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The Northern Lights & planetary alignment

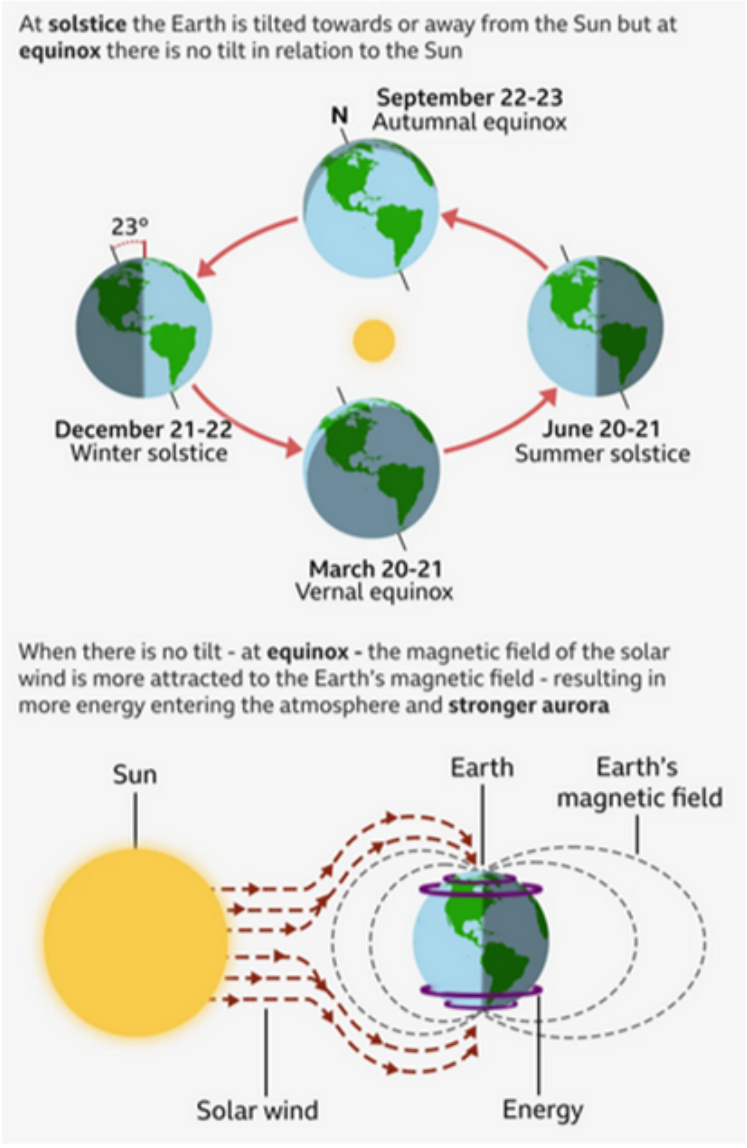
Written and Edited by Emma Coker

The Northern Lights were spotted around the UK on the night of Wednesday the 19th and there may be more opportunities to see them in the next few weeks. But why don't we see the aurora all the time?

The combination of lots of solar flares and the 'Russell-McPherron' effect that happens only around the equinox results in people in the UK being able to see the Northern Lights. The alignment of the Sun and Earth around the spring and autumn equinox and means that you are twice as likely to see the aurora as any other time of year.

Earth is tilted on an axis of 23.5 degrees. On its orbit around the Sun, it is either towards or away from the Sun at the solstices. At the equinoxes in March and September, Earth is neither tilted towards or away from the Sun.

This changing tilt results in different amongst of solar energy interacting with Earth's magnetic field and therefore changes the strength and likelihood of seeing of aurora.

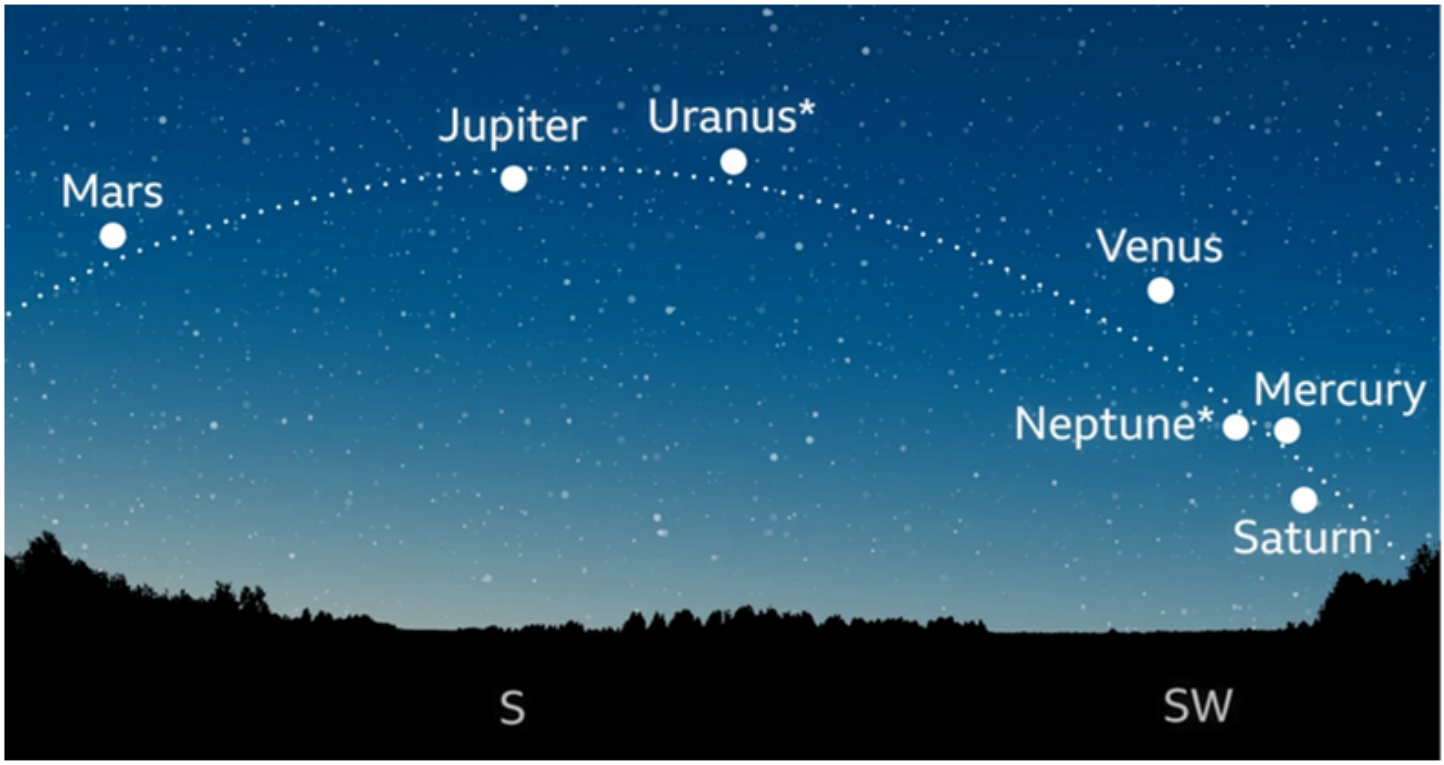


Explained in pictures!

Photos from around the country!







On the 28th of February this year, Mars, Jupiter, Venus, Mercury, Saturn, Uranus and Neptune were all visible in the sky just after sunset, between 5:30 & 7:00 pm. This is known as a *planetary parade* or *planetary alignment*, and it will be the last time seven planets can be seen at the same time so clearly until 2040.

Venus, Jupiter, and Mars were easy to spot because of how bright they appeared. Mercury and Saturn were harder to see because they were almost below the horizon and you would have had to have a powerful telescope to spot the other two planets - Uranus and Neptune. The planetary parade was visible for the whole of the week, but Friday the 28th was the best night for seeing the rare event. On May 6th 2492 it is predicted that all eight planets will align, which last happened in 949 AD. Sadly, you won't be around to see that (I hope, or something has gone very wrong) so have a look in 2040 if you missed this one, as a planetary alignment of seven is as close as you will get to all eight planets aligning in your lifetime.





Questions:

(E-mail your answers to Mr.Downing; first correct entry will receive a prize)

All answers can be found in the text:

1: What effect only happens around the equinoxes?

2: What is the other name for a planetary alignment?

3: How many degrees is Earth tilted on?

4: In which coming year will all eight planets align?

Scientists of the month:

Year 7: Georgina Montgomery Year 8: Ethan Ruby

Year 9: Josie Munro Year 10: Cody Mathers

Year 11: Rosie Kirk Year 12: Sam Woods

Year 13: Annabelle Raver