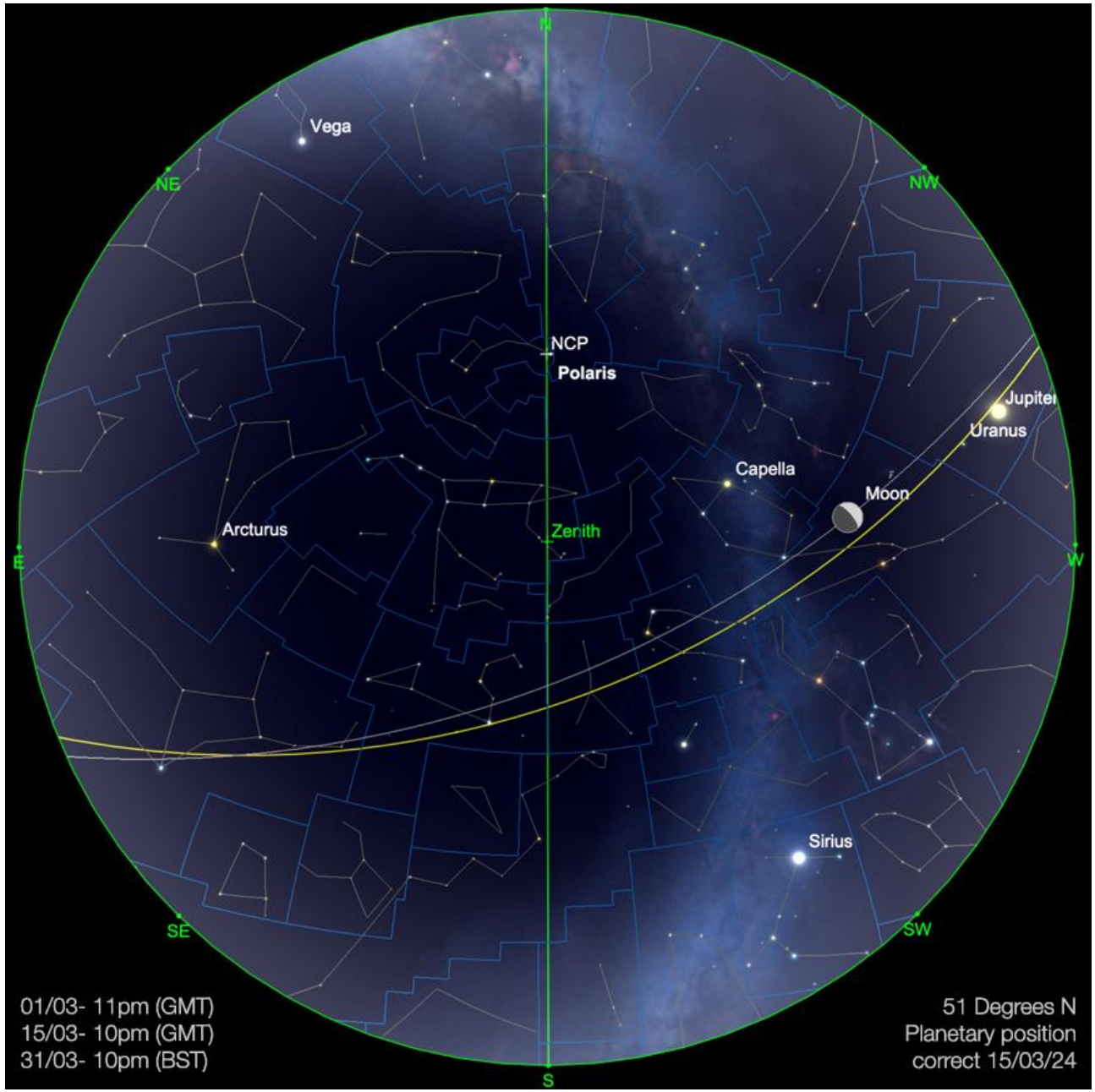

Telescope House March Sky Guide
The most up-to-date guide to Planetary and Lunar activity,
Comet News, plus Deep Sky Delights...


N
NE
NW
E
W
SE
SW
S
Vega
NCP
Polaris
Jupiter
Uranus
Capella
Moon
Arcturus
Zenith
Sirius
01/03- 11pm (GMT)
15/03- 10pm (GMT)
31/03- 10pm (BST)
51 Degrees N
Planetary position
correct 15/03/24

MARCH SKY CHART

Telescope House March Sky Guide

March is a transitional month as far as the sky is concerned, with the Sun transitioning from the southern celestial hemisphere to the northern. This is the annual Spring Equinox, which this year takes place on Wednesday 20th Mar 2024. This is the official start of Spring, though the way the seasons gradually unfurl is a complex affair, with many interlinked (and occasionally contradictory) signifiers. However, from and astronomical perspective, beyond this boundary is where those in the mid-northern hemisphere start to experience more daylight hours than hours of night. Likewise, house in the southern hemisphere experience exactly the opposite with the beginning of Autumn.

Those of us in mid-northern latitudes commonly outside at the crepuscular times of the day will definitely have noticed the encroachment of daylight in the mornings and evenings recently. The clocks will move forward on the 31st March for much of Europe, which will lead to lighter evenings for many. Moves were afoot in the European Union to abandon the practice of changing time twice a year, with legislation passed in 2019 to cease the practice. However these plans seem to have been paused for the time being. The USA and Canada will change clocks a little earlier this year, on the 10th March. Australia and New Zealand will wait until early April to perform their Autumnal reset. Not all countries practice time changes. Those closer to the equator experience much smaller seasonal variations in lengths of day and night, so the practice is rarely considered necessary.

The Solar System

The Sun

The solar system’s centrepiece continues to increase its activity. Cycle 25 - our current one - is not expected to reach its peak until 2025. Though it is difficult to definitively determine true solar maximum until it has passed. It will be interesting to monitor activity independently and draw our own conclusions. This is an area of scientific inquiry where the amateur, despite very sophisticated modern automated solar surveys, can still contribute. The BAA still accepts sunspot observations and has been receiving them from some individual observers continuously since the 1930s. Although those with more sophisticated H-alpha telescopes will have the best view of the solar surface, very reasonable observations can be made with inexpensive solar film, with any telescope (or even powerful binoculars).

Further and more detailed observations of the Sun can be found by referring to Michel Deconinck's monthly newsletter here: https://astro.aquarellia.com/doc/Aquarellia-Observatory-forecasts.pdf - this newsletter also covers other observations made from Europe.

The Moon

We begin March with the Moon a resident of Libra. Rising at a little before midnight on the 1st, the Moon will be illuminated by just under 75%. Our natural satellite is waning during early March and will steadily decrease its phase as it moves through the most southerly regions of the ecliptic plane, taking in Scorpius, Ophiuchus, Sagittarius and up through Capricornus, where it will join Mars and Venus on the morning of the 8th.

The Moon will become new when it joins the Sun in Aquarius on the 10th, slipping to the south of the solar disk and then re-emerging as an evening object.

This month's evening lunar apparition will result in one of the aforementioned "High Spring Evening Crescent Phases" for observers in the temperate northern hemisphere. This occurs at this time of year when the Moon ascends through a very steeply angled ecliptic plane, during the evenings. This maximises the Moon's separation from the horizon and gives us some excellent observing possibilities, while at thin crescent phase.

The Moon will stand around 15 degrees high in the west at sunset on the evening of the 11th (as observed from 51 degrees North). Although only illuminated by 2.7%, the Moon should be visible and can act as a handy guide to Mercury, sitting at about half the height, in the same area of sky.

Two days later the 15% illuminated Moon will sit alongside Jupiter in the early evening sky - the two sharing the constellation of Aries. The Moon is gaining double digits on a daily basis in terms of degrees, when it comes to separation from the horizon at this point in time and will stand over 40 degrees as the sun sets.

The Moon continues to ascend through Taurus and crosses the border into southern Auriga, where it will come to first quarter phase on the evening of the 17th. By this point, the Moon will reach nearly 67 degrees elevation from the horizon as the Sun sets (again, as observed from 51 degrees North). This is the highest first quarter Moon of the year - April's will only reach 64 degrees elevation at sunset by comparison (as observed from the same latitude).

After reaching the dizzy heights of the most northerly part of the ecliptic, the Moon continues its track through Gemini, Cancer and Leo and then on into the expansive Virgo, where it will reach full on the evening of the 25th. This Full Moon is a special one as it also gives rise to a partial lunar eclipse, which will begin Penumbral stage at just before 5 am. The Moon will set from much of Europe before maximum eclipse has been reached, but those further west in the Americas will see much more of the event. This will definitely be one for the early risers amongst us, but even though it won't reach completely Umbral phase of deepest eclipse, should still be interesting to witness.

Post eclipse, the Moon continues its journey through Virgo, and on into Libra and Scorpius. It ends the month at a waning, gibbous phase, illuminated by just over 70%, and occupying the non-zodiacal constellation of Ophiuchus

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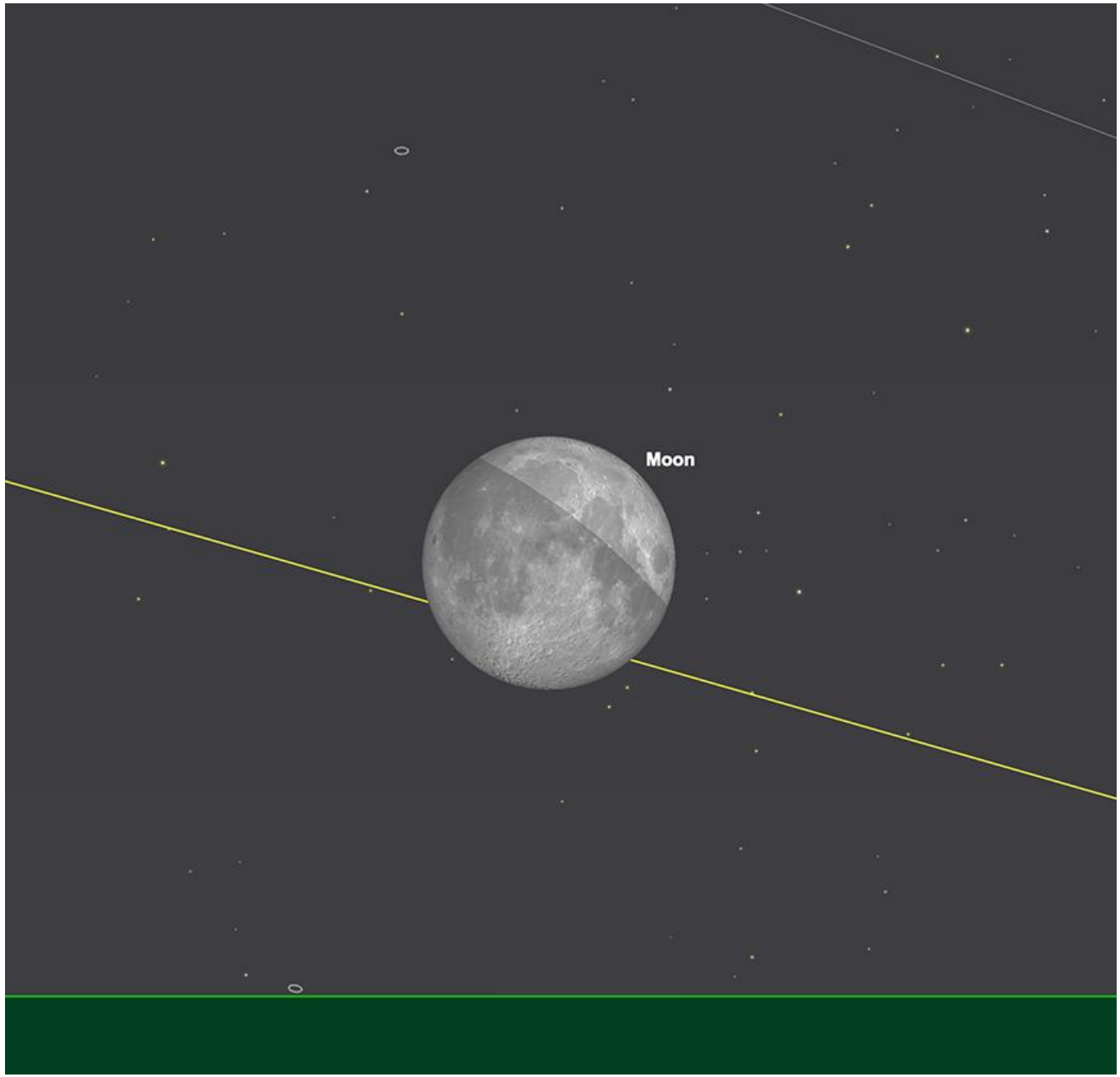

Moon

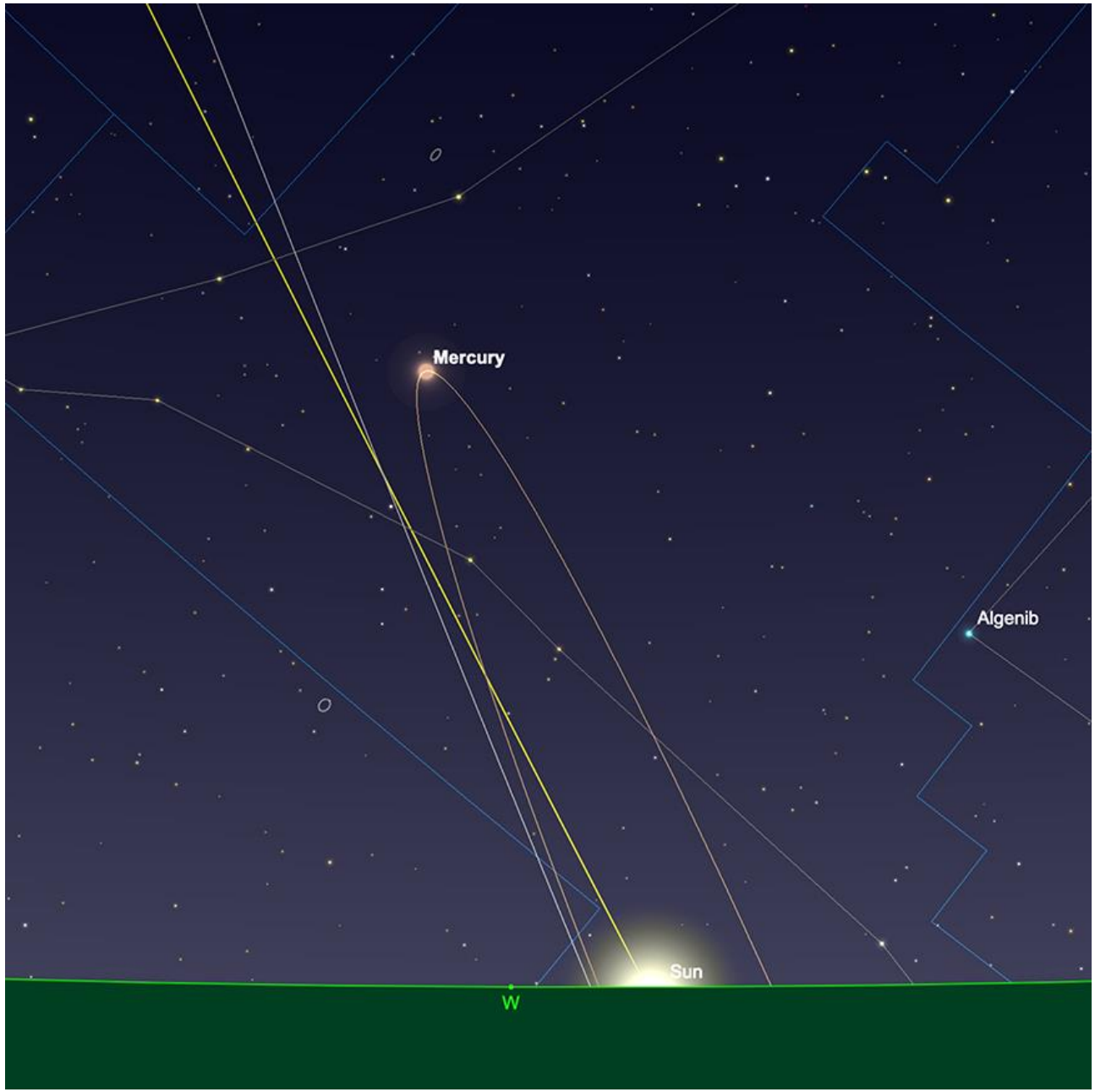
The Moon close to setting, in partial eclipse, 6am, 25th March. Image created with SkySafari 5 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

Mercury

The solar system's innermost planet starts March, emerging from superior conjunction, the opposing side of the Sun as seen from Earth. As such, Mercury will be invisible for the first part of the month. However, as all things mercurial are by their very nature, nothing stays the same for very long. Mercury rapidly increases its separation from the Sun and in doing so delivers one of the most spectacular evening apparitions of the year. By the time we get to the beginning of the second week in March, Mercury will sit at around 6 1/2°, above the horizon as the sunsets. It will shine at a visual magnitude of -1.4 and display a 5.3 arc second diameter disc, illuminated by just under 95%. If you have a reasonable westerly horizon, it will be remiss not to attempt an identification of Mercury at this stage. However, as the days progress, Mercury continues to separate itself from the Sun, fading very slightly as it does. By the time we reach halfway through March, Mercury will stand at around 12 1/2° elevation at sunset (as viewed from 51° north) and will be shining at a steady -1.1 magnitude, its 5.9 arc second diameter disc illuminated by just over 78%.

Mercury reaches maximum eastern elongation on March 24th. At this point in time, Mercury will be standing around 16 and three-quarter degrees, above the horizon as the Sun sets (again, from 51° north), and although it will have diminished in magnitude to -0.1, the planet will have grown inside significantly to 7.5 arc seconds diameter and is now showing a distinct crescent phase, illuminated by just over 43%. As the area of sky that Mercury is in, namely, the constellation of Pisces, sets at quite an elevated angle, as seen from temperate northern latitudes at this time of year, this gives rise to significant separation from the horizon, making the elusive planet much easier to detect. Observers with both binoculars and telescopes are thoroughly encouraged to make the most of this, one of the best opportunities for observing Mercury this year.

The last few days of March sees Mercury start its journey back towards the Sun. This has the effect of rapidly diminishing its phase, whilst the planet's size increases yet further. By the time we get to the end of March, Mercury will have diminished to a visual magnitude of +1.4 and now shows a 9.2 arc second diameter, eliminated by just under 18%. Mercury stands around 14 1/2° high in the west as the Sun sets.

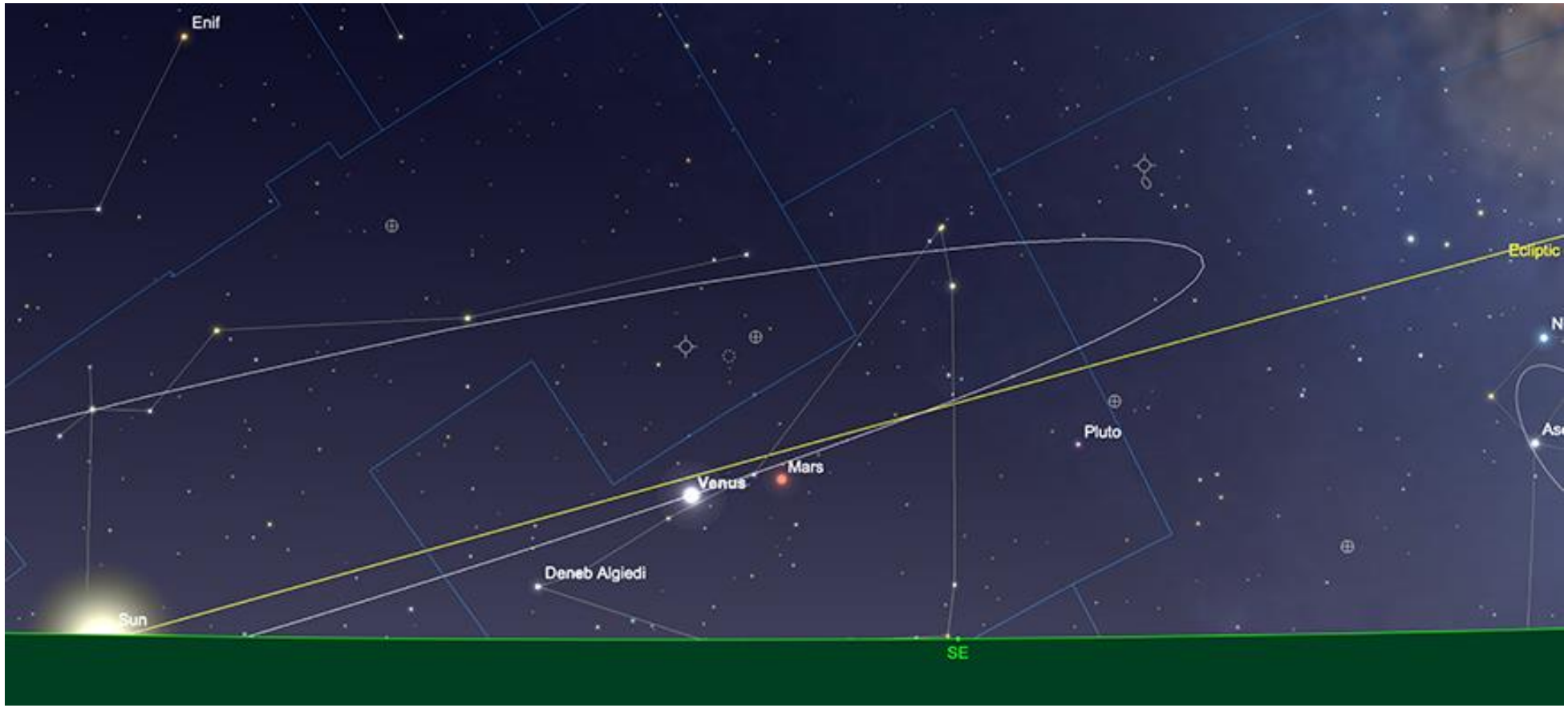

Mercury
Algenib
Sun
W

Mercury greatest eastern elongation, sunset 24th March. Image created with SkySafari 5 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

Venus

Our neighbouring planet is sitting in the observing doldrums at present. The 1st sees Venus a morning target, shining brightly at -3.9 magnitude, showing an 11.1 arc second diameter disk, but sitting desperately low to the horizon as the sun rises. Elevated by just under 5 1/2°, as the Sun comes up, he will need a clear south, easterly horizon to see Venus at all. Once found, the planet is, as ever, extremely prominent. However, from observers in mid northern latitudes, its position in the sky is sub optimal as far as telescopic of observation is concerned.

Venus is heading back towards the Sun, as observed from our perspective here on earth, and it will still be sometime before it reaches superior conjunction in early June 2024, the conditions for observing for those of us in mid northern that attitude defines considerably as time progresses. By the end of March, Venus will be found some 17° to the west of the Sun and will attain an altitude of just under two and three-quarter degrees (as viewed from 51° north). Although Venus will still be shining at an extremely prominent -3.9 by this point in March, its position in the sky means that it will be missed by many. Those in the equatorial regions of the planet will still have a reasonable view of Venus at a significantly higher elevation at this point. However, for the rest of us, this particular Venusian apparition is drawing to a long and drawn out conclusion.



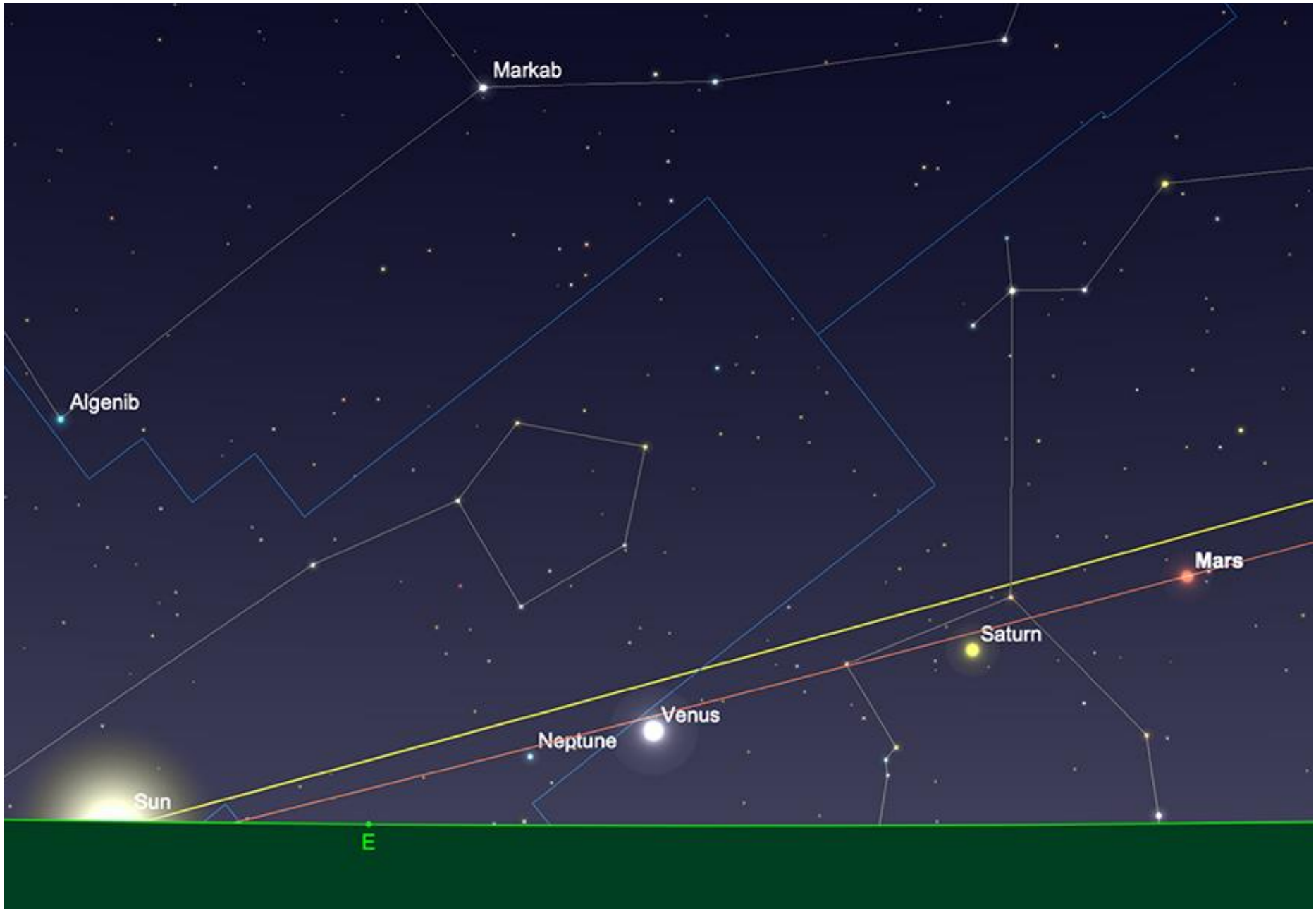
Venus, sunrise, 1st March. Image created with SkySafari 5 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

Mars

Mars is in a similar area of sky to Venus, the constellation of Capricorn - and as such is a morning target. The 1st of March sees Mars sitting a little to the west of Venus, separated by around three and three-quarter degrees. Where is Venus is bright, Mars is much less so, at +1.3 magnitude currently and displays a 4.2 arc second diameter disk. Unlike Venus, Mars is separating itself from the Sun at present.

Early January sees the planets separated from the Sun by just over 28°, though once we hit mid-March, this separation has increased to 31°. By this point, Mars will stand around 6 1/2°, above the horizon in the Southeast as the Sun comes up.

By the time we reach the end of the month, Mars will have brightened very fractionally to +1.2 magnitude and now displays an apparent size of 4.5 arc seconds. By this point in the month, Mars, now a resident of Aquarius, will stand just over 7° high in the south east at dawn.


Markab
Algenib
Mars
Saturn
Venus
Neptune
Sun
E

Mars, sunrise, 31st March. Image created with SkySafari 5 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

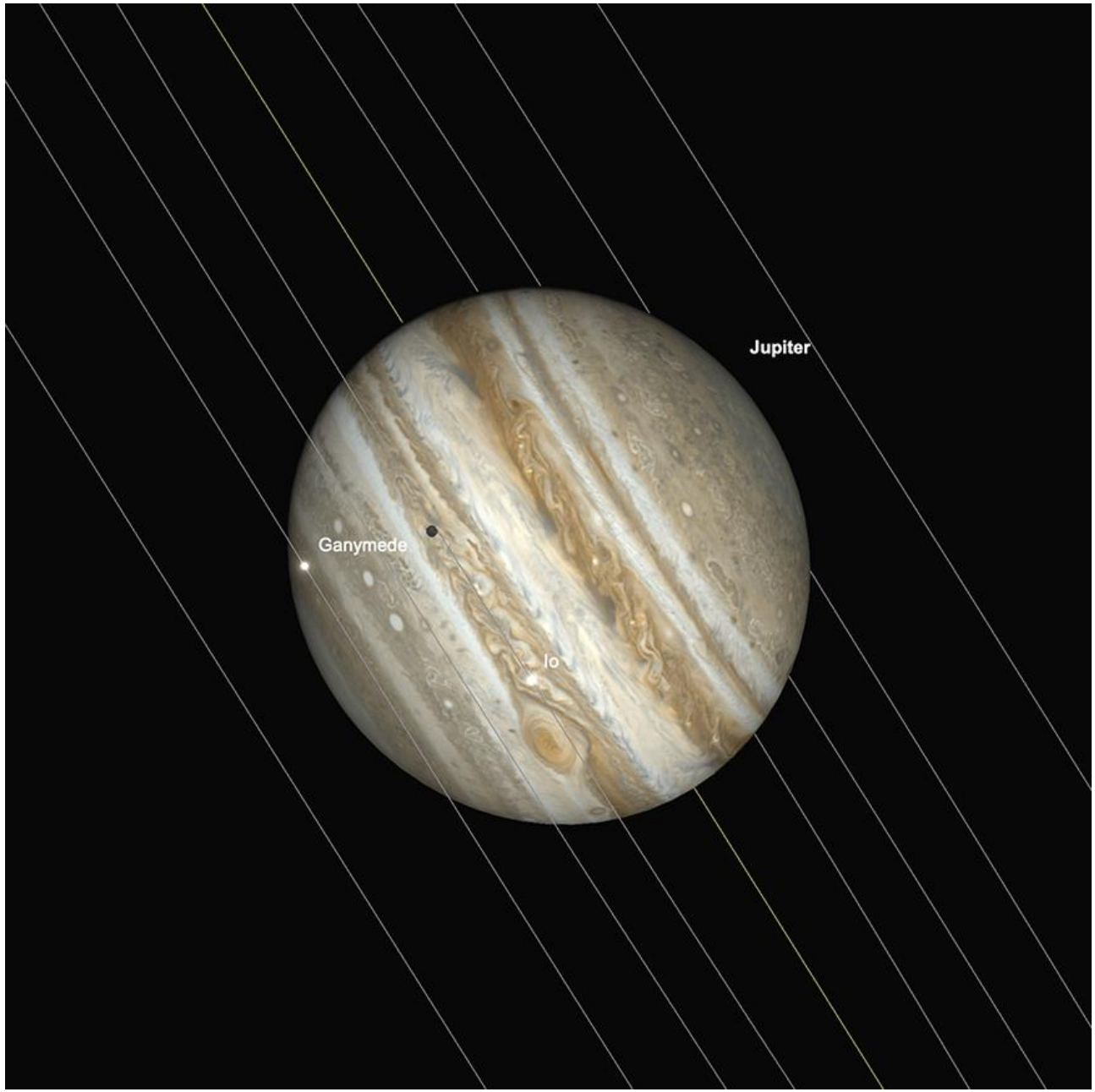
Jupiter

The king of the planets stands at an altitude of 48° high in the sky (as viewed from 51° north), as the Sun goes down on March 1st. Shining at a brilliant -2.2, Jupiter will be a mistakable as the brightest object in the south-west after dark. Showing an apparent size 36.4 arc seconds diameter at the beginning of the month. Jupiter will be an excellent target for telescopic observation in the early evening. The planet will set at a little after 11:30 pm (GMT) on the evening of the 1st.

Jupiter is heading sunward as seen from our perspective here on Earth. By the time we reach mid-March, the separation of Jupiter from the Sun has decreased from 59° at the month's beginning, to 48°. At this point in time, the planet will stand around 40° high in the south-west at sundown. Jupiter will now display a visual magnitude of -2.1 having freed fractionally from the months beginning and decreased its size to just over 35 arc seconds diameter.

By the time we reach the end of March, Jupiter will have decreased its separation from the Sun to a little under 36° and while staying static at -2.1 magnitude has shrunk fractionally just over 34 seconds diameter. The planet will stand at just under 30° elevation in the west at sunset. It will set at a little past 11 pm (BST) on the evening of the 31st.

There are a few mutual transit events in March as far as Jupiter is concerned. There is a mutual transit of the Great Red Spot and Europa, which begins at around 7 pm (GMT) on March 3rd. There is an excellent early evening GRS, Io and Ganymede transit, which peaks at around 4pm on March 18th. This is followed by a GRS, Europa and Europa shadow transit, which peaks at similar time on March 21st. There is another excellent GRS, Io, Io shadow transit and Ganymede transit at around 7 pm, March 25th. There is another mutual GRS and Europa transit, which starts around 5 pm on March 28th.


Jupiter
Ganymede
Io

Jupiter, GRS, Io, Io Shadow and Ganymede mutual transit, 7pm March 25th. Image created with SkySafari 5 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

Saturn

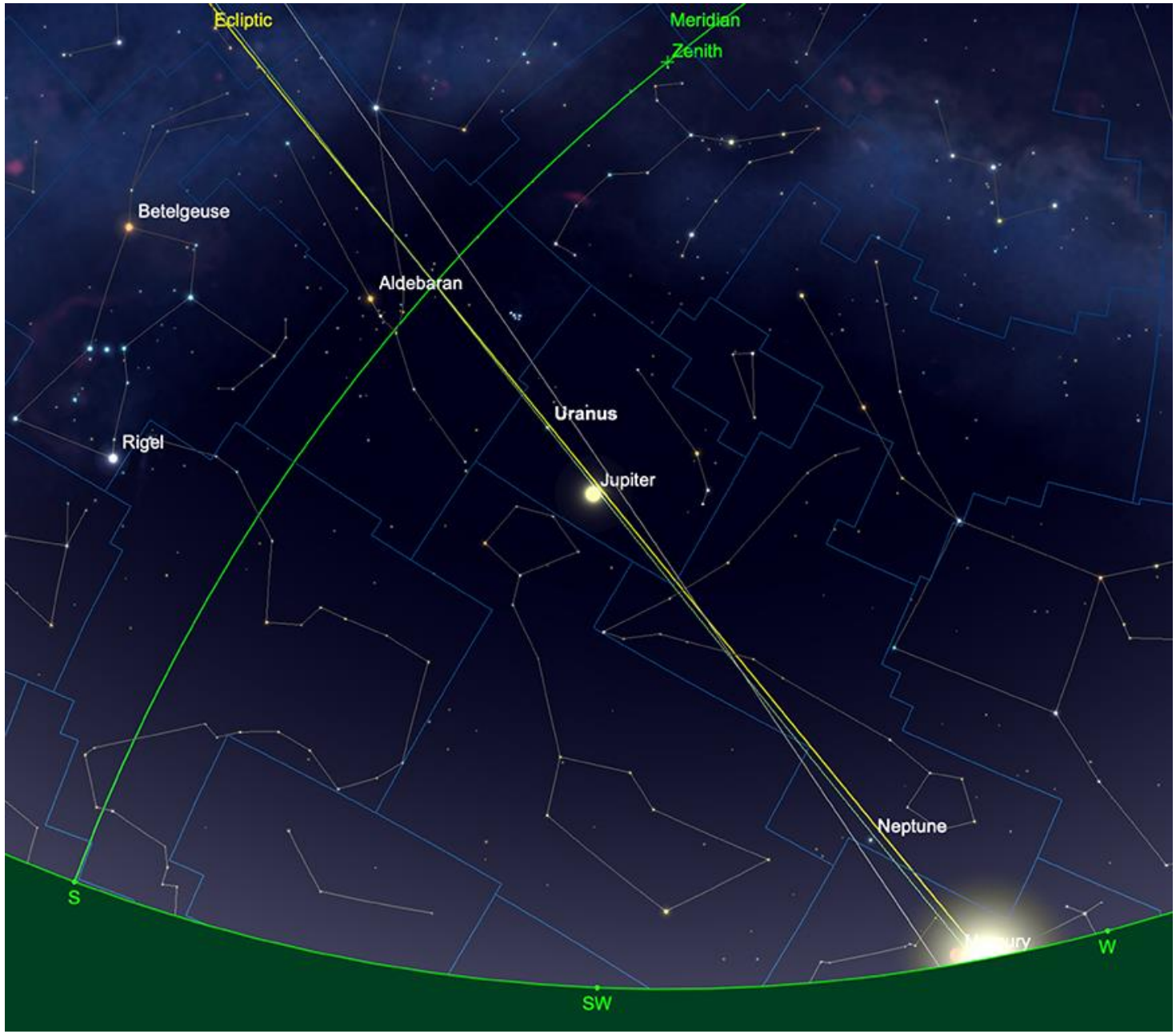
Saturn is emerging from late February's superior conjunction and for the first part of the month will be unobservable, being so close to Sun. Rising almost in line with the sun from mid-Northern latitude in Aquarius, the ringed planet will remain in a very poor observational position until later in March, when it has attained a reasonable separation from the Sun. However, even by the end of March, Saturn will stand just 5°, above the horizon at sunrise (as observed from 51° north) and will still be a very difficult target to find in the glare of the morning sky. Saturn will end the month separated from the Sun by around 27° and flanked Venus and Mars - though will be far too low in the sky for meaningful telescopic observations, outside the equatorial regions of our planet.

Uranus and Neptune

Of the two outer gas giants, Uranus is definitely the better placed during March. Sitting in the constellation of Aries, Uranus can be found around 8° to the east of the much brighter Jupiter, which serves as a handy waypoint to find the much fainter outer world. Uranus will still be at a very reasonable altitude of just under 41° once astronomical dusk occurs on the evening of the 1st.

Neptune, on the other hand, is separated from the Sun by around 15° in on the Pisces/Aquarius borders, and will be an extremely difficult, if impossible target as the sky will be too bright for observation of the eighth magnitude planet in the early evening. Neptune reaches superior conjunction in March 17th, after which it will re-emerge as a morning target, but will be unobservable for some time after this.

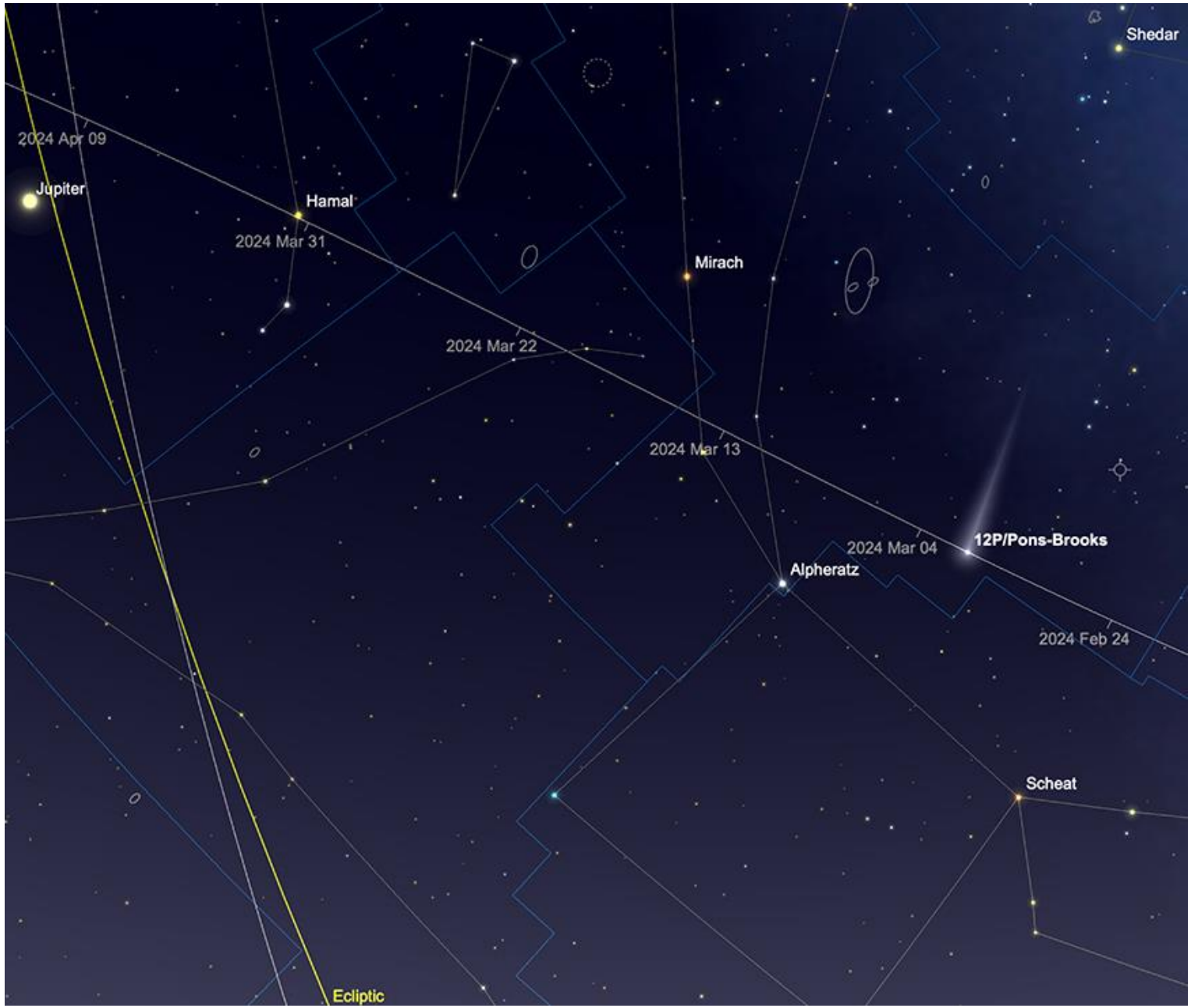
Uranus will remain extremely well placed for evening, observation right up until the end of March and beyond. It is currently the planet in the most northerly part of the ecliptic, favouring observation by those in the northern hemisphere. At +5.8 magnitude, Uranus is technically a naked eye object, but is more likely to be visible in binoculars or small telescopes.


Ecliptic
Meridian
Zenith
Betelgeuse
Aldebaran
Uranus
Rigel
Jupiter
Neptune
S
SW
W

Uranus and Neptune relative positions, 1st March, sunset. Image created with SkySafari 6 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

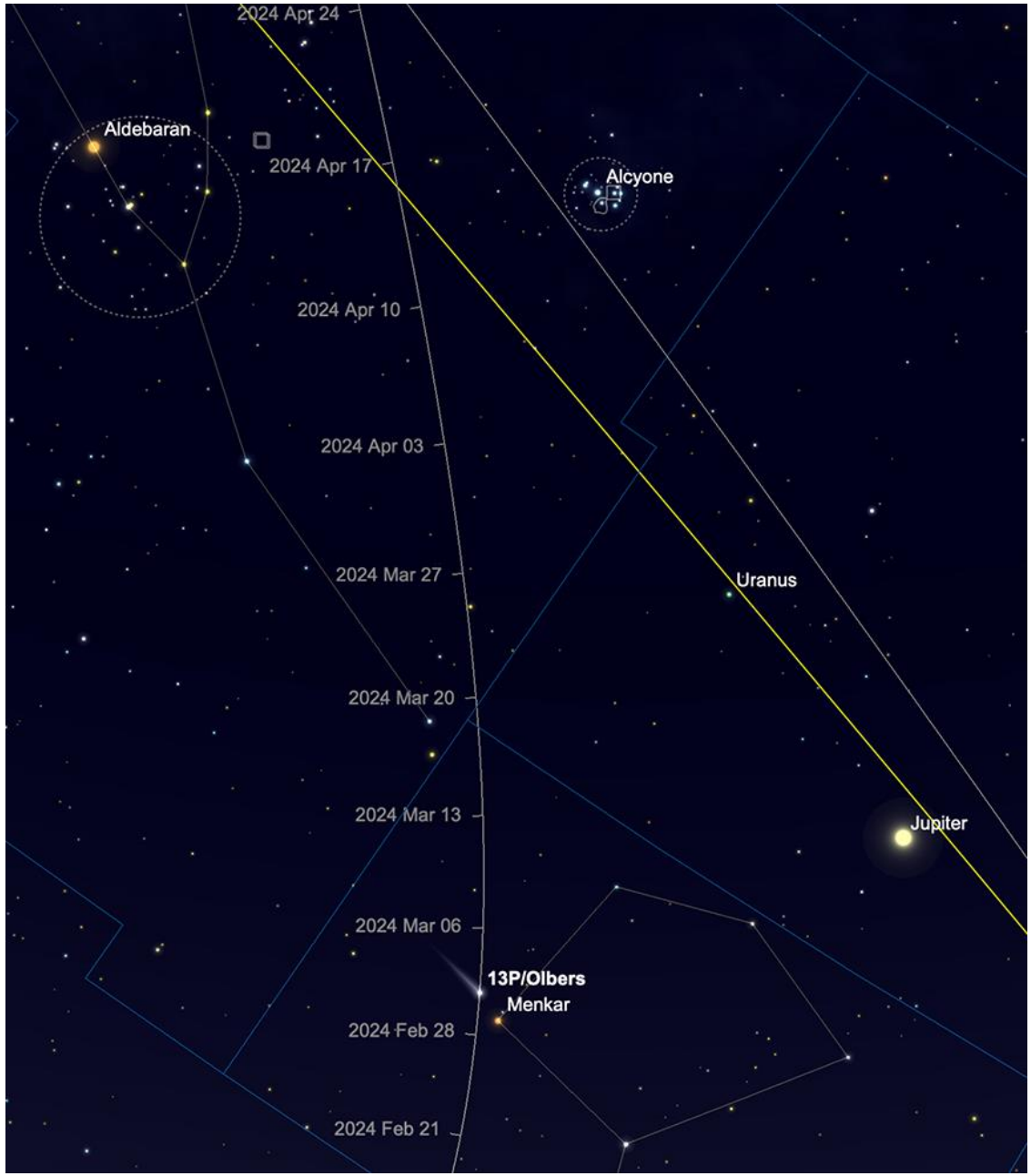
Comets

12P/Pons-Brooks is the only comment of reasonable brightness easily observable during March. It should start the month around 6th to 7th magnitude and will be observable through much of the night. The comet is a resident of Andromeda in early to mid-March and will set at around 11:30 pm and rises at just before 3 am the following morning on the 1st/2nd March. As the month progresses, it will drift through northern Pisces, skirting the border with Triangulum and ending the month very close to Alpha Arietis, Hamal - the principal star in Aries. By this point, 12P will have increased its brightness to a predicted 5th magnitude. Although 5th magnitude is technically naked eye, the comet's brightness will be spread out over a wide area, so will definitely need binoculars and/or a telescope to observe it.


Shedar
2024 Apr 09
Jupiter
Hamal
2024 Mar 31
Mirach
2024 Mar 22
2024 Mar 13
2024 Mar 04
12P/Pons-Brooks
Alpheratz
2024 Feb 24
Scheat
Ecliptic

12P path March 2024. Comet position shown 1st March. Image created with SkySafari 6 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

Another periodic comet, 13P/Olbers will be making its way through Cetus and into Taurus during March. This will be much less prominent at around 10th magnitude, though should be relatively straightforward to find in larger binoculars and small telescopes. 13P will continue to brighten after the end of March and should reach 7th magnitude - possibly brighter - in May, June and July.


2024 Apr 24
Aldebaran
2024 Apr 17
Alcyone
2024 Apr 10
2024 Apr 03
2024 Mar 27
Uranus
2024 Mar 20
2024 Mar 13
Jupiter
2024 Mar 06
13P/Olbers
Menkar
2024 Feb 28
2024 Feb 21

13P/Olbers path, March 2024. Image created with SkySafari 6 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

Lastly, C/2023 A3 (Tsuchinshan-ATLAS) is still showing very reasonable progress. It is 12th-13th magnitude at time of writing, but it now predicted to reach around a minimum magnitude of -0.8 - and could become even more spectacular - when it reaches its peak in September to November of this year. There is still a lot that can happen between now and then, but we remain cautiously optimistic for a very good showing from this comet.

Meteors

There are no major meteor showers, observable in March.

Deep Sky Observation - The Messier Marathon

We take a break from our regular round up of in-depth coverage of observations of the extra-solar system kind, to cover the grand tour-de-horizon that is the Messier Marathon. Many readers will have heard of this challenge (indeed we've covered it before in previous sky guides) - to observe as many, if not all of the 110 deep sky objects on the Messier list in one night's sitting. Around the Vernal or Autumnal Equinoxes is normally the most sensible time attempt the Marathon, as the spread of Messier objects in the sky, the chance of clearer weather and a significant amount of darkness all conspire to give us the best chance of picking off the majority - if not all of the Messier list. This year, the weekends of March Friday 8th, Saturday 9th and Sunday 10th and the following April weekend of the 6th and 7th are closest to New Moon in their respective months, giving many of us the best opportunity to take this challenge on.

It must be noted that the Marathon is not possible everywhere in the world. Charles Messier, making his observations from France in the 18th century, did not have the opportunity to add many of the wonderful deep sky treasures of the southern hemisphere to his list, and a

significant amount of Messier objects are circumpolar for those in the northern hemisphere - which put southern hemisphere observers at a distinct disadvantage!

The optimum latitude for attempting the Messier Marathon is about 25 degrees N, but this should not put off those who are further north, or south of this part of the world attempting it. You will simply have to complete the Marathon with what's practical to observe from your particular location.

So, what do you need?

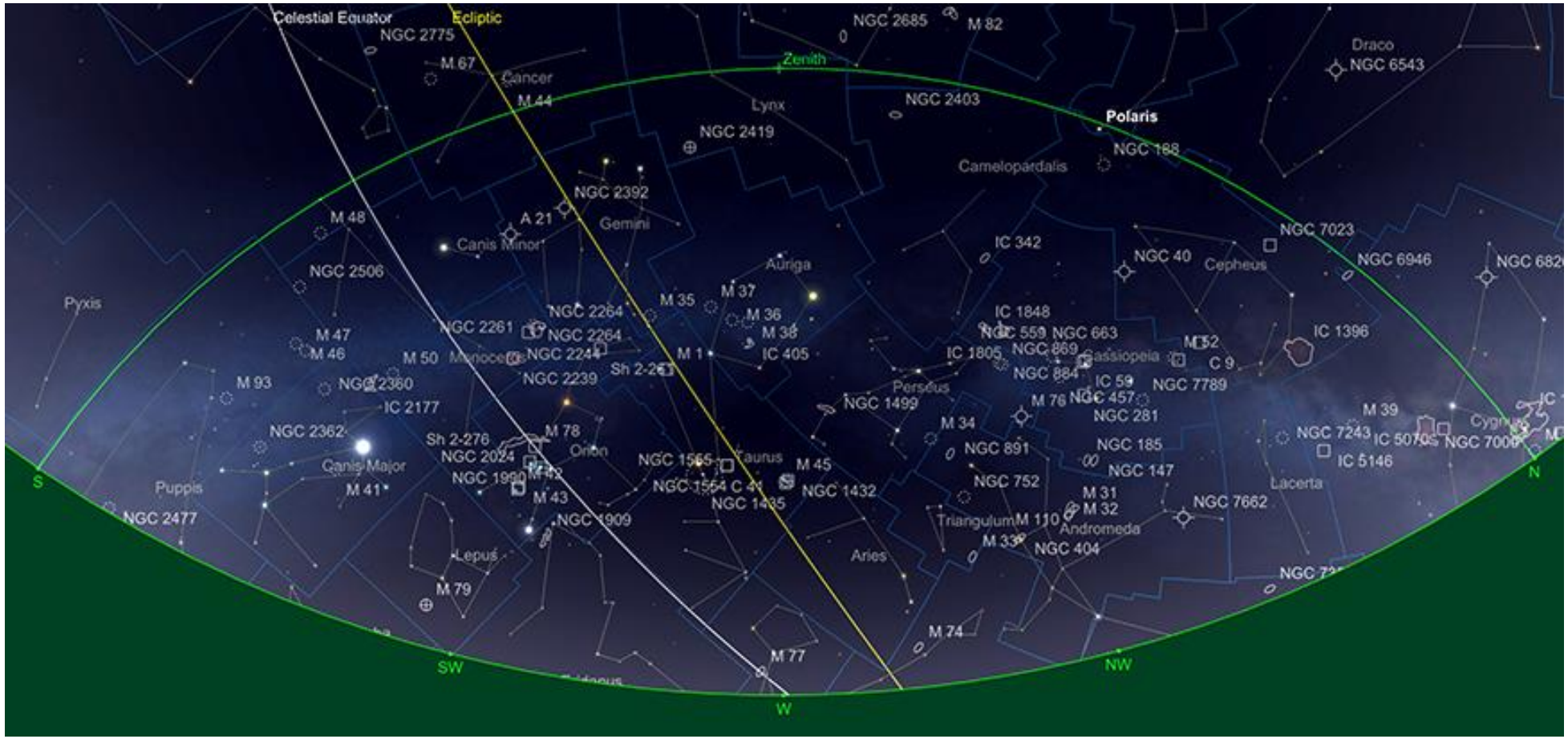
1. A Telescope. While it's possible to observe many of the Messier list in binoculars, the type of magnifications needed to resolve some of the fainter members of the list really do require a telescope to be sure of identification. Naturally, the larger your aperture, the better your chances of positively identifying some of the fainter members of the Messier list and a Goto telescope will help immeasurably - though some observers will regard this as cheating somewhat. However, in regards to a telescope's aperture, it should be noted that Messier himself observed with many telescopes throughout his career, but made many of his discoveries using a refractor of around 3-4 inches / 90-102mm of aperture, or a Gregorian reflecting telescope of around 7.5 inches of aperture. Both instruments would have been roughly equivalent in performance to many general starter's telescopes today, albeit they were used in the 18th century, when skies were generally much darker than they are today.

2. A Dark Observing Site. As eluded to above, dark skies are essential to achieving positive identification of some of the fainter members of the list. The absence of the Moon from proceedings is also extremely helpful, as any additional skyglow caused by our natural satellite will be extremely unhelpful. This makes the New Moon period of the 17th March a more favourable time to observe, but a couple of days either side of this date should be good too, with a thin Crescent phase Moon not adding too much to the illumination of the sky.

3. Clear Horizons. The early evening's window of observing objects in the extreme west of the sky will require a clear westerly horizon in order to have any chance of seeing these targets. For instance, around 7th April, the galaxy M74, one of the most beautiful face on spirals in the sky, but unfortunately the Messier object with the lowest combined surface brightness will only be 11° 18 minutes from the setting Sun, so will be set before Astronomical darkness has been achieved from mid-northern latitudes, making it highly unlikely if not impossible to detect. Likewise, M30 in Capricornus won't have risen very high in the sky by Sunrise, so will be a difficult find in the dawn sky at the end of the night. Likewise the wonderful open clusters M6 and M7 in Scorpius and the Globular clusters M54, M55, M69 and M70 are very low and difficult to detect in the morning sky from mid-northern latitudes.

4. Patience and Tenacity. This is a Marathon and not a sprint! Not everything on the list may be observable in one sitting, but the challenge is to observe as much as you can. Special attention should be paid to pacing yourself, making sure you're properly dark adapted, insulated from the cold of a springtime night and hydrated and fueled as well. If you're not paying attention to all of these criteria, you run the risk of fatigue, which will ultimately make the Marathon a slog - when it's meant to be enjoyable.

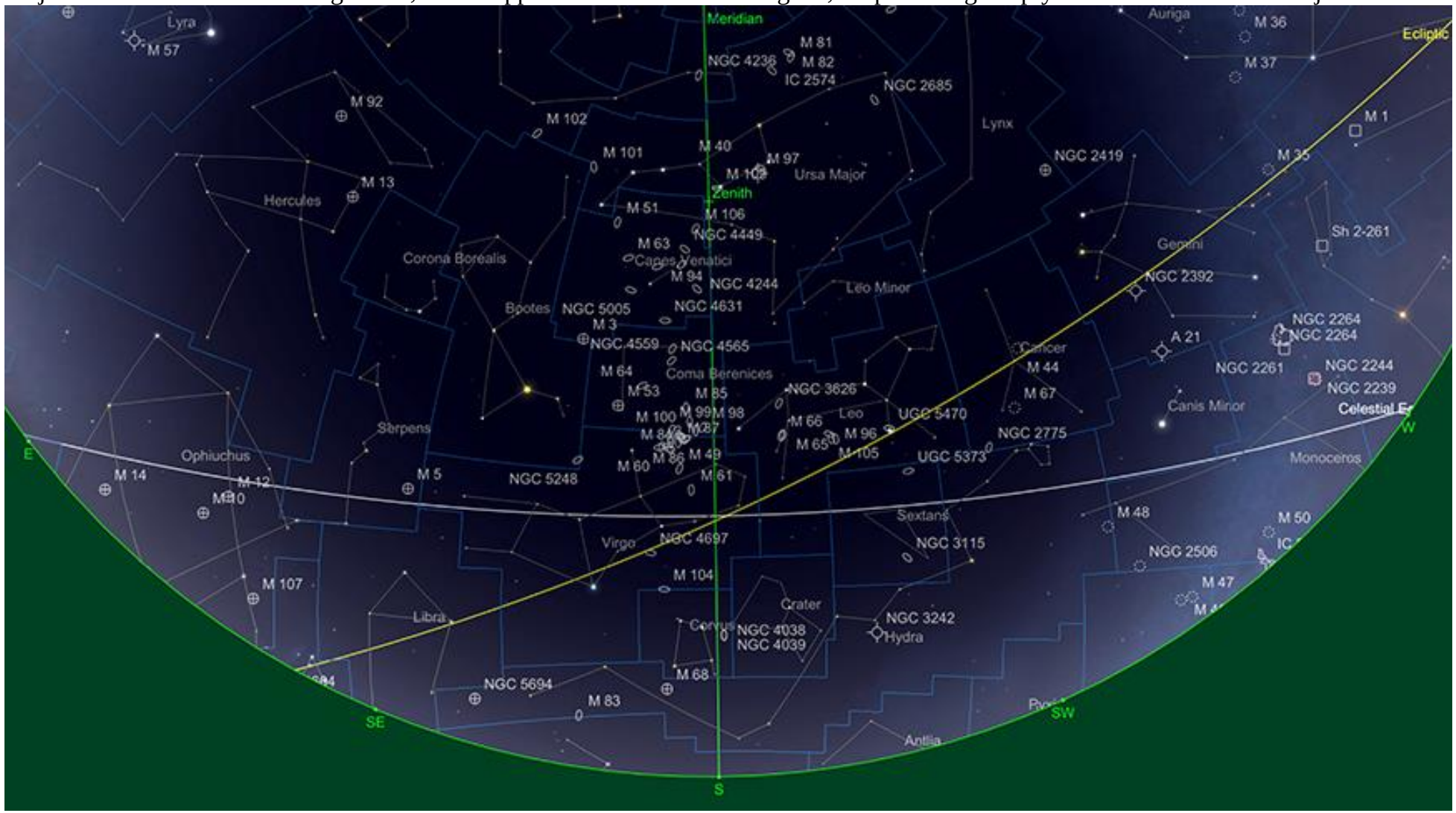
When attempting the Messier Marathon at this time of year, we can split it up into roughly four quarters. The first of these are those objects that are in the west of the sky after sunset, which need to be observed quickly before they set (or become too low to observe in the north). If you use the Milky way as a dividing line, these are all the Messier objects that fall to the West of this point. This section of sky includes some of the brightest and best known of the Messier list: M31, the Andromeda Galaxy and its two attendants M32 and M110; M33 the Triangulum Spiral (which will be a tricky target in the evening at this time of year, due to its low surface brightness); the wonderful Pleiades (M45) and M1, the Crab Nebula in Taurus and of course the Orion Nebula complex, M42 and M43. While these targets are pretty easy to find, special attention should be shown to those potentially difficult objects in the southern reaches of this sector, such as the globular M79 in Lepus, which will be set by just past 9pm from mid-northern latitudes. It is also a good idea to attempt to observe the circumpolar Messier targets in the low NNW, such as the open cluster M39 in Cygnus and the easier, higher up targets in Cassiopeia and Perseus, if possible, though there will be opportunities to observe these later, if this is not practical.



Messier Marathon part 1, after dusk, looking west. Image created with SkySafari 5 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

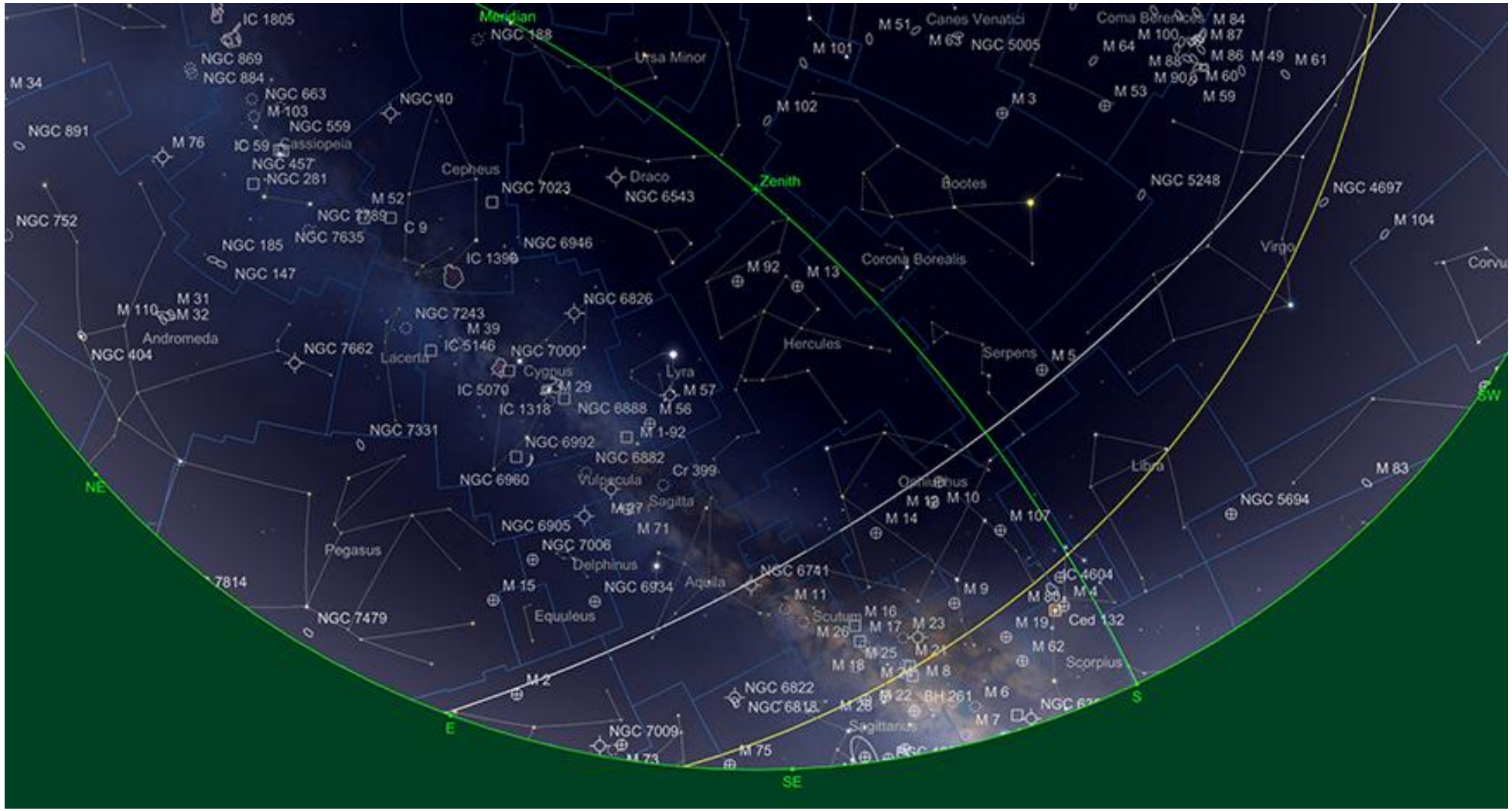
The second quarter of the Marathon is the most populous in terms of extra-galactic Messier objects This area of sky is the swathe east of the Milky Way, which takes in the huge arc of galaxies which runs from the fantastic pairing of M81 and M82 in the northern reaches of Ursa Major, down through multiple galaxies in Canes Venatici, Coma Berenices down into the huge riches of Virgo and Leo, ending south of the celestial equator with the challenge of M104, the Sombrero Galaxy on the Virgo-Corvus borders. This area takes in just over a third (36) of the Messier List and will take the longest time to work through. Naturally a Goto telescope will help considerably here, as many of

the objects in this part of the sky are towards the fainter end of Messier's list and tricky to find and positively identify for the uninitiated. Amongst the profusion of galaxies, there are notable globular clusters in the guise of the magnificent M3 in Canes Venatici and M53 in Coma Berenices, the intriguing Owl Nebula, M97 - the "companion" of the galaxy M108, both of which are found near Merak, Beta Ursae Majoris. There is also the strange M40, which appears to have been catalogued, despite being simply a double star in Ursa Major.



Messier Marathon part 2, midnight, looking north-south. Image created with SkySafari 5 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

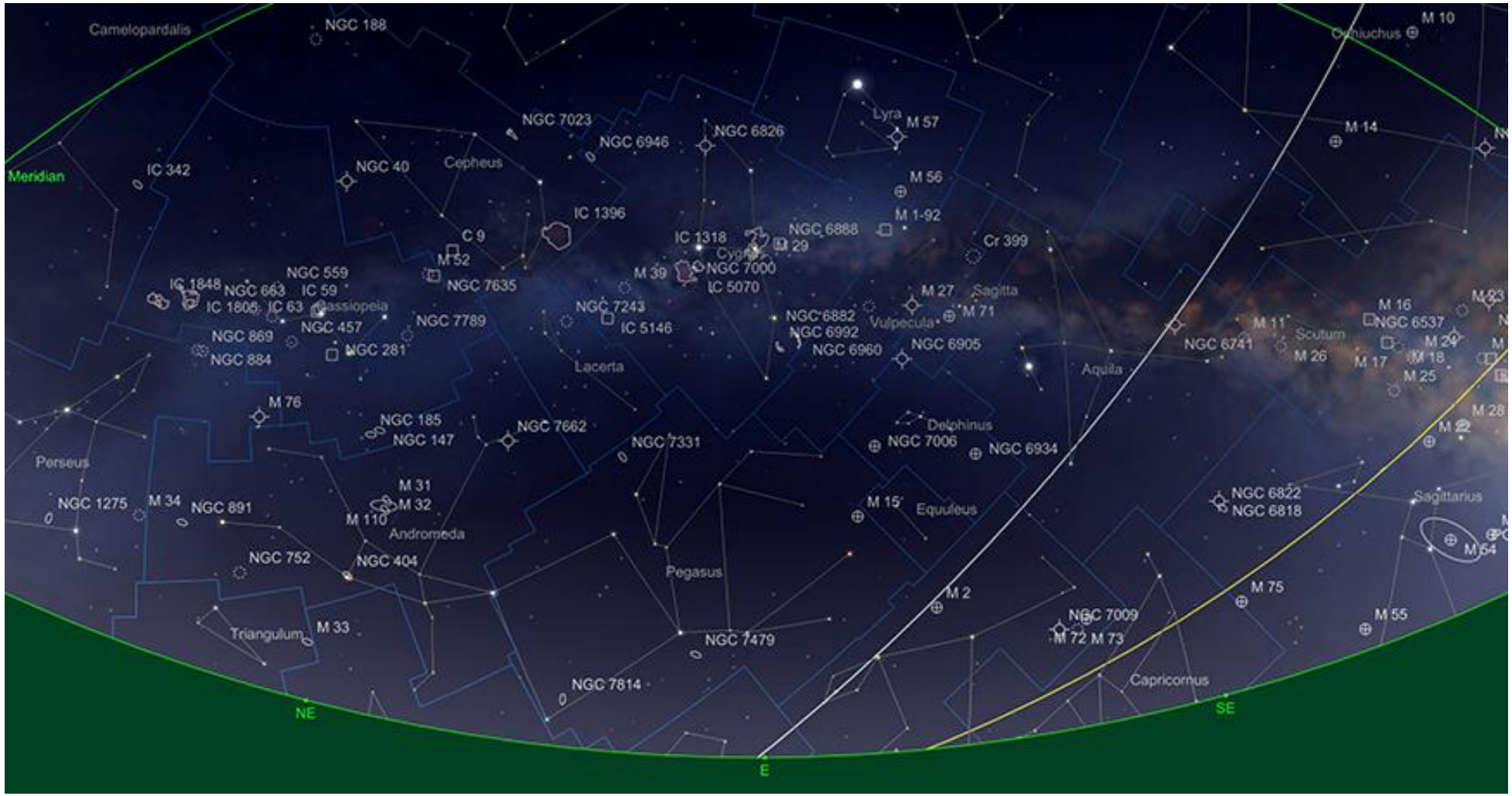
Where the second quarter of the Marathon was largely taken up by galaxies, the third quarter is very much the preserve of nebulae and star clusters - particularly the globulars which orbit the central bulge of the Milky Way. This quarter will have to wait until well after midnight in order to risen high enough for observation and contains the riches of Ophiuchus, Scorpius and Sagittarius - to west of the "Summer" part of the Milky Way, which looks directly towards of galactic centre and the richest area of deep sky objects bounded by our galaxy. In addition to the area, there are also the more northerly targets in Serpens (Caput), Hercules, Lyra and the Western half of Cygnus. This is a really challenging part of the marathon, as many of the targets will be very far south from mid-northern latitudes and atmospheric extinction will play a large part in observations. Highlights in this area include the great globular clusters of M13 and M92 in Hercules, M5 in Serpens, M10, M12, M14 and M07 in Ophiuchus and, if observable, M80 and M4 in Scorpius. However, you may have to revisit the latter two objects later in the night to see them well, if at all.



Messier Marathon part 3, 4am, looking southeast. Image created with SkySafari 5 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

The last quarter of the Messier Marathon really is a race to see as much as is possible before the Sun begins to rise and Astronomical Dawn begins, which for many mid northern hemisphere latitudes is just after 4am at this time of year. This area of sky includes the eastern side of

the "Summer" section of the Milky Way from the eastern side of Sagittarius in the south, up through Sagitta, Vulpecula and the eastern side of Cygnus, on through to the star clusters in Cassiopeia in the north. This area also includes the great globular clusters M15 in Pegasus and M2, below it in Aquarius. This area inevitably includes some of the toughest fainter objects to attempt to see before the dawn breaks - notably the fainter globulars M72 and M75 and the rather disappointing asterism M73, all in Aquarius. These will be extremely tough, if not impossible to see from higher northern latitude before the Sun makes its presence felt. However, this part of the night gives observers in higher northern latitudes the best chance of seeing the great areas of nebulosity in Sagittarius, M8 the Lagoon Nebula, M20 the Triffid Nebula, M17 the Omega Nebula and the Eagle Nebula in neighbouring Serpens at reasonable altitude.



Messier Marathon part 4, 5am, looking southeast. Image created with SkySafari 5 for Mac OS X, ©2010-2016 Simulation Curriculum Corp., skysafariastronomy.com.

When you consider the possibility of seeing the lion's share of the Messier list in one sitting, it is perhaps wise to consider that it took Messier, aided by the excellent contemporary observer Pierre Mechain and reference to the observations of other earlier telescopic

astronomers such as Giovanni Battista Hodierna, over a decade to expand his initial list of 45 objects, published in 1771, to the 102 objects of his final list, which was published in 1781. With reference to Messier's observing notes, this final list was expanded to the 110 objects we know today, by Messier scholars in the 20th century. If it took Messier, a professional astronomer, this long to be sure of his observations, then don't be too disappointed if you can't see all of the Messier list in one night, should you attempt the Marathon. If you do attempt this epic task, we hope the weather is kind to you and however many objects you find, you enjoy it.