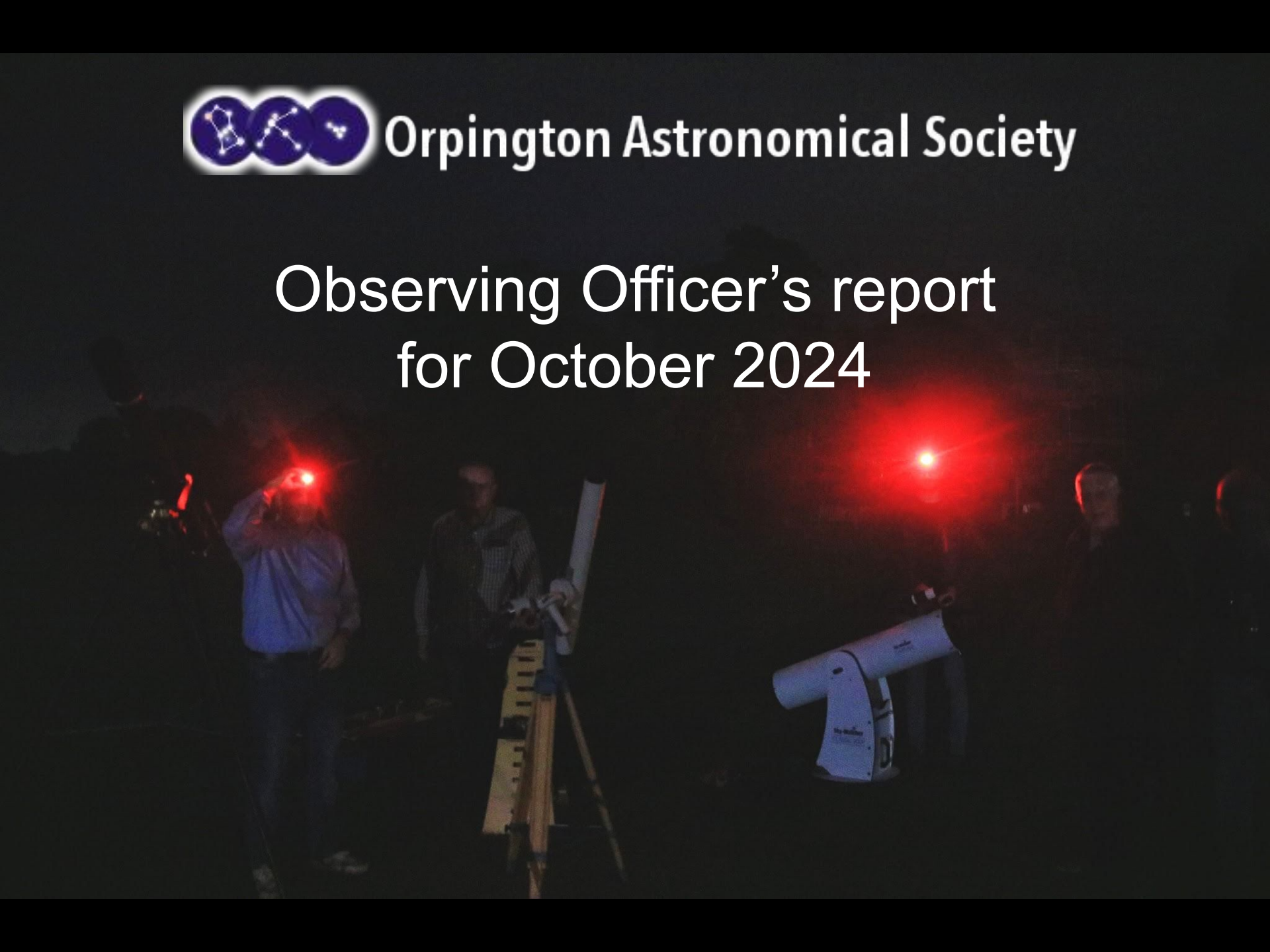
Orpington Astronomical Society

Observing Officer's report for October 2024



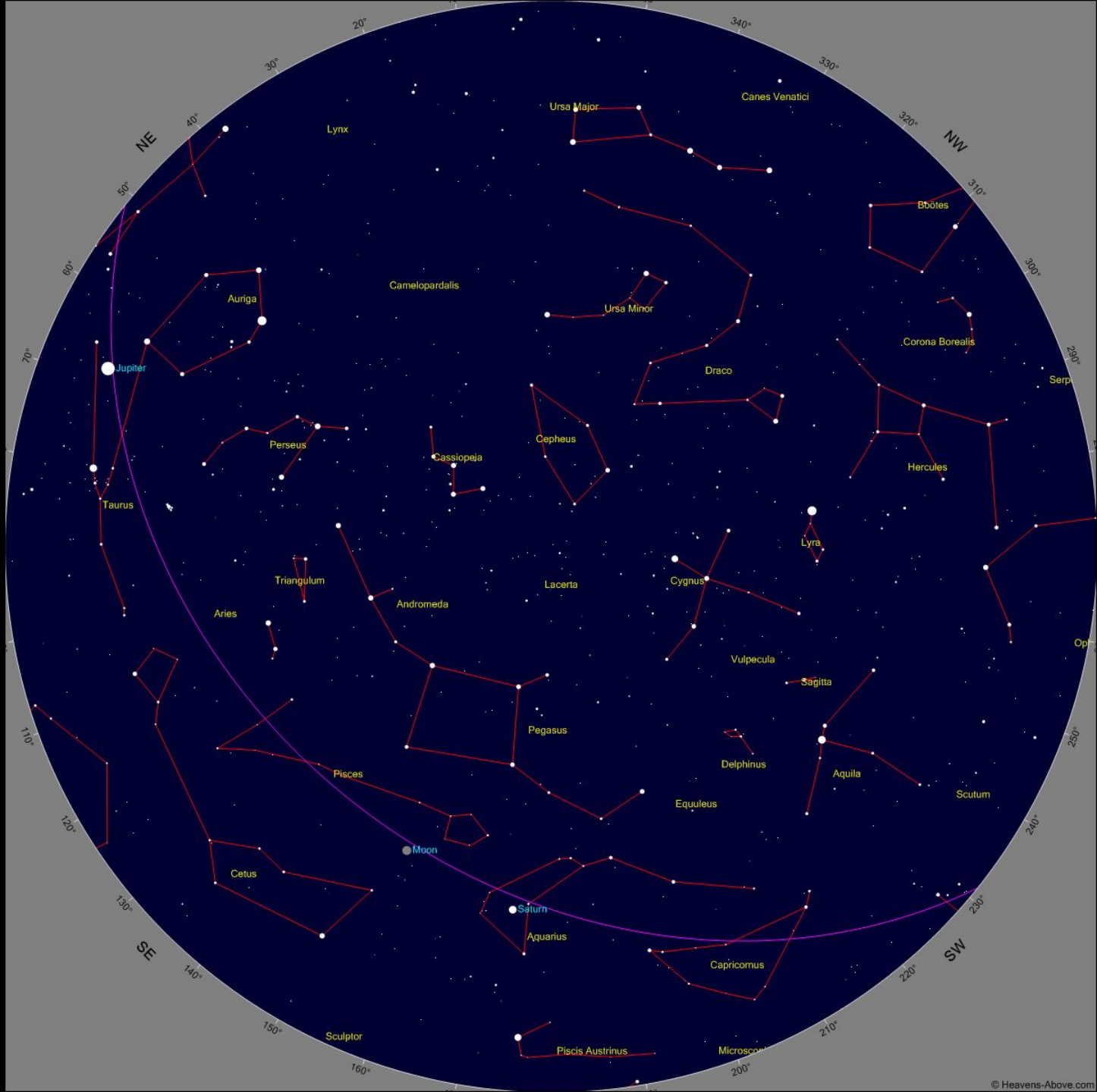
Sky chart

1/10/2024
23:00

15/10/2024
22:00

28/10/2024
21:00

Source
https://heavens-above.com/



Phases of the Moon

New Moon	1st quarter	Full Moon	3rd quarter
			
2nd Oct 19:45	10th Oct 19:55	17th Oct 12:26	24th Oct 9:03

Source www.timeanddate.com

Sun phenomena in October

British Summer Time ends on 27th October

Date	Twilight starts *)	Rise	Set	Twilight ends *)	Day length
1st	5:09	7:00	18:36	20:27	11:35
15th	5:33	7:24	18:05	19:56	10:41
28th	4:54	6:46	16:39	18:29	9:49

*) Astronomical twilight

Source www.timeanddate.com

Planets in September

M - Morning sky, before sunrise, E - evening sky, after sunset

Mercury - very difficult to see

Venus - slightly difficult to see (E) later average visibility

Mars - average visibility (M) becoming perfect

Jupiter - perfect visibility (E)

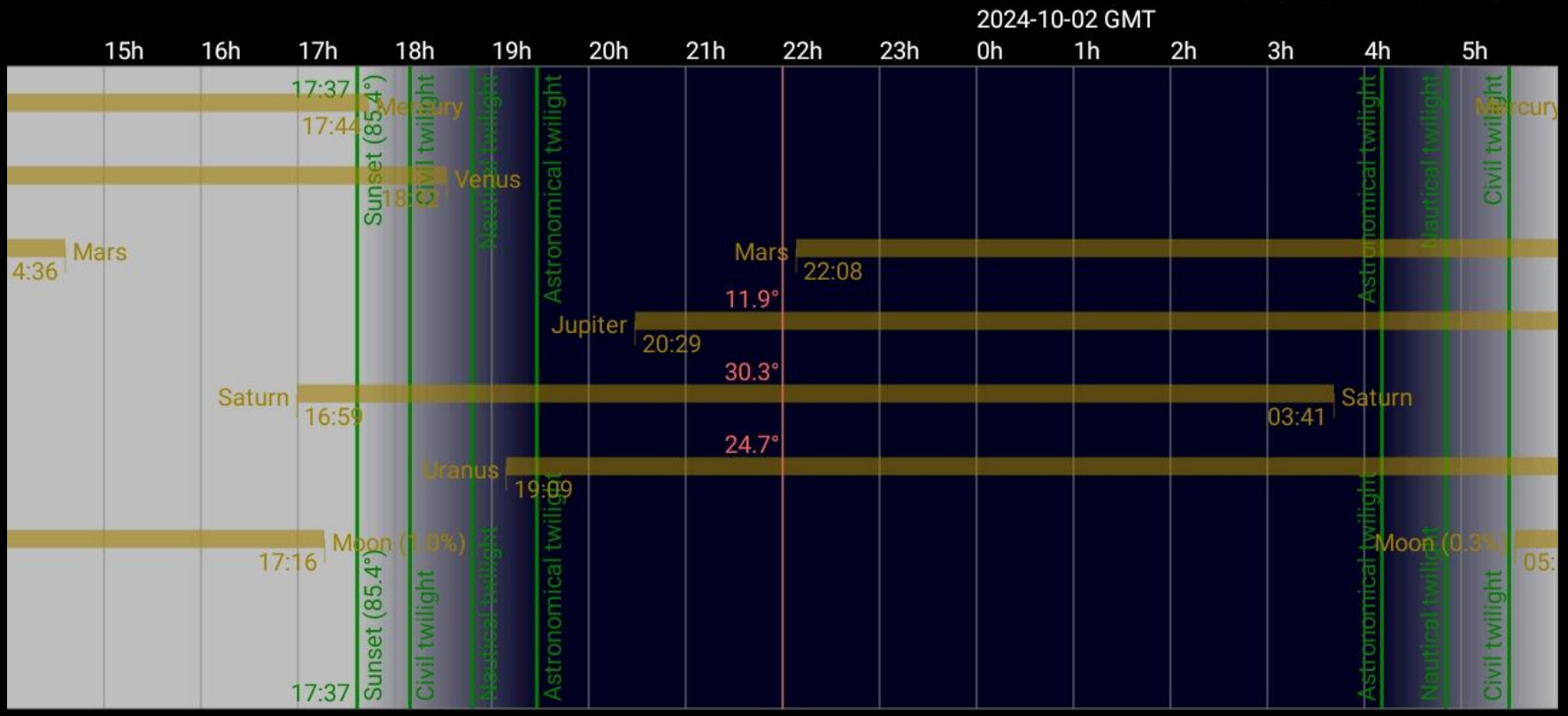
Saturn - perfect visibility (E)

Uranus - average visibility (E)

Neptune - difficult to see (E)

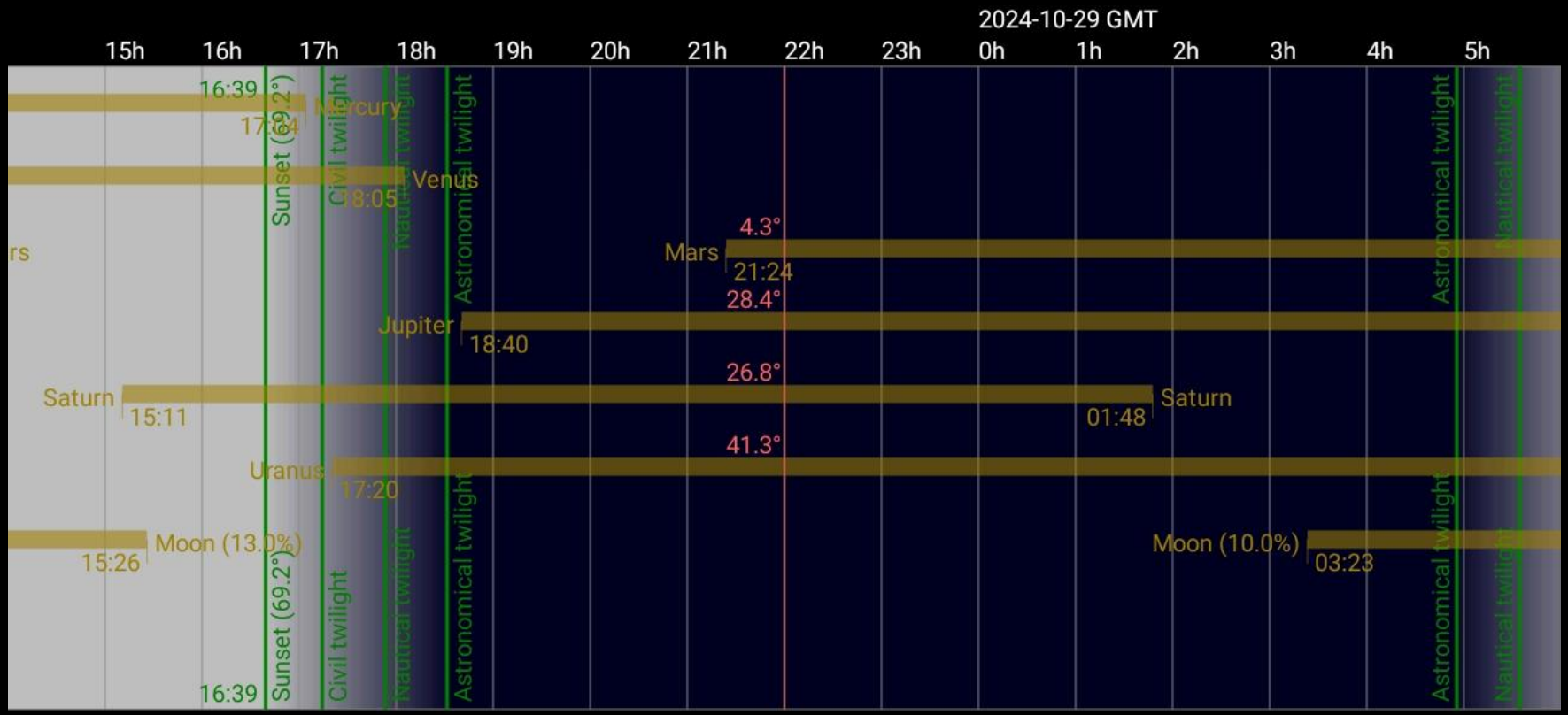
Source www.timeanddate.com

1st October


2024-10-02 GMT
15h
16h
17h
18h
19h
20h
21h
22h
23h
0h
1h
2h
3h
4h
5h
17:37
Mercury
17:44
Venus
Sunset (85.4°)
Civil twilight
Nautical twilight
Astronomical twilight
Mars
4:36
Mars
22:08
11.9°
Jupiter
20:29
30.3°
Saturn
16:59
Saturn
03:41
24.7°
Uranus
19:09
Moon (1.0%)
17:16
Moon (0.3%)
17:37

15th October

28th October



Selected events:

02 Oct: Annular solar eclipse visible from southern Chile and southern Argentina between 15:44 UTC and 21:46 UTC

05 Oct: conjunction of the Moon and Venus

07 Oct: Lunar occultation of Antares

09 Oct: Jupiter enters retrograde motion

14 Oct: Close approach of the Moon and Saturn & Occultation

Selected events:

15 Oct: Lunar occultation of Neptune

21 Oct: Conjunction of the Moon and Jupiter

23 Oct: Conjunction of the Moon and Mars

Source
https://in-the-sky.org/newscal.php?year=2024&month=10

Draconids meteor shower

Period: 6-10/10
Peak: 8-9/10 (best visibility between 22:00 and 0:50)
Zenithal hourly rate: variable
Parent: 21P/Giacobini-Zinner

Moon just before first quarter will be setting at 20:53, leaving the rest of night for possible observations.
The radiant is north-circumpolar, at its highest during the first half of the night.
Draconid meteors are exceptionally slow-moving (21 km/s).

Orionids meteor shower

Period: 2/10-7/11

Peak: 21-22/10 (best visibility between 22:00 and 0:50)

Up to 20 meteors per hour

Parent: 1P/Halley

Velocity: 67 km/s

Reduced visibility: Full Moon very close to radiant

Comet C/2023 A3 (Tsuchinshan-ATLAS)

Orbital period - millions of years (inbound)m possible ejection (outbound)

On September 27, the comet will fly a distance of 58.6 million kilometers from the Sun; that is roughly the same as the orbit of Mercury.

From next week it will be visible before dawn, and from October 9 visible at sunset. The closest passage to Earth is on October 12.

Image credit: Dominique Dierick via Flickr (CC BY-NC-ND 2.0)

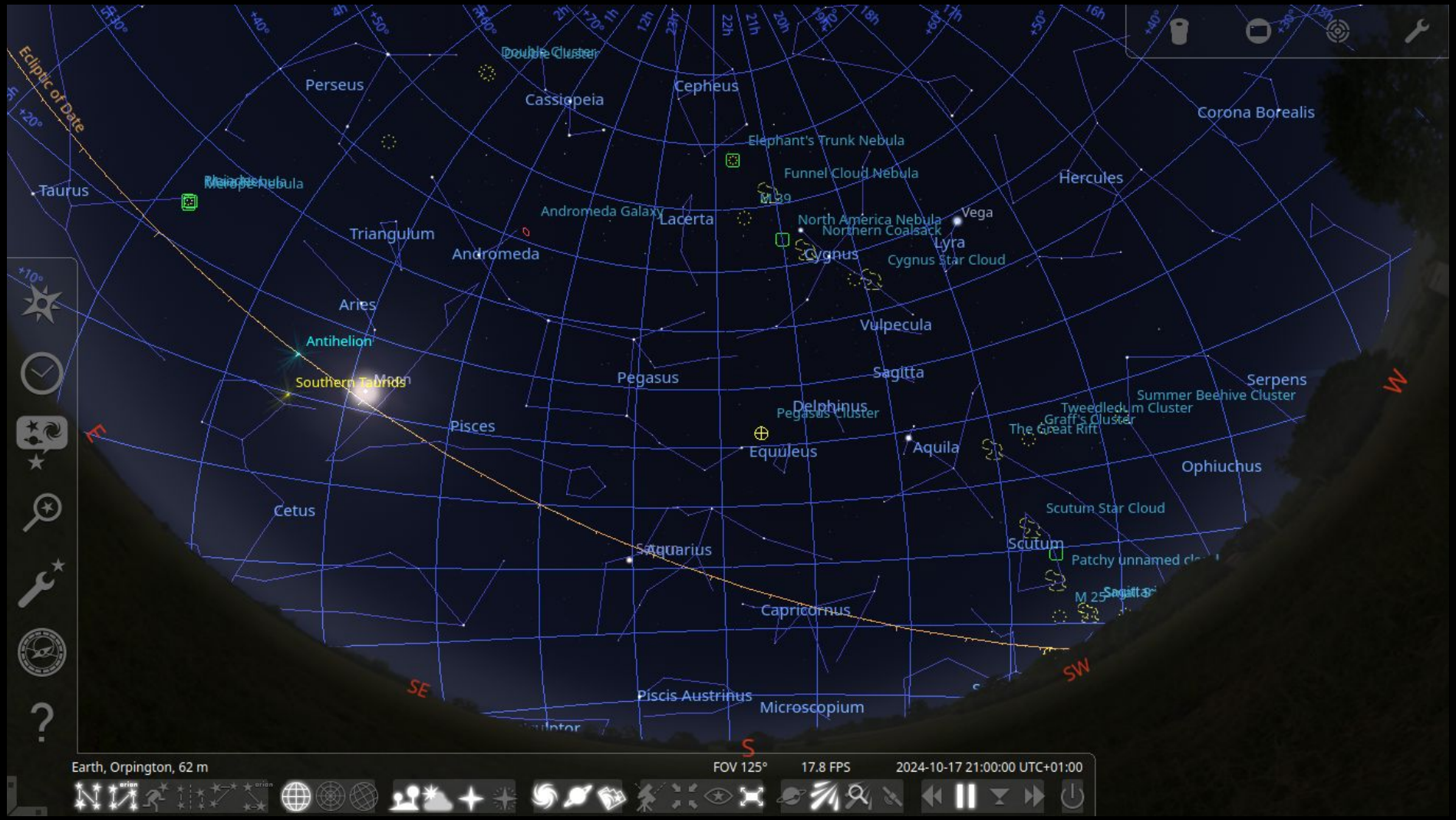
The next Observing evening will be at the OVMH on Thursday 17th October at 8pm. Change of room due to Otford Parish Council By-Election.

At the observing evening we will be observing:

- Moon (15 days old, Full Moon) rising @16:33
- Saturn @0.7 mag, rising 15:52
- Jupiter @-2.6 mag, rising 19:26

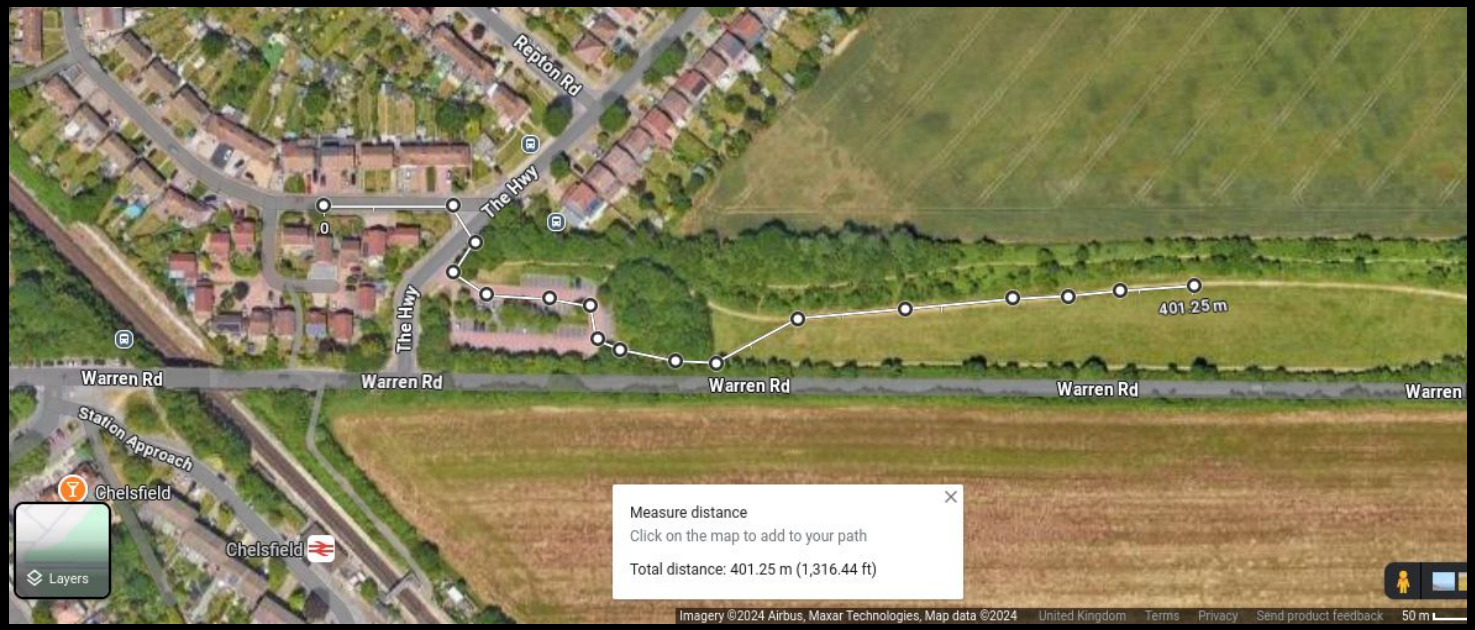
Sunset 17:01

Astronomical twilight: 18:52


Ecliptic of Date
Double Cluster
Perseus
Cassiopeia
Cepheus
Corona Borealis
Elephant's Trunk Nebula
Funnel Cloud Nebula
Hercules
Taurus
Merope Nebula
M39
Andromeda Galaxy
Lacerta
North America Nebula
Vega
Northern Coalsack
Triangulum
Andromeda
Lyra
Cygnus
Cygnus Star Cloud
Aries
Vulpecula
Antihelion
Southern Taurids
Pegasus
Sagitta
Serpens
Summer Beehive Cluster
Tweedledum Cluster
Graff's Cluster
Delphinus
Pegasus Cluster
The Great Rift
Pisces
Equuleus
Aquila
Ophiuchus
Cetus
Scutum Star Cloud
Scutum
Aquarius
Patchy unnamed cl
M 25
Capricornus
Piscis Austrinus
Microscopium
E
W
SE
SW
S
Earth, Orpington, 62 m
FOV 125°
17.8 FPS
2024-10-17 21:00:00 UTC+01:00

Informal meetings

The next informal meeting will be on Friday, 4th October at 8:30pm on Chelsfield Green. Free parking on single yellow lines at Stirling Drive or in Chelsfield car park off The Highway (£4.60).
The viewing spot is located some 400 m away on the green.




Thank you