

Saskatoon Skies

**The Newsletter of the Saskatoon Centre
of the Royal Astronomical Society of Canada**

Volume 31, Number 9

September 2000



Almost 200 people attended his year's Saskatchewan Summer Star Party -a great success, with clear nights and excellent speakers. More inside. Photo by Murray Paulson, Edmonton Centre.

RASC Calendar Happenings

Date (2000)	Event	Contact	Telephone
Sep. 18	Executive Meeting - Room 8313 - 6:30 pm	Les Dickson	249-1091
Sep. 18	General Meeting - Room 8313 - 7:30 pm	Les Dickson	249-1091
Sep. 26-Oct 10	Zodiacal Light season (morning sky)		
Sep. 29	Youth Group Registration - Nutana - 7 pm	Andrew Krochko	955-1543
Oct 5	Teacher's Astronomy Workshop - Brightwater Camp	Rick Huziak	665-3392
Oct 16	General Meeting - Room 8313	Les Dickson	249-1091
Oct. 20	Youth Group Meeting - Nutana - 7:00 pm	Andrew Krochko	955-1543
Oct. 26-Nov. 9	Zodiacal Light season (evening sky)		
Oct. 27 - 29	Edmonton Centre's Astronomy Workshop - Skeleton Lake, Alberta	Rick Huziak	665-3392

Sky Buys and Mirror Sells

The Saskatoon Centre's Swap and Sale Page!

For Sale: Brass-finished Carrying Trunk for C-8 or C11. Call Darrell Chatfield, tel. 374-9278.

For Sale: Meade ETX 90 f/13.8 (1250 mm) telescope with tripod. Accessories include battery-operated drive, erecting prism. Two years old. Upgraded to a larger scope. Call Richard Allen at 652-1616.

Got any old .965" eyepieces sitting in the closet unused for years now? Brent needs some for an old scope. Will pay \$5 each or perhaps more for better quality ones. Contact Brent 241-8765 or <thunderb@home.com>

STILL KIND OF LOST - I misplaced or loaned out my Lumicon OIII filter to someone and I'd like it back. Please own up. This means YOU! - Darrell Chatfield 374-9278.

For Sale: Bushnell/Jason Model 519, Deep Space Series 675x telescope with tripod. Retail value \$179.99. Brand new and unused. If anyone would like to look at it they are welcome to call me at home 373-4914 or at work 975-5336 and make arrangements. \$150 obo. Call Linda Cunningham <CUNNINGHAM@EM.AGR.CA>

PRINTING OF THIS NEWSLETTER IS (mostly) COURTESY OF

WBM OFFICE SYSTEMS

601 Second Avenue North, Saskatoon, SK, S7K 2C7

Copying is provided on a Risograph copier for a small flat fee.



Saskatoon Centre

The Royal Astronomical Society of Canada

P. O. Box 317, RPO University

Saskatoon, SK, S7N 4J8

URL: <http://maya.usask.ca/~rasc/rasc.html>

E-mail: dickson@sk.sympatico.ca

Telephone: (306) 249-1091

Newsletter Editor - Richard Huziak

Copy - Brian Friesen & WBM

Collate - Friesen, Christie, Dicksons, Ferguson, Essar & Kochko

IN THIS ISSUE

	<i>page</i>
Calendar of Events & Sky Buys and Mirror Sells	2
Sask. Summer Star Party 2000 - by Rick Huziak	4
About the SSSP 2000 - <i>a letter from Harris Christian (Edmonton Centre)</i>	6
Errors in the Millennium Star Atlas - by Rick Huziak	6
SSSP 2000 Observing Report - by Andrew Kochko	7
The Alberta Star Party - by Rick Huziak	8
Binocular Objects for September - by Andrew Kochko	9
Edmonton's Astronomy Workshop	9
Youth Group News - by Andrew Kochko	10
The Deep Sky Observer - A Nebular and a Variable in Cygnus - by Scott Alexander	12
The Messier, FNGC and Herschel Page - by Rick Huziak	14
The Sleaford Page - by Rick Huziak	15
The July 30th Solar Eclipse - by Rick Huziak	16

Sask. Summer Star Party 2000, Cypress -Aug 25 - 27

by Rick Huziak

This year's SSSP was quite well attended despite the star party occurring on the last weekend of August before school starts. About 200 people attended in total.

Several of us took the opportunity of arriving early, and there were about a dozen star-partiers already camped in the Meadows by the time Dale Jeffrey and I arrived on Wednesday evening, August 23rd. Wednesday provided some reasonable observing, though transparency was not very good due to smoke haze and by 2:30 am, thin clouds came in and spoiled the views.



Thursday was spent setting up the Meadows tents and signs for the starparty and picking up tables and chairs, but we had a lot of time to sit around and chat about things to come. On Thursday evening, Scott Alexander and Brian Friesen arrived just in time

with the food, and we held an Earlybird Weinie Roast at the north end of Loch Leven. This event was even more popular than we had anticipated, with about 35 people attending, and calls for this to be an annual event. I was surprised that by Thursday evening, 29 telescopes were already set up in the Meadows! Unfortunately, Thursday was clouds, but we had fun chatting to all hours with everyone.

Friday morning gave us a new hope for clear skies. Les and Ellen Dickson began registration. We had a lot of time to walk around and talk to the participants and oogle at their excellent telescopes. More people arrived throughout the day. Friday evening began with the Informal Short Talks, where Alister Ling (Edmonton Centre) talked about Clementine and how to photograph the moon, Les Dickson talked about the far solar system environment, Andrew Krochko talked about observing and I covered Saskatoon's July 30th solar eclipse adventure. We all then retired to the Meadows where clear skies awaited us. Murray Paulson (Edmonton Centre) gave his famous *Binocular Star-walk* that was attended by 50 people! The Regina Centre held a public star party at Lookout Point with about 75 park campers attending. We all then settled into observing, though Montana smoke caused a small transparency problem. One of the highlights of the evening, for me, was to see the passage of the NOSS Triad spy satellites pass overhead - a constellation of 3 satellites flying in a triangle formation! Alister Ling (Edmonton)

announced their passage times to everyone who was still up in the early morning. Bedtime was about 5:00 am.

Saturday was much busier, beginning with bleary eyes and the Kid's Astrofest organized by Sharon Hartridge, Barb Young, Lou-Ellen Jensen and others (sorry if I missed mentioning you!). This went off very well, with face painting, constellation crafts, solar viewing, and a great little-person dress-up solar system scale model, where the kids dressed up in planet (and asteroid!) costumes made by Sandy Ferguson, then stood at scale distances. In the meantime, the Swap Table rolled in, and many people picked up new eyepieces and camera lens, red flashlights and other miscellaneous trinkets that surely will be sold back at the next swap table! By this time, the Regina crew had showed up with the new t-shirts.

Morning soon turned into afternoon, and the events shifted to the Wapiti Room, where the afternoon talks began. We had learned from other star parties not to overload the afternoon session. I gave a talk and slide show on the *Sleaford Observatory* plan and construction activities. This was followed by a social coffee break, the Alan Dyer (Calgary Centre) gave an excellent slide show on his *Adventures Down Under* - a magnificent set of images of the marvels of the southern sky from Australia. Alan is an excellent and enthusiastic speaker. Following the talks, the door prize draw was held, giving away the many wonderful prizes that Darrell Chatfield had worked so hard at getting for this event, including once again a set of binoculars from SkyVue Telescopes (Blair Colburn) of Calgary (which Darrell Chatfield won)!

At 5:00 pm, the Banquet was held - most people attended - a turkey buffet, and a ?real' meal for some of us poor campers!) During the banquet, the other commercial vendor on site, Bushnell Optics (Saskatoon) also provided, among other prizes, a set of binoculars and a 4.5 inch reflector as draw prizes. The telescope was won, most appropriately, by an enthusiastic, and very excited junior astronomer from Lethbridge.

The Father Lucien Kemble Memorial Lecture began at 7:45 after a fine introduction by Les Dickson and Dale Jeffrey. The lecture was given by Jack Newton; one of Canada's finest astrophotographers. Jack gave a very down-to-earth presentation on his decades of photographic experience with film, cold cameras and now CCD photography. Since Jack test new products for Meade, he has access of some of the finest amateur equipment available, and the quality of the imagery shows! Many of the images show detail never before seen with *any* telescope, amateur or professional!

Back in the Meadow on Saturday evening, I gave a Variable Star Clinic, attended by 19 hopefully new convertees. Regina again gave a public star night at Lookout point. And tonite, despite a very cold wind, the sky cooperated with a NW wind that cleared the

smoke out and provided better and better viewing until sun-up. Unfortunately, some observers were defeated by the cold wind. Al Hartridge also decided to make it an earlier night when he noticed that he had fallen asleep at the eyepiece during one of many astrophoto exposures! Bed time was 5:30 am, long after Jupiter and Saturn were high in the sky, Orion was fully up and the moon shone as a beautiful -2 day crescent. At the end of the night, we all had Saturn in our scopes at 600x without significant image deterioration.

Sunday is a pack-up day. By noon many of the participants were gone - with long drives back to Edmonton, Winnipeg and other distant places. We even had participants from Alabama, Texas and Whitehorse this year! Sunday also finds time for our traditional organizer's breakfast at the Cypress Hills Resort Inn. Then all the tents and signs come down, and the annual Pop Can Stomp occurs.

With increased popularity of the starparty, people are tending to come early and stay late. About a dozen groups stayed the Sunday night; many making time until they go to the *Alberta Star Party* which began a few days later. However, the weather did not cooperate - clouds and rain rolled in, and we spent another evening visiting and exchanging stories and ideas about next year's party. On Monday morning, Murray Paulson found Mercury and Venus, both at superior conjunction and less than 7 degrees from the sun. This was a fun surprise. Then we all packed up and went on our way, promising we'd meet again one year later.

(Photo in this article is of Jack Newton addressing the participants during the Keynote Presentation - photo by Murray Paulson, Edmonton).

About the SSSP - from Harris Christian

Councillor, RASC Edmonton Centre.

Hello Folks. Just a quick line to congratulate everyone on the successful completion of SSSP 2000. As a first-time participant, I was thoroughly impressed with how I felt welcome, and how everyone on the Saskatchewan team went out of their way to ensure that the other participants got the most out of the event. I will certainly spread the good word about your fine star party & I plan to attend the next one.

Thanks again for offering & delivering a great program at a very reasonable cost.

Harris Christian

Errors in the Millennium Star Atlas

By Rick Huziak <huziak@SEDSystems.ca>

When I first purchased my *Millennium Star Atlas*, 1st edition, I was absolutely overjoyed with the quality and detail within the Atlas. Dale Jeffrey, stated that his copy of the Atlas "added two inches to his telescope's aperture", and indeed I found the same. The accuracy of plotting and detail of extra-galactic objects made finding and identifying faint fuzzy things a whole lot easier!

However, deep-sky observing is not my only interest. When I began to use the Atlas for variable star location by my usual method of star-hopping, I became amazed at the number of brighter variable stars that were either plotted and not labelled with the variable's name, or common variable stars not plotted at all!

When I contacted Roger Sinnott, MSA co-editor, of *Sky & Telescope* magazine, he explained that there were a few factors that resulted in these problems. For one, the Hipparcos satellite did not detect all the variables, since either the variation was not significant enough to be detected, or the variable was too dim during the mission to be detected. Another reason was that the *median* magnitude of variation was chosen for the star's dot size, and those for which the median magnitude was not brighter than 9th magnitude were rejected. This apparently deleted some brighter objects, such as R Cas from the list! *Sky & Telescope* made an effort to plot many of the variables that were "missed", but obviously, from the list at the following web site, many were still missed.

Don't get me wrong! The MSA is still an absolutely wonderful atlas, and the errors and omissions seem, hopefully, to be minor nature. However, if you have a copy of the MSA, you may want to visit the listing of errors of variable stars and deep sky objects so far found. And please report any new errors you find to me so I can add them to the list!

MSA Errors and Omissions: <http://maya.usask.ca/~sarty/astronomy.html#MSA>

SSSP 2000 Observing Report

by Andrew Krochko

SSSP 2000 had mostly clear skies this year. Unfortunately smoke from forest fires in Montana stopped the skies from being as good as they could be. We did attract a lot of big scopes this year, there were at least 5 scopes over 16 inches of aperture.

Thursday night was cloudy. Most people who stayed awake sat around the campfire and talked. There were a couple sucker holes and Rick Huziak, managed to get 4 variable star estimates done!

Friday night was clear but the sky was very smoky especially near the southern horizon. Even Antares was very hard to see. Near the zenith it was still as good as an average night at the Sleaford Observatory and there was a warm breeze so there was lots of observing going on. Murray Paulson ran a Binocular Star Walk and this was well attended. Rick Huziak and Paul Campbell from Edmonton were looking at 15th magnitude galaxies. I tried to see them a couple times but I kept getting confused by the glare around faint stars. I left them and observed Messiers through my 6" f/5 with youth member Lorne Jensen. After this I moved over to where Rick and Paul were observing and spent the next 2 hours sketching NGC 949 through my 6". Most of this time was spent plotting stars, and trying to see the exact shape of the galaxy and its central brightening. I later checked in a CCD atlas that Alister Ling had and I found I got the galaxy's shape almost perfect! During breaks from sketching I looked at the Andromeda Galaxy through a 6" and a 16". Both views were great although the 16" inch showed more detail. Some time around 2:30am the moon rose so I switched to variable stars.

A steady northwest wind on Saturday cleared out a lot of the smoke and promised a better night. As night fell I could see that the transparency was a lot better than on Friday. Unfortunately there was a bitterly cold wind. The night started out with Rick Huziak's *Variable Star Clinic*. This was well attended with about 18 people coming out and estimating variables. After this Alister Ling and I looked for faint nebula through my 6". Several parts of the gamma Cygni nebulosity were relatively easy. We also looked at IC 1396 in Cepheus and although we couldn't see the edge of nebulosity we were able to see several dark lanes through it, very cool! After this the transparency became worse, so I wandered around and I found many people were having trouble with their scopes because of the wind. Between midnight and 1:00 a.m. many people packed up because it was very cold and windy. (It felt more like winter than summer to me). Sometime around 2:00 a.m. the wind died down and the transparency became good again. There were still some Saskatoon members up observing including Scott Alexander and Brent Gratias. I continued to wander around and just admire the beauty of the sky. Alister Ling pointed out the zodiacal band to us. It looked like a really faint version of the Milky Way.

Sunday night was cloudy and there was a fire ban, so those of us that stayed had a "red flashlight campfire" by putting all our red flashlights together in a pile.

Although not perfect the observing at SSSP 2000 was quite good. Both Friday and Saturday nights were clear, which is exactly what we wanted. Several people also took advantage of the clear horizon and southerly latitude to get M6 and M7. I observed both of these in addition to many of the more southern Messier objects although I did miss M62. See you there next year!

Alberta Star Party, Caroline, AB - Aug 31 -Sep 3

by Rick Huziak



As I approached Olds, Alberta, still an hour away from the ASP, a horrendous thundershower and rain squall almost pushed me off the road. Lightening was striking all around the car - a good omen, I thought! Hoping that this hurricane would clear away the smoky skies, I proceeded with renewed optimism, and indeed, arriving at the Caroline site at about 11:33 p.m., I was rewarded by a large *sucker hole* that showed stars for the next hour - good enough even that Larry Wood from Edmonton announced that he could *nearly* see Palomar 10!

As I went around and said my hellos, pitched my tent and set up my scope, the sky gradually fogged in then clouded over. We retired to the shelter for the rest of the evening. Some old friends were there - Harold and Tracy, Dave and Glen from SSSP 2000 and several others I had met on other excursions to Edmonton or Calgary. Margo Millar (Calgary) entertained us with many hilarious astronomy anecdotes.

The next morning was met with a cold drizzle, and Sharon Tansley (ex-S'toon member - now Edmonton) was trying to light her camp stove. Larry and others were already digging trenches to drain the steadily accumulating lake. Thankfully, Murray Paulson

pulled in and soon invited me to stay in his trailer for the rest of the party - out of the wet. We spent more time in the shelter. Later, Susan Yeo & Shirley Conway (Calgary) showed up and brightened up the party. That evening we spent more time in the shelter and we did the only thing we could - party by the wood stove! And the next morning more trenches were dug and we spent a lot of time in Murray's trailer.

Saturday was better. The rain stopped and heavy showers began. That afternoon, the formal talks began. I gave the same talk on Sleaford that I gave at the SSSP and Murray gave the talk on his trip to Arizona that he presented in Saskatoon earlier in the year. After supper, Murray and I put on another impromptu slide show to provide some more entertainment - astrophotography, the solar eclipse, and sunsets. Then some people went home.

On Sunday, with no hope of a better forecast and continuing showers, the party wrapped up and we all went home to dry out. Because of the pitiful weather, only 29 people came to the star party, but we really were 29 people who decided to have a good time in spite of what we couldn't control. I'll be back next year, toting better rain gear and boots! (*About the photo - sorry - grabbed the wrong pin - I do have a "2000" pin as well - Rick*).

Binocular Objects for September 2000

by Andrew Krochko, Observing Coordinator

This will be the first article in a series on easy binocular objects. I will concentrate on objects that I can see from the city with my 8x36 binoculars although I may throw in objects that need dark skies.

Late summer is a great time for binocular double stars. There are many easy ones in the northern Milky Way. Here are some with separations in arc-seconds:

Double Star	Sep. (")
nu Draconis	62"
epsilon Lyrae	208"
delta Lyrae	630"
16 Cygni	39"
61 Cygni	30"

The moon is about 1800" across and Jupiter is currently about 42" across. I find I need to hold the binoculars steady for doubles that are less than 60". It is also important to focus accurately.

If you have a small telescope or dark sky you can see that delta Lyrae and its companion are just

the brightest members of a loose open cluster called Stephenson 1. Epsilon Lyrae is the famous double-double. If you view this double at high power each of its components is also a double.

Edmonton's Astronomy Workshop

October 27 - 29

The Edmonton Centre once again is holding their *George Moores Astronomy Workshop* at the Skeleton Lake Scout Camp, approximately 1.5 hour north of Edmonton. This is an intensive astronomy camp for beginners and advanced astronomers which runs from Friday evening until Sunday morning. Once your registration fees of \$60.00 are paid, everything - food, room and sessions - are paid. **Parts of this workshop are also geared toward providing astronomy information for Grade 6 teachers!**

Friday evening begins with a buffet supper, then Saturday morning has a make-your-own

breakfast supplied, and a swap table. At noon there is a brunch.

Sessions begin on Saturday afternoon, with talks on the *Cosmic Connections* (Ken Hewitt-White), *Naked Eye Observing* (Bruce McCurdy), *Telescope Selection* (Alister Ling), *Optimizing Your Telescope* (Arnold Riviera), *Grade 6 Curriculum Teacher Sessions* (Russ Sampson), *Planning an Observing Session* (David Prud-Homme), *Astrophotography* (Ben Gendre), *Telescope Clinic* (Larry Wood), *Star-hopping* (Murray Paulson), *Sketching* (Sherry MacLeod), *the Binocular Star-walk* (Murray Paulson) and general observing sessions.

Dinner and snacks will be served on Saturday evening and a wrap-up breakfast/brunch buffet on Sunday morning. To end things off, a group picture will before everyone leaves on Sunday morning. For more information, call Rick Huziak (Saskatoon, 665-3392) or any member of the Edmonton Centre executive.

Notice of the General Meeting of the Saskatoon Centre

Monday, September 18, 2000 at 7:30 p.m.

Room 8313 City Hospital

Presenting

L. Dickson, D. Chatfield, R. Huziak & others- "SSSP 2000 in Pictures"

R. Huziak - "The Alberta Star Party in Pictures"

S. Ferguson - "The July 30th Solar Eclipse in Pictures"

Ken Noesgaard - "The GA, eh?"

Les Dickson- "The Membership Fee Increase" Les will explain why there is a fee increase and what the new rates may be - a vote to decide the new rates will follow!

U of S Observatory Hours

The U of S Observatory is open to the general public every Saturday evening in September from 8:30 p.m. to 10:30 p.m. and from October through February from 7:30 p.m. to 9:30 p.m.. Admission is free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear evenings visitors may look through the 6-inch refractor to the moon, star clusters, Jupiter, Saturn and other exciting astronomical objects. For further information, phone the recorded Astronomy Information Line at 966-6429.

Youth Group News

by Andrew Krochko

The Saskatoon Centre youth group is starting up again. I will be taking over from Sandy Ferguson this year. There will be a registration on September 29th at Nutana Collegiate. The dates for this year are October 20th, November 3rd and December 1st. All classes will run from 7:00 p.m. until 9:00 p.m. I will publish later dates in a future newsletter. The program is for ages 11 and up. We will be learning about observing as well as the science and history of astronomy. Participants are encouraged to bring binoculars and star maps if they have them. Like previous years there will be a \$25.00 RASC membership fee plus a \$10.00 materials fee. If you have any questions feel free to contact me at 955-1543.

Interested in

Saskatoon RASC

Membership?

Regular - was \$40.00 per year (increasing)*

Youth - was \$22.50 per year (increasing)*

*** Note - at the Winnipeg General Assembly in July a FEE INCREASE was voted in, so membership fees for 2000 - 2001 will increase slightly, from those listed above. Final price for membership will be decided at the September General Meeting.**

It's never too late to join!

When you join the Centre in September, we will apply your membership to the 2000 - 2001 membership year, which begins October 1st. If you do not want to join at this time, ask to get onto our FREE 3-month Temporary Membership list. You will receive regular mailings of our Saskatoon Skies newsletter and will be invited to participate in Centre activities. Members are encouraged to renew early to avoid disruption in publications.

Benefits of Membership in the Saskatoon Centre

Past-members and temporary members are encouraged to join or rejoin the Centre as soon as possible in order not to loose out on any benefits of membership, which include:

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the UofS Observatory (after training)
- Saskatoon Skies Newsletter
- Observer's Handbook 2000
- The Journal of the RASC (bi-monthly)

- SkyNews Magazine (bi-monthly)
- use of the Centre library
- discounts to Sky & Telescope Magazine
- discounts of Sky Publishing merchandise
- discounts to Firefly Books

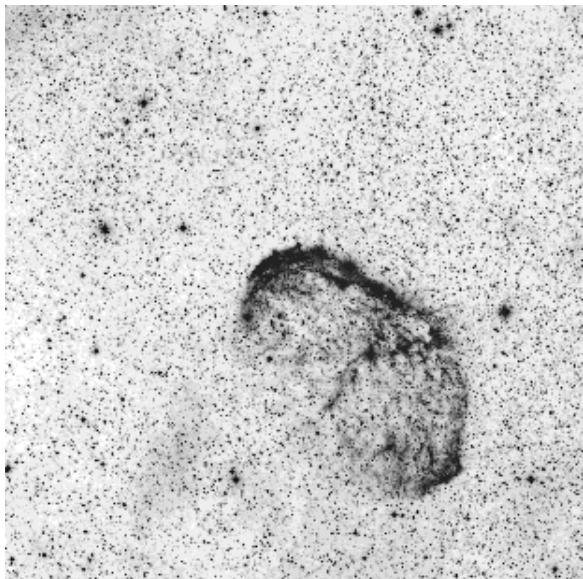
●

The Deep-Sky Observer - A Nebula and a Variable in Cygnus

by Scott Alexander

My first object is from the NGC list in the Observer's Handbook. It is called NGC 6888 (the Crescent Nebula and "van Gogh's Ear"), a faint emission nebula in Cygnus. It is located at 20h12.0m0s +38d21m0s. This one will really test your observing skills start with your lowest power eyepiece and try to find the general location of the nebula. After finding the general area, switch to a higher power to try to see the nebula. This nebula will look like a backward **C**. There are two fairly bright stars on the back of the **C** and on the front that frame it.

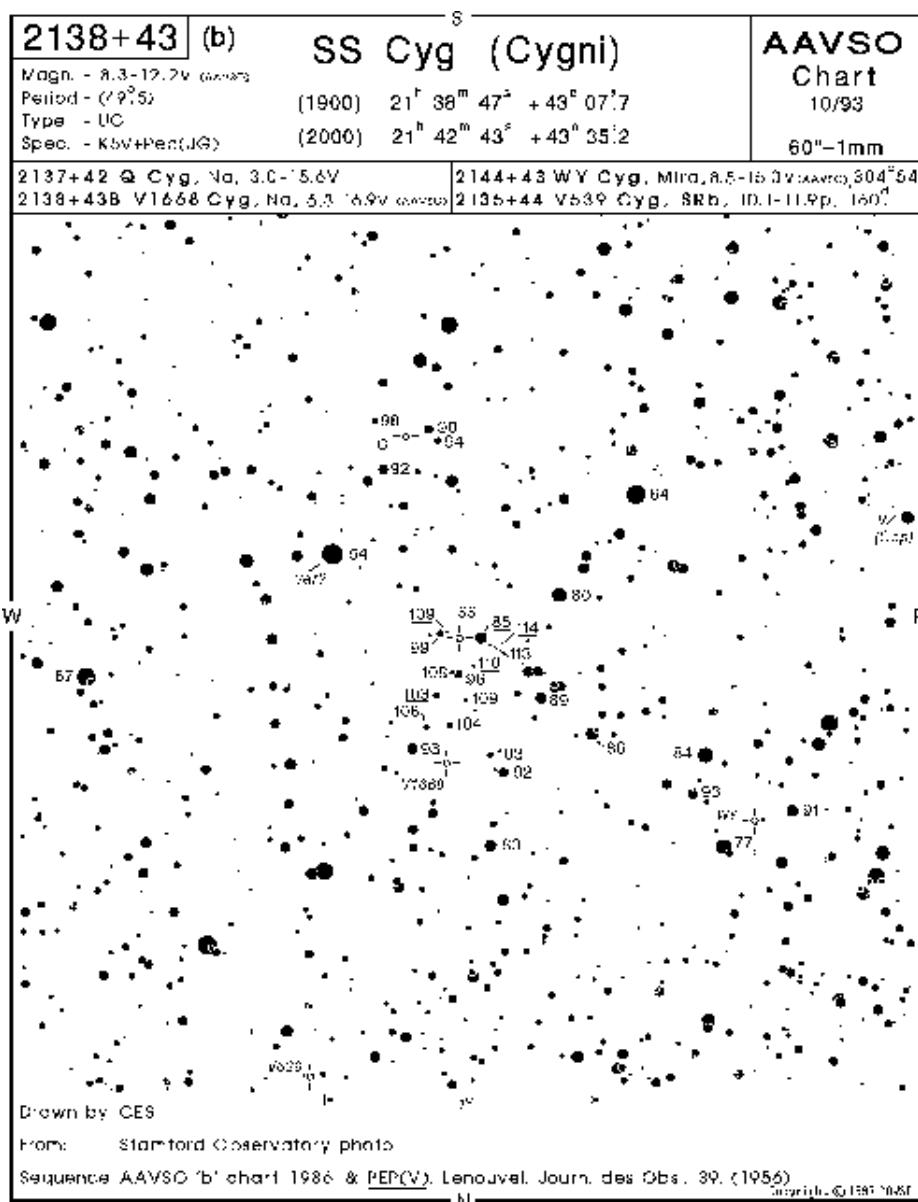
The nebula will be brighter on one side than the other. Look for any detail in this nebula. The pictures that I have seen show a mass of detail inside of the **C**, (but remember that the are long exposure photographs so there will be a lot more detail than you will see with your eyes alone).



All right - the next object to look at is a variable star called SS Cygni. It is in the constellation of Cygnus (HENCE the name)! This star varies from a magnitude of 8.3 to 12.2 and has an average period of 49.5 days. It is also a type "UG" (after the prototype variable U Geminorum), and the spectral class is K5V+pec (ug). It can be found at RA 21h 42 m 43 s and DEC +43d 35.2m 0s.

If you want, contact our variable expert in our Centre, Rick Huziak, for more information on variables. He will be really happy that someone other than him likes variables, too! JUST KIDDING, RICK!

[OK, Scott - them's fightin' words, eh? A bit on SS Cygni: the star usually sits at or near its minimum magnitude of 12.0v and every about 40 - 60 days will erupt to 100 times its rest brightness - up to about 8.5v or better. This eruption occurs because SS Cygni (and all cataclysmic variables) is a close double star. The red giant feeds gas into the accretion disk of a white dwarf, and when the disk "overloads", it burns off the excess gas in a bright, week-long nuclear detonation! On occasion, eclipses of the disk by the giant star are visible - especially at minimum magnitude, where the star may fade to as faint as 12.4v! SS Cygni is always being studied, and AAVSO members have been alerted to inform the head office the moment SS erupts this September, so further satellite studies, including imaging with the Chandra X-ray telescope can be coordinated! The chart on the next page is from the AAVSO web at www.aavso.org/. - Ed.]



Wade Selvig 71

Mike Stephens 55

Erich Keser 51

Andrew Krochko 42

Brent Gratias 39

Stan Noble 28

Lorne Jensen 25

Ellen Kaye-Cheveldayoff 23

Les & Ellen Dickson 20

Brian Friesen 15

Debbie Anderson 8

FINEST NGC CLUB

Certified at 110 Objects: R. Huziak, D. Jeffrey , G. Sarty, D. Chatfield

Scott Alexander 89

Ken Noesgaard 24

Sandy Ferguson 23

Ellen Kaye-Cheveldayoff 17

Mike Stephens 3

HERSCHEL 400 CLUB

Certified at 400 Objects:

Dale Jeffrey *WOW- COMPLETED* 400

Rick Huziak 376

Darrell Chatfield 285

Gord Sarty 147

Scott Alexander 98

Ken Noesgaard 44

Sandy Ferguson 18

Chatfield BINOCULAR CERTIFICATE

Mike Stephens 34

Join the Messier, Finest NGC, H-400 & Binocular Club!

Observe all 110 Messier, 100 FNGC or 400 H-400, or 80 Binocular objects and earn your

CERTIFICATES!

The first 2 lists can be found in ***the Observer's Handbook***. The Binocular List & Herschel 400 list will be available at each general meeting for 50 cents (covers photocopying) or **can be mailed out on request to distant members**. Each month I'll be posting updates.

Great News!

The exact method of "certifying" and presenting Dale with the H-400 certificate has not been determined. We are still sorting this out, since none of us want to send our log books to Florida for verification.

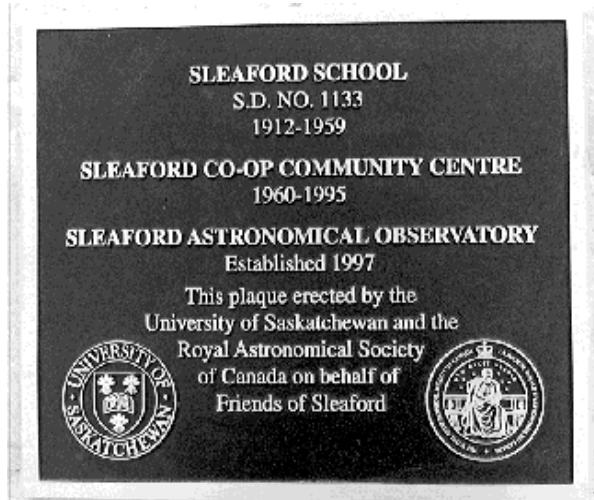
Note the quick climbs up the ladder for Wade Selvig, Mike Stephens, Andrew Krochko, Brent Gratias and Ken Noesgaard. These guys have been doing some summer observing!

Send observing numbers to <huziak@SEDSystems.ca>

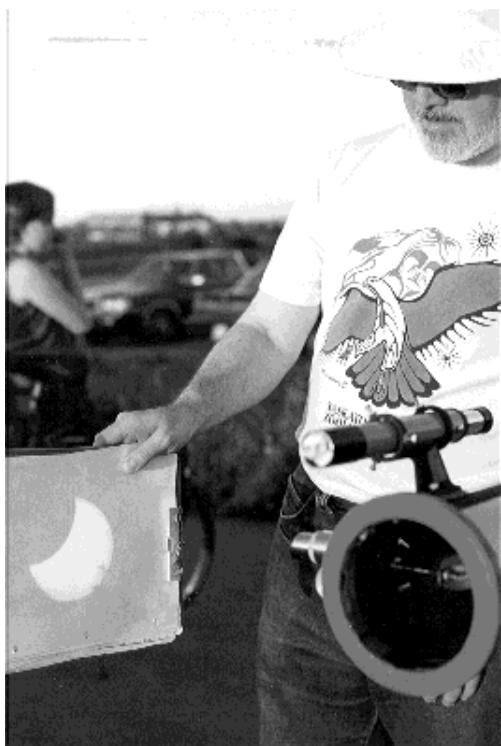
The Sleaford Observatory Page

Longitude: 105° 55' 13" +/- 13" W Latitude: 52° 05' 04" +/- 08" N, tel. (306) 255-2045

by Rick Huziak



A Friday, August 4th Open House & an August 5th Plaque Dedication: The Friends of Sleaford held a Millennium Reunion at the Sleaford School. We opened the observatories for public viewing on August 4th at dusk and about 75 community residents showed up to view through the U of S and Centre telescopes, despite marginal weather, that, of course, improved immensely once everyone left! On August 5th, the commemorative plaque for the Sleaford Site was unveiled in a ceremony at 4:00 p.m. The unveiling of the plaque fulfills a commitment made to the community at the time of purchase of the schoolyard. The plaque features a history of the site as a school, community center and then the observatory. The bronze plaque is mounted to a limestone erratic boulder. We also opened the U of S roll-off observatory and Bill Hydomako showed visitors the sun. *About 35 people who had gone to school or taught at Sleaford attended the Saturday unveiling.*



Recent Work Done at the Site: Despite a work slowdown due to commitments around the Summer Star Party, we got a work crew together on September 10th and continued to knock down the long list of small remaining tasks. The crew consisted of Bill Hydomako, John Fraser, Al and Graham Hartridge, Kim Mysyk, Ted Firman, Ken Noesgaard, Rick and Amy Huziak, Mike Stephens, Jim Young, Bob Christie and Darrell Chatfield. The following jobs were finished: painting of the Patterson Dome interior, overflow drain and pit construction for the toilet, brick-molding and siliconing the Patterson door, repositioning of the Warm-up Shelter deck boards, plug and fixture wiring in the Warm-up expansion, gravel-scaping of the Warm-up Shelter. The following jobs were begun: gravel-scaping of the Patterson dome, building of the Patterson deck and step. I would like to thank everyone for helping out.

WE ARE GETTING THERE!

The July 30th Partial Solar Eclipse

by Rick Huziak



I got a call from Sandy Ferguson on July 29th wondering what we were going to do for the partial eclipse of the sun tomorrow. I never really even thought about it. Partial eclipses can be kind of boring, but then again, they do present a wonderful opportunity to do some public awareness programming. On the spur of the moment, I said that we'd set up scopes on the bike path on the east

side of the weir on the river. From that spot, we'd get a good view of the sunset, and we'd get a captive jogging-by or biking-by audience. So I called around and found that Les and Ellen Dickson were also happy to participate, so it was settled.

July 30th was a beautiful day, and fortune smiled on us with very clear weather for the eclipse. We set up my 4-1/4" reflector and the youth group's 4.5" reflector for projection and my 6" solar scope for direct viewing. We also came armed with solar glasses and ancient B&W film for 1 power viewing.

The eclipse worked out wonderfully (see your *Observer's Handbook* for details). I'm always amazed that these events begin on time. A small bit out of the upper right quadrant of the sun signaled the beginning. And by time the sun set scenically behind a stand of pine trees, the sun was about 40% eclipses. This made a wonderful picture with finally only one cusp projecting about the horizon for the last few seconds. The event lasted only about 40 minutes, but in that time, we showed about 35 passers-by the sun, sunspots and the partial eclipse. They were all delighted with the sight! Come to the September meeting and see my slides of the event! (*Photos by the author*).