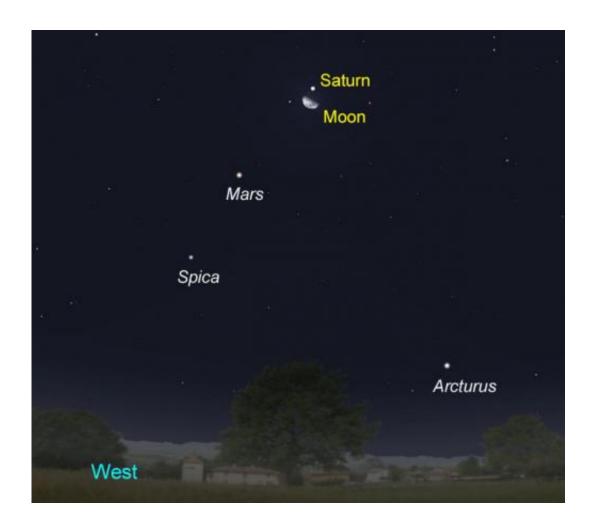


Lunar occultation of Saturn

August 1 2014, by Tanya Hill



Look towards the west to see the occultation. Credit: Museum Victoria / Stellarium

On the night of Monday August 4, mainland Australia will see <u>Saturn</u> disappear behind the moon. It's the third time this year that the moon and Saturn will perfectly line up, as viewed from our part of the world.



This event is known as a lunar occultation of Saturn and this time around occurs with a <u>first quarter moon</u>.

It will be possible to watch Saturn disappear behind the dark or unlit area of the moon and reappear, about an hour later, from the moon's bright side. Those in Tasmania will see Saturn approach very close to the moon but not disappear from view.

With half the moon in darkness, this occultation is set to be the best of the three, as long as the weather cooperates.

The nice thing about a lunar occultation is that it's easy to find the moon. Central and eastern Australia will see the moon in the west, with the red planet Mars and the bright star Spica below.

For Perth, the occultation occurs just on half an hour after sunset. So the sky will still be a little bright and the moon will be found high in the north.

The first occultation for 2014 occurred February 22, but happened during daylight hours, so Saturn was too faint to see.

This was followed up on May 14, with Saturn disappearing behind the <u>full moon</u>. It looked amazing through a telescope, but the bright full <u>moon</u> (and light clouds in many areas), made it hard to see with the naked eye.

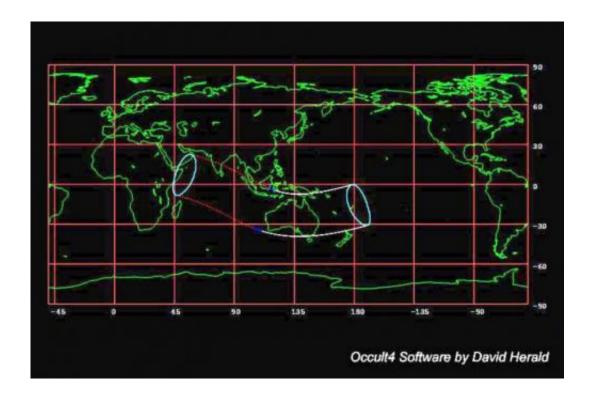
Of course, if you have access to binoculars or a small telescope viewing the occultation will be all the better. Saturn always provides an amazing view and it's astonishing to watch the planet and its rings as they disappear then reappear again.

As explained previously on The Conversation, occultations of Saturn



occur in groups and we are about to reach the end of this occultation season.

By the end of the year, a dozen lunar occultations of Saturn will have occurred, with Australia ideally positioned for Monday night's event as shown in the graphic below.



The occultation of Saturn by the first quarter moon is centred directly on mainland Australia. Credit: David Herald/Occult4

It identifies the area on a world map that can potentially see the occultation. Over the Indian Ocean the occultation occurs during daylight hours and therefore is denoted by the red-dashed lines. Australia is centred directly between the white-bold lines to indicate that the occultation will be seen at night from here.



The next batch of Saturn occultations will come in 2019. Australia will see four throughout the year, although two of them will be during daylight hours.

Here's hoping Monday night will be a great time for Australians to head outdoors and look up.

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