NAA

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In Focus

No. 270

December 2017- January 2018

What to look out for in the night sky

3 December - Supermoon This full moon was known by early Native American tribes as the Full Cold Moon because the cold winter air is settling in. The Moon will be at its closest approach to the Earth ('Perigee') and should look slightly larger and brighter than usual.

13 December - NGC 1980 Open Star Cluster This cluster should be visible as part of Orion's sword. It will be at its highest point over the southern horizon at midnight. The image to the right shows the cluster (www.space.com).

Close approach of Moon and Mars You can use binoculars to view these 2 bodies, between 03:30 and 07:35.

13-14 December - Geminids Meteor Shower The Geminids shower is considered by many to be the best meteor shower, producing up to 2 meteors per minute at its peak. It is produced by debris left behind by an asteroid called 3200 Phaethon, discovered in 1982. The shower runs from 7-17 December but peaks on the night of the 13th and morning of the 14th. Best viewing will be after midnight, meteors radiating from the constellation Gemini but can appear anywhere in the sky.

21 December - December Solstice The December solstice occurs at 16:28. The sun is at its southernmost position in the sky, directly over the Tropic of Capricorn. The South Pole of the earth will be tilted towards the Sun. This is the first day of winter (winter solstice) in the Northern Hemisphere and the first day of summer (summer solstice) in the Southern Hemisphere.

21-22 December - Ursids Meteor Shower The Ursids is a minor meteor shower producing 5-10 meteors per hour. It is produced by dust grains left behind by comet Tuttle, which was first discovered in 1790. The shower runs from 17-25 December but peaks on the night of the 21st and morning of the 22nd. There should be dark skies for optimal observing. Meteors will radiate from the constellation Ursa Minor but may be seen anywhere in the sky.

26 December - NGC 2232 Open Star Cluster This cluster can be found in Monoceros, visible from 20:36 to 03:40 but is at its highest point around midnight, above the southern horizon.

1 January - Mercury at Greatest Western Elongation. This is the best time to view the planet Mercury as it will be at its highest point above the horizon in the morning sky. Look for the planet in the eastern sky just before sunrise. The photo below right is a spectral surface image of Mercury, taken by the NASA Messenger spacecraft.

2 January - Supermoon The Moon will be located on the opposite side of the Earth to the Sun and the Moon's face will be fully illuminated. This phase occurs at 02:24. This full moon was known by early Native American tribes as the Full Wolf Moon. This is the first of two Supermoons for 2018. The Moon will be at its closest approach to the Earth and should look slightly larger and brighter than normal.

3, 4 January - Quadrantids Meteor Shower The Quadrantids is a shower which produces up to 40 meteors per hour at its peak. The nearly full moon will mean only the brightest meteors are visible but if you view from a dark location after midnight, you should be rewarded. Meteors will radiate from the constellation Bootes but may be seen anywhere in the sky.

4 January - Conjunction of Moon and Ceres The pairing of the Moon and dwarf planet can best be spotted when at its highest point at 02:40, above the southern horizon.

7 January - Close approach of Jupiter and Mars You can use binoculars or the naked eye to see the pair in the dawn sky, between 03:20 and 07:42.

10 January - Moon and Haumea The pairing of the Moon and dwarf planet will be visible when at its highest point in the sky, around 07:00, above the southern horizon.

11 January - Close approach of Moon and Jupiter and Moon and Mars The Moon and planets will be visible from 3:22 to 07:42 in a south-facing direction.

This is the best time of the month to observe faint objects such as galaxies and star clusters because moonlight will not interfere.

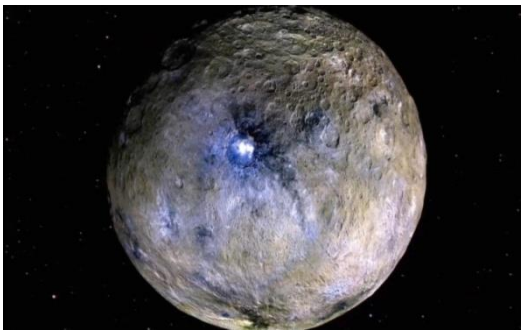
24 January - Conjunction of Moon and Eris The pairing of the moon and dwarf planet is at its highest point at 17:28, disappearing by 22:22, over the eastern horizon.

29 January - M44 Beehive Open Star Cluster You can use binoculars or the naked eye to see this cluster (image to the left). Its highest point will be around midnight, over the southern horizon.

31 January - Ceres You may see this dwarf planet over the eastern horizon, its highest point being reached at 00:34 over the southern horizon. The picture below is a NASA image of Ceres.

31 January - Supermoon This is the second full moon in the same month and so is sometimes referred to as a Blue Moon. It is also the last of two Supermoons for 2018.

Total Lunar Eclipse You will need to access your TV or internet to see the eclipse as it is only visible in western North America, eastern Asia, Australia and the Pacific Ocean.



Forthcoming Club Events

Meetings are held at **Geddington Cricket Club, Queen Street, Geddington NN14 1AS**. Please visit **www.naastronomy.com** to check meeting information. Visit the NAAS Facebook pages for discussion, photos and events.

Tuesday 5th December
Fish and chips supper at Geddington Cricket Club, 7.30pm for 7.45pm - booking essential. Jane and Steve will be giving an astronomical talk on their recent trip to America.

Tuesday 12th December
Committee meeting at The Piper, Windmill Avenue, Kettering, 7.30pm

Tuesday 19th December
Meeting up at Geddington Cricket Club, 7.30pm for 7.45pm

Tuesday 9th January
Committee meeting at The Piper, Windmill Avenue, Kettering, 7.30pm

Tuesday 16th January
Meeting up at Geddington Cricket Club, 7.30pm for 7.45pm, in-house speakers

Meetings with guest speakers: £3 (£4 for non-members)
General meetings: £2 (£3 for non-members)
Full membership: £30 (Concessions £19)

Club contact details:

President Nick Freville Tel: 01536 723211 email: astro2002astro@yahoo.co.uk
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Maps to show what you can see in the sky each month:
Other useful websites:
https://www.timeanddate.com/astronomy/sights-to-see.html
https://www.space.com/
https://www.stargazing.me.uk/astronomy-calendar-2017/
https://in-the-sky.org/newscal.php?month=1&year=2018&maxdiff=3#datesel

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