The Astronomical Sky above Edinburgh – April 2025

As we start British Summer Time, the Lyrid meteor shower lights up the April sky and we witness both the farthest Full Micromoon of the year and the closest New Supermoon of 2025.

2025. The Sun leaves Pisces (The Fishes) on 18 April at 12:40 pm and enters Aries (The Ram) and recedes from Earth by 1,238,923 km over the month. Daylight lengthens from 13:08 (13.140 hours) on 1 April to 15:19 (15.324 hours) on 30 April so we lose 2 hours and 11 minutes of night time by the end of April. As we head towards the long summer days of northern climes, spare a thought for the hapless astronomer who yearns for the dark hours when astronomical dusk ends and astronomical dawn begins. At the start of April, this amounts to 6 hours and 15 minutes but shortens dramatically to 2 hours and 8 minutes by month's end!

The first quarter Moon shows up on 5 April at 3:15 am in Gemini (The Twins). This is followed by the full Pink Moon which makes an

appearance on 13 April at 1:22 am in Virgo (The Maiden). Lunar apogee (furthest from Earth) occurs on 13 April at 11:33 pm and takes the Moon to 406,287 km away from Earth-around 21,887 km further than average-subtending an angle of 29.4 arc-minutes. This is the farthest 'full Moon apogee syzygy' of the year making it the smallest full micromoon of 2025. The Moon enters last quarter on 21 April at 2:36 am in Capricornus (The Sea Goat). Lunar perigee (closest to Earth) occurs on 27 April at 5:12 pm and finds the Moon some 357,118 km away from Earth—around 27,282 km closer than average-subtending an angle of 33.5 arcminutes. The new Moon appears on 27 April at 8:31 pm in Aries (The Ram) beginning a new synodic month which will last 29 days, 7 hours and 31 minutes. This is the closest 'new Moon perigee syzygy' of the year making it the largest new supermoon of 2025. The Moon conjuncts with several bright objects in April. The Pleiades (M45 but also known as the 'Seven Sisters' star cluster) will be 0.6 degrees south of the waxing gibbous Moon on All Fool's Day. The full Moon also comes within 0.3 degrees of Spica in Virgo (The Maiden) in the wee hours of 13 April. Finally, Antares in Scorpio (The Scorpion) will be 0.4 degrees north of the waning gibbous Moon on 17 April. For the inferior planets: Mercury remains in Pisces (The

Fishes) all month but recedes by 57,681,851 km. The 'Swift Planet' increases in brightness from 2.89 to 0.15 magnitudes (12.42 times in luminosity) and reaches aphelion (furthest from the Sun) on 17 April and greatest western elongation on 21 April. On 24 April, Mercury reaches dichotomy where exactly half the surface is illuminated by the Sun but the planet will be very low on the horizon during civil dawn. Likewise, Venus remains in Pisces (The Fishes) all month and recedes by 24,527,795 km. Venus re-emerges as the 'Morning Star Planet' and increases in brightness from -4.24 to -4.72 magnitudes (1.55 times in luminosity) throughout April. Both Mercury and Venus reach orbital stationary points in April as shown in the ephemeris. For the superior planets: Mars begins the month in Gemini (The Twins) and ends in Cancer (The Crab) whilst receding by 42,296,425 km. Mars will conjunct with the waxing gibbous Moon on 5 April passing 2.2 degrees south. The 'Red Planet' decreases in brightness from 0.44 to 0.94 magnitudes (0.63 times in luminosity). Mars reaches aphelion on 16 April and is at eastern quadrature (where the angle between Sun, Earth and planet is exactly 90 degrees) on 21 April. Jupiter remains in Taurus (The Bull) all month and recedes by 57,447,313 km so decreases in brightness from -2.11 to -1.98 magnitudes (0.89 times in luminosity) over the

month.

Saturn begins the month in Aquarius (The Water Bearer) and ends in Pisces (The Fishes) but comes closer by 37,126,048 km. This barely affects the magnitude of 1.16. On 25 April, however, the waning crescent Moon, only 7.5% illuminated, bisects Venus and Saturn just before sunrise but Saturn will be difficult to see. For telescopic or binocular observers: Uranus remains in Taurus (The Bull) all month but recedes by 37,132,338 km and fades from 5.82 to 5.84 magnitudes. Neptune remains in Pisces (The Fishes) all month but comes closer by 31,723,524 km so increases in brightness from 7.83 to 7.81 magnitudes. Shooting star watchers may enjoy the Lyrid meteor shower between 14-30 April. These originate in Lyra (The Lyre) and should peak 22-23 April with 18 meteors per hour. Good viewing will begin after 9:30 pm and the waning crescent Moon should not hamper observations too much since last quarter was the previous day. Seeded by (C/1861 G1) Thatcher's Comet, these are the oldest meteor showers having been observed by Chinese astronomers in 687 BCE. Thatcher's comet has a period of around 415 years and will not be visible in our night sky until it returns to perihelion sometime in 2276. Meanwhile, our vigil of the recurrent nova T CrB, in Corona Borealis (The Northern Crown). continues as the constellation is highly visible during evening and night hours all month.

At the time of our sky map, some constellations visible are Ursa Major (The Greater Bear) at zenith, Cepheus (The King) in the north, Hercules (Hercules) in the east, Orion (The Hunter) in the west, and Crater (The Cup) in the south. The ecliptic hosts Virgo (The Maiden), Leo (The Lion), Cancer (the Crab), Gemini (The Twins), Taurus (The Bull) and Aries (The Ram). April is the shoulder season where the 'Winter Triangle'-Procyon in Canis Minor (The Lesser Dog), Sirius in Canis Major (The Greater Dog) and Betelgeuse in Orion (The Hunter)-sets in the west and a few hours later the 'Summer Triangle'-Deneb in Cygnus (The Swan), Vega in Lyra (The Lyre) and Altair in Aquila (The Eagle)-rises in the east. Between them lies the 'Spring Triangle' of Arcturus in Bootes (The Herdsman), Denebola in Leo (The Lion) and Spica in Virgo (The Maiden). Circumpolar constellations-always above the horizon at the latitude of Edinburgh and Lothian-include Draco (The Dragon), Perseus (The Hero), Cassiopeia (The Seated Queen) and Camelopardalis (The Giraffe).

Edinburgh and Lothian Ephemeris		
1 April 8:30 pm 3 April 11:03 pm	Pleiades (M45) 0.6 [*] south of waxing crescent Moon Lunar standstill north	Taurus Gemini
5 April 3:15 am	Moon at first quarter	Gemini
5 April 8:00 pm	Mars 2.2 [°] south of waxing gibbous Moon	Gemini
6 April 7:21 am	Mercury stationary	Pisces
10 April 3:59 pm	Venus stationary	Pisces
10 April 8:57 pm	Moon crosses descending node	Virgo
13 April 1:22 am	Full (Pink) Micromoon, farthest all year	Virgo
13 April 1:39 am	Spica 0.3 [*] north of full Moon	Virgo
13 April 11:33 pm	Lunar apogee 406,287 km	Virgo
16 April 11:27 pm	Mars aphelion 249,239,476 km (1.667AU)	Cancer
17 April 2:30 am	Antares 0.4° north of waning gibbous Moon	Scorpio
17 April 2:22 pm	Mercury aphelion 69,817,856 km (0.467AU)	Pisces
18 April 12:40 pm	Sun leaves Pisces, enters Aries at 1.004 AU	Aries
18 April 2:12 pm	Lunar standstill south	Sagittarius
21 April 2:34 am	Mars at eastern quadrature	Cancer
21 April 2:36 am	Moon at last quarter	Capricorn
21 April 7:50 pm	Mercury at greatest western elongation 27.4°	Pisces
22 April 9:30 pm	Lyrid (006 LYR) meteors peak, ZHR=18	Lyra
24 April 6:45 am	Mercury at dichotomy	Cetus
25 April 3:21 am	Moon crosses ascending node	Pisces
25 April 5:30 am	Waning crescent Moon bisects Venus and Saturn	Pisces
27 April 5:12 pm	Lunar perigee 357,118 km	Aries
$27~{\rm April}~8{:}31~{\rm pm}$	New Supermoon, Meeus lunation 313, closest all year $% \left({{\left[{{\left[{\left[{\left[{\left[{\left[{\left[{\left[{\left[{$	Aries



Edinburgh and Lothian (55.95°, -3.19°, 10.00m for 15 April 2025 10:00 pm)