

Stardust

A Monthly Newsletter of the
Royal Astronomical Society of Canada
Edmonton, Centre

May, 1968

Meeting "The Goto Projector at the Queen Elizabeth Planetarium"
Monday, May 13th Speaker- Mr. William Cable, Director
Planetarium



The Return of Dr. Milton

Dr. E.R. Milton and the Aurora Dr. Milton, a long-time member of the R.A.S.C. and former active observer for the Edmonton Centre, returned to us in March to reveal the extensive work he has done with fine auroral observations done by the Centre's aurora observers in the 1950's.

Dr. Milton paid special tribute to the amateur astronomers of the Centre who were involved in the important task of recording the appearance of northern lights over Edmonton during the International Geophysical Year.

He concluded his talk with an appeal and an offer to the young members of the Centre to collectively observe and record their appearance. It certainly provides a tremendous opportunity for young people to assist the professional astronomer.

Dr. Milton, in cooperation with the National Research Council, will be providing forms to report observed aurora.

Dr. Richard Henry and the Universe A recent news release out of Washington, D.C. revealed that rocket launchings last fall have revealed that the intergalactic space is not empty of dust and gas but rather has one hundred times more hydrogen gas than previously suspected. Dr. Richard Henry of the U.S. Naval Laboratory who instigated the project, states that this evidence means that the universe is likely closed in upon itself and finite as Einstein suggested. More tests are required to confirm this.

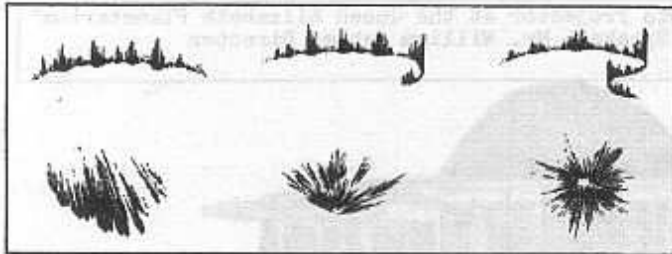
In case you don't know Dr. Henry was a former member of the Centre's Observers' Group in 1955. The picture of this group appeared in the January issue of STARDUST and Dr. Henry is the 'boy' in the lower right-hand corner.

JUNE MEETING-- A TRIP TO THE MEANOOK METEOR OBSERVATORY

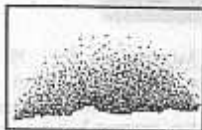
Illustrative sketches of standard auroral forms.



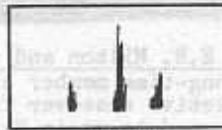
HA (HOMOGENEOUS ARC)



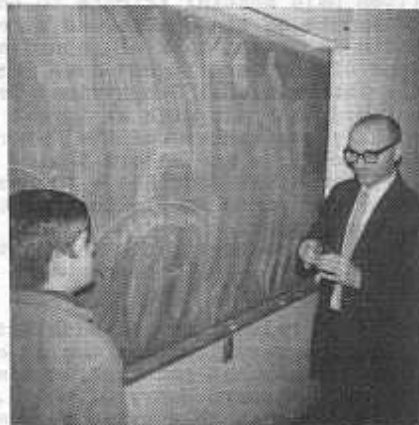
RA (RAYED ARC)



G (GLOW)



R (RAYS)



Dr. Harrison of the U. of Cal

This Canadian scientist via Britain, Saskatoon and Calgary has taken a keen interest in the northern lights. The mechanisms behind the aurora was the subject of his very interesting talk to our Centre in April. We hope to hear from him again in the future.

Observing the Aurora

The visits of Drs. Milton and Harrison at the March and April meetings respectively, again pointed out the importance of the work of amateur astronomers. This was never more true than in the field northern light studies.

Easily seen from Edmonton and without a telescope the aurora at times can be most colourful and spectacular.

The sketches at the side illustrate the more common forms seen. The most common colour is greenish-yellow but reds and purple have been reported.

The method of reporting brightnesses is by comparing a faint aurora with the Milky Way, a medium bright aurora with moonlit cirrus clouds and bright aurora with the edges of moonlit cumulus clouds. More tips on how to observe the aurora will appear in the June issue of STARDUST



Aurora Sharpshooters of the 50's

Walter Scheuerman of Bashaw and Walter Nacuk of Thorsby, two of our most active aurora observers in the 1950's, were re-united at our special March 25th meeting. The two provided two important links in the network of aurora observers in Alberta. Between them they supplied over 400 reports of aurora to the National Research Council.

The General Assembly in Calgary
May 17 - 20

Friday, May 17

There is every indication that General Assembly will be another large success with delegates scheduled to arrive from Victoria, Quebec City and all points in between. As you can see from the abbreviated program on the right there will be a great deal to see and do.

If you have decided to go but have not yet contacted the Calgary Centre send a quick letter off to Mr. Ken Meiklejohn, 88 Selkirk Drive, S.W., Calgary 13.

1:30 p.m. National Council Meeting
2:00 p.m. Registration
2:30 p.m. Tour of exhibits
8:00 p.m. General Meeting and UFO Talk
9:30 p.m. Social Hour

Saturday, May 18

8:30 a.m. Papers Session
12:00 Noon Group Photograph
1:00 p.m. Committee Meetings
2:30 p.m. Photographic Zenith Tube
7:00 p.m. Provincial Banquet

Sunday and Monday May 19, 20

Tours of Calgary Centennial Planetarium,
Cosmic Ray Station, and city sights.



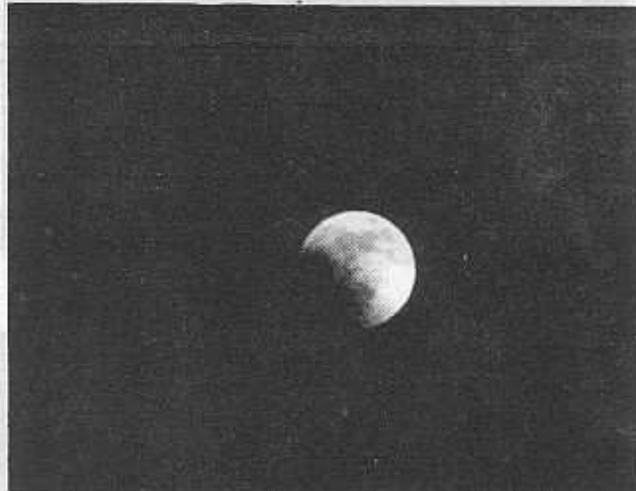
Total Lunar Eclipse of April 12

The talk of the past month has been the ideal conditions for this eclipse. The eclipse was quite beautiful, especially with the bright star Spica in conjunction with the moon. A coppery-red colour was noticeable quite early in the eclipse, and became more pronounced as the moon slid deeper into the shadow.

Other noticeable features of the eclipse included abnormal brightness of the southern limb of the moon which ranged from pearl white to a subtle blue. This could be explained by the fact that the moon did not pass through the center of the earth's shadow. At no stage of the eclipse was any part of the moon completely invisible. Two occultations were recorded during the eclipse.

The author wishes to acknowledge the assistance of Mr. Paul Deans who obtained crater timings and Miss Inger Fleisher who helped operate the movie camera used for time-lapse moves. Miss Fleisher also came through with the much-needed coffee, as the three were frozen much of the time.

Franklin Loehde and myself will be showing colour slides of the eclipse at the May meeting in the Planetarium.



(Anschochrome by F. Loehde 20:30 MST)

David Roles

Total Lunar Eclipse
April 12-13

Colour Photographs by F. Loehde

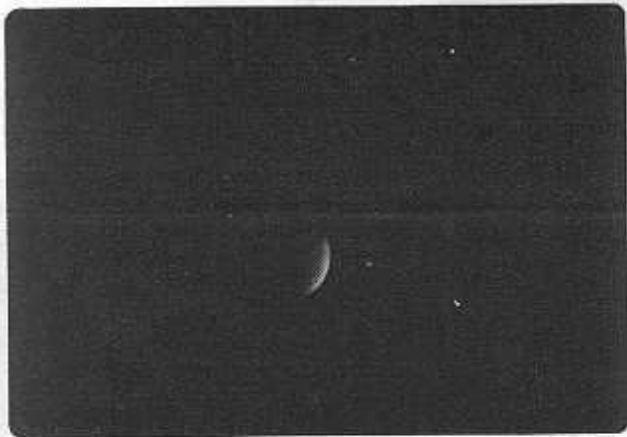
Anscochrome 500
f/8 1/25 sec.
500 mm telephoto
21:00 MST



Totality Phase

Anscochrome 500
f/8 2 sec.
500 mm telephoto
21:30 MST

Note Spica to right of moon



Anscochrome 500
f/8 1 sec
500 mm telephoto
22:15 MST



Observing Notes by David Roles Jenny Rusch has added M46, M47 and M93 to her Messier list total, while yours truly managed to find several objects during a break from lunar and planetary work. Of good news to you younger observers without large telescopes is the observing done by Mr. Loehde with a pair of binoculars. In a short three-hour observing session during April he saw with binoculars alone Messiers 3, 13, 51, 53, 63, 64, 65, 66, 92, 94, 95, 96, 81, 82, 101, and 104. Don't give up as he isn't competing. He has seen them all before through regular telescopes. As far as myself is concerned I've been very busy the past few weeks and so have not been in touch with our younger members for their totals in the Messier Contest. Please give your latest score at the May 13th meeting at the Planetarium.

One of the most beautiful objects now prominent in the evening sky is the planet Jupiter, the great gas giant of the solar system. Jupiter is a fascinating planet to watch, and changes in the face of the planet and in the positions of the four Galilean moons are visible in a short period of time. Jupiter's four large moons are easily visible in binoculars and would even be visible to the naked eye if they were not lost in the planet's glare.

Using my eight inch telescope, I managed to observe the Jovian details shown in the accompanying drawings made on the 23rd and 24th of March. Jupiter's Great Red Spot and a white oval beneath it were visible on the 23rd as was a narrow but distinct belt at a peculiar upward angle from the Red Spot. Another observer with me at the time confirmed my observations. The most notable feature the following evening was a close conjunction of two of the moons. At 220X the moons were split, but at 50X they appeared as one moon. Observers with reasonably large telescopes should try watching for transits, eclipses, etc. of the moons

7:45 P.M. MARCH 23



11:16 P.M. MARCH 24

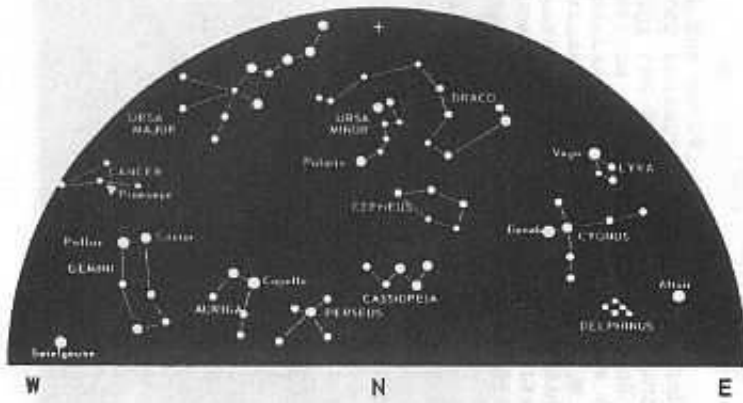


'GRAZER' Howell of Calgary Centre

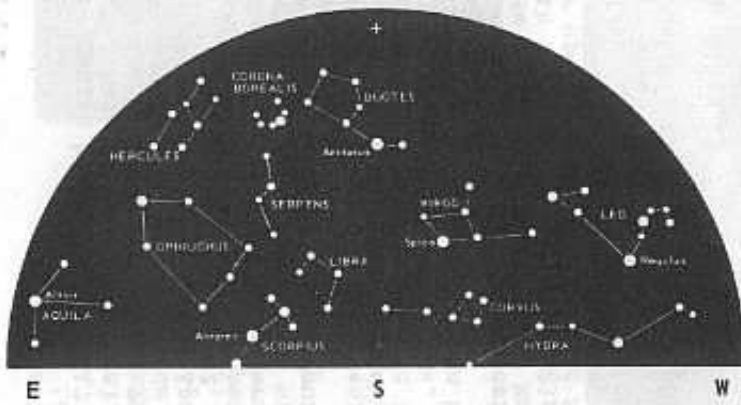
The gentleman on the right with that plaintive and almost pained look is what is called by the occultation fraternity a Grazer. These creatures are afflicted with a rare disease which forces them to travel to remote, God-forsaken spots in the hopes of seeing a star pop in and out of the valleys of the moon. While during a regular occultation of a star by the moon, the moon passes directly in front of the star in a 'graze' there is a partial miss as the star goes behind a range of lunar mountains. Needless-to-say with such split-second timing required it sometimes is cloudy at precisely the wrong time. The pained look on John's face? You guessed it!



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To-



Meeting
Monday, May 13th
PLANETARIUM
8:30 p.m.