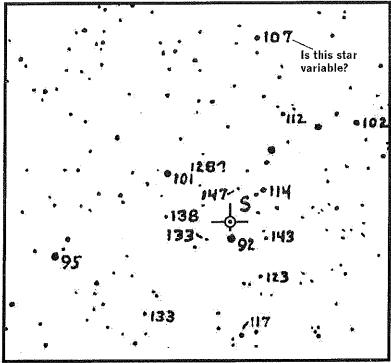
Saskatoon Skies

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

Volume 32

June 2001

Number 06



If you'd like an observing challenge, you can help me determine if a potentially new variable star is really varying. This portion of the S Cygni AAVSO variable star chart shows a magnitude 10.7 comparison star that I think is variable by about one magnitude, ranging from 10.6 to 11.6. Complete S Cygni charts can be downloaded from the AAVSO site at www.aavso.org/. Recently, I submitted a summary of 53 stars that do not seem to be at their "chart" magnitudes to AAVSO. Most are likely mislabels, but this star is probably legitimately variable. Do not use the 11.4 star – it seems to be mislabeled and is most likely 11.1. (Rick)

RASC Calendar Happenings				
Date (2001)	Event	Contact	Telephone	
June 14	Executive Meeting – at Sandy's – 7:00 pm	Les Dickson	249-1091	
June 18	Supper with Dr. Martin Beech at the Great Buffet of China - 5:30 pm	Les Dickson	249-1091	
June 18	General Meeting - Room 8313 - 7:30 pm -	Les Dickson	249-1091	
June 23	Solstice at Jeffrey's - Laird, SK - 5:30 pm	Dale Jeffrey	223-4447	
June 23	SSSP Organizing Meeting (at Dale's)	Les Dickson	249-1091	
Jun 29- Jul 2	General Assembly - London, ON	Les Dickson	249-1091	
Aug. 10	Public Perseid Observing at Pike Lake	Rick Huziak	665-3392	
Aug. 11	Public Perseid Observing at Beaver Creek	Rick Huziak	665-3392	
Aug. 11	Perseid Meteor Shower Peak	Rick Huziak	665-3392	
Aug. 17-19	Sask. Summer Star Party – Cypress Hills	Les Dickson	249-1091	
Aug. 18 - 25	Mt. Kobau Star Party - BC	Guy Mackie	(205)861-3074	
Sep. 12 - 16	Alberta Star Party – Caroline, AB	Rick& Carol Weis	(403)286-4347	

Sky Buys and Mirror Sells

The Saskatoon Centre's Swap and Sale Page!

For Sale: Tasco Model D6 60mm refractor. Brand new c/w accessories. \$170.00 Call Carl Reinhalt, #5 – 644 Heritage Lane, Saskatoon, S7H 5P8, tel: 374-2237.

Wanted: Telescope. Mike Clancy, a co-worker of Les Dickson, is looking to buy a used 6" or 8" Dobsonian telescope for himself and his two sons. If you have one for sale, contact him at (306) 384-2643.

For Sale: Brass lined trunk for SC-8 or SC-10, 9 mm Kellner eyepiece, 0.965 "6x30" eyepiece with crosshair for a spotter, 3-D Saturn V Rocket puzzle (3-feet tall), and some very good astronomy books: The Pocket Guide to Astronomy by I. Ridpath, Astronomy by Menzel, Introduction to Practical Astronomy by Jones, Burnham's Celestial Handbook (3 vol. set, hardcover). All books are in excellent shape. Call Darrell Chatfield for prices at 374-9278.

Still Wanted: 25mm Orthoscopic or Plossl eyepiece, spider and 2" - 2-1/4" diagonal for 10" scope. Will buy or trade. Call Rick Huziak at 665-3392.

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Saskatoon Centre

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Newsletter Editor - Richard Huziak Copy - Brian Friesen & WBM Collate - Friesen, Christie, Dicksons, Ferguson, Essar & Lowden



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Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 165 copies per issue. Saskatoon Skies welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science articles. Articles can be sent by mail in any format to the Centre's mailbox. Submissions may also be sent by e-mail - preferred as plain unformatted ASCH text files without line breaks. Images sent by e-mail should be attached .GIFs, .TIFs .JPGs or similar. Send e-mail submissions to the editor at <huziak@SEDSystems.ca>. Submitted materials can be returned upon request. Please send articles in "generic" formats, with standard grammatical formatting appreciated - 5 spaces at the beginning of paragraphs, two spaces after periods, one space after commas. A separate subscription to Saskatoon Skies is available for \$15.00 per year. Articles may be reprinted from Saskatoon Skies without expressed permission (unless otherwise stated), but source credit is requested. DEADLINE for submissions is the 26th of each month. Saskatoon Skies accepts commercial advertising. Please call the editor for rates. Members can advertise non-commercial items free of charge.

EVEN MORE TALES FROM THE LUNATIC FRINGE

by Daphne Lowden

Apollo 15 landed in July of 1971 at 3.5° E, 26° N. This site is very easy to locate. At about eight days after the new moon go outside and look in the northern hemisphere, in about the middle, where the mares in the eastern hemisphere meet up with the mares in the western hemisphere. This would be where Mare Imbrium (in the west) makes contact with Mare Serenitatis (in the east). Directly south of where these mares meet, and a little off-centre to the west, is about where James Irwin and David Scott landed the Falcon. Alfred Worden piloted the command module, the *Endeavour*. The three men were all originally Air Force; hence the names.

What makes this landing site interesting is the fact that it is in the middle of a mountain range. You remember the error in the speedometer in the Eagle? The lunar module's speed was being misread to the tune of 13 kph, and this was within the limits set by NASA as being acceptable. As a result, when Neil Armstrong started to land the Eagle, he found himself already past the original location, and then over a field of boulders for about 5 km. So he ended up overshooting the designated landing site by about 6 km. Well, for Apollo 15 the whole landing site was in a basin that was about 8 km by 12 km. Not a whole lot of room to play with if anything went wrong, especially considering there were 4 500 m high mountains (the Apennines) on three sides of the site and a 350 m deep, 1500 m wide gorge (the Hadley Rille) on the fourth. As it was, they overshot the target site by about 600 m. And when he first set foot on the moon, Scott stated, "As I stand out here on the wonders of the unknown at Hadley, I sort of realize there's a fundamental truth to our nature. Man must explore, and this is exploration at its greatest". (RIGHT! So let's go back!!)

And for all you car buffs out there, this was the mission that introduced the world to Rover I, which, for all intents and purposes, looked like a stripped down dune buggy. Mind you, this stripped down dune buggy cost \$8 million. When it was originally unpacked, the front steering system didn't work. But, true to form, NASA improvised and the thing got rolling the next day. (These were the same people who used a hammer to "persuade" a canister containing plutonium to "budge" during the Apollo 12 mission). The Rover allowed the crew to travel ten times further that the previous missions had been able to, for a total of 28 kilometres. Prior to the crew taking off, Scott positioned the camera on the Rover to point at the Falcon so that the camera would be able to record and transmit the lander's departure, so for the first time, people watching on Earth could watch the event.

However, in my estimation, the most remarkable aspect of the mission was the installation of a memorial plaque listing the names of the fourteen individuals, both astronauts and cosmonauts, who had died in the pursuit of the exploration of space up to that point in time. In these days of space stations and other technological marvels that spun off of the space programme (Tang notwithstanding), we must never forget where we came from or how we got here.

Summer Solstice Barbeque at Living Skies Observatory, Laird

An Invitation from Dale and Whendi Jeffrey

Attention all members!

On Saturday, June 23rd, Whendi and Dale Jeffrey wish to invite you and yours to a Summer Solstice Barbeque at Living Skies Astronomical Observatory in Laird. Plan to arrive at 5:30 p.m. for home-made barbequed farmer's sausage, shamelessly-purchase perogies, salad, and Druid cake, followed by deserts, campfire and, the Druidic spirits willing, clear skies and observing. (Donations of salads or other desert items would of course be appreciated).

Bring your own libations, lawn chairs, telescopes, or binoculars. Our house is located at the very north edge of town, just as you leave the paved main street for gravel.

An Appeal from the Registrar of SSSP 2001

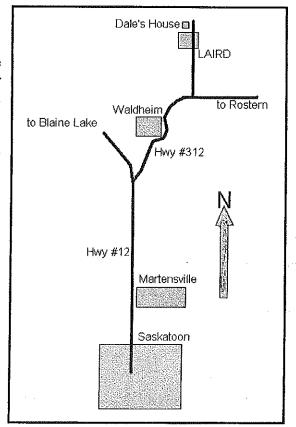
Ellen Dickson, SSSP 2001 Registrar

Hello. As registrar of this year's Star Party in Cypress Hills Inter-provincial Park, I want to take this opportunity to give a brief reports on what we hope will be a good party.

At present, we are sitting well below the number of registrants that we had last year at this time. Mailings have gone out, yet little has come in. There are, however, many more resort accommodations reserved than there are paid-up attendees. That can only mean that I may be swamped in the next while as the deadline date of July 20 draws near for the early registration.

In that case, I am going to appeal to you - all of you that are reading this now - PLEASE get your registrations in NOW. Fewer problems may occur later if you take the time to do it now. Fewer problems now mean less headaches for you later. If you do so, you will receive my gratitude (for saving my sanity) and thanks. (You will also save yourselves \$10 in your registration fee!)

Thanks all for now, thanks for your time and precious starnite vision.



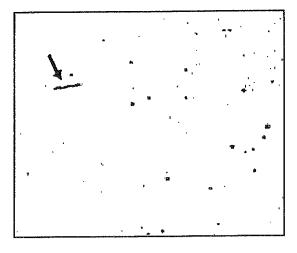
"We Want YOU, To REGISTER NOW!!!!" ...

(Lest a Monolith falls on you!!!)

Catching the Earth-Crossing Asteroid 1999KW₄ by Murray Paulson, Edmonton Centre mpaulson@ecn.ab.ca

I managed to get off a shot of the Aten asteroid that passed close to Earth in late May. Here is a photograph re-touched to improve the contrast for printing.

1999 KW₄ - Close encounters part 2. This little 1-to 2-km lump passed nearby Earth a few years back and caused quite the stir at the time. What happened was that a set of less than rigorous calculations had put it in the very near vicinity of the Earth in 2031 and got alarm bells ringing in the media of a final impact situation. No doubt there were a few scientists with egg on their faces over that one. We were treated to a second viewing of it this May from a distance of 4.8 million km.. It is quite something to see an asteroid moving fast enough that you can actually see it move



over a period of a minute! I was lucky enough to get a photograph of it between clouds, a finicky illuminated reticule eyepiece, and a missing countdown timer on late Saturday evening May 26th. The photograph was a ~5-minute exposure taken at 2:27 to 2:33 p.m. May 27 local (Edmonton) time.

Saskatoon Centre Member Selected to Receive RASC Chant Medal by Les Dickson, President

Richard Huziak, Past-President of the Saskatoon Centre of the Royal Astronomical Society of Canada (RASC), has been selected to receive the RASC's Chant Medal, to be presented June 30 at the General Assembly of the RASC in London, Ontario.

Rick is receiving this award for his significant contributions as an amateur observer in generating, over a 25-year period, a substantial body of high quality variable star observations. A long time member of the RASC and an accomplished observer, Rick has completed over 19,000 professional quality observations. Rick has made other significant contributions to variable star observing, including improvements to the accuracy of star charts, and actively encouraging other observers. Recently, he has brought to the attention of the astronomical community the large number of variable stars that appear to be mislabeled or missing in the "Millennium Star Atlas." The American Association of Variable Star Observers (AAVSO) has also recognized his valuable contributions, by awarding him with an AAVSO Observer Award in 1999.

The Chant Medal is the most prestigious award given to amateur astronomers in Canada. The medal is awarded, not more than once a year, to an amateur astronomer resident in Canada for a significant and valuable piece of work of an extensive nature carried out in astronomy and closely allied fields. The award was established in 1940, and has been awarded only 24 times before 2001.

International Space Station Evening Passes - June 13 to August 1, 2001

Date	Magni		Starts		Max.	Altite	ıde		End	s
		Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
13 Jun	1.3	23:33:42	10	WSW	23:35:40	16	SW	23:36:20	15	ssw
14 Jun	0.7	22:33:58	10	W	22:36:36		SSW	22:39:05	11	SSE
15 Jun	1.9	23:12:03	10	SW	23:12:47		SW	23:13:32	10	SSW
			(0	laytime p	asses betwe					55,,,
17 Jul	1.7	03:51:43		S	03:53:24		SE	03:55:07	10	ESE
18 Jul	0.5	04:24:55	10	SW	04:27:43	31	SSE	04:30:33	10	Е
19 Jul	1.2	03:25:30	15	S	03:26:44	19	SE	03:29:01	10	E
20 Jul	2.0	02:26:26	10	SE	02:26:26	10	SE	02:26:29	10	SE
20 Jul	0.0	03:58:30	13	sw	04:01:01	40	SSE	04:03:59	10	E
21 Jul	0.7	02:59:20	23	SSE	02:59:50	25	SSE	03:02:30	10	E
22 Jul	1.9	02:00:07	12	ESE	02:00:07	12	ESE	02:00:36	10	ESE
22 Jul	-0.4	03:32:10	19	SW	03:34:06	50	SSE	03:37:09	10	Е
23 Jul	0.2	02:32:52	32	SSE	02:32:52	32	SSE	02:35:38	10	E
23 Jul	-0.7	04:05:19	10	W	04:08:26	78	S	04:11:34	10	E
24 Jul	1.9	01:33:30	12	ESE	01:33:30	12	ESE	01:33.52	10	E
24 Jul	-0.7	03:05:33	28	WSW	03:06:59	61	SSE	03:10:04	10	E
25 Jul	0.2	02:06:08	36	SE	02:06:08	36	SE	02:08:30	10	E
25 Jul	-0.8	03:38:10	10	W	03:41:13	82	S	03:44:22	10	E
26 Jul	2.1	01:06:40	10	E	01:06:40	10	E	01:06:45	10	Е
26 Jul	-0.8	02:38:42	40	WSW	02:39:39	71	S	02:42:46	10	E
26 Jul	-0.7	04:12:21	10	W	04:15:27	74	S	04:18:34	10	ESE
27 Jul	0.6	01:39:13	31	ESE	01:39:13	31	ESE	01:41:06	10	E
27 Jul	-0.8	03:11:15	14	W	03:13:48	83	S	03:16:56	10	Е
28 Jul	-0.8	02:11:46	66	SW	02:12:06	78	S	02:15:13	10	E
28 Jul	-0.7	03:44:48	10	W	03:47:53	64	SSW	03:50:58	10	ESE
29 Jul	1.3	01:12:21	20	E	01:12:21	20	E	01:13:27	10	E
29 Jul	-0.8	02:44:24	23	W	02:46:08	79	S	02:49:15	10	E
29 Jul	-0.0	04:18:55	10	W	04:21:48	35	SSW	04:24:40	10	SE
30 Jul	0.1	01:45:14	42	Е	01:45:14	42	E	01:47:26	10	Е
30 Jul	-0.6	03:17:19	12	W	03:20:05	54	SSW	03:23:07	10	ESE
31 Jul	-0.2	02:18:58	48	ESE	02:18:58	48	ESE	02:21:21	10	ESE
31 Jul	0.3	03:51:08	10	W	03:53:48	27	SSW	03:56:30	10	SSE
31 Jul	1.0	22:03:19	10	S	22:05:15	16	SE	22:07:01	11	ESE
31 Jul	0.6	23:37:34	10	WSW	23:39:12	27	SW	23:39:12	27	SW
01 Aug	1.8	02:54:42	12	SE	02:54:42	12	SE	02:55:00	10	SE
01 Aug	1.3	04:27:01	12	SW	04:27:15	12	SW	04:28:33	10	SSW
01 Aug	-0.1	22:35:54	10	SW	22:38:44	34	SSE	22:41:04	13	E

The Planets This Summer

by Murray Paulson, Edmonton Centre <mpaulson@ecn.ab.ca>

The Mercury – Jupiter conjunction of May was wonderful and provided many a night of watching the pair in the twilight. Mercury moves so quickly that it's position changed dramatically from night to night. But now the summer twilight has come, the sun has swallowed Jupiter, Saturn and finally Mercury. So for the next few months, Venus, Mars and the distant duo of Uranus and Neptune will be our companions in the summer skies.

Mercury will still be a good daytime target. It will be a good daytime activity at the star parties for people using setting circles and the ultimate star hop. On the summer solstice, Jupiter will be 5 degrees west of the sun, and Mercury will be 8 degrees west of the sun, situated 4 degrees above the ecliptic. On July 9, Mercury will be at greatest western elongation, and will rise 1 hour before the sun with Jupiter as its companion 5 degrees to the north. I find that this is the best time of year to observe Mercury in the daytime. It is as high in the sky as it gets and if the seeing is good, you can use lots of power. Mercury is small and 300 to 400 power is what you need on it. It's markings are subtle, but be patient.

Venus is a morning object and has past its greatest western elongation of 46 degrees on June 13th. I find it amazing that it was only a little more than 2 months ago that it was in conjunction with the sun! It presently is a 22.2" arc half "moon", slightly bigger than Mars and shines at magnitude -4.3. It is now on a slow decent back toward the sun and will shine brilliantly in the morning sky for the rest of the year! By September it's gibbous phase will sit 34 degrees from the sun and subtend 12.6" of arc.

Mars rules! Well, this month is Mars opposition time. Low as it may be, Mars will shine as a brilliant red ember just above the southern

horizon for this month. The summer twilight will emphasize its redness. Mars shines at magnitude -2.4, second only to Venus and shows a 20.68" disk. I have seen some details on it, with small aperture scopes, so it isn't without possibilities this Leandro Rios's program, "Mars go round. Previewer", a down-loadable freeware, will give you an up-to-date image of the face that is presently visible. Many of the planetarium programs, like Guide, Skytools, etc. also will give you this data. Go for it! Let me know what luck you have observing this apparition. opposition, Mars will swoop back toward Antares and halt it's retrograde on July 19th only 5.2 degrees east of it. At this time, it shows a 18.5 arc second disk at magnitude -1.8. Then it will turn and head east along the ecliptic and by the time of the summer star parties, Mars will have shrunk further to just under 15" of arc, but we will have a better view of it from the south end of the provinces.

Uranus is at opposition on August 15th and will show a 3.7" magnitude 5.7 disk. It should be naked eye visible for those of you who want to get a 7th naked eye planet. It will be located in a nice grouping of stars in the first half of August on the east side of Capricorn. The stars range from magnitude 5.2, 5.9 and 6.0, so will give you a good naked eye magnitude limit estimate as well. One tip to aid in attempting it would be to inspect the field beforehand with your binoculars and then look for Uranus. Please refer to your favorite astro software or one of the location charts in the Handbook or the magazines. One feature that the astro software is the position of Uranus's satellites can be printed for field charts, so you can add them to your observing plan. Uranian moons Titania and Oberon are at magnitudes 13.9 and 14.1 respectively. There is an inner moon, Ariel at magnitude 14.3, but it lies only 6.5" away from Uranus and the glare will make it very difficult to observe.

Neptune is at opposition on July 30, and will show a blue-green 2.3" disk and shines at magnitude 7.8. It also has a moon worth hunting down, Triton at magnitude 13.5. This is an even

better target than the Uranian moons, so hunt it down as well. I will bring finder charts to the star parties, so if you would like to see these distant moons, come see me.

If we don't meet at the star parties, we will see you in the fall. Clear skies and a good summer.

Alan Dyer to Speak at the Saskatchewan Summer Star Party August 18 by Les Dickson

Alan Dyer is the Featured Guest and the Fr. Kemble Memorial Lecturer our Saskatchewan Summer Star Party (SSSP) this Alan is one of Canada's best known astronomy writers. His articles appear regularly in SkyNews magazine (where he serves as Associate Editor) and in Sky and Telescope magazine where he reviews the latest telescopes. He is author or coauthor of several books for amateur astronomers, including the best-selling Backyard Astronomer's Guide, plus Advanced Skywatching (for the Nature Company), Star and Sky, an Insight Travel Guide (for the Discovery Channel), and the just published Astronomy Companion (for Konemann Publishing Co.) He served as an editor with Astronomy magazine for four years and currently is a producer for the Discovery Dome theatre at the Calgary Science Centre. His special interests in the hobby include astrophotography, deepsky-observing, and eclipse chasing. In June he traveled to Zimbabwe, Africa to view the total eclipse of the Sun.

Alan will be making two presentations at SSSP. The main talk Saturday evening is titled "Hiking the Milky Way." Using wide-angle and telescopic astrophotos he's taken over the years, Alan's guided

hike will trek us along the Milky Way currently visible, with stops at the best star clusters and nebulas of the summer sky. The tour will continue by following the Milky Way down into the southern sky then ascend back up into the winter sky, for a walk around the entire sky. While the presentation is designed to be of interest to both hard-core observers and novice stargazers, the many photos of spectacular regions of the sky should make the talk suitable for other family members with only a casual interest in the sky.

Saturday afternoon, Alan will give a "Telescope Users Seminar." In a special afternoon session Alan Dyer will provide advice on choosing and using your first telescope. This session is aimed at beginners who have just purchased a telescope or are thinking of buying one. Segments will deal with tips on using computerized telescopes, how not to set up a telescope, tips on frustration-free telescope use at night, and recommended accessories to buy. Bring your own telescope for answers from Alan on those mysterious parts and bits you've never figured out how to use or what they are for.

Messier, FNGC, H-400 & Binoc Club

MESSIER CLUB

Certified at 110 Objects: R. Huziak, G. Sarty, S. Alexander, S. Ferguson, D. Jeffrey, D. Chatfield, R. Christie, K. Noesgaard

Mike Stephens	**ALMOST THERE **	106
Wade Selvig		71
Andrew Krochko		42
Brent Gratias		39
Stan Noble		28
Mike Oosterlaken		28
Lorne Jensen		25
Les & Ellen Dicks	on	20
Debbie Anderson		17
Brian Friesen		15

FINEST NGC CLUB

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

Sility, Di Character	
Scott Alexander	89
Ken Noesgaard	24
Sandy Ferguson	23
Mike Stephens	16
Mike Oosterlaken	1

HERSCHEL 400 CLUB

Certified at 400 Objects: Dale Jeffrey

Rick Huziak	**ALMOST THERE **	399
Darrell Chatfield		340
Gord Sarty		147
Scott Alexander		98
Ken Noesgaard		44
Sandy Ferguson		18
Mike Oosterlaken		7

Chatfield BINOCULAR CERTIFICATE

Mike Stephens **ALMOST THERE ** 37

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

Observe all 110 Messier, 100 FNGC or 400 H-400, or 40 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.

Hey, Observers!

It's been a long time since all observers on these lists have contacted me with their numbers – please do so, so that I can get an accurate update for the next newsletter!

In the meantime, some observers have been doing their jobs and are nearing completion of their observing goals. In particular, Mike Stephens has had a very productive spring and summer, and is only 4 objects short of his Messier certificate & 3 short for the Binocs. Darrell Chatfield has moved up the H-400 list, and I have made it to only one object short in the same list. Now I wish I had tried a bit harder in February when the last object in Sculptor was visible! Oh well — I should be able to get this puppy at the Sask. Summer Star Party!

New members – get onto the Messier list! Two-thirds of the Messiers can be done with a reasonable pair of binoculars!

> Send observing numbers to huziak@SEDSystems.ca

Notice of the General Meeting of the Saskatoon Centre

Monday, June 18, 2001 at 7:30 p.m. Room 8313 City Hospital

Presenting

Dr. Martin Beech

Campion College, Dept. of Physics, University of Regina

"Collecting Astronomy"

Astronomy is one of the most accessible of sciences and many trade and cigarette companies have in the past issued cards relating to astronomy and space exploration. My talk will look at the history and development of astronomy as portrayed by trade and cigarette cards over the past century.

Come Early for Supper with Martin at the Great Buffet of China at 5:30 pm

U of S Observatory Hours

The U of S Observatory is open to the general public every Saturday in June - July from 10:00 p.m. to 11:30 p.m. Admission if 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 and other exciting astronomical objects.

For further information, phone the recorded Astronomy Information Line at 966-6429.

Interested in Saskatoon RASC Membership?

Regular - \$48.00 per year Youth - \$26.00 per year

It's never too late to join!

The Saskatoon Centre operates on a one-year revolving membership. You will now be a member for the next 12 months no matter when in the year you join.

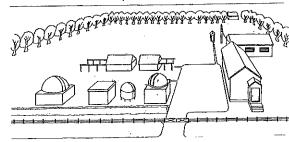
Benefits of Membership in the Saskatoon Centre

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the UofS Observatory (after training)
- Saskatoon Skies Newsletter
- Observer's Handbook 2001
- 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
- free, no cost, no obligation, 3-month temporary membership if you don't want to join right now!

The Sleaford Observatory

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

General Site Use – The site continues to be used frequently, but it seems that the same observers are always coming out. If you'd like to get out and



observe, you are welcome to do so. Call Rick Huziak (665-3392) and Darrell Chatfield (374-9278) to see if anyone is going to the site and if you can get a ride if you need one. Although the moon will interfere a bit, the Perseid Meteor Shower in August will present a good time get out and use the site. The peak even falls on a weekend this year.

Site Construction – Improvements continue with the construction (by Darrell) and mounting (by Darrell and Bill) of a bookshelf for the Warm-up Shelter.

U of S Work at the Observatory – The U of S will be conducting maintenance of the Roll-Off observatory during June and July. The maintenance will be done during daylight hours, but be cautious of possible obstacles around the building.

Astronomical Events Calendar for June through August By Les Dickson

Jun 13 Jun 17 Jun 19 Jun 21 Jul 04 Jul 05 Jul 10	Mars At Opposition Mercury Passes 3.5° From Jupiter Venus 1.7° N of Moon Saturn 0.9° N of Moon Summer Solstice, 07:24 UT Solar Eclipse, Visible From Southern Africa Moon Occults Jupiter Earth At Aphelion (1.017 AU From Sun) Lunar Eclipse Mercury at Greatest Western Elongation (21°)	Jul 15 Jul 17 Jul 19 Jul 30 Aug 06 Aug 11 Aug 14 Aug 15	Venus Passes 0.7° From Saturn Moon Occults Saturn Moon Occults Venus Moon Occults Jupiter Moon Occults Mercury Neptune At Opposition Southern Iota Aquarids Meteor Shower Peak Venus Passes 1.2° From Jupiter Perseid Shower Peak Moon Occults Saturn Moon Occults Jupiter Uranus At Opposition
Jul 13	Mercury Passes 1.9° From Jupiter		·