



M51 – Whirlpool Galaxy and Companion NGC5195 (With IC4277 edge on spiral and IC4278 irregular)

4/23/2003

Bowling Green, Ohio

Conditions: rural, slight light pollution, no wind, slight turbulence, no moon, no dew, low 40's

Telescope: Meade LX-90 8 inch SCT in Polar alignment mode with 3.3 focal reducer

Camera: Astrovid StellaCam-EX: 2X Zoom, 128X sense-up, gain at 7, 8 and 9 out of 9 (see below).

Capture off video tape onto HP ze5185 notebook using Video Capture Essentials with no interleaving:

For AGC = 9: as 89 image sequence @ 1 per second with brightness at 40%, contrast at 70%.

For AGC = 8: as 297 image sequence @ 1 per second with brightness at 40%, contrast at 70%.

For AGC = 7: as 239 image sequence @ 1 per second with brightness at 45%, contrast at 100%.

Make "M51_042303_0_1_2_avg622autoregx_AA3ffcor_proc1crv1proc2_cln_proc3"

Registax Processing:

Average 89 (AGC-9) images plus 297 (AGC-8) images plus 239 (AGC-7) images [total 625] using auto-optimal alignment and stacking. Reject 3 (meteor streak) so have 622 with 60% Stack Quality and 15% Difference

AstroArt 3.01 Processing:

Set data to floating point / Make new Artificial FlatField (Chris Icough): Set flatfield processing image to floating point.

Select box around galaxy / Calculate "normal" and make the flat / Set flat to floating point.

Gauss the flat with sigma = 5.0 / Divide original by flat. (Excellent result, smooth without "integer" contours!)

Offset -40

Create luminance image to get rid of slight greenish artifact creeping in.

Convolve background with sigma = 2.0, level = 4.0

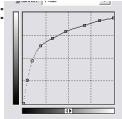
Gauss smooth all with sigma = 1.0

Histogram: RF=-36.4:240 B=2.7 V=0:256 linear

PhotoShop 6 Processing:

Curve1:

RGB



Unsharp mask 100%, 5 pixels, 5 threshold / Gauss smooth 0.5 pixels / clone out hot pixels.

AstroArt 3.01 Processing:

Convolution with sigma = 2.0, level = 20 (do it twice)

Crop / offset -10 / do luminance extraction again.

Microsoft Word Processing: Brightness 55%, Contrast 45%

Larry Low – Astrophotonist

3/8/2004