JANUS
THE NEWSLETTER OF EWELL ASTRONOMICAL SOCIETY

September 2026

Editor: ewellastro.editor@gmail.com

Email: ewellastro@gmail.com

Website: https://www.ewellastronomy.org

Important Reminder:

To allow sufficient time to compile Janus and place it on the EAS Website by the 1st of the month any submissions for publication are required at least 3 days before the end of the month. Items received after this date will be held over until the following month.

Editorial

Welcome to the September edition of Janus – the first one after our summer break. This month's meeting on Friday 11 September features a talk by Society member Paul Costa. Entitled "An Atacama Astronomical Adventure", it will recount his experiences when he visited the Atacama Desert in May this year. Sounds interesting!

There have been a few events since the last edition of Janus – the most notable was, of course, the partial solar eclipse on 12 August. A few members travelled to Northern Spain to witness totality whilst, closer to home, many members gathered on Epsom Downs to view the event. Others (including myself) viewed it at home or elsewhere. Remarkably, the weather remained fine, and everyone celebrated the historic event.

Gary notes, amongst his many observations, that some people were disappointed by the experience as there was no pronounced darkening of the sky or cooling of the air. I have some sympathy with this view as, having experienced the 1999 event myself, I didn't feel the same sensation this time around. I put it down to the fact that the 1999 event occurred around mid-day when the sun was high in the sky and very bright, whereas this time around the sun was already low in the sky and close to setting - hence less intense anyway.

In this edition:

2. Sky Update – The Solar System in September
3. Notable Events for September and October
4. Collected Observations and thoughts - Gary Walker
13. Whew, what a scorcher! – John Pillar
19. An astronomer on what it's really like to stargaze for a living from THE CONVERSATION
21. Up Next
21. Some Images from WhatsApp during August
24. 12 August 2026 – Partial Eclipse of the Sun (91%) – Ron Johnson

A second eclipse event occurred on 28 August when we experienced a partial lunar eclipse. Not as widely anticipated as the solar eclipse and, taking place early on a potentially cloudy morning, probably not as attractive. Nonetheless, some enthusiastic members got themselves out of bed in time to view it and were suitably rewarded for their stoicism.

There are several upcoming events in September of which the most eagerly anticipated one is, undoubtedly, the official opening of the Maurice Gavin Observatory. This will take place at 14:30 on Saturday 19 September performed by the Deputy Mayor of Epsom & Ewell, Councilor Julie Morris. Regular monthly viewing sessions at the observatory will commence the following week on 23 September, just before the Society's 60th Anniversary dinner on 26th. We also have the annual picnic which, this year will take place on Saturday 5 September. So, much to look forward to.

John

The Solar System – September

MERCURY: begins the month having recently passed behind the sun at superior solar conjunction on 27 August. From Sutton, it is not readily observable since it is very close to the Sun, at a separation of only 4° from it. By the end of the month, it remains not observable as it will reach its highest point in the sky during daytime and is 1° below the horizon at dusk.

VENUS: begins the month potentially visible as an evening object, having recently passed greatest elongation E. From Sutton, however, it is not observable as it will reach its highest point in the sky during daytime and be no higher than 3° above the horizon at dusk. By the end of the month, approaching inferior solar conjunction in October, it remains not observable as it will reach its highest point in the sky during daytime and be 2° below the horizon at dusk.

MARS: begins the month visible in the dawn sky, rising at 01:00 BST and reaching an altitude of 36° above the E horizon before fading from view as dawn breaks at around 05:17. By the end of the month, still visible in the dawn sky, it will rise at 00:38 BST and reach an altitude of 48° above the SE horizon before fading from view as dawn breaks at around 06:08.

JUPITER: begins the month visible in the dawn sky. Rising at 03:46 BST – 2 hours and 24 minutes before the Sun – it will reach an altitude of 17° above the E horizon before fading from view as dawn breaks at around 05:49. By the end of the month, it remains visible in the dawn sky, rising at 02:24 BST and reaching an altitude of 37° above the SE horizon before fading from view around 06:36.

SATURN: begins the month visible as a morning object, becoming accessible around 22:07, when it reaches an altitude of 10° above the E horizon. It will then reach its highest point in the sky at 03:12, 41° above the S horizon, before being lost to dawn twilight around 05:30, 33° above the SW horizon. By the end of the month, approaching opposition on 4 October, it will become accessible at around 20:09, when it rises to an altitude of 10° above the E horizon. Reaching its highest point in the sky at 01:11, 40° above the S horizon, it will become inaccessible at around 06:13 when it sinks below 10° above the W horizon.

URANUS: begins the month visible in the dawn sky, rising at 22:33 BST and reaching an altitude of 53° above the SE horizon, before fading from view as dawn breaks at around 04:44. By the end of the month, becoming accessible around 23:11, at an altitude of 21° above the E horizon, it will reach its highest point in the sky at 04:38, 59° above the S horizon, before being lost to dawn twilight around 05:37, 57° above the SW horizon.

NEPTUNE: reaches opposition on 26 September, and begins the month visible in the morning sky, becoming accessible around 23:01, when it reaches an altitude of 21° above the SE horizon. Reaching its highest point in the sky at 02:34, 38° above the S horizon, it will be lost to dawn twilight around 04:44, 31° above the SW horizon. By the end of the month, now past opposition, it will become accessible at around 21:06, when it rises to an altitude of 21° above the SE horizon. It will reach its highest point in the sky at 00:37, 38° above the S horizon before becoming inaccessible at around 04:08 when it sinks below 21° above the SW horizon.

Notable Events:

Some observations will require a telescope, whilst others will be visible with the naked eye.
More information at: *https://in-the-sky.org*

September

1 Aurigid meteor shower 2026
3 Close approach of the Moon and M45
4 Moon at Last Quarter
Venus at aphelion
5 Lunar occultation of Beta Tauri
6 Conjunction of the Moon and Mars
Close approach of the Moon and Mars
The Moon at perigee
8 Close approach of the Moon and M44
Conjunction of the Moon and Jupiter
Close approach of the Moon and Jupiter
Lunar occultation of Jupiter
9 September ε-Perseid meteor shower 2026
10 Uranus enters retrograde motion
11 New Moon
12 Conjunction of the Moon and Mercury
13 The Moon at perihelion
14 Conjunction of the Moon and Venus
Close approach of the Moon and Venus
Lunar occultation of Venus
17 Lunar occultation of Antares
18 Moon at First Quarter
19 The Moon at apogee
20 Lunar occultation of Sigma Sagittarii
22 Venus at greatest brightness
23 September equinox
The Moon at aphelion
25 NGC 55 is well placed
26 Neptune at opposition
Full Moon
27 Close approach of the Moon and Saturn
Mercury at aphelion
Conjunction of the Moon and Saturn
Daytime Sextantid meteor shower 2026
47 Tuc is well placed
Mercury at highest altitude in evening sky
30 Asteroid 192 Nausikaa at opposition
Close approach of the Moon and M45

October

1 The Moon at perigee
2 Lunar occultation of Beta Tauri
The Andromeda Galaxy is well placed
3 Moon at Last Quarter
NGC 253 is well placed
4 Saturn at opposition
Asteroid 2 Pallas at opposition
The Small Magellanic Cloud is well placed
5 Conjunction of the Moon and Mars
Close approach of the Moon and Mars
Lunar occultation of Mars
136472 Makemake at solar conjunction
Close approach of the Moon and M44
Conjunction of Venus and Mercury
NGC 300 is well placed
6 October Camelopardalid meteor shower 2026
Conjunction of the Moon and Jupiter
Close approach of the Moon and Jupiter
Lunar occultation of Jupiter
7 Lunar occultation of Regulus
NGC 362 is well placed
9 Draconid meteor shower 2026
10 New Moon
Southern Taurid meteor shower 2026
11 Close approach of Mars and M44
δ-Aurigid meteor shower 2026
12 Conjunction of the Moon and Venus
Mercury at greatest elongation east
Conjunction of the Moon and Mercury
13 Asteroid 4 Vesta at opposition
The Moon at perihelion
14 Lunar occultation of Antares
15 The Triangulum Galaxy is well placed
16 The Moon at apogee
17 Lunar occultation of Sigma Sagittarii
Mercury at dichotomy
18 Moon at First Quarter
ε-Geminid meteor shower 2026
136199 Eris at opposition
21 Orionid meteor shower 2026
23 The Moon at aphelion
24 Venus at inferior solar conjunction
Close approach of the Moon and Saturn
Conjunction of the Moon and Saturn
Leonis Minorid meteor shower 2026
26 Full Moon
The Perseus Double Cluster is well placed
27 136108 Haumea at solar conjunction
28 Close approach of the Moon and M45
The Moon at perigee
29 Lunar occultation of Beta Tauri

Collected Observations (and thoughts) – Gary Walker

Huge Sunspots! – Posted 30 June

Today, and earlier, there were a total of 4 large Sunspots upon the Sun including one really massive one with multiple umbrae and a large penumbra. One spot, (presumably the largest) was visible to the naked eye (with a filter of course!).

There were also 2 areas flaring. However, surprisingly, there were very few Prominences on view!

Venus – Posted 2 July

Yesterday, I saw that Venus now appeared at 67% phase (i.e. gibbous) and is still very prominent in the early evening sky with the naked eye.

My Thoughts on Dark Matter - Posted 11 July

After Dr Elizabeth Cunningham's excellent talk last night, when you think about it, the subject of Dark Matter is so bizarre!

Dark Matter comprises 95% of the Universe, yet it cannot be seen or detected!

The Solar Telescope must be deep underground, meaning that you can't actually observe the Sun through it (however, at least, there is no danger of damaging your eyesight!). Other Dark Matter detectors must also be deep underground. So, basically, the Astronomy of Dark Matter is all about something that is invisible, and telescopes cannot be used to see it!

I still wonder if one day in the future, people will look back to today and "and they STILL believed in Dark Matter, back in those days ...!"

The Coming Big Solar Eclipse! – Posted 11 July

On 12 August, there will be a Partial Solar Eclipse. What is particularly interesting is that it will be the largest Solar Eclipse visible from the UK since that of 11 August 1999. That one was 96% eclipsed from the London area, but next month's will be about 91% eclipsed. It won't be total from any part of the UK, although Western Ireland sees it get as much as 98%!

Unfortunately, it occurs near Sunset, which is not good as there nearly always tends to be clouds near the horizon, partly as an effect of perspective!

The last deep Partial Eclipse in the UK was that of 20 March 2015. Unfortunately, it was totally overcast from this area. A large bank of stationery cloud cover had rocked up two days earlier and was still hanging about on Eclipse Day!

The only interesting effect that I saw on that occasion was a noticeable darkening and gloom, for about 20 minutes, at maximum eclipse!

Over most of the UK, the weather was both challenging and difficult to forecast accurately. Basically, it seemed to be clearer to the West and to the North of London - as Martin Howe said at last night's meeting, he dashed off in the car, up to Oxford, where it WAS clear!

Other clear places were in Cornwall and Devon, (e.g. Plymouth and Penzance) as well as Jodrell Bank and Leicester in the Midlands. The Isle of Lewis was also clear and saw a 97% eclipse. In fact, the Reporter there said that they'd had about 4 seasons during this period! That was probably an advantage, as at least it meant that the weather was changeable, with a chance of clearing skies, unlike our area which just had stagnant weather. To add insult to injury, our sky cleared before 1pm - far too late for the eclipse, of course!

Gary Fildes, described in his book "An Astronomers Tale" about their frustrations in trying to observe this eclipse. He was based at his Observatory at Kielder and had set up a screen to display live images of the eclipse to the general public.

Inevitably, of course, the forecast was cloudy, so he sent one of his observers to where it might be clear. Eventually, he found clearing skies near Rothbury, so he set up his equipment to live stream images to Kielder, and elsewhere. He also had trouble trying to find a phone signal, and had to keep on driving around until he found one!

Ironically, after all that, he need not have bothered, as the sky had cleared at Kielder Observatory, after all. On that day, as is often the case, the weather was awkward to the last!

Such deep Solar Eclipses are quite rare, so they are particularly interesting to see. The one on 11 August 1999, being 96% eclipsed over our area (and in good weather!), created a dimming over the landscape, and a temperature drop. ..The most common buzzword after the eclipse was that it was "eerie"!

My Mum and Dad used my 60mm refractor to project the Sun's image, and photograph it, from Banstead, and the Sun was a beautiful and very thin crescent. I, meanwhile, was observing the actual Total Eclipse from the English Channel on board a ship!

The 20 March 2015 eclipse reached 85% obscured in the London area, whereas the 11 August 1999 one reached 96%. Next month's one, in contrast, reaches 91% in the London area.

One experiment that I carried out during the 20 March 2015 eclipse was to take photographs during the eclipse (even though it was overcast throughout!), all at the same exposure. I set the exposure to be correct for normal daylight, before the eclipse started, and maintained the same setting throughout.

As a result, the point of maximum eclipse was obvious as it coincided with the point at which my images appeared significantly darker! Had I set the camera to "Auto" exposure, it would not have recorded the drop in light level but would just have adapted to it, so would not have showed the dimming!

That was about the only positive success I got from that eclipse. (Normally with overcast Partial Solar Eclipses, this wouldn't work, as the eclipses would not be big enough to create this effect).

I intend to try this again for the coming eclipse, whether it is cloudy or clear, so as to detect the drop in the light level.

Of course, unlike in the path of Totality, light levels don't drop drastically, and it's always surprising how much light remains, even if the Sun is about 96% obscured. There would, of course, be a more dramatic drop if it was over 99% obscured!

Naturally, this up-coming eclipse is now dominating the Astronomical magazines. It has also appeared in the national newspapers for many months, with advertisements for cruises to view it.

As it will be a low altitude event, I will hopefully (weather permitting!) be able to see much of it from my back garden but, to see the end of it, I may have to go over the fields at the back of my house, as I usually have to do in such situations.

I will have to do my homework on days before the eclipse, checking how low the Sun actually is at the time, and how much of it will actually be visible from my back garden.

Hopefully, the media will feature it well, as it is the biggest Solar Eclipse since 1999 and 2015

Owen Brazell - Posted 16 July

Owen Brazell still "lives" in the Astronomy Now magazine of August - this time he is featuring the Planetary Nebula of NGC 6894!

Astronomy Now magazine – Posted 17 July

Our own Martin Howe has written a good article in the August edition of Astronomy Now magazine, on "Holiday astrophotography with a digital camera". This is obviously about how to take astronomical photographs, abroad, especially of Deep Sky objects that are invisible from the UK.

50 years since Viking 1 landed on Mars! - Posted 20 July

Exactly 50 years ago today, on 20 July 1976, Viking 1 landed on Mars. This was the first successful lander on Mars (The Russian lander, Mars 3, did so earlier, but failed). Viking I landed in the Chryse area of Mars.

It was equipped with cameras which provided a spectacular 360-degree panorama of the surface. The site was covered with basalt boulders and dust. There were also visible dust drifts or small sand dunes. Due to the dust, the sky was of a pinkish colour.

The probe recorded cold surface temperatures from - 33°C to - 86°C, with wind speeds of about 30km per hour.

The lander was also equipped with a biological laboratory, which collected samples to heat up and search for life signs. Unfortunately, however, the results were inconclusive, and still are, to this day. This probe continued working until November 1982.

These were the first successful Mars landers, although the Russians had landed two probes on the surface of Venus the previous year (1975), which returned surface images.

Saturn Returns! - Posted 24 July

I first saw Saturn again in the early hours of today, which is 6 months since I last saw it at the end of January.

I could see that the Rings had opened out and were much brighter and wider than they were in January. However, they were still fairly narrowly inclined. I could also see a distinct, thin, dark band crossing the disk of Saturn, where the Rings crossed the planet, itself.

I could see that the shadow of Saturn itself was cutting off one end of the Western side of the rings, so they appeared suspended from the disk! This happens at certain times, when the shadow is in this position. Also, both ring ends narrowed significantly, closer to the planet, making quite a delicate effect. This is because they are still fairly narrowly inclined to the planet.

The Rings are now open by about 9 degrees. Back in December, they were only about 0.4 degrees tilted.

The Sun continues to be active! - Posted 24 July

Over the past few days, there have continued to be a number of large Sunspots upon the Sun. These had multiple umbrae and large penumbral areas. Thus, the cycle of 25, is still going strong, despite being officially past Solar Maximum.

Jodrell Bank to close? – Posted 27 July

Today, it was announced that the UK Research and Innovation Agency (UKRI) is withdrawing its funding for the Jodrell Bank Observatory, and that scientific research there will cease on 1 April 2028.

Of course, Jodrell Bank is extremely important in Astronomy, in studying galaxies, black holes and the formation of planets, as well as training new scientists.

This same agency has also cut funding for the Extremely Large Telescope in Chile, and another in Hawaii.

This decision by the UKRI will be challenged, but if it is not reversed, or alternative funding found for Jodrell Bank, then it may be forced to close.

Jodrell Bank, also known as the Lovell Telescope after Bernard Lovell, its founder, was opened in 1957, and was the only telescope at the time capable of tracking the Sputnik 1 satellite.

The coming big eclipse – Posted 4 August

As of today, the main media hasn't yet picked up on this eclipse (unlike the 1999 one), but on Facebook, a number of astronomical societies and other sites have been flooding my feed with the eclipse (obviously because I am interested in it)!

I have been checking where, and at what time the Sun is setting from my back garden, being as the Sun will be low down, and getting even lower as the eclipse goes on. This exercise is vital to ensure there are no nasty surprises!

I am happy to say that the Sun is still visible at the time of the maximum eclipse around 7.10pm, and up to about 8pm! Also, helpfully, it is setting at the point where the treeline appears at its lowest. So, assuming the weather plays ball, I will observe most of the Eclipse from my back garden, although I may have to go over the fields at the back of my house in order to see the final stages of it! The Sun will, of course, be setting a little earlier, a week from now, but at least I now have a sense of where the Sun will be at the crucial times!

Obviously, the weather has been simply wonderful this Summer - let's just hope it lasts and 12 August isn't the very day that it all goes pear shaped!

Venus – Posted 7 August

Today, I managed to find Venus in a beautiful deep blue daytime sky. I have not seen it since 1 July because it disappeared very quickly from the evening sky, after June!

It appeared at half phase but, due to the hot weather, the seeing was very unsteady, making the phase difficult to make out at first.

It is nearly at Greatest Eastern Elongation, which means that it is well separated from the Sun, and is over 40 degrees to the East of it.

The Sun, itself, has still been "busy" over the past few days or so, with several Sunspots - some of them very large!

The Sun – Posted 9 August

Today, for the first time in months, I saw that the Sun was entirely BLANK! The large spots seen 2 days ago have just departed over the Sun's limb! There have, of course, been numerous large spots over the past month.

Excitement ramps up for the coming eclipse – Posted 10-12 August

On 9 August, with 3 days to go, the main media (surprisingly) still hadn't picked up on this eclipse. Social media, however, was full of posts on it, and some astronomers such as the Royal Greenwich Observatory were warning people not to use sunglasses to observe it.

On local social media such as Facebook, people were enquiring as to where they should obtain eclipse glasses from. One shop selling them was Robert Dyas, but the shop in Banstead, had already run out of them! Others were being sold on Amazon, although some people rightly complained that they wouldn't be available until 13 August – too late to be of any use! As a result, people were panicking, trying to find a shop that still had them, or to find someone else to buy from on Facebook. I found this a bit reminiscent of the panic buying of toilet rolls, just before the Pandemic kicked in!

Over the years, I have acquired at least 17 pairs of eclipse glasses, mostly as free gifts accompanying the various eclipse book guides that I bought back in 1999. Others, I have acquired from later eclipse guides, and I even won one at a Society meeting in 2015, before that big eclipse!

People were often advised to project the Sun through a colander, giving rise to the popular joke "Don't strain your eyes"!

The coming event finally made it onto the BBC News on 11 August, although it featured on Breakfast Time the previous day. "Panic buying" of eclipse glasses increased - no doubt because most people only have a casual interest in Astronomy, and had only, suddenly, become aware of the preceding in few days. The BBC 6pm News showed a reporter trying to find a shop that still had eclipse glasses and, when she did, finding that there was a massive, long queue, for them!

To add to the chaos, Jake Foster from the Royal Greenwich Observatory advised that old eclipse glasses from 1999 might be unsafe, as the polymer materials that they are made of may have deteriorated over time. He suggested that eclipse glasses over 10 years old, were no longer safe.

Naturally, many people will be observing the eclipse from the Old Greenwich Observatory site, and the news on the day will probably be coordinated from there.

By coincidence, 11 August is the anniversary of the Great Total Eclipse of 11 August 1999, and there were several posts on Facebook remembering it. As was the case at the time, the common "buzzword" was that people found that experience was "eerie". On that occasion, from our local area, the Sun was 96% eclipsed, enough to make the landscape go dim and cold! I watched this eclipse from the English Channel between Portsmouth and Le Harve on a ship and, fortunately, the weather was good, so we got to see it all!

As I noted earlier, on 9 and 10 Augus, the Sun was blank with no Sunspots. On 11 August, however, there was a new, large spot just emerging from the solar limb. Thankfully, being so close to the limb, it was extremely elongated, which meant there wouldn't be any Sunspots that the Moon could block in the coming eclipse!

On 12 August, with only a few hours to go, the eclipse was the top story on the 1pm BBC News. It featured scenes from Cornwall, where the eclipse would be at its maximum from the UK, at 95%, and the BBC said that coverage of the event would start from 5pm!

Even this late, social media such as Facebook and Next Door was still full of desperate people trying to find places from which to source eclipse glasses, or else asking if anyone has any spare ones that they could have. There were also reports of people queuing for hundreds of yards in places where eclipse glasses were still available!

We amateur astronomers, having known about this eclipse for years, were prepared for it. But, for others, the eclipse went "viral" over two days, meaning people with only a casual interest in Astronomy suddenly became aware of it, and started panic buying!

Advice on the News, etc, for those without a pair of glasses, was to use a Colander for solar projection, or else to make a Pinhole Viewer, from a cereal box, for example!

Frustratingly, perhaps, there were still a few people saying that it would be best to watch it on TV. I remember this view being put forward before the 1999 eclipse, most notoriously by the Chief Medical Officer of that time. However, this overzealous approach and panicking, could have spoilt the eclipse for many; I know of two people who stayed inside during the 1999 eclipse. Thus, fear can ruin a spectacular event like this!

Naturally, this eclipse was linked with the 1999 eclipse because, whilst nowhere was Total in Britain, it was over 91-95% eclipsed, so was certainly the biggest eclipse since then…. And there won't be another one as big until 2081 and 2090 (so, mark your diaries!)

For once, we knew, there was a fighting chance of actually seeing this eclipse, after the appropriate sacrifices had been

made to the Weather and Astronomy Gods!

The big partial solar eclipse (at last!) – Posted 12 August

Well, I saw this eclipse in perfect conditions. I never thought that the weather would hold out this long, and expected that 12 August would, inevitably, mark the end of the Summer, with bad weather!

I observed this eclipse from my back garden. As I said earlier, I had been checking and watching where, and when, the Sun would be at the critical time, so that I could assess if it was worth observing from my garden, or else going over the fields beyond my house. In the event, I missed the last 20 minutes of the eclipse, when I lost it from my garden, and didn't bother to go over the fields, to see the end of it (I know, sacrilegious!).

I saw First Contact at about 6.18pm, as a shallow curve in the limb. Surprisingly, a few more new Sunspots had formed today. So that the Moon could actually occult them!

The sky was very sunny but, as time progressed, I started to notice a slight dimming and a cooling down of the temperature. There was, however, a small patch of cirrus cloud, so it was difficult to assess how much that would have affected it!

When the Sun became a true crescent shape, I could see a definite dimming in both the sky and the landscape. The effect of this made the illumination appear like a searchlight from the West, but then the Sun was in that direction, anyway! Also, the sky overhead turned to a deeper blue than it had been earlier on.

By 7.01pm, the Sun was a narrowing crescent and, by 7.14pm, when the eclipse was at maximum, I saw that the Sun's narrow crescent had "turned around" to the top of the Moon. It was now, a very narrow crescent – similar in appearance to a 2-3 day old crescent Moon! This was a stupendous site, especially in my 8" SCT, at 62X magnification. After this, of course, the Moon started to retreat, and the crescent became fatter again.

By about 7.34pm, the Sun was sinking into the treeline from my point of view, but I could still see it for a while. I last saw it about 7.46pm. By then, it was back to a fat crescent, probably now only eclipsed by one third.

By this time, as the Sun had essentially set, at least from my location, the landscape was a bit brighter, but, as it was approaching sunset, it didn't make a lot of difference.

So, the weather had been as good as it could ever be, with only one small patch of cirrus cloud. Plus, it was still very warm, and calm!

The story of the eclipse was again The Top Story on the BBC News at 6pm! They were filming the crowd from Greenwich Observatory in London, and a site in Cornwall. They were also showing scenes of where the eclipse was already underway, from Iceland, and from Ayr, in Scotland.

Inevitably, there have been many people remembering the last Big Eclipse in 1999. Thankfully, the weather was much better this time - except in Scotland!

The Big Solar Eclipse on the BBC News – Posted 12 August

Although it was now over, the eclipse was again the Top Story on the 10pm BBC News. In fact, it lasted about 12 minutes, with occasional mentions and images later on! They had filmed from Greenwich, Cornwall, and Spain (where it was Total!).

As I said earlier, there was a real "run" on the eclipse glasses, but the general public only seemed to become aware of it in the last few days. This was in marked contrast to the 1999 eclipse, where there was a big build up for weeks, indeed months, beforehand, with many councils

in Cornwall and Devon worried about the logistics of managing all the people and traffic expected to rush down to the West County to see it.

Tonight, social media was full of images of today's eclipse. Plus, a few, (presumably) joke posts asking if anyone wants their eclipse glasses!

Reflections on the Eclipse – Posted 12 August

A large group of people were watching the eclipse from Epsom Downs and, indeed, from any park with a good Western horizon. A couple of my friends were watching it from there, and I lent them some of my eclipse glasses!

I heard one of my next-door neighbours observing it at its maximum, as I heard then talking about using a colander to see it. I heard them saying that the colander worked for that!

From the eclipse to the Perseids – Posted 13 August

Last night, I was sitting out in my back garden, as it was another very warm night! I wasn't particularly watching out for the Perseids. Unlike the Eclipse which you know will start and finish on time, I find that meteor showers are always hit and miss! However, I did see 3 bright meteors flash low down in the south-east. The next-door neighbours (Not the ones I heard observing the eclipse), were obviously also seeing them, as I heard the young woman exclaim when one went over!

Predictably, over the last few days, when talking about the eclipse, the Media had also mentioned the possibility of observing the Perseids meteor shower!

Today's newspapers the day after the eclipse – Posted 13 August

All the national newspapers today had massive coverage of the eclipse - indeed, the " i" newspaper had 8 pages devoted to it! All had images of the eclipse on their front pages, which was very reminiscent of the 1999 eclipse.

Most people were thrilled with last night's eclipse, although there were some moaners who were totally underwhelmed by it!

Some social media sites had displayed a Total Eclipse although, of course, that was not what was seen in the UK.

There were still some mentions of the Eclipse on the BBC News today, asking people to send in their images of it, and displaying a few of them!

The Daily Mail (erroneously) claimed that the next solar eclipse visible in the UK would be in 2050 - typical media nonsense by lazy hack reporters!

Apparently, sales of colanders also rocketed (John Lewis had reported a 40% increase in sales) - this along with the run on eclipse glasses!

Final reflections on the eclipse – Posted 15 August

Even on 14 August, the national newspapers still featured some art on the Eclipse!

Victoria and David Beckham got in on the fun by observing the eclipse from their super yacht in the Italian Riveria!

On a more serious note, despite people being advised not to watch the eclipse through sunglasses, only through proper eclipse glasses, there were the usual number of people with eye damage. Believe it or not, they had been staring at the Sun without any protection!

Sadly, some people were not impressed with the eclipse and said it was overhyped by the media. Some had expected the sky to go dark (not helped by some posts showing the Sun in a total eclipse mode, for the UK).

Fortunately, others were impressed with it, and every park or open space was filled

with lots of spectators! The beautiful weather certainly helped, and places like Parliament Hill in London and Greenwich Park were particularly popular.

Astronomers, knowing what to expect, were thrilled with the spectacle.

Sadly, a comparable eclipse won't occur in the UK until at least 2081 and 2090 - well beyond my lifetime!

Owen Brazell Again – Posted 20 August

Owen Brazell still "lives" in the Astronomy Now magazine, with an article by him in the September issue on the Globular Cluster, M30. They must have stored up a collection of his articles before he died!

Big Partial Solar Eclipses visible in the UK – Posted 22 August

After this month's magnificent Big Partial Solar Eclipse of over 90%, it is worth seeing how many other big partial eclipses have been seen in the UK.

They are rare, but at least 9 of them have been visible between 1900 and 2026.

From London, the dates and magnitudes of these eclipses were:

- 17 April 1912 - 91%
- 8 April 1921- 84%
- 24 January 1925 - 78% (Total from North of the Scotland)
- 29 June 1927 - 95% (Total from parts of Wales and Yorkshire!)
- 15 February 1961 - 91%
- 11 August 1999 - 96% (Total across Cornwall and Devon)
- 31 May 2003 - 80% (Annular, from Northern Scotland)
- 20 March 2015 - 85%
- 12 August 2026 - 91%

Future Big Partials will occur in 2039, 2048, 2050, 2081 and 2090. The 2090 one will again be Total from Cornwall and Devon, as well as the South Coast; from London, it will be in the high 90's% It is, however, evident that a Solar Eclipse as big as that on 12 August won't be seen again from our country for many years to come!

Venus – Posted 25 August

Today, I observed Venus at about 4pm. I saw that it was now just under 50% in phase, so it is now starting to look like a very fat crescent.

This, of course, means that the exciting period of Venus observation is about to start as, after a long, slow period from Full to Gibbous phases, the phase will shrink to a narrow crescent quite quickly. The latest issue of Astronomy Now magazine reports today that Venus is of 43.2% phase, and 27.4' arcs in angular size.

The partial Lunar Eclipse – Posted 28 August

Despite a poor forecast earlier in the week of more unsettled weather for this eclipse, I managed to see it well!

Even last night, it was overcast in the late evening, but it cleared by about 12.45am, and remained clear for a while, despite some scudding cloud suddenly appearing after about 4am, causing me to think that I might well miss maximum eclipse at 5.13am.

Fortunately, this cloud disappeared as quickly as it had first appeared, and the rest of the Eclipse, including the maximum eclipse, was perfectly clear!

As usual, the eclipse developed slowly but, by about 4.30am, it appeared as a narrow crescent. Eclipse "phases" always look "weird" in comparison to normal Moon phases, as the eclipse crescent always appears narrower and longer than a normal crescent does.

I observed this eclipse from my back garden up to about 4.39am, but it then disappeared behind my treeline. So, I then went out over the fields at the back of my house, to see the rest of the Eclipse. Over in the field, I found another man also observing the eclipse. He had a camera on a tripod.

By about 5am, the eclipsed part of the Moon clearly showed a strong reddish-brown colour, both in binoculars and with the naked eye. The uneclipsed part of the Moon appeared as a narrow, short crescent, with a much paler "extension" along the Moon's limb to the South. I could clearly see the Mare of the Moon, both in binoculars, and with the naked eye, so it was a bright eclipse.

The sky was getting light, and eventually the reddish-brown eclipsed part of the Moon became invisible, with only the uneclipsed crescent still visible. The Moon sunk behind the treeline, here, just after about 6am.

Timings of the Eclipse were as follows:

- Start of Penumbral Phase at 2.24 am.
- Start of Umbrae Phase at 3.30am.
- Maximum Eclipse at 5.45pm.
- Moonset at 6.20am (still in eclipse).

At maximum eclipse, the Moon was 93% obscured, so it was a big partial eclipse.

So, despite a poor weather forecast and some nuisance clouds, the eclipse was seen well! In addition, the temperature was still very warm, calm, and humid! The only problem was that, being quite damp, the optics tended to dew up!

Solar eclipses are always followed, or preceded by a Lunar Eclipse, about 2 weeks later, as was the case this month.

Incidentally, this Lunar Eclipse was the 33rd that I have seen over the past 50 years. In contrast, I have only seen 15 Solar Eclipses, over the same period.

Ironically, Lunar Eclipses are actually rarer than Solar Eclipses, but as they last much longer than Solar ones, and can be seen over an entire hemisphere of the Earth, they can be seen more frequently than Solar eclipses. This is because the Earth's shadow (for Lunar Eclipses is larger than the Moon's shadow (for Solar Eclipses).

The Lunar Eclipse featured in 4 of the National Newspapers but was largely absent from the TV News). Inevitably, it didn't make such an impact on the media as the partial Solar Eclipse.

The Sun – Posted 30 August

Due to the marvellous Summer this year, I have managed to obtain my longest ever period of continuous observations of the Sun. I have managed to observe it on every single day from 12 June to 28 August – a period of about 2.5 months!

My previous "record" was from 17 April to 4 June 2011 - a mere 1.5 month period!

Obviously, it is easier to do this in the summer months, when you get long days and better weather, unlike the winter months, when the days are short, often with bad weather (indeed, even the high pressure Anticyclones are full of clouds!).

Whew, what a scorcher! – John Pillar

Sweltering under a midday sun, seeking shade, ice-cream and cold drinks wherever, desperately trying to keep the house cool…. the weather is making headlines. It seems that every week this summer brings another hottest or driest record, and talk of 'the climate emergency', or 'the new normal', resonates in the news.

Reaching for another cool drink, I thought it'd be interesting to research the influence and control that our place in the Solar System has on the climate of our planet.

The recent, short term (~200 year), change that our climate is undergoing is widely believed to be strongly influenced by human emission of CO_2 and other gasses into the atmosphere since the early days of the industrial revolution.

However, our planet has experienced continual cyclic changes in global temperature since the earliest time, for more than 4 billion years. Global average temperatures are constantly changing – icecaps have enlarged and reduced, sea-level has risen and fallen, shorelines have moved landward and seaward …. If there is one constant then it is that global climate is constantly changing.

Milankovitch Cycles

Milankovitch cycles describe the effects of variations in earth's orbit and rotation on the global average temperature and climate. These effects manifest themselves particularly during ice-ages, when significant swings in global temperature occur on a time-scale of 10s to 100s of thousands of years.

Milutin Milankovitch was a Serbian geophysicist and astronomer working in the 1920s at the University of Belgrade. Milankovitch made significant contributions to understanding of planetary climatology by demonstrating the relationships between celestial mechanics (the movements of the planets in the solar system) and the amount and distribution of solar radiation reaching the earth's atmosphere and surface.

Milankovitch focussed on three dominant cyclic variations in earth's orbit and rotation…

- The shape of the earth's orbit around the sun: **eccentricity**
- The angle of the earth's tilt, known as **obliquity**
- The direction the earth's axis is pointing, known as **precession**

There are many other subtle perturbations, but these are the main three.

Eccentricity

The earth's orbit around the sun is not perfectly circular, but is elliptical, influenced by the gravitational pull of the other planets, particularly Jupiter and Saturn.

The degree of ellipticity, or "squashedness" of the orbit varies on a cycle of approximately 100,000 years.

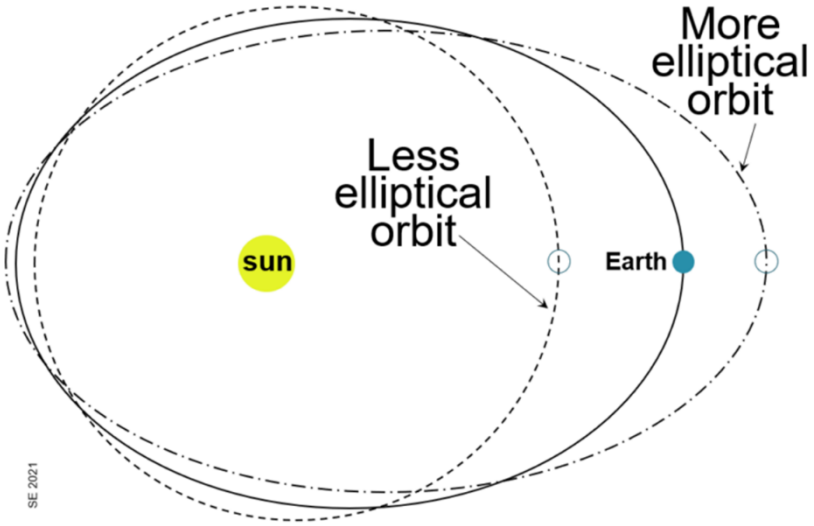


Figure 1: Earths' orbit varies from less to more elliptical over a period of about 100k years. From Steve Earle, section 3.4, https://environmental-geol.pressbooks.tru.ca/chapter/earths-orbital-fluctuations-and-climate-change/

Currently, the earth's orbit is nearly circular, only slightly elliptical… at perihelion (3 January), when earth is closest to the sun) the earth is 5.1 million km closer to the sun than it is at its furthest (aphelion) on 4 July. This variation causes the earth to receive 6.8% more solar radiation in January than it does in July (yes… more in winter than in summer 😊).

When the earth's orbit is at its most elliptical on the 100k year eccentricity cycle the amount of solar radiation reaching the earth varies by 23% over the course of a year, a more significant variation.

Axial Tilt (Obliquity)

The obliquity or axial tilt is the angle of the earth's axis with respect to the orbital plane (the circular plane the earth follows around the sun). This angle varies between 22.1° and 24.5° over a period of about 41000 years. The axial tilt was at its maximum value about 9000 years' ago, and is currently decreasing, toward a minimum in 11700 years' time.

Increased tilt causes the northern and southern polar regions to receive more solar radiation and harsher seasons, whereas decreasing tilt (the current trend) will bring milder seasonal variation. Milder seasonal variation causes warmer winters – which tends to promote a glacial period because summers are milder (melting less winter ice).

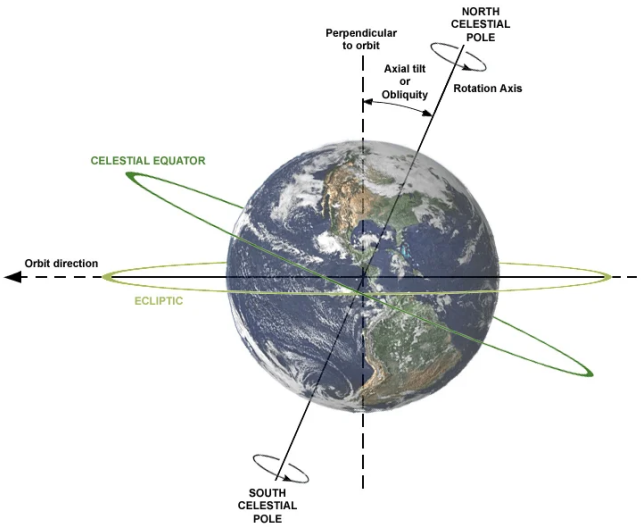


Figure 2: Earths' axial tilt is currently 23.4°, but varies over a period of years 41k from 22° to 24.5°. From Universe Today, https://www.universetoday.com/articles/earths-axis

Precession

Axial precession is the movement of the earths' axis relative to the galactic framework of fixed stars with a period of 25700 years. Precession is caused mainly by the tidal forces of the moon and sun on the rotating earth. Currently the earth's axis points almost exactly toward the Pole Star – the ancient Greeks, however, didn't have a convenient north star and had to use stars at the tip of Ursa Minor and Draco. Precession will cause Deneb to be the north star in 10000 years' time.

Precession works together with orbital eccentricity to affect the global climate: currently the axial tilt and perihelion (closest to the sun) occur during the southern hemisphere's summer, resulting in greatest solar radiation. In the northern hemisphere, perihelion and axial tilt toward the sun occur 6 months apart, and tend to reduce the summer/winter difference in solar radiation. In 13000 years time the north pole will be tilted toward the sun at perihelion, causing maximum solar radiation during the northern summer.

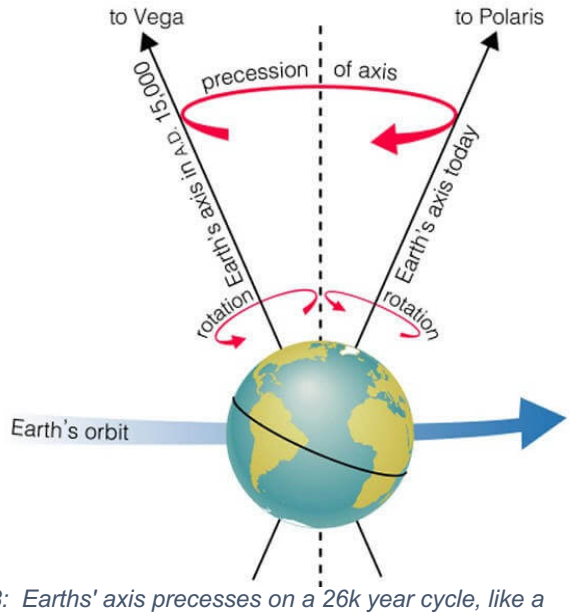


Figure 3: Earths' axis precesses on a 26k year cycle, like a spinning top. Currently pointing at Polaris, it will swing to Vega in 15k years. From https://people.highline.edu/iglozman/classes/astronotes/cycles.htm

What does the data show: Long term global temperature trends

Evidence for long term, repeated cycles in global temperature is captured in the geological rock record and ice cores taken by drilling in polar regions.

Long periods of many milder summers promote the growth of permanent ice (glaciers, ice-sheets) in polar regions and high-altitude mountainous regions at lower latitudes. Mild summers (not colder winters) promote the growth of ice sheets because less ice melts during a mild summer – the ice stays around until the next winter and accumulates year-on-year.

Storing large amount of water on land as snow and ice causes global sea level to fall, and when this ice melts during long periods of global warming, sea level rises. There is also some evidence that during periods of extreme global warming when there were no or minimal polar icecaps (such as during the Upper Cretaceous) sea level rises/falls were modulated by large continental aquifer and lake storage.

Particular lines of evidence are used to infer sea-level cyclicity over millions of years:

- Isotopic composition of fossils in oceanic sediments
- Isotopic and chemical composition of gas bubbles and ice taken from deep polar ice cores

- Systematic changes in vertical stacking of rock layers in geological profiles, eg, repeated sand/mudrock cycles in cliff outcrops, or in deep well-bores.

Isotopic indicators

The oxygen isotopic composition of fossils and continental ice change systematically as global temperature changes. This is because water molecules containing the lighter isotope of oxygen, ^{16}O, evaporate more easily from warm oceans than heavier ^{18}O. As a result, clouds, and ultimately rain and snow, are enriched in ^{16}O. Permanent continental ice sheets therefore lock away large quantities of ^{16}O, and leave the oceans enriched in ^{18}O. When the continental ice sheets melt and retreat the contained ^{16}O is returned to the ocean.

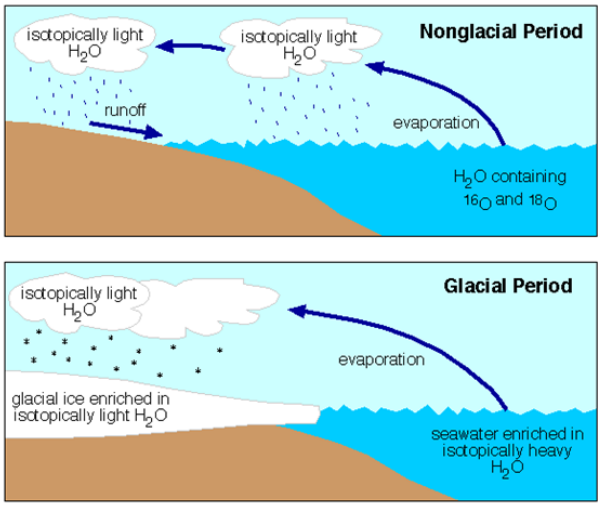


Figure 4: Illustration of how the oxygen isotopic system works to record global temperatures. From https://www.columbia.edu/~vjd1/stable_isotopes.htm

In a similar way, plants, plankton, algae etc prefer to incorporate ^{12}C than ^{13}C, and therefore periods high global plant productivity are marked by a reduction in ^{12}C in ocean water relative to ^{13}C.

Also, ^{2}H, deuterium, behaves similarly to ^{16}O, tending to evaporate more easily from the ocean surface and be concentrated in continental and polar ice sheets.

Geologic Rock Record

Since the Archean, 4+ billion years ago, sediments (sands, muds, carbonates) have been deposited, eroded, re-deposited in the shallow seas on the margins of the continents. These shore-line sediments, preserved as sandstones, shales, limestones, chalks, record sea-level cyclicity – as a generalisation, muddy shelfal sediments record deeper water periods, sandstones and gravels record shallower water, limestones and chalks record clean, sunlit waters with reduced sediment (clay, sand) input.

As such, the geological rock-record is like a bar code, recording 'in stone' a repeated cycle of rising and falling sea level; geologists document the encroachment of seas 100s of km onto the continental margin, or the opposite, a shoreline regression, leaving the continental margins high and dry.

The cliffs at West Bay, Dorset are a familiar example of environmental cyclicity recorded in the geological record (Figure 5)… repeated minor shifts in Milankovitch climate cycle sea-level variations altered the balance of sandy,



Figure 5: West Bay, Bridport, Dorset. Environmental cyclicity recorded in Jurassic sediments. Hard limestone rich layers alternate with softer sand/mud layers.

muddy and carbonate sediment preserved in the shallow, Lower Jurassic shoreface.

Sea-level cyclicity, evidenced by subtle repetition of geological layers is recognised in countless geological records, outcrops, oil-company well data. Environmental cyclicity, recorded in the geology of our planet is like a genetic code, embedded in every cliff, outcrop, and well-bore dataset across the globe.

Maybe check out 'How Geologists Found Earth's Orbit in Stone' on Youtube, by Geo.Sassie (Saskia Elliott | Geoscientist) for an excellent discussion from Kimmeridge Bay, Dorset.

Figure 6, built from an enormous integrated global dataset of well-bores and geologic outcrops, shows how sea-level has changed from the Cretaceous to the present day. During the

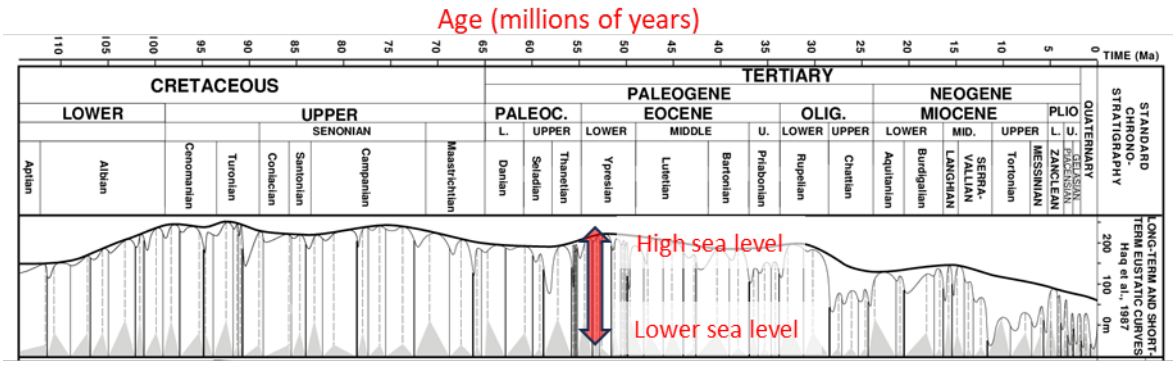


Figure 6: Cretaceous sea-level record deduced from fossil, oxygen isotope, rock outcrop and well-bore data. Abreu et.al, 1998. Mesozoic and Cenozoic Sequence Stratigraphy of European Basins. SEPM Special Publication No. 60

Cretaceous, around 95million years ago, there were no (minimal) polar ice-sheets, and sea-level was approximately 200m higher than today. Since then, the planet has been on a long-term cooling trend – a gradual decline overlain by a complex short-term cyclicity of minor (10s of metres) of sea-level change.

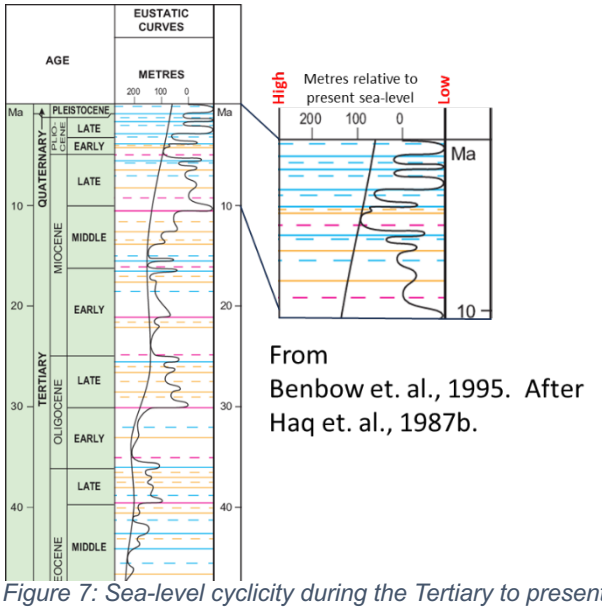


Figure 7: Sea-level cyclicity during the Tertiary to present day. Zoom-in shows the recent sea-level changes due to the current ice-house glaciation period the earth is experiencing

Similarly, Figure 7 shows a more detailed sea-level curve from the Tertiary to present-day and zooms in on the recent rises/falls that are due to the glacial and inter-glacial periods the earth is currently undergoing. At the peak of the recent glaciation, sea-level was around 100m lower than today (yes, you could walk to France 😊).

Global temperature change over the last 400,000 years is shown in **Error! Reference source not found.**, derived from the tiny gas bubbles locked into ice in the Vostock Ice core, drilled to 3000m in the Antarctic ice sheet. The data record 4 significant cycles of relatively gradual cooling (~100000 years long) punctuated by rapid warming. The solar heating variations (insolation) are empirically linked to CO_2, CH_4, oxygen isotope data, and by direct correlation to ice-sheet volume, and

hence global average temperature. It's interesting to note that the warming phase of each cycle is rapid relative to the cooling phase, with an implication that sea-level rise in response to insolation related warming is much faster than the following sea-level fall (ice caps take a long time to build, but can thaw quickly).

The data and solar insolation curve imply that we should be maintaining global temperature, or transitioning into another cooling, glacial trend…. though civilisation's emission of greenhouse

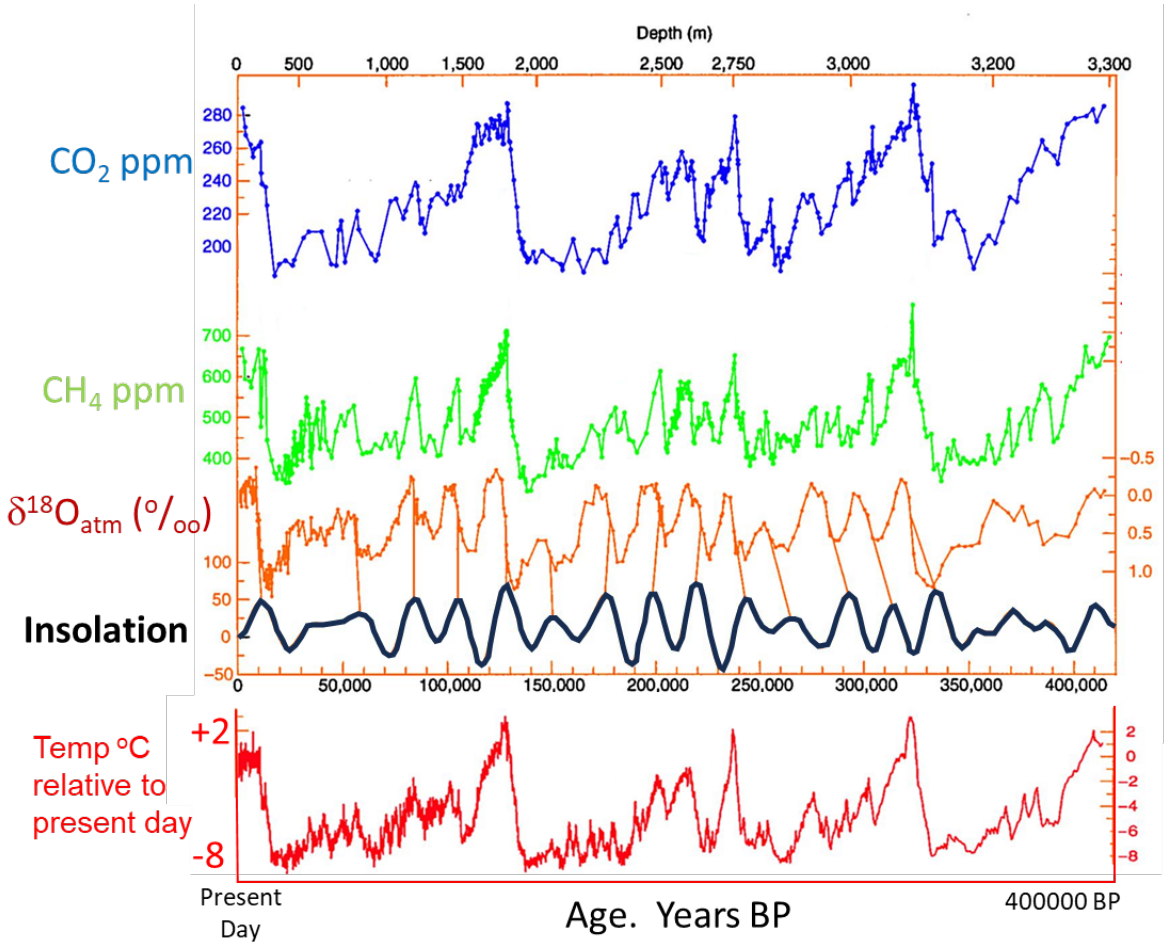


Figure 8: Linking global temperature to Solar heating (insolation). Present day is to the left. Data from Antarctic Ice Core (Vostock) drilled to 3000m depth. Inferred global temperature relative to present day is shown on the bottom, red, curve. Solar heating. Modified from Wikipedia.

gases back into the atmosphere is impacting the natural dynamic of solar system Milankovitch cyclicity on the global equilibrium.

An astronomer on what it's really like to stargaze for a living

Acknowledgement: This article was written by Alix Violet Freckelton, Research Fellow - Sun, Stars, and Exoplanets, University of Birmingham. First published in THE CONVERSATION on 13 August 2026, it is republished in full under a Creative Commons Licence. The original article, with additional links and images can be found here: *https://theconversation.com/an-astronomer-on-what-its-really-like-to-stargaze-for-a-living-288451*

Jodie Foster tearing up a dirt road, yelling stellar coordinates into a walkie-talkie à la the 1997 sci-fi film Contact. Control rooms alive with a cacophony of "enhance that signal". Real-time discovery. That's what I pictured when my PhD supervisor told me I'd be going observing at a telescope.

Cut to 2am on top of a mountain in La Palma last April, at an altitude that makes you forget you're in the Canary Islands. It was utterly freezing, and I had dressed for the sunny archipelago in thin layers. I almost dropped my mug trying to close the telescope door against the wind.

Coffee and food waited two minutes away in the service building. In the darkness, the wind caught a loose scrap of fabric and scared the life out of me. I fell over within 30 seconds. Winds of 40km/h aren't uncommon at the observatory; I was just entirely unprepared.

I sat on the road, mourning my dignity. And I looked up. For the first time in my life, I saw the Milky Way. It painted the sky, reminding me violently of my insignificance. Nothing in my life has ever compared to that. I allowed myself to bask in it for ten minutes. Then the work beckoned me: I needed coffee, and hadn't told my colleague which star was next on the schedule.

How is an observing night prepared?

A night at a telescope begins in the afternoon. At around 4pm, my colleague, who was training me to use the telescope, and I drove up to the Nordic Optical Telescope. It's a gorgeous piece of kit, with a diameter of 2.56 metres. It collects enough starlight for exquisitely precise measurements.

Every instrument and filter had to be carefully tested. On my side, this was a few lines of code. The telescope operator ensured everything worked properly and set up the telescope. While calibrations ran, I started scheduling the night's observations.

Telescope time is limited, so having three nights at the helm meant I had to squeeze out every second I could. Hollywood did not prepare me for how many spreadsheets this involves. This sort of scheduling requires careful balancing of many factors. For example, observing stars close together on the night sky consecutively to avoid spending too much time repointing the telescope.

Once calibration and scheduling were complete, I watched the sun set. It was beautiful, but also a warning – working hours will soon begin. If you catch the right moment, you can see a small fleet of astronomers in cars headed to their respective telescopes.

The mountain came to life with domes opening, catching the first starlight of the night. There're more than 20 telescopes in the observatory on the mountain, whose specialisms range from observing supernovae to exoplanets (any planet beyond our solar system).

The night itself

Around 8pm, the first light from a star – HD153557 in this case, a dwarf star around 59 light-years away – entered the telescope. This is always a bit special. The whir of the dome moving, the shutters opening, seeing the monitors show the first traces of data. I sipped my coffee, turned up the 80s hits, and was content in the knowledge that I'd still be in that chair in 12 hours.

This night started rather predictably. The weather was perfect, not a cloud in sight, and the telescope behaved beautifully. Before long we had a spreadsheet slowly getting filled in with completed observations. I knew the peace wouldn't last. I'd done ten observing nights at two different telescopes by that point in my career, and not one of them without something disrupting my colour-coded plans. Typically, a cloud will move right in front of a star I'm trying to observe, or it'll rain and that means we have to close the dome. But every few nights, there's something a little more exciting.

An email just before midnight brought with it a Target of Opportunity alert. These are observations that need to be done immediately, a blink-and-you'll-miss-it moment. This one was a gamma-ray burst. It's one of the most violent events in the universe, over a trillion times brighter than our Sun. This was picked up by a space-based detector and emailed to us to request the observation.

Gamma-ray bursts aren't in my area of expertise – I research stars like the Sun and their surrounding planets. Far less explosive. Between switching observing instruments, rotating the dome, checking calibrations, I was also digesting as much information as I could about what a gamma-ray burst is. This was probably the closest I'll ever get to my Jodie Foster moment, and it was a rather anticlimactic, blurry image loading very slowly on a screen.

After the gamma-ray burst was observed, the control room became quiet again. Back to my spreadsheets and falling over trying to get coffee. To feeling slightly lonely but seeing another dome rotating under the moonlight when I stepped outside, and being reminded of the other tired astronomers all working beneath the same stars.

It was 8:30am when I finally got back to my room. Ready for a shower, and bed, and to wake up in five hours and do it all again.

The scientific end product

The reality is that scientific interpretation rarely happens in real time. The telescope measurements are first cleaned and calibrated by a computer programme, which turns them into usable spectra. I then apply my own analysis code to these spectra. For me, this comes much later, at my desk in Birmingham once my sleep schedule has recovered. These particular observations gave us stellar spectra: when a star's light splits into a rainbow, imposed with patterns that reveal its temperature and chemical composition.

The most common observing nights involve balancing spreadsheets, a whole lot of coffee, and slowly surrendering to the delirium of sleep deprivation. Some of them have dramatic alerts. Some of them end up entirely clouded out and allow for an early bedtime.

There is no pivotal “enhance that signal” moment, but there is the quiet, consistent sense of joy that I’m cataloguing and understanding the stars that could one day be found to host another Earth. Hollywood didn’t prepare me for the scientific process. But it got the wonder spot on.

Up Next:

NEXT MEETING: 8pm Friday 11 September – Nonsuch High School

Society member Paul Costa will give a talk entitled “An Atacama Astronomical Adventure” recounting his experiences when he went to the Atacama Desert in May this year.

As usual, there will also be a presentation on the sky at night for the coming month.

60th ANNIVERSARY DINNER

This will be held at Horton Park Golf Club at 19:00 on Saturday 26th September

NEXT USER GROUP:

These will now be incorporated into observing sessions at the MGO

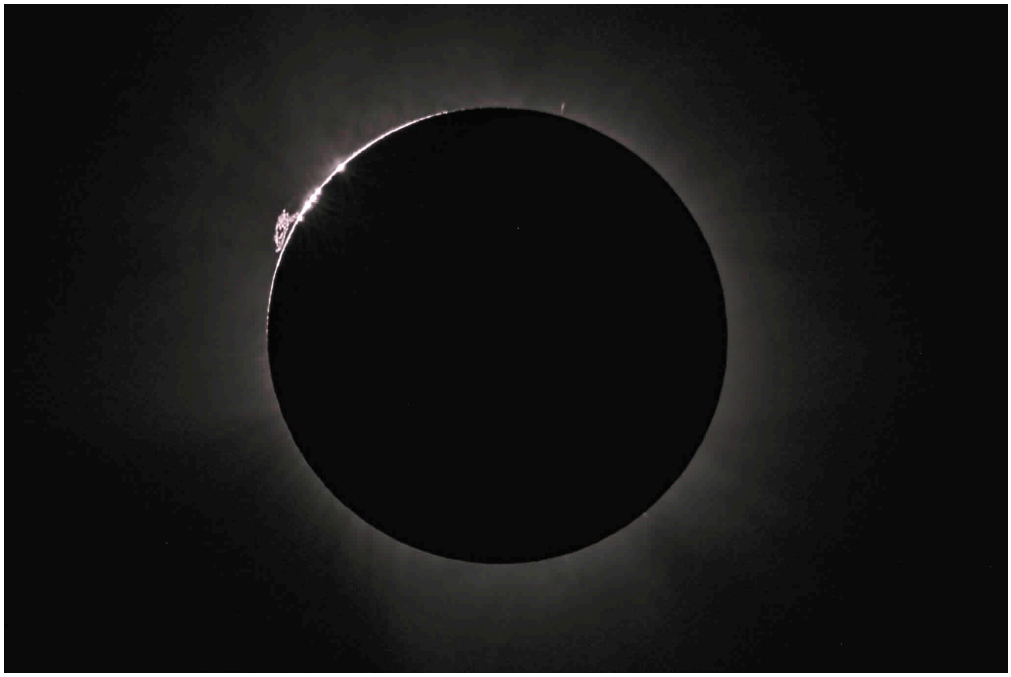
OBSERVING SESSIONS AT MGO

Regular observing sessions will now take place at the MGO. The intention is that they will be held on the last Friday of each month. Similar in format to the old User Group sessions, they will evolve with time, and there could be an option to include Telescope surgeries for members. It may also be possible to hold separate sessions for Imaging classes etc.

The first Observatory session is planned for 23 September, just before the 60th Anniversary dinner, with succeeding sessions on 30 October and 27 November.

As was previously the case, ad-hoc “dark sky” sessions may additionally be held at Ranmore Common. The precise date and timings of these will be advised by email and WhatsApp a few days in advance.

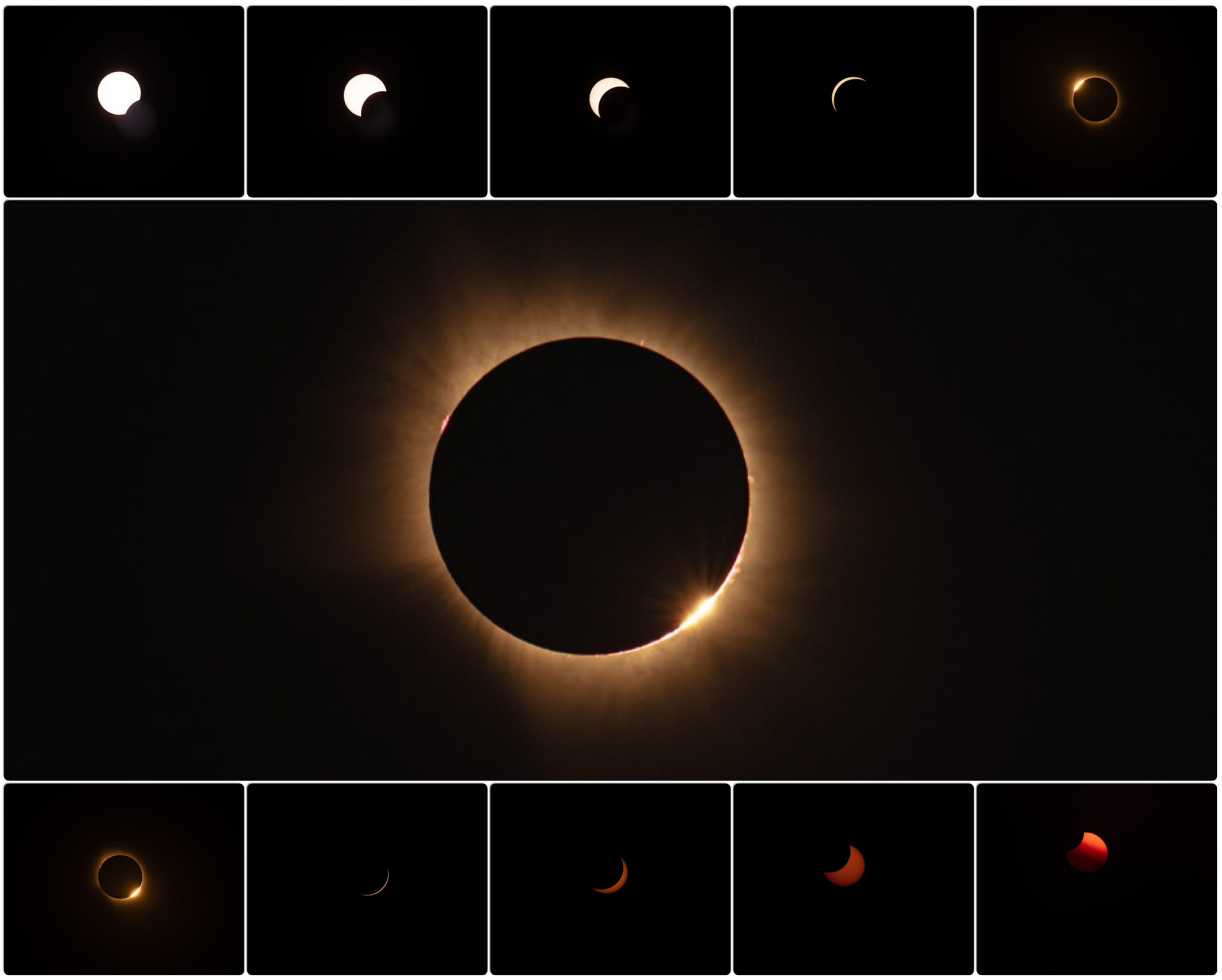
Some Images from WhatsApp during August



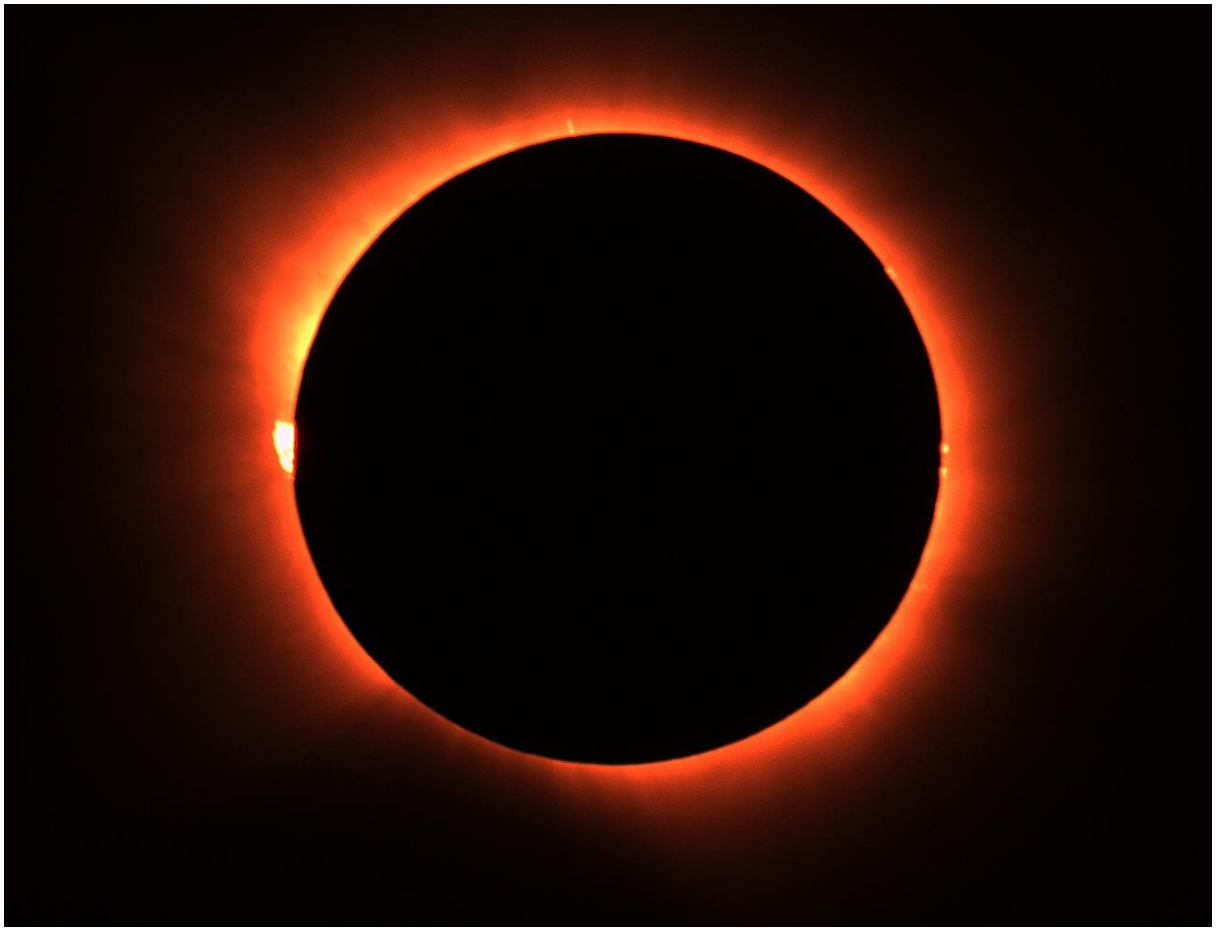
Matt Graydon

Solar EclipseTotality viewed from Spain

Baily’s Beads visible on the limb



Matt Graydon – Solar Eclipse Sequence



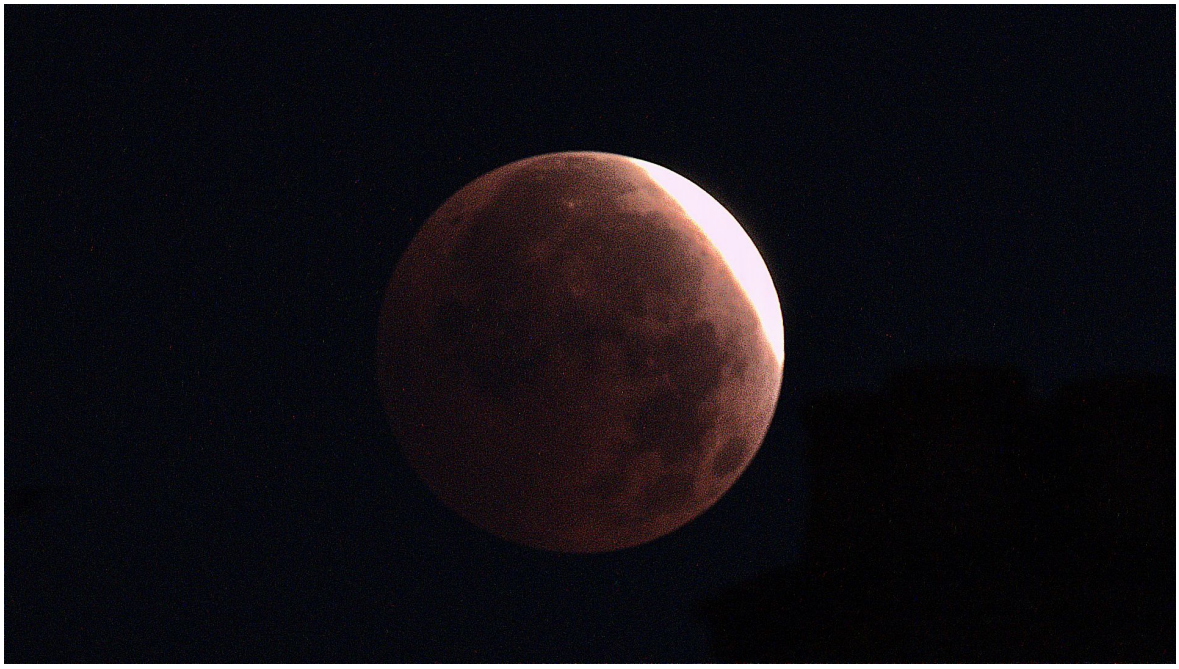
Aseem G from Calig, Spain



Crowds on Epsom Downs



Casper got lucky - An aeroplane against the sun



Anita King – Lunar Eclipse

12 August 2026 – Partial Eclipse of the Sun (91%) – Ron Johnson

102mm f9.8 OG full aperture solar filter Canon 400D DSLR

First image taken at 17:18UT. Last image taken at 19:04UT.

