



MINUTES

Minutes of the regular meeting of Tuesday, March 7, 1978:

The entire March meeting of the Twin City Astronomy Club was devoted to a lecture and slide presentation by Dr. Donald E. Osterbrock, Director of Lick Observatory. Dr. Osterbrock will be returning to Lick soon after spending six months in the Twin Cities as a Hill Family Visiting Professor.

He began his lecture by tracing the history of Lick Observatory, which was constructed as a monument to a wealthy San Francisco tycoon, James Lick. The observatory is located on Mt. Hamilton, near San Jose. The original telescope was a 36" refractor constructed about 1888. In 1958 a 120" reflector was added. The observatory has several other telescopes in addition.

Dr. Osterbrock discussed some of the research underway at Lick. Stellar evolution, the spectra of interstellar matter and radio galaxies are among the research topics at the observatory. A photographic program to determine proper motion of stars, using the galaxies as reference points, is another Lick project.

In 1967 the faculty of the observatory moved to the University of California, Santa Cruz. Dr. Osterbrock now spends only two or three nights a month at Lick, which is used by several campuses of the U of C.

Because of light from the San Francisco Bay area, Lick is now seeking another site at 6800 feet in the Monterey area. Lick staff is seeking funding for this site, located about 65 miles south of the present Lick Observatory in the Santa Lucia Range. The cost is estimated at \$10 million. The National Science Foundation is the most likely funding source.

Visitors are welcome at the present Lick Observatory, which is open from 1 to 5 p.m. daily, except holidays.

The April meeting of the Twin City Astronomy Club will feature a lecture on "Stardust" by Dr. Edward Ney of the University of Minnesota Department of Physics and Astronomy. Dr. Ney is studying early stellar evolution. He will be leaving for Palomar Observatory subsequent to the April lecture.

Dr. Ney's address will be at 7:30 p.m. Tuesday, April 4, in Room 170 of the Physics Building, University of Minnesota. The Physics Building is located on the east side of the mall in front of Northrup Auditorium, between Morrill Hall and Murphy Hall (the journalism building).

Event of the Month

by Bill Larson

Uranus is in conjunction

with Alpha Librae April 27

The disk of Uranus is easily seen in small amateur telescopes and at magnitude 5.7 at opposition Uranus is even visible to the naked-eye. Nevertheless many amateur astronomers have never seen Uranus. Although Uranus comes to opposition this year on May 5, it is nearly as bright in April. Furthermore Alpha Librae will fortuitously provide an excellent guide to Uranus on April 27. Therefore this month presents this year's best opportunity to pick out Uranus.

Alpha Librae (Zubenelgenubi) is a double star. The primary, α^2 Librae, is magnitude 2.8; the secondary, α^1 Librae, 3.8 minutes of arc northwest, is magnitude 5.2.

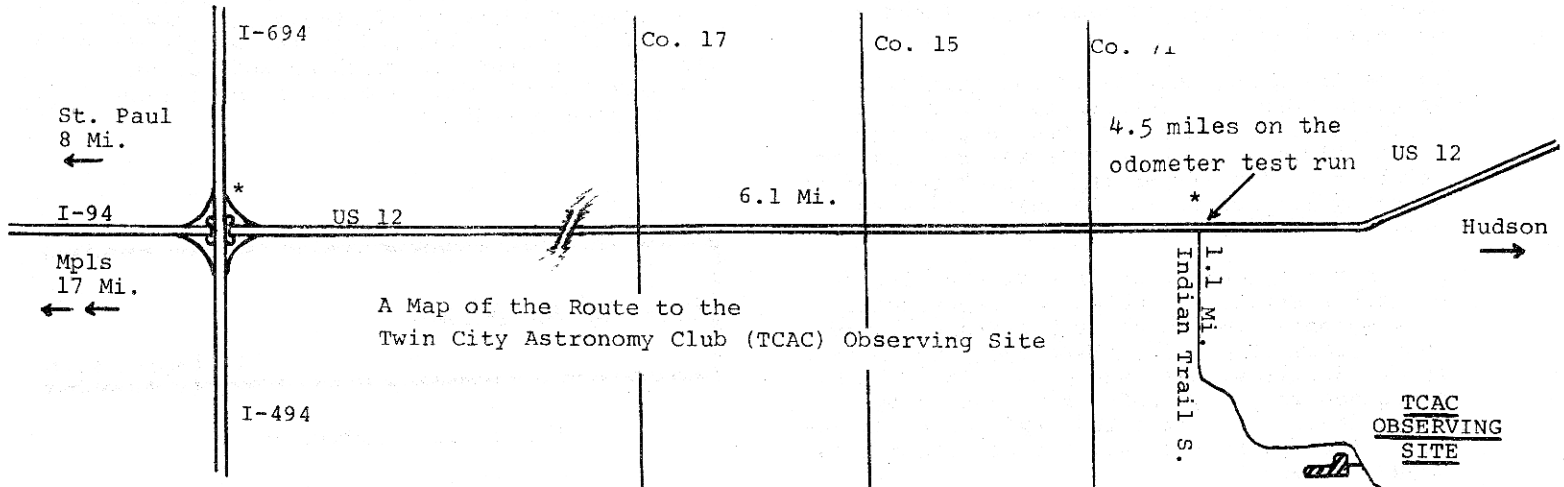
In mid-April try finding Uranus with your naked-eye about 15 minutes (half of the moon's diameter) straight east of Librae. Since the first naked-eye star east of Alpha is over 3 degrees away, if you see any naked-eye star even roughly where Uranus should be, you have seen Uranus!

If this fails you should have no trouble locating it with a 15 cm telescope. 40 power should just reveal the 4 seconds of arc disk of this bright bluish "star". A higher power, say 200x, should make the disk obvious. If you still are unsure which "star" is Uranus wait until April 27 when it will be only 5 minutes of arc north of Alpha thus forming a nice wide triple. This is a triple star which won't last so don't miss it!

John Cooner would like to remind those members who receive their Sky & Telescope through the club to bring the address sticker to the next meeting and give it to him if you have not already done so.

The May 2 meeting will be a joint meeting of the Twin City Astronomy Club and the 3M Club Astronomical Society. The program to be held at Clin Hall on the campus of Macalester College will be given by Rick Binzel and Dr. Sherman Schultz on Photometric Measurement at Macalester College. Following this, Dr. Schultz will give a demonstration of 360 degree photography in the planetarium.

The star party season this year begins on April 7. All star parties will be held on Friday evenings with the following Saturday evenings being alternates in case a given Friday is judged too cloudy or very inferior to the predicted Saturday conditions. If there is any question about which evening is being used phone me Lauren Nelson 644-1254, Andy Frazier 690-5902 or if no one answers call The Minnesota Science Museum guard 227-8241. The star parties begin at sunset and proceed throughout the night at the sight shown in the map below. Additional star parties: May 5 or 6; June 9 or 10; July 7 or 8; Aug. 4 or 5; Aug. 11 or 12 (Perseid meteor shower); Sept. 1 or 2; Oct. 6 or 7; and Nov. 3 or 4.



GEMINI

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