The Prairie Astronomer

JAN 83

Epoch - - 1982

Now that the year 1982 has come to an end it might be appropriate to look at some of the events that shaped astronomy in the past year.

The most distant object in the universe was found by a team of American, Australian, and British astronomers. Using two large radio telescopes and a 3.9 meter optical telescope they discoverd PKS 2000-330. The object is 100 trillion times more luminous then our sun. Can you imagine the Aurora! It is located 12 billion light-years from Earth.

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Paul Birch, radio astronomer at the University of Manchester in England discovered from a study of highly energetic celestial objects, radio emitting galaxies that the entire universe is slowly rotating. Focusing his research on the bell shaped lobes of radiation that turn up on radio maps of galaxies he has determined that the universe turns at the rate of one revoluton every 60 trillion years. (I love those celestial time tables.) At this rate it will complete one turn when it reaches 4000 times its present age.

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In June one of astronomer Edward Guinan's students reprocessed some water soaked 14 year old computer punch cards. A close examination revealed that Neptune may have a ring system. The data was gathered in 1968 and showed that the light of a star eclipsed by Neptune was again dimmed one and a half minutes after it reappeared from behind Neptune. Confirmation of this will have to wait until 1989 when voyager 2 sweeps by and hopefully will shed some light on this 'dimming' situation.

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In October after the 200 inch Palomar telescope recieved a clean and shine session it discovered Halley's comet 140 million miles out beyond Saturns orbit and closing fast.

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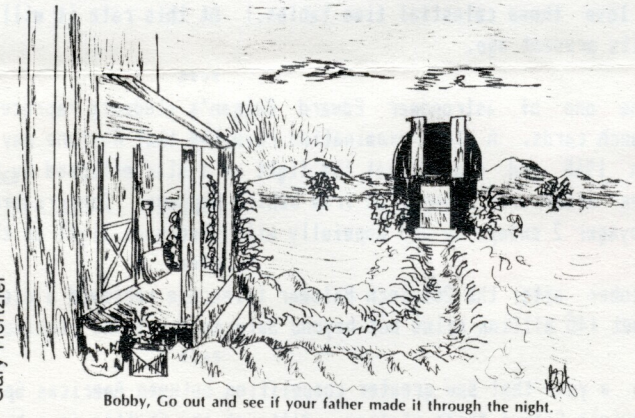
It was a year that saw greater competition between Americas Space Transport System (the Shuttle) and the Soviets Salyut space station. Although the Shuttle is a back and forth Space Ferry while the Salyut system is more of a permenant space station set-up the Soviets are looking at a shuttle system for the future. Obviously for their planned manned flight to mars that will come before the end of the decade. Thats right you heard it here first. The fifth and most recent Shuttle mission was the first to actually haul up gear on a pay for the ride basis. Land sakes alive maybe NASA will find that there is a Profit side to their Profit and Loss operating statement. the fifth mission was a success from a commercial standpoint in that both satellites were launched from the Shuttle with no problems. NASA also stated that 22 Americans will ride the Shuttle this year. They also plan to relax their rules to allow staff from the companies furnishing experiments for the Shuttle to ride along (now where's my chemistry set). they also reasoned that anyone in reasonable health could be a candidate and that empty seats could be available by the end of the decade.

PRESIDENT'S MESSAGE....

By Presidential decree I cancelled last months meeting. Due to the weather and some of our younger members not being able to attend would not have made it a representative meeting. The January meeting is important to those who want a voice in the restructuring of our membership guidelines. It was put up to the club several meetings ago to have a Junior class of membership that would help the younger members of our club to remain a member, have a voice in club affairs and have a choice of astronomy magazines to chose from. We do have the ability to participate in a group rate discount for Astronomy magazine. All those who wish to get on this group rate, plan to attend as I will have a form you will need to sign.

Say, does anyone have any suggestions for 'warm' yet easy to work with gloves for telescope work. I've been asked that by several memebers and now I find it exceedingly difficult to work my focuser or handle my eyepieces with my large ski gloves. We all know astonomers unlike Ski Bunnies don't have to look good, just warm. So I as I'm sure many other amateur's pile on the clothes for those cold weather observing sessions. But those darn gloves!! Any suggestions?

Russ Genzmer



Gary Hertzler

Bobby, Go out and see if your father made it through the night.

The Prairie Astronomer is published monthly by the Prairie Astronomy Club, and is free to all club members. Yearly subscription without club membership is $6.00. Regular membership, $19.00. Family membership is $21.00. Memberships include 1-year subscription to Sky & Telescope, the club newsletter, and 4 quarterly issues of The Reflector, Journal of the Astronomical league. Address correspondence and membership renewals to: Prairie Astronomy Club, Inc., P.O. Box 80553, Lincoln Ne. 68501. address all articles for inclusion in the newsletter to Russ Genzmer 5301 South 30th. Lincoln Ne. 68516. All articles must be received 10 days before the meeting date.

***** JUST A NOTE OR TWO.. *****

For all you planetary viewers remember Saturn starts to show a favorable ring tilt this month and next. The ring system will show its North face to us at a 16.7 degree tilt and will widen to 17.1 next month.

Andy Corkill is progressing along in his quest for the Messier Award. At last count he is past 70 and waiting for more favorable positioning of the remaining constellations he needs. Keep it up Andy and remember to periodically stomp the feet and pound the hands together.

The Space calendars are in and can be picked up from our Tresurer Lee Thomas at the January meeting.

Also as mentioned in the last newsletter, the latest Telescope Making Magazine is in and can be picked up by those members who are on the list. Price $1.50

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In the I can't believe it column. Congress has approved $1.5 million in NASA's budget for 1983 to study what equipment would be needed for a major SETI that's Search for Extraterrestrial Intelligence. (Our Congress?). The International Astronomical Union also will set up a new division to coordinate efforts to find life on other planets. A private group will finance a search by physicist Paul Horowitz of Harvard University. He will be using an 84 foot radio telescope in Massachusetts for scanning up to 2/3rds of the sky.

It is important that we get started now with an organized, well financed effort. With increasing numbers of radio transmitters on Earth and in low Earth orbit space, 22,000 mile range, it causes large amounts of radio interference which can hamper efforts in the following years.

Observing Chairman's Report....

Gemini holds many interesting objects for the moderate telescope. NGC 2266 is a rich 'V' shaped group of stars located two degrees north of epsilon Geminorum. Less than one degree south of the star 63 Geminorum is the bright planetary nebula NGC 2392. It is starlike in small telescopes and a six or eight inch telescope shows its oval disk with an outer ring.

In Orion there are several beautiful but faint open clusters. NGC 2194, located less than a degree northwest of k Orionis, is a moderately sized group that is rich in faint stars. It also possesses 2 or 3 rays of stars extending outward from the cluster making it a beautiful sight in an 8 to 10 inch instrument. A somewhat brighter cluster is NGC 2186, located two degrees east of 63 Orionis. It consists of a large number of fairly bright stars in a series of interwoven chains over a one degree field and is spectacular in a six or eight inch. Finally NGC 2169 is a striking three dimensional prism of bright stars, located about a degree southwest of xi Orionis. It should show up well even in small instruments as two offset triangles of stars.

In Canis Major take a good look at the 4th magnitude star Tau. small telescopes will show a hazy glow around the star but higher power or a slightly larger telescope will show that Tau is surrounded

(OBSERVERS REPORT CONT FROM 3)

by about 40 stars in a very tight configuration. It is beautiful NGC 2362, a cluster showing some bluish tint to the stars in my eight inch and is a must for your winter observing program.

In Puppis look at M46, a beautiful cluster with a small planetary nebula located at the north edge. It is about five degrees south of alpha Monocerotis and is just east (one degree) of beautiful M47, another nice but somewhat sparse cluster. About three and a half degrees south of M46 is the faint but interesting planetary nebula NGC 2440. In my eight inch it shows a small inner disk and a diffuse outer shell with a faint central star. If you saw the planetary in M46,(NGC 2438) you should be able to see 2440, as the two nebulae are of approximately the same brightness.

David Knisely

» JANUARY Meeting «

The January meeting of the Prairie Astronomy club will be held January 25th at Hyde Observatory. Meeting starts at 7:30 pm.

The Prairie Astronomer
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