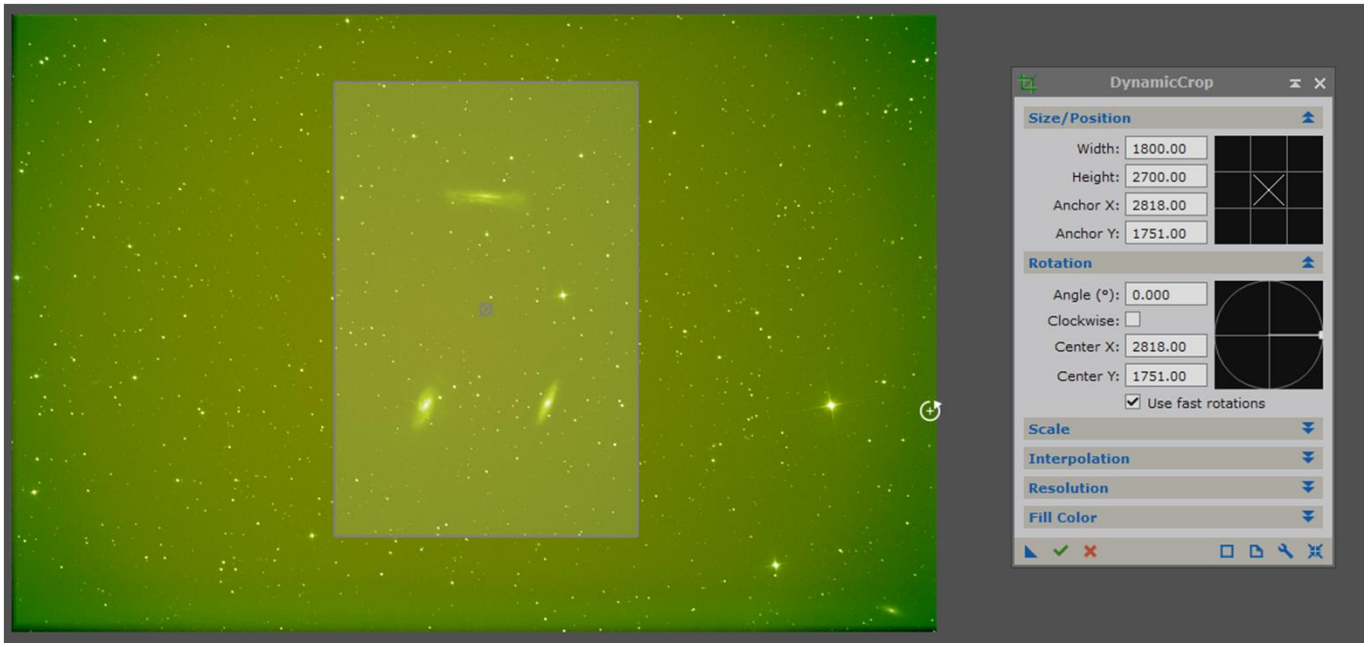
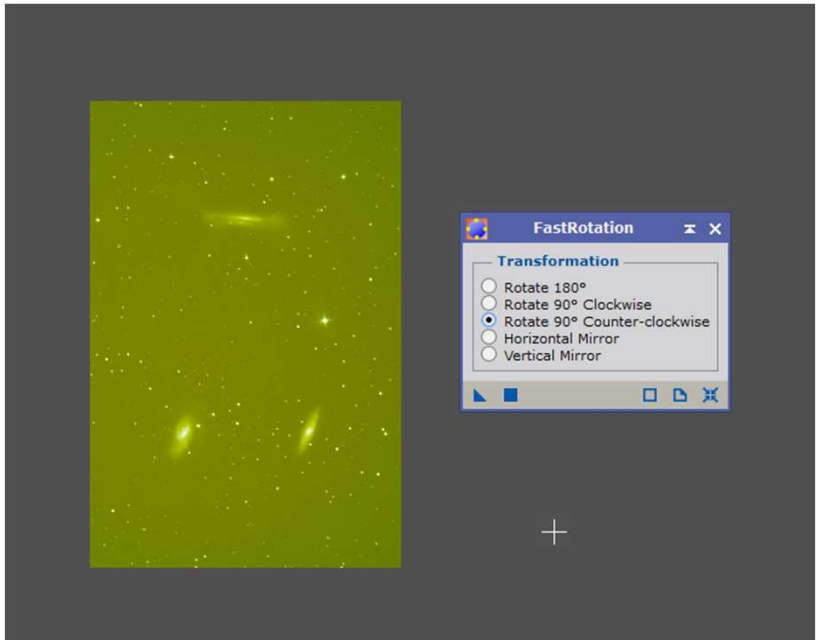
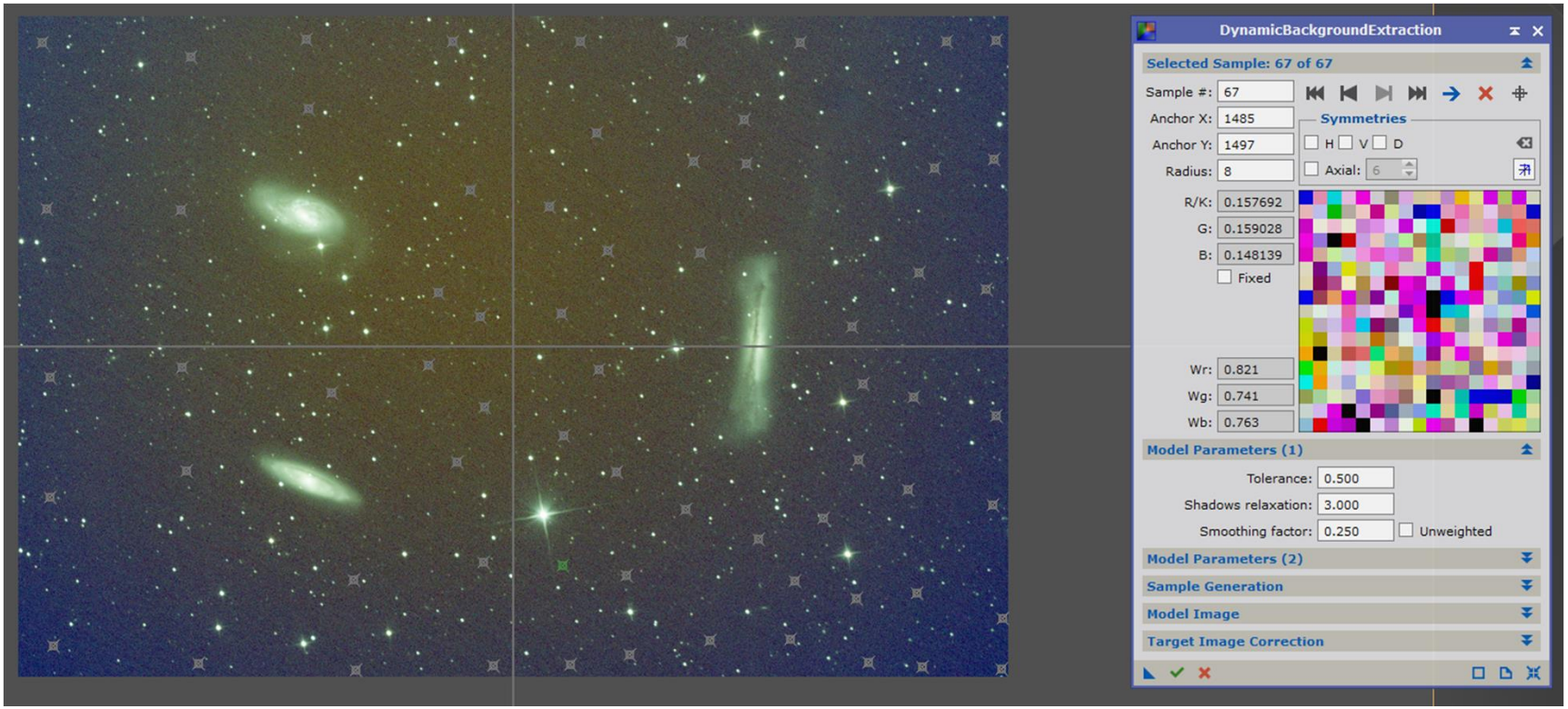
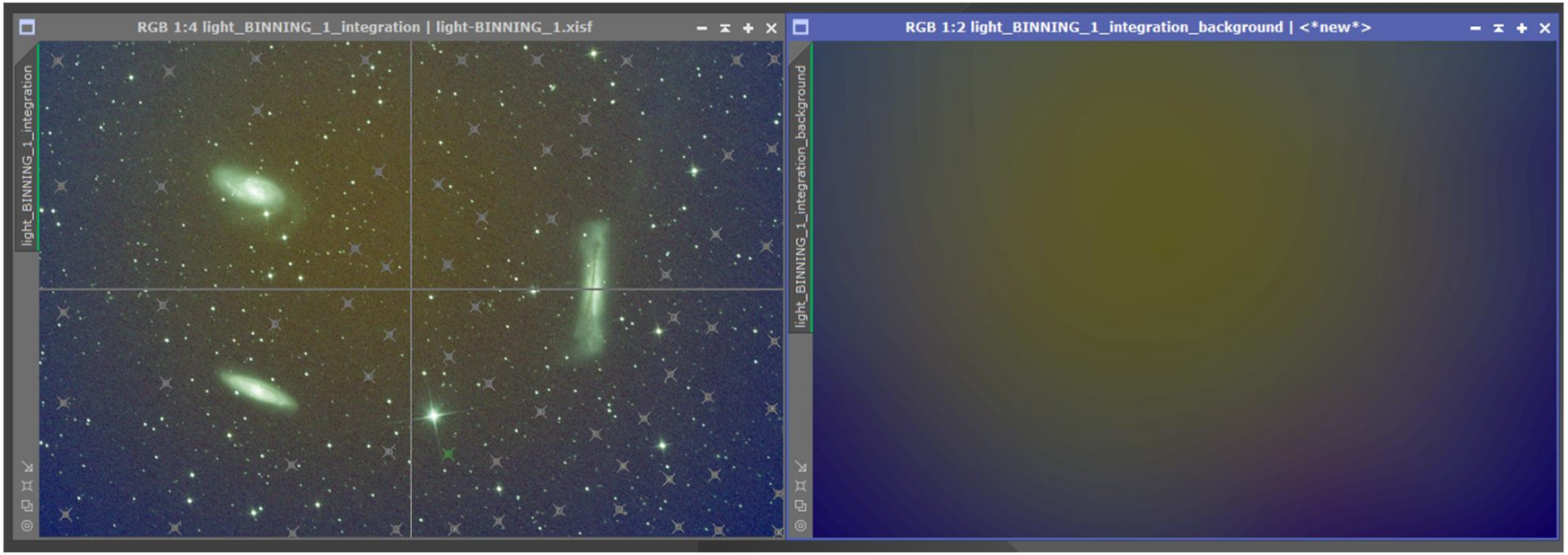
PixInsight Example – Leo Triplet

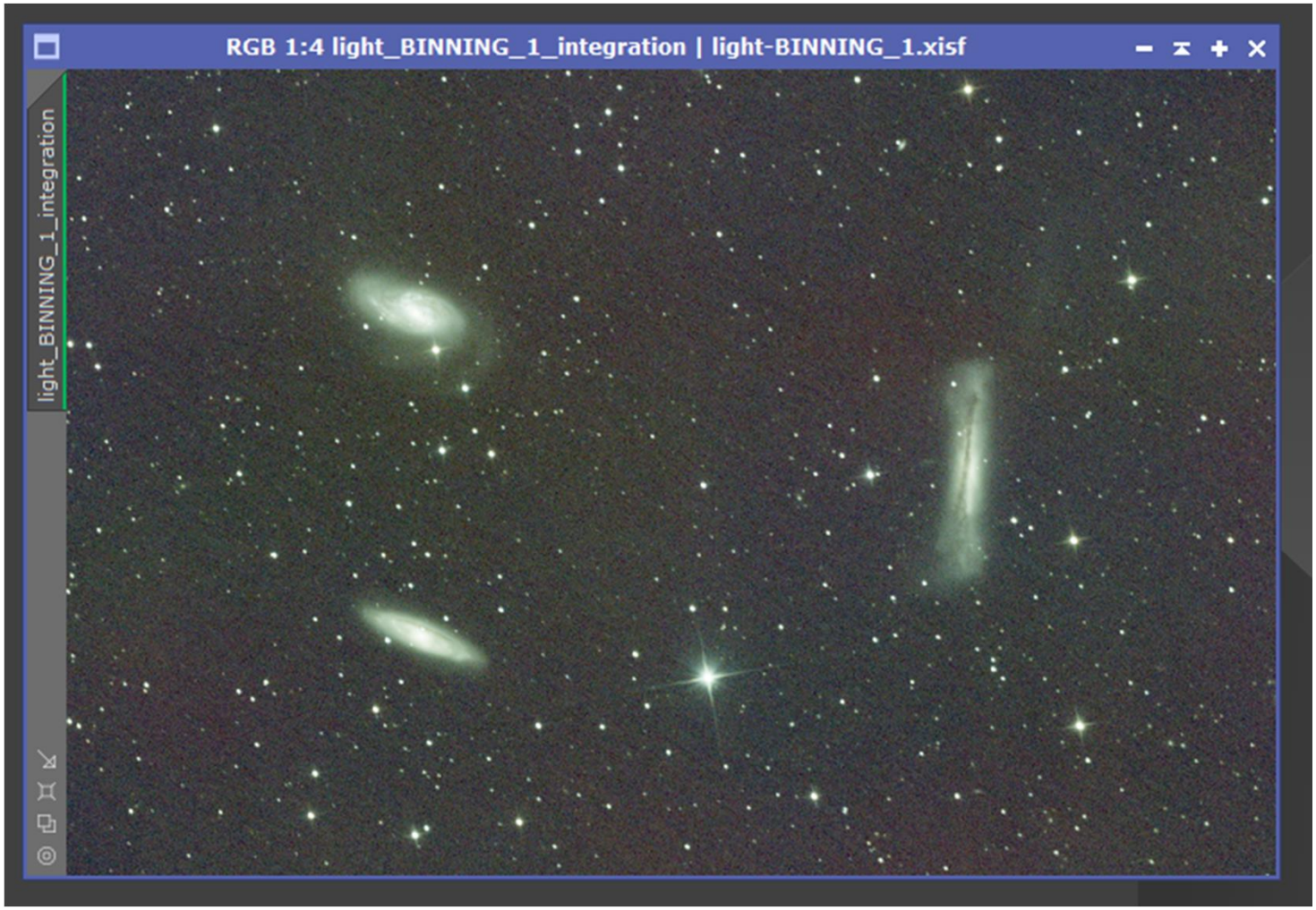
-Keerthi Kiran M

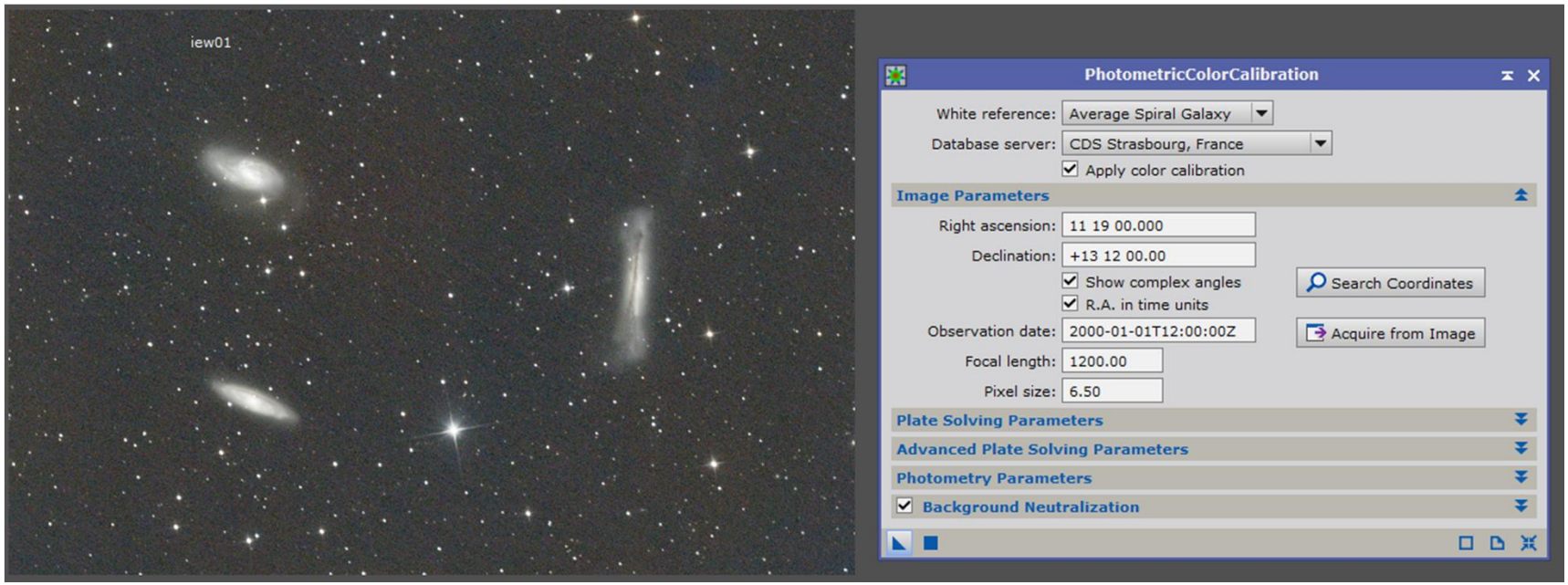

DynamicCrop
Size/Position
Width: 1800.00
Height: 2700.00
Anchor X: 2818.00
Anchor Y: 1751.00
Rotation
Angle (°): 0.000
Clockwise:
Center X: 2818.00
Center Y: 1751.00
Use fast rotations
Scale
Interpolation
Resolution
Fill Color

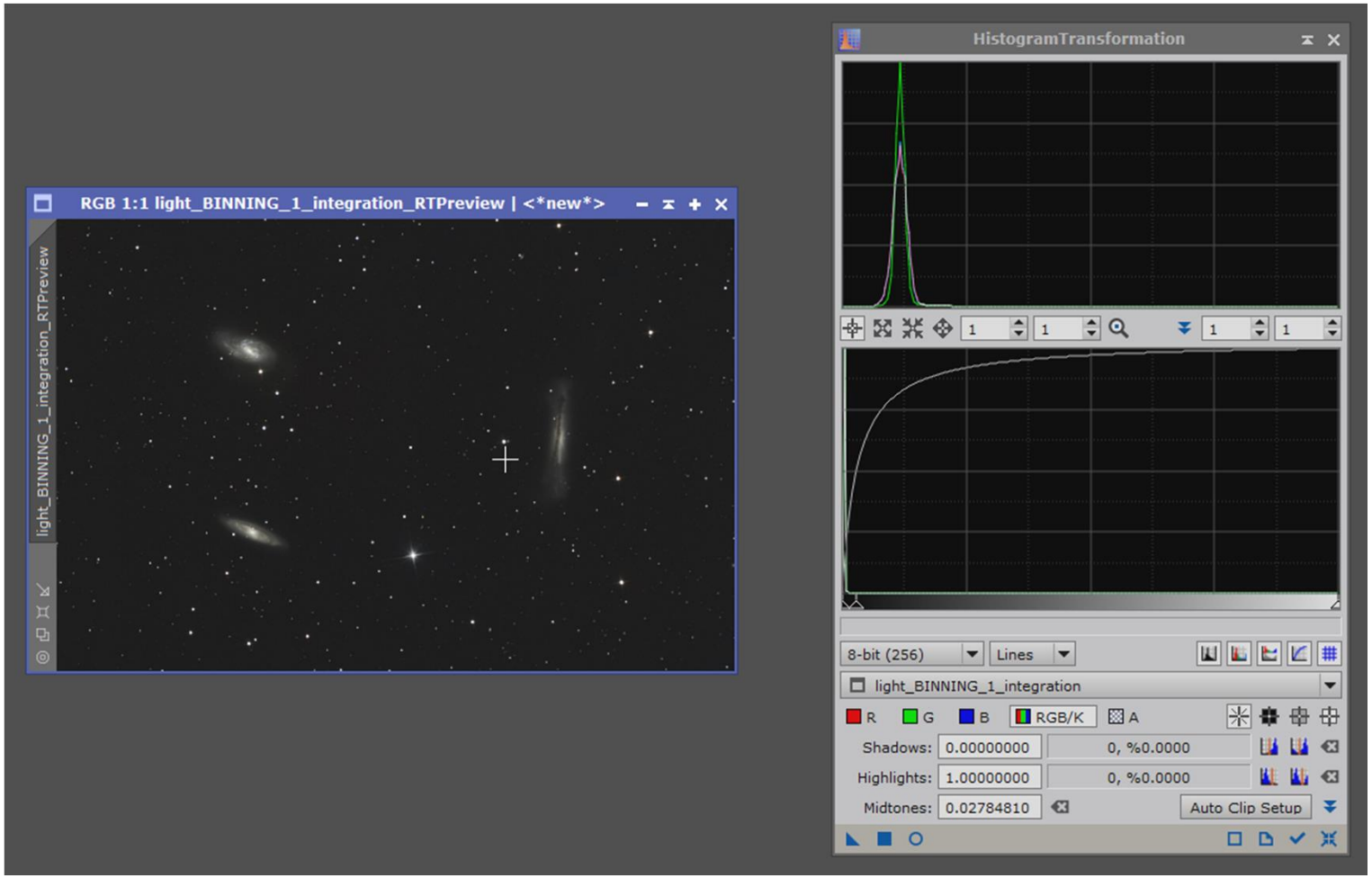

FastRotation
Transformation
Rotate 180°
Rotate 90° Clockwise
Rotate 90° Counter-clockwise
Horizontal Mirror
Vertical Mirror

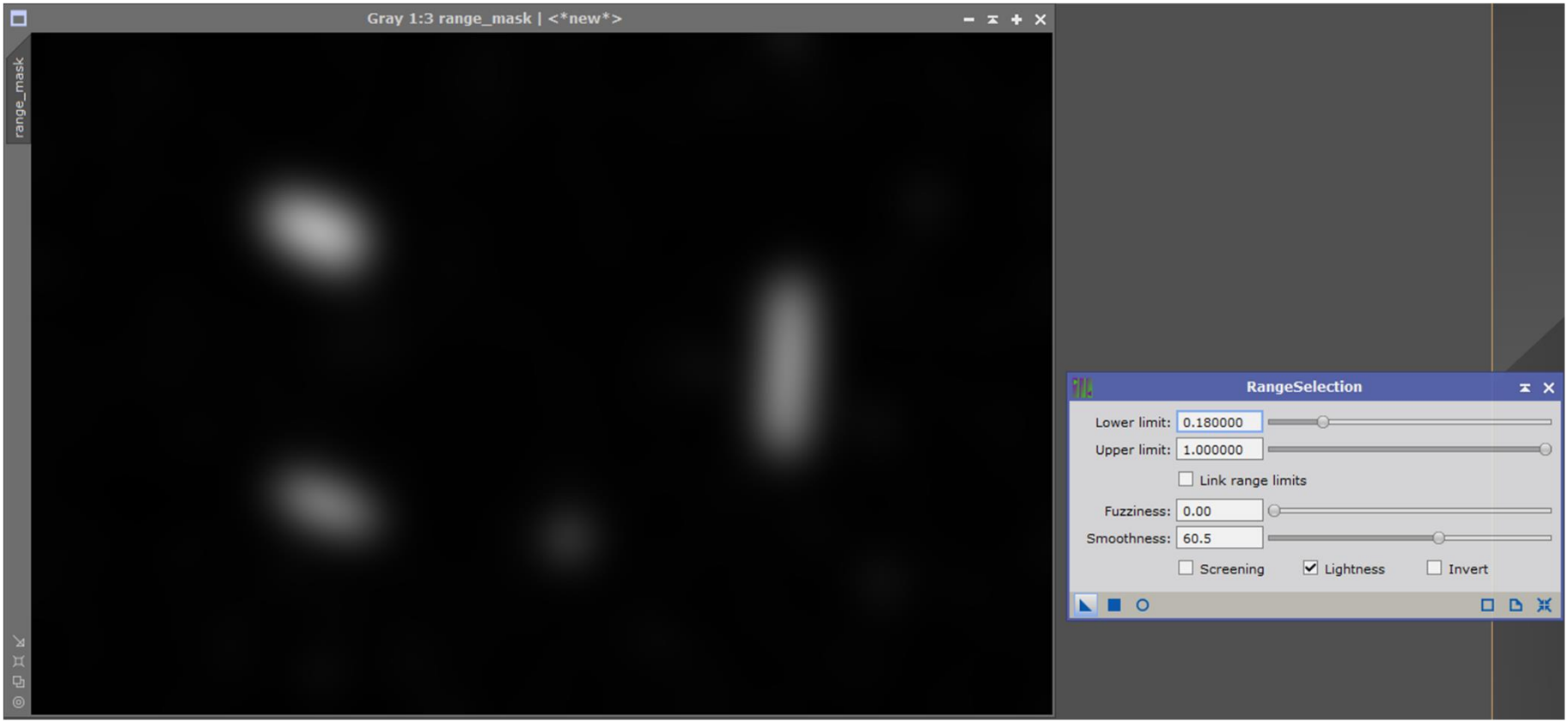

DynamicBackgroundExtraction
Selected Sample: 67 of 67
Sample #: 67
Anchor X: 1485
Anchor Y: 1497
Radius: 8
Symmetries
H V D
Axial: 6
R/K: 0.157692
G: 0.159028
B: 0.148139
Fixed
Wr: 0.821
Wg: 0.741
Wb: 0.763
Model Parameters (1)
Tolerance: 0.500
Shadows relaxation: 3.000
Smoothing factor: 0.250
Unweighted
Model Parameters (2)
Sample Generation
Model Image
Target Image Correction

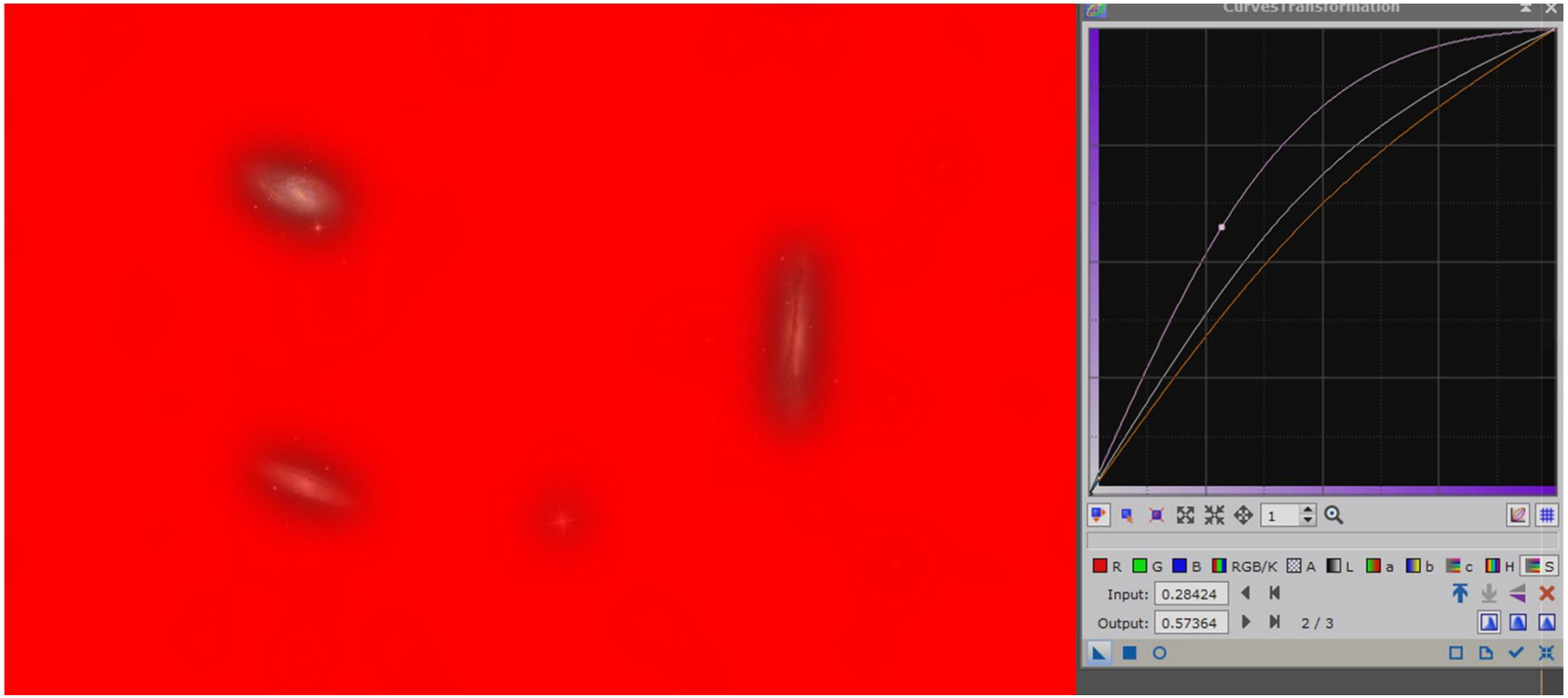

RGB 1:4 light_BINNING_1_integration | light-BINNING_1.xisf
light_BINNING_1_integration
RGB 1:2 light_BINNING_1_integration_background | <*new*>
light_BINNING_1_integration_background

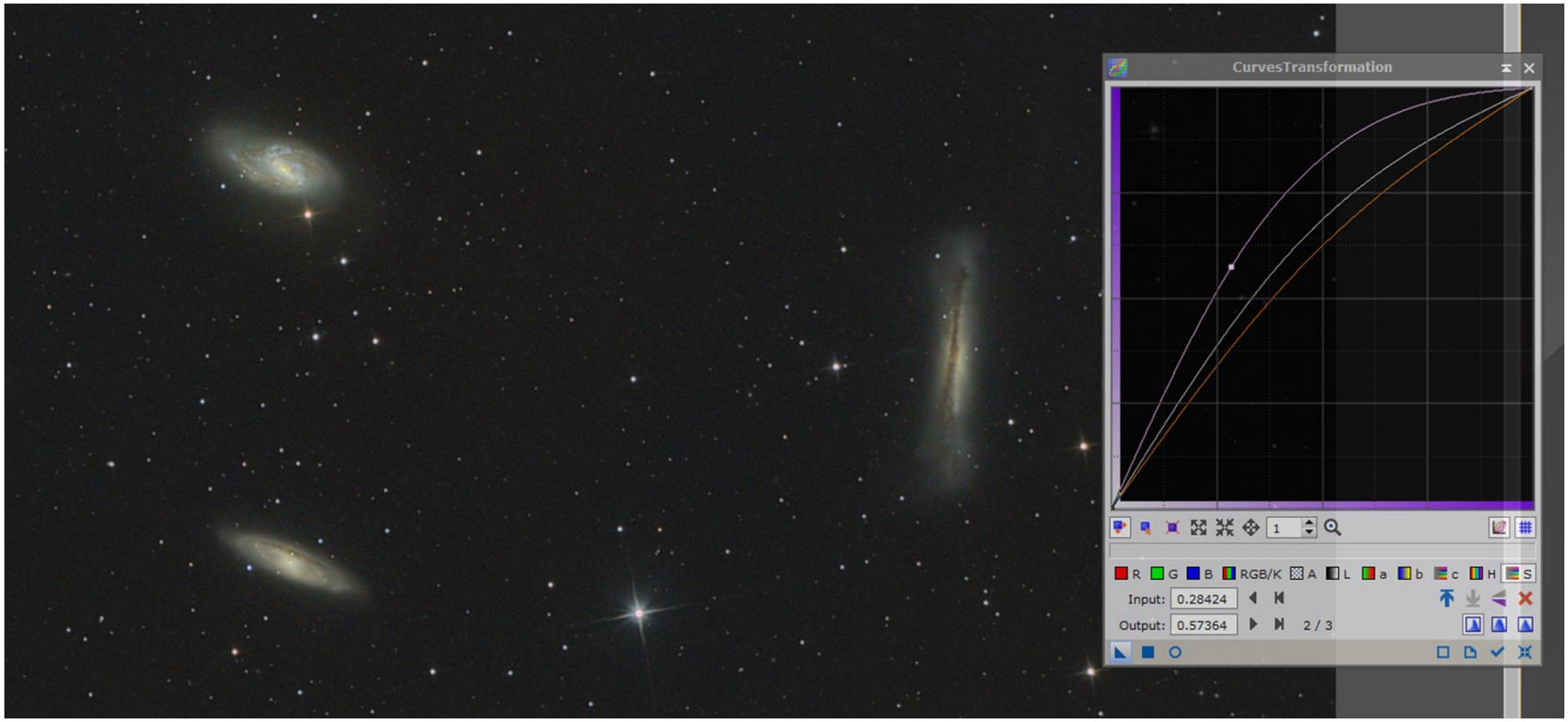

RGB 1:4 light_BINNING_1_integration | light-BINNING_1.xisf
light_BINNING_1_integration

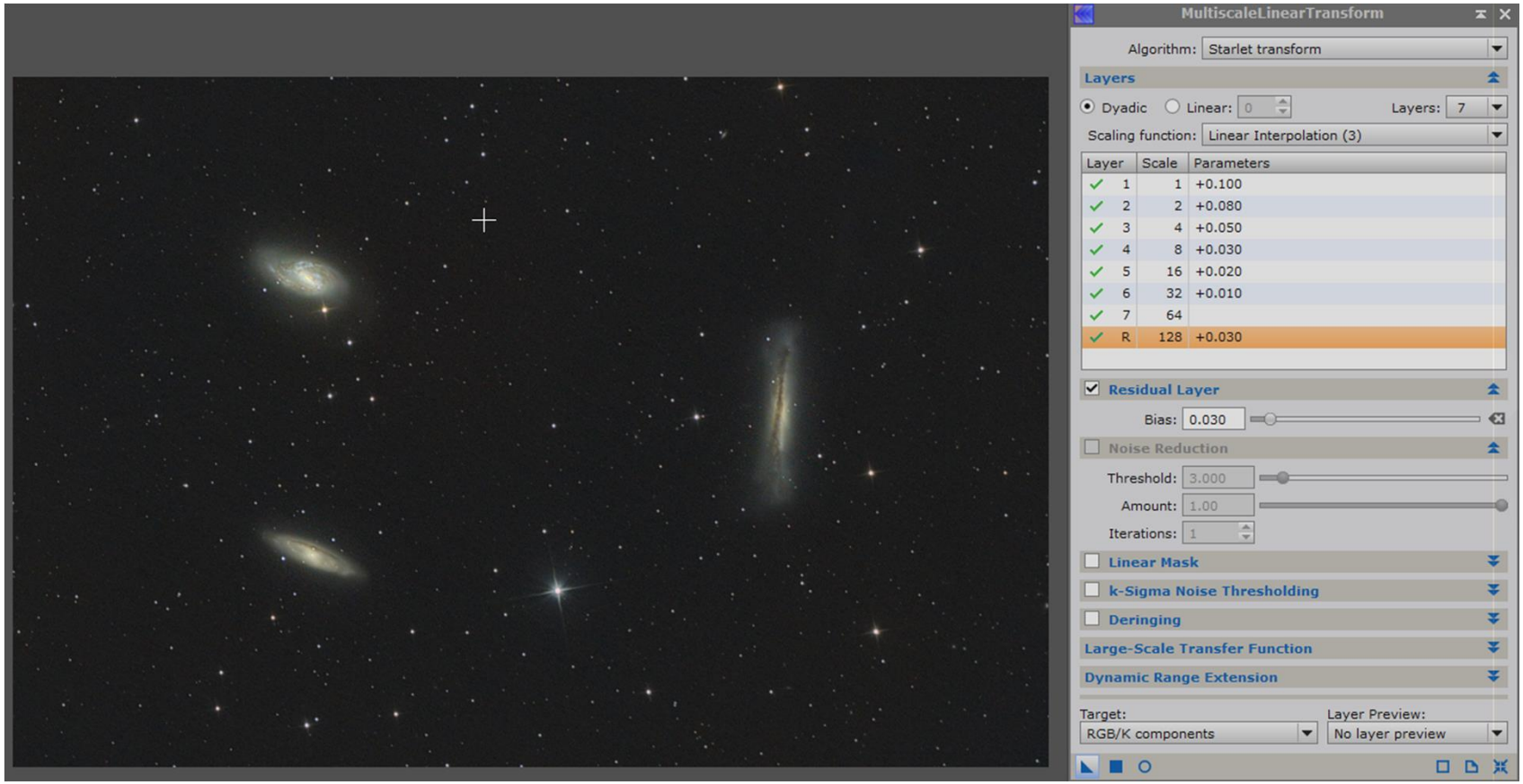

iew01
PhotometricColorCalibration
White reference:
Average Spiral Galaxy
Database server:
CDS Strasbourg, France
Apply color calibration
Image Parameters
Right ascension:
11 19 00.000
Declination:
+13 12 00.00
Show complex angles
R.A. in time units
Search Coordinates
Observation date:
2000-01-01T12:00:00Z
Acquire from Image
Focal length:
1200.00
Pixel size:
6.50
Plate Solving Parameters
Advanced Plate Solving Parameters
Photometry Parameters
Background Neutralization

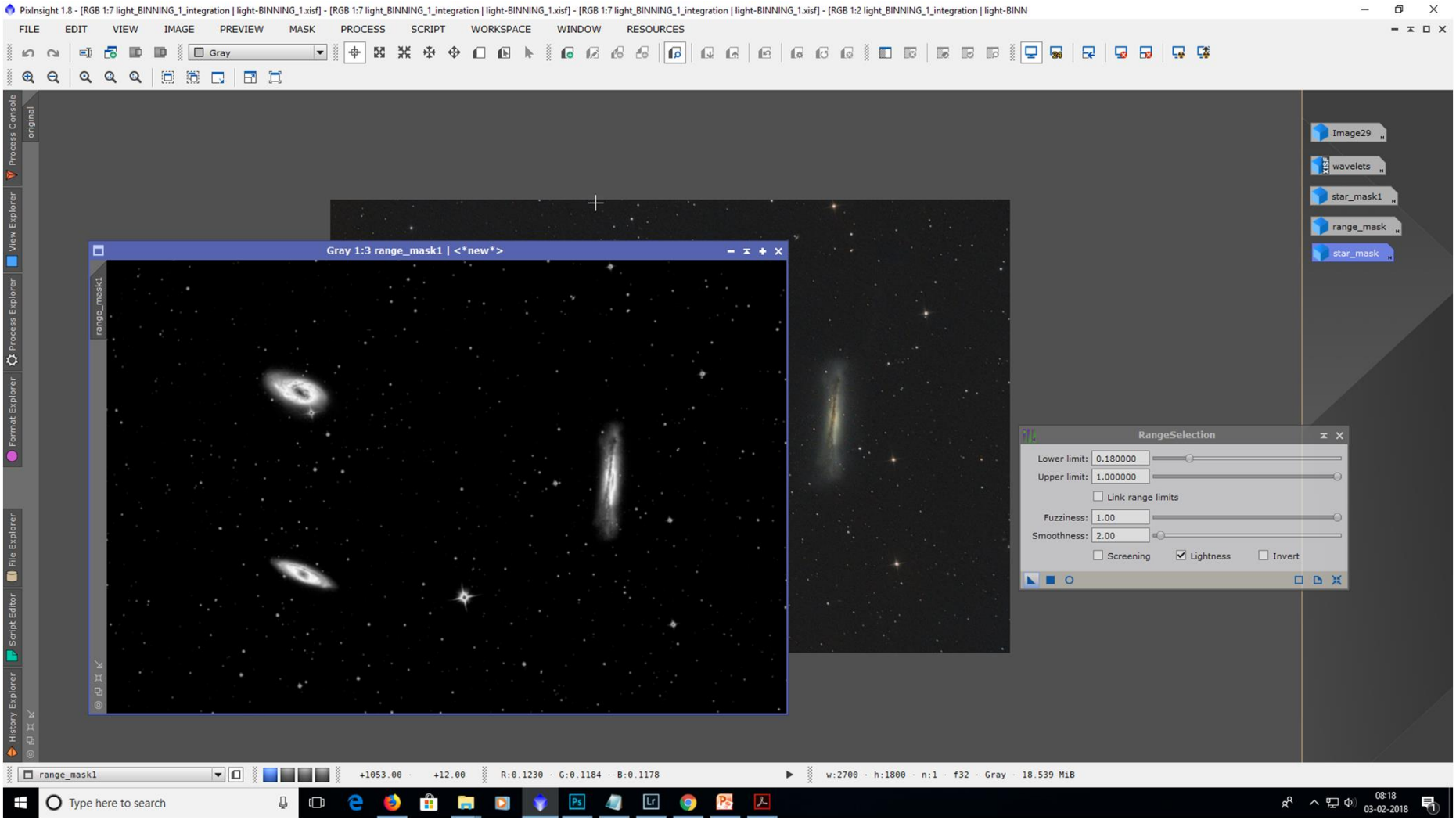

RGB 1:1 light_BINNING_1_integration_RTPreview | <*new*>
light_BINNING_1_integration_RTPreview
HistogramTransformation
1
1
1
1
8-bit (256)
Lines
light_BINNING_1_integration
R
G
B
RGB/K
A
Shadows: 0.00000000
0, %0.0000
Highlights: 1.00000000
0, %0.0000
Midtones: 0.02784810
Auto Clip Setup

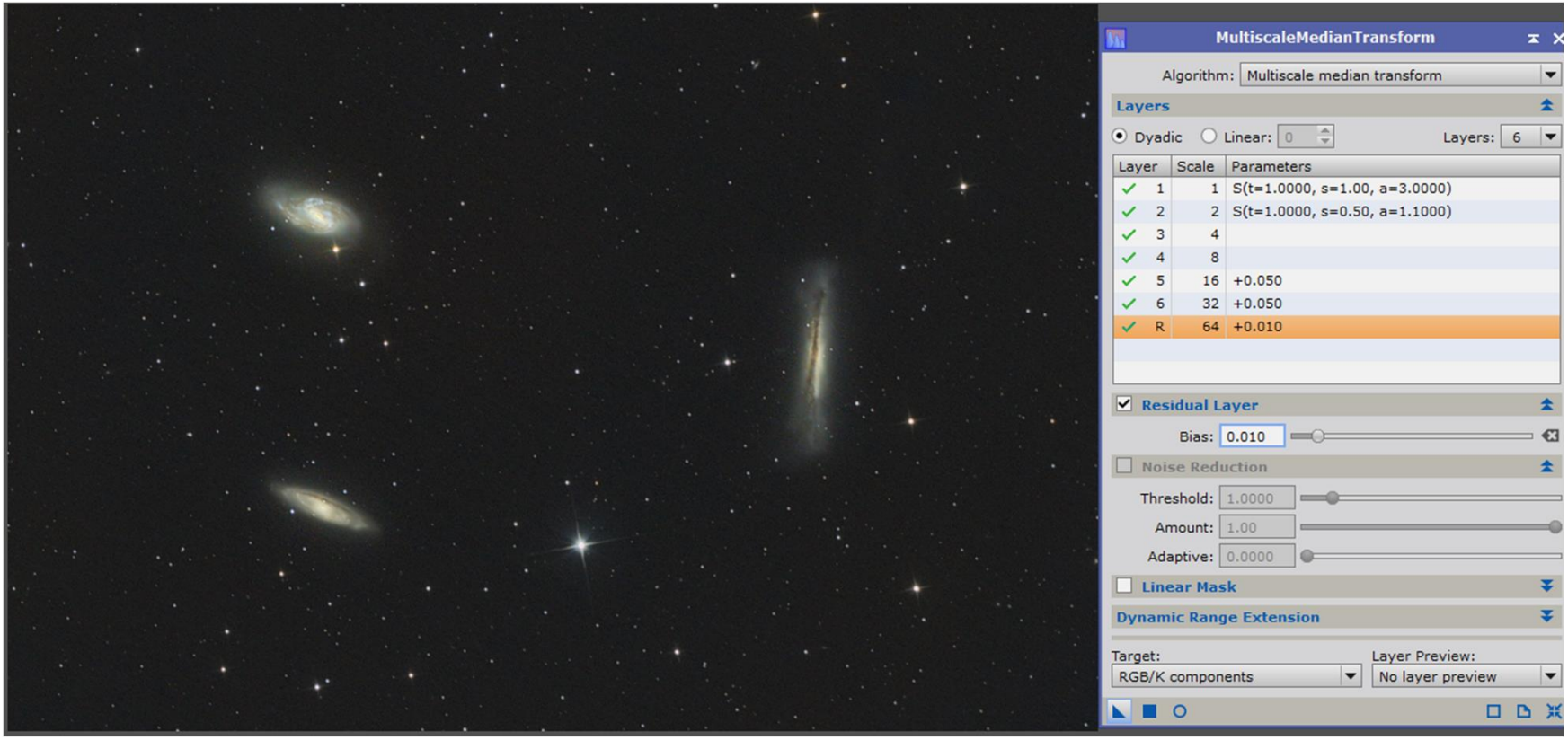

Gray 1:3 range_mask | <*new*>
range_mask
RangeSelection
Lower limit: 0.180000
Upper limit: 1.000000
Link range limits
Fuzziness: 0.00
Smoothness: 60.5
Screening
Lightness
Invert

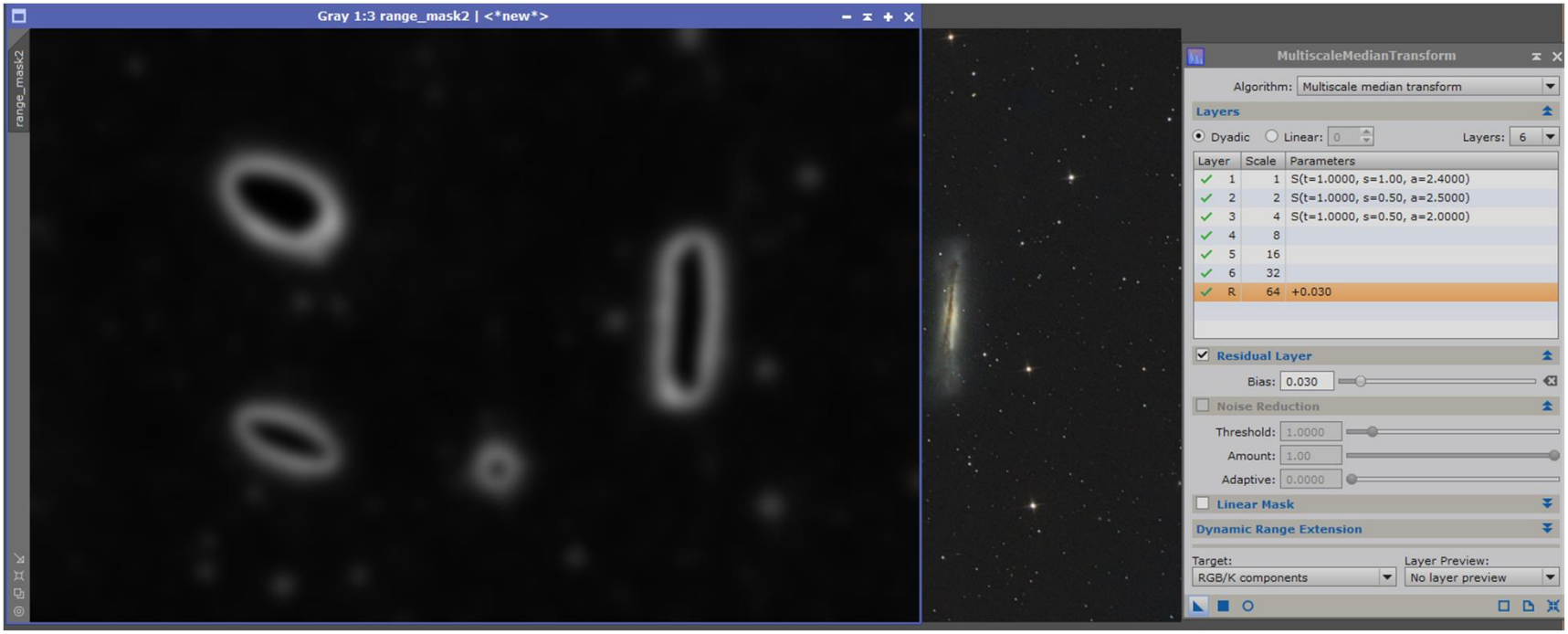

Curves Transformation
1
R G B RGB/K A L a b c H S
Input: 0.28424
Output: 0.57364
2 / 3

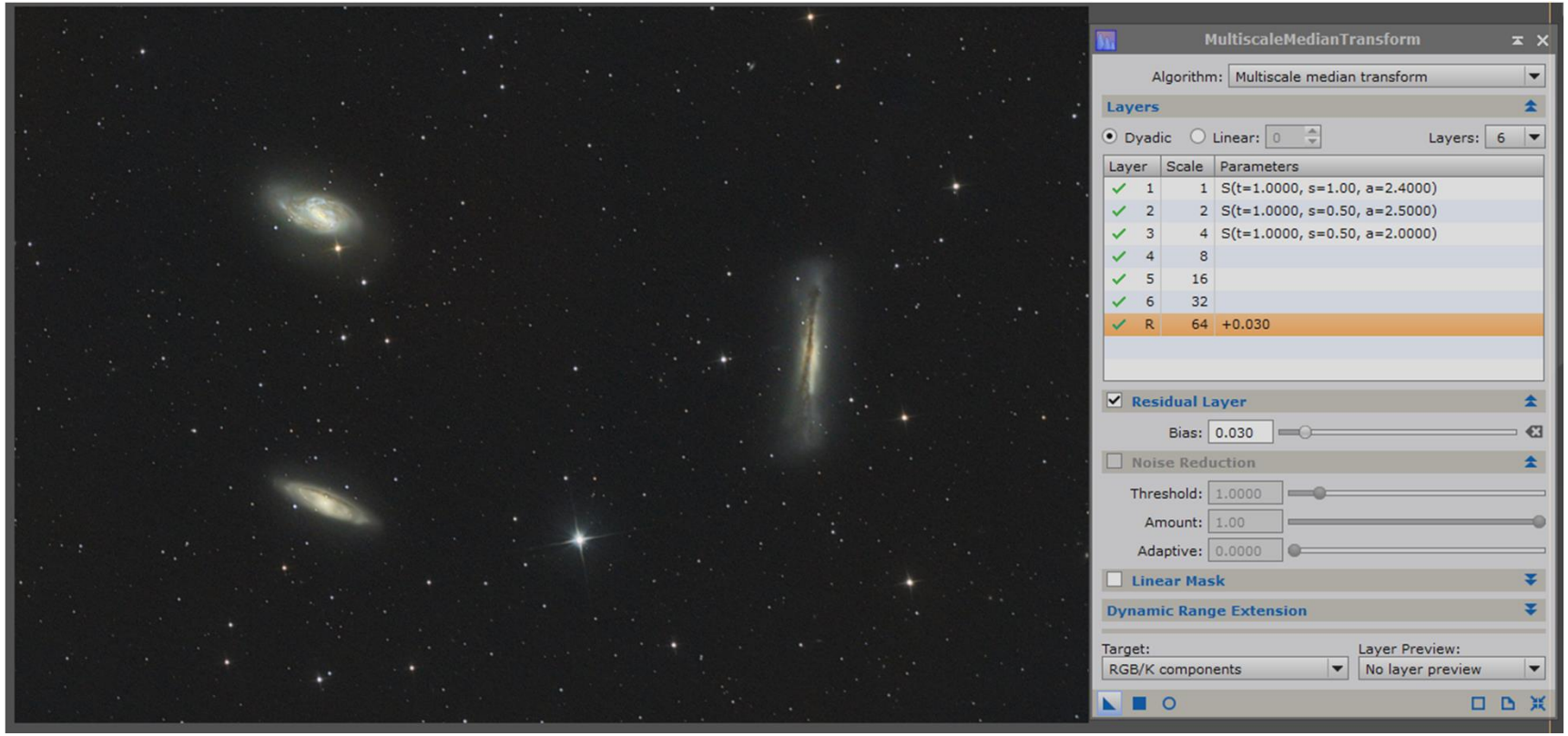

CurvesTransformation
1
R G B RGB/K A L a b c H S
Input: 0.28424
Output: 0.57364
2 / 3

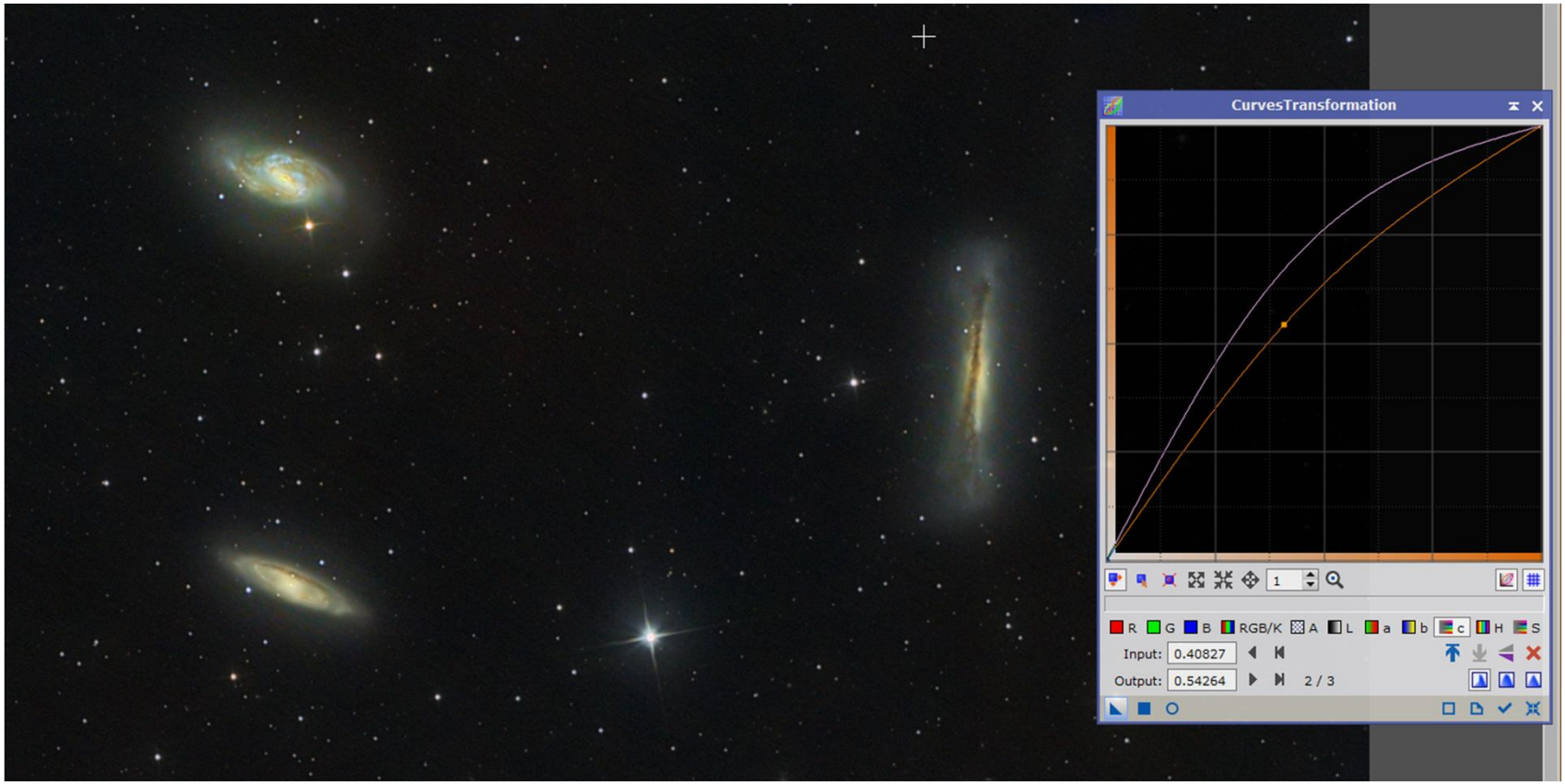

MultiscaleLinearTransform
Algorithm: Starlet transform
Layers
Dyadic
Linear: 0
Layers: 7
Scaling function: Linear Interpolation (3)
Layer Scale Parameters
1 1 +0.100
2 2 +0.080
3 4 +0.050
4 8 +0.030
5 16 +0.020
6 32 +0.010
7 64
R 128 +0.030
Residual Layer
Bias: 0.030
Noise Reduction
Threshold: 3.000
Amount: 1.00
Iterations: 1
Linear Mask
k-Sigma Noise Thresholding
Deringing
Large-Scale Transfer Function
Dynamic Range Extension
Target:
RGB/K components
Layer Preview:
No layer preview


PixInsight 1.8 - [RGB 1:7 light_BINNING_1_integration | light-BINNING_1.xisf] - [RGB 1:7 light_BINNING_1_integration | light-BINNING_1.xisf] - [RGB 1:7 light_BINNING_1_integration | light-BINNING_1.xisf] - [RGB 1:2 light_BINNING_1_integration | light-BINN
FILE
EDIT
VIEW
IMAGE
PREVIEW
MASK
PROCESS
SCRIPT
WORKSPACE
WINDOW
RESOURCES
Gray
Process Console
View Explorer
Process Explorer
Format Explorer
File Explorer
Script Editor
History Explorer
original
Gray 1:3 range_mask1 | <*new*>
range_mask1
Image29
wavelets
star_mask1
range_mask
star_mask
RangeSelection
Lower limit: 0.180000
Upper limit: 1.000000
Link range limits
Fuzziness: 1.00
Smoothness: 2.00
Screening
Lightness
Invert
range_mask1
+1053.00 · +12.00
R:0.1230 · G:0.1184 · B:0.1178
w:2700 · h:1800 · n:1 · f32 · Gray · 18.539 MiB
Type here to search
08:18
03-02-2018


MultiscaleMedianTransform
Algorithm: Multiscale median transform
Layers
Dyadic
Linear: 0
Layers: 6
Layer Scale Parameters
1 1 S(t=1.0000, s=1.00, a=3.0000)
2 2 S(t=1.0000, s=0.50, a=1.1000)
3 4
4 8
5 16 +0.050
6 32 +0.050
R 64 +0.010
Residual Layer
Bias: 0.010
Noise Reduction
Threshold: 1.0000
Amount: 1.00
Adaptive: 0.0000
Linear Mask
Dynamic Range Extension
Target:
RGB/K components
Layer Preview:
No layer preview


Gray 1:3 range_mask2 | <*new*>
range_mask2
MultiscaleMedianTransform
Algorithm: Multiscale median transform
Layers
Dyadic
Linear: 0
Layers: 6
Layer Scale Parameters
1 1 S(t=1.0000, s=1.00, a=2.4000)
2 2 S(t=1.0000, s=0.50, a=2.5000)
3 4 S(t=1.0000, s=0.50, a=2.0000)
4 8
5 16
6 32
R 64 +0.030
Residual Layer
Bias: 0.030
Noise Reduction
Threshold: 1.0000
Amount: 1.00
Adaptive: 0.0000
Linear Mask
Dynamic Range Extension
Target:
RGB/K components
Layer Preview:
No layer preview


MultiscaleMedianTransform
Algorithm: Multiscale median transform
Layers
Dyadic
Linear: 0
Layers: 6
Layer Scale Parameters
1 1 S(t=1.0000, s=1.00, a=2.4000)
2 2 S(t=1.0000, s=0.50, a=2.5000)
3 4 S(t=1.0000, s=0.50, a=2.0000)
4 8
5 16
6 32
R 64 +0.030
Residual Layer
Bias: 0.030
Noise Reduction
Threshold: 1.0000
Amount: 1.00
Adaptive: 0.0000
Linear Mask
Dynamic Range Extension
Target:
RGB/K components
Layer Preview:
No layer preview


CurvesTransformation
1
R G B RGB/K A L a b c H S
Input: 0.40827
Output: 0.54264
2 / 3

SCNR
Color to remove:
Green
Protection method:
Average Neutral
Amount:
1.00
Preserve lightness