



President's Message September 2009



September has arrived and the Monsoon season end is in sight. Hopefully everyone has finished purchasing their new equipment and we can avoid the new equipment curse of cloudy skies. I will be picking up my last piece of new equipment for the season on the 17th and will be gone for the rest of the month for my youngest Daughter's Wedding. \$\$\$\$\$

The White Sands Star Party has come and Gone It was the weekend of, Sept 11th and 12th, and we, the ASLC gave our agreed upon Workshop Speakers. The turnout was small, perhaps because of the weather or the time of year, however Rich is providing a report that should give us the experience in detail.

School has started and the star party requests are starting to roll in. We will soon be planting the seeds of science in the young minds of our local youths.

No new news on the Upham Lighting situation or the status of the local revision to the Las Cruces Lighting ordinance.

The Enchanted Sky Star Party is just around the corner, it will be held October 14-17, 2009 in Socorro, New Mexico. It offers a unique Southwestern Astronomy experience. With many exciting features, the Enchanted Skies Star Party includes a unique opportunity for a night of observing at an elevation of 10,600 feet. We continue our decade-long tradition of presenting outstanding lectures by leading professional and amateur astronomers, and we'll gather on Saturday night for an evening of great food, Southwestern entertainment and excellent, dark-sky observing. Socorro's dry, high-desert climate, dark skies, and friendly small-town environment provide an excellent dark sky observing experience. Join ESSP for dark sky observing, astronomy workshops, door prizes, lectures, and insider tours of the Very Large Array and the Magdalena Ridge Observatory. Nightly observing, lectures, and camping will take place at the Etscorn Campus Observatory and at the ESSP official "Dark Sky Site," the El Camino Real International Heritage Center, located only about 30 miles South of Socorro. More information can be found at the web site <http://enchantedskies.org/index.html>

Your President and humble servant
Jerry Gaber
575 382-9183

The Astronomical Society of Las Cruces (ASLC) is

dedicated to expanding public awareness and understanding of the wonders of the universe. ASLC holds frequent observing sessions and star parties and provides opportunities to work on club and public educational projects. Members receive the High Desert Observer, our monthly newsletter, membership in the Astronomical League, including AL's quarterly A.L. Reflector. Club dues are \$35.00 per year. Those opting to receive the ASLC newsletter electronically receive a \$5.00 membership discount. Send dues payable to ASLC with an application form or note to: Treasurer ASLC, PO Box 921, Las Cruces, NM 88004

ASLC members are entitled to a \$10.00 discount to Sky and Telescope magazine.

ASLC OFFICERS, 2009

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Next Meeting

The next monthly meeting will be held on September 25th at 7:30 pm in room 77 at the Dona Ana Community College, Main Campus. This month's speaker will be Dave Dockery. The topic will be "Imaging The LCROSS Lunar Impact Event."

The Imaging Group will meet at 7:30pm.

Events

The next monthly dark sky viewing event will be held on the night of September 19th at the Upham site. The next monthly Moon Gaze will be held at the International Delights Cafe on September 26th. Both events begin at dusk. For information on these and other events, please see the ASLC website.

[Http://www.aslc-nm.org](http://www.aslc-nm.org)

October Issue of the HDO

A note to all members, we need more contributors! Sharpen your writing skills, share your knowledge and help bolster our newsletter! Articles for future issues should be sent to Tony Gondola by the 10th of the month. Text should be submitted as email (acgna@comcast.net) or as an attached Microsoft Word format document. All Images should be in jpg format.

If you have any questions about submitting materials for publication in the HDO, please don't hesitate to contact Tony at 373-5104, acgna@comcast.net

Thanks in advance!

Minutes, August 2009 ASLC Meeting

Call to Order:

Jerry Gaber, President, Astronomical Society of Las Cruces (ASLC), called the meeting to order at 7:30 pm., 28 August 2009, Rm. 77, Dona Ana Community College.

President's Comments:

Jerry Gaber welcomed the group and recognized new members or visitors present. Jim Enright has recently relocated to Las Cruces from New Jersey and Paul Temple was visiting from Deming.

Secretary's Report:

The minutes for the July meeting were submitted as published in the current issue of the Club newsletter, the *High Desert Observer (HDO)*. Rich Richins moved to accept the minutes as published, Ron Kramer seconded. The minutes were accepted by the members present. There was not an additional Secretary's report.

Treasurer's Report:

The Treasurer was present but did not have an update of the Club's accounts. She had updated member directories and will distribute them following tonight's meeting. The annual budget presentation is due and will be made at the September meeting. She also noted that nominees for next year were due. Jerry Gaber asked for volunteers to form a Nominating Committee chaired by past-President Nils Allen. Bernie Joplin, Bert Stevens and Kirby Benson will serve on the committee. A check for \$50 was received as the Club's portion from the Texas Star Party. Another check was received from the Astronomical League Southwest Regional meeting. There was no additional Treasurer's report.

Committee Reports:

Observatory Committee:

Rich Richins, Committee Chairman, had a brief status report. The Club is no longer waiting on electrical plans for the proposed observatory but is working on coordinating a meeting regarding the plans with the current Leasburg Dam State Park ranger. There was no additional progress to report.

There were no additional committee reports.

Old Business:

1. Club-logo Apparel – Ron Kramer announced that he has submitted an order for additional items based on the expression of interest from last month's meeting. He distributed an order form for those members that had not previously expressed an interest; he can also be reached via email. He plans to have the items available at the September meeting.
2. Meade Solarscope – No update was available from Meade. Steve Barks will continue research into other vendors and brands.

3. Meeting Presentations/QCShow – Jerry Gaber purchased a single software license for the Club for \$65 rather than five (5) licenses for \$249.99 until he is sure the Club can utilize it for presentations.
4. 100 Hours of Astronomy - Another 100 Hours of Astronomy event will possibly be held in October '09 as part of IYA 2009. Kirby Benson and Wes Baker will continue to track this event but did not have an update.
5. White Sands Star Part (WSSP) 2009 – WSSP 2009 is scheduled for 11-12 September, a $\frac{3}{4}$ Moon weekend. Jerry Gaber reported that the workshop schedule is set and posted on the WSSP website. The current presenters from the Club are Steve Barkes, Dave Dockery, Jerry Gaber, Ron Kramer, and Joe Zurlinden. Another person from one of the other clubs will also make a presentation. Packets may be picked up at 12:00 noon on 11 September by early and pre-registrants, after 3:00 pm by other registrants. Public viewing will be available on 12 September.
6. Beginners/Imagers circle – Thanks to Vince Dovydaitis for tonight's presentation. Ron Kramer will present prior to the September meeting and Steve Barkes will present in October. Additional volunteers are needed for the rest of the year.
7. September Monthly Meeting – Jerry Gaber will be out of town on 25 September. Kirby Benson, Club Vice-President, will conduct the September meeting.
8. Star Parties – Jerry Gaber has been in discussions with Allen Scott of The Albuquerque Astronomy Society (TAAS) about a joint club star party. They are looking at a November event either at Valley of Fires State Park. Please let Jerry know of your preferred date for this event.
9. *HDO* articles – Tony Gondola NEEDS ARTICLES for each issue. Brief articles are fine and will be appreciated. Please submit them to him by the 10th of each month.

There was no additional old business discussed.

New Business:

1. Star Parties – Bernie Joplin, Outreach Coordinator, reported a star party at Sonoma Elementary is scheduled for 09 November.
2. Southern New Mexico State Fair – The Fair is scheduled for 30 September to 04 October. Rich Richins has been in conversations with people at the Fair about setting up an Astronomy booth. He will liaise but will not coordinate the Club's effort. Jerry Gaber will be out of town but has some printed material for handouts. The NMSU Astronomy department may also participate. There were no volunteers for coordinating or participating in this outreach opportunity. The Club will not have a booth at the State Fair.
3. Magdalena Ridge tour – A tour of the new observatory at Magdalena Ridge in November is a possibility, perhaps in conjunction with the star party at Valley of Fires State Park.
4. Presenters – Program presentations for the rest of the year are needed. Fred Pilcher volunteered to present a program on light curve photometry next month. He will coordinate with Kirby Benson. Astronomy graduate students may be interested in giving presentations in the coming months.

5. Las Cruces lighting Ordinance – A rough draft is available for review and comment. There is no enforcement provision included and all currently legal lighting already in place will be “grandfathered” in under the proposed ordinance.

There was no additional new business for discussion.

John McCullough offered a motion to adjourn and Vince Dovydaitis seconded. The motion passed and the business portion of the meeting was adjourned at 8:04 pm.

Announcements:

Jerry Gaber has a DSI Color III for sale. Asking price is \$600. See him for details.

The Shuttle *Discovery* launch is still on schedule.

Achievements:

Dave Dockery was presented the Astronomical League (AL) Messier award certificate.

Rich Richins was presented the AL 1st place webmaster competition plaque.

There were no additional announcements made.

Presentation:

This month’s program was “Life at Apache Point Observatory – Amateur vs. Professional Astronomy” by Club member Howard Brewington. Howard described some of his achievements as an amateur astronomer: five (5) visual comet discoveries are credited to him and he has an asteroid named after him. His longtime goal was to turn his hobby into his job and he succeeded by obtaining an astronomer position on the Sloan Digital Sky Survey 2.5 meter instrument. He is also the cloud camera expert and the seeing quality monitor expert at Apache Point. Unfortunately, he has found that astronomy is now his JOB, while being an amateur astronomer was many things, especially FUN!

This presentation was not recorded for rebroadcast on the Internet. Other meeting presentations can be accessed on the web at <http://www.aicsresearch.com/lectures/aslcnm/>.

The June 2009 monthly meeting concluded at 8:50 pm.

-Respectfully submitted by John McCullough, ASLC Secretary

Finding that last little bit of image correction that can be the difference between an 'acceptable' image and a 'better' one.

by

Kirby Benson

It is generally possible to go a "little bit further" to tease out some image qualities that we may be tempted to overlook or disregard after spending several hours working on it.

All images were taken from my house in the Las Alturas area that has moderate light pollution.

1. Image of M51 Mono ST10 on May 27 2009. 2 hours and 15 minutes of data both 10 minute and 5 minute sub frames.



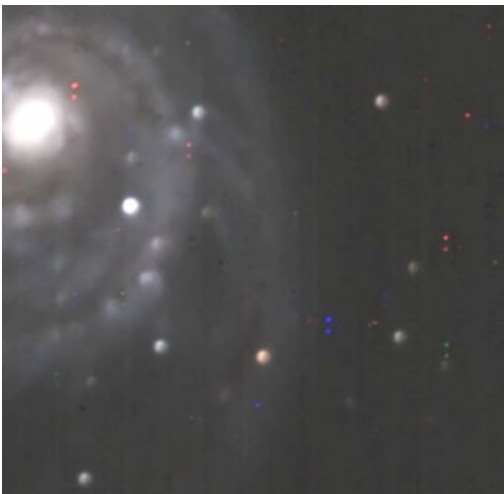
2. Image of M51 Color ST4000 on May 15 2009. 1 hour and 35 minutes of data from both 5 minute and 10 minute sub frames.



3. These two images were scaled and rotated in ImagesPlus 3.75 and then combined in Photoshop after some preliminary processing on the images individually:



Here is a detail with the brightness and contrast increased to indicate the hot pixels and the need for cleaning up and processing that the image will now require:



After several processing sessions we are now at draft three and what could be considered an acceptable image.

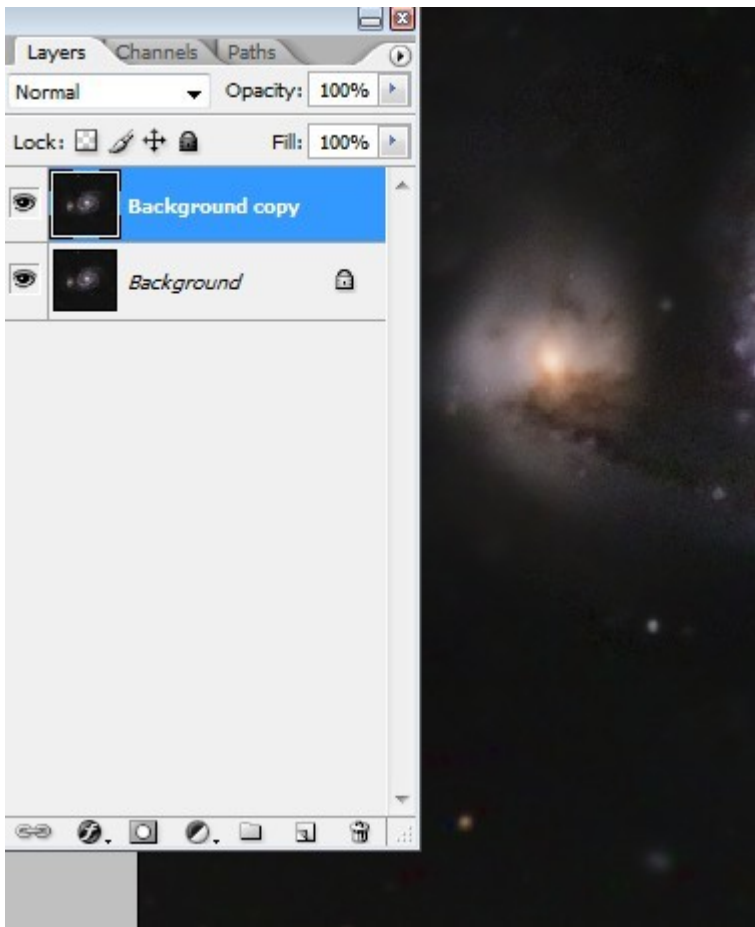
There has been some noise reduction with the software program “Noiseware” and some sharpening with a Photoshop plug-in called “Focus Magic” in addition to levels and curves and some masking and adjustment layers of color balance, saturation, gradient reduction and so forth.



However, there is more that can be done with this image that is subtle and can improve it. Also it is at a place now that we do not want to destroy what we have worked so hard to achieve.

The first thing we will do is sharpen the image some more but this time we will use a sharpening layer and the high pass filter.

We make a duplicate of the background layer by dragging the background layer to the “create a new layer” icon (if we have layers stacked up they need to be flattened before making the duplicate layer).

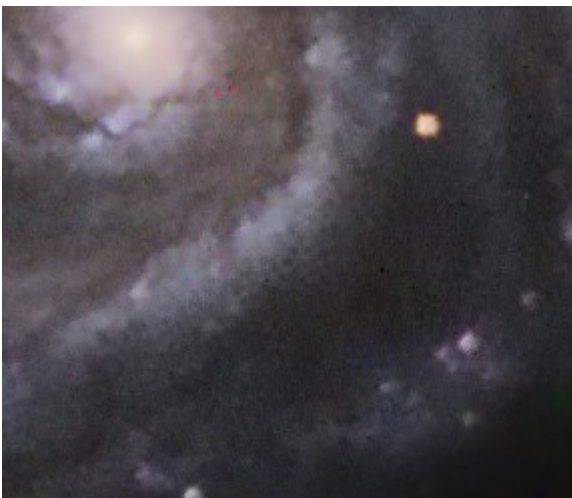


Now we change the blending mode of the new layer to 'Overlay' and then Filter/Other/High Pass.

The radius is adjusted to what we want. I used 3 in the example. We can go a little harsh in this step because we are going to cover up most of the sharpening anyway.



It doesn't look too bad just the way it is but if we push the size up to 100 percent we can see all the noise that the sharpening has accentuated:



The next thing we will do is add a layer mask. Layer/Layer Mask/ Hide All.

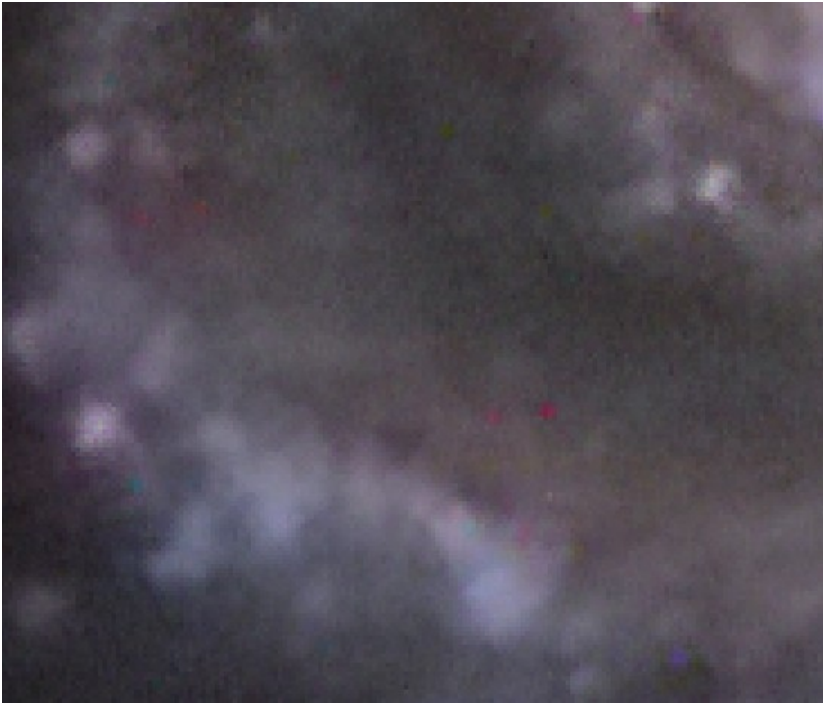
Next we select the brush tool, adjust the size and hardness to suit the image and carefully reveal the areas that we want to see sharpened.



If we alt/click on the background copy's icon we see this:



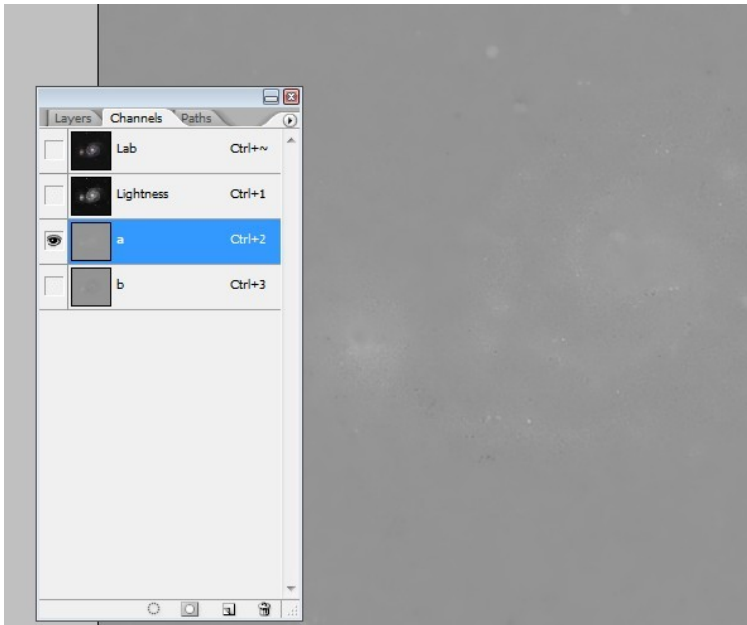
Well, things look pretty good at this point but there still more to do. If we increase the size of the image we will again see the noise that was there before we even started on the sharpening.



We can clean some of this up and we are going to use the LAB mode to do it. This mode is not as destructive as other modes such as RGB.

We will first need to flatten the image.

Then we start with Image/Mode/Lab Color. Next we open the channels palette and choose the A channel:



We examine the image and decide if it is noisy enough to warrant blurring. It is, so we open Filter/Noise/Median and blur the Channel. In this case I blurred it 2 pixels.

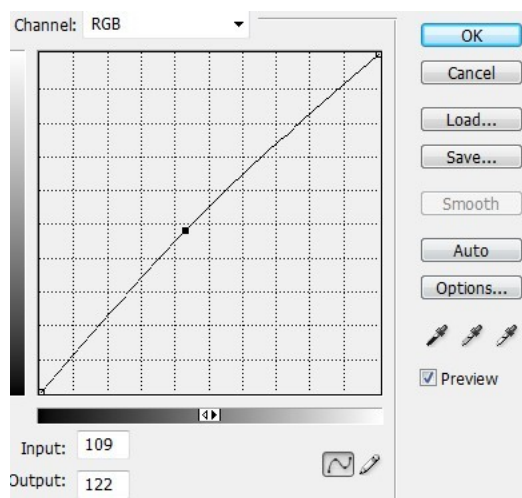
Next we do the same with the B channel. Again, I decided to use 2 pixels.

Last we choose the LAB composite channel to reveal the entire image and then return to RGB.

Now, just as we did before, we create a new 'background layer copy' and go to Layer/Layer Mask/Hide All. Then we will pick the brush size and hardness and reveal some of the areas where the noise was blurred. It is important to be careful to preserve the areas that had previously been sharpened.



The next to last thing I did was to open a curves adjustment layer and raise the RGB from 109 to 122 in order to reveal more of the full dynamic range.



And finally we flatten the final image. While the improvements are subtle they have improved the image and brought it to a more acceptable level of display.



ASTRONOMICAL SOCIETY of Las Cruces
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ASLC - Sharing the Universe
With Our Community
for Over 50 Years

