

June's planetary huddle

On late June evenings in 2005 three bright planets will engage each other in a complex celestial dance as they bunch together low in the western sky. The close approaches or *conjunctions* of Mercury, Venus and Saturn on the 26th and 27th of the month will be one of the highlights of this year's celestial calendar.

In the middle of June after dark the elusive innermost planet Mercury appears just above the north-west horizon. The planet is "elusive" as it rarely strays far enough from the Sun to be easily seen. Bright Venus is low in the north-west above Mercury while the ringed planet Saturn is somewhat higher in the sky. The giant planet Jupiter is separate from the other two high in the north-east.

Each night after it first appears, Mercury moves closer to Venus which in turn is climbing higher towards Saturn. On 26 June the climbing duo will pass by the ringed planet at a separation of less than three moon-widths. By the next evening they are a little further from Saturn, but Mercury will be so close to Venus that it may not be possible to separate the two planets without a telescope.

The motion of the planets over a week around the conjunction is apparent in the attached views of the north-west horizon (drawn for Sydney at 6pm each night, about an hour after sunset, but not too different for many other parts of Australia).

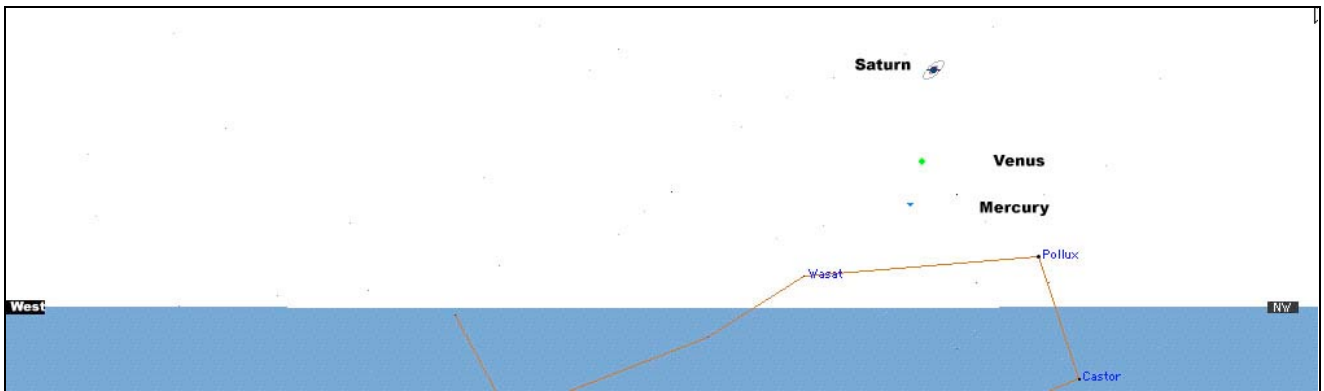
Close groupings of the planets can provide a spectacular sight. This one should be no exception, but Mercury, Venus and Saturn will be very low in the sky on 26 and 27 June. To see them close together you will need a view towards the north-west horizon that is not blocked by shrubs, trees or houses.

OTHER CONJUNCTIONS

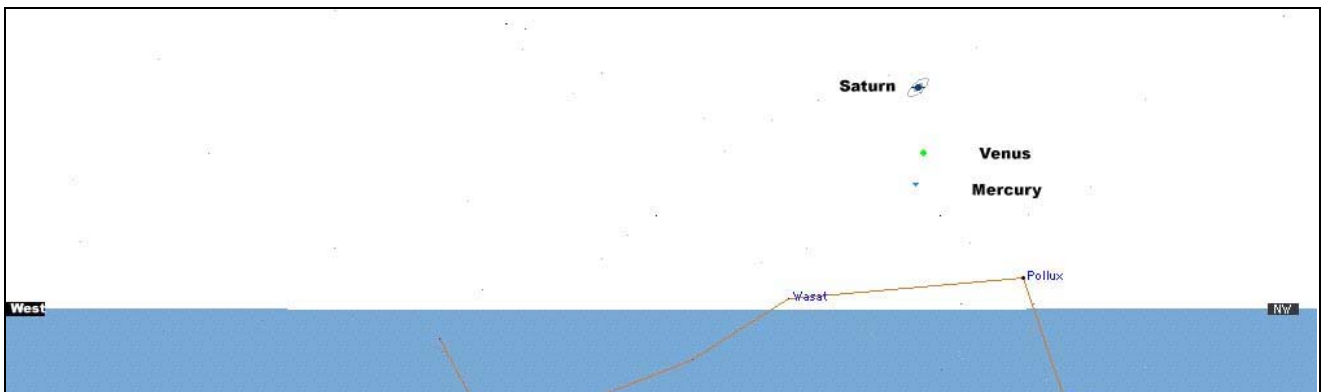
Three or more planets grouping in this way is quite a rare occurrence. For example, the last time these three planets, Mercury, Venus and Saturn, could be seen from Australia less than two moon-widths from each other was in the middle of the 19th century. They formed a close bunch on the morning of 7 April 1848 as well as on the morning of 22 February 1845.

There is one exceptionally good planetary grouping to which younger readers can look forward. This is on the evening of 7 September 2040 when all five naked eye planets, Mercury, Venus, Mars, Jupiter and Saturn, will appear in the western sky.

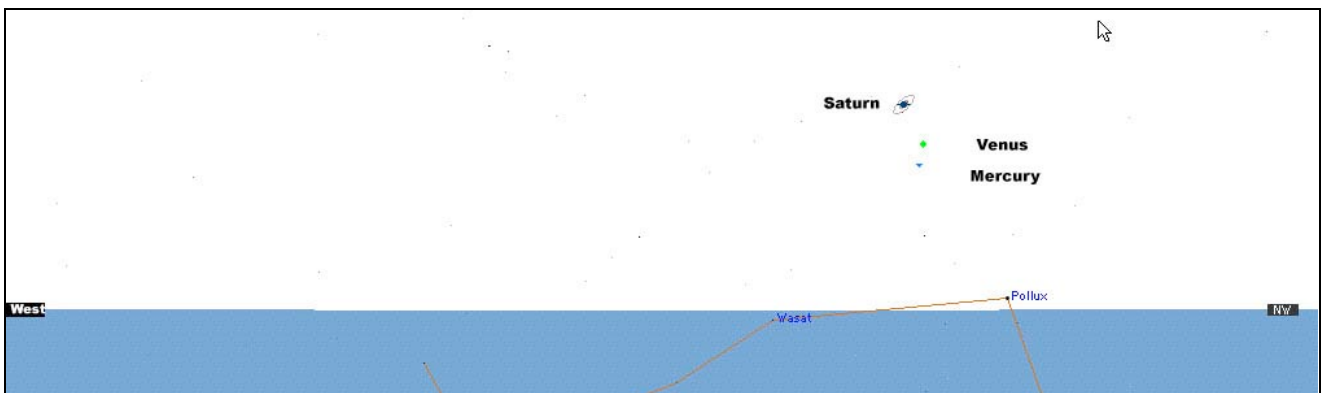
However, if you do not want to wait three and a half decades to see a close grouping of the planets have a look at the one this June!



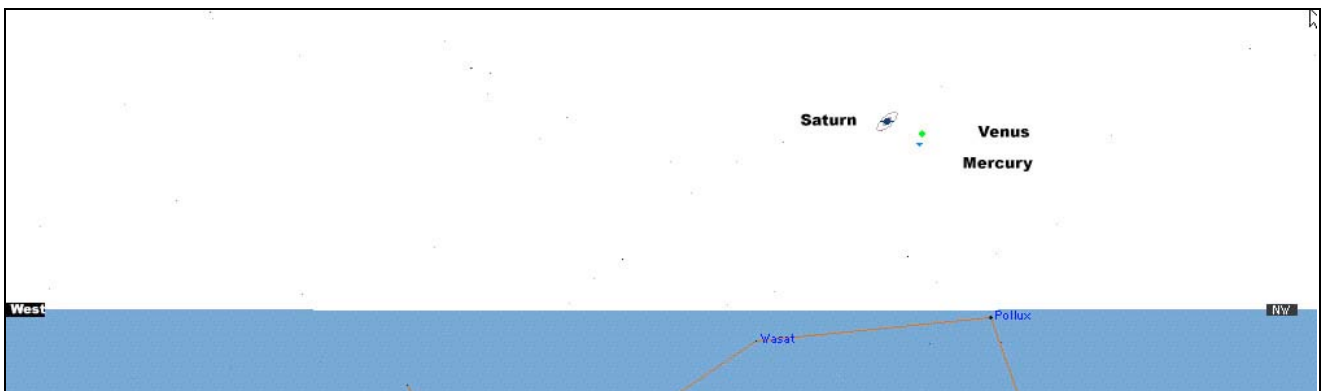
View of the West to North-West horizon from Sydney, 6pm 23 June.



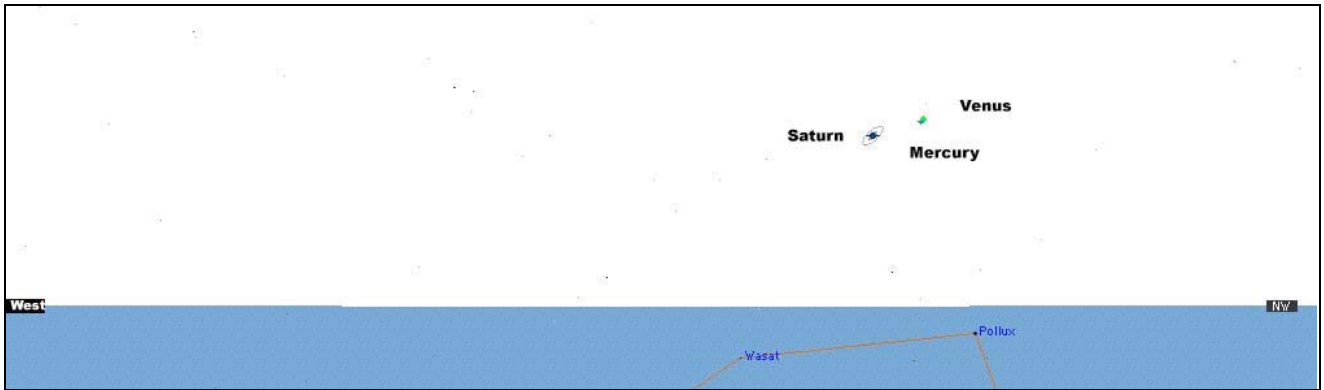
View of the West to North-West horizon from Sydney, 6pm 24 June.



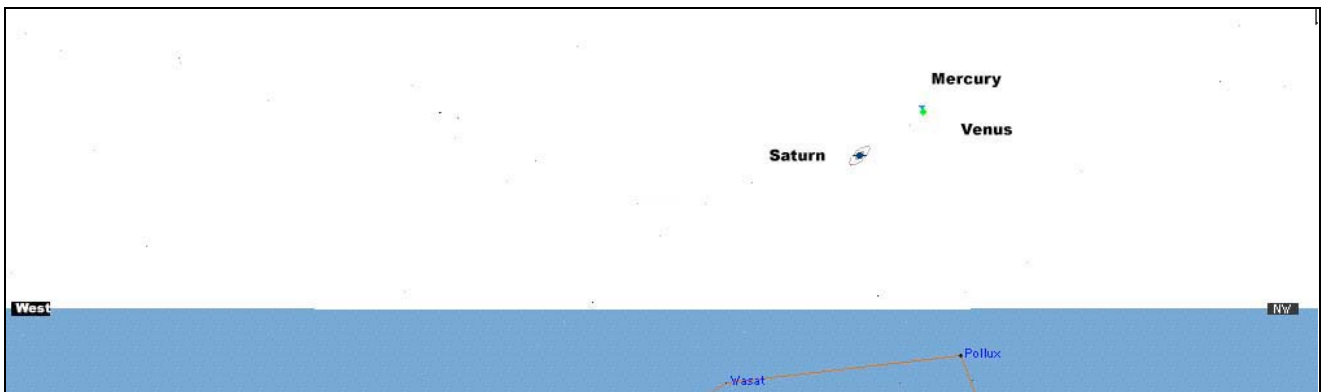
View of the West to North-West horizon from Sydney, 6pm 25 June.



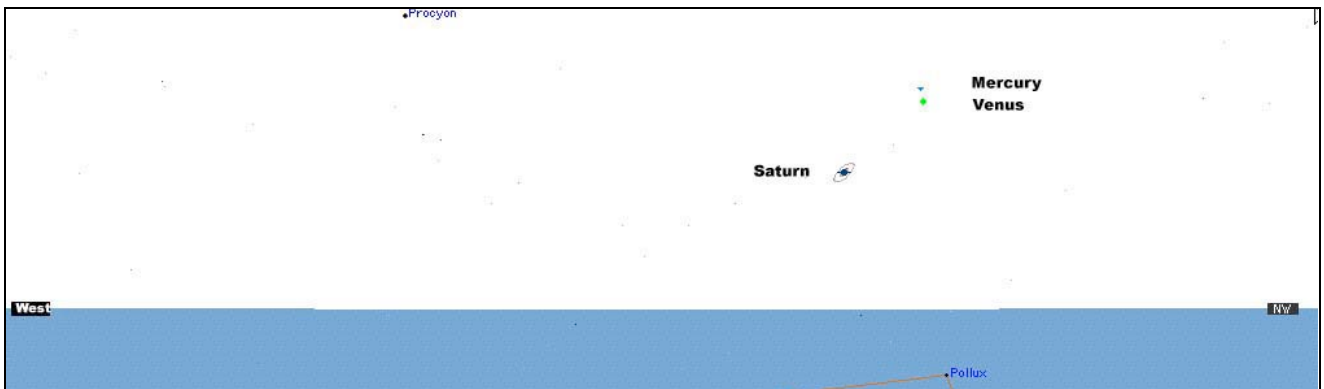
View of the West to North-West horizon from Sydney, 6pm 26 June.



View of the West to North-West horizon from Sydney, 6pm 27 June.



View of the West to North-West horizon from Sydney, 6pm 28 June.



View of the West to North-West horizon from Sydney, 6pm 29 June.

More information on Planetary Alignments

Astronomy Factsheet No.7 <http://www.astronomy.org.au/ngn/engine.php?SID=1000011>

John Mosely, Griffith Observatory <http://www.griffithobs.org/SkyAlignments.html>

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