

SPACEWATCH

the newsletter of the Abingdon Astronomical Society

March 2002

“Nicholas Copernicus: 1473-1543”

by Allan Chapman, Wadham College, Oxford.

Well, do you think it'll be third time lucky? Although a few of you saw Jupiter occulted by the Moon, most people's view was either dulled or completely obscured by cloud. This month we have another close encounter. Watch out on the evening of March 22nd – details below.

It's the vernal (or spring) equinox on 20th March this year. The first full Moon after that is on 28th March. The first Sunday after the first full Moon after the vernal equinox is ... Easter! That's 31st March – that's why it's so early this year.

The Night Sky this Month

The planets

Venus - Keep your eye for the planet Venus low in the west shortly after sunset. It will become easier to see as the next few weeks go by, but what is the earliest you can find it? Being very bright at magnitude -3.8 you should be able to find it in the evening sky fairly easily with binoculars soon.

Jupiter - Mark down the March 22nd in your diaries, as that evening the first quarter Moon passes VERY close to Jupiter at about 10.40 UT. You will be able to actually watch the Moon glide past the planet over the course of about an hour or so. They will both be in the same field of view of your telescope eyepiece as the Moon will be THAT close.

The great spring planet lineup of 2002 has begun. Three planets form a great diagonal line high in the southwest to west at dusk in March -- and now a fourth is rising to join them. Look for Jupiter near the zenith as you face southwest, Saturn (with dimmer Aldebaran) far to its lower right, and Mars far to the lower right of Saturn. Venus is now emerging from the twilight low above the western horizon to join them, and beginning on the 15th the Moon will sweep past all four planets in 6 days. Some good photo opportunities perhaps?

Comets

There are two comets that you can probably see quite easily at the moment.

C/2000 WM1 (LINEAR) is the most awkward as it's in the morning sky, slowly moving through Aquila. It is predicted to be about 8th magnitude but as it broke into two pieces a few weeks ago, all bets are off. You will have to have a look to find out whether it's as bright (or brighter) than predicted.

2002 C1 Ikeya-Zhang is the other comet about at the moment. This one is very conveniently placed in the evening sky, moving through Pisces. It is about 5th magnitude at the moment and getting brighter as it moves northward, so you should be able to find this one in binoculars fairly easily. From a dark site, there is a nice small tail as well, which was well seen at our observing evening last Thursday. Well worth a look.

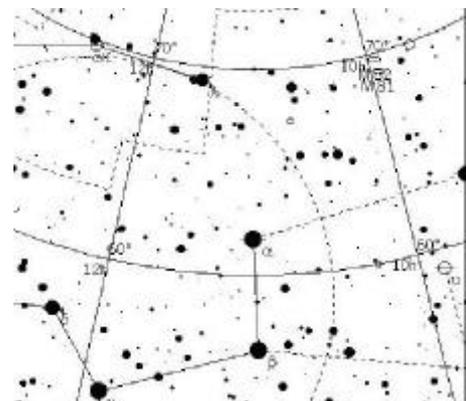
Moon Phases:

Last Qtr: 6th Mar; New: 14th Mar; First Qtr: 22nd Mar; Full: 28th Mar.; Last Qtr: 4th April.

This month's Deep Sky Object

By Paul Warren

I must be getting generous in my old age, because I'm offering you two objects in this month's column. Ladies and gentlemen, a big hand for M81 and M82 please!



It's getting on to that time of year when the galaxies appear in their thousands. Funnily enough, I always find that the spring observing season is disproportionately short, because the

lengthening days squeeze this observing season. So, make the most of those (increasingly) rare clear dark nights.

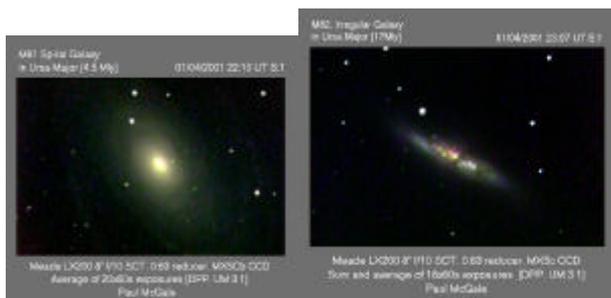
Now how to find M81 and M82? Some people like to extend a line running from gamma Ursa Maj to alpha Ursa Maj and run it for the same distance. M81 should be visible in a good finderscope. I've never found this particularly easy, and my way to locate these two galaxies is to locate the star to the right of the midpoint between alpha and beta Ursa Maj in my finderscope. Move up North in declination by about 5 degrees and I hit a triangle, which is lying horizontal. Nudge the finderscope up a little, then lock it in declination and move across right to the end point of the triangle, and move that same distance again. With a low-powered eyepiece in the scope, at least one of the two galaxies should be in view.

M81 is a spiral galaxy, and the brighter of the two. I can see a nebulous misty patch surrounding the core of the galaxy, which are its arms, but I haven't yet been able to make out the actual spiral structure in them.

M82 is an irregular galaxy. It is irregular because it had a close encounter with M81 some 200 million years ago. M82 has a definite cigar shape to it, and is fairly uniformly illuminated for the entire width of the galaxy. This is because we are seeing a major star-burst in progress (a lot of new stars being formed all at the same time).

Most people (and I'm no exception) just like looking at these two galaxies side by side. M81 lies about 4.5 million light years away from us and M82 lies some 17 million light years away from us.

I find that M82 yields more detail through the scope than does M81, and I attribute this to the fact that it is uniformly illuminated across its entire width. It doesn't take much effort to make out dust lanes and tracts running down through it. Also, on those once in a year fine nights, it can take astonishing magnification well. Back in December I was observing it with an 8 inch scope at magnification 280. No-one has any right to use that sort of magnification on a galaxy, but I got away with it simply because the seeing was so exceptionally good that night, and the view was simply stunning.



FURTHER DISCUSSION

The society's e-mailing list is used by members to comment on all things astronomical, as well as other related subjects like, for example, which brand of whisk(e)y keeps you warmest on a cold night observing, or which pub to visit after the meetings.

The list is also used to publicise "first-clear-night" observing evenings and for alerting members to hot news on objects to observe.

To subscribe: send an email to abiastro-subscribe@topica.com.

You will then receive all e-mails sent to the list.

To post e-mails on the list: send an email to abiastro@topica.com.

To unsubscribe: send an email to abiastro-unsubscribe@topica.com

WEB SITES

Don't forget our web site:-

<http://www.abingdonastro.org.uk>

Our webmaster, Chris Holt, would welcome any material for the members observation page – particularly photographs. If you haven't looked here for a while there are some pretty stunning pictures.

ISS/Iridium data:

<http://www.heavens-above.com/main.asp>.

Space weather & aurora forecasts:

<http://www.pfrr.alaska.edu/~pfrr/AURORA/INDEX.HTM> &

<http://www.skypub.com/news/astroalert/astroalert.html>.

DATES FOR YOUR DIARY

25th Mar.: Beginners' meeting in the Perry Room. 8pm.

1st to 5th April (first clear night) Observing Evening at Britwell Salome again (as Compton is too muddy). Phone Bob on 01491 201620 for confirmation and directions.

8th March: Speaker Meeting 8pm. "Space Weather" by Dr Mike Hapgood (RAL).

The editor of "SpaceWatch" is Andrew Ramsey, who would very much appreciate your help and contributions. Please send any news, observations, photos, etc. to:
SnailMail: A.T.Ramsey, 35 Cope Close, OXFORD,
OX2 9AJ.

E-mail: AbiAstro@ATRamsey.com

Phone: 01865 245339