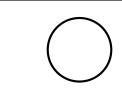


### SOUTH AFRICAN ASTRONOMICAL OBSERVATORY

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## What's Up - October 2025

## Moon



Full Moon

7 October 2025 05:48



**Last Quarter** 

13 October 2025 20:13



**New Moon** 

21 October 2025 14:25



The moon is at perigee (closest to Earth) on 08/10 at 14:36, at a distance of 359 819 km. It is at apogee (furthest from Earth) on 24/10 at 01:31, at a distance of 406 445 km.

#### **Planets**



Mercury (in Libra) ↑ 06:57 ↓ 20:40 Near the Moon on 23/10



**Venus** (in Virgo) ↑ 05:18 ↓ 17:20 Near the Moon on 19/10



Mars (in Libra) ↑ 07:13 ↓ 20:52 Near the Moon on 23/10



Jupiter (in Gemini) ↑ 01:52 ↓ 11:55 Near the Moon on 14/10



**Saturn** (in Aquarius)

↑ 16:48 ↓ 05:11

Near the Moon on 05/10 and 06/10

All the details (apart from the proximity to the Moon) are for mid-month in Cape Town.

### More information



Scan the QR code for more information about the South African Astronomical Observatory (SAAO) and for details about visiting the SAAO in Cape Town or Sutherland.

# Some bright stars in the evening sky

Altair: white star, brightest star in Aquila Antares: red supergiant in Scorpius Betelgeuse: red supergiant in Orion Canopus: yellowish-white star in Carina

Rigel: blue supergiant in Orion

Sirius: brightest star in the night sky, in Canis Major

Spica: bluish-white star in Virgo The Pointers: Alpha and Beta Centauri

#### **Meteor showers**

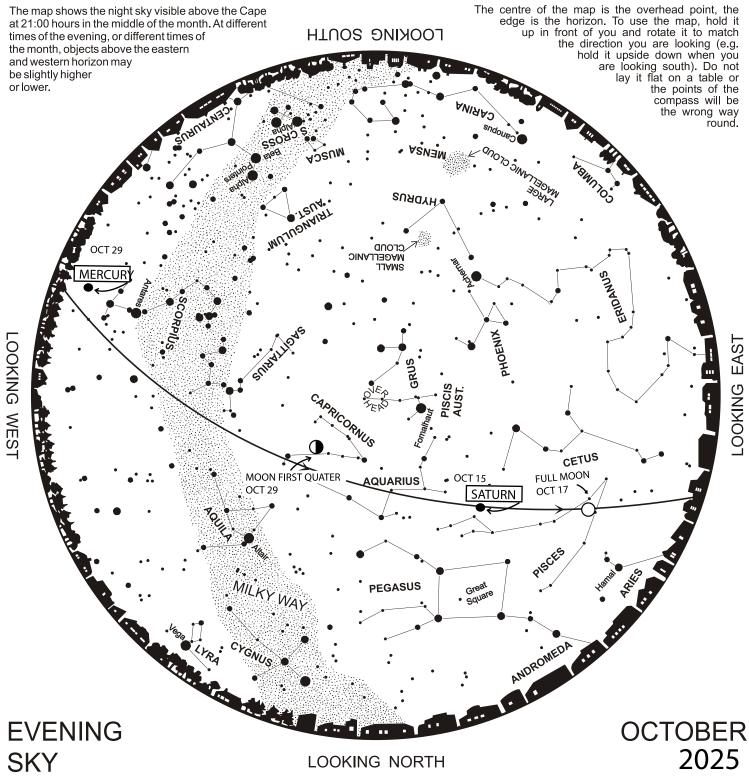
The Southern Taurids are active from 20/09 until 20/11, peaking on 05/11 with 7 meteors per hour. They are best viewed between 21:30 and 03:30. The Orionids are active from 02/10 until 07/11, peaking on 21/10 with 20 meteors per hour. They are best viewed between 00:00 and 04:00. The Northern Taurids are active from 20/10 until 10/12, peaking on 12/11 with 5 meteors per hour. They are best viewed between 21:30 and 03:30.

#### **Fun facts**

While the great English astronomer John Herschel was in Cape Town, a New York newspaper ran a series on his "discoveries". Turning his newly built superb telescope to the Moon, it was claimed, he could see flora and fauna, and even a magnificent temple. While the series was intended as satire, some people actually believed this "Great Moon Hoax".

More credible evidence for past life on Mars was presented in a recent Nature paper. A thorough analysis of data from the Perseverance rover revealed textures, chemical and mineral characteristics, and organic signatures that might have originated from microbial life. This is exciting, but not conclusive, and further research is warranted. We'll have to wait and see whether our red neighbour once was a stronghold of life or these tantalising signatures are (in the words of the lead researcher) "a valuable lesson in all of the ways that nature can conspire to fool us."





As spring deepens in Cape Town, the Milky Way shifts westward, with the Southern Cross (Crux) now lower in the southern sky. Nearby, the Small (SMC) and Large Magellanic Clouds (LMC), dwarf galaxies bound to the Milky Way, appear as faint patches and are slowly merging with our galaxy. The LMC is part of the Mensa (Latin for table) constellation, the faintest constellation aptly named after Table Mountain in Cape Town. In the west, Sagittarius' Teapot asterism points toward the galactic centre, while Scorpius and its bright red supergiant star Antares sink closer to the horizon. To the northeast, Pegasus rises with its Great Square, and Pisces lies faintly below it. Saturn dominates the evening sky among Pisces, Aquarius, and Cetus.

Mercury offers a brief viewing window on October 29 - 30, low in the west after sunset. Mars fades from view before 21:00, while Jupiter becomes visible after midnight.

October's full Moon occurs on the 7th, and the new Moon on the 21st brings darker skies ideal for comet viewing. Comet C/2025 R2 (SWAN), about 39 million km away, is best seen between October 20–23 before midnight near Sagittarius. Comet C/2025 A6 (Lemmon) may also be spotted low in the west after sunset, with visibility improving in November. Binoculars or a small telescope will enhance chances of seeing both.



