

Forthcoming CAWAS Meetings on Zoom at 7:00pm GMT		
Friday January 8th	Paul Fellows	Hawkins Black Holes and the edge of Physics
Friday February 12th	Richard Miles	When is a comet not a Comet?
		When it is Schwassmann Wachmann!
Friday March 12th	Peter Williamson	Herschel to Hawkwind

Observing Sessions with RADAS at Barby Cricket Club at 19:00 (subject to Covid restrictions).
 In general two dates are given, the one to be used will be notified the day before.
2021 January 8/9, 22/23 February 5/6, 19/20 March 12/13, 19/20

January	Event	
Saturday	9th	Mercury near Saturn
Monday	11th	Moon near Venus Mercury near Jupiter
Wednesday	13th	Moon - new ●
Thursday	14th	Moon near Mercury
Wednesday	20th	Moon - first quarter, Mars near Uranus ☾
Thursday	21st	Moon near Mars
Sunday	24th	Mercury greatest elongation east, Saturn conjunction
Thursday	28th	Moon - full ○
Friday	29th	Jupiter conjunction
February		
Monday	1st	Occultation of Nu Virginis
Thursday	4th	Moon - last quarter ☾
Monday	8th	Mercury inferior conjunction
Thursday	11th	Moon - new ●

Coventry and Warwickshire Astronomical Society
 The society usually meets on the second Friday in the month, at Earlsdon Methodist Church Hall. The meetings begin at 19:15 and end at 21:30. **(Suspended until further notice)**

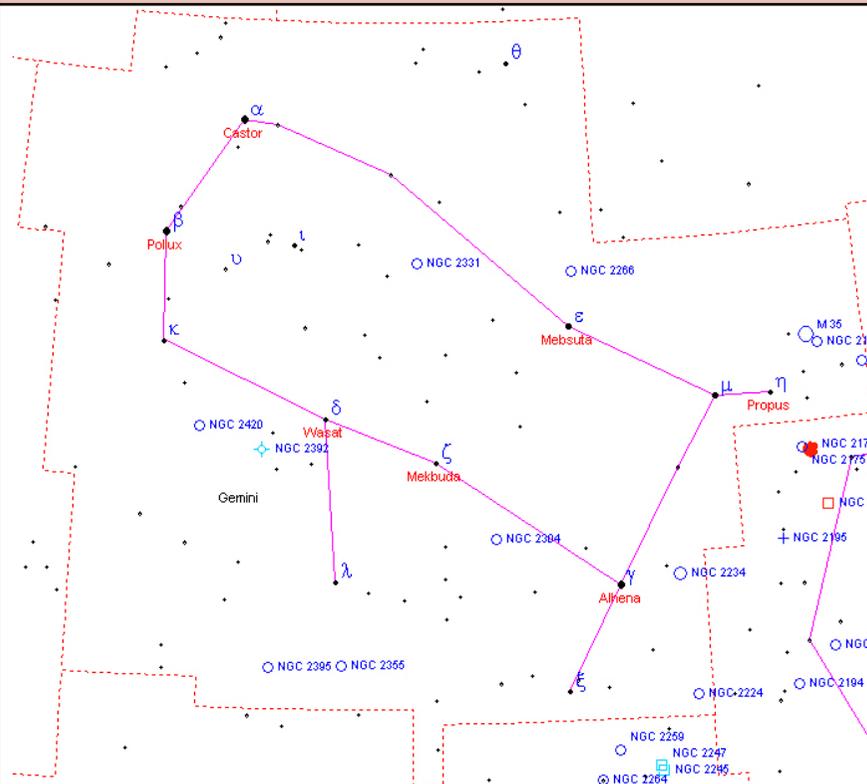
Web Site: <http://www.covastro.org.uk>
Mailing list - Note the change to groups.io
 Join the CAWAS mailing list and receive irregular information of astronomical events and CAWAS news.
 To subscribe just send an empty email to: covworksastro+subscribe@groups.io
 To post a message send to: covworksastro@groups.io
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Coventry and Warwickshire Astronomical Society

Sky Notes

January 8th to February 12th 2021 No. 280



Gemini – The Twins

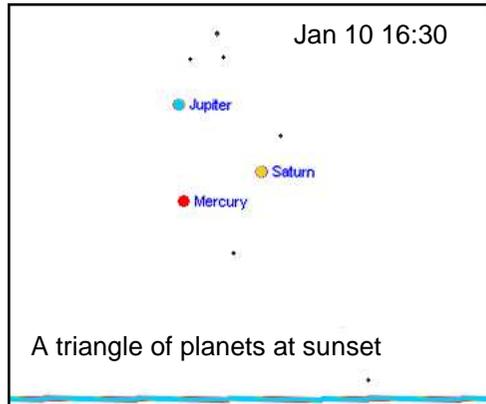
Castor and Pollux are the heavenly twins, but they are not identical. Pollux is a single giant yellow-orange star (mag. +1.1), Castor, though, is a system of six stars, the main components of which are a pair of blue-white stars (each a spectroscopic binary) one +1.93 and the other +2.97 separated by 4". ζ (Zeta) is a Cepheid variable star varying between +3.68 and +4.16 every 10.148 days - compare its brightness with δ (+3.5). Also not to be missed are the bright (+5.3) open cluster M35 and the planetary nebula, Eskimo Nebula NGC2392 (+10.1).

Time given in these skynotes is Co-ordinated Universal Time (UTC) known as GMT here in the UK.

Sun moves north from Sagittarius into Capricornus this month.

January 8th	Rise 08:14	Set 16:12	Dec $-22^{\circ} 13'$
February 12th	Rise 07:28	Set 17:14	Dec $-13^{\circ} 28'$

Mercury ($-0.9 5.2''$ 92% to $+3.0 10.3''$ 5%) moves from Capricornus into Aquarius and after its conjunction last month is visible very low in the SW just after sunset. Between Jan 9 and 12 it passes just 2° to the south of first Saturn then Jupiter, making an interesting triangle of planets which is joined (4° south) by the thin crescent Moon on Jan 14. On Jan 24 Mercury reaches its greatest elongation east of 18.6° and on Feb 8 passes through inferior conjunction.



Venus ($-3.9 10.5''$ 95% to $-3.9 9.9''$ 98%) moves from Sagittarius into Capricornus and is visible very low down in the SE just before dawn at the beginning of the month, gradually being lost in the Sun's glare as the month progresses. On Jan 11 the crescent Moon lies 7° to the west.

Mars ($0.0 9.6''$ to $+0.7 7.2''$) lies in Aries and is visible high in the southern sky for the first half of the night, setting around 01:30. Throughout the month it gradually overtakes Uranus, passing it to the north on Jan 20 at a distance of $1^{\circ} 37'$. On Jan 21 the Moon lies 7° to the east.

Jupiter ($-2.0 32.6''$) lies in Capricornus and can be seen very low in the SW just after sunset at the beginning of the month, gradually disappearing into the Sun's glare as it moves towards conjunction on Jan 29.

Saturn ($+0.6 15.1''$ to $+0.7 15.2''$) lies in Capricornus, now 2° to the west of Jupiter and like Jupiter moves towards conjunction on Jan 24 making it only visible at the beginning of the month.

Uranus ($+5.7 3.6''$ to $+5.8 3.5''$) lies in Aries and is visible high in the southern sky for the first half of the night, setting at 02:30 at the beginning of the month and 00:15 at the end.

Neptune ($+7.9 2.2''$ to $+8.0 2.2''$) lies in Aquarius and is visible in the SSW in the early evening, setting at 21:40 at the beginning of the month and 19:25 at the end.

Lunar Occultations

The bright limb of the gibbous Moon passes in front of Nu Virginis (mag. +4.0) at 00:26 on Feb 1. It reappears from behind the dark limb at 01:35.

The Clair-obscure effects known as the **Lunar X and V** are visible on the Moon's terminator on Jan 20.

Asteroids at opposition this month:-

Jan 21	Eunomia	+8.4
Jan 24	Irene	+9.3
Jan 28	Hygiea	+9.9
Feb 1	Melpomene	+9.4

Their paths through Cancer are shown in the chart.

Milky Way passes to the east of Orion and contains a number of open clusters. One of these, NGC2244 is surrounded by the famous Rosette Nebula, NGC2237. This emission nebula is excited by the radiation from the stars in the cluster, which in turn were born out of the gas of the nebula.

