

## **Popular Clair-Obscur Effects: Times for 2026**

### **Lunar X & V, the Face in Albategnius, the Eyes of Clavius, the Jewelled Handle, Cassini's Moon Maiden and Reiner Gamma** **by Mary McIntyre**

The Lunar X and V are one of the most talked about lunar Clair-Obscur effects and for the past few years I have produced tables showing the times that they are visible for the coming year. However, they are just two of a huge list so I now include the times for a few more; the Face in Albategnius, the Eyes of Clavius, the Jewelled Handle (sunrise over Sinus Iridum) and Cassini's Moon Maiden AKA Promontorium Heraclides. Last year I also included an additional feature to look for, the lunar swirl Reiner Gamma. Although Reiner Gamma is not actually a Clair-Obscur effect, observing its appearance compared to its surroundings is related to the way the light plays over the lunar surface. More about this later.

Detailed information about each of these effects is below if you're new to this, but for those of you who are only interested in the data tables, I've put those first. For the time-dependant ones I've included the moonrise/moonset times for Oxford, UK, but these times will vary slightly across the UK. The times are listed in UT so if you're outside of the UK you can convert this to your own local time then and check your own moonrise and set times. I've included the time in UT and BST when the UK is on daylight savings (29<sup>th</sup> March – 25<sup>th</sup> Oct).

For UK observers, this first table is where I've put everything together in one quick reference layout showing if and when each of the Clair-Obscur effects are visible from the UK for each month. Visibility is based on moonrise and set times for Oxford, UK. The Jewelled Handle, Moon Maiden and Reiner Gamma are not as time critical and will be nice to observe anytime on the dates shown here. Detailed times are in the specific data tables that follow after this.

## **2026 Quick Check Visibility Table for UK Observers**

	<b>Lunar X &amp; V</b>	<b>Face in Albategnius</b>	<b>Eyes of Clavius</b>	<b>Jewelled Handle</b>	<b>Cassini's Moon Maiden</b>	<b>Reiner Gamma</b>
<b>January</b>	25 <sup>th</sup> 17:00 UT	25 <sup>th</sup> ~23:00 UT	27 <sup>th</sup> 02:00 UT	28 <sup>th</sup>	29 <sup>th</sup>	31 <sup>st</sup>
<b>February</b>	24 <sup>th</sup> 08:00 UT	24 <sup>th</sup> ~14:00 UT	25 <sup>th</sup> 18:00 UT	27 <sup>th</sup>	27 <sup>th</sup>	-----
<b>March</b>	25 <sup>th</sup> 22:00 UT	-----	27 <sup>th</sup> 10:00 UT	28 <sup>th</sup>	29 <sup>th</sup>	1 <sup>st</sup> & 30 <sup>th</sup>
<b>April</b>	24 <sup>th</sup> 11:00 UT 12:00 BST	24 <sup>th</sup> ~17:00 UT ~18:00 BST	25 <sup>th</sup> / 26 <sup>th</sup> 23:30 UT 00:30 BST	27 <sup>th</sup>	27 <sup>th</sup>	29 <sup>th</sup>
<b>May</b>	23 <sup>rd</sup> 23:00 UT 00:00 BST	-----	-----	26 <sup>th</sup>	27 <sup>th</sup>	28 <sup>th</sup>
<b>June</b>	-----	22 <sup>nd</sup> ~16:00 UT ~17:00 BST	-----	25 <sup>th</sup>	25 <sup>th</sup>	27 <sup>th</sup>
<b>July</b>	21 <sup>st</sup> 20:00 UT 21:00 BST	-----	-----	24 <sup>th</sup>	25 <sup>th</sup>	27 <sup>th</sup>
<b>August</b>	-----	-----	21 <sup>st</sup> 18:00 UT 19:00 BST	23 <sup>rd</sup>	23 <sup>rd</sup>	25 <sup>th</sup>
<b>September</b>	18 <sup>th</sup> 18:00 UT 19:00 BST	-----	-----	21 <sup>st</sup>	22 <sup>nd</sup>	24 <sup>th</sup>
<b>October</b>	-----	-----	-----	21 <sup>st</sup>	21 <sup>st</sup>	23 <sup>rd</sup>
<b>November</b>	16 <sup>th</sup> 21:00 UT	-----	-----	19 <sup>th</sup>	20 <sup>th</sup>	22 <sup>nd</sup>
<b>December</b>	16 <sup>th</sup> 12:00 UT	16 <sup>th</sup> 18:00 UT	17 <sup>th</sup> 18:00 UT	19 <sup>th</sup>	19 <sup>th</sup>	21 <sup>st</sup>

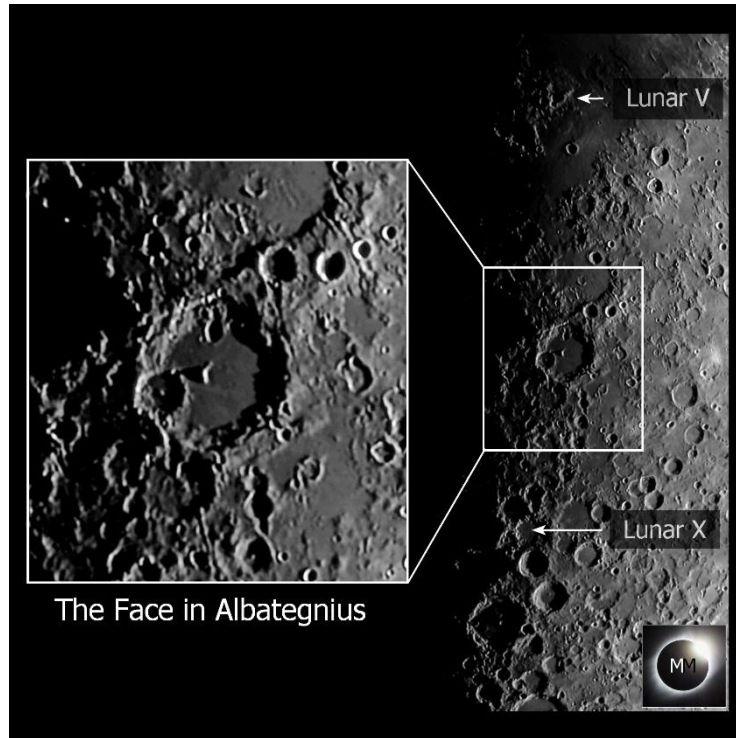
## The Lunar X and V



### Lunar X and V Visibility Table 2026

Date	Start	Moonrise	Moonset	Visible UK?	% illuminated
Jan 25	17:00 UT	10:05 UT	01:14 UT (Jan 26)	Y	44.6%
Feb 24	08:00 UT	09:19 UT	03:22 UT (Feb 25)	Y (rising)	48%
Mar 25	22:00 UT	08:58 UT	03:19 UT (Mar 26)	Y	51.4%
Apr 24	11:00 UT 12:00 BST	11:50 BST	03:46 BST (Apr 25)	Y (rising)	54%
May 23	23:00 UT 00:00 BST	12:23 BST	02:02 BST	Y	55.4%
June 22	10:00 UT 11:00 BST	14:00 BST	01:01 BST	N	55.3%
July 21	20:00 UT 21:00 BST	14:16 BST	23:34 BST	Y	53.8%
Aug 20	07:00 UT 08:00 BST	15:42 BST	22:44 BST	N	51.8%
Sep 18	18:00 UT 19:00 BST	15:33 BST	22:05 BST	Y	49%
Oct 18	07:00 UT 08:00 BST	15:22 BST	23:07 BST	N	46.5%
Nov 16	21:00 UT	13:04 UT	22:19 UT	Y (setting)	44.2%
Dec 16	12:00 UT	11:48 UT	23:45 UT	Y (rising)	42.7%

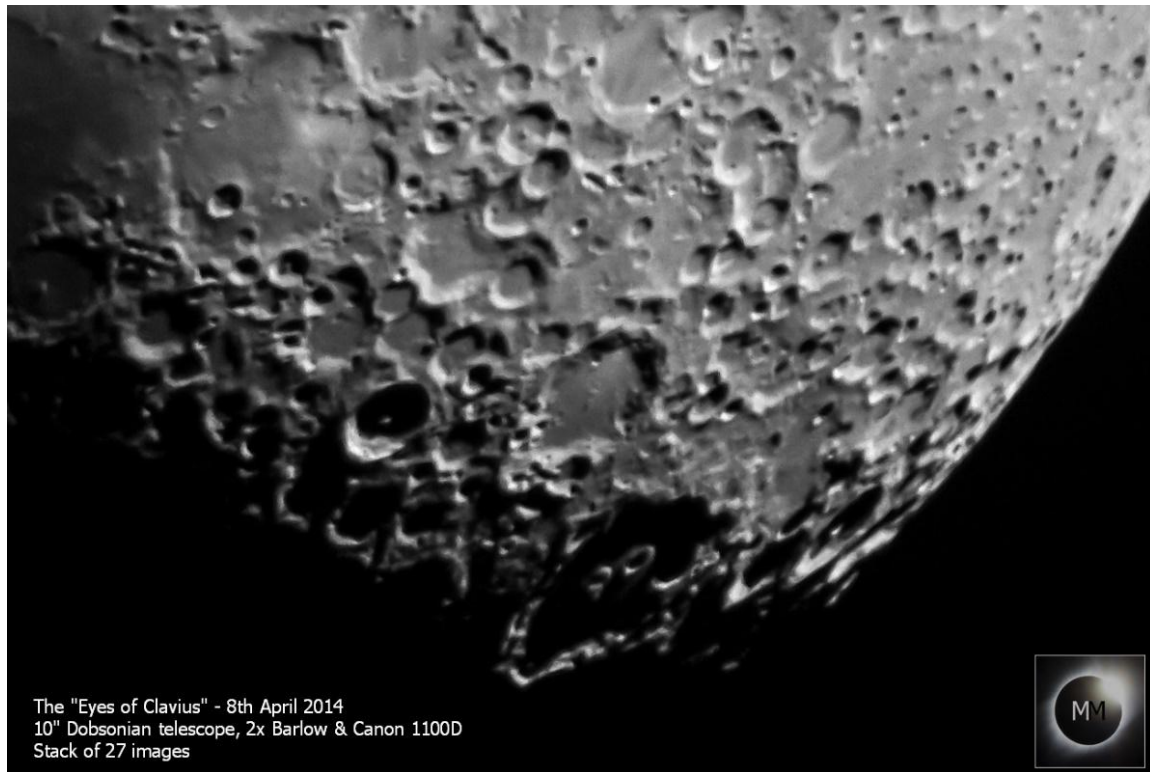
## The Face in Albategnius



## The Face in Albategnius Visibility Table 2026

Date	Start	Moonrise	Moonset	Visible UK?
Jan 25	~23:00 UT	10:05 UT	01:14 UT (Jan 26)	<b>Y</b>
Feb 24	~14:00 UT	09:19 UT	03:22 UT (Feb 25)	<b>Y day</b>
Mar 26	~04:00 UT	08:58 UT (Mar 25)	03:19 UT	N
Apr 24	~15:00 UT ~16:00 BST	11:50 BST	03:46 BST (Apr 25)	<b>Y day</b>
May 24	~05:00 UT ~06:00 BST	12:23 BST (May 23)	02:02 BST	N
June 22	~16:00 UT ~17:00 BST	14:00 BST	01:01 BST	<b>Y day</b>
July 22	~02:00 UT ~03:00 BST	14:16 BST (Jul 21)	23:34 BST (Jul 21)	N
Aug 20	~13:00 UT ~14:00 BST	15:42 BST	22:44 BST	N
Sep 19	~00:00 UT ~01:00 BST	15:33 BST (Sep 18)	22:05 BST (Sep 18)	N
Oct 18	~13:00 UT ~14:00 BST	15:22 BST	23:07 BST	N
Nov 17	~03:00 UT	13:04 UT (Nov 17)	22:19 UT (Nov 17)	N
Dec 16	~18:00 UT	11:48 UT	23:45 UT	<b>Y</b>

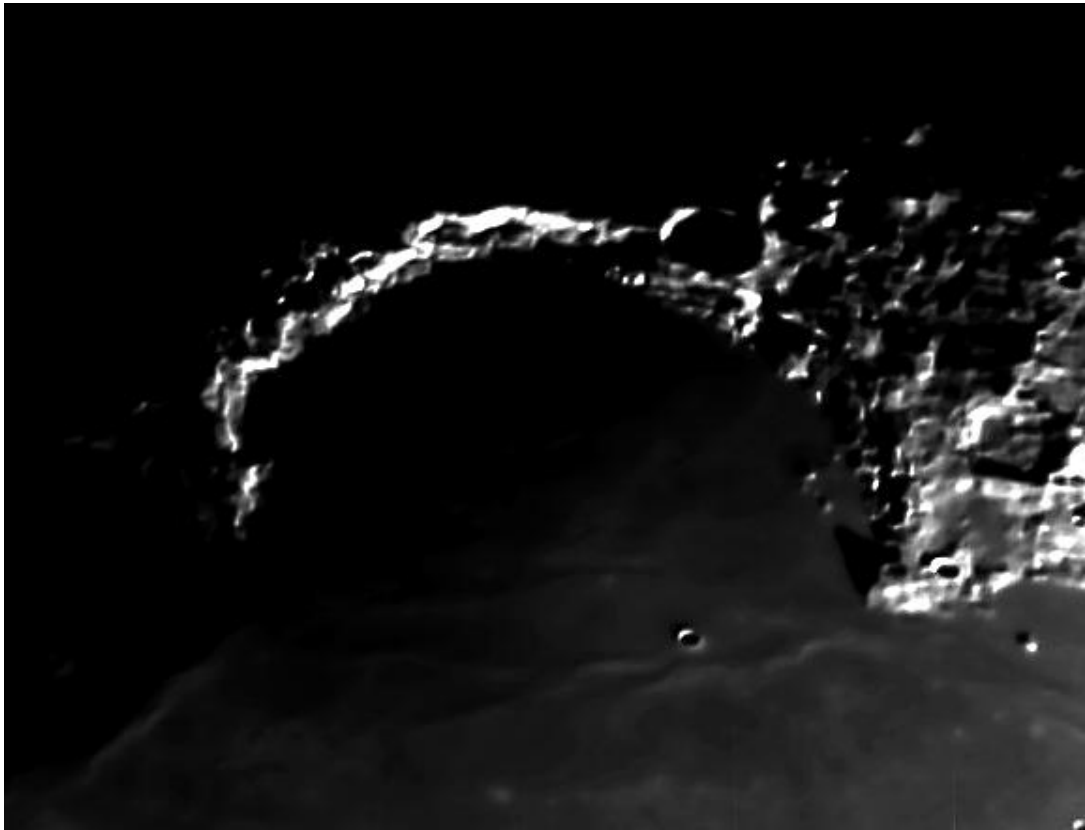
# The Eyes of Clavius



## The Eyes of Clavius Visibility Table 2026

Date	Start	Moonrise	Moonset	Visible UK?	% illuminated
Jan 27	02:00 UT	10:45 UT (Jan 26)	02:44 UT	<b>Y</b> setting	60.1%
Feb 25	18:00 UT	10:03 UT	04:30 UT (Feb 26)	<b>Y</b>	64%
Mar 27	10:00 UT	11:36 UT	04:21 UT (Mar 28)	<b>Y</b> rising	67.9%
Apr 25	23:30 UT 00:30 BST (Ap 26)	13:14 BST	04:01 BST (Apr 26)	<b>Y</b>	70.1%
May 25	13:00 UT 14:00 BST	14:57 BST	02:42 BST (May 26)	N	71.1%
Jun 23	23:00 UT 00:00 BST (Jun 24)	15:15 BST	01:13 BST (Jun 24)	N	70%
Jul 23	09:00 UT 10:00 BST	16:45 BST	00:14 BST (Jul 24)	N	68.3%
Aug 21	18:00 UT 19:00 BST	16:47 BST	23:23 BST	<b>Y</b> day	65.5 %
Sep 20	03:00 UT 04:00 BST	16:56 BST	00:12 BST (Sep 21)	N	62%
Oct 19	14:00 UT 15:00 BST	15:44 BST	00:22 BST (Oct 20)	N	58.8%
Nov 18	03:00 UT	13:31 UT	00:47 UT (Nov 19)	N	56.3%
Dec 17	18:00 UT	11:59 UT	01:00 UT (Dec 18)	<b>Y</b>	55.4%

## The Jewelled Handle



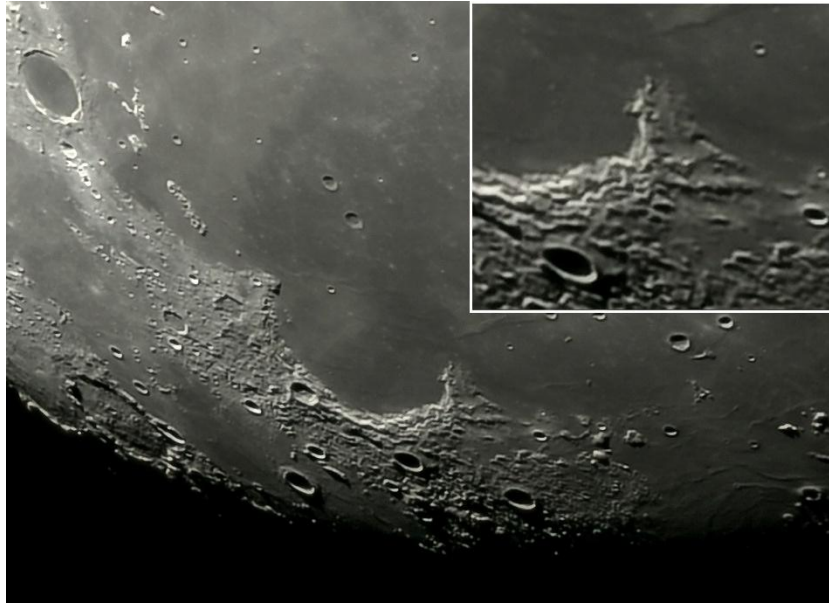
*Photo of Sinus Iridum by Mary McIntyre*

This clair-obscur effect is best viewed at the start time below but remains visible after the lunar terminator has passed over the region so it should therefore be visible for a large part the dates listed below.

### The Jewelled Handle Visibility Table 2026

Date	Start	% illuminated
Jan 28	16:00 UT	77%
Feb 27	06:00 UT	79.4%
Mar 28	17:00 UT	80.3%
Apr 27	07:00 UT 08:00 BST	81.6%
May 26	17:00 UT 18:00 BST	81%
Jun 25	04:00 UT 05:00 BST	80.1%
Jul 24	16:00 UT 17:00 BST	79%
Aug 23	04:00 UT 05:00 BST	77.5%
Sep 21	18:00 UT 19:00 BST	76.3%
Oct 21	07:00 UT 08:00 BST	74.5%
Nov 19	23:00 UT	74%
Dec 19	12:00 UT	73.1%

## Cassini's Moon Maiden



Cassini's Moon Maiden starts to become visible and is at its best as the sunlight illuminates Promontorium Heraclides, but it remains visible for a couple of days so the times below are just an approximate guide. The Moon maiden is upside down for UK observers – Cassini's telescope flipped the view. The photo above was turned to better show the maiden.

### Cassini's Moon Maiden Visibility Table 2026

Date	Start
Jan 29	09:00 UT
Feb 27	19:00 UT
Mar 29	10:00 UT 11:00 BST
Apr 27	22:00 UT 23:00 BST
May 27	06:00 UT 07:00 BST
Jun 25	21:00 UT 22:00 BST
Jul 25	05:00 UT 06:00 BST
Aug 23	21:00 UT 22:00 BST
Sep 22	08:00 UT 09:00 BST
Oct 21	21:00 UT 22:00 BST
Nov 20	11:00 UT
Dec 19	23:00 UT

## Reiner Gamma



Once the Sun has risen over the prominent lunar swirl, Reiner Gamma, it remains visible until the Sun sets over it a couple of weeks later. The table below shows the approximate time that the Sun has risen over the swirl; it usually occurs when Moon is around 95% illuminated.

### Reiner Gamma Visibility Table 2026

Date	Start	% illuminated
Jan 31	02:00 UT	95.4%
Mar 01	15:00 UT	95.9%
Mar 30	23:00 UT 00:00 BST (Mar 31)	95.3%
Apr 29	14:00 UT 15:00 BST	95.6%
May 28	23:00 UT 00:00 BST (May 29)	94.6%
Jun 27	17:00 UT 18:00 BST	95.1%
Jul 27	05:00 UT 06:00 BST	94.6%
Aug 25	14:00 UT 15:00 BST	93.4%
Sep 24	04:00 UT 05:00 BST	92%
Oct 23	16:00 UT 17:00 BST	92.1%
Nov 22	02:00 UT	91.1%
Dec 21	15:00 UT	91.2%



### Additional information if you're new to Clair-Obscur effects

The times given in the data tables are in 24 hour clock and are in UT/GMT (and BST where appropriate) so you will need to correct for time zones and daylight time savings if you are not in the UK. I have also included the approximate moonrise and moonset times in the tables for the effects that are time critical. These times were taken from the Time and Date website and relate to my location in Oxford, UK. Your exact rise and set times will vary depending on where you are in the UK. You can check sunrise and set times for your location here:

<https://www.timeanddate.com/moon/uk/london>

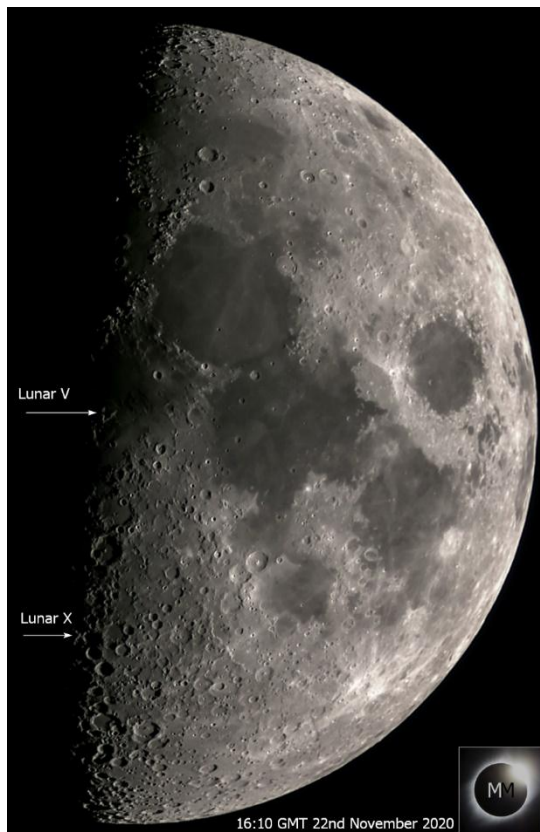
To ascertain the times these effect appear each month, I used the NASA Scientific Visualisation Studio Moon Phase and Libration tool for 2026: <https://svs.gsfc.nasa.gov/5187/> You can set the time/date in the calendar and it will show how the Moon looks at that time. Please note that due the issues in the US not all functions are currently available on this website.

### Lunar X and V

The Lunar X and V are transient Clair-Obscur effects visible on the lunar surface once a month for about 3 or 4 hours. The "X" is caused by light illuminating the rims of craters Blanchinus, La Caille and Purback. The "V" is caused by light illuminating crater Ukert along with several smaller craters. The X is at its most striking when it is visible on the shadow side of the terminator. The X is located about a quarter of the way up from the bottom, and the V is approximately half way up, just inside the illuminated side of the terminator, where it shines brightly against the darker background of Mare Vaporum.

Once you know where to look, you will be able to spot them with large binoculars (it will help if they are mounted) but they are best viewed through a telescope. They will show up on photos taken with a 300mm zoom lens or through a modest telescope.

They will remain visible against the lunar surface for a few hours even after the terminator has moved over them as shown in the photo below.



*Left: The lunar X and V can still be seen for a short time when the Sun has risen over those craters, but it isn't as striking as when the X is illuminated against the unlit surface, as shown in the image above.*

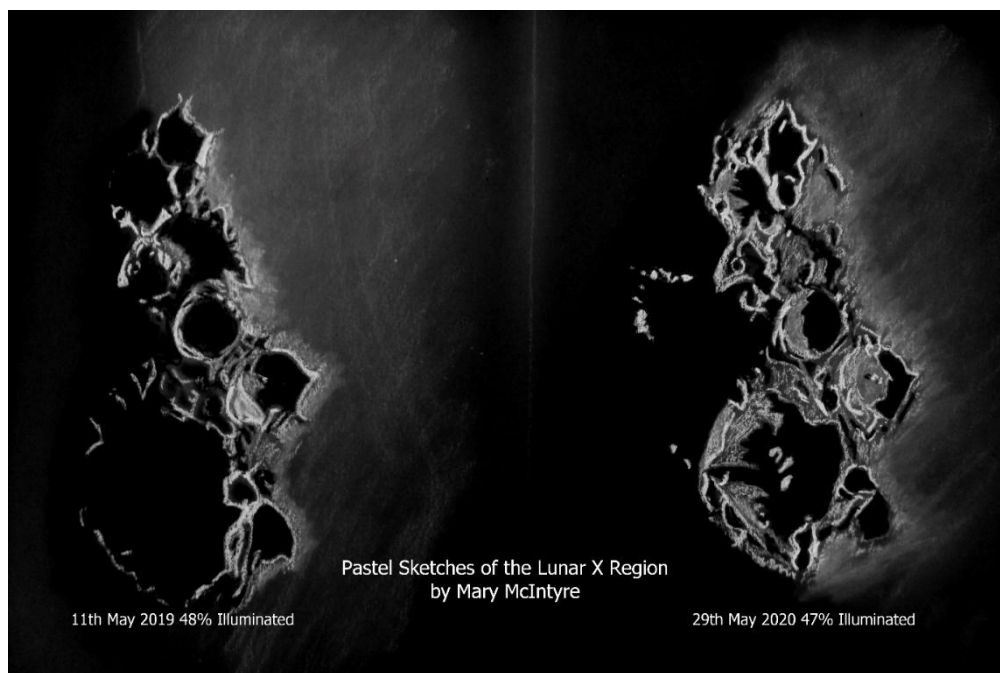
The X and V are visible close to the First Quarter phase, however, due to libration, the exact time that they are visible is different from month to month. The lunar phase illumination at the times they're seen during 2026 varies between 42.7% - 55.4%. Although the Lunar X and V occur every month, they time they're visible may not coincide with the Moon being above the horizon from your location, so you will not see them every month.

From the UK, the Lunar X is visible 9 times during 2026, but three are on a daylight rising Moon which is challenging to observe, and one is on a setting Moon which is also challenging. January 25th, March 25th, May 23rd and September 18th are our best chances during 2026.



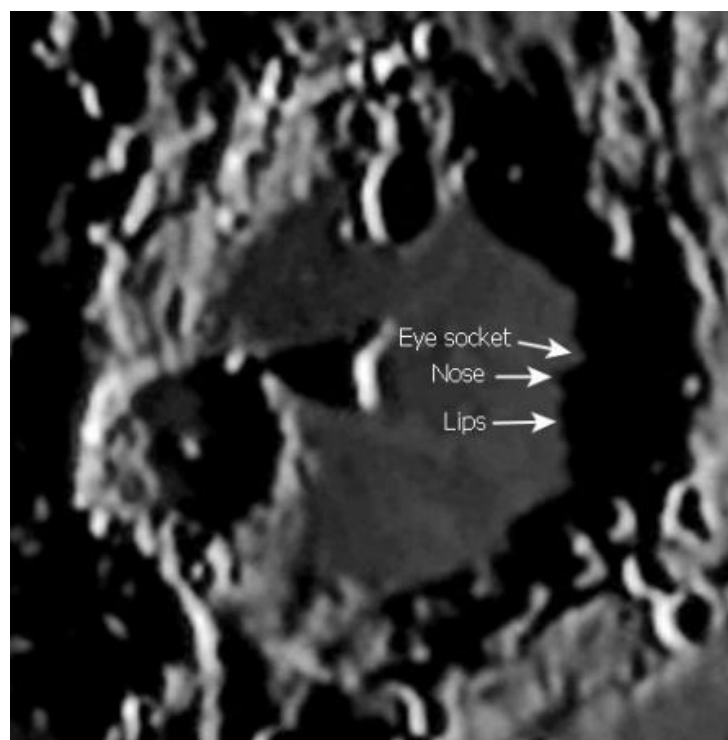
The Lunar V appears around an hour before the X. In previous years when I've observed the Lunar X using the start times from the NASA website, I have found it may take about 45 minutes from the start time before the X becomes clearly visible. The start times are approximate, and they should be visible for a few hours after this. There is no fixed end-time listed because as mentioned above, these features remain visible even after the terminator moves across them, but if you assume they are visible for around 3 hours from the start time, you will see them at their best.

It's great fun to observe how the Lunar X and V regions evolve over time, so if you do make the effort to see them when they first appear, make sure you check that region again periodically to see how things have changed. The sketches below show how the Lunar X is far less prominent once the terminator has passed over it and starts to illuminate more of the craters.



*Pastel sketches showing how the Lunar X stands out against better against the darker background before the lunar terminator has passed over it.*

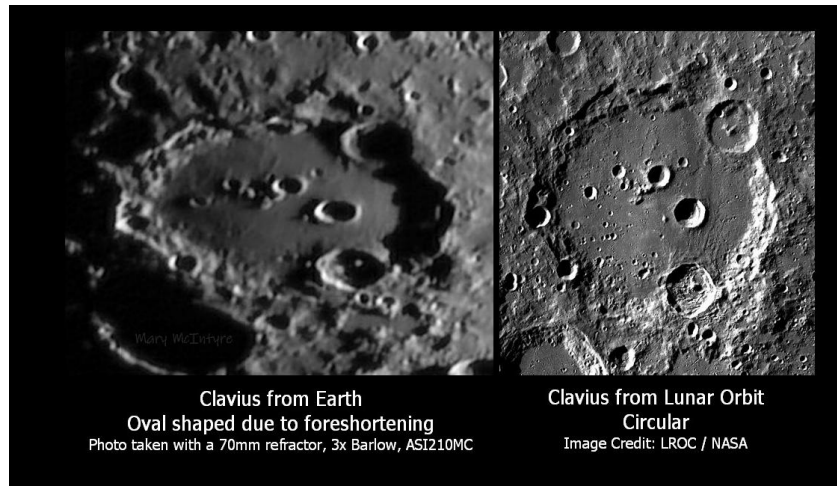
### **The Face in Albategnius**



**Approximately 6 hours** after the Lunar X is at its best, when the terminator has moved across to cover the area around it, take a closer look at the shadows on the eastern side of the crater Albategnius (located almost halfway between the X and V). At just the right time the shadow looks like the side profile of a face. This shows up more clearly on stacked photos which have better resolution and sharper features. The above image was taken with a William Optics 70mm refractor with Celestron 3x Barlow. The camera was an ASI120MC. This is another short-lived Clair-Obscur effect, so make sure you don't miss it!

### The Eyes of Clavius

Clavius is the second largest crater on the lunar nearside so it's a brilliant crater to observe, even with modest equipment. It is a roughly circular crater that has a diameter of 225km, but its location near the southern limb means it appears foreshortened top to bottom so it therefore looks oval shaped when viewed from Earth.



*Comparison of Clavius as seen from Earth and from orbit. Clavius appears oval from Earth due to foreshortening.  
Left image by Mary McIntyre, right image by LROC/NASA*

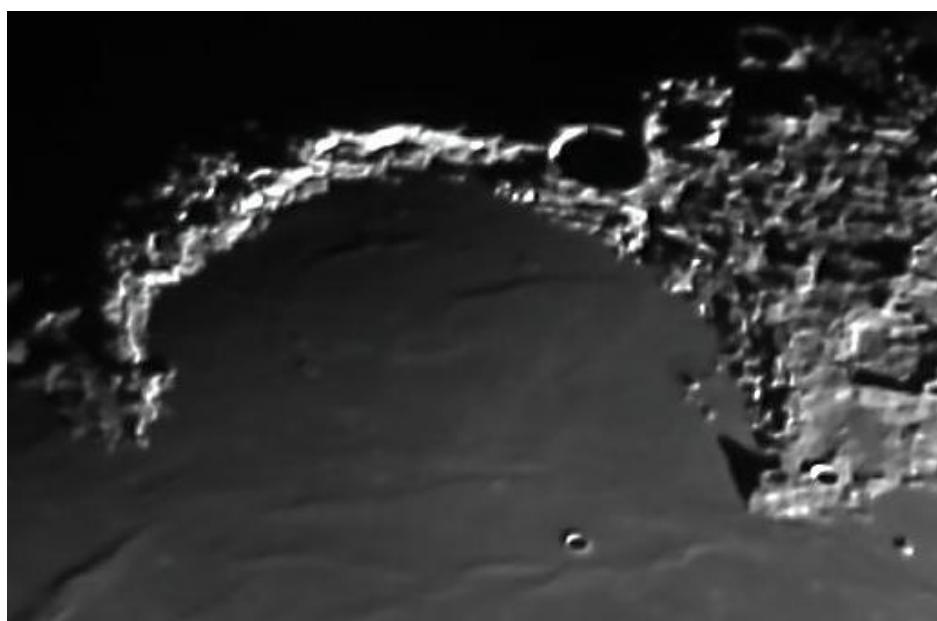
Interestingly, there are very few truly oval shaped craters on the Moon; almost all oval craters only look that shape to us because they're foreshortened by their position near to the limb. Clavius has several satellite craters along its floor. Clavius C and D, with diameters 21km and 28km respectively, have walls that are higher than the crater floor. As the Sun rises over Clavius, the tops of these crater walls catch the sunlight before the rest of the crater floor, and this creates two white rings that resemble a pair of eyes looking out from the shadowy void.

The Eyes of Clavius are visible during a Waxing Gibbous Moon, but as with other Clair-Obscur effects, the exact phase angle varies each month due to libration. During 2026 there are 6 months where they are visible from the UK, but one of those is on a setting Moon and one is on a rising Moon, which will be challenging. Additionally, in August they will be visible on a daylight Moon which is also a challenging. February 25<sup>th</sup> and December 17<sup>th</sup> are our best chances.



*Left side: The Eyes of Clavius shine out from the shadowy crater floor as the Sun rises over Clavius.  
Right side: Clavius fully illuminated with more satellite craters visible. Image credit: Mary McIntyre*

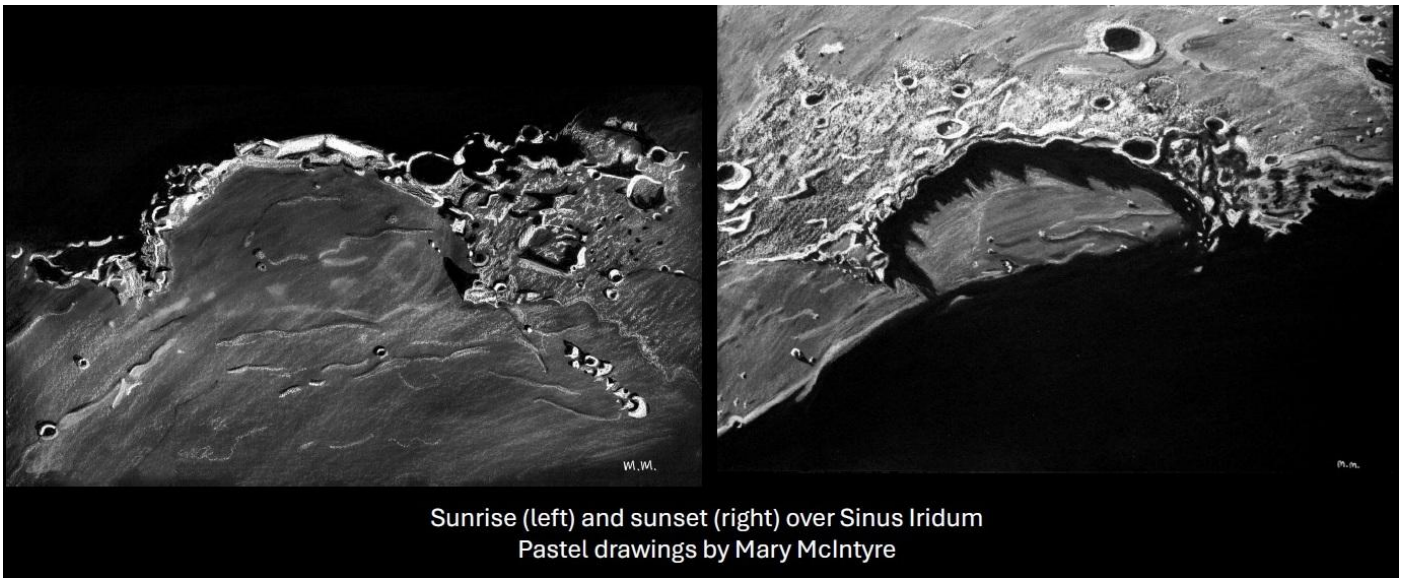
### **The Jewelled Handle / Sinus Iridum**



*Photo of the Jewelled Handle by Mary McIntyre*

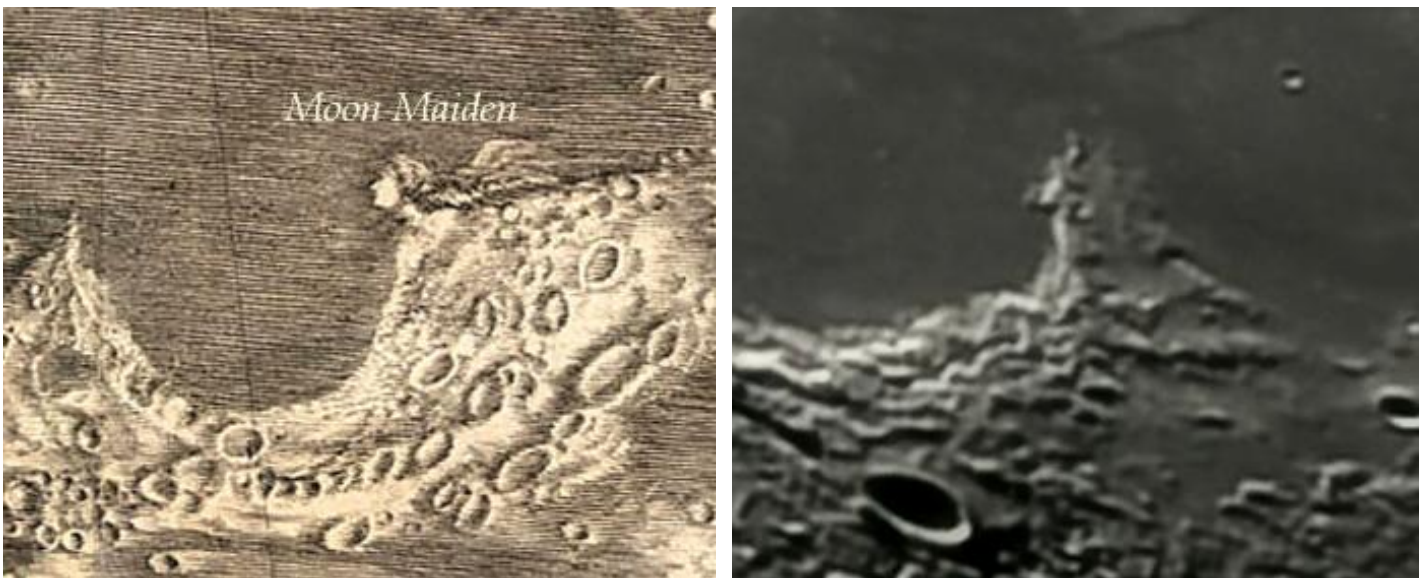
As the Sun rises over Sinus Iridum, sunlight catches the tops of the Jura mountain range, causing a bright semi-circle pattern that shows up through the shadows. This clair-obscur effect is best viewed at the start time, but the bright arc along the Jura Mountains remains visible for quite a while, even after the lunar terminator has passed over the region. When observing this, don't forget to look for the shadow being cast by Mount Laplace on the top corner – seen on the right of the above photo.

We see photos of the Sun rising over this area quite frequently, but we don't see as many photographs of the Sun setting over that area. A couple of years ago Dave Eagle took a photo that showed the Sun setting over the region so I just had to create a pastel drawing of it to go with my Jewelled handle pastel drawing. It's fascinating seeing the jagged shadows being cast by the mountain range along the wall of the bay.



*Pastel drawings of Sinus Iridum by Mary McIntyre. Left side shows sunrise, right side shows sunset*

### **Cassini's Moon Maiden / Promontorium Heraclides**



*Left: Moon Maiden drawn by Giovanni Cassini in 1679 | Right: Moon Maiden photograph by Mary McIntyre*

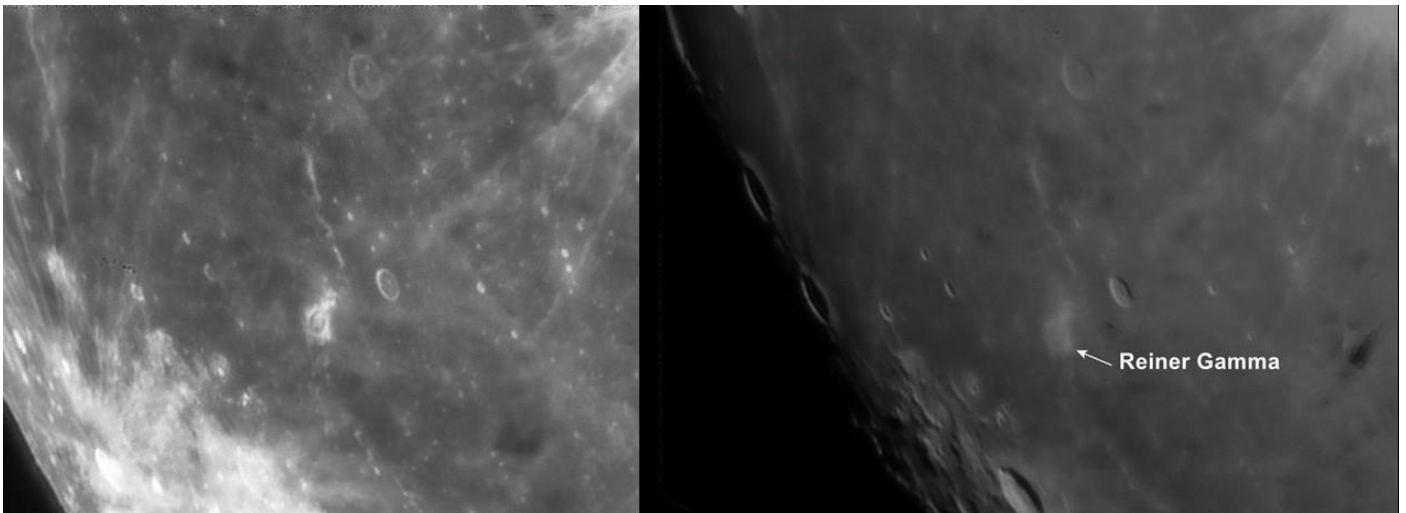
Humans are predisposed to see faces everywhere, even in the most unexpected places; this is a phenomenon called Pareidolia. In his 1679 map of the Moon, created from telescopic views hence south being up, Giovanni Cassini depicted Promontorium Heraclides on the edge of Sinus Iridum as a woman's head with long, wavy hair. It is believed to have represented the head of Geneviève de Laistre, who Cassini married in 1673. This makes her the first woman on the Moon! This Clair-Obscur effect starts to become visible as soon as the Sun has risen over the area when the height differences and contrast with the darker maria surface around her create areas of light shade that give the impression of her face and hair. She actually remains visible through to Full Moon but the when the whole area is under a high Sun some of the surface relief and definition are lost, so she is best viewed when the Moon is a Waxing Gibbous. See my sketches above to see how different the Moon Maiden looks as the Sun sets over the area –

The Moon Maiden must be tall because she's casting the longest shadows!



## Reiner Gamma

Reiner Gamma is a large and prominent lunar swirl that snakes its way along the western edge of the Moon. Lunar swirls are brighter than the surrounding surface so they stand out when fully illuminated; the large tadpole shape of Reiner Gamma is very easy to spot near the limb when the Moon is approximately 95% waxing, but it remains visible for a couple of weeks after that. High-lying regions on the Moon usually appear brighter than the surrounding landscape and when the terminator is nearby they will often cast shadows. However, if you observe Reiner Gamma when the terminator is nearby you will see no shadows being cast; this is because this feature is actually flush with the lunar surface. If you photograph Reiner Gamma at the times listed above, compare it to how the light is playing over nearby features such as the crater Reiner that lies to the east of it.



*Left side: Reiner Gamma under a high Sun angle, Right side: Reiner Gamma under a low Sun angle.*

*Image credit: Mary McIntyre*

The left side photo above shows Reiner Gamma during a 95% Waning Gibbous Moon. The area is fully illuminated and the bright regions are very visible. The right side photo was taken during a 98% Waxing Gibbous Moon when the terminator was closer to Reiner Gamma. All of the surrounding high ground and craters are now casting shadows but Reiner Gamma does not.

We do not fully understand how these features have formed with such a high albedo (brightness level) whilst being flush to the surface. It is thought that they could be due to magnetic anomalies within the lunar regolith. NASA were planning to send the Vertex Mission to investigate these curious features, but like many NASA missions, it has been delayed. Although lunar swirls are not Clair-Obcur effects, observing their appearance as the lighting changes is kind of related and they are interesting to observe, so enjoy looking for Reiner Gamma.

I hope you enjoy looking for these effects during 2026. Don't forget there many other Clair-Obcur effects that are well worth seeking out. There is comprehensive list of them here:

[https://the-moon.us/wiki/Clair-obscure/List\\_of\\_Clair-Obscure\\_Effects\\_and\\_Informal\\_Optical\\_Feature\\_Names](https://the-moon.us/wiki/Clair-obscure/List_of_Clair-Obscure_Effects_and_Informal_Optical_Feature_Names)

You can use the NASA SVS Libration Tool or the Lunar Terminator Visualization Tool to check when some of the others are visible. I really hope you found this post helpful. I spend ages putting these tables and pictures together to help people to see something new, so please do feel free to share the link to this PDF. You are also welcome to share the images and captions (with credit please).

Clear skies and please let me know if you do photograph one of these features.

Mary McIntyre FRAS

*Astrophotographer, space artist, astronomy communicator, and outreach astronomer*

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(no attachments otherwise your email won't get forwarded to me!)

Facebook: [www.facebook.com/marymcintyreastronomy](http://www.facebook.com/marymcintyreastronomy)

X (formerly known as Twitter): [https://x.com/Spicey\\_Spiney](https://x.com/Spicey_Spiney)

Instagram: <https://www.instagram.com/spiceyspiney/>

Blue Sky: <https://bsky.app/profile/marymcintyreastro.bsky.social>

Flickr: [https://www.flickr.com/photos/spicey\\_spiney/](https://www.flickr.com/photos/spicey_spiney/)

You Tube: <https://www.youtube.com/@Spiceyspiney>