



THE OBSERVER

SAN BERNARDINO VALLEY AMATEUR ASTRONOMERS

Member of The Astronomical League

2009, International Year of Astronomy

<http://sbvaa.org/>

Volume #52, Issue 8

Since 1958

August, 2010

Meeting:

August 14, 2010

Location:

San Bernardino County
Museum, 5:30 - 9:00 p.m.
Redlands, CA. California
St. exit, I-10 Fwy.

B

B

Q

Program

Annual BBQ



Time once again for the club's annual BBQ potluck at the Museum. The grill will be hot so bring your main course and a little something to share.

Set up at 5:30 p.m. Serious grilling and eating from about 6:00 p.m. until 9:00 p.m.



Upcoming Astronomy Events in SoCal

August 13 - 14, Perseid Meteor Shower

Aug. 5 - 8: Julian Starfest, Julian, CA.
This is the third one and is hosted by the San Diego Astronomy Association. Go to Julianstarfest.com for more info.

Griffith Park Observatory Star Parties
Hosted by the Los Angeles Sidewalk Astronomers.

September 18

October 16

November 13

December 11

CALENDARS

The **2011 “Deep Space Mysteries”** calendars from Astronomy Magazine are here. It will be available for sale starting with the club meeting on September the 25th. We have 20 for sale on a first come first served basis. The retail for this calendar is \$12.95 plus \$1.00 tax or \$13.95 altogether. **Your cost, through the club this year, is \$8 a savings of \$6.**

See Fidel, the club treasurer, at the back of the room to make your purchase. Reservations are accepted.



The Cosmic Café Opens on Mount Wilson

Visitors to the world-famous Mount Wilson Observatory can once again enjoy a memorable lunch among the telescope domes and Ponderosa pines up in the clear air overlooking the Los Angeles Basin. The Mount Wilson Institute today announced the opening of the “Cosmic Café” where visitors to this historic site can purchase fresh-made sandwiches, hot dogs, soft drinks, snacks and souvenirs. Not since 1992 has food been available for purchase at the Observatory to enhance the visitor experience or to refresh hikers as they reach the mountain’s summit.

The Cosmic Café is located in the open-air pavilion overlooking the large parking lot just inside the gate to what has been known as Skyline Park since the 1970s. The pavilion serves as the entry point to the Observatory grounds.

“We’re delighted to reopen this food venue to the public after all these years,” said Dr. Hal McAlister, the Observatory director. “The income from the Cosmic Café will support our ‘Second Century Campaign’ in which we hope to build a wonderful new visitor center that will entice Southern Californians to rediscover this world-class science heritage site in their back yards.”

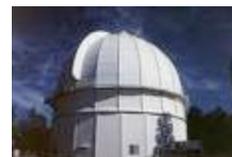
Mount Wilson was home to the world’s largest telescopes during the first half of the 20th Century. The Observatory’s astronomers utilized those powerful instruments to revolutionize our understanding of the Universe. The Hubble Space Telescope was named for Mount Wilson’s most famous astronomer, Edwin Hubble.

Mt Wilson

Weekend Walking Tours of the Observatory

Public walking tours led by MWOA docents are available from April through October. Tours are held Saturdays, Sundays and holidays beginning at 1:00 PM at the Pavilion. See the [Visitors' page](#) for further information.

Take the tour and refresh at the Cosmic Cafe.



October in Afton Canyon

by Cliff Saucier

It's time to start thinking about the upcoming weekend Under the Stars, **October 8 and 9**. Joining us will be the High Desert Astronomical Society (HiDAS) and the Pomona Valley Amateur Astronomers (PVAA).

Last year we met up with HiDAS, but this is the first time that PVAA will be to this site. Like us, they have to drive a fair distance for a dark sky. Ron Hoekwater, the PVAA president, likes to head up to Grandview several times a year, and many of us have met him on that wonderful mountain. His twenty-two inch dob will certainly be welcome. Both clubs are about the size of ours, and I would expect to see about eight to ten members from each of the clubs to show up. The fall weather is almost always excellent there, so plan on coming out for both Friday and Saturday. We will probably have a hamburger bar-b-que on Saturday night, and possibly breakfast on Saturday as well. That model works out well for our club in Grandview, and it would be nice to continue the tradition.

For those who haven't been to Afton Canyon yet, this will be the time to check it out. Very dark skies, and stars down to the Southern horizon. Come join the fun!



Afton Canyon

by Cliff Saucier

Steve Peeters and his son Ryan, joined me out at Afton Canyon on an unscheduled night. Conditions looked to be very good, and by the time I reached Barstow, the clarity of the air was starting to amaze me, You could see forever with the depth of the colors just resplendent. Normally brown desert hills were a deep chocolate, the blue of the sky a depth not usually seen. "This is going to be one good night!", I thought to myself. Glassing the eroded landscape with binos before the drop down into the campground showed more areas to explore on hikes in the cooler season, but tonight was just for the stars. Steve's van arrived on the scene at that moment, and we were off to the campground. The night was very transparent, but strong winds came up for a few hours. We used the giant binoculars to great advantage until the winds died down then had a good time the rest of the night with the scopes. And it was T-shirt weather all night.

The week before the Grandview trip, Martin Carey and Scott Freeman and myself went back to Afton again. It was extremely hot as the sun was setting, and was warm all night, but the winds came up and were merciless. We left the shrouds off our truss scopes, but it was still too much to deal with. Another incredibly transparent night. Very dark. Our best luck was with Scott's twelve-inch, held against the winds, then handed off from one man to another. "Do you have it?", "Yeah I've got a grip". The Eagle was the brightest I've ever seen it, but the degree of difficulty in the observations mostly kept us just looking up and talking among ourselves.

The next weekend at Grandview had some surprises, I heard. Light snow flurries on Friday night being one of them. Saturday night was reported to have started out cloudy, but cleared around ten-thirty. Still cold. Martin said the view he had of the Trifid was one of his best ever.

Griffith Park Observatory: The Wall

The "Big Picture" is a single continuous digital sky image, a cut through the core of the Virgo Cluster of galaxies, derived from the Palomar-Quest digital sky survey. It is reproduced on porcelain tiles as a **152 ft long by 20 ft high** back wall of the new exhibit hall at the Griffith Observatory. This website is its home in cyberspace. The image is a window into the distant universe, and it conveys a remarkable richness of the sky.



Mahogany Flats (Part 1)

by Steve Peeters

My experience at this site exceeded my expectations in the following manner: 1. The road in to the site, for the last couple of miles, is described (by the park service) as being unsuitable for all but high clearance vehicles. Well this road was no problem for my low clearance van. The road is steep but easily driven. 2. The distance is a good bit shorter than Grandview. 3. Though many of the campsites have trees (like Grandview) I got a site that had an unobstructed view of 90% of the sky. 4. Like Grandview this is a no fee campground, but there are only 10 sites, so not as many people to light things up!

As for conditions they were very good on both nights, the second night edged out the first because it was warmer and had zero wind, the first night there was a mild breeze. The milky way was awesome. The transparency was exceptional, so galaxy viewing was enhanced. There was a light dome from Las Vegas but it was not a nuisance. I viewed all the usual good stuff. Because the campground was small and only about half full I invited all of the campers to come over and look through the scope. This turned out well. On the first night I had a group of three, on the second night I had everyone in the campground for a group of 10. One guy was a member of an astronomy club in Ogden, Utah. He was with me on the second night and contributed nicely to answering questions and suggesting objects to observe. It was cool to have a group of ten people at a dark sky site who had never looked through a large telescope. After a couple of hours all but the guy from Utah departed. He and a friend up there have three scopes set up in an observatory, so he did not bring a scope. Besides the regular stuff, which included plenty of galaxies, I took a better than usual look at M16. The guy from Utah likes it, it is the eagle nebula. I had never looked for the eagle but it is not hard to spot. This is now one of my favorites, not as cool as the swan, but quite nice to see. Also, Saturn was superb with excellent steady views. The first night I went to bed at 2:00 A.M. so I didn't get a good look at M31 or Jupiter. On the second night I observed until 4:00 A.M. and saw both of them. Jupiter was not that impressive, fairly low in the sky, decent but some evidence of turbulence (still

just one band). With my big binoculars M31 was a treat, it was only about one-third of the way up to the zenith, but still presented itself nicely. The view was stunning; bold, filling the full width of my 4 degree FOV. It was jaw dropping. And, not even close to the zenith; I can hardly wait to see it at a dark site thru the big binocs when it is higher in the sky!

Club Star Party at Afton Canyon

by Mike Ratcliff

I did end up going to Afton Canyon after all. Martin Carey was there with his family, Robin was there, plus two other families that were beginners and hoping for telescope assistance. Robin stayed there Friday night and Saturday during the day. I think she was pretty tired by Saturday night.

It started badly but got better later on. Winds and clouds were bad from sunset to about 11 p.m. The temp was 103 just before sunset when I got there. Martin and one of the families drove back home. Robin and the other group went to sleep.

Between 11 and 1130 conditions improved greatly, and I had a pretty good time until I went to sleep around 2am. The southern sky was pretty much cloud free. I didn't wake up Robin or the other family.

The skies are dark there; very promising! This was my first time there. Yes the skies were nice in places away from the clouds. The Sagittarius milky way was better than at Cottonwood Springs campground at Joshua Tree, where I've done the most observing from lately.

Martin Carey wanted to try again a few days later as the monsoon settled down, and I joined him at Kelbaker Road, a place that Martin and others have been to before. The darkest spot he had been to in some time. We were marvelling at our shadows cast by the Milky Way!

Mahogany Flats (Part 2)

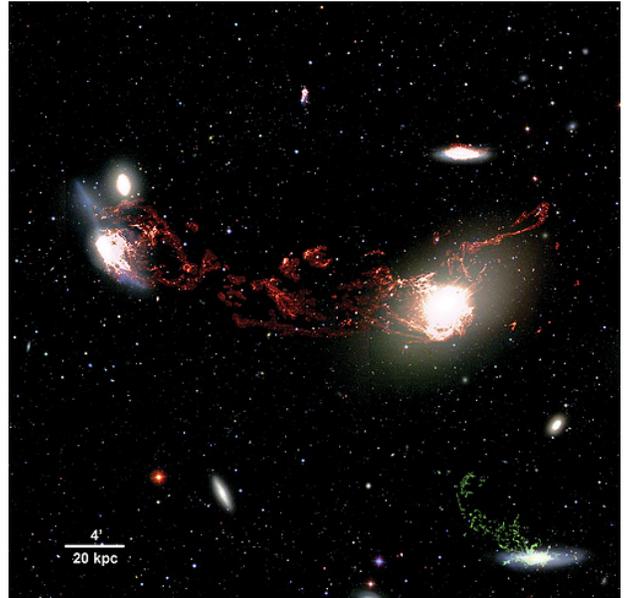
by Steve Peeters

I did make it back to Mahogany Flats Campground. After checking on the weather reports I didn't wait until Saturday. Instead Ryan and I left on Thursday, July 8th. We were not affected at all by the monsoon weather. We arrived on site at about 3:30 P.M. There were some clouds that concerned me, they built up too as we were getting set up. At five P.M. I took a nice nap, when I woke up around 7:00 most of the clouds were gone and by 9:00 P.M. it was clear. Around eleven we got a second scare when we heard the howling of wind. This was coming up from the valley via a steep hill to our east, but fortunately all we felt was a pleasant breeze. The seeing was superb as attested to by fine views of Jupiter. I laid down to sleep at 4:30 A.M. and we left the site at about noon.

I have been careful about when to go out to observe -- and lucky. In spite of the threatening clouds and fierce winds to our east we got in a terrific night. This is a great location. It is a lengthy drive, but not as far as Grand View, it is 180 miles from the SB Museum. Due to driving on other than freeways it takes, figuring in pit stops and subway pickups, 4.5 hours to drive it from the museum. For me the effort has paid off well. When I saw the clouds take up about 60% of the sky I got concerned. But as I said it was totally clear by observation time. Again, when I heard that wind I was anxious, but it didn't affect us at all!

I viewed all the usual stuff. Transparency was great so the galaxies I viewed were stunning. With the new 31mm Nagler T-5 I got grand views of M8 and M31. One of my favorite views though was shortly before going to bed, this was the view of a waning thin crescent moon, nicely showing the the unlit area through earth shine. I realized then that viewing the earth shine in the A.M. hours is superior to the P.M. hours. This I think is due to sky being much darker at 3:30 A.M. than at 8:30 P.M. Anyway, with a dark sky, large binoculars, and a dark site, plus 8200' elevation the view was incredible. I never thought the moon would impress me so much! Additionally the views of M31's companions, sharing the FOV with M31 were very nice. Also, I'd note that I enjoyed seeing the White Rose cluster in Cassiopeia.

As for light domes, the only one at Mahogany Flats is from Las Vegas, 100 miles to the east, and it is not the least bit bothersome. I'd also enjoy getting some of our more adventurous club members to come out here. I hope you visit this site on a good night, you'd love it.



Big Galaxy Collisions Can Stunt Star Formation

A deep image of the Virgo cluster has revealed monumental tendrils of ionized hydrogen gas 400,000 light years long connecting the elliptical galaxy M86 and the disturbed spiral galaxy NGC4438. Taken with the wide-field mosaic imager on the National Science Foundation's Mayall 4-meter telescope at Kitt Peak National Observatory, this hydrogen-alpha image and related spectroscopic measurements of the filament provide striking evidence of a previously unsuspected high-speed collision between the two galaxies, creating enough heat to slow down and even stop star formation in the galaxy.

For more, see [NOAO Press Release PR-0807](#).