

# Amazing Space!

## July - September 2015

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Getting started in astronomy is as easy as looking up. This poster shows you how to find the planets Mercury, Venus, Jupiter and Saturn plus the Moon and constellations without a telescope. Planet spotting will in fact be totally dazzling in the first two weeks of July as Venus and Jupiter will be close together in the evening twilight. Mercury will be easy to locate over the period 16 August - 15 September. Look low above the Western horizon around 6:30 pm AEST.

See Venus, Jupiter and the Moon together on 19 July 2015



Chart prepared for 6:30 pm AEST. Look low above the North Western horizon.

See Saturn and the Moon together on 22 August 2015



Chart prepared for 7 pm AEST. Look high above the North Western.

See Mercury, the star Spica and the Moon together on 15 and 16 September 2015

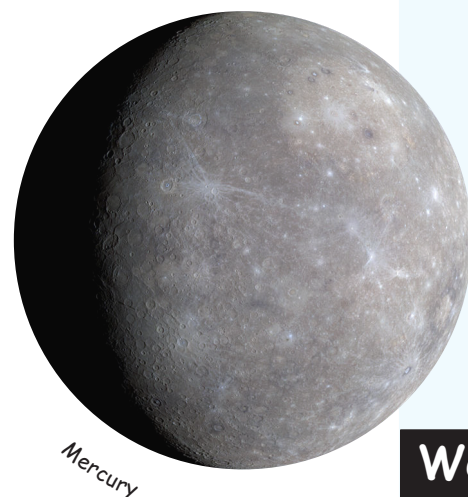


Chart prepared for 7 pm AEST. Look low above the Western horizon.

## 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 the 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, Saturn and Jupiter at different times during July, August and September 2015.



## Phases of Mercury

Mercury displays phases just like the Moon.

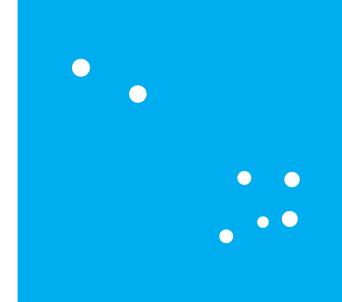
Mercurys are more difficult to view because of Mercurys closeness to the Sun and its great distance from Earth.

The chart at left shows what a highly magnified inverted view of Mercury would look like through a high magnification telescope.

## Constellations

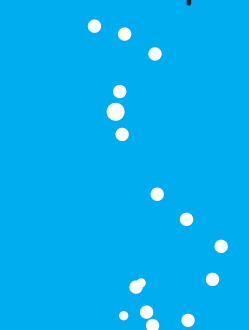
Constellations are imaginary pictures in the sky. Can you imagine a giant Cross or a Scorpion in the night sky? Use these charts to help you find the stars around which the ancient people created their constellations.

Crux 'The Southern Cross' and 'The Pointers'



Look high above the South Western horizon at the end of evening twilight.

Scorpius 'The Scorpion'



Look high above the South Eastern horizon at 8pm in mid-July and 7pm in mid-August.

Image credits: Full Moon and Mercury courtesy NASA

**Crescent Moon**



July 21  
August 20  
September 18

**First Quarter Moon**



July 24  
August 23  
September 21

**Gibbous Moon**



July 26  
August 24  
September 23

**Full Moon**



July 2 / 31  
August 30  
September 28

## Moon 'swallows' Venus

A rare daytime occultation of Venus by the Moon will occur on Sunday 19 July 2015 for observers North of the Gold Coast. Observers South of the Gold Coast will only see a close encounter between Venus and the Moon. More information can be found here: [http://nightskyonline.info/?page\\_id=15873](http://nightskyonline.info/?page_id=15873)