

S. C. R. A. P. S.

Society's ChRonological Astronomical PaperS



## Message from the President

First of all, a big thank you to everyone who participated in the Star Party at Cades Cove this October. We had a great turn out. We had good weather which evolved into great skies as the night got darker. We had great objects to see. We had great feedback from the visitors during the star party. We had great compliments from the Park rangers about how we entertained the crowd.

**This would not be possible without the great participation of so many volunteers and their telescopes.**

I briefly saw the crescent Venus before the visitors arrived and only as I was driving home did I realize that not once during the star party did I look through a telescope. I had such pleasure pointing out the asterisms in the sky to the people waiting in line and answering questions that I was kept productively busy the whole time.

We gave away all of our magazines. We gave out 150 SMAS business cards taken and we could have given away lots more if I had thought to get a light and a sign on the table.

Because of some western clouds when we started Jupiter was the first show piece. I spoke to people about how Jupiter missing one of his stripes and about the moons circulating around Jupiter which Galileo was the first to publicize. As the evening wore on and the clouds cleared, visitors were treated to a description of the galaxy around us. The dust lanes could be seen cutting the Milky Way in two. The star forming region of the Lagoon nebula, the open clusters and globular clusters of stars and the Ring Nebula surrounding a dying star were prime objects. I pointed out and many people saw naked eye the heart of the Andromeda Galaxy and then saw it and its companions.

We were host to over 820 visitors. Far, far, larger than our previous high of about 250 several years ago. I hope we inspired curiosity in some young people and I know we were much appreciated. I overheard someone asking if we did this every weekend and someone else explaining that it was a fall event.

News of our star party was circulated by many media sources. I heard a radio add announcement and was told that the national park service news letter got out the word nationally. Mike Masolona says other parks have contacted him about advice on how to host star parties.

Let there be no doubt. We have made a positive difference to many people, raising their eye to the universe around us.

Thank you all,  
**Lee Erickson**

Photos from the October 2, 2010 Special SMAS Star Party – Cades Cove, GSMNP:





## Upcoming Events

**November 6, 2010 –SMAS Star Party:** Look Rock (Weather permitting, last star party of the year).

**The 2010 Great World Wide Star Count** is here! Join by making your observations between October 29th and November 12th. Please be sure to download the Activity Guide to participate. In the activity guide are star charts – you just match the chart to what you see and then report your results online.

Link to Activity Guide and Star Charts:

[http://windows2universe.org/citizen\\_science/starcount/GWWSC2010\\_ActivityGuide.pdf](http://windows2universe.org/citizen_science/starcount/GWWSC2010_ActivityGuide.pdf)

Report results at:

[http://windows2universe.org/citizen\\_science/starcount/report.html](http://windows2universe.org/citizen_science/starcount/report.html)

**November 12, 2010 – Regular SMAS meeting at PSTCC**

**Tentative program:**

Michael Reuter: How Telescopes Changed our Understanding of the Universe

Jim Sanders: Autumn Night Sky

Beginners program: Useful suggestions and discussions for persons just starting out.

## Observation Reports

Lee Erickson reminded the group that comet 103P/Hartley was to be near the Double Cluster on Oct 8 and 9th. This prompted that following Observation Reports regarding 103P/Hartley:

**Michael McCulloch:**

It will be close tomorrow night as well, the 7th. I was able to see it from my backyard last night with my C9.25 scope with binoviewers operating at about 100x. It was an obvious smudgy spot with a bright point in the center. I thought I could see a slight tail to the north, but it may have been imagination.

I also studied Jupiter a while with the C9.25. The new board in my equatorial mount, and its rock steady tracking, has really made a difference in my enjoyment of planetary observing.

I think I will try to capture some astrophotos tomorrow night of the comet near the Double Cluster. I think I can get them both in the same field with my 105mm refractor.

**Michael McCulloch:**

I tried to take several exposures myself to stack, but the comet is moving so fast that it didn't work very well to capture the comet itself. Actually my picture works better as one of the Double Cluster rather than the comet.

That was 14, 2-minute exposures over the course of about 40 minutes on Thursday night. I screwed up a bit by accidentally leaving my camera in JPEG mode instead of RAW (how did I do that?!), but the stacking helped recover my effort to some degree.



**Gary Bridges:**

Ralph and I found it in his 70mm binoculars at 20x. It's difficult to find with bino's due to the Milky Way running through Cassiopeia but with a little persistence.

Jim Sanders:

Last night I was able to capture a few photos of this faint comet through my 3" refractor. I took 3 exposures of 90 seconds each. I then used the comet center as the alignment point and stacked the images – hence the stars have trails. Here is the result:



**Vicente Diaz:**

Here are my efforts in imaging the comet. I took approx. 18 photos of the comet with an exposure of 60 sec each thru my 10" LX200 at f10 using a Canon T1i and stitched the photos to made a little movie of the comet's movement. I've also included a 150 sec exposure that shows more of blob with no discernible tail. Will try again tonight and Friday with my 80mm apo to hopefully capture the comet near the double cluster.



**Vicente Diaz:**

Attached is a movie made from about 60 photos take early this morning at around 1am. The movie is compressed like crazy (original was like 2.3 gigs!) so it loses some of the clarity but I've also attached a single photo of the comet and the double cluster. The equipment used was an 80mm apo from William Optics (f6.4) and the Canon T1i. The exposure time for each frame was 60 seconds. All images were processed with Images Plus and converted into the Video with Virtualdub and Adobe Premiere Elements. The first part of the movie is the full frame and the second part is cropped around the comet.

Link to movie:  [Movie of Comet 103P-Hartley on Oct 8 2010 at 1230am.wmv](#)

Photo:



**Michael Reuter:**

I figured I add to the picture parade. Here is a wide field picture containing the Double Cluster, Comet Hartley 2 and Eta Persei. It's a 45 second exposure on my telescope mount with clock drive. I did a little processing to remove some of the sky glow.



## Minutes of September 10, 2010 Meeting

Any corrections to these minutes should be sent to JC Sanders ( [sandersj@chartertn.net](mailto:sandersj@chartertn.net) )

The regular SMAS business meeting was held at PSTCC on Friday, October 8, 2010

The meeting was called to order by President Lee Erikson. Those in attendance were:

Angela Quick and Miles, Jerry Kornegay, Kenny Pridgen , Duane Dunlap, Lee Erikson, Michel Reuter, Jim Sanders, James East. Visitors: Noah Frere, David and Susan Fowlkes (previous members).

Lee reminded the group of upcoming events: SMAS star party at Lock Rock on November 6 and the TAO open house on October 16.

The group discussed the SMAS Star Party at Cades cove. Several of the comments are listed below:

- Not enough time to setup and align scopes
- The presentation of the night sky was done when the crowd was at the scopes – this meant that few members could help by using their laser pointers.
- We need to get more scopes, maybe get another club to join with us for the event.
- The park staff does not want for the event to attract more people next time.
- We should pick a night when TAO is not having an event.

### Program: Astronomical League's Observing Clubs

Lee lead off the discussion by explaining what the Observing Clubs are all about and their benefits.

Several members talked about their current observing club activities:

- Lee is almost finished with the Lunar Club and is also working on the universe Sampler club.
- Michael Ruter is well into the Double Star observing program
- Jim Sanders is working on the Urban Observing club and the Lunar program.

Several observing log books were passed around to the attendees.

Noah Frere described his telescope with an Equatorial Mount and was seeking advice on how to best use this mount. Several members provided some input.

The meeting concluded at 9:30 PM.

Submitted by J. C. Sanders

November 5, 2010

## Sky Events –November and December



**November 6** - New Moon



**November 17, 18** - Leonids Meteor Shower. The Leonids is one of the better meteor showers to observe, producing an average of 40 meteors per hour at their peak. The shower itself has a cyclic peak year every 33 years where hundreds of meteors can be seen each hour. The last of these occurred in 2001. The shower usually peaks on November 17 & 18, but you may see some meteors from November 13 - 20. Look for the shower radiating from the constellation Leo after midnight.



**November 21** - Full Moon



**December 5** - New Moon



**December 13, 14** - Geminids Meteor Shower. Considered by many to be the best meteor shower in the heavens, the Geminids are known for producing up to 60 multicolored meteors per hour at their peak. The peak of the shower this year should occur on the night of December 13 and morning of the 14th, although some meteors should be visible from December 6 - 19. Some estimates say there could be as many as 120 meteors an hour visible from dark-sky locations. The radiant point for this shower will be in the constellation Gemini. The Moon will set early in the evening setting the sky up for a spectacular show. Best viewing is usually to the east after midnight.



**December 21** - Full Moon



**December 21** - Total Lunar Eclipse. The eclipse will be visible throughout most of eastern Asia, Australia, the Pacific Ocean, the Americas, and Europe. The eclipse will be visible after midnight in North and South America. Since the Moon will be almost directly overhead from these locations, this should be an excellent chance to view a rare total lunar eclipse.  
([NASA Eclipse Information](#))



**December 21** - The Winter Solstice occurs in the northern hemisphere at 23:38 UT. The Sun is at its lowest point in the sky and it will be the shortest day of the year. This is also the first day of winter.

## News Articles Needed

In order to have a better newsletter, I would ask that members contribute articles for publication in SCRAPS. Write about

- a project you have underway,
- a trip or visit made that had some astronomical connection,
- a review of an interesting book,
- a link to a useful website,
- or any other subject that might be of interest to the group.

Please send your articles to Jim Sanders ([sandersj@chartern.net](mailto:sandersj@chartern.net))

November 2010						
SUNDAY	MONDAY	TUESDAY	WEDNESD	THURSDAY	FRIDAY	SATURDAY
	1	2	3	4	5 UT K	6 <b>New Moon</b> <b>SMAS</b> <b>Star Party</b> <b>Look Rock</b>  <b>TAO</b>
7	8	9	10	11	12 <b>SMAS</b> <b>Meeting</b> <b>PSTCC</b>	13
14	15	16	17	18	19	20 <b>TAO</b>
21  <b>Full Moon</b>	22	23	24	25	26	27
28	29		30			

UTK – roof of Neilson Physics Building on the Hill At UT on 1<sup>st</sup> and 3<sup>rd</sup> Fridays  
<http://www.phys.utk.edu/trdc/telescope.html>

TAO – Tamke-Allen Observatory  
Public Stargaze  
Watts Bar Lake, Roane County  
1<sup>st</sup> and 3<sup>rd</sup> Saturdays  
<http://www.roanestate.edu/obs/>