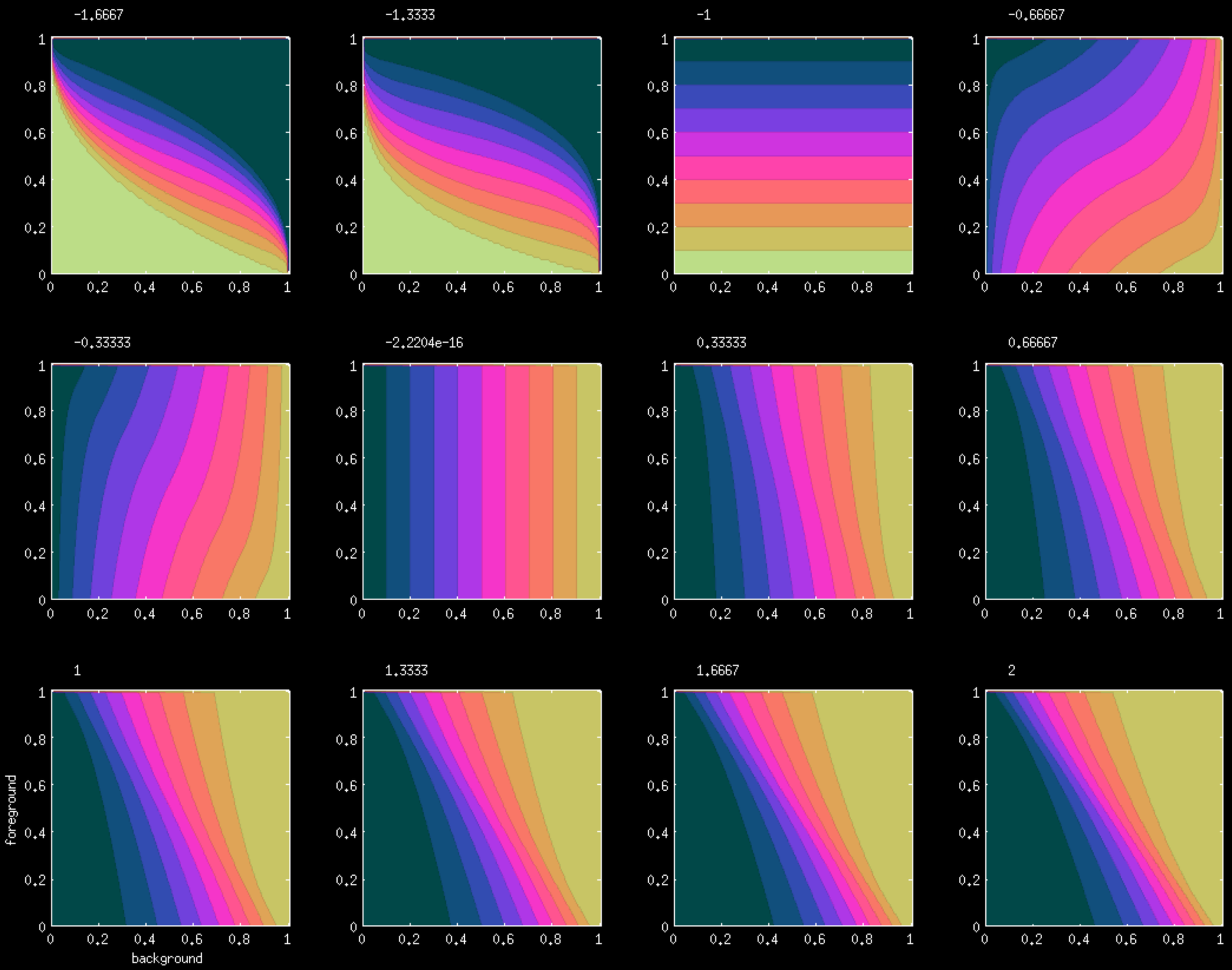
1.6667
2
foreground
background
0
0.2
0.4
0.6
0.8
1

below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-1
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1
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2
foreground
background
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0.2
0.4
0.6
0.8
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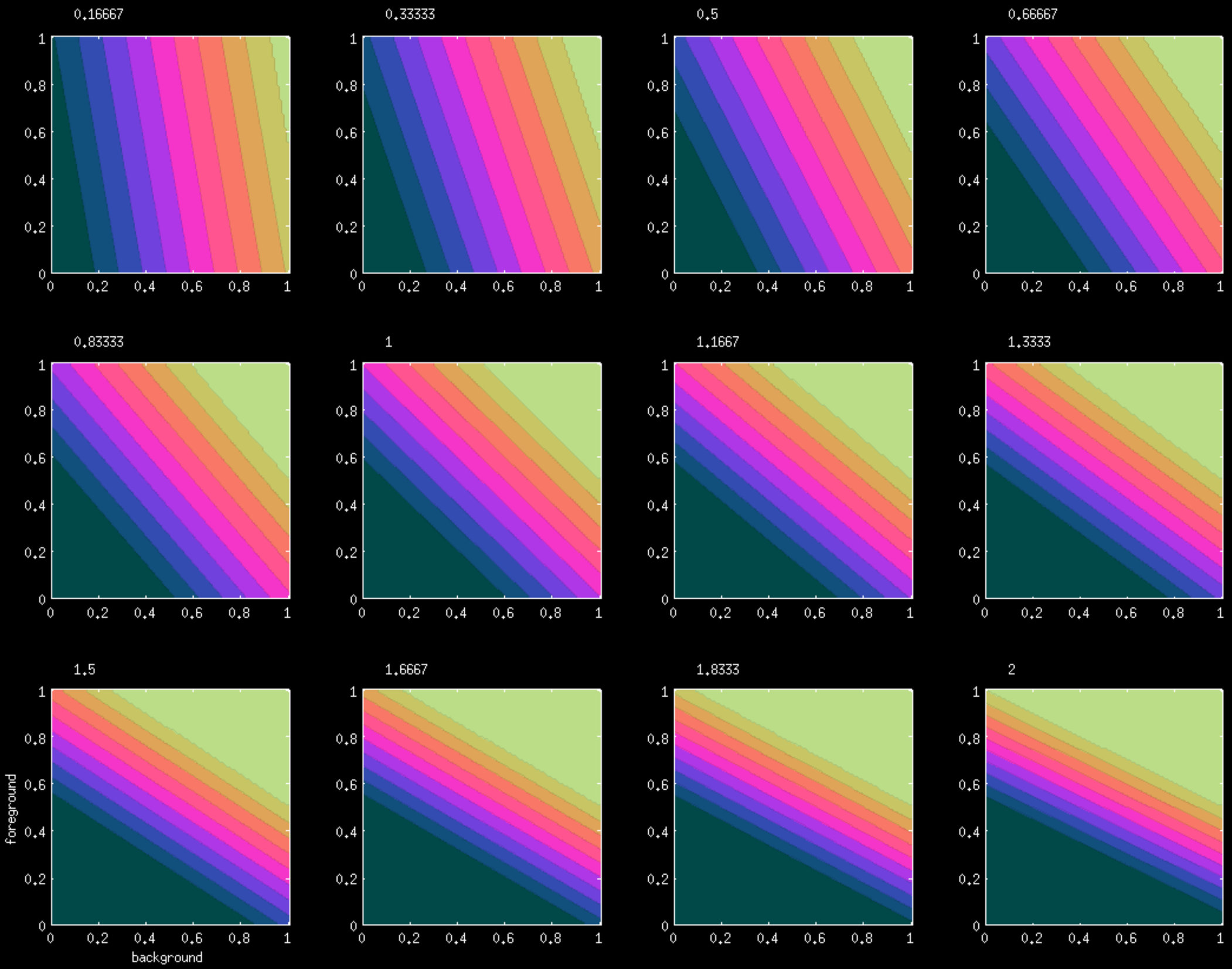
scaleadd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1
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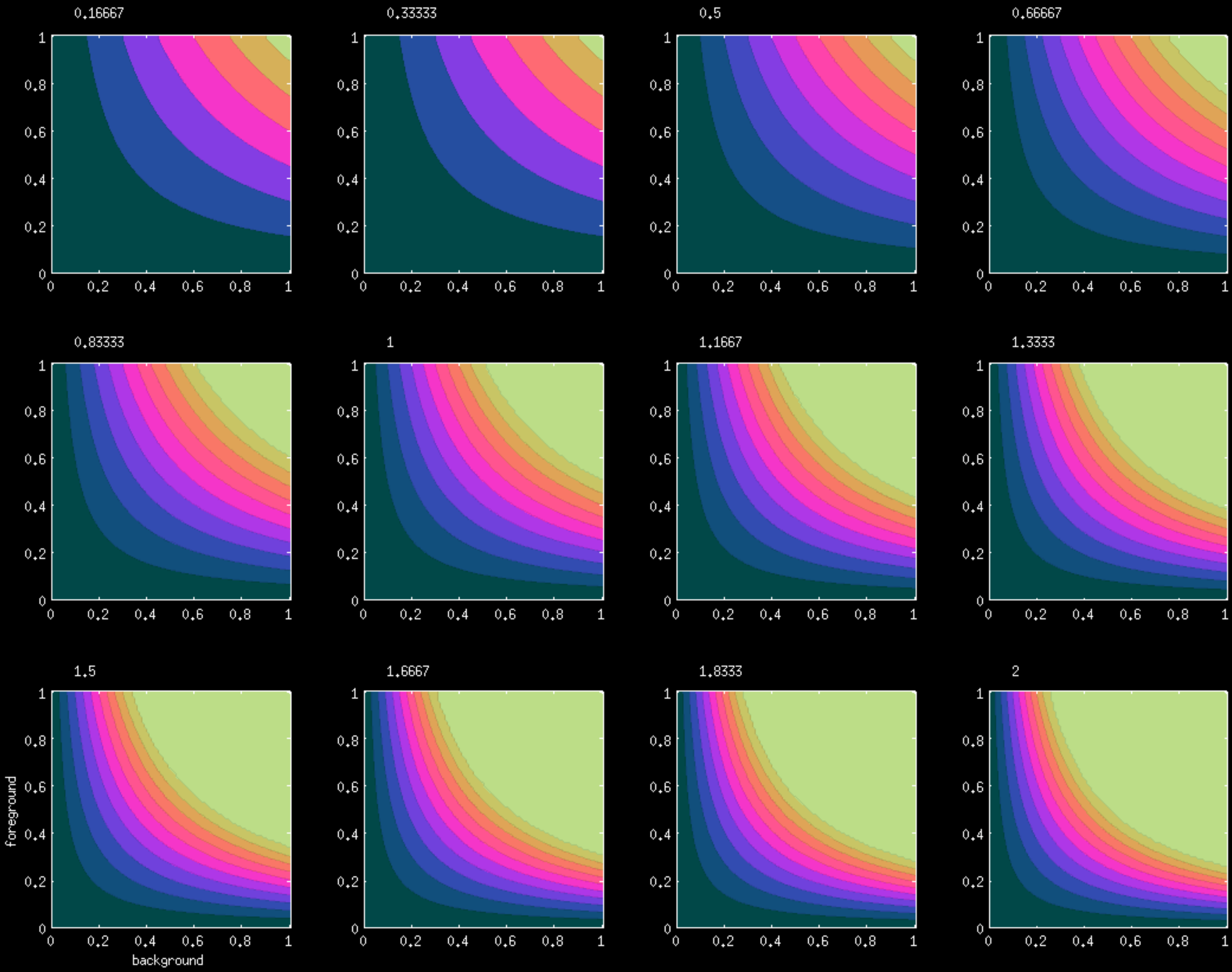
1.8333
2
foreground
background
0
0.2
0.4
0.6
0.8
1

scalemult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1.5
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1.8333
2
foreground
background
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0.2
0.4
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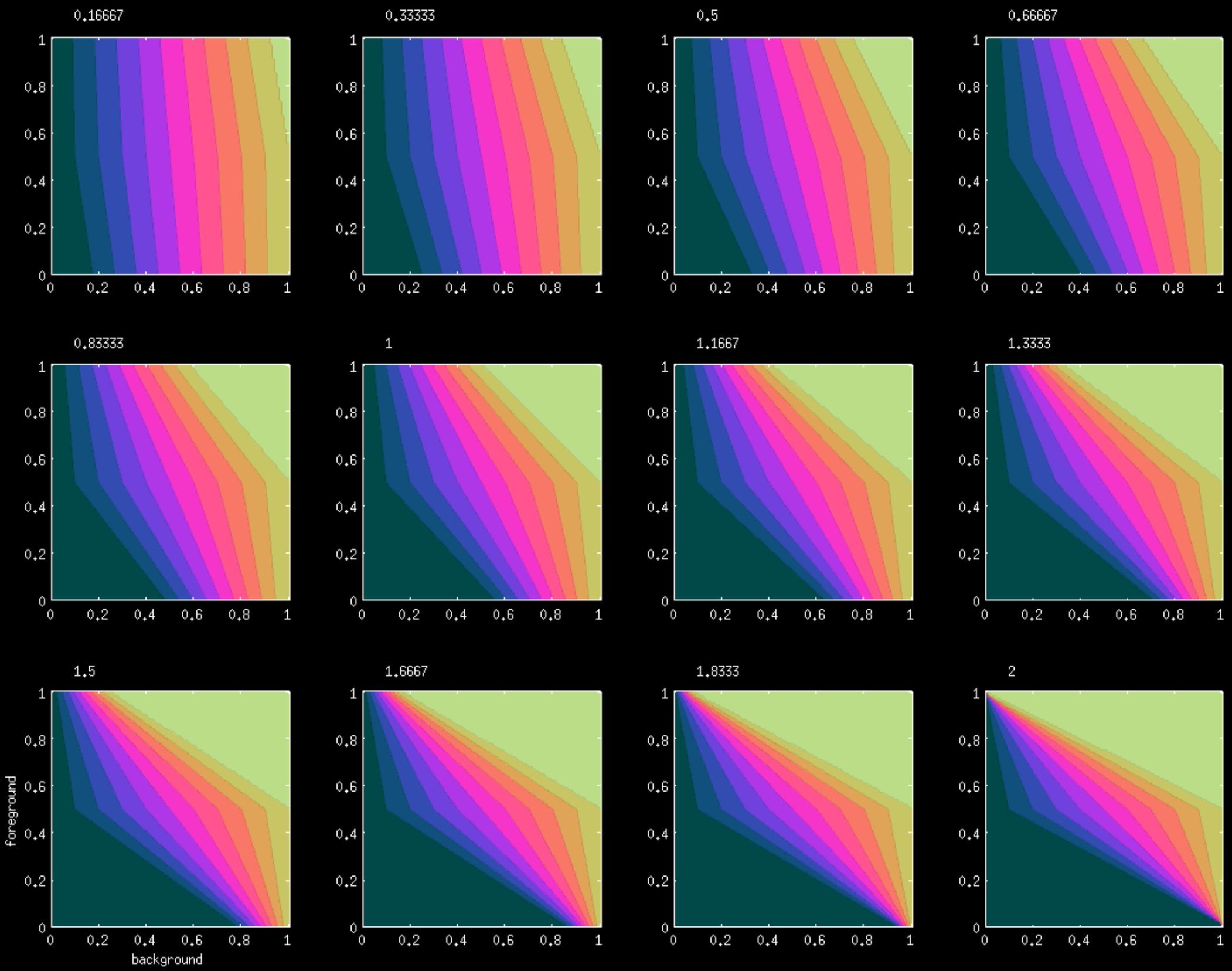
0.8
1

contrast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foreground
background
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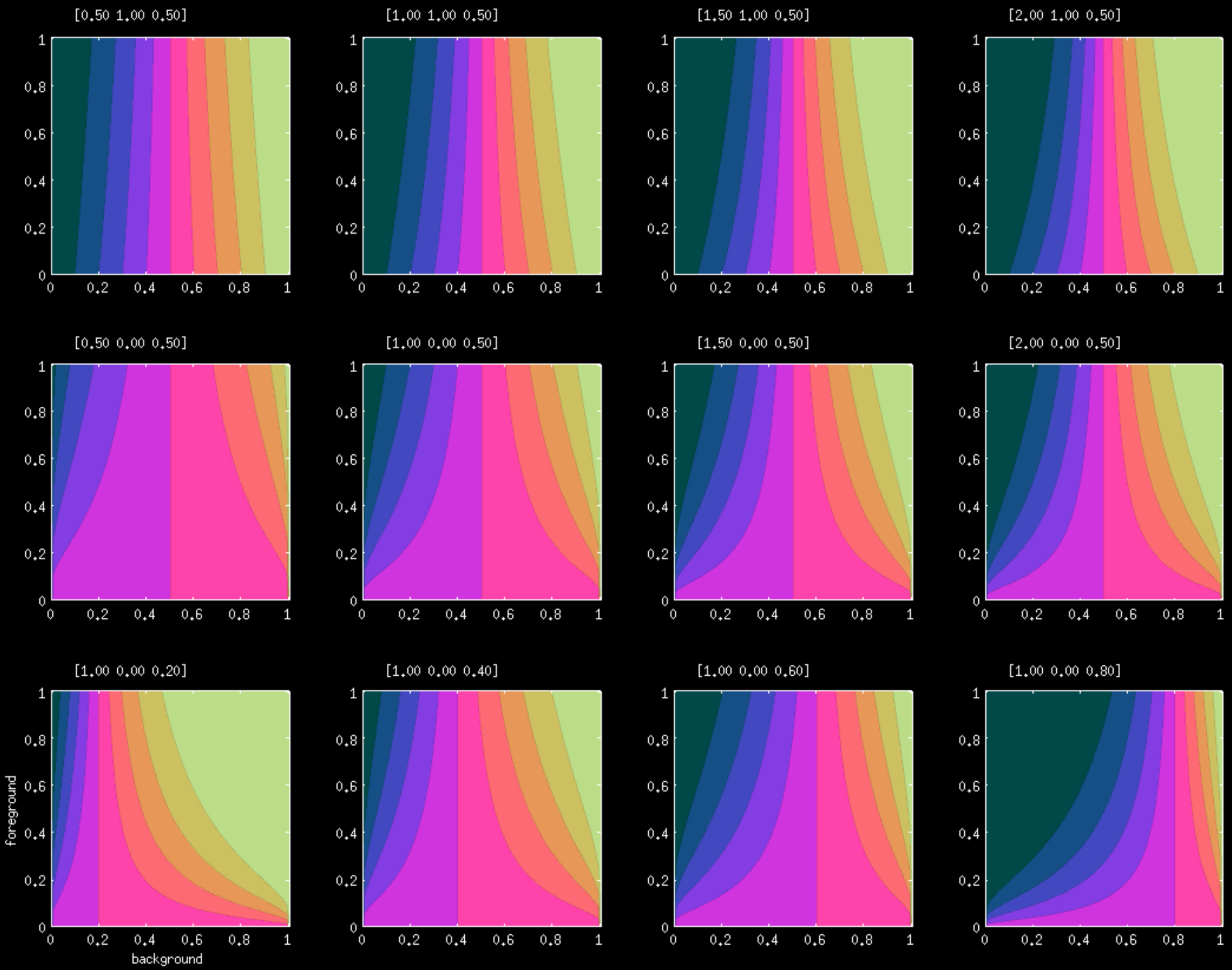
0.8
1

curves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[1.50 1.00 0.50]
[2.00 1.00 0.50]
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[1.00 0.00 0.50]
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[1.00 0.00 0.40]
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foreground
background
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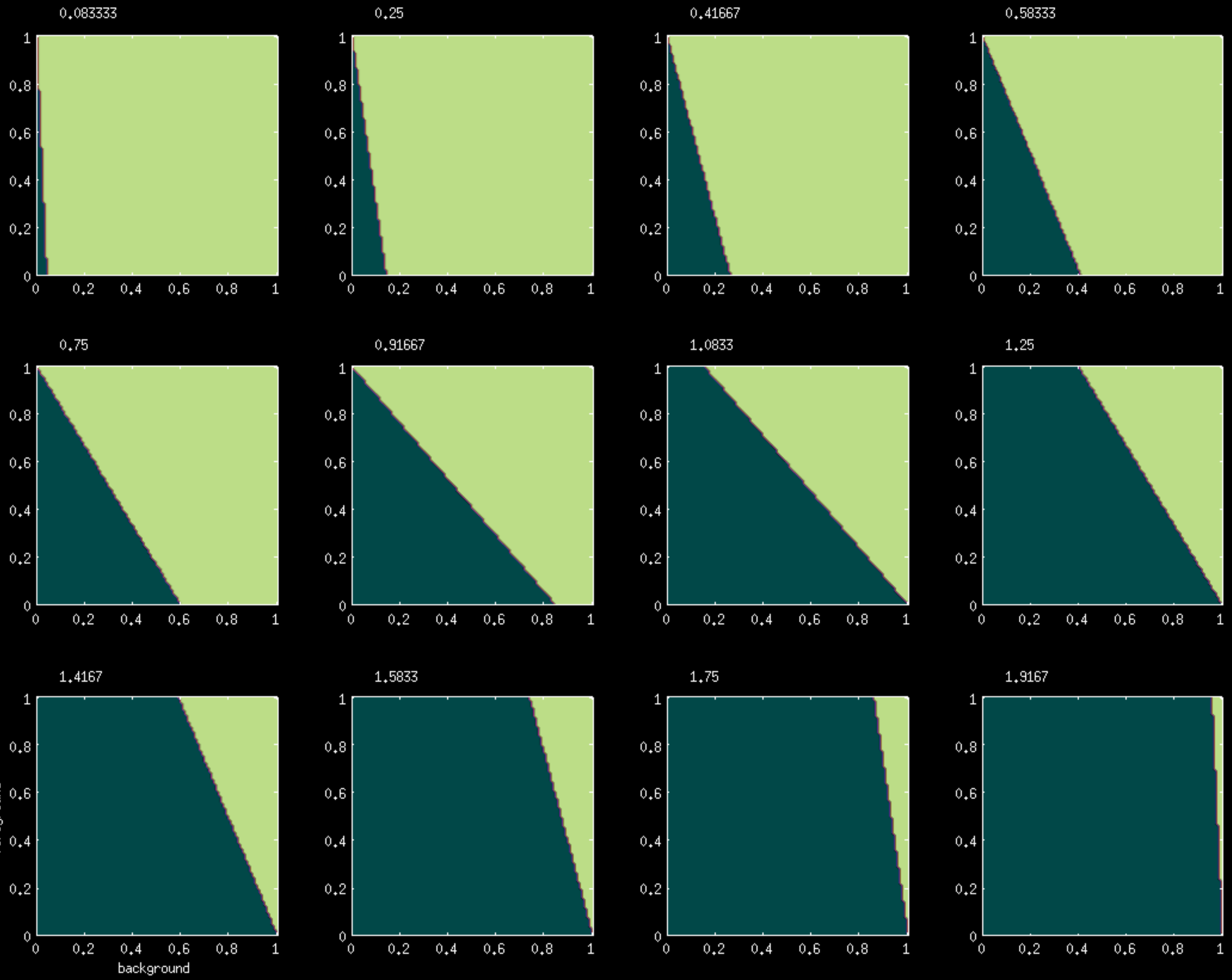
0.2
0.4
0.6
0.8
1

hardmix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foreground
background
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0.4
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0.8
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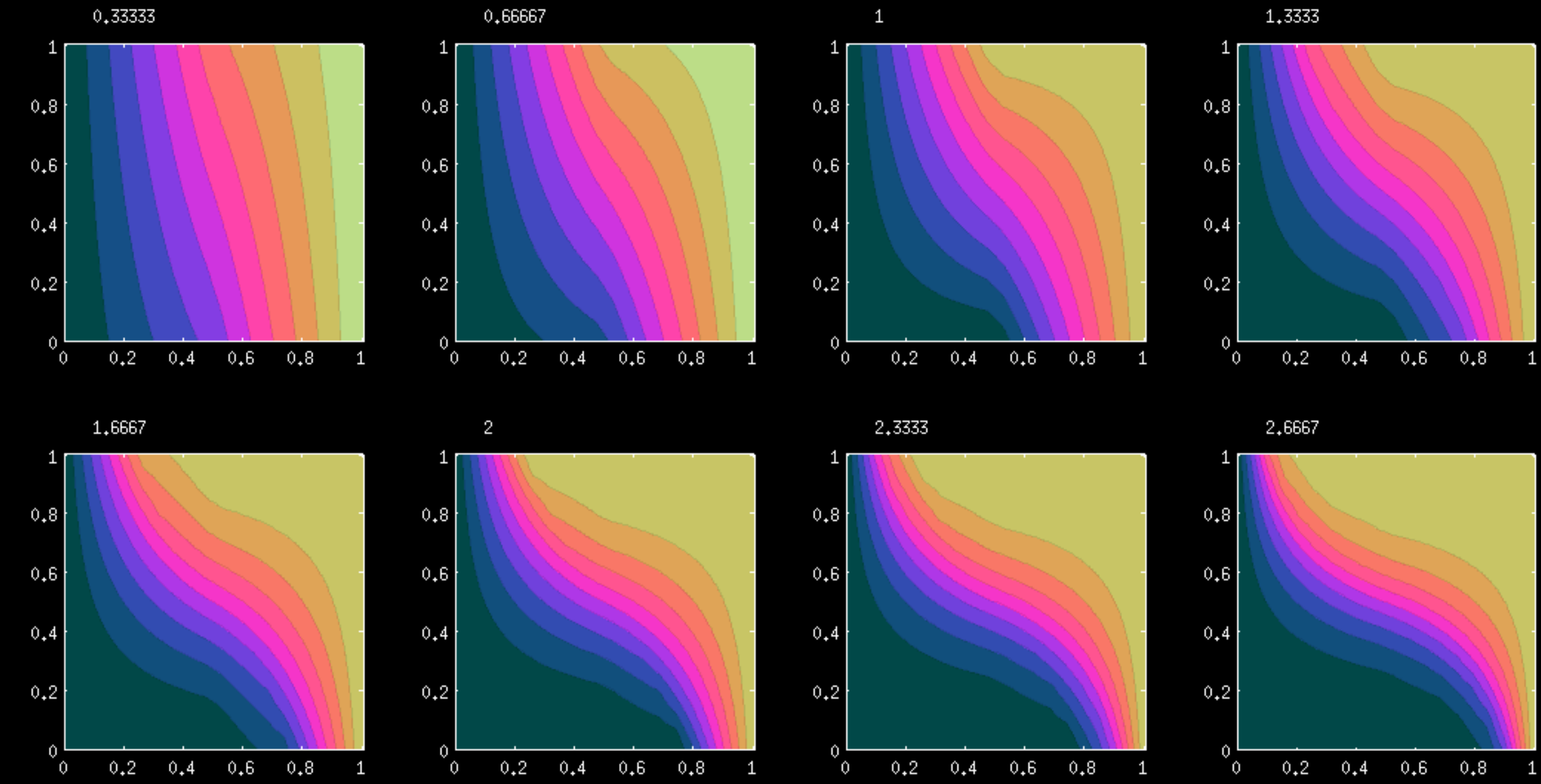
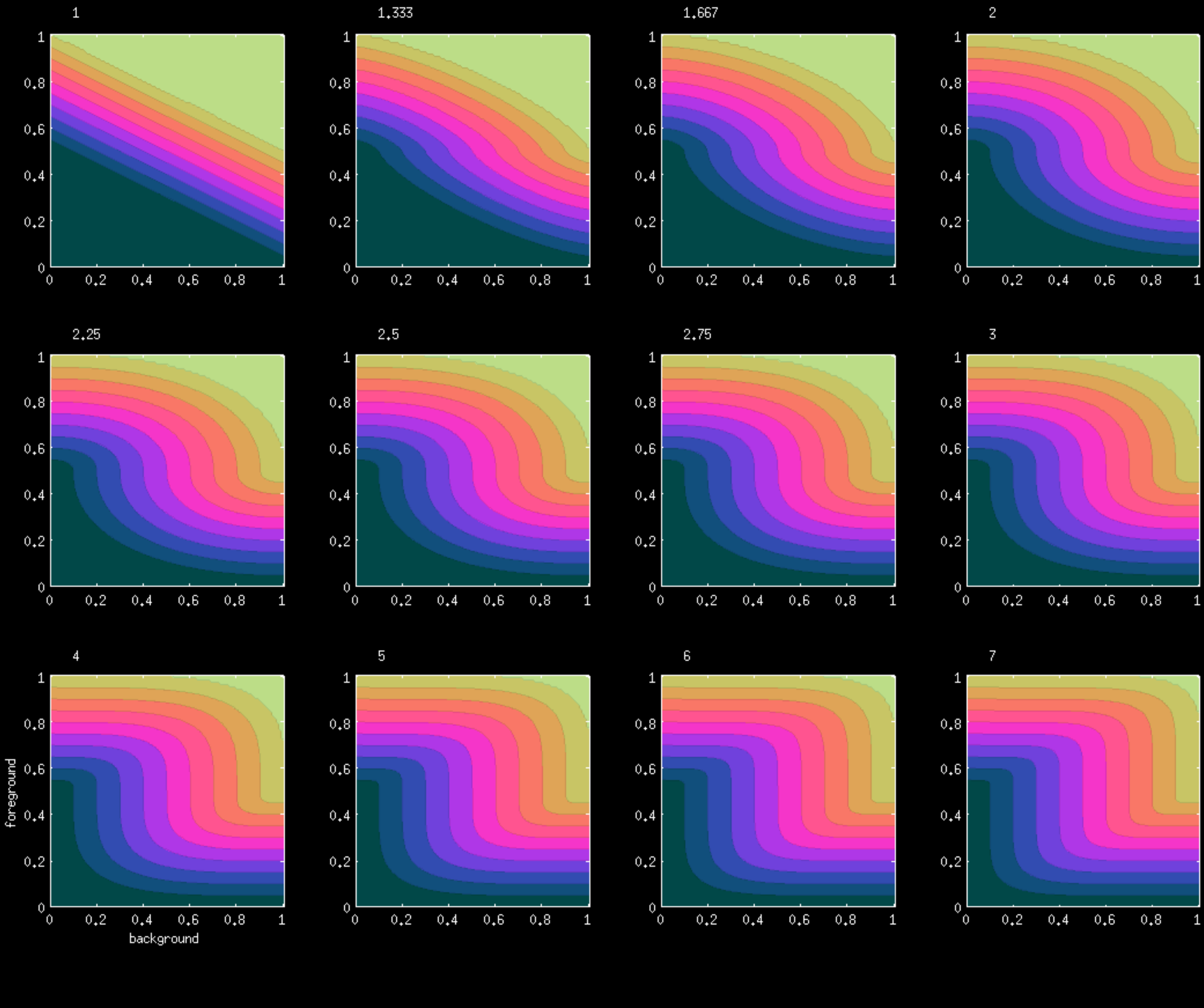
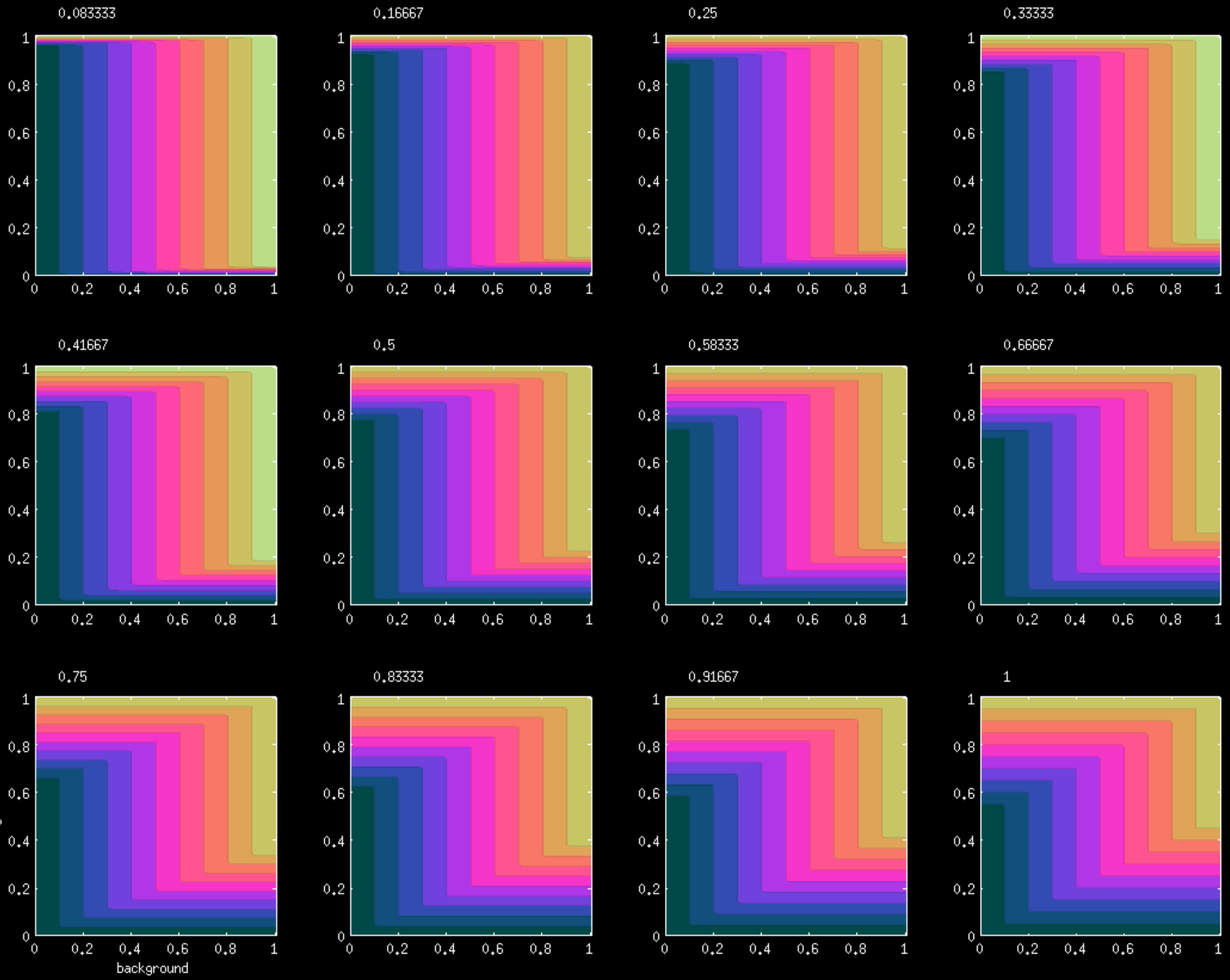
scalable overlay



superlight



pinlight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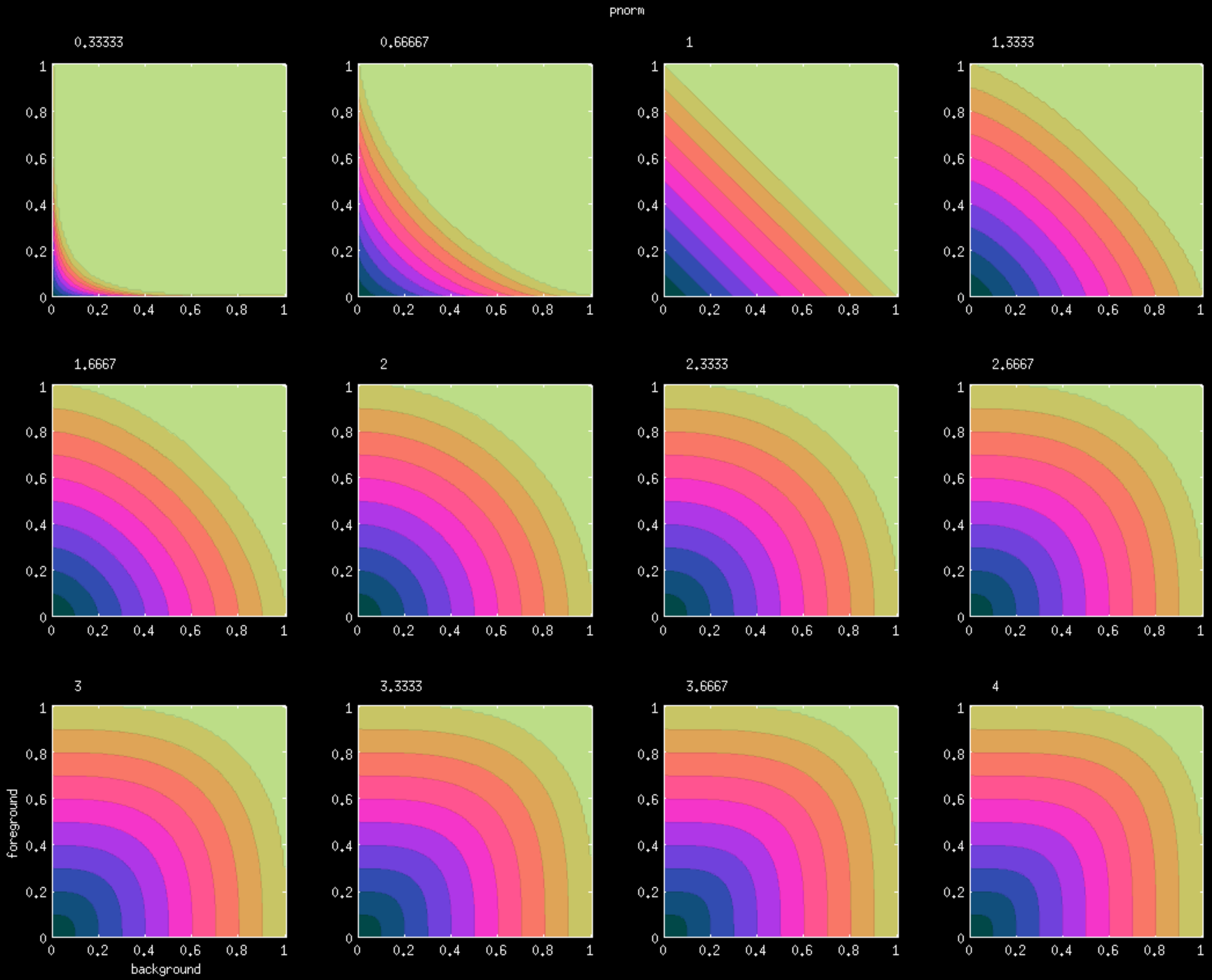
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1.6667
2
2.3333
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3
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3.6667
4
foreground
background
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0.2
0.4
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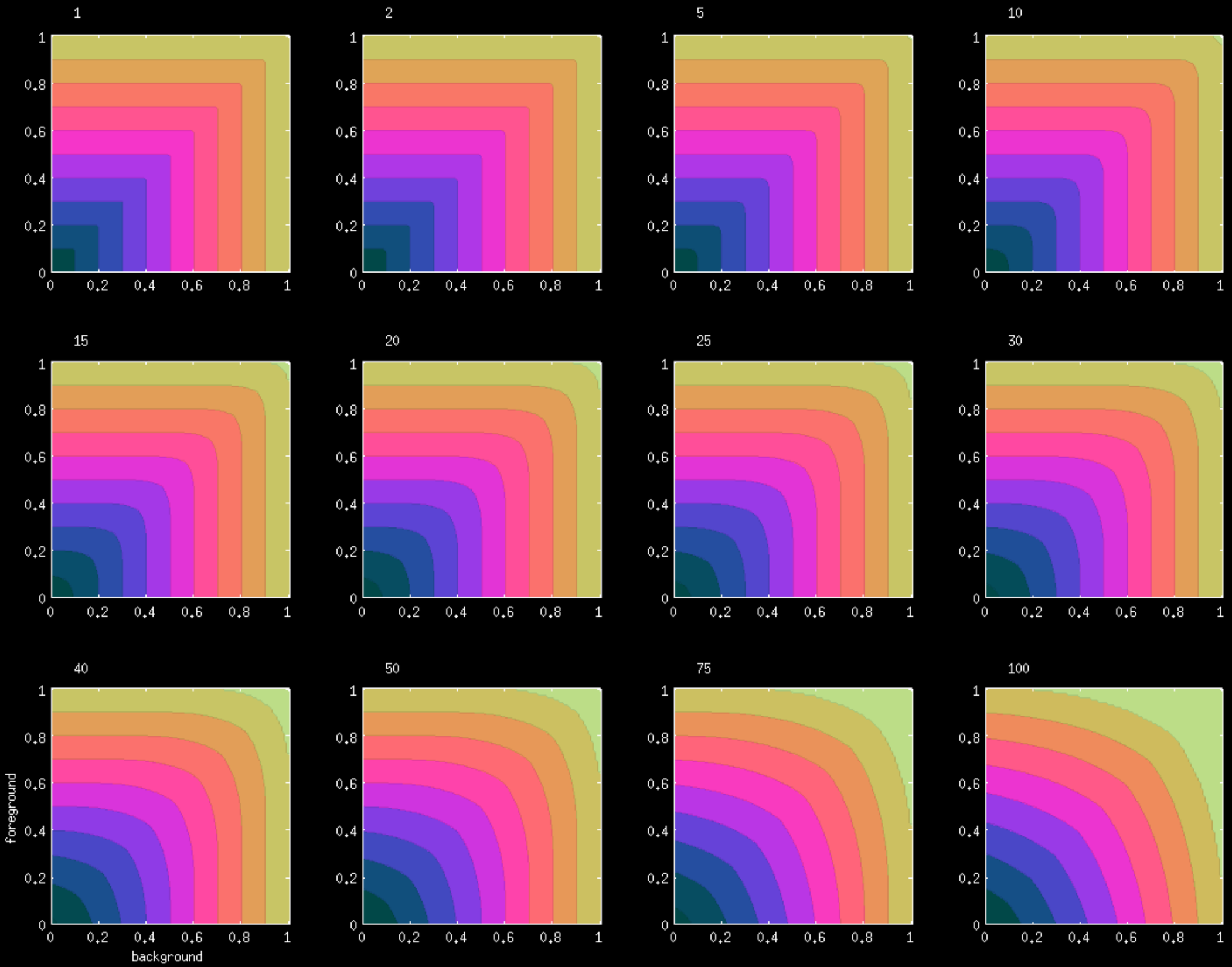
0.8
1

lightenrgb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15
20
25
30
40
50
75
100
foreground
background
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0.2
0.4
0.6
0.8
1