

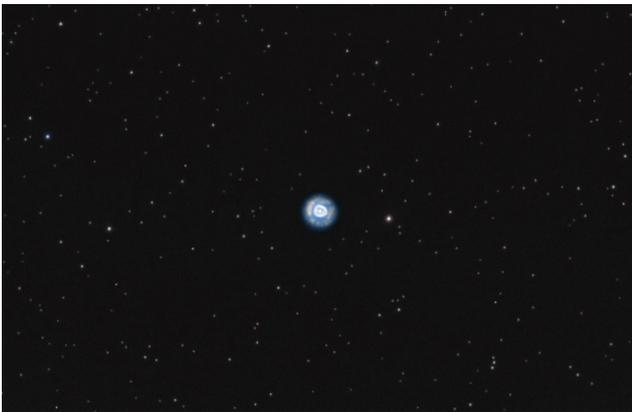
SPACEWATCH

the newsletter of the Abingdon Astronomical Society

Talks Postponed

EDITORIAL

As expected the lockdown continues with no end in sight therefore it is probably best to regard the 2019/2020 session as over. Given the governments pronouncements it is probably likely that we will not be starting the 2020/2021 session in September either but we will wait and see what comes along. This will also depend on what the Church decides to do and when they decide to open the church hall again. Obviously all of this is extremely unsatisfactory and the fact that we cannot make future plans does not help either but we will do our best to keep communicating to members through the usual channels. On a positive note the recent run of clear skies has meant that the imagers amongst the group have had a bumper time. I cannot say the same as the skies in Faringdon are not conducive the usual kind of visual observing I do, however I have managed to keep track of the three comets gracing the northern skies at the moment. Hopefully this will be some breaks in the lock down, certainly if F8 performs and you need to get out to see it.



NGC 2392 – the Eskimo Nebula in Gemini by Ian Smith

The editor of “SpaceWatch” is Owen Brazell, who would very much appreciate your stories & contributions. In particular whilst many fine images are being posted on the discussion group it would be nice to have some in the SpaceWatch.

Please send any news, observations, photos, etc. to:

Mail: Owen Brazell, 15 Spinage Close,
Faringdon, Oxfordshire SN7 7BW or
owen@online.rednet.co.uk

NOTICE OF ANNUAL GENERAL MEETING POSTPONEMENT

The Annual General Meeting for 2019/20, which was to have taken place on **Monday 11th May 2020** at All Saints’ Methodist Church Hall, Dorchester Crescent, Abingdon at **8.00 p.m.** has been **postponed** owing to the national measures in response to the Covid-19 pandemic. New notices of the AGM will be issued once a firm date can be set.

Chris Holt, Secretary, Abingdon AS

THE NIGHT SKY FOR MAY 2020

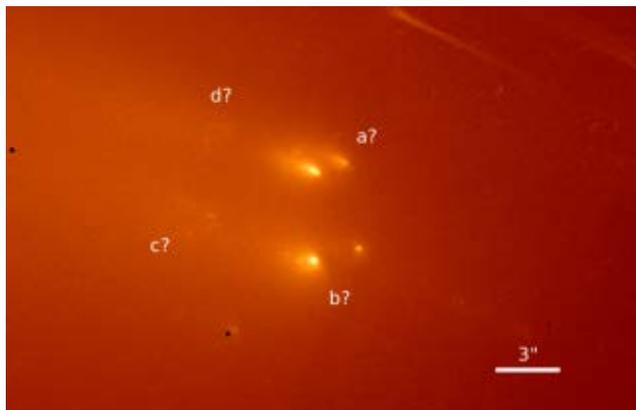
By Steve Creasey & Cristina Garcia Pozuelo Sanchez

I hope you are all well and staying safe, and if possible making the most of these clear nights we seem to be having so many of. The timing of which does make you think about what effects our 'normal' lives are actually having on our planet.

There is 'normally' a constant stream of transatlantic flights coming and going over my house, not only to and from Heathrow, but also many European airports, all leaving vapour/exhaust trails as they go, now the skies are clear. May just be a coincidence of course. There is still plenty to look at in the night sky this month. All the Galaxies of Leo, Virgo, Coma Berenices, Canes Venatici and Ursa Major are still visible, as well as the many Globular Clusters now rising in the East as our night sky starts to turn towards the plane of the Milky Way.

We also still have three comets visible at the moment and a possible candidate to replace Y4

(ATLAS), (which has broken up, although there is still a fragment operating as the head. broke up), as the next comet that could become a stunner, C/2020 F8 (SWAN). Fingers crossed (again)



C/2019 Y4 (Atlas) as seen by Hubble

(Image: © NASA/ESA/Ye (UMD))

See also <https://hubblesite.org/contents/news-releases/2020/news-2020-28>

The Planets

Mercury – Mercury is an evening object, having passed superior conjunction on the 4th. You should be able to detect it in the NNE sky from the 12th onwards, low in the bright twilight. A good opportunity to locate the planet takes place on the evenings of the 21st and 22nd, when Mercury is within 2° of the much brighter Venus. Mercury reaches its greatest elongation east of the Sun early in June, but at the end of May it sets two hours after the Sun, and so should be readily visible using binoculars. On the evening of the 24th, the young crescent Moon is in the vicinity of the two planets, both of which lie above the Moon. All are within a radius of 5° .

Venus - At the beginning of May Venus sets four hours after the Sun. However, at the end of the month the planet sets with the Sun; its inferior conjunction being on the 3rd of June. During May the planet appears to be moving rapidly in towards the Sun. In binoculars it is possible to detect the crescent phase which the planet exhibits. However, your binoculars must be firmly fixed and well-focused in order to see the tiny but brilliant crescent. As mentioned above, Venus lies near to the crescent

Moon and Mercury on the 23rd.

Mars – Mars is a morning object increasing in magnitude from +0.4 at the beginning of the month to 0.0 at the end. The planet continues to move eastwards from Capricornus into Aquarius, crossing the boundary between the two on the 9th. During the early morning of the 15th, the Moon, just past last quarter, passes a couple of degrees south of Mars in Aquarius in the brightening morning twilight.

Jupiter - Jupiter rises just after 01h at the beginning of May, and before midnight at the month's end. It may be seen low in the early morning sky on the eastern part of Sagittarius. Jupiter is the brightest object in the morning sky at this time unless the Moon is in the sky, of course. It crosses the south meridian, just before 04h, as the Sun is rising. The bright star-like object 5° to the left of Jupiter is Saturn; their comparative magnitudes are -2.5 (Jupiter) and +0.5 (Saturn). The waning gibbous Moon may be seen approaching Jupiter on the 12th.

If you look through well focused, firmly fixed binoculars, you will see the points of light, which are Jupiter's Galilean satellites, slowly changing their positions on a nightly basis.

Saturn – Saturn is visible in the morning sky and lies in Capricornus near to its western boundary with Sagittarius. Together with Jupiter, both gas giants are in the same part of the sky, separated by some 4° (eight moon-widths). The northern surface of the rings continues to be well presented towards the Earth and are visible through the smallest telescope. If you wish to locate Titan, the largest of the planet's satellites at visual magnitude +8, then look west of the planet on the 9th, 10th, 25th and 26th, when Titan's greatest western elongation of two arc minutes occurs, and to the east of Saturn on the 4th and 5th, and again on the 20th and 21st, when the greatest elongation east of the planet takes place. During the morning of the 13th, the gibbous waning Moon lies 6° to the lower left of Saturn as they are rising at around 02h00.

Uranus & Neptune Uranus, in western Aries, and Neptune in eastern Aquarius near the Pisces

border, are not suitably placed for observation during this month when twilight shortens the nights.

Meteor showers

In 2020, the Eta Aquarids will peak on the night between 5–6 May.

Also sometimes spelled as Eta Aquariid, the meteor shower is usually active between April 19 and May 28 every year.

Named after the constellation of Aquarius, the radiant, the point in the sky where the Eta Aquarids seem to emerge from, is in the direction of the constellation Aquarius. The shower is named after the bright star in the eastern part of the Aquarius constellation, Eta Aquarii.

The Eta Aquarids is one of two meteor showers created by debris from Comet Halley. The Earth passes through Halley's path around the Sun a second time in October. This creates the Orionid meteor shower, which peaks around October 20.

Comet Halley takes around 76 years to make a complete revolution around the Sun. The next time it will be visible from Earth is in 2061.

Comets

C/2017 T2 (PanSTARRS) estimated mag of 11.7, observed mag of 8.6, in the constellation of Camelopardalis



C/2019 Y1 (ATLAS) estimated mag of 13.9, observed mag of 8.3, in the constellation of Cepheus. As of the end of April this is by far the brightest of the comets in the northern sky. I have seen it with telescopes down to 140mm



C/2019 Y4 (ATLAS) Still visible (mag 11) in the constellation of Camelopardalis, but disappointingly much fainter after its break up. This has become a challenge to see visually but shows up as a faint streak now. It is still visible, just, in telescopes down to 140mm visually.



Comet images above by Steve Creasey



C/2020 F8 (SWAN) found by Michael Mattiazzo of Australia, in imagery taken by the Solar Wind ANisotropies (SWAN) camera, on the Solar and Heliospheric Observatory

(SOHO).

Comet SWAN is presently 8th magnitude, compact, and brightening steadily as it plows across Piscis Austrinus at dawn for Southern Hemisphere observers, the most recent observations show it on the brink of naked eye visibility
C/2020 F8 (SWAN) will hopefully continue to brighten and move rapidly northward in the May dawn sky, hopefully reaching a peak magnitude of 3.5 between May 15–23 while racing from Triangulum across Perseus. Though bright, the comet remains low in the northeastern sky at the start of dawn throughout the best part of its apparition. Amazingly, Comet SWAN arrived just in time to pinch-hit for ATLAS in the event that comet disintegrates completely. It even reaches peak brightness in the same area of the sky. Perihelion occurs on May 27th at a distance of 64.3 million kilometers. However to paraphrase the comet hunter David Levy,

Comets are like cats, they have tails and do what they want.

There is a chart for F8 included in this newsletter.

Excellent recent amateur images of comets can be found at :-

https://spaceweathergallery.com/comet_gallery.html

Deep Sky Objects

May deep sky targets

Galaxies and Globulars this month

NGC 3507 is an interacting barred spiral galaxy in the constellation of Leo, 46 million ly

NGC 3501 an edge on galaxy, seen in the same field of view as 3507 in Leo, 51 mly

M64 the Black Eye galaxy is a spiral galaxy in Coma Berenices, 17 mly



NGC 4631 the Whale Galaxy in Canes Venatici, 30 mly



NGC 4535 is a barred spiral galaxy in Virgo, 54 mly



NGC 4535 – Steve Creasey

NGC 5053 a Globular Cluster in Coma Berenices 57 kly

M53 (NGC 5024) another GC very close to 5053 in Coma, 60 kly

M5 (NGC 5904) GC in Serpens 25 kly



NGC 6058 a Planetary Nebula in Hercules 11 kly

NGC 6210 Turtle Nebula a Planetary Nebula in Hercules 6.5 kly

LAST MONTHS TALK

With the meetings currently in abeyance there are a number of places setting up virtual astronomy meetings, mostly via Zoom.

The Virtual Astronomy Club:

<https://www.star-gazing.co.uk/WebPage/virtual-astro-club/> who are offering free 7 pm Zoom meetings on a Tuesday and Thursday. PDFs of recent talks are here:

https://www.dropbox.com/sh/9k7medirj1gkwlt/AA_C4dqakRuUiYIJHgz0KKqma?dl=0

The BAA are also doing virtual webinars which are open to all at <https://www.britastro.org/meetings>

Look for the webinars

If you are interested in the dark sky movement the dark sky meeting for 2020 was done virtually and the presentations can be found at <https://www.youtube.com/playlist?list=PLwHEmqG4ZaZq6AzTNtzc0yQyUIFaDtWqa&eType=EmailBroadcastContent&eId=ac9ec4ff-250f-4545-85fe-791cea66d6c3>

It also includes presentations on lost constellations and dark skies around the world

Observing evening: There are no further Observing evenings this session. This is due to the fact that it is now too light and not to Covid-19, we hope to restart these in the next session.

NEW MAILING LIST

If you have not already done so, why not subscribe to our new email mailing list. The list is called 'aaslist'. Members use the list to alert each other about celestial events and to chat about amateur astronomy. The list is quite active, with several messages most weeks. To subscribe to aaslist and to read through previous messages click on:

<http://lists.abingdonastro.org.uk/mail.cgi/list/aaslist>



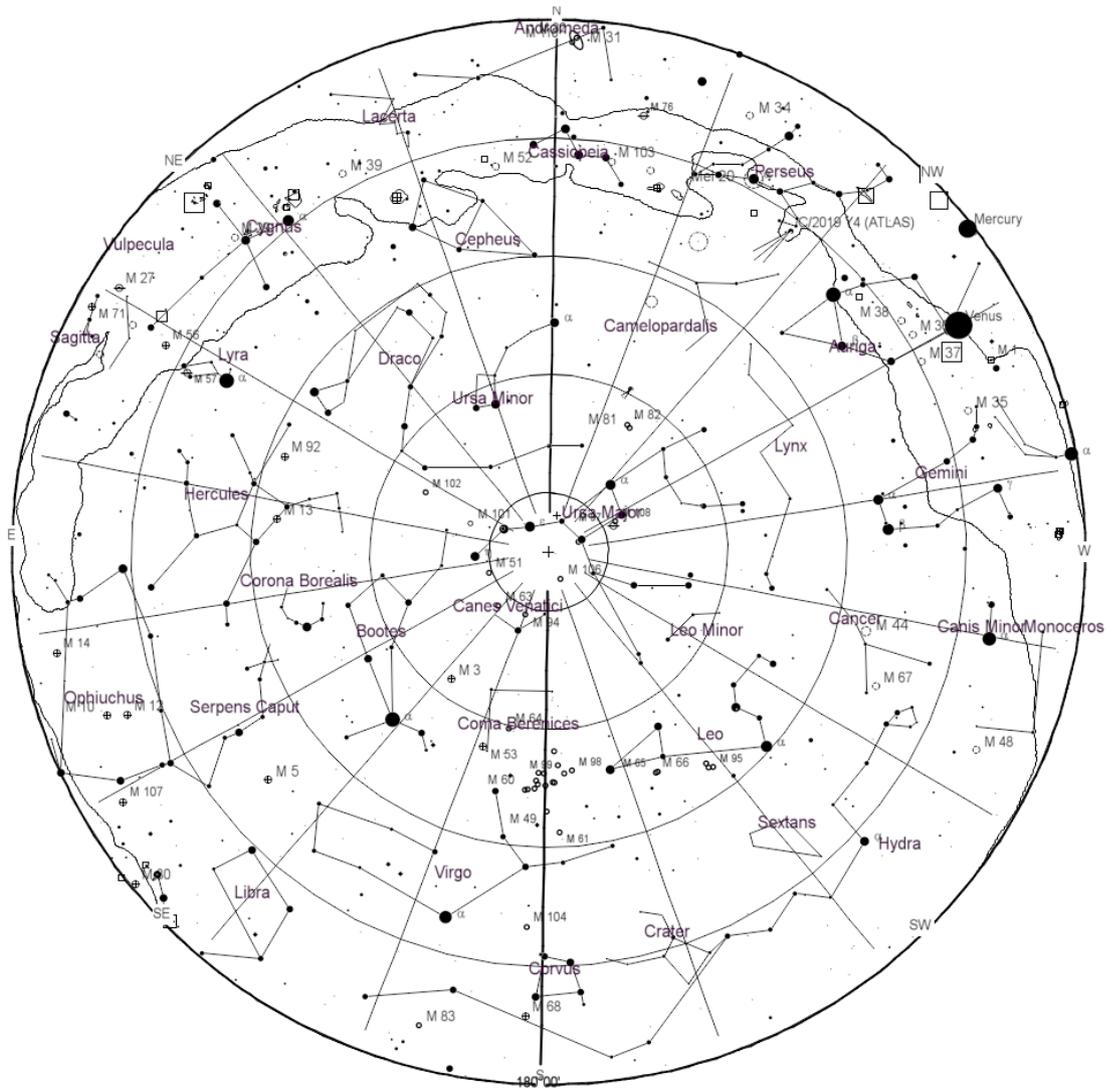
M101 – Trevor Pitt



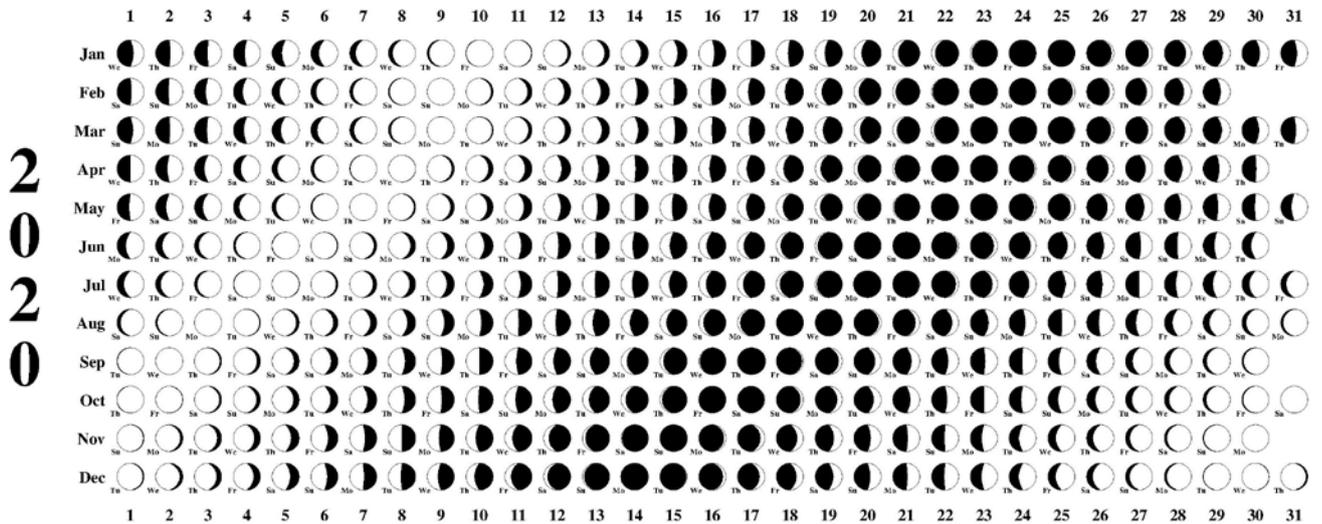
M92 – Trevor Pitt

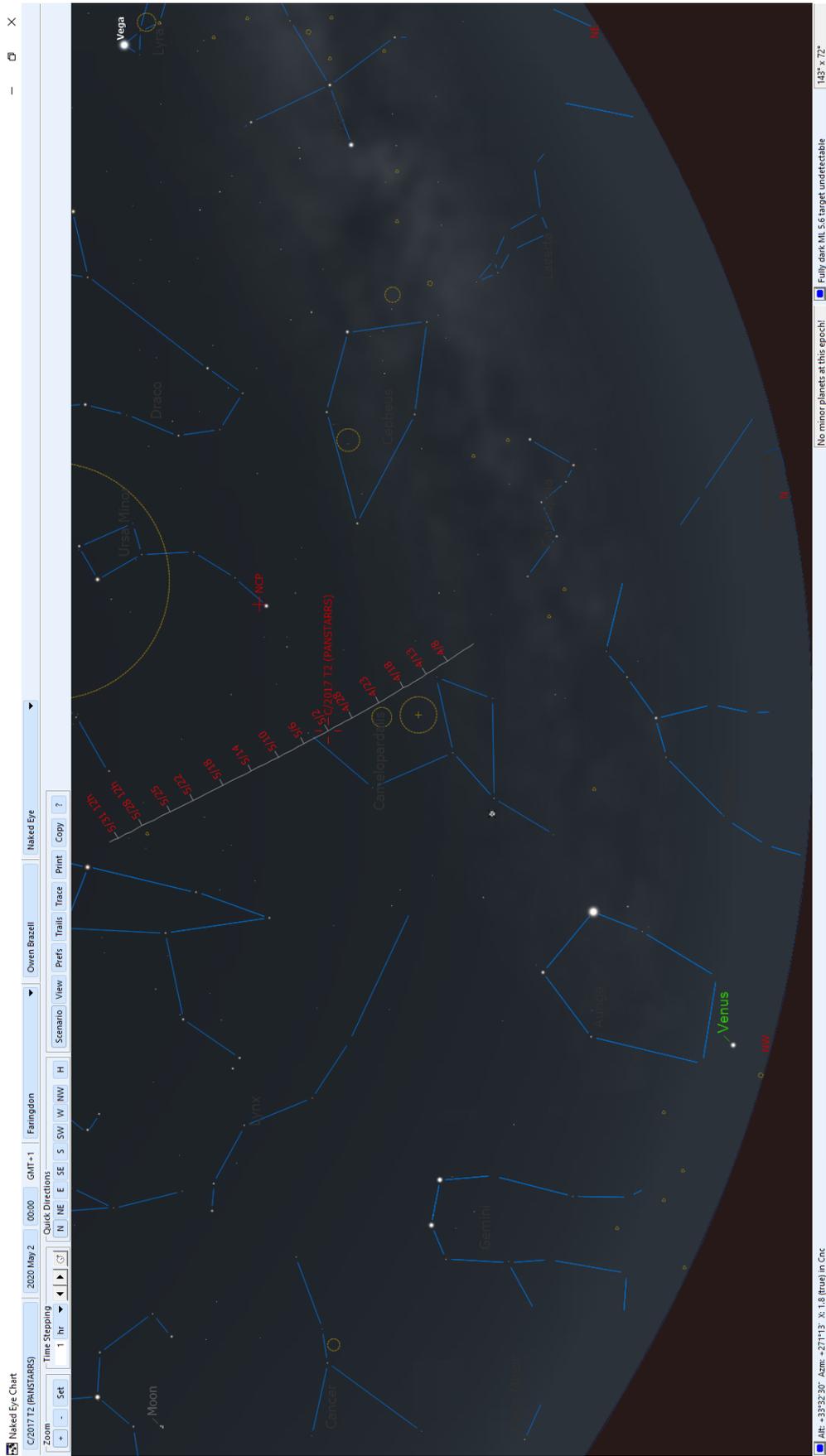
STAR CHART

The night sky at 22:00 (BST) Friday 15th May 2020

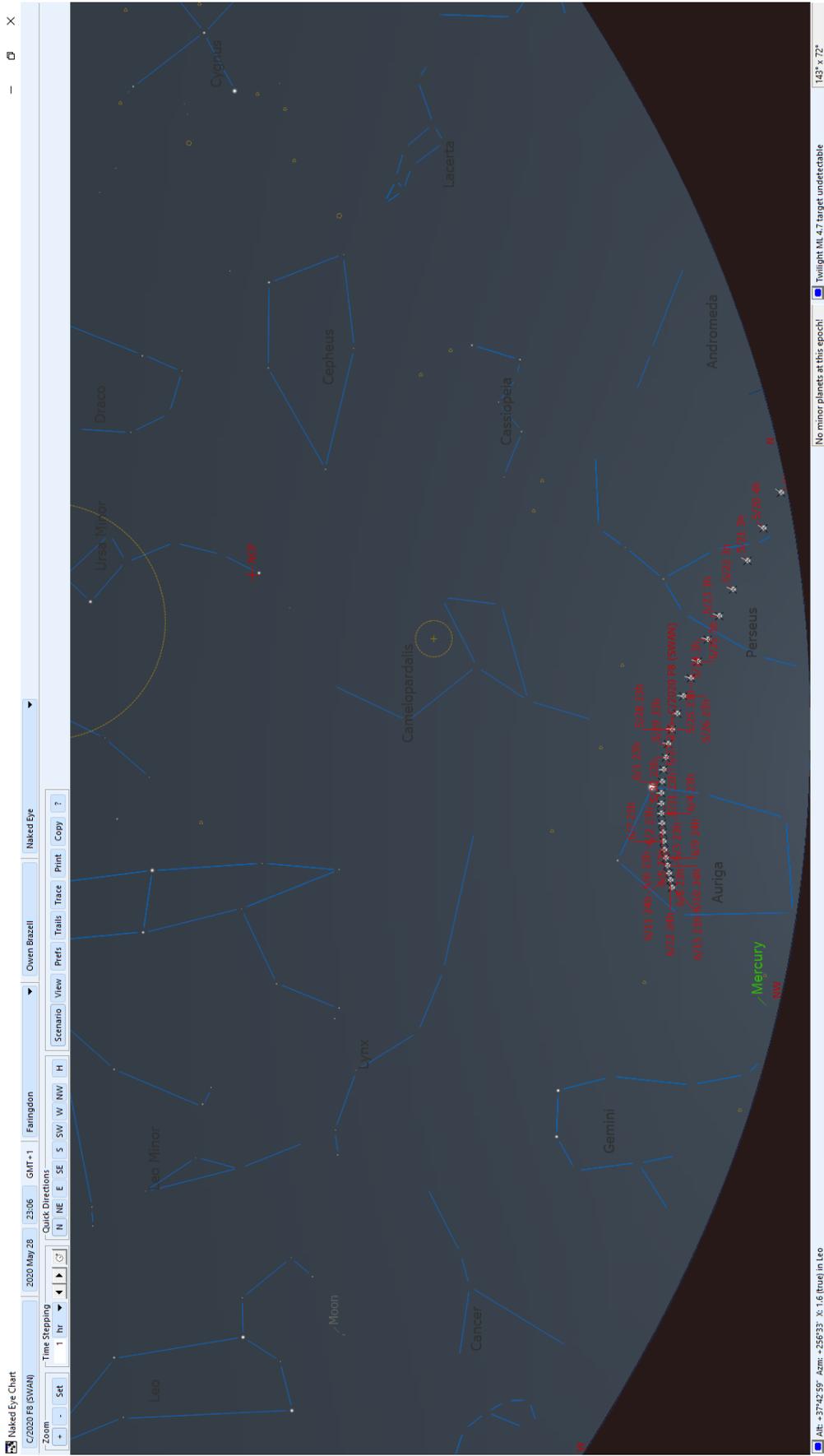


MOON PHASES: 2020





Track for Comet C/2017 T2 through May – taken from SkyTools 4



Track for Comet C/2020 F8 (SWAN) through March taken from SkyTools 4