

Creating and Applying Star Halo Masks

Nonlinear Image: R, G, B, Ha, OIII, or SII - If RGB, separate into individual colors

Apply Star Mask

Creating Star Mask

Choose image that shows halo most distinctly

Clone image and stretch to nonlinear using simple HistogramTransform

Run Game Script and create ellipse around halo. Bring ellipse to very edge of halo. Save - Binary Mask and Brightness Mask

Apply Convolution to Binary Mask setting StdDev to blur edge. Experiment with amount of blur needed to remove halo without causing edge effects. Start with something like 5.

Create Star Halo Mask in PixelMath using the following expression:
 $\sim(\text{BrightnessMask} - \text{BinaryMask})$. Save to new image, rescale result.

Apply HaloMask to nonlinear image

Using HistogramTransform increase midpoint to reduce effect of halo. Blend halo into background. Check for edge effects and vary size of Convolution operator if needed.

Nonlinear Image with reduced star halo

