

ASSA DEEP AND SHALLOW SKY OBSERVING BULLETIN

ON THE UPCOMING LUNAR ECLIPSE

DIRECTOR OF DEEP AND SHALLOW SKY: COLIN STEYN

Event date: Sunday 7 September 2025

Location: Visible across South Africa, Asia, Europe and Australia

Peak eclipse time (SAST): 20:11

Event type: Total Lunar Eclipse (Blood Moon)

DEEP SKY CONTEXT: A CELESTIAL ALIGNMENT WORTHY OF AWE

On the evening of Sunday, 7 September 2025, the moon will glide into earth's umbral shadow, producing a total Lunar Eclipse – the longest since 2022. This cosmic ballet will plunge the moon into a burnt crimson hue, creating the dramatic 'Blood Moon' effect that has captivated skywatchers for centuries.

- Totality duration: 1 hour 22 minutes.
- Overall eclipse duration: 5 hours 27 minutes.
- Maximum eclipse: 20:11 SAST (18:11 UTC).
- Moon's position: In the constellation Aquarius, near perigee – appearing slightly larger and deeper red.

This eclipse offers a rare opportunity to observe the moon's transformation in real time, from brilliant silver to dusky red, as earth's atmosphere refracts sunlight around its edges.

BONUS OBSERVING TARGETS

While waiting for the eclipse phases, consider scanning nearby regions of the sky:

<u>Target</u>	<u>Planet</u>	<u>Location</u>	<u>Notes</u>
• Saturn	Planet	East (Aquarius)	Bright and well placed for viewing
• Neptune	Planet	East (Aquarius)	Near the eclipsed moon – challenge object!
• M2	Globular Cluster	East (Aquarius)	A faint but rewarding Deep-Sky object
• Albireo	Double Star	North-East (Cygnus)	Stunning colour contrast in binoculars.

ASTRONOMICAL SIGNIFICANCE

This eclipse is part of Saros Series 128 and occurs just 2.7 days before lunar perigee, enhancing its visual impact. The moon's passage through the densest part of earth's shadow will produce one of the richest red hues seen in years. Unlike

Solar Eclipses, Lunar Eclipses are safe to view without protection and are visible to anyone on the night side of earth. South Africa is especially fortunate – this eclipse will be visible nationwide, from start to finish.

FINAL THOUGHTS

Mark the date and time, invite friends and family. The 7 September 2025 Blood Moon is not an astronomical event – it's a shared moment of wonder under the stars. Whether you're sketching the moon's phases, capturing it on camera or simply soaking in the view, this eclipse promises to be unforgettable.

Clear skies and happy observing!

Colin Steyn

27 August 2025

Bloemfontein Area Times

TOTAL LUNAR ECLIPSE

17:54 Moonrise

18:27 Partial Eclipse begins

19:30 Total Eclipse begins

20:11 Maximum Eclipse

20:52 Total Eclipse ends

21:56 Partial Eclipse ends

22:55 Penumbral Eclipse ends

SAVE THE DATE
7 September 2025

FRIENDS OF BOYDEN OBSERVATORY

NAVAL HILL Planetarium

Follow us for more.