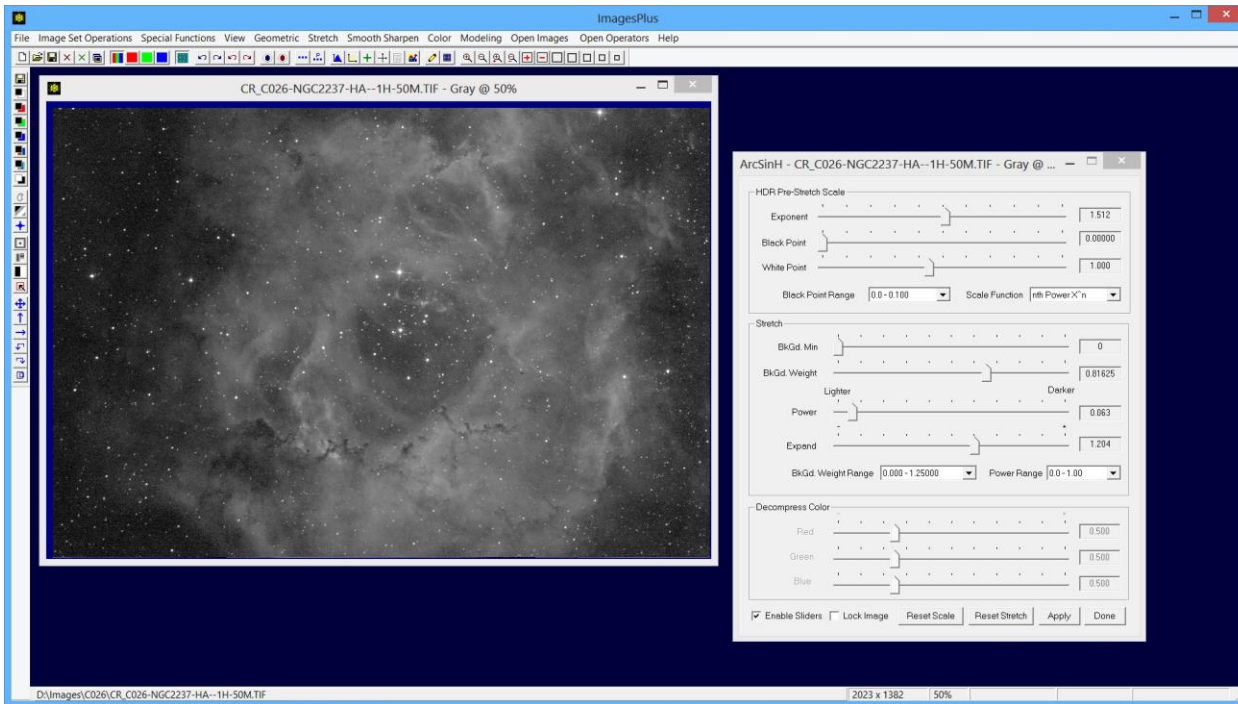


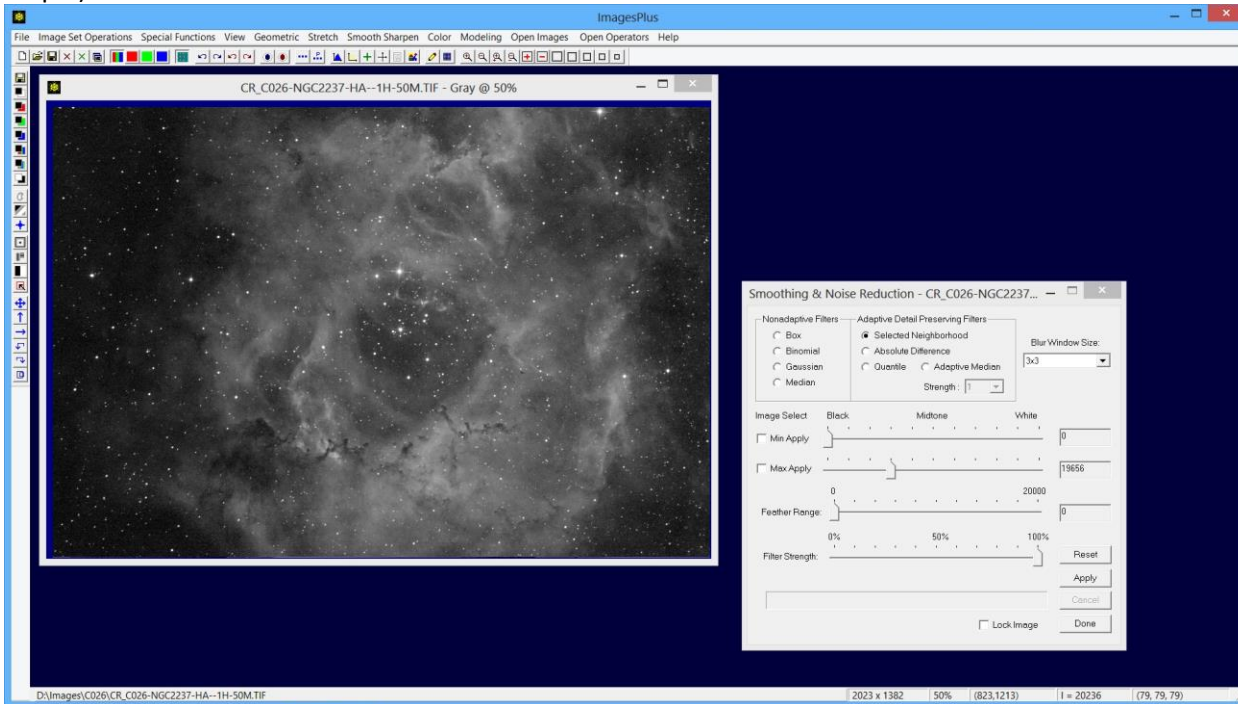
ImagesPlus 6.0 (early alpha) Ha-RGB Processing Workflow

H-alpha Processing Step 1)



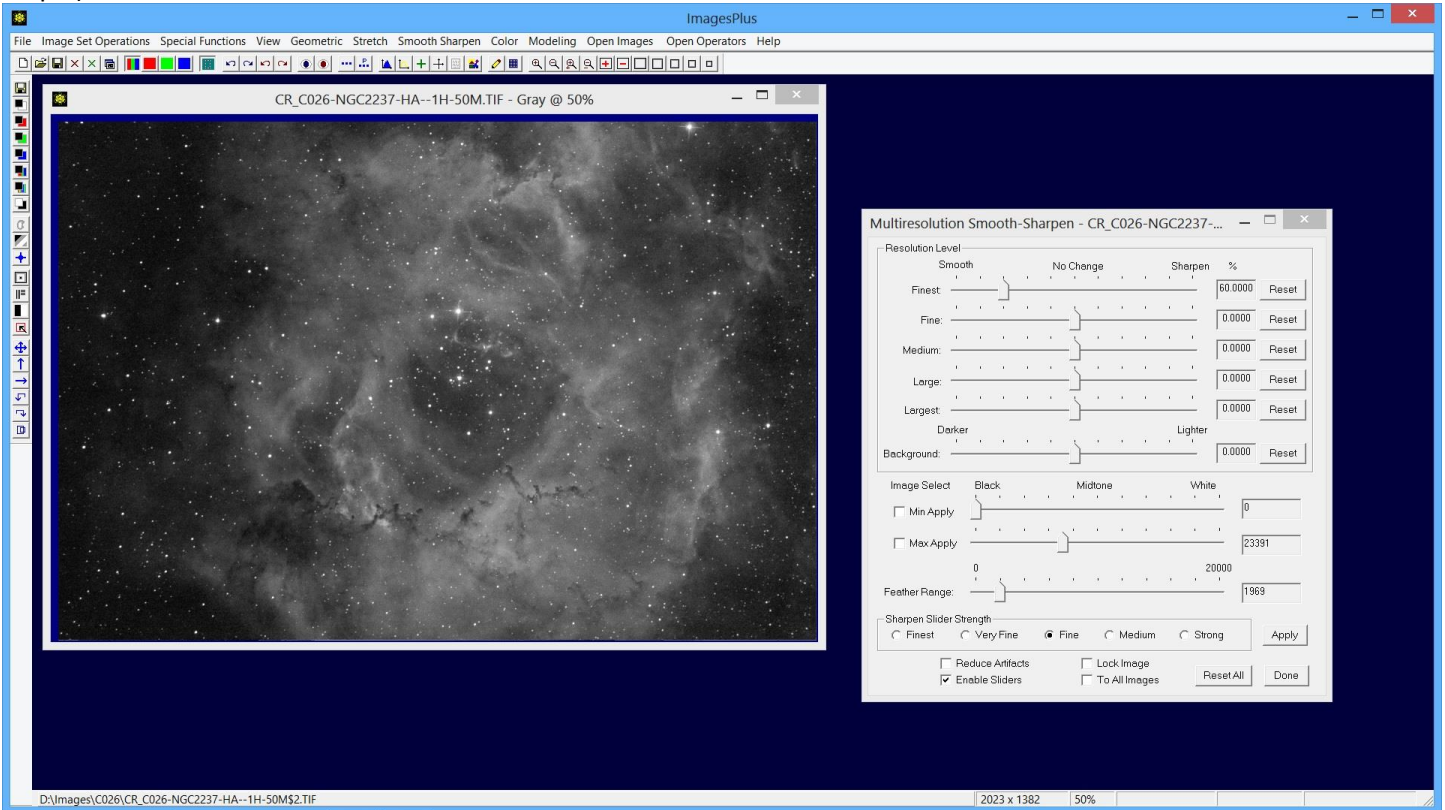
Stretch | ArcSinH is used for the initial brightness stretch.

Step 2)



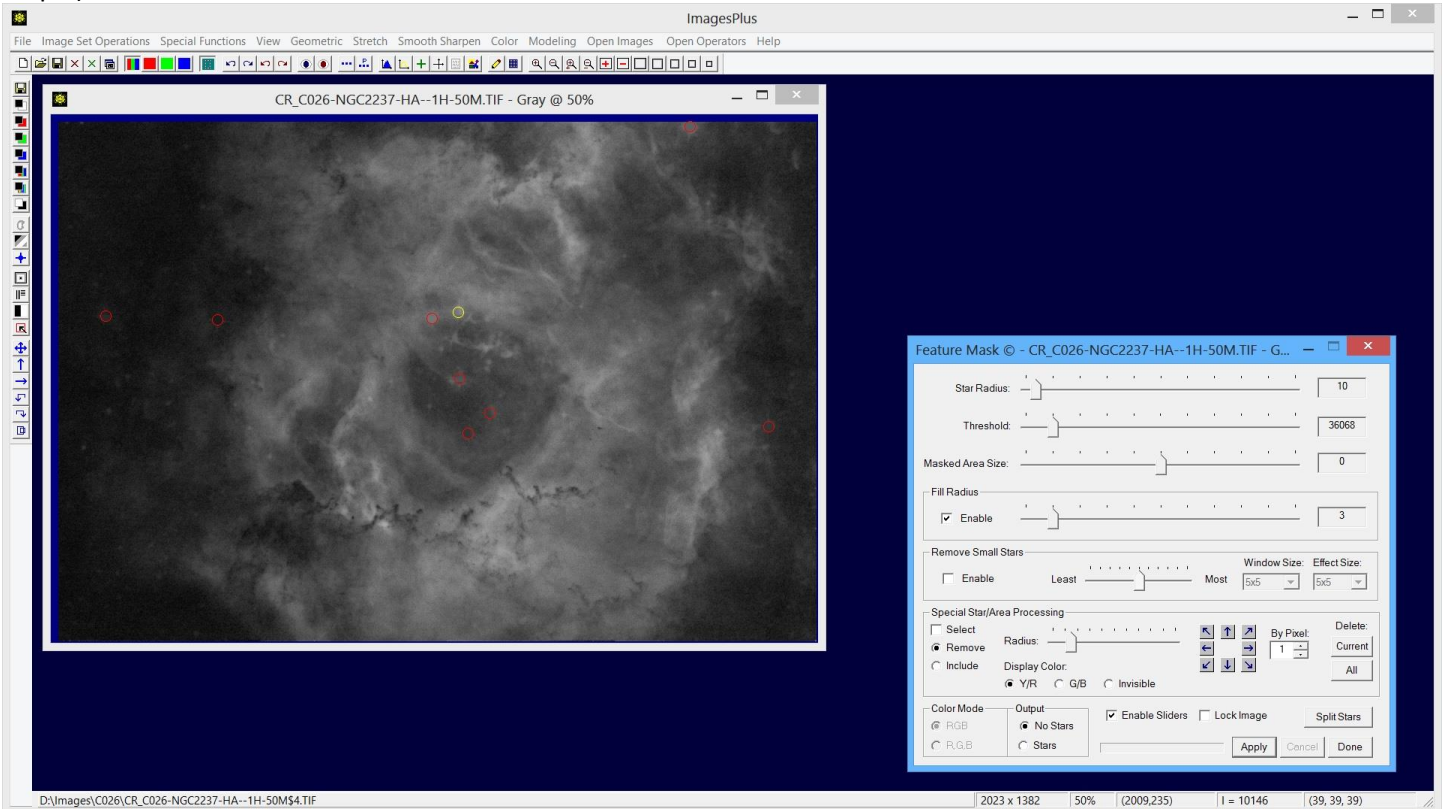
Smooth Sharp | Smoothing & Noise Reduction is used to remove fine noise with the 3x3 edge preserving Selected Neighborhood option.

Step 3)



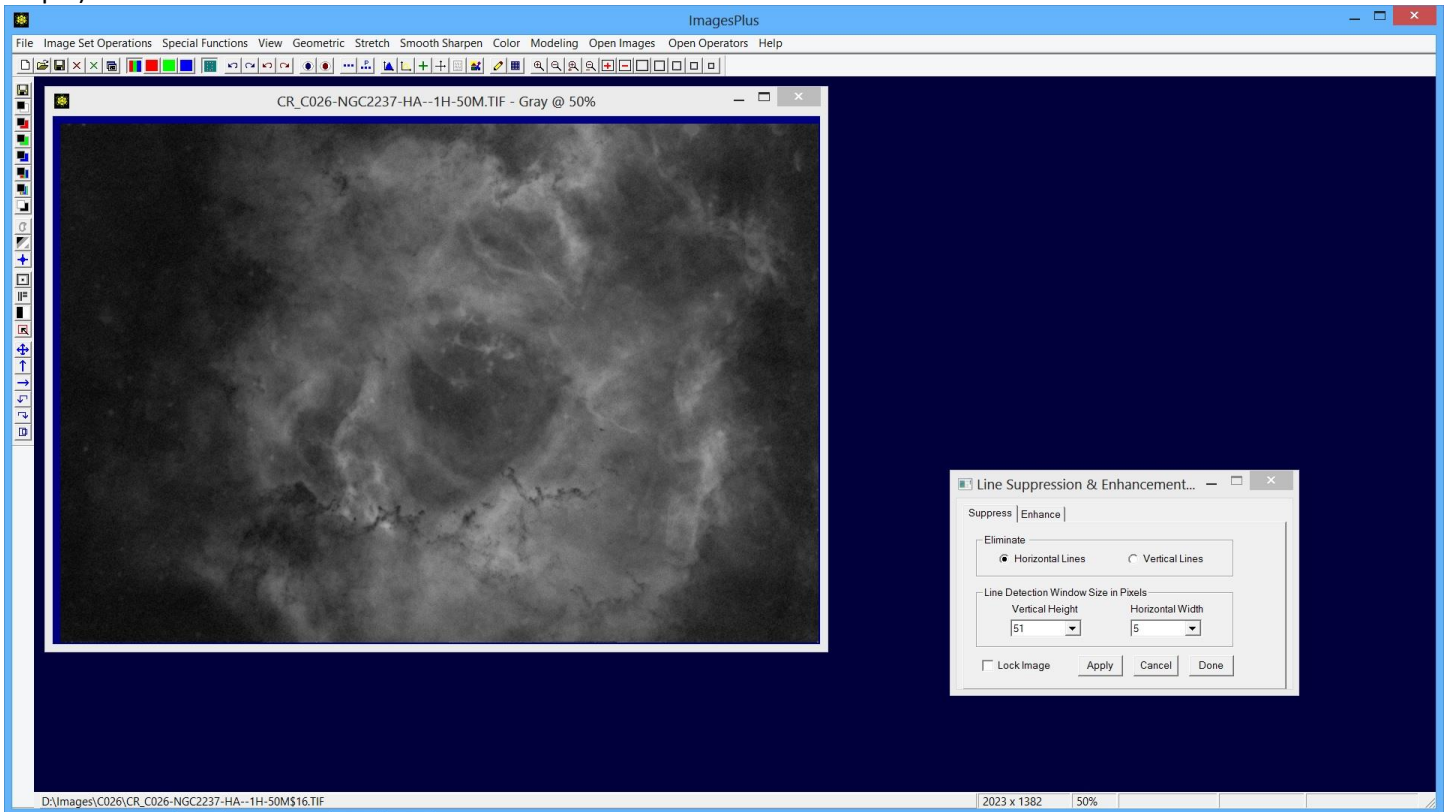
Smooth Sharpen | Multiresolution is used to reduce the fine level noise in the luminance range [0, 23391] with feather range of 1969.

Step 4)



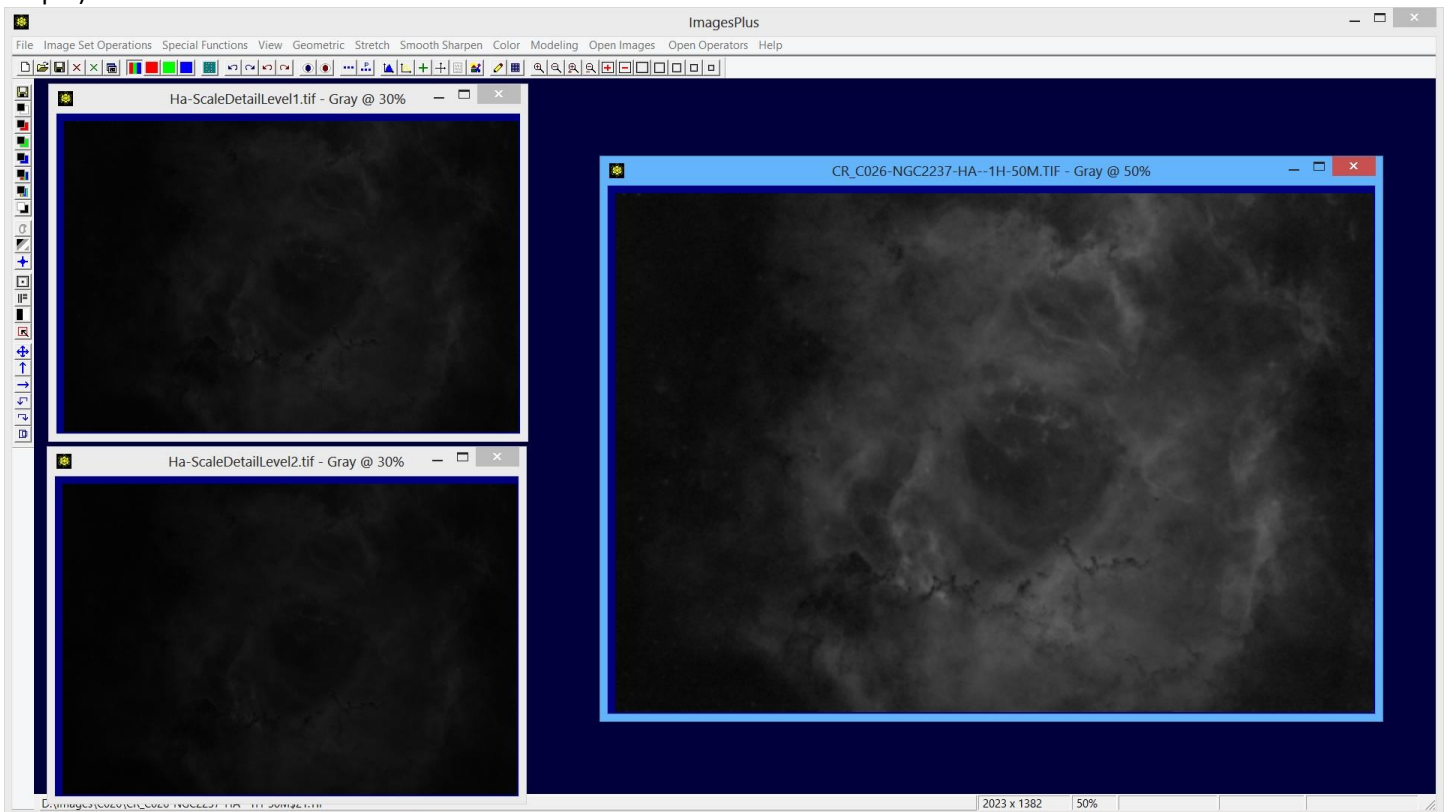
Special Functions | Feature Mask is used to remove all stars from the H-alpha image from step 3.

Step 5)



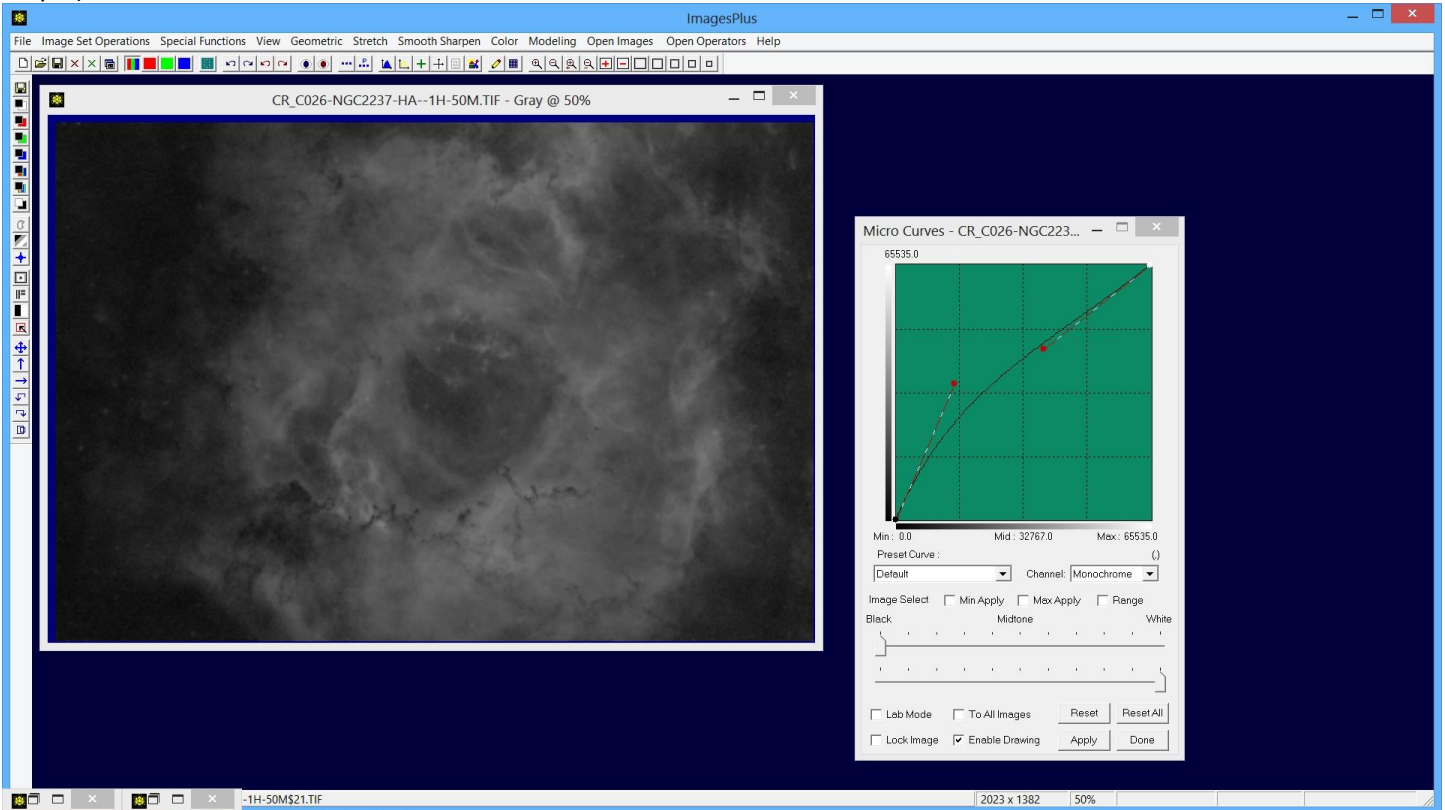
Horizontal line noise is removed used the Smooth Sharpen | Line Suppression tool.

Step 6)



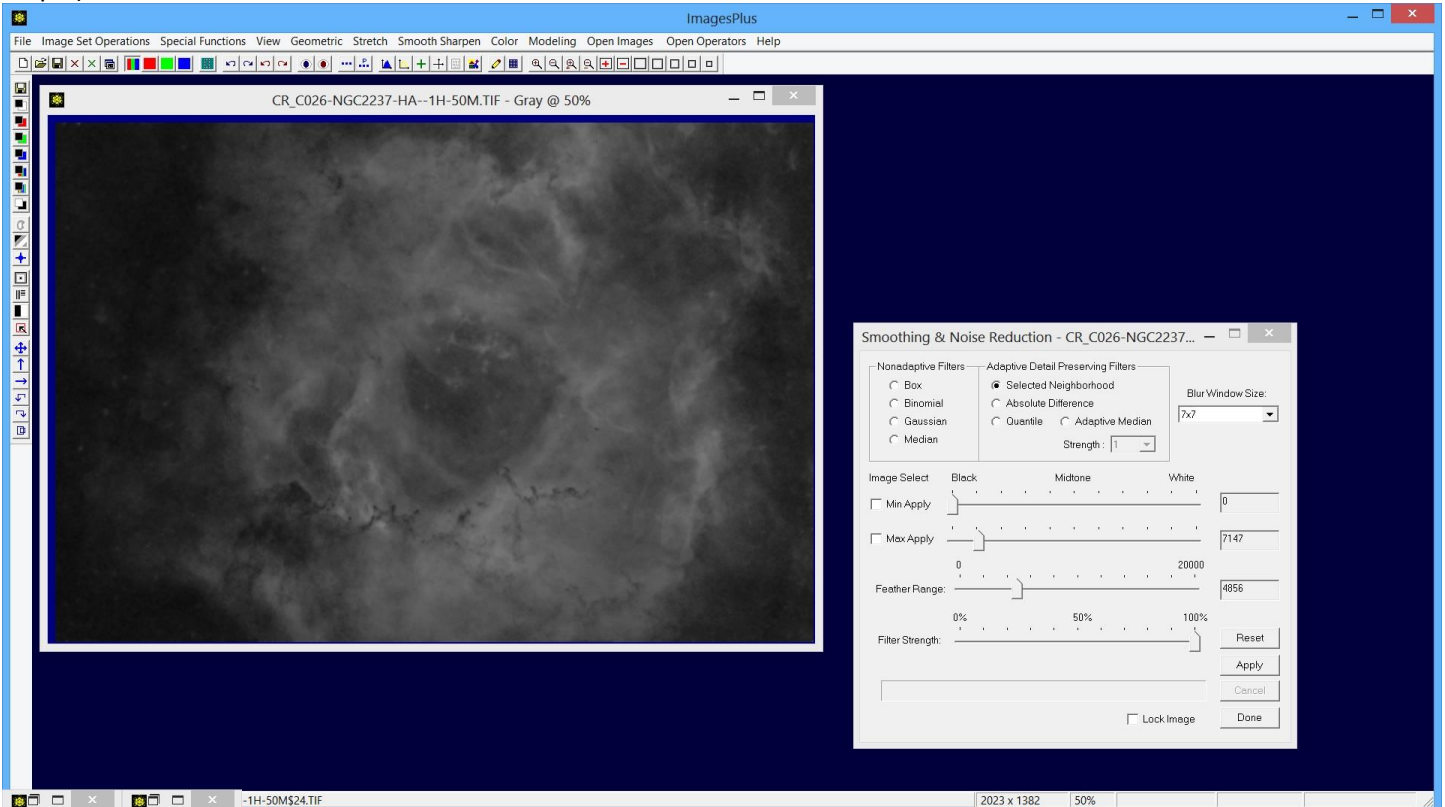
The image from step 5 is split into 2 detail levels shown on the left and the residual background shown on right using the multi-scale decomposition tool. Detail level 1 at top left has the fine noise so it is smoothed a little with the Multiresolution tool.

Step 7)



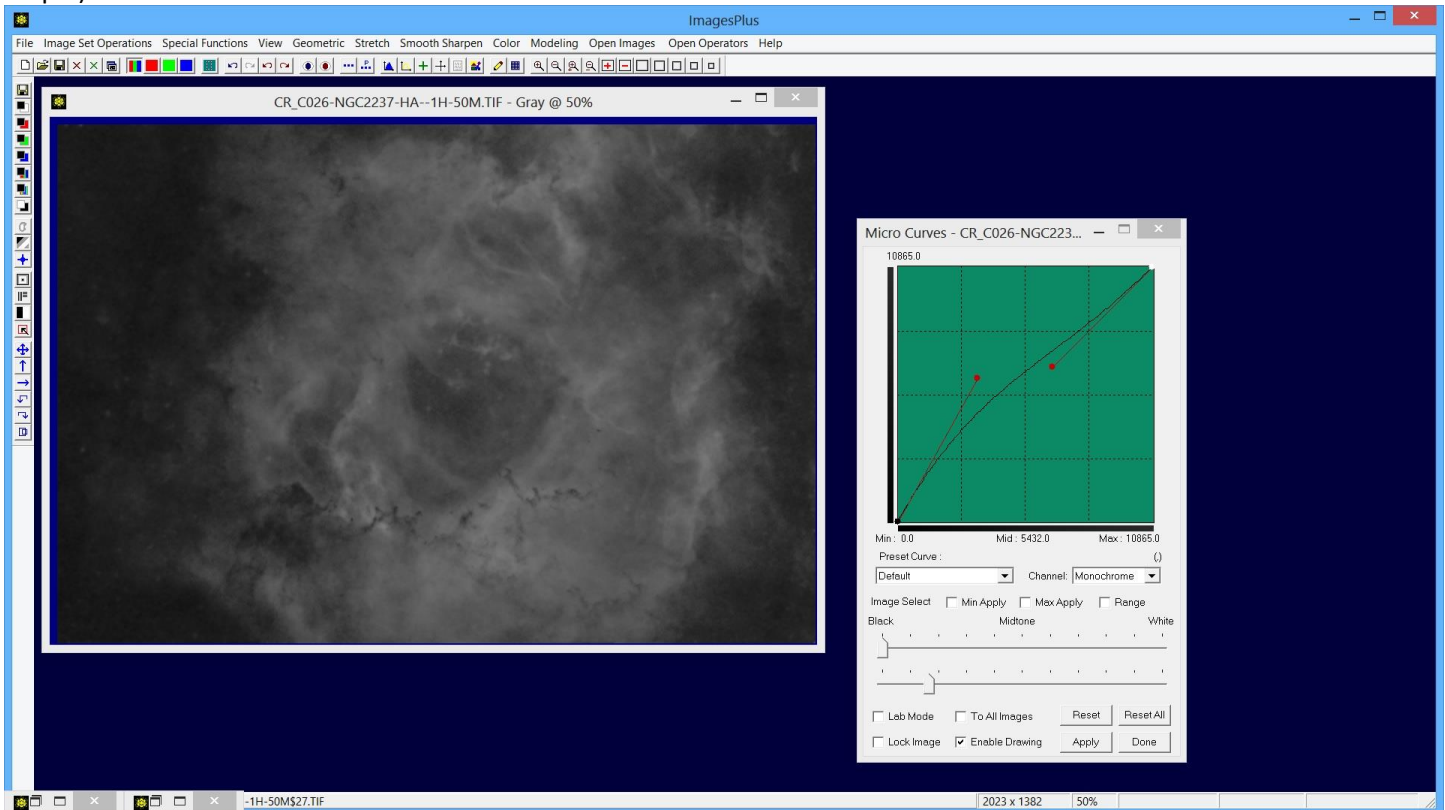
Detail level 1 and 2 images are minimized then the residual background level image is brightened a little with the Stretch | Micro Curve tool.

Step 8)



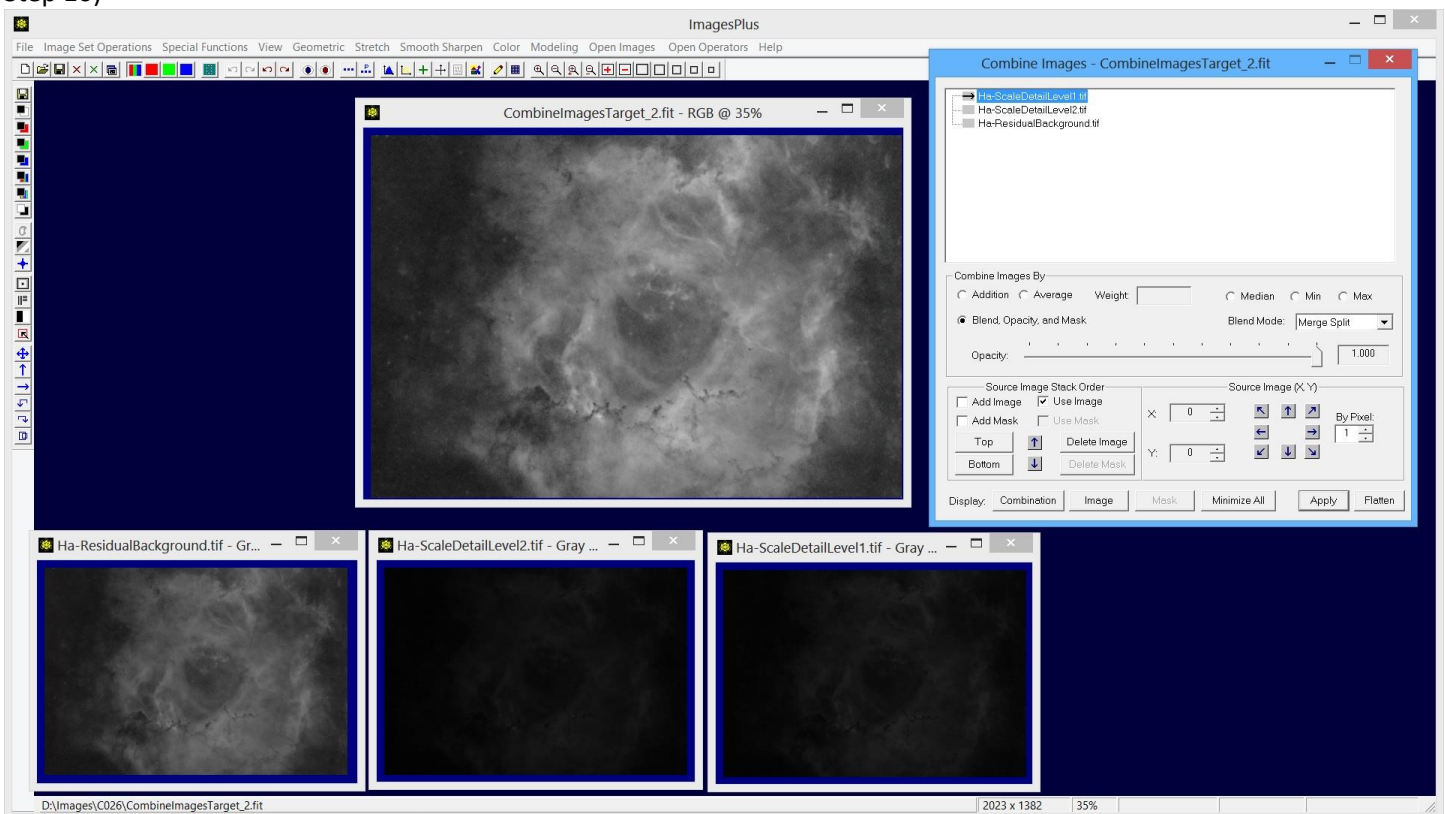
Additional edge preserving smoothing is applied to the residual background level H-alpha image.

Step 9)



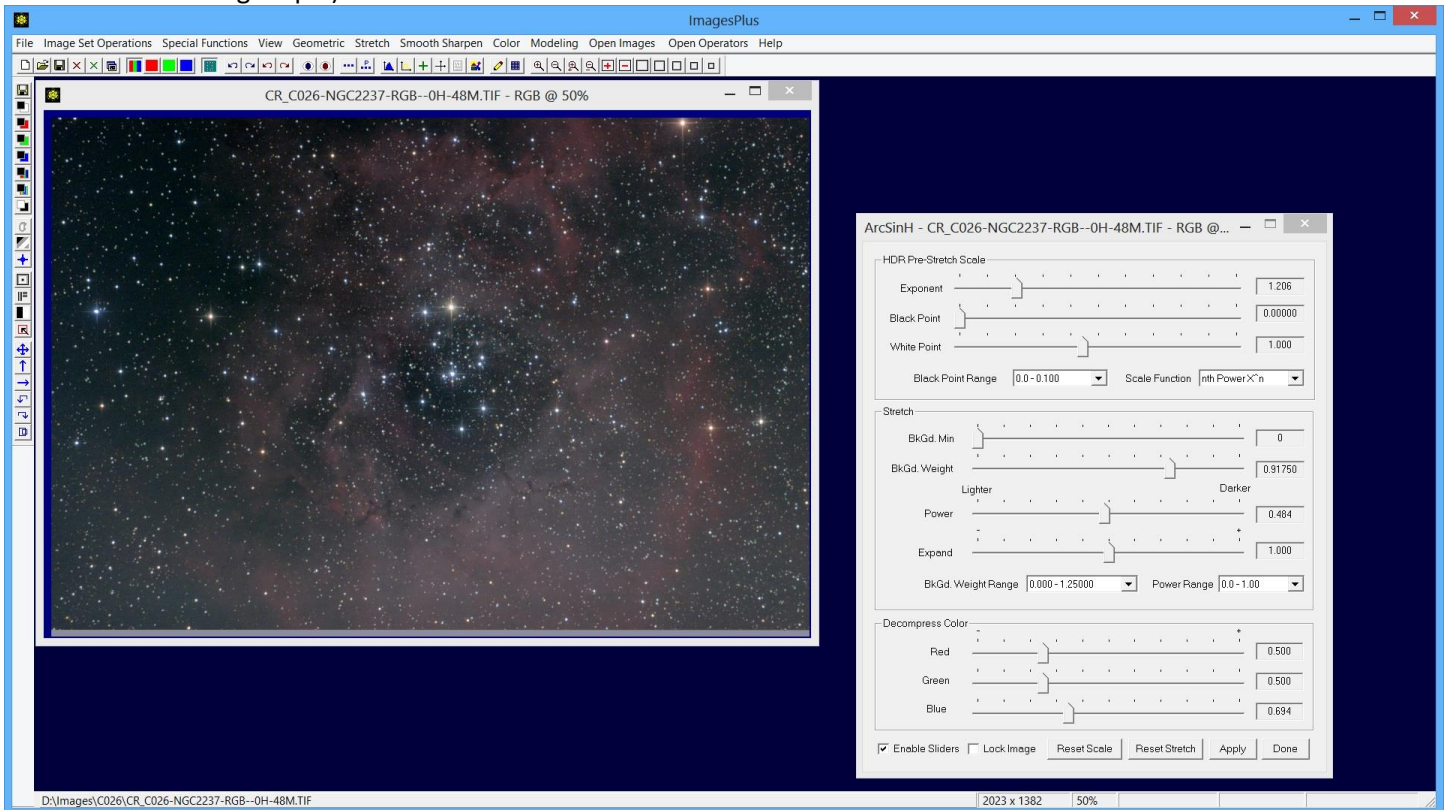
Micro Curves is used to brighten the dark areas of the residual H-alpha image with luminance range [0.0, 10865.0].

Step 10)



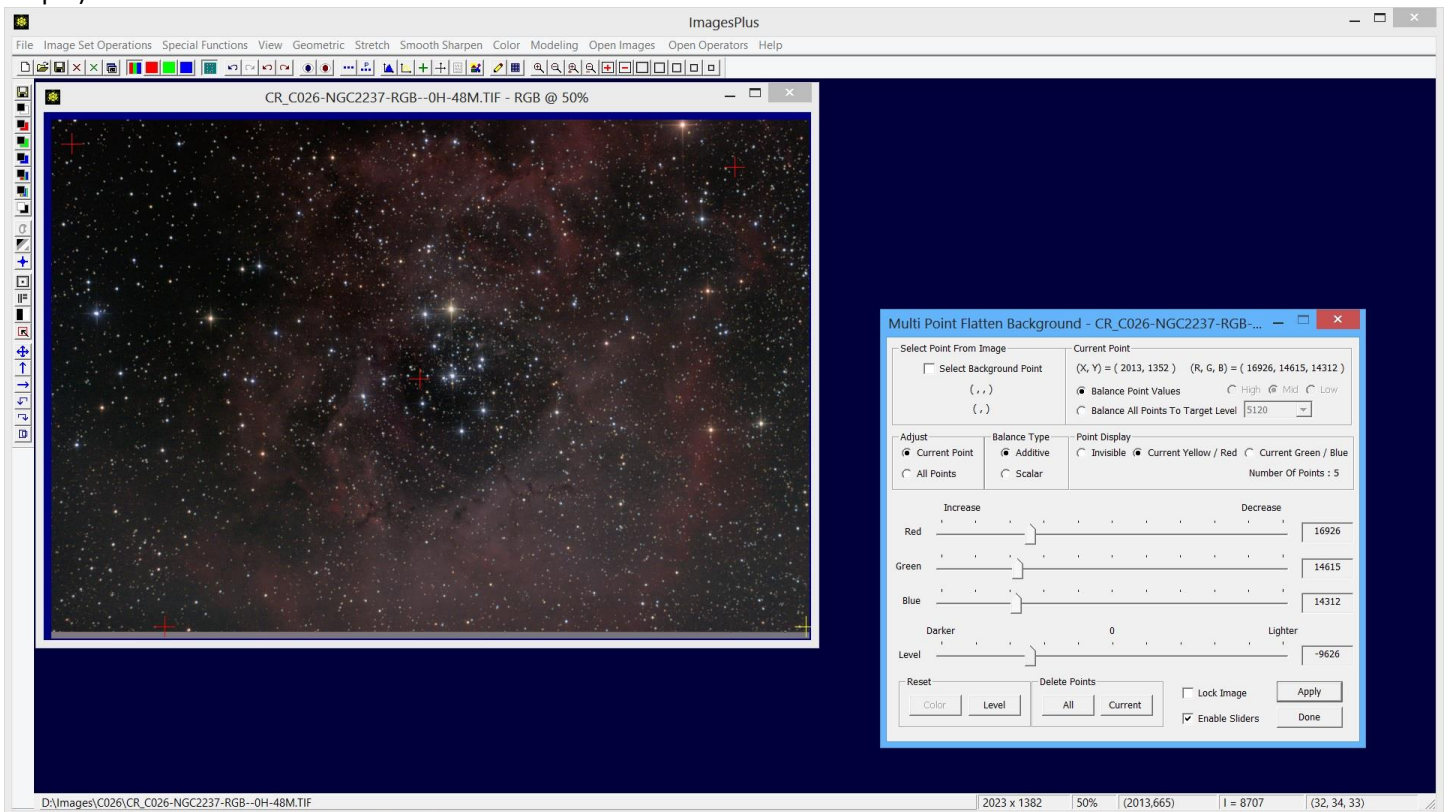
The Combine Images layer tool is used to combine the processed residual background image from step 9 with the smoothed detail level 1 image and the detail level 2 image. Both detail levels 1 and 2 use merge split blend mode with 100% opacity. The processed residual background is the bottom layer with normal blend mode and 100% opacity.

RGB Data Processing Step 1)



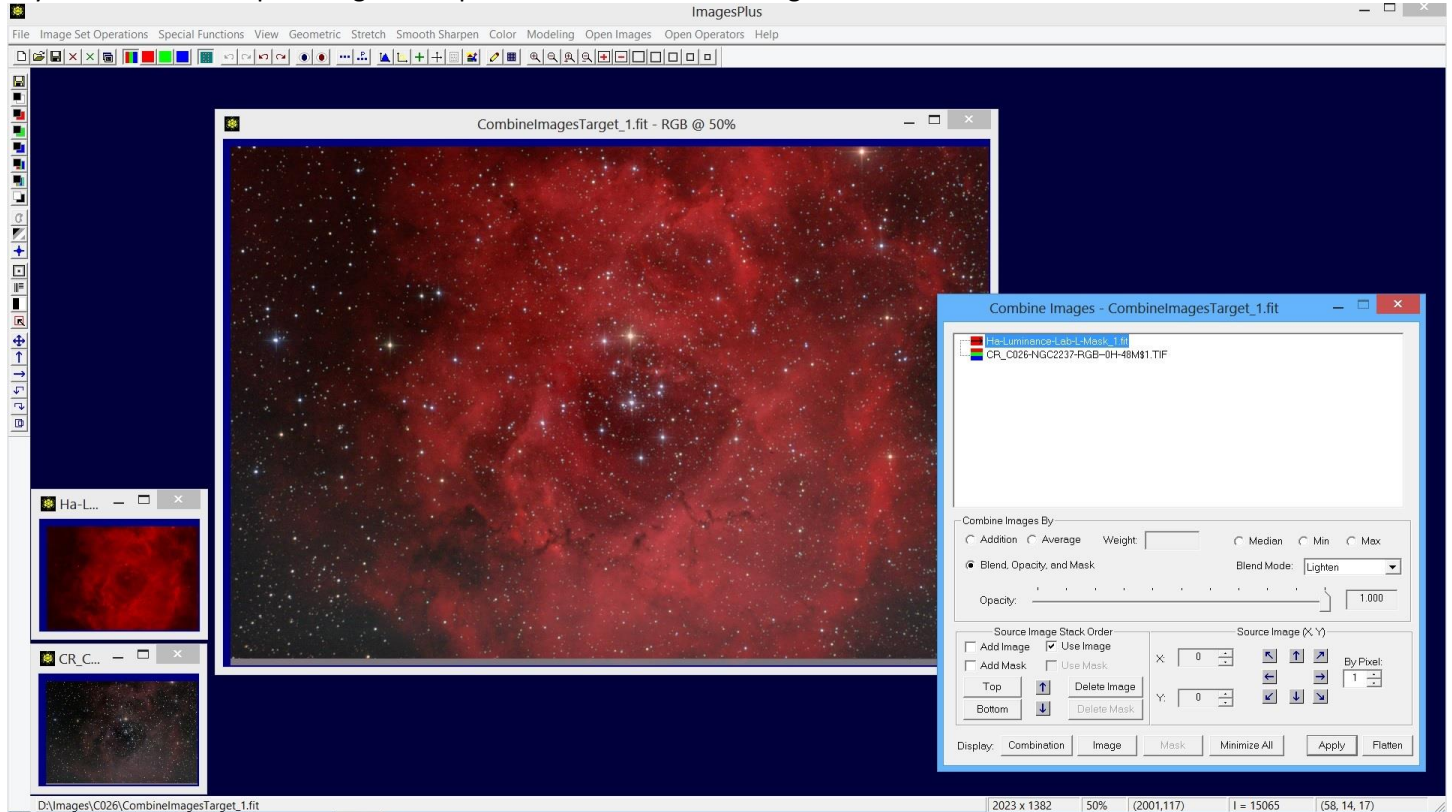
Stretch | ArcSinH is used for the initial brightness increase.

Step 2)



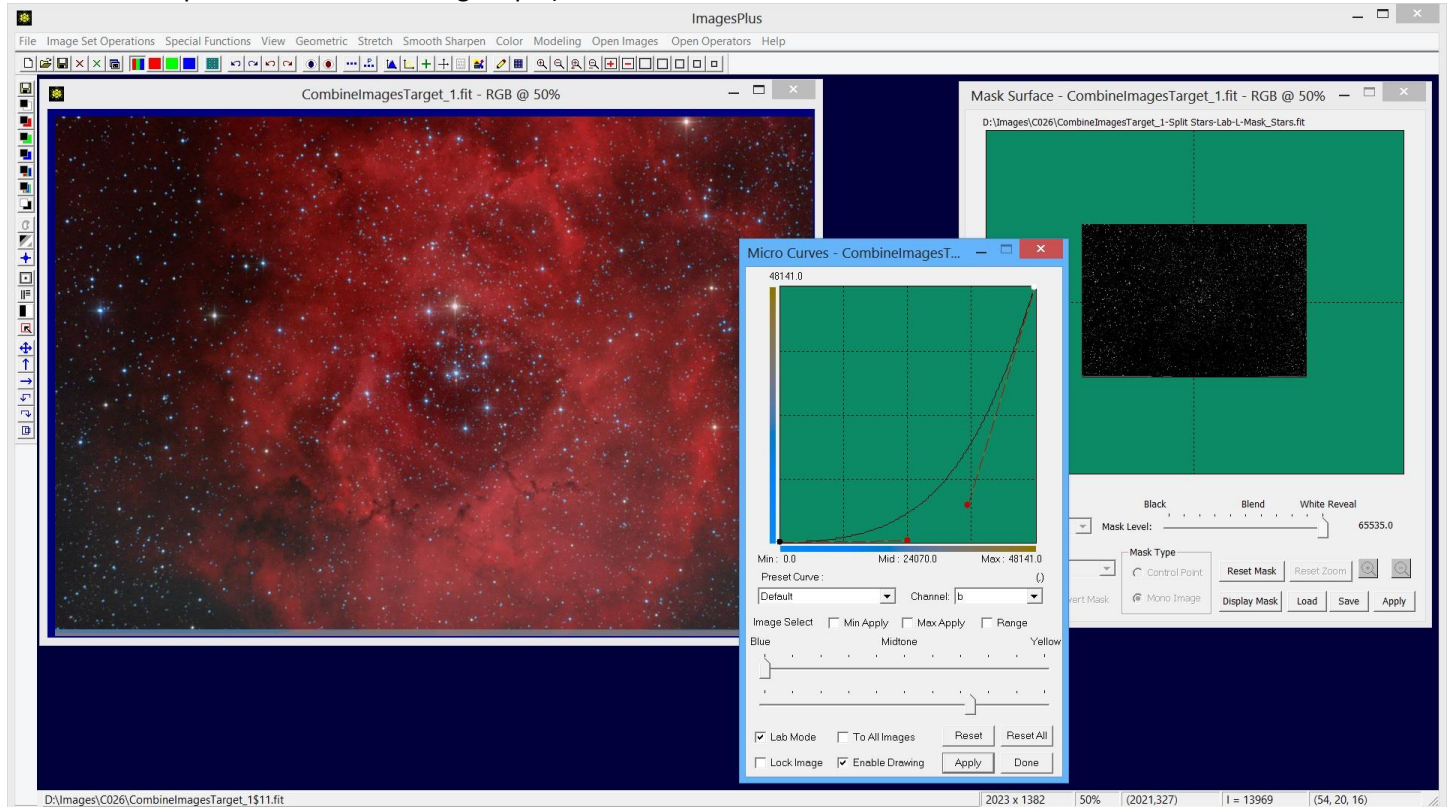
Special Functions | Multi Point Flatten is used to flatten and neutralize the background using 5 points as shown by the red and yellow + marks.

Layer Processed H-Alpha Image On Top of the Processed RGB Image



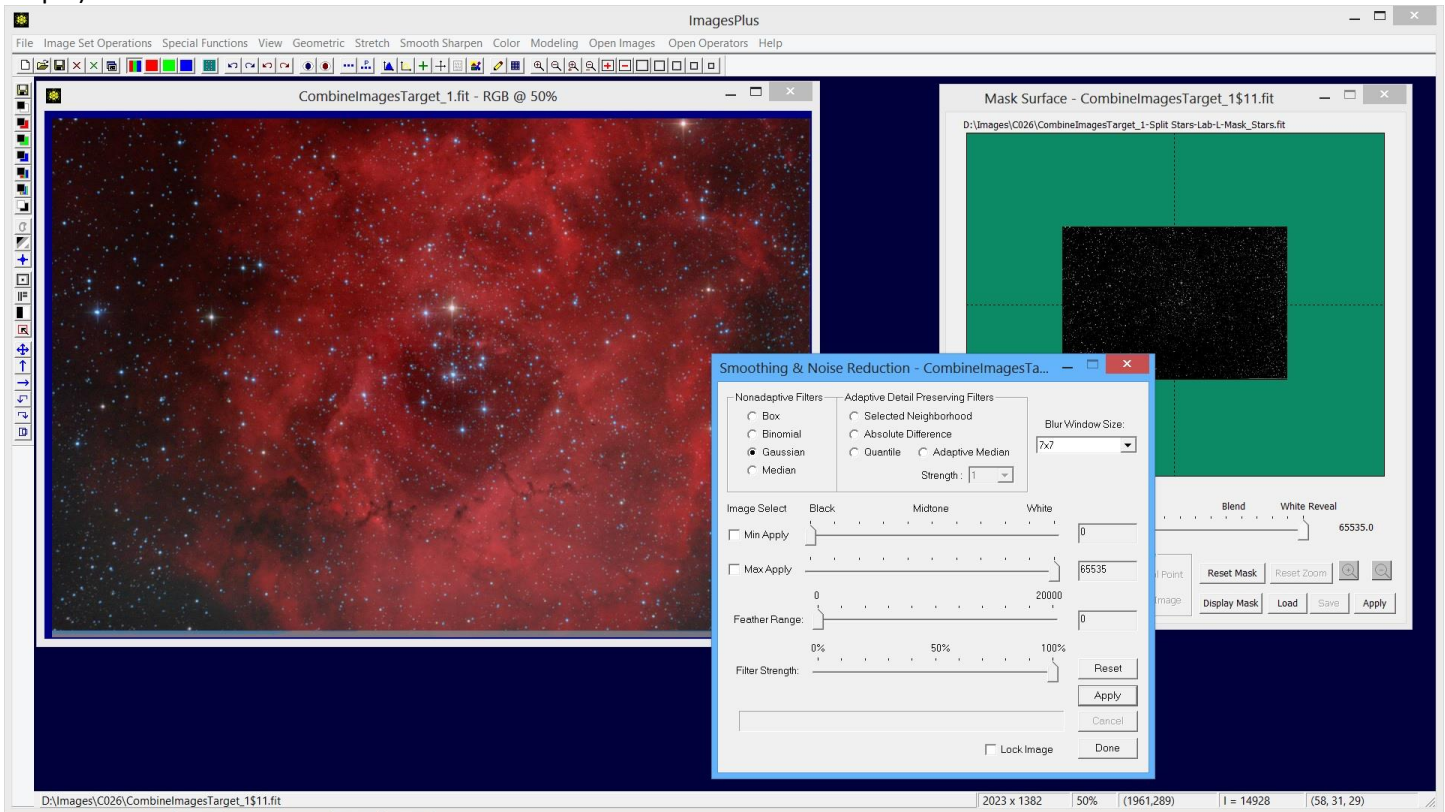
The processed RGB image is the bottom layer with normal blend mode and 100% opacity. The processed H-alpha image is the top layer and is set as red data with lighten blend mode and 100% opacity.

Combined H-alpha and RGB Processing Step 1)



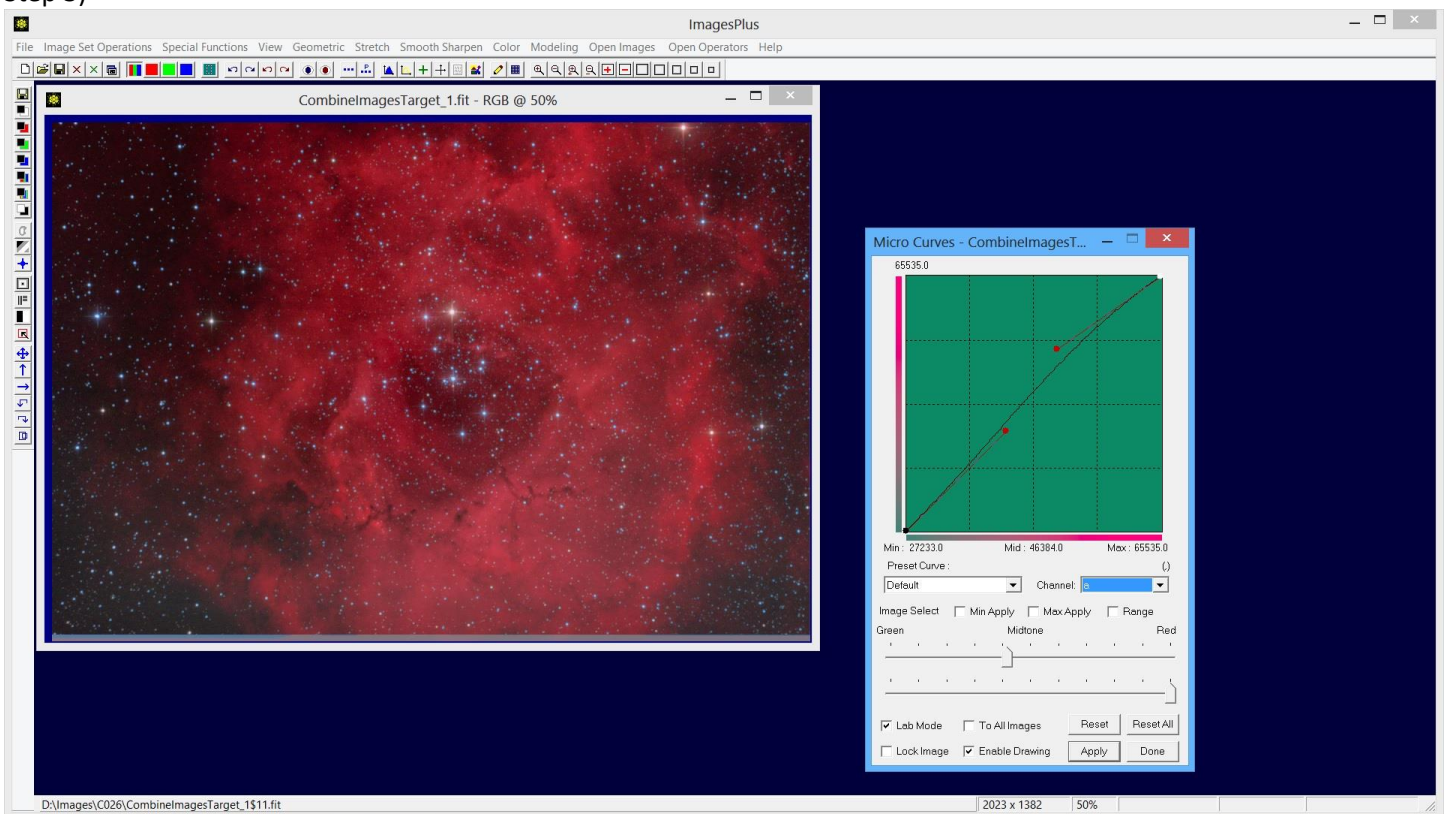
Micro Curves is used in Lab mode with a star mask created using the Feature Mask tool to increase the blue level without changing the red or green levels.

Step 2)



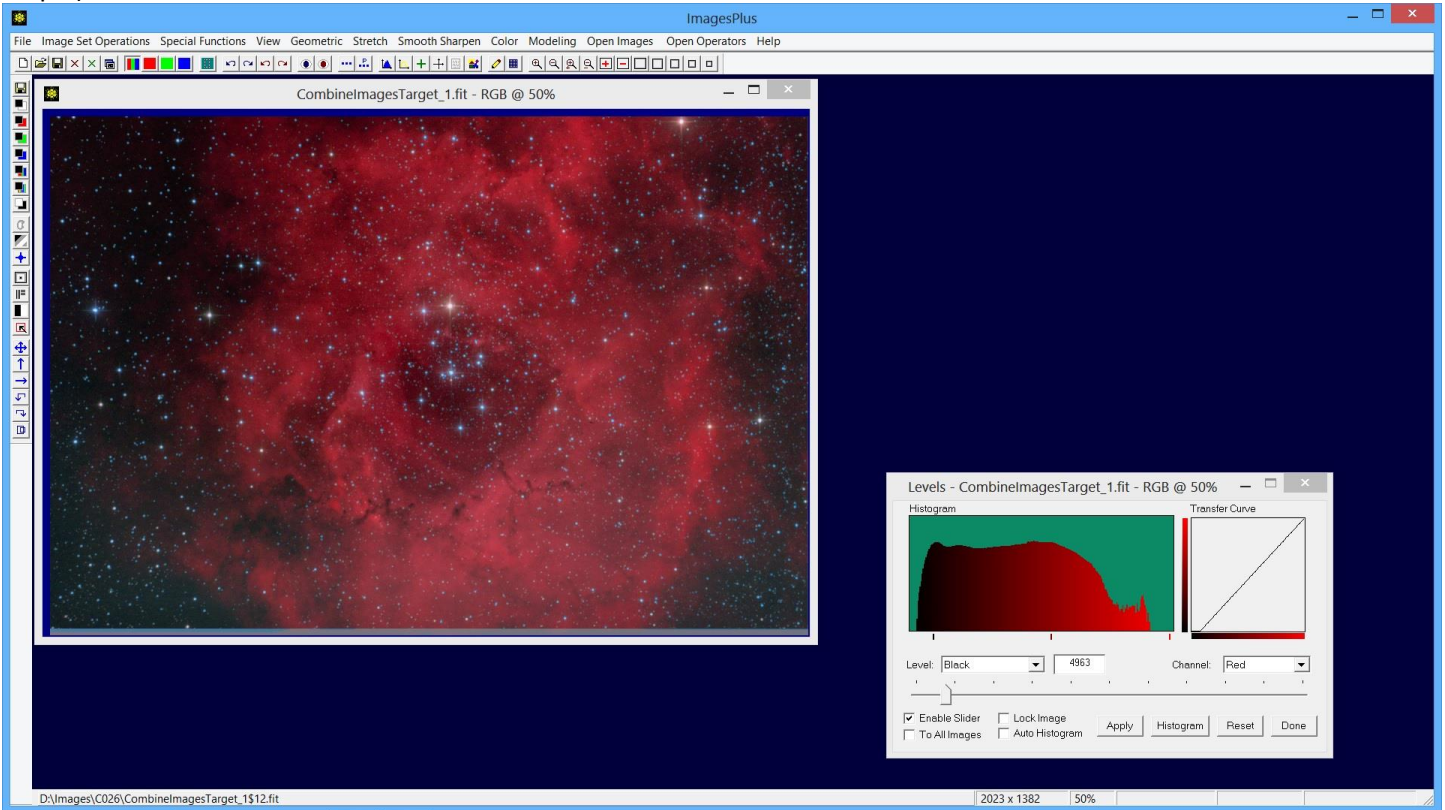
Stars are smoothed using a 7x7 Gaussian with a star mask.

Step 3)



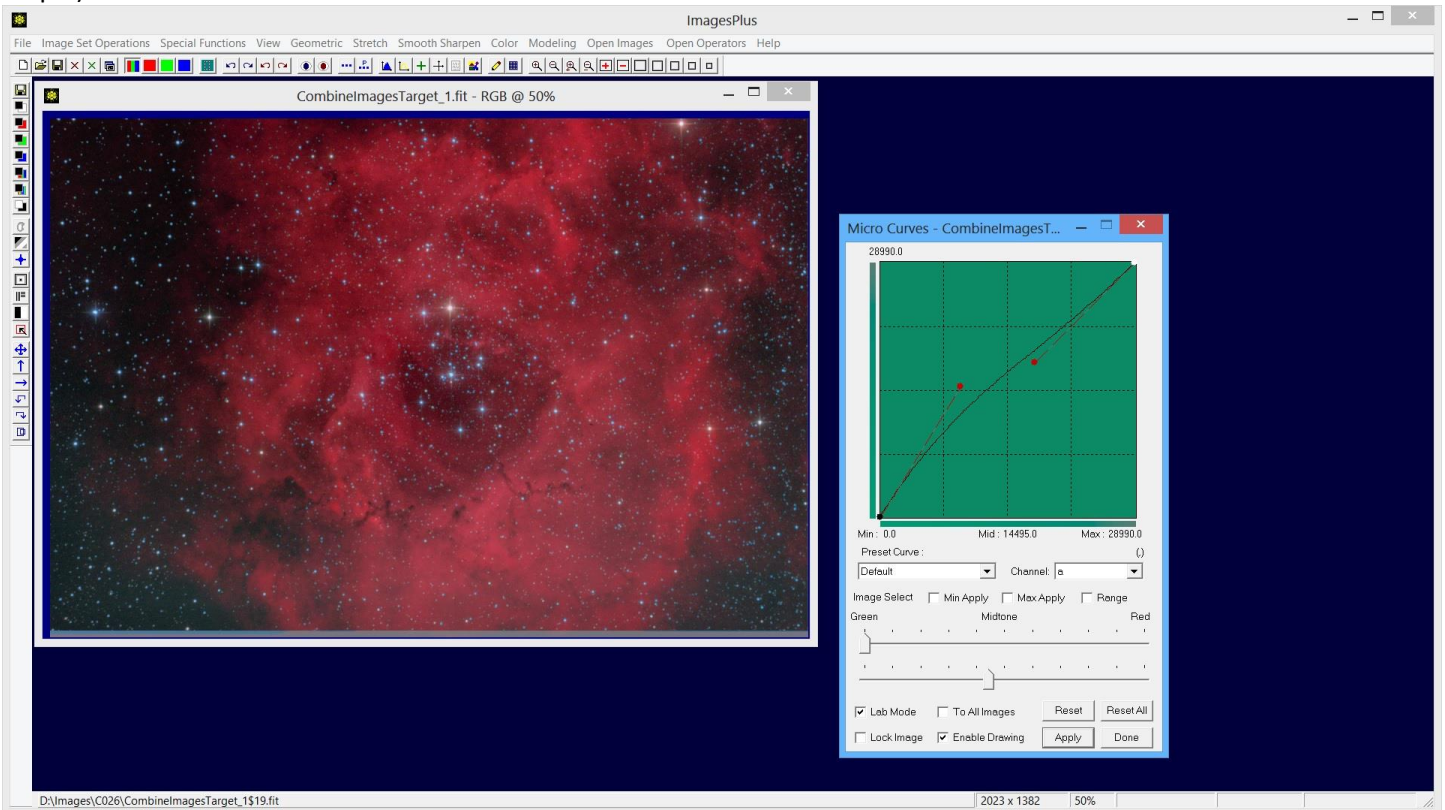
Micro Curves is used in Lab mode to increase red without changing green and blue.

Step 4)



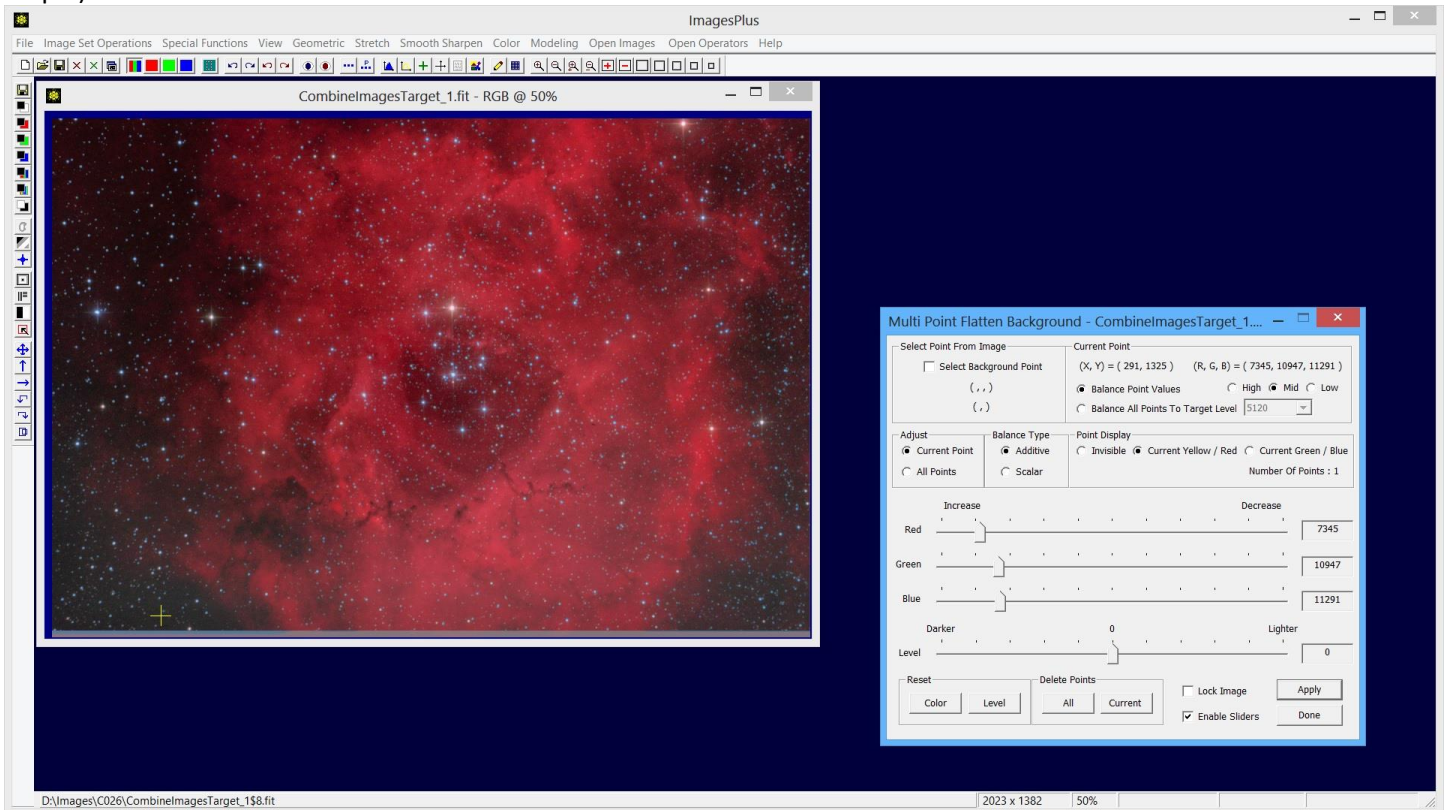
Levels is used to set the black point of the red data.

Step 5)



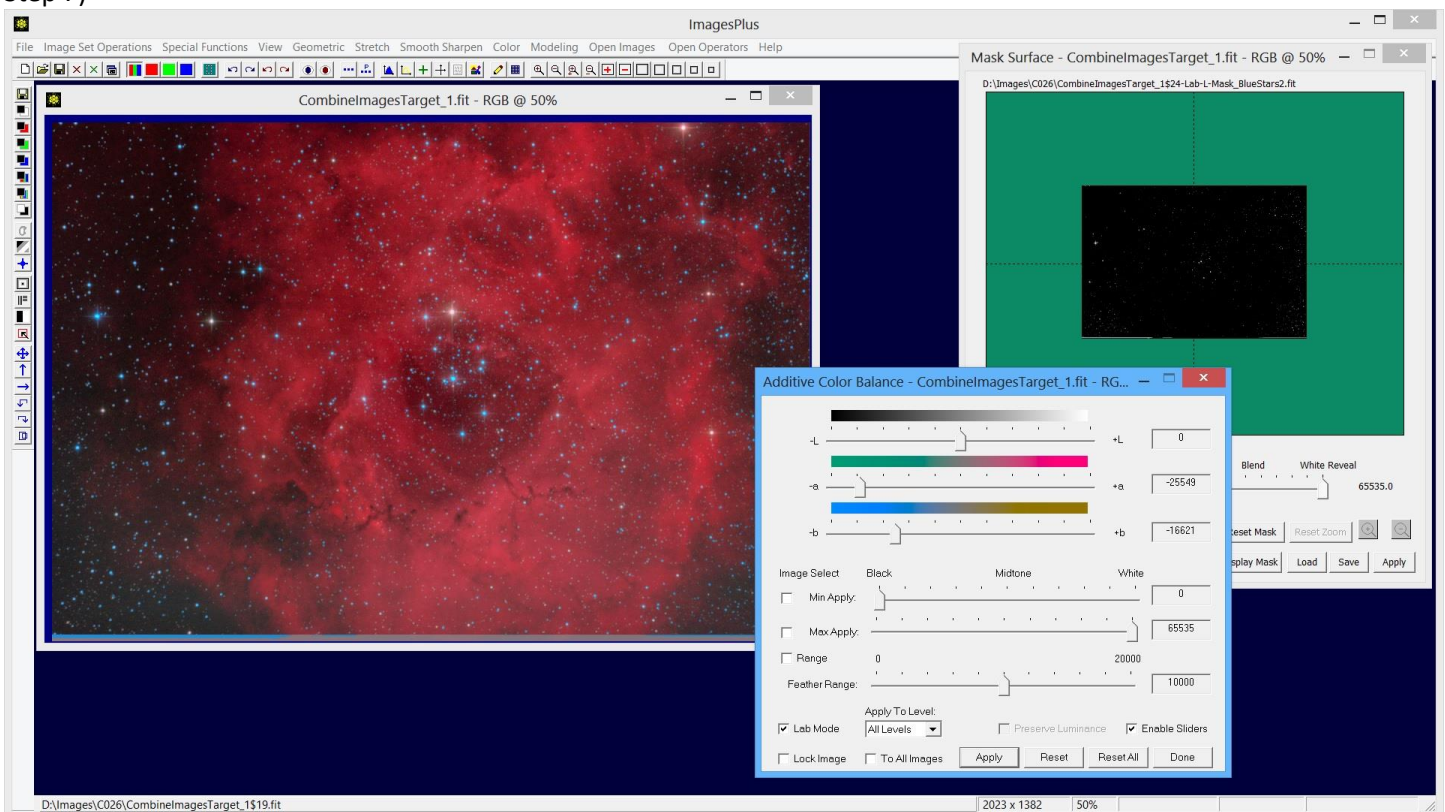
Micro Curves is used in Lab mode to reduce green with changing red or blue.

Step 6)



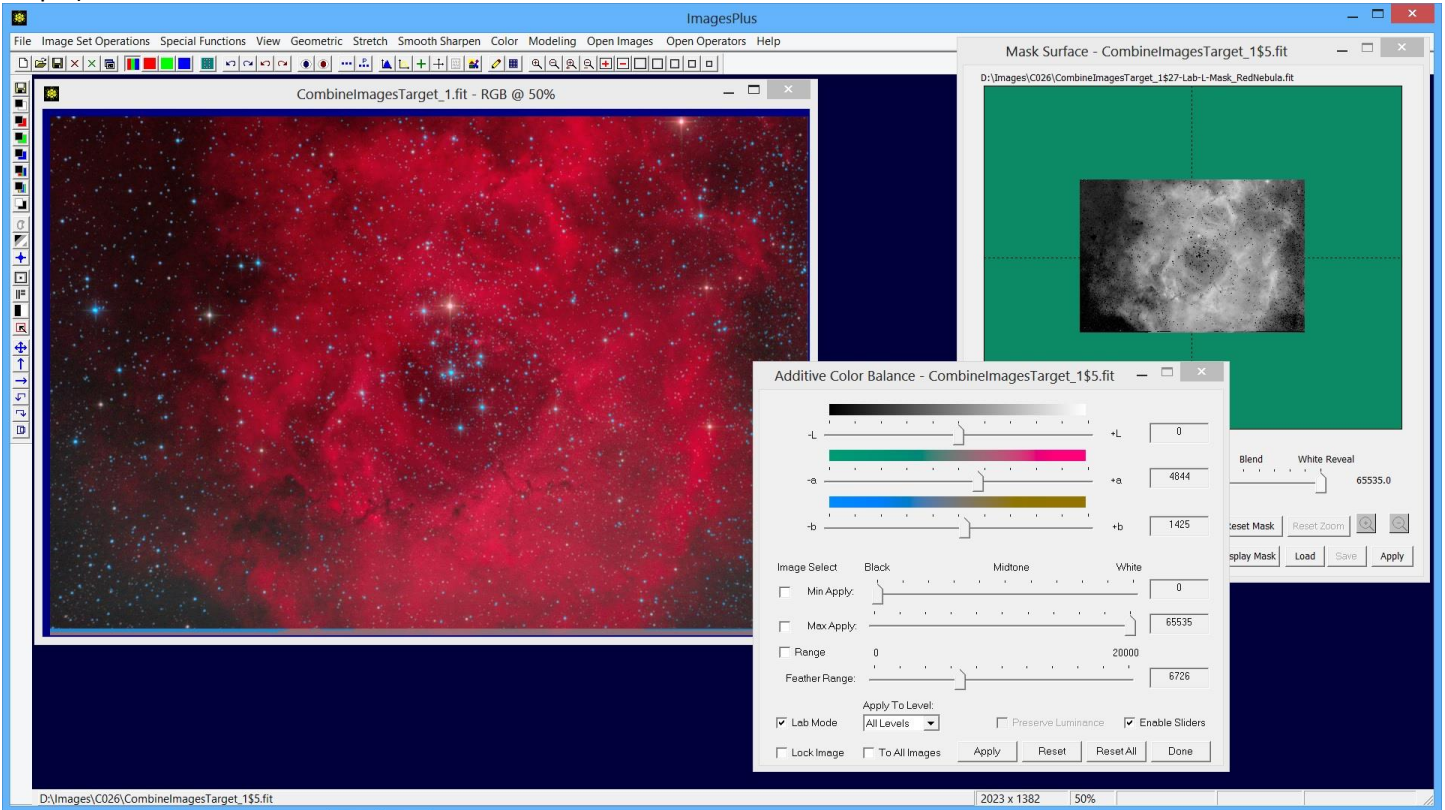
Multi Point Flatten is used to neutralize the background using one point in the lower left marked by the yellow +.

Step 7)



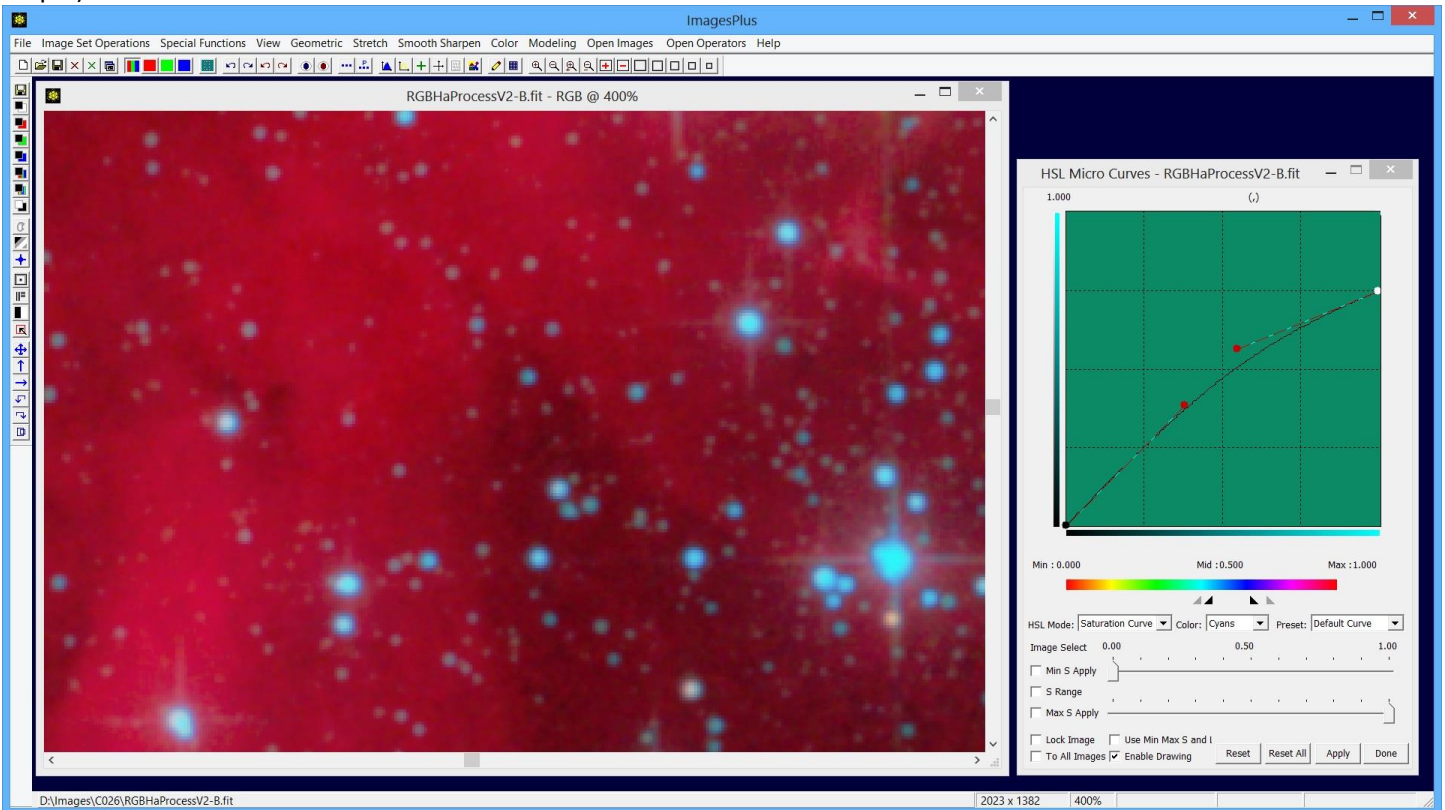
Color | Additive Color Balance is used in Lab mode with a blue star mask to increase blue and green. Move the middle slider towards the right to add less green and make the blue stars bluer.

Step 8)



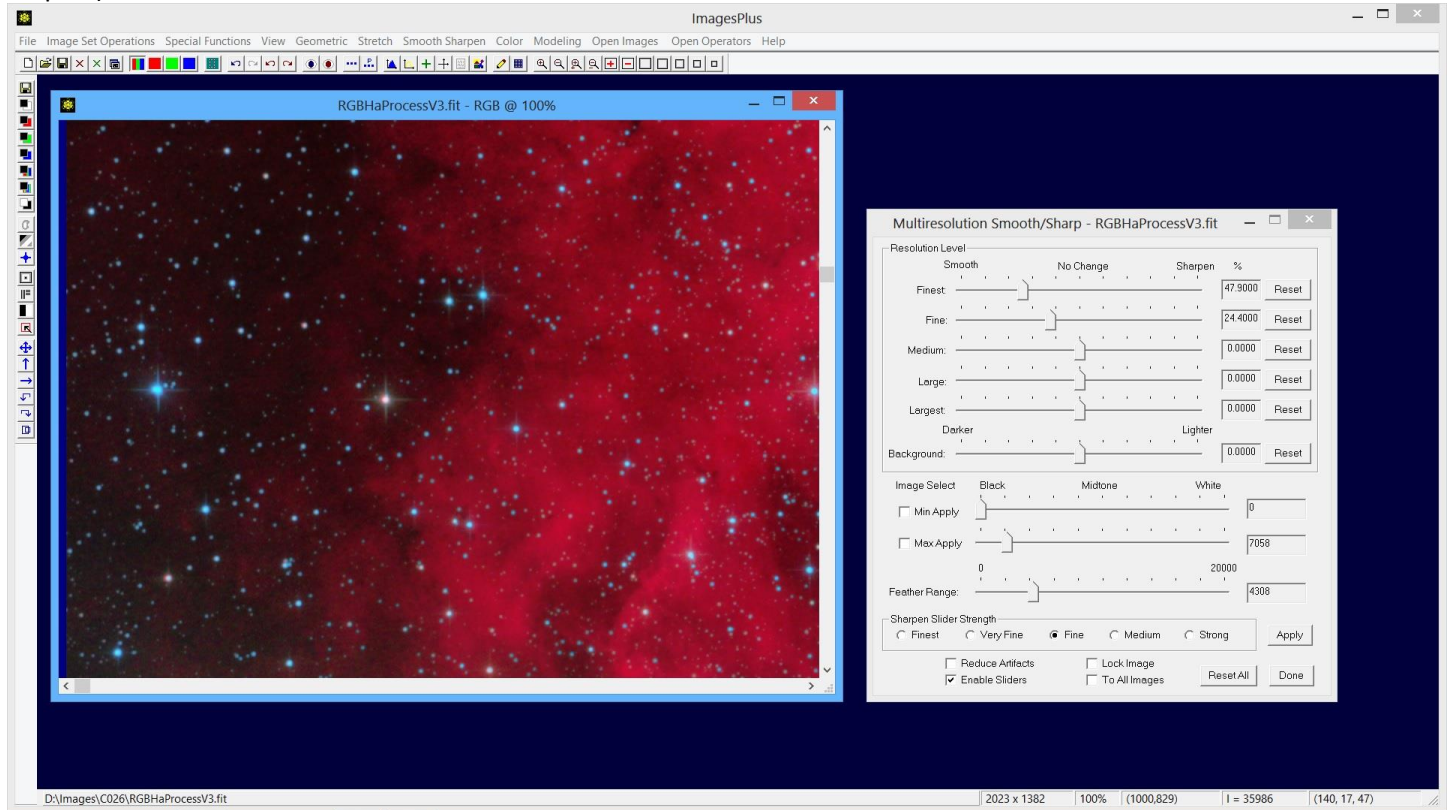
Additive Color Balance is used in Lab mode with a starless red luminance mask to increase red in the nebula.

Step 9)



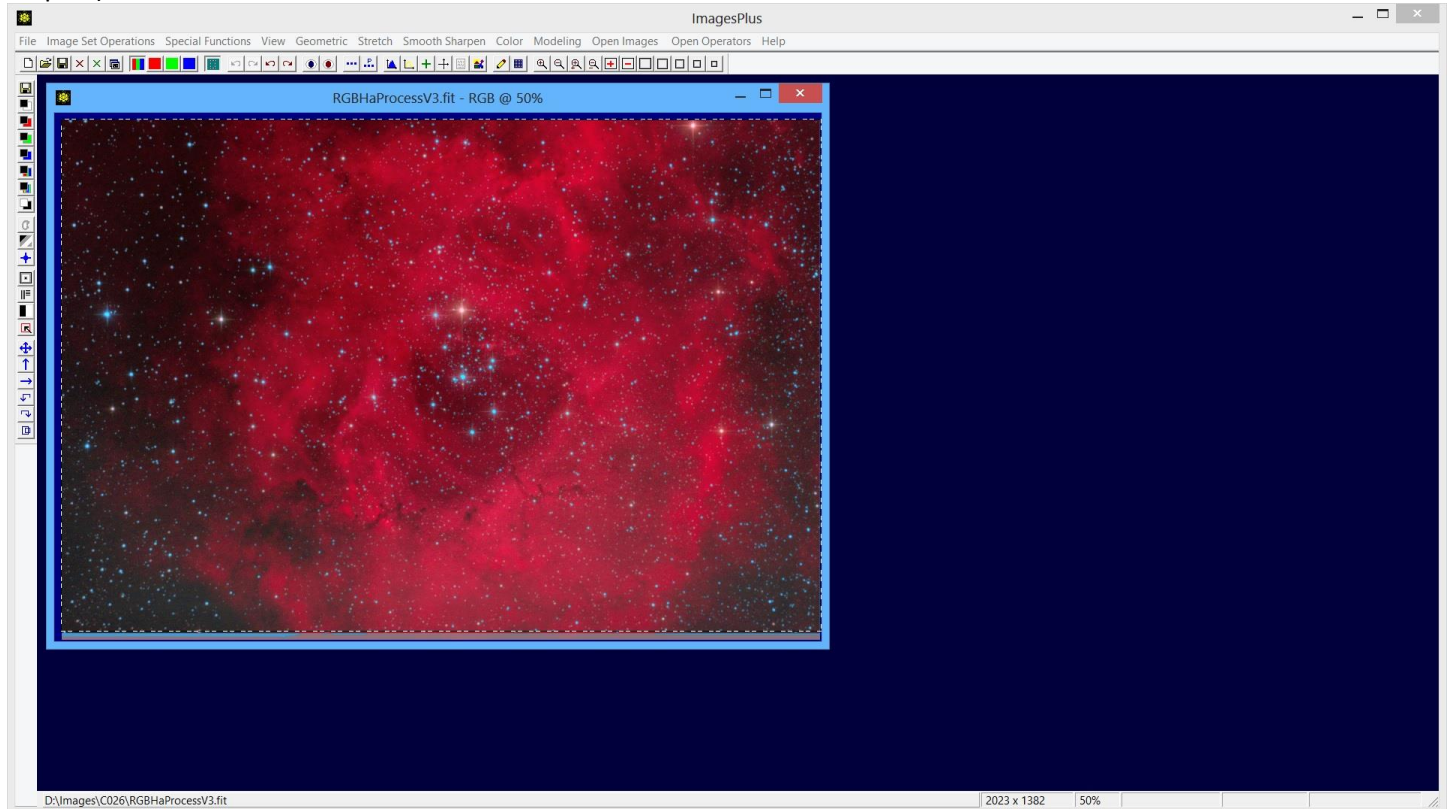
The HSL Micro Curves tool is used to select the blue saturated rings around some of the bright stars and reduce the saturation.

Step 10)



The Multiresolution tool is used to smooth the dark areas of the image in the luminance range [0.0, 7058.0] with feather range of 4380.0

Step 11)



Use the Copy Portion toolbar button to crop then save the image as C026-RGBHa-MLU-IP6alphaV3.jpg as shown below.

Final Ha-RGB C027 Image



C026-RGBHa-MLU-IP6alphaV3.jpg