

**M3 in Color**



**Raw Data**

12/28/2003

3161 Winston, Toledo, Ohio – Back porch area

Conditions: residential, clear, no wind, low turbulence, crescent moon(set), 27 deg, no dew

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

Camera: Canon Digital Rebel:

At prime focus without Barlow lens

Shutter: 15 sec // ISO1600 // medium image format with fine jpeg compression (2048X1360)

White balance auto, contrast +1, sharpness +1, color saturation +1, color tone normal

27 images captured (Frames 2-28 or Resized 1-27)

Download from camera to USB port on HP ze5185 notebook using standard image download process.

Make "M3\_122803\_DIGREB\_F1\_27rz\_avg27aregx\_proc1\_crv1\_proc2\_crv2\_proc3"

Adobe Photoshop Elements 2.0:

Batch resize each image to 800X531 (maintain aspect ratio) so Registax can read them in.

Registax: Align and stack 27 images with quality 77%, diff 100% and save as bmp image.

AstroArt 3.01:

Use bmp image // Crop // resize 200% // Deconvolution (Van Cittert) using medium bright star and 20 iterations

Gauss smooth with sigma 1.2 // Histogram min 8, max 149, log 15 // Unsharp mask 1.0, 2.0, adaptive

Convolution with Gauss psf sigma 1.2, level 15 // Gauss smooth with sigma 0.5 // Color saturation 60% from 50% nominal

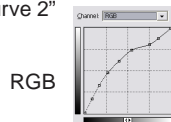
Adobe Photoshop 6: Apply "curve 1"



RGB

AstroArt 3.01: Convolution with Gauss psf sigma 2.0, level 40 // offset -5

Adobe Photoshop 6: Apply "curve 2"



RGB

AstroArt 3.01: Unsharp mask 1.0, 2.0, adaptive // Gauss smooth with sigma 0.7 // offset -5

Microsoft Word: brt 55%, con 55%

Larry Low – Astrophotonist

1/19/2004