

Gearing up for National Astronomy Week

This year the annual UK National Astronomy Week (NAW) is being held from 14 to 22 November. These weeks are held to celebrate a particular astronomical event, with public lectures and observing events up and down the country. This autumn, Mars is the focus (figure 1), with a combination of a close approach to Earth and comparatively high declination offering optimum viewing conditions for the public.

However, crowds of people trying to view through telescopes on chilly winter nights while social distancing is not healthy at the moment, so this year the emphasis will be on enjoying Mars from your own home. You will be able to see Mars as an unmistakable bright object in the sky, but for close-up viewing we plan to provide live-streamed views of the planets from telescopes around the country.

The view online may not be as exciting as viewing it for yourself with the actual photons hitting your eyeball, with or without binoculars, but a live-streamed image from even an amateur telescope is enjoyable; the view is always in motion as a result of the seeing, and you can see more details. The aim is to have expert commentary accompanying the view each evening and, periodically, to show how the video stream can be processed to bring out more detail. We are planning question-and-answer sessions too.

Amateur and public outreach observatories around the country are preparing to carry out the live streaming, and any other organizations who may like to join in are invited to get in touch urgently. In the event of poor weather across the whole UK, some observatories overseas may be able to provide support. In addition, science and outreach centres are planning daily morning broadcasts of talks about Mars, aimed at schools, home schoolers and the general public.

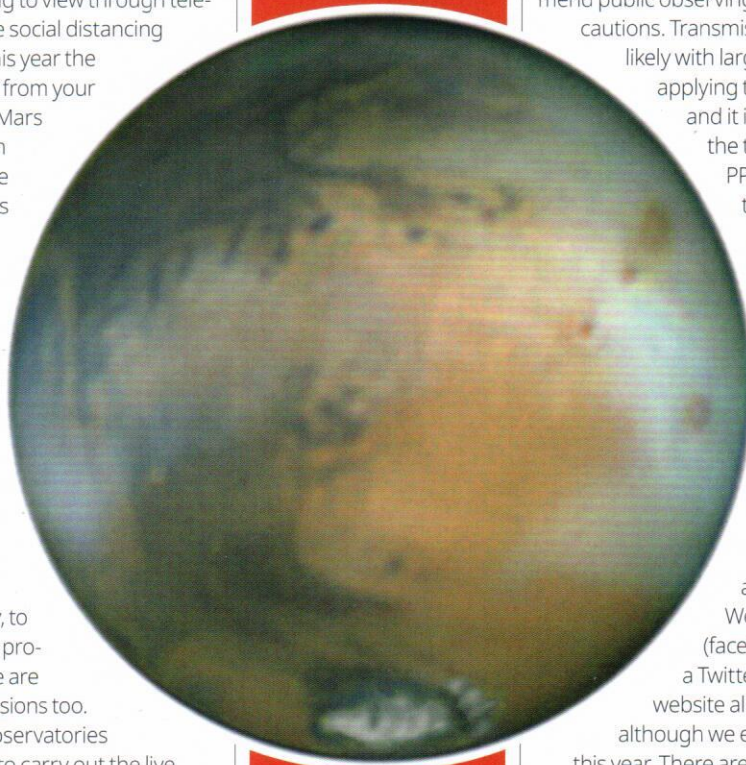
Why this week?

Mars is actually at its closest to Earth on 6 October, when it will have an apparent diameter of 22.56 arcsec. This compares with around 25 arcsec at the most favourable oppositions, but unfortunately these occur when the planet is at its most southerly declination, with poor seeing from the UK.

Opposition itself is when the planet is directly opposite the Sun in the sky, which means that it is highest at astronomical midnight. This year's opposition occurs on 13 October, during British Summer Time, at 1 a.m. – not a good time for public observing.

It was decided that the best chance of good public observing would fall a month after opposition. The planet is further away, with an apparent diameter of 17.5 arcsec at the start of the week, but it is at an elevation of 40° by

National Astronomy Week is coming and Lucinda Offer and Robin Scagell want you to get ready.



1 Mars, photographed from the UK in 2014 by Damian Peach.

8 p.m. (GMT), compared to 15° a month earlier.

This week also has the advantage of a crescent Moon, which is always good value for public observing. Jupiter and Saturn are still in the sky although rather low to the west, and the Leonid meteors peak on 17 November, an event which is always marked by media excitement even if in most years the numbers of meteors visible don't warrant it.

The NAW steering committee decided not to recommend public observing sessions because of Covid-19 precautions. Transmission through the face and eyes is likely with large numbers of people touching and applying their eyes to a telescope eyepiece, and it is not really feasible either to clean the telescope between users or to use PPE. At the time of writing it is uncertain whether any public meetings will be able to go ahead; it seems unlikely. But even if there is no public observing, live streaming of Mars is still best carried out in the early evening, particularly if we want to make it possible for all age groups to watch.

Organization and resources

There is a website to support NAW, astronomyweek.org.uk, and the sites for previous weeks are still accessible through links.

We also have a Facebook page (facebook.com/astronomyweek) and a Twitter account (@NatAstroWeek). The website allows events to be placed on a map, although we expect fewer geographical events this year. There are articles on finding Mars for yourself, tips on observing, advice on choosing a telescope, and lots of information about the planet itself, from its fascinating geology and current missions, to the mythology surrounding the planet.

The NAW steering committee consists of representatives from the RAS and other leading organizations: the British Astronomical Association, the Federation of Astronomical Societies and the Society for Popular Astronomy, all of whom have given financial support. There are also representatives from science and outreach centres. Any group wishing to contribute towards the week is urged to get in touch with the organizers as soon as possible. The main contact address is info@astronomyweek.org.uk. ●

AUTHORS

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Astronomy and has an asteroid named after him, (24728) Scagell

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2020 – Mars Encounter, executive director of the Mars Society and an ESERO UK space champion

NATIONAL ASTRONOMY WEEK

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