

Amazing Space!

May - July 2018

Getting started in astronomy is as easy as looking up. This poster shows you how to find the planets Mercury, Venus, Mars, Jupiter and Saturn plus the Moon and constellations without a telescope. There is also a morning lunar eclipse plus three planets at opposition to observe!

See the Moon pass under Jupiter on 27 and 28 May 2018

Chart prepared for 6.30 pm AEST. Look above the Eastern horizon at the end of evening twilight.

See the Moon, Mars and Saturn on 27 - 30 June 2018

Chart prepared for 7.30 pm AEST. Look above the Eastern horizon.

See the Moon pass Mercury and Venus on 15 and 16 July 2018

Chart prepared for 6.30 pm AEST. Look above the Eastern horizon at the end of evening twilight.

See a planet without a telescope

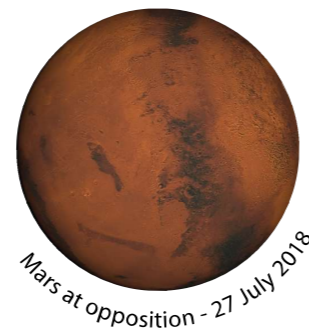
Despite what many people think, you don't need a telescope to see a planet in the night sky. The origins of word planet (ancient Greek for 'wandering star') gives you a clue as to what you need to look for.

To make planet spotting even easier, use the Moon as a celestial signpost to find Mercury, Venus, Mars, Jupiter and Saturn at different times during May, June and July 2018. The charts at left are for the evening sky. More charts can be found online at Nightskyonline.info.



Mars at opposition

July and August 2018 present a unique opportunity to observe humanities potential future home Mars. This small rocky planet has an egg shaped orbit which usually keeps it far from Earth. However, every 26 months the planet comes closest to Earth, presenting the opportunity to view some of the planets largest features through amateur telescopes. Mars reaches opposition on 27 July 2018 with the planet being closest to the Earth on 31 July (at a distance of 57.59 million kilometers). It will appear as a dazzling star to the unaided eye above the Eastern horizon at the end of evening twilight from mid-July onwards. The next opposition of Mars will occur in October 2020.



What is a planetary opposition?

Mars is said to be "in opposition" when it is located on the opposite side of the Earth to the Sun. From a practical viewpoint, this means Mars will rise as the Sun sets on the day of opposition. When a planet is on the opposite side of the Sun to the Earth, it is said to be in conjunction.



Other Astronomy Events

- 9 May 2018 - Jupiter at opposition
- 21 June 2018 - Winter Solstice. The shortest day of the year.
- 27 June 2018 - Saturn at opposition
- 7 July 2018 - Earth is furthest in its elliptical (egg shaped) orbit from the Sun for the year.
- 28 July 2018 - Total Lunar Eclipse. Partial phase begins at 4.22 am AEST.
- 31 July 2018 - Mars closest approach to Earth

Constellations

Constellations are imaginary pictures in the sky. Can you imagine a giant Cross or a Scorpion in the night sky? Use these charts to help you find the stars around which the ancient people created their constellations.

Crux 'The Southern Cross' and 'The Pointers'

Look above the southern horizon at the end of evening twilight (April-June).

Scorpius 'The Scorpion'

Look low above the south-eastern horizon at 7.30 pm in early May and 6.30 pm in early June.

Moon Phases

Crescent Moon	First Quarter Moon	Gibbous Moon	Full Moon
20 May 18 June 18 July	22 May 20 June 20 July	25 May 23 June 23 July	30 May 28 June 28 July

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