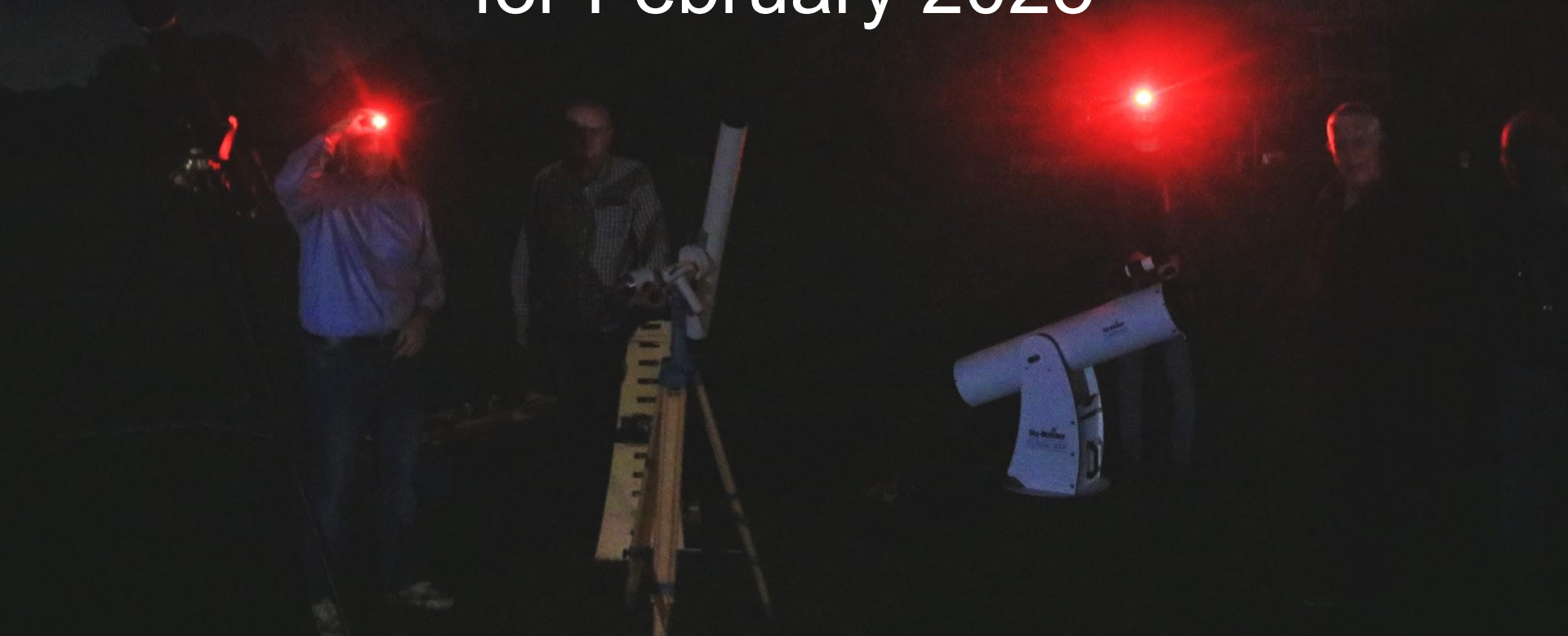




Orpington Astronomical Society

# Observing Officer's report for February 2025



# Sky chart

1/4/2025

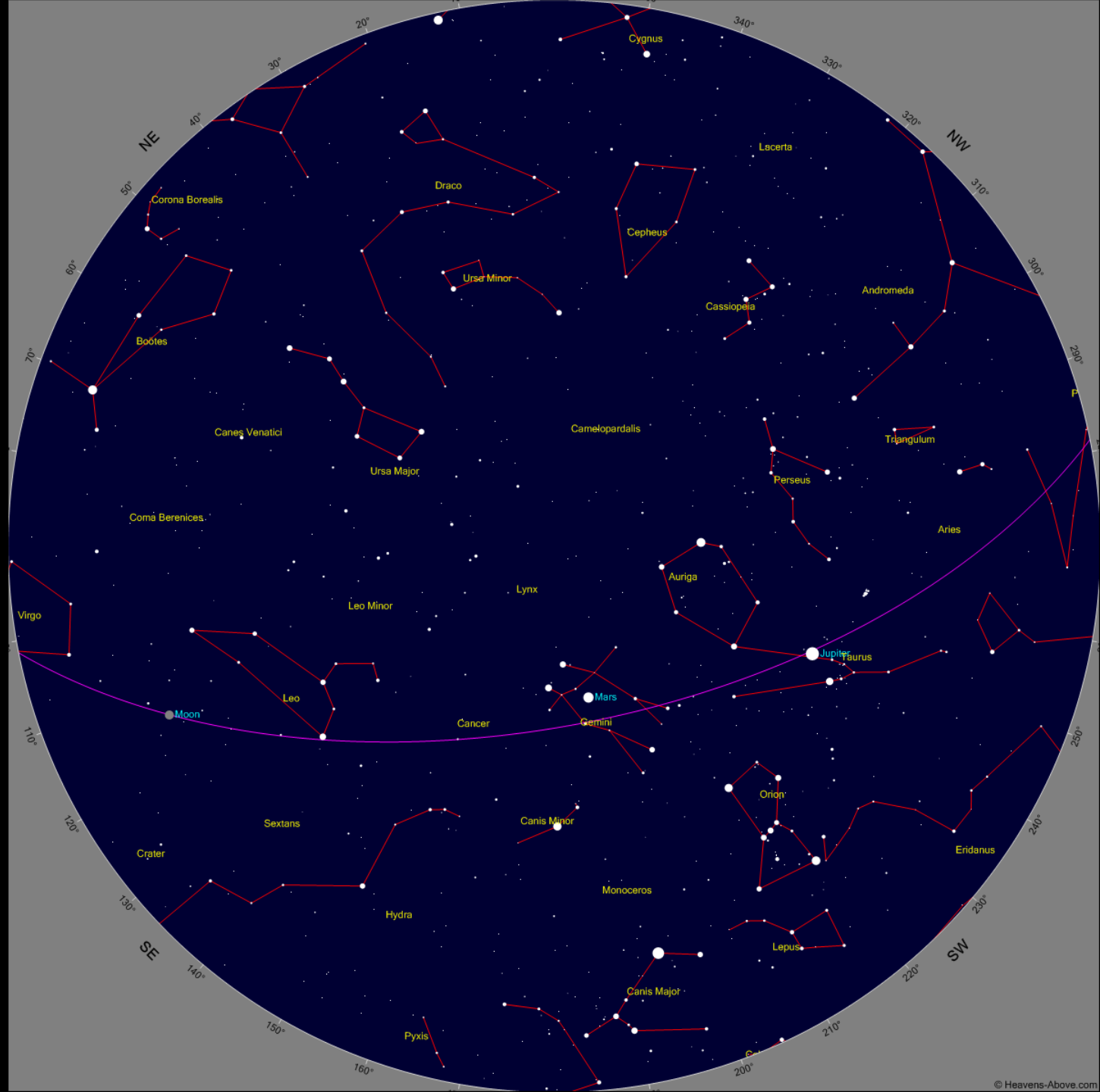
23:00

15/2/2025

22:00

28/2/2025

21:00



Source  
<https://heavens-above.com/>

# Phases of the Moon

<p>1<sup>st</sup> quarter</p>  <p>5<sup>th</sup> Feb 8:02</p>	<p>Full Moon</p>  <p>12<sup>th</sup> Feb 13:53</p>	<p>3<sup>rd</sup> quarter</p>  <p>20<sup>th</sup> Feb 17:32</p>	<p>New Moon</p>  <p>28<sup>th</sup> Feb 0:44</p>
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# Sun phenomena in February

Date	Twilight starts *)	Rise	Set	Twilight ends *)	Day length
1 <sup>st</sup>	5:43	7:38	16:50	18:45	9:12
15 <sup>th</sup>	5:21	7:13	17:15	19:08	10:02
28 <sup>th</sup>	4:56	6:47	17:39	19:30	10:52

\*) Astronomical twilight

# Planets in February

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

Mercury - extremely difficult to see (M) later  
difficult to see (E)

Venus - great visibility (E), -4.7 mag later  
becoming good,

Mars - perfect visibility (E), -1.1 mag reducing to -  
0.35

Jupiter - perfect visibility (E), -2.6 mag later good  
@-2.1 mag

Saturn - average visibility (E), 1.4 mag becoming  
difficult to see

Uranus - difficult to see (E), 5.7 mag

Neptune - extremely difficult to see, 8.0 mag

# Selected events:

Phenomenon	Date and time	Object 1	Mag. 1	Object 2	Mag. 2	Separation	Elevation	Solar Elongation
Conjunction	2025-02-25 09:45	Mercury	-1.22	Saturn	1.12	+1°26'12.1"	+20°23'50.78"	13°03'54.0"
Conjunction	2025-03-01 04:07	Mercury	-1.01	Moon	-4.79	+1°13'37.6"	- 27°32'47.75"	15°44'45.7"
<b>Perihelion</b>	<b>2025-02-19 19:49</b>	<b>Venus</b>	<b>-4.87</b>	<b>Sun</b>	<b>-26.77</b>	- 41°09'51.7"	<b>+11°53'12.29"</b>	<b>37°44'13.8"</b>
<b>Stationary (begin retrograde motion)</b>	<b>2025-02-28 03:26</b>	<b>Venus</b>	<b>-4.82</b>	—	—	—	- 25°20'19.33"	<b>31°35'36.4"</b>
<b>Conjunction</b>	<b>2025-02-09 18:51</b>	<b>Mars</b>	<b>-0.80</b>	<b>Moon</b>	<b>-12.01</b>	<b>+0°22'02.8"</b>	<b>+46°23'41.44"</b>	<b>146°49'34.3"</b>
<b>Stationary (begin prograde motion)</b>	<b>2025-02-24 09:23</b>	<b>Mars</b>	<b>-0.47</b>	—	—	—	- 12°24'26.63"	<b>130°53'21.4"</b>
Transit	2025-02-02 00:45	Jupiter	-2.51	Io	—	—	+26°38'20.97"	117°51'37.8"

# Selected events:

Phenomenon	Date and time	Object 1	Mag. 1	Object 2	Mag. 2	Separation	Elevation	Solar Elongation
Stationary (begin prograde motion)	2025-02-04 12:46	Jupiter	-2.49	—	—	—	+9°00'16.78"	115°18'56.6"
Conjunction	2025-02-08 19:01	Jupiter	-2.46	Callisto	6.33	+0°00'23.6"	+60°01'44.23"	111°01'59.4"
Shadow transit	2025-02-11 11:51	Jupiter	-2.43	Ganymede	5.07	+0°00'59.7"	+5°13'08.34"	108°21'07.1"
Conjunction	2025-02-17 01:58	Jupiter	-2.39	Callisto	6.42	+0°00'22.4"	+7°06'13.67"	102°53'30.3"
Eclipse	2025-02-17 14:04	Jupiter	-2.39	Callisto	6.43	+0°01'44.3"	+28°30'44.19"	102°24'24.1"
Shadow transit	2025-02-18 15:52	Jupiter	-2.38	Ganymede	5.13	+0°01'00.0"	+45°24'37.89"	101°22'19.5"

# Selected events:

Phenomenon	Date and time	Object 1	Mag. 1	Object 2	Mag. 2	Separation	Elevation	Solar Elongation
Shadow transit	2025-02-25 19:53	Jupiter	-2.32	Ganymede	5.18	+0°00'59. 5"	+55°14'58. .97"	94°34'23.5 "
Shadow transit	2025-02-26 00:56	Jupiter	-2.32	Callisto	6.47	+0°01'44. 6"	+11°12'21. 06"	94°22'26.6 "
Occultation	2025-02-27 16:39	Jupiter	-2.31	Io	—	—	+55°24'49. .86"	92°50'00.8 "
Shadow transit	2025-02-08 17:29	Saturn	1.12	Titan	8.73	+0°00'09. 7"	+17°30'33. .63"	28°08'16.6 "
Occultation	2025-02-16 14:30	Saturn	1.12	Titan	—	—	+31°26'08. .69"	21°06'49.0 "
Eclipse	2025-02-16 16:28	Saturn	1.12	Titan	8.75	+0°00'07. 1"	+21°49'38. .26"	21°02'29.6 "
Transit	2025-02-24 15:12	Saturn	1.12	Titan	—	—	+27°03'44. .69"	14°01'41.6 "
Shadow transit	2025-02-24 16:43	Saturn	1.12	Titan	8.75	+0°00'05. 4"	+16°50'48. .63"	13°58'23.8 "





**The next Observing evening will be at the OVMH on Thursday 20<sup>th</sup> February at 8pm.**

# At the observing evening we will be observing:

- Pleiades and Hyades
- Beehive Cluster
- January Salt-And-Pepper Cluster M37
- M42 Great Orion Nebula
- Venus @-4.4 mag, setting
- Mars @-0.4 mag, rising 12:36, 12" diameter
- Jupiter @-2.2 mag - both prominent in southern sky

Sunset 17:24

Astronomical twilight: 19:15

No Moon as in 3rd quarter and not rising until 2:45 the following day

nus

Altitude: 5.78 (reduced to 5.96 by 1.43 Airmasses)  
 Dec (J2000.0): 3h23m05.81s/+18°19'00"  
 RA: 3h23m05.81s  
 Alt: 17h21m  
 Az: 106m  
 Apparent diameter: +0°00'03.58", with rings: +0°00'13.69"  
 Physical diameter: 51118.0 km



Date and time

Date and time: 2025 - 2 - 20  
 Julian Day: 20 : 0 :

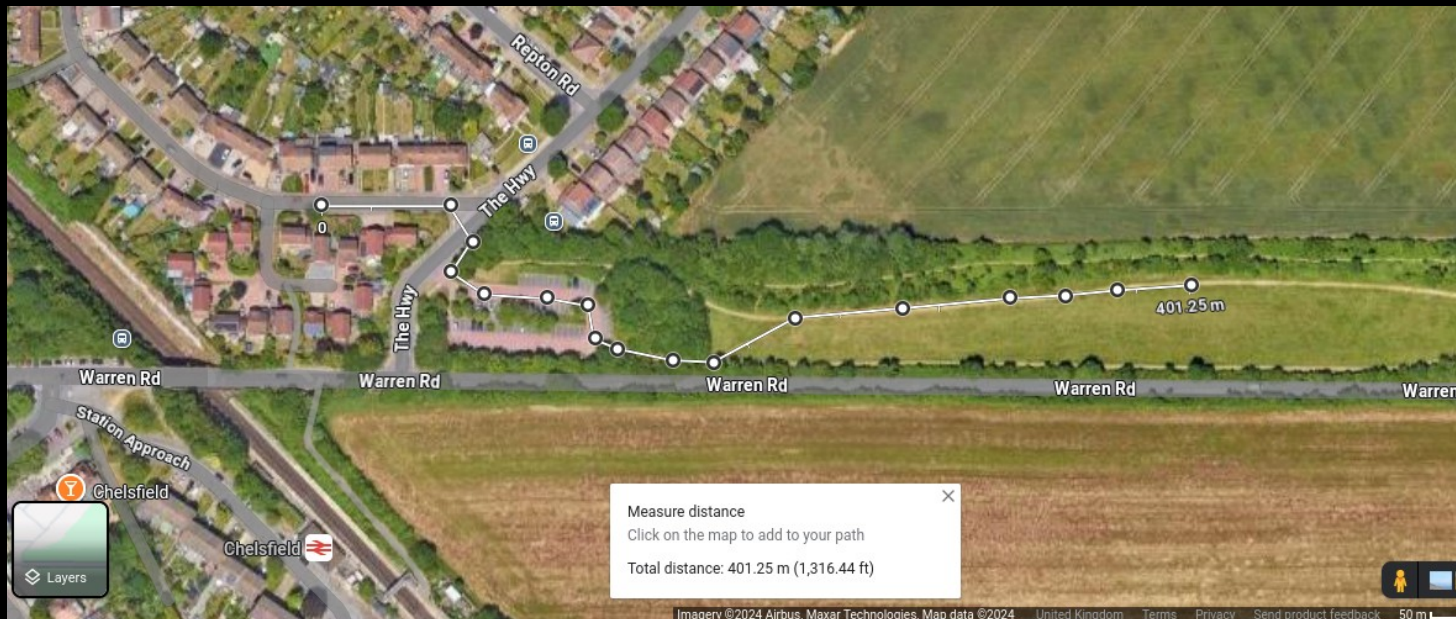
Earth, Orpington, 62 m

FOV 141° 12.15 FPS 2025-02-20 20:00:00 UTC+00:00

# Informal meetings

The next informal meeting will be on Saturday, 1st February 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

