



THE STAR DIAGONAL

THE JOURNAL OF THE OGDEN ASTRONOMICAL SOCIETY

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The President's Message

Hi All:

I hope that you all have had a happy and safe holiday season. This month hopefully we will have Dr. John Armstrong doing a talk on the Mars Rovers and any other interesting subject that he maybe working on. It is incredible that the Rovers have lasted a year up there and they are still working good.

We will also discuss the location for the star party this February we have moved it because of a report of light pollution problems from Las Vegas but Dave has found a good location close to St George that should have good skies, I think that most of us are going to stay in motels but the area is on public lands that should allow for camping if you are wanting to do so.

- Craig Browne

OAS Minutes, Dec 04

The meeting of the Ogden Astronomical Society was held on Nov. 9. President Craig Browne called the meeting to order. It was announced that there is a star party scheduled for Feb. 4-5. Input was requested for the location. Dave Dunn had emailed with Debbie Whitticker from St. George about possible locations. She had come up with one in Zions NP that was kind of small and Baker reservoir, which is north of St. George. Another site that was suggested was Valley of Fire SP in Nevada. This would be much warmer than the other locations. It was decided that we would go there for the Star Party. Lee announced that he had the Year in Space calendars that had been ordered. Doug said that we still have several of the Astronomy Wall calendars as well.

The rest of the meeting was a show and tell. Craig taught everyone how to set up the club's 10" Orion telescope. Ron Vanderhule demonstrated the secondary cage of his 25" Dobsonian. Dave showed pictures of a Ronchi test

of his 16" mirror which demonstrated part of the problem with the mirror. There is .00006014 inches too much aluminum on the mirror and that changed it from a paraboloid to a sphere. After show and tell, the meeting adjourned to general conversation and then later to Denny's for some more socializing.

- David Dunn

21 Years Ago In the Star Diagonal

December 8, 1983 – The December meeting of the Ogden Astronomical Society was conducted by vice president Gary Liptrot. After the month's "What's Up" presentation and the Constellation of the month, Sears Roach led a group discussion on Lunar Geography. Cassiopeia. The Star Diagonal also included several articles by members of the society. January Skies 1984 by Carl Sandefur, talked of the alignment of the planets. "All eight planets could be seen in the morning sky within 60 degrees of arc". Dean Williams published some of the notes from his last observing session. It had been two months since the sky was clear. The official "OAS Pronunciation Guide For the Constellations" was also published.

Northern Utah Astronomy Swap Meet

will be coming up at a indoor venue in the next few weeks. This is not affiliated with any club. Everyone is welcome to participate. Interested folks should email Patrick Wiggins at paw@trilobyte.net.

Horse Head Nebula

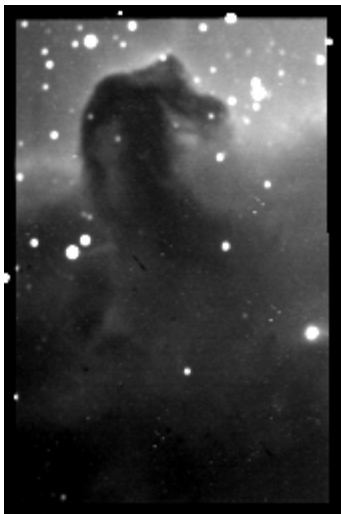
I replaced my Meade CCD camera with a camera from SBIG. Like many things there is a learning curve associated with such changes. The weather this Fall and Winter just hasn't presented a great deal of "learning" time. On one evening, mid December, the skies looked good so I thought I'd get in some training time. After spending some time learning I noticed that Orion was looking good.

I have never seen the Horse Head Nebula through my equipment before so I gave it a try. The first image I took was about 1 minute in duration and when it appeared on the computer screen I really got excited. I took a total of 25 one minute exposures. At that point I tried something I knew was going to fail - a 3 minute exposure - it worked. I set up to take 25 of them but part way through the fifth exposure I canceled the sequence to try an unheard of (for me) - 5 minute exposure. After getting 5 of them, I went for five 10 minute exposures. I had pushed my luck too far and only 2 of the 5 were good.

This may not sound like much but all of this was totally unguided. I have an AO7 and a CCD camera with a guide chip but I'm sorry to admit that I haven't even tried to use it yet.

This image is very small because it was binned 3X3 or in other words I was combining the light falling on 9 pixels into a single pixel so the image is 1/9th the size of a full image. Since then I have been waiting to try again but the weather hasn't allowed it. I hope to try in color and at full size some day, maybe even this year. I'm attaching a combined but totally unprocessed image because I hadn't even planned on getting any images when I started that evening.

- Cliff Peterson



Light Pollution - A Problem for All of Us

Introduction

Have you had a problem with light pollution? Of course. Whether you are a professional astronomer or an amateur astronomer or a member of the general public, you have undoubtedly been bothered by this scourge.

Write and tell us of your experiences. In detail. Include, of course, whether or not you found any relief, and how. Be as specific as possible, please. We will compile the results, and share the information along with comments and suggestions where we can offer such.

Probably the problem had to do with:

- Light Trespass: Spill light bothering you.
- Glare: Bright, troublesome, always a bother.
- Urban Sky Glow: This item is the curse for many professional observatories.

What to Do?

Here are some specific suggestions:

1. Talk to the offender. Ask for their help. Offer yours. Be friendly. But be persistent. Constantly push, without making enemies.
2. Educate people about what can be done. Most people haven't a clue about lighting, what is available, what costs are, or anything.
3. Educate about energy waste.
4. Educate about the adverse effects of poor lighting: glare, clutter, light trespass, sky glow, energy waste. Show what quality lighting can do. Set a good example.
5. Join the International Dark-Sky Association, a non profit organization formed to help. There is strength in unity. Share information. Write us for details.
6. Learn about quality lighting. Educate others.

7. Talk to people, individually and in groups: city officials, the media, utility staff, lighting designers, and the public.
8. Develop "networks":

Helpers
Awareness
Solutions

9. There are few things in life where solving the problem saves money. Curing the problem of light pollution saves money, makes for a safer nighttime environment, and saves the dark skies. It's a Win/Win/Win situation. Everyone can win.

Solutions

1. Use the right amount of light, not overkill.
2. Shield the light, so it goes down, not up or sideways.
3. Use time controls when possible.
4. Use low pressure sodium sources whenever possible; not only does it not affect most of the visible spectrum, but it is also the most energy efficient light source.
5. Be aware of quality lighting. Educate others.
6. More information about this issue is available from the IDA, Inc. through membership, or write to us anyway if you would like more help.

Summary

Dark skies are compatible with quality lighting they require such lighting, in fact. Poor lighting has many adverse effects, including glare, clutter, light trespass, energy waste, and light pollution.

Dark skies are compatible with a safe, secure, and functional nighttime environment. As with astronomers, the public needs and deserves a quality nighttime environment. Glare, clutter, light trespass, energy waste, and light pollution are a major threat to that environment.

Solutions are possible, and they work. Let's achieve them, and have a Win/Win/Win situation. The time is now. Let's do it.

This information sheet is based on the text of a poster paper given by Dr. David L. Crawford at a meeting of amateur astronomers in California in 1987.

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