



## Double Cluster in Perseus NGC884 / NGC869

12/27/2003

3161 Winston, Toledo, Ohio – Back porch area

Conditions: residential, clear – variable light haze, no wind, atmospheric stability 9/10, moon(set), mid 20's, frost later

Telescope: Meade LX-90 8 inch SCT in Polar alignment mode:

UV filter on back  
Right angle prism

Camera: Canon Digital Rebel:

At prime focus  
Shutter: 10 sec // ISO1600 // medium image format with fine jpeg compression (2048X1360)  
White balance auto, contrast +1, sharpness +1, color saturation +1, color tone normal  
12 images captured (Frames 2-13 or Resized 2-13)  
Download from camera to USB port on HP ze5185 notebook using standard image download process.

Make "DoubleClusterBigResz\_122803\_DIGREB\_FRrz5\_13less6\_avg8aregx\_proc1\_mirror"

Adobe Photoshop Elements 2.0:

Batch resize each image to 1024X680 (maintain aspect ratio) so process time will be reasonable.  
Registax: Align and stack 8 images (Frms 5, 7-13) with quality 95%, diff 100% and save as bmp, tiff and jpg images.  
Also create a flatfield from all 12 images and save as a tiff file.

AstroArt 3.01:

Use tiff image and tiff image of flatfield  
Smooth flatfield twice with Gauss sigma 15  
Unsharp Mask 2.5, 5.0, adaptive  
Mirror (flip horizontal)  
Gauss sigma = 0.7  
Histogram R=1265:308062 B=13630 V=8808:52854 exponential 10 clicks from linear  
Unsharp Mask 1.5, 3.0, adaptive  
Histogram R=1265:716318 B=13676 V=22561:56386 linear  
Clip minimum at 32000  
Color saturation 40% from 50%  
Gauss sigma = 0.5

Microsoft Word: brt 55%, con 55%

Larry Low – Astrophotonist  
1/30/2004