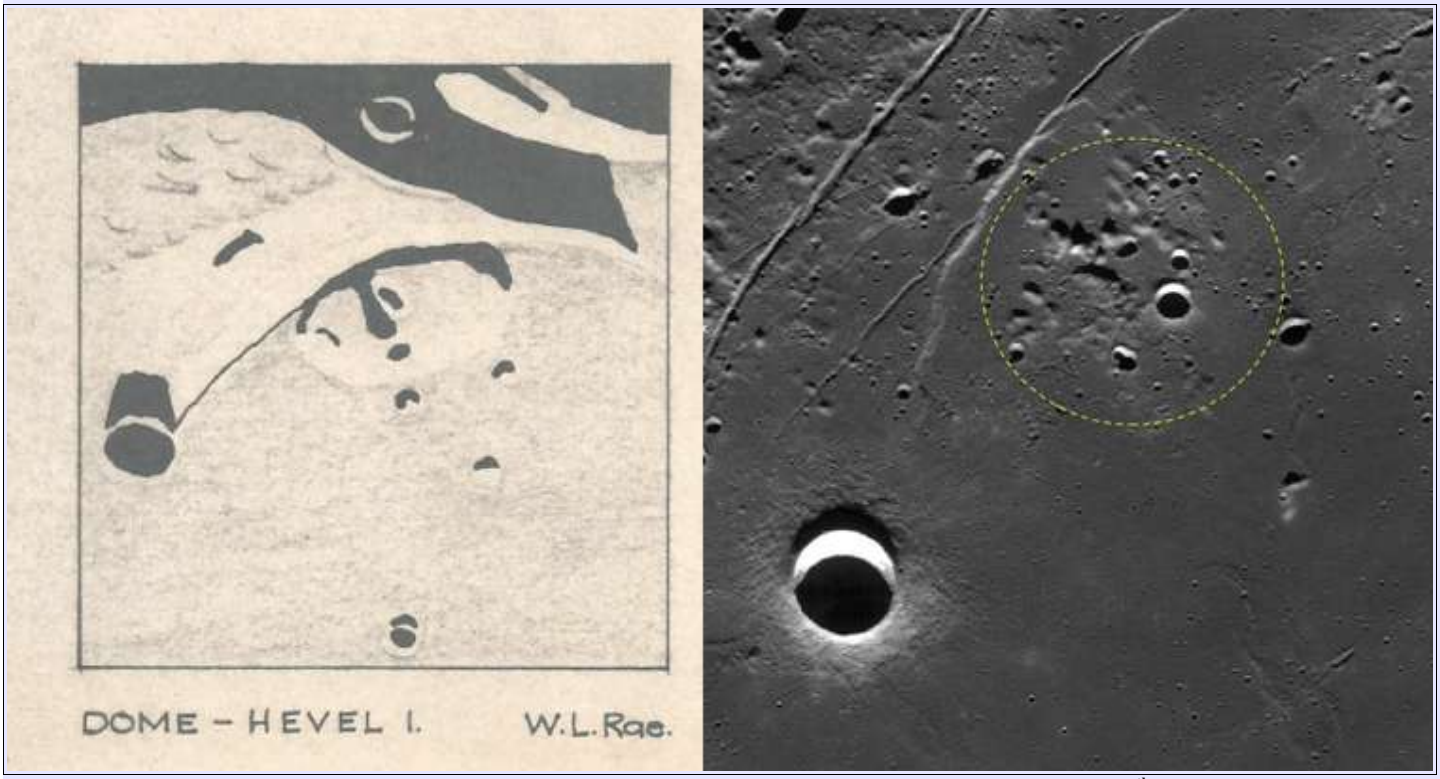
BAA
British Astronomical Association
Lunar Section

Director: Dr.Anthony Cook.
Editor: Barry Fitz-Gerald.

LUNAR SECTION CIRCULAR
Vol. 63 No.11 November 2026

Dome Hevel 1.



Left, Drawing of the suspected dome Hevel 1 by W.L Rae, made with a 9ins reflector at x300 on 20th February 1959 between 22:25 and 22:45hrs (The Moon Vol.8 No.1 October 1959) and right the same area from LRO WAC. North is to the right in both. This was previously identified by Patrick Moore and given the designation δ1 (The Moon Vol.5 No.4 June 1957) but as the LRO image shows, this is not a dome of any sort but an series of embayed peaks of highland material projecting above the mare surface. The prominent crater is Lohrmann A (Diam 11.9kms). So Hevel 1 goes the way of many suspected domes from the pre-spacecraft era, but as one dome goes many others will reveal themselves to persistent imagers and others scouring the available spacecraft images.

For more on W.L Rae see '*Harry Thornton, Leslie Rae, & the rise & fall of The Moon'* by Martin Mobberley in https://britastro.org/journal/baa-journal-volume-134-number-02-april-2024

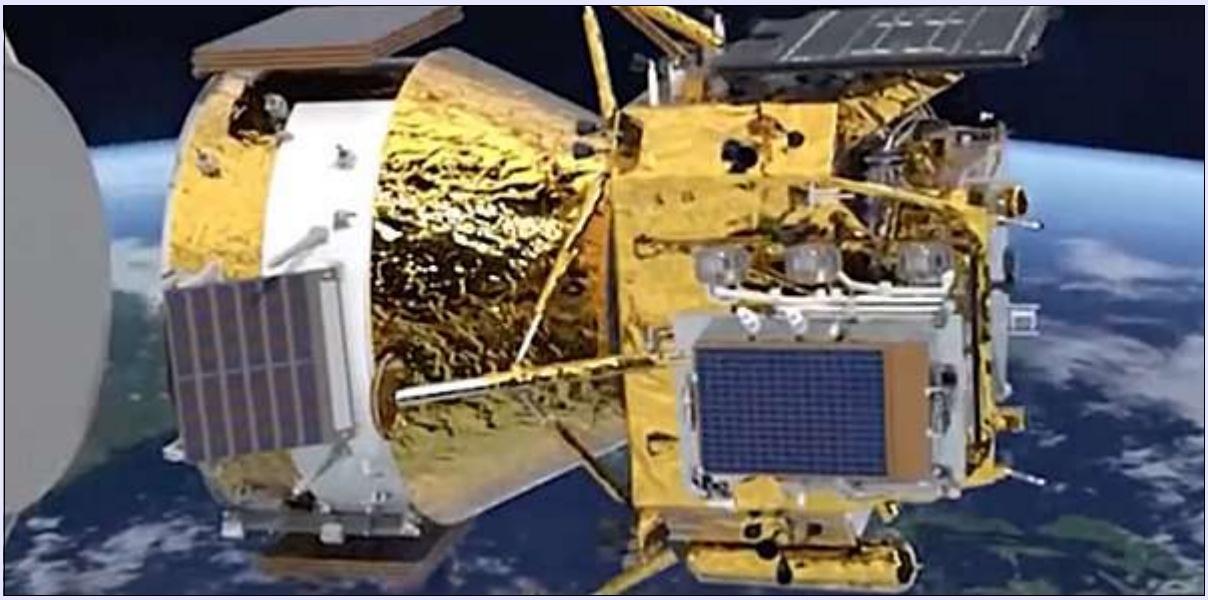
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FROM THE DIRECTOR by Tony Cook.



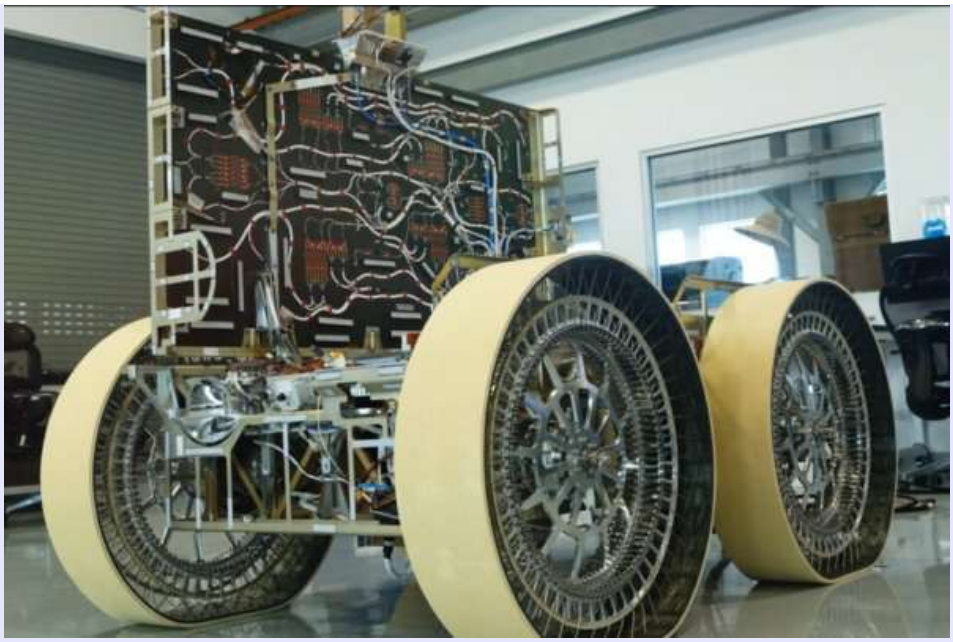
An artist's rendition of Change'7 in Earth orbit prior to lunar trajectory from: https://www.youtube.com/watch?v=hGDOclspXek

In case you are wondering what ever happened to Chinese Change' 7 mission to the lunar south pole – this did not launch as planned on 24th August because according to various media reports: *"it did not meet the conditions required for an absolute mission success"*. This possibly means technical issues and the requirement to be at the south pole when there is both good solar illumination and favourable libration, such that the lander has power and is able to communicate along line of sight with Earth. The Chinese Space Agency is now suggesting a launch some time in 2027 – lets hope them better luck next time.

However, we have a new contender for an unmanned mission to the lunar south pole. This is the US Griffin Mission 1, which is slated to launch as early as late November and will form "Moon Base 2" of NASA's planned network of probes, and eventually crewed landings, around the south pole area. The Griffin 1 will carry two rovers and is primarily a technology demonstration mission. The main rover is the FLIP rover, a technology demonstration of a more advanced rover (to be called FLEX), and a smaller CubeRover.

Both rovers will attempt to drive several km, using stereo cameras, headlamps to see in the dark, and powered by batteries which will be recharged by their vertically orientated solar panels optimised for the harsh illumination environment at the south pole where sunlight comes in horizontally. Lighting will definitely be a problem for solar power as they will want to make sure they don't drive into regions with large amounts of shadow whilst the power is running low, else they will be stuck there for up to a lunar day before sunlight comes around again. Permanently shadowed craters will probably be places to avoid till the end of the mission, in case the rovers's don't have enough power to get back out again. Also onboard is a navigation camera to help in the descent and to map the landing area, and a demonstration of nickel engraved archive material (a sort of non-computer readable miniaturised microfiche library). The landing site, is near Nobile crater / Mons Mouton.

The FLIP rover carries a British built Bremont watch within its chassis and on the top of the solar panels is a 360° camera for panoramic views. There is an advanced space worthy super computer with AI, to help the rover navigate autonomously without light round trip time communication/telemetry delay issues with mission control. The rover additionally carries a laser scanner to help map the terrain. One important experiment will look for signs of Helium 3, which is an important resource for future Nuclear Fusion reactors. There are also a lunar dust environment sensor, and a camera on top of the vertical solar panels will monitor dust accumulation on the thermal radiators (vital to prevent the spacecraft overheating) – 4 anti-dust coating will be trialed out on the radiator surface.



Astrobotic's FLIP heavy duty rover - https://www.astrolab.space/flip-rover/

The wheels are deformable, partly made of Kevlar, with spokes and have the resemblance of a slightly flat tyre without much of a tread. In fact, the deformable nature of the wheels provides the traction with the underlying surface, so a conventional tread is not needed.

As far as I can make out the CubeRover is purely a technology demonstration of a light weight 2kg rover. Though the cube approach allows it to be scalable in module sizes to larger builds and it is versatile due to its small mass and size.



The CubeRover design – from Astrobotic

Lastly, NASA has at last released its Artemis II preliminary Science report in case you are interested: https://science.nasa.gov/feature/artemis-ii-preliminary-lunar-science-report/ for a general public sanitised version and for a slightly more scientific version click here.

Lunar Occultations for November 2026 by Tim Haymes

Time capsule: 50 years ago: in Vol 11 No.11

[With thanks to *Stuart Morris* for the LSC archives.]

* H. Ford (Director) on Giordano Bruno, the Moon's latest large crater ?

Geoff Amery drew attention to a paper in 'Nature' (vol 264 November 18th) in which David W.Hughes quotes author Jack Hertung in 'Meteoritics (11,187; 1976) on the subject of an event recorded in Mediaeval Chronicles of Gervase of Canterbury. This is to the effect that five monks in the year 1178 on the evening of July 18th when the Moon was 1.5days old, witnessed suddenly, the upper horn split in two by an eruption of fire, hot coals and sparks. Giordano Bruno is on the far side (https://lroc.im-ldi.com/images/623).

A Google search reveals discussions on the impact and its estimated age. The account is well known, especially in view of the recent discussion on a new crater identified by Lunar Reconnaissance Orbiter Camera (LROC) images. This impact occurred in or about April 2024 and is discussed in the October LSC.

https://britastro.org/wp-content/uploads/2026/10/2026-10-lsc.pdf

Observer News
Alex Pratt (Leeds) and Mazin Younis (Manchester) posted images on the BAA Observation forum, depicting the Moon in the field of view with the Pleiades cluster. The observers were using Seestar instruments. The quality of the S50 Pro is remarkable. This was a severe test of the optics. The images were taken on the early morning of October 28.

Alex https://britastro.org/observations/observation.php?id=20261028_094247_bc78b77568ebfb83

Mazin https://britastro.org/observations/observation.php?id=20261028_154019_93cfeb5eab29cac8

Occultations this month
On Nov 02 0300, the Moon has passed M44, and now forms an alignment with Mars and Jupiter which are little further to the East. Then, 24hrs later the Moon, is on the far side of Jupiter heading in the direction of Regulus. No occultations are predicted for the UK.

On Nov 5th 0500, the waning crescent occults upsilon Leo (sp type G9) (Reappearance Dark Limb). This should be quite a spectacle, and I would say the best event of the month to look out for.

After New on Nov 09, the Moon is at southerly declination and passing through Libra and Scorpius
On Nov 19, both 13-Psc and 14-Psc are occulted (DD), However 13-Psc is only seen to disappear from Scotland. There is a southern limit graze path from Fraserburgh on the East Coast, passing near Perth and exiting the mainland south of Stranraer. See BAAH page 44

On Nov 19, 51-Psc is occulted (DD). This a bright multiple star catalogued with four components. Two are well separated, one pair is close. I don't know what will happen here !

On Nov-28, 82-Gem is occulted (RD) a double v6.8, v7.3 at 0.25arcsec. There are fainter minor companions. Flamsteed 84-Gem passes under the S cusp from my location 2 hrs later, but it looks remarkably close to the S cusp. Is there a graze? Yes, but on the bright limb over Scotland. It is predicted to miss the Moon from Oxfordshire.

On the morning of the 28th the Moon will cross (again) the Beehive (M44). The view is at Alt/Az 19/083 in waxing phase 82% and should be easy to follow with a Seestar and other Smart telescopes.

Occultation predictions for 2026 Nov (UK) (Times at other locations will +/- a few minutes)
Oxford: E. Longitude -001 15 00, Latitude 51 45 00 Alt 50m
Moon Alt >=10 degrees, Magnitude limit r8

Date	Time	Ph	Star	Sp	Mag	Mag	%	Elon	Sun	Moon	CA	
26 Nov 1	2 38 42.6	R	1222cG5		7.2	6.8	58-	99		46 115	34N	
26 Nov 2	0 36 50.6	R	1343 M4		6.3	5.5	47-	87		17 82	45N	
26 Nov 2	4 32 20.4	R	1355 G5		7.6	7.0	46-	85		49 136	51S	
26 Nov 2	5 41 32	M	1361kK0		7.6	7.0	45-	85		54 160	11S	
26 Nov 4	5 42 22.7	R	118529kF8		8.2	8.0	25-	59		35 135	38N	
26 Nov 5	5 14 37.7	R	1685cG9		4.3	3.8	16-	47		21 121	50S	upsilon Leo
26 Nov 5	5 18 45.9	R	138302 K0		7.7	7.1	16-	47		22 122	68N	
26 Nov 5	5 20 34.9	R	138307 K5		8.4	7.6	16-	47		22 122	55N	
26 Nov 16	18 39 47.7	D	3105 K0		6.1	5.5	43+	82		20 196	43N	
26 Nov 19	17 45 33.6	D	3467kK1		6.4	5.8	72+	116		32 145	39N	13 Psc
26 Nov 19	19 3 6	M	3474kA2		5.9	5.8	72+	116		37 167	15S	14 Psc
26 Nov 21	1 44 29.3	D	68SB9		5.8		83+	131		14 264	87N	51 Psc dbl*
26 Nov 22	0 58 20.9	D	197cK0		7.0	6.5	90+	144		32 248	46S	
26 Nov 22	20 24 46.0	D	317 F5		6.4	6.2	95+	155		50 139	54S	20 Ari
26 Nov 26	4 25 39.0	R	X 75950		6.6	6.6	96-	158		48 252	58S	
26 Nov 26	4 25 39.4	R	844SB9		5.8		96-	158		48 252	58S	
26 Nov 27	6 30 25.8	R	78778cK0		6.8	6.0	90-	143	-11	38 263	49S	
26 Nov 28	1 48 23.2	R	79657 K5		7.4	6.6	83-	131		56 138	90N	
26 Nov 28	3 50 7.2	R	1178SG2		6.3		82-	130		61 191	69N	82 Gem dbl*
26 Nov 28	5 52 52	M	1187 K0		7.1	6.5	82-	130		50 237	14S	84 Gem
26 Nov 28	23 6 19.0	R	1293pK0		6.8		74-	119		23 87	50N	M44
26 Nov 28	23 16 23.2	R	1299pA*		6.3	6.2	74-	119		24 89	37N	epsilon Cnc
26 Nov 28	23 30 48.4	R	1297pA9		6.8	6.6	74-	119		27 92	85N	M44
26 Nov 29	2 8 13.4	R	1312pF2		6.8	6.6	73-	117		48 129	74S	
26 Nov 29	4 49 9	M	1321cG5		6.9		72-	116		56 190	13S	
26 Nov 29	6 3 6.7	R	98190kF0		7.3	7.1	72-	116		51 219	63N	
26 Nov 30	3 5 44.9	R	98730 K0		7.1	6.4	62-	104		44 134	16N	
26 Dec 1	3 53 45.2	R	1549cG8		5.1	4.6	51-	91		38 138	65S	48 Leo
26 Dec 3	3 51 40.9	R	138617KF2		7.2	7.0	30-	66		17 123	85S	
26 Dec 3	6 27 36.3	R	1759pA*		6.6	6.4	29-	65		31 161	37N	

REPORTING:
Please Report in Occult4 .dat format in the first instance to the coordinator for checking: Lunar Section: tvh.observatory@btinternet.com

Checked reports to:
Lunar Occultations: LunOccult@IOTA-ES.de
Lunar GRAZES to: mitsuru.soma@gmail.com

Favourable asteroid occultations of stars,

Report:
(635)Vundtia + TYC 0720-00339-1 on Oct 25. 0239 to 0242 UT, max. durn.: 17.6s

Observations of (635) Vundtia in October were effected by weather, and some technical problems were reported. There is a positive observation from Great Shefford of 14.5 seconds

November
Ref: BAAH 2026 page 54 (or search on https://cloud.occultwatcher.net/)

6) (209) Dido occults HIP 51902 on Nov 12, 0406UT (04:04h 6sec at Oxford), max. durn. 6.2sec
A complete disappearance of this bright star is expected over southern counties. The asteroid diameter is about 148km or 61 mas.

https://cloud.occultwatcher.net/event/2141-209-573893-373224-H51902/3984225

Lunar Impact Flash Observing Programme by Alex Pratt.

The original version of ALFI required pre-processing of each AVI video file through VirtualDub. This was time-consuming and discouraged some LIF observers. James Dawson continues with the AI-assisted development of his new Flash Detection program and his Python code directly reads and analyses AVI video files, streamlining the process.

A very useful feature is that it measures the location of the impact flash on each observer's image of a confirmed event (recorded by two or more observers) and produces an estimate of its selenographic latitude and longitude coordinates. These can be made available to the Lunar Reconnaissance Orbiter team and other researchers.

Promoting of the LIF project continues at pace.
https://lif.mi.imati.cnr.it/

In August, lead scientist Prof. Detlef Koschny gave a presentation to the IMC (annual conference of the IMO, International Meteor Organisation) on the subject of: 'Lunar impacts: new available tools for observations'. This was a summary of the project for amateurs to observe LIFs, how to make recordings and what software tools are available for detecting impact flashes in your data.

https://imc2026.imo.net/lectures/IMC2026-2-8-Koschny.pptx

Following this talk Bernd Gährken and Peter Slansky presented: 'Three lunar Lyrid impacts observed at the Bavarian Public Observatory'. At least two of their LIFs were also captured by Tim Haymes and Alex Pratt. (Subsequently, James Dawson's software confirmed an impact by a fourth observer).

https://imc2026.imo.net/lectures/IMC2026-2-9-Slansky-Lunar-Lyrids.pptx
https://imc2026.imo.net/lectures/IMC2026-2-9-Gaehrken-Lunar-Lyrids.zip

Detlef, Tony Cook and Elisa Maria Alessi are finalising a paper on 'The Lunar Impact Flash Geminid observing Campaign (LGC)' which discusses the results from our successful Geminid LIF observations in December 2025.

The next observing campaigns:

https://lif.mi.imati.cnr.it/open_search_page.php?query_by=category&search_key=CMN-000000092

The LIF website requests monitoring of the Moon for Geminid impacts between 12 – 15 December 2026. More details on this in the December LSC.

In the meantime, observers may wish to record the Earthshine side of the Moon during the peak of the Leonid meteor shower. The Leonids produced storm activity in the 1990s - early 2000s, although their ZHR now only reaches about 25/hr. Leonid maximum is predicted for around midnight on November 17-18 but the Moon will be at First Quarter which could cause too much glare for some setups. Leonid meteoroids are very swift, they have geocentric velocities of 71 km/s, which is in our favour and observations during the evenings around Leonid maximum would be valuable to compare their LIFs with those from other meteoroid streams.

Images and Drawings

Schiller-Zucchius Basin.

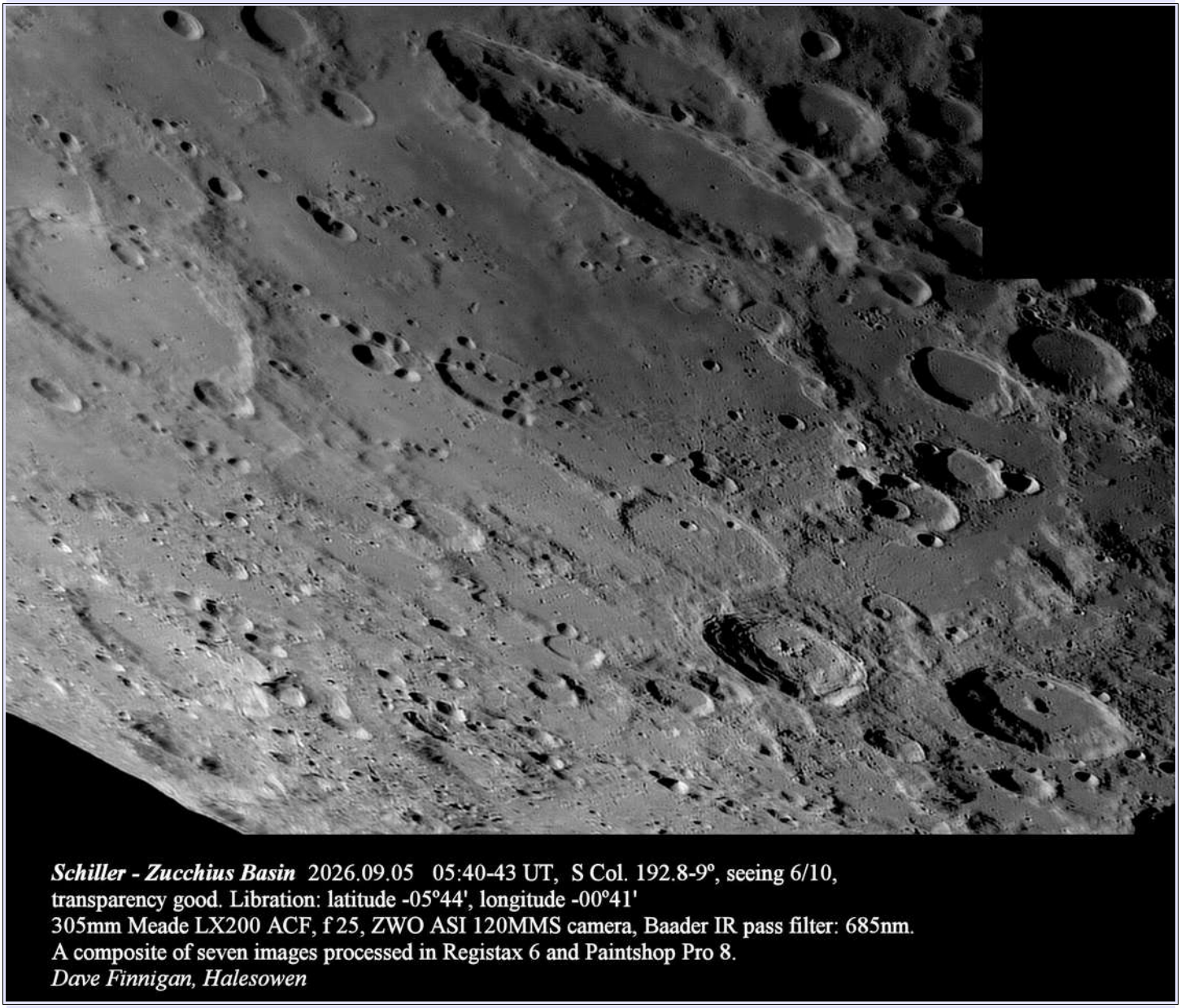
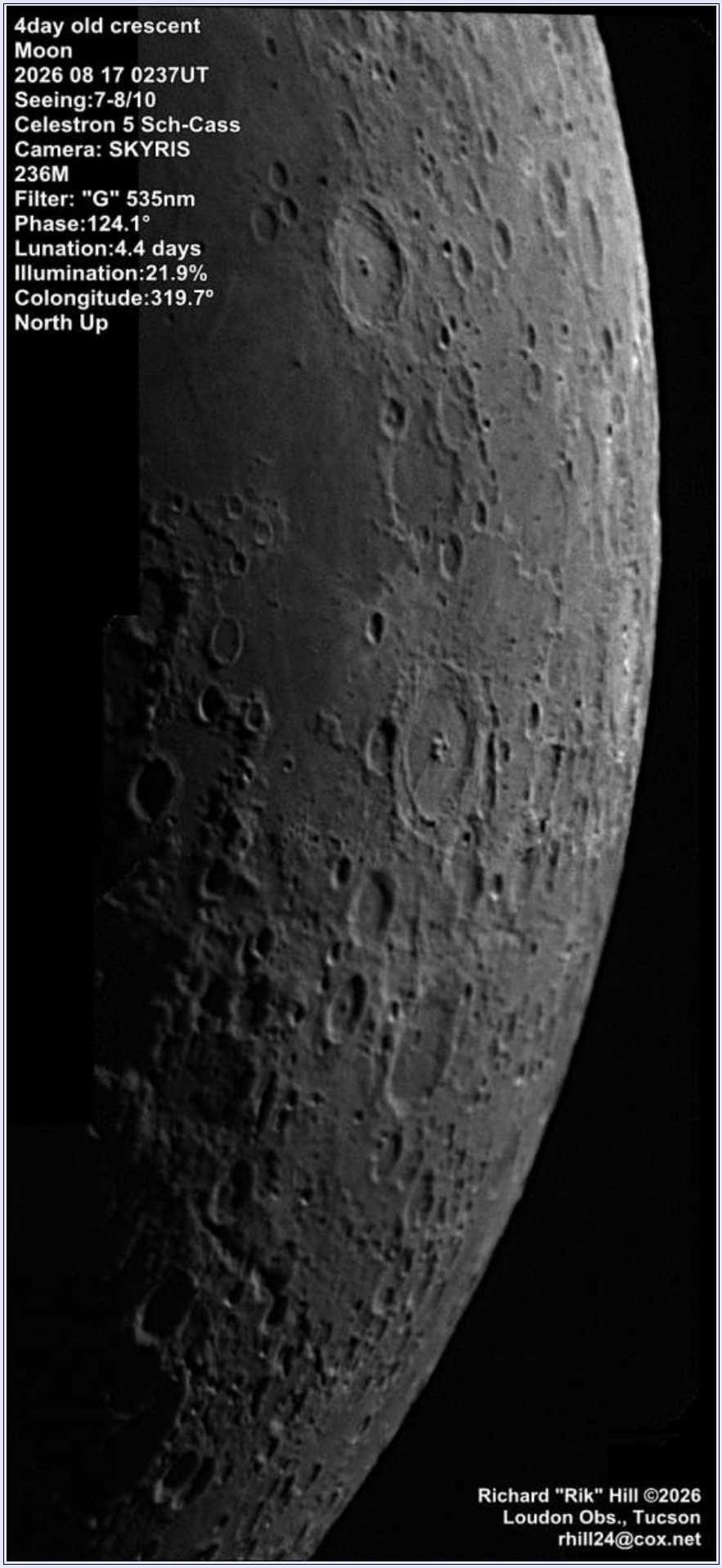


Image by Dave Finnegan with details as shown.

4 Day old Crescent Moon with image and text by Rik Hill.



I never get tired of this region whether waning or waxing. Though my eyes are too old, I would image when this collection of craters are on the limb they can be made out by younger eyes. Here we have a 4.4 day old crescent full of wonderful sights as observed with a C5 telescope.

We start with the well defined crater at the north end of this image. This is Langrenus (136km dia) of Eratosthenean age making it between 1.1-3.2 billion years old with nicely terraced walls all the way around. The floor is brighter than surrounding terrain, the higher the sun the more so, possibly an indication of a fractured floor. Just below Langrennus are the remnants of a once great crater, Vendelinus (151 km). Most of the walls are overlain by 30-50km craters and smaller making this Nectarian aged crater (3.9-4.5 b.y.o.) hard to spot.

Moving farther south is a crater similar to Langrenus, Petavius (182km) a favorite of many amateur selenologists because of the interior rills and dramatic terracing of the interior walls. I once had the privilege of viewing this crater through a 61-inch telescope where we could study the rims of the main large rima. A breathtaking sight.

South of Petavius are two smaller but similar sized craters with low central peaks. The first one is Snellius (85 km) and the next one is Stevinus (77 km). These two point to another similar crater almost twice as far down, Rheita (71 km) and the famous Vallis Rheita (445x30 km) , the large shadow filled gash next to it.

All of this can be seen in detail in any telescope of 80mm or larger. I urge you to get out and try it and observe these and again two days after full moon too!!

This was made from 4 AVIs stacked with AVIStack2 then further processed with GIMP and IrfanView.

Arzachel.

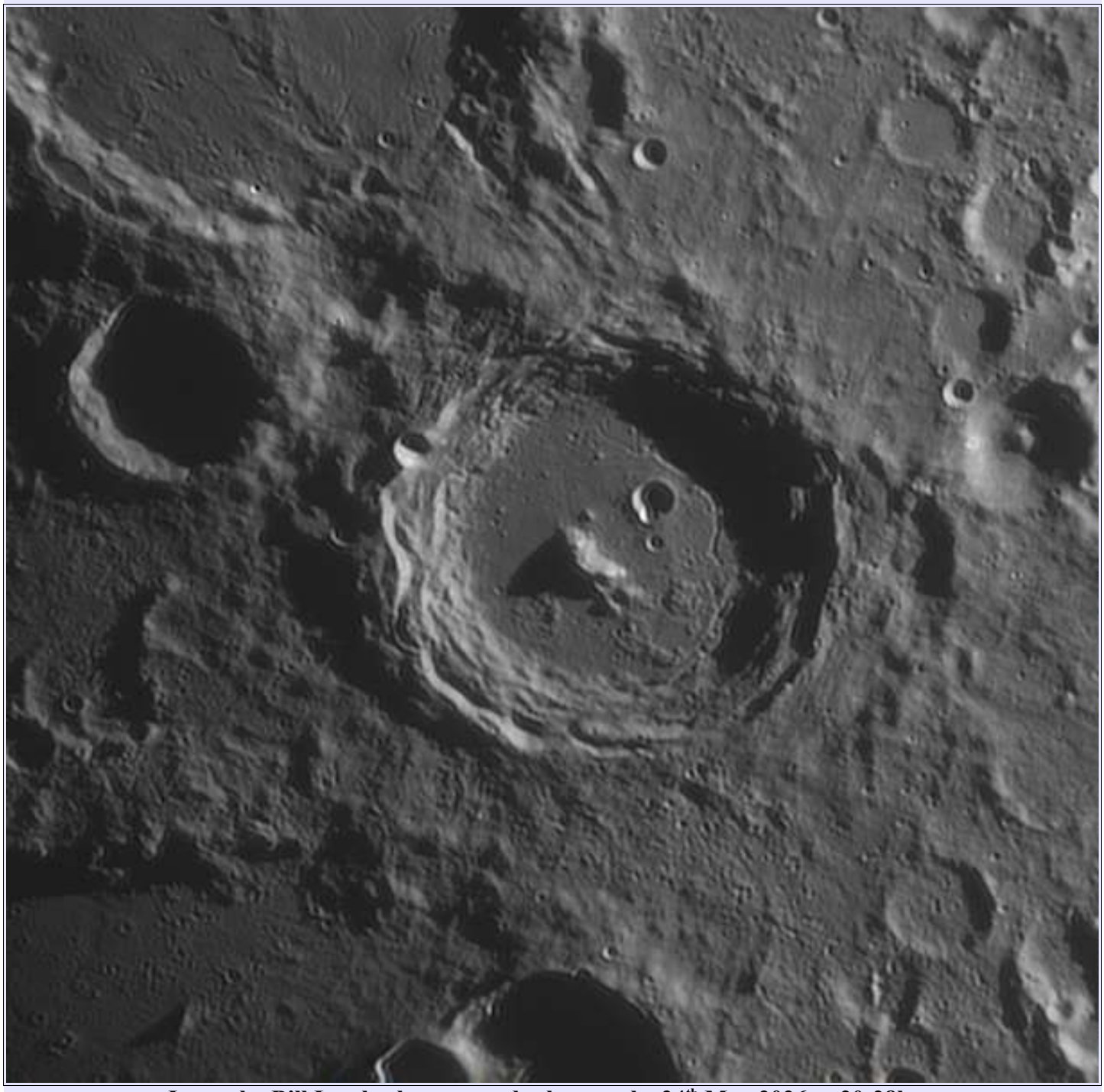


Image by Bill Leatherbarrow and taken on the 24th May 2026 at 20:28hrs.

Triesnecker.

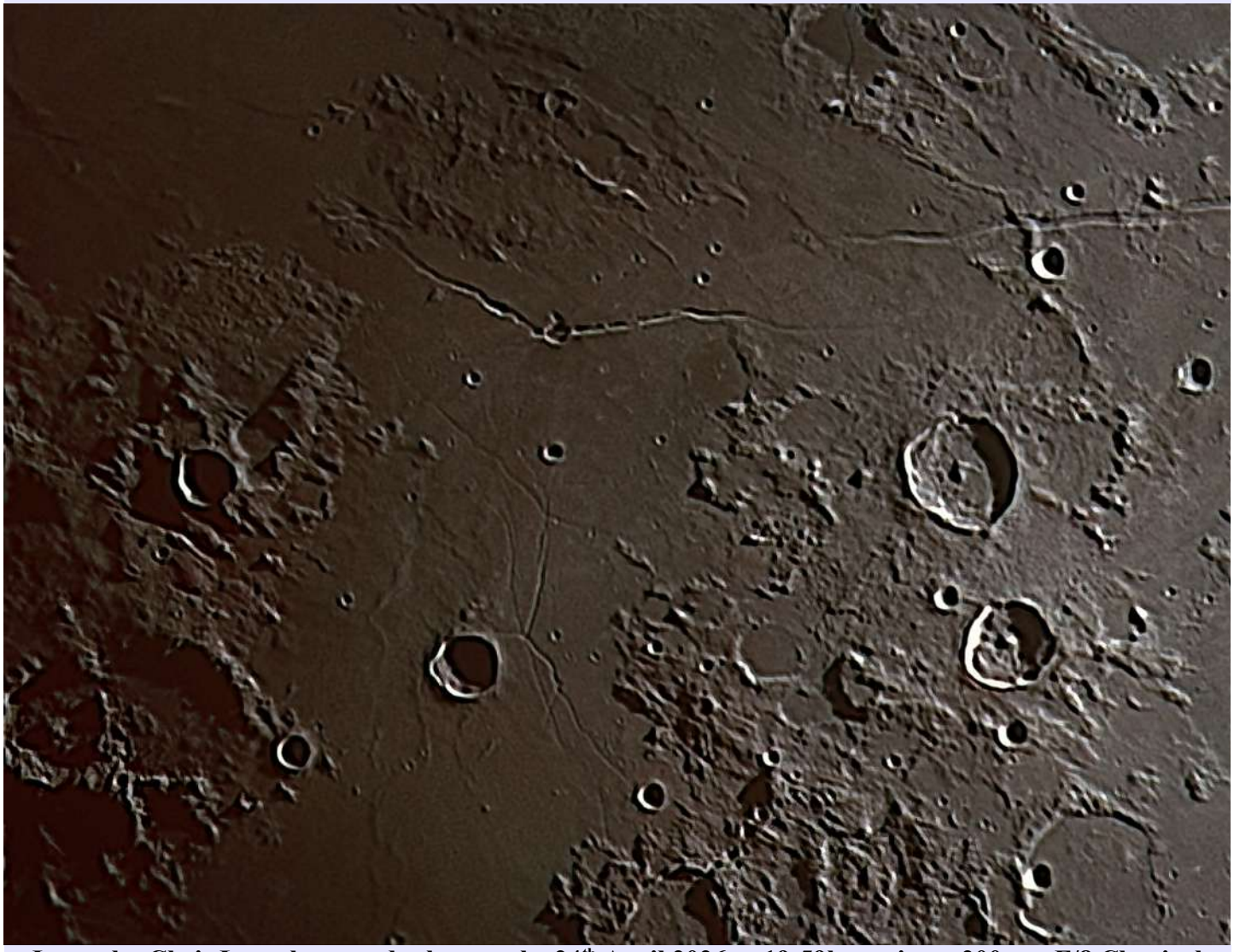


Image by Chris Longthorn and taken on the 24th April 2026 at 19:59hrs using a 200mm F/8 Classical Cassegrain, 2 x tele-extender and ZWO ASI 224MC colour camera.

Ptolemaeus and Mare Nubium.

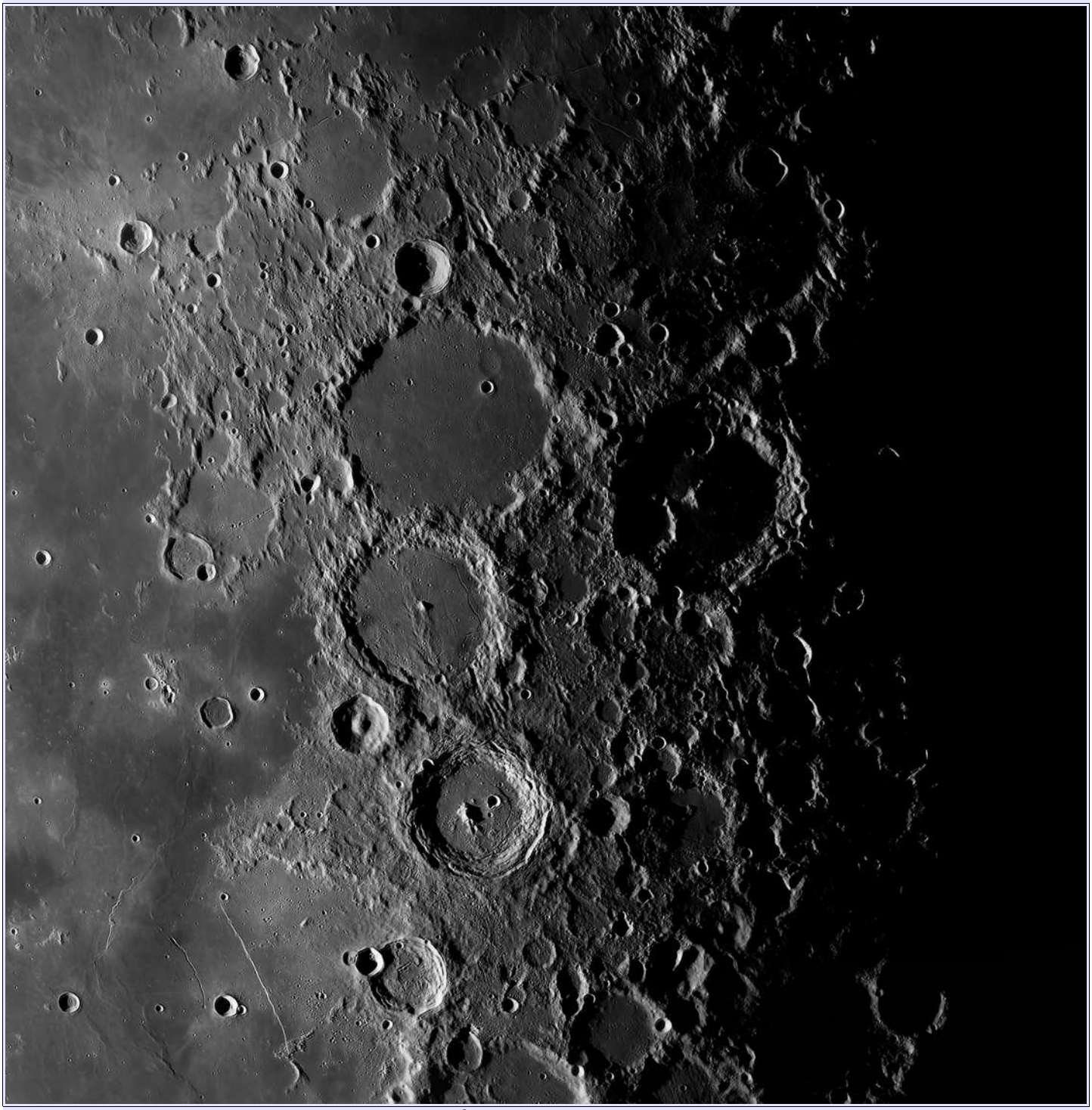


Image by Jeff Grainger and taken on the 3rd October 2026 at 02:14UT using a C11 Edge, ASI 678 mono and 685nm IR filter.

Harvest Moon.



Image by Alex Pratt at Harvest Moon_20260926 18:59:47UT on 26th September 2026 who added the following: ***I was staying in motel-style accommodation near Durham on my way up to visit Holy Island. It was a clear night but I had no observing equipment with me, so leaning on a stone wall I used my Smartphone in Photo Mode with 30x digital zoom. It had Motion Photo enabled, it recorded a brief (1.5 s?) video clip and produced this still image. Some blurring caused by the combination of 30x zoom and being handheld on a wall, otherwise a nice souvenir from my trip.***

Palus Putredinis.

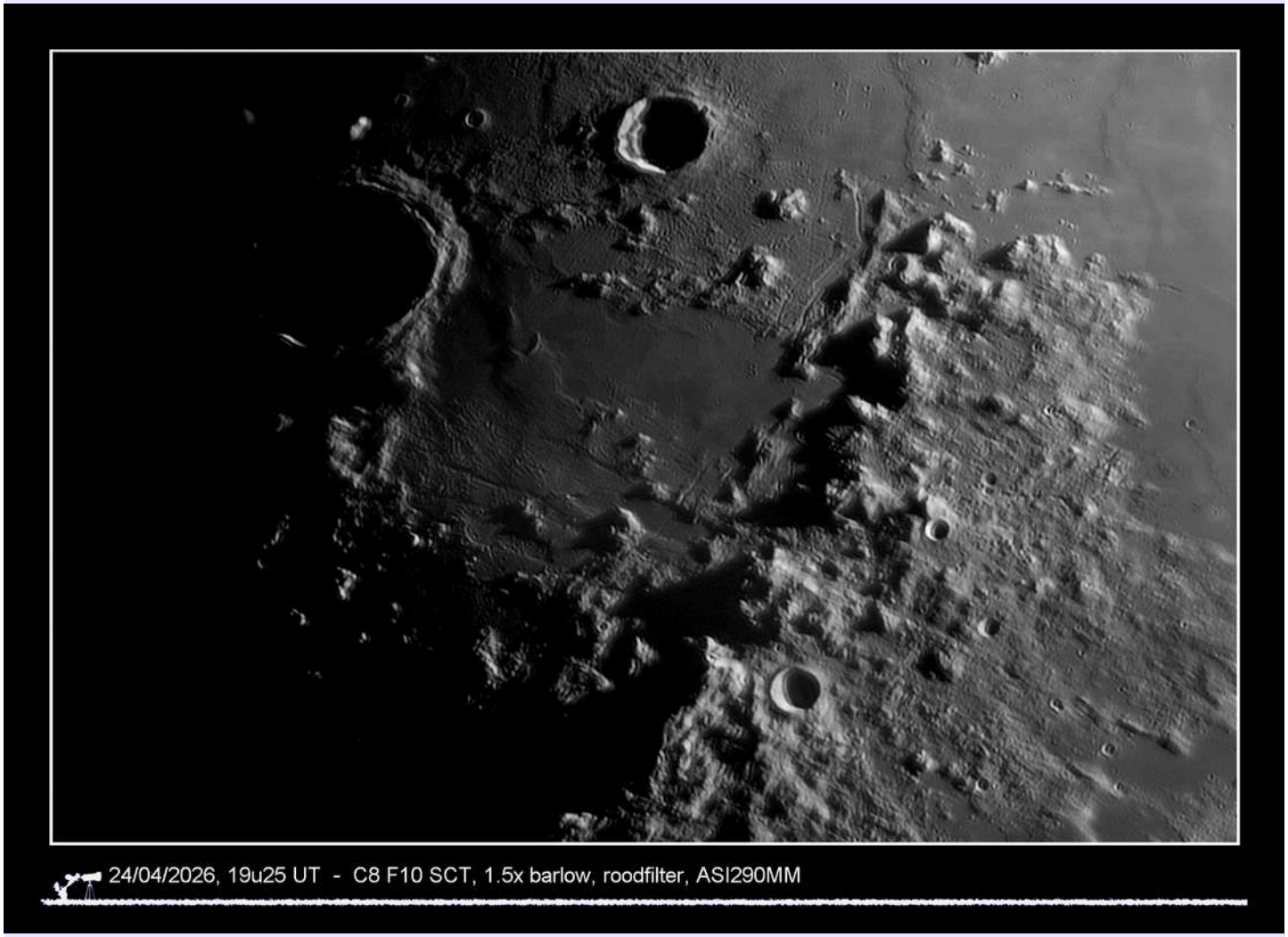


Image by Alexander Vandenbohede with details as shown

Waxing Crescent Moon.



Image by Ivan Walton and taken on the 14th October 2026 at 09:10:12 from SLOOH, Siding Spring, Australia.

9.6 Day old Moon.



Image by Maurice Collins with details as shown.

Albategnius.

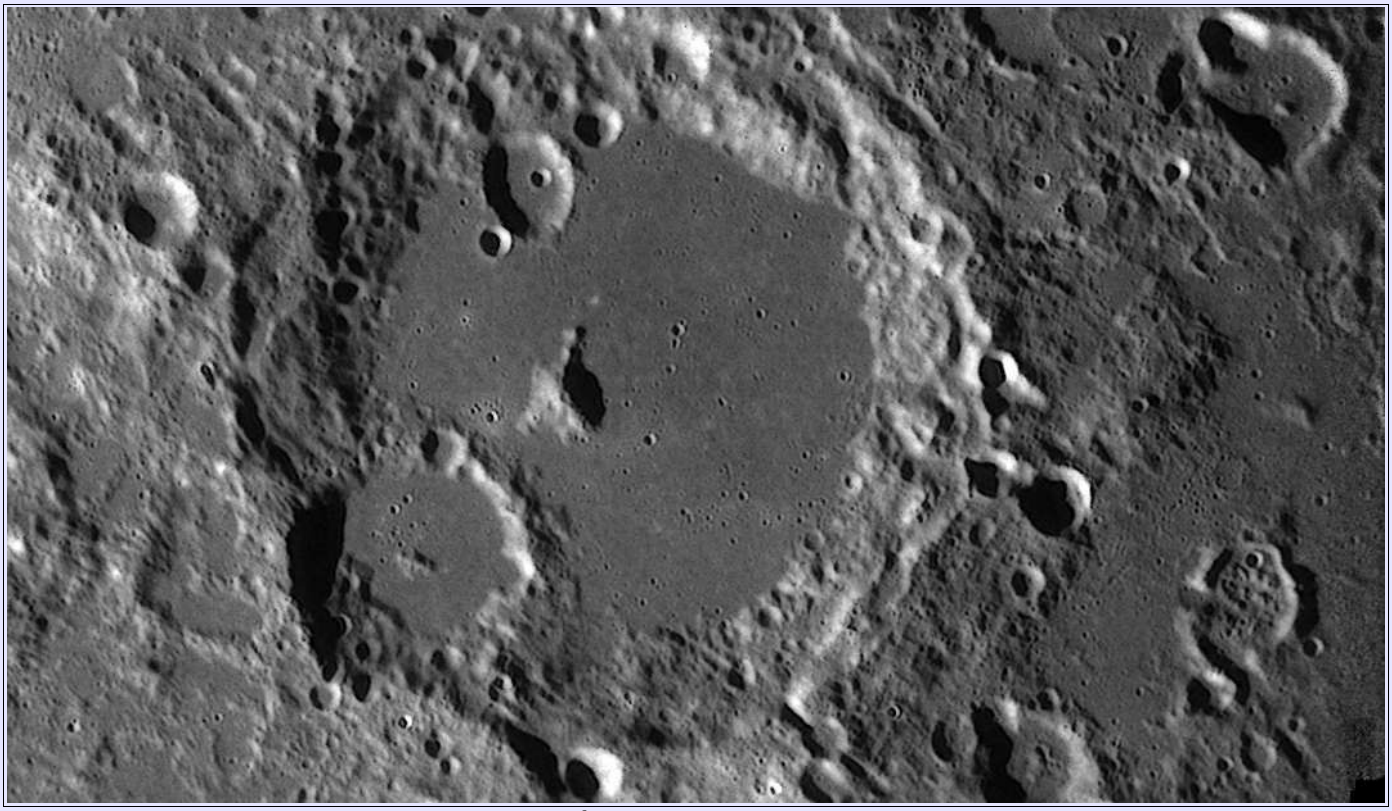


Image by Leo Aerts and taken on the 2nd October 2026 at 02:31 UT using a C14, green filter, ASI 290MM.

Mare Crisium Sunset.



Image by James Weightman and taken on the 28th September 2026 at 21:00hrs using a Nikon Coolpix P1000.

Aristarchus.

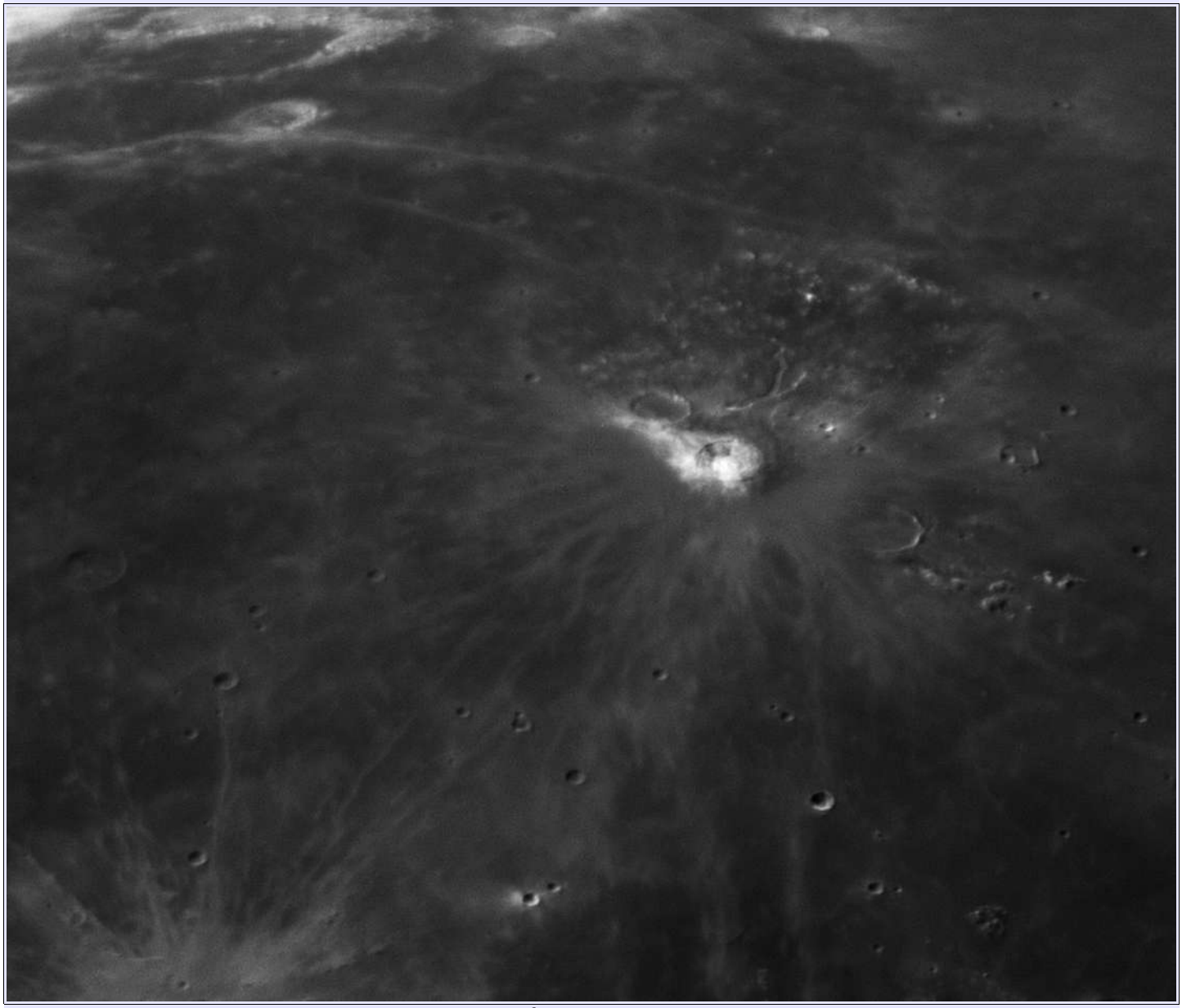


Image by Martyn Kinder and taken on the 3rd October 2026 at 09:28 using a C11 EdgeHD, ZWO ASI 174MM and IR Pass filter.

Theophilus Crater Chain.



Image by Mark Radice and taken on the 1st October 2026 at 05:38hrs using a Celestron C11.

Deslandres.

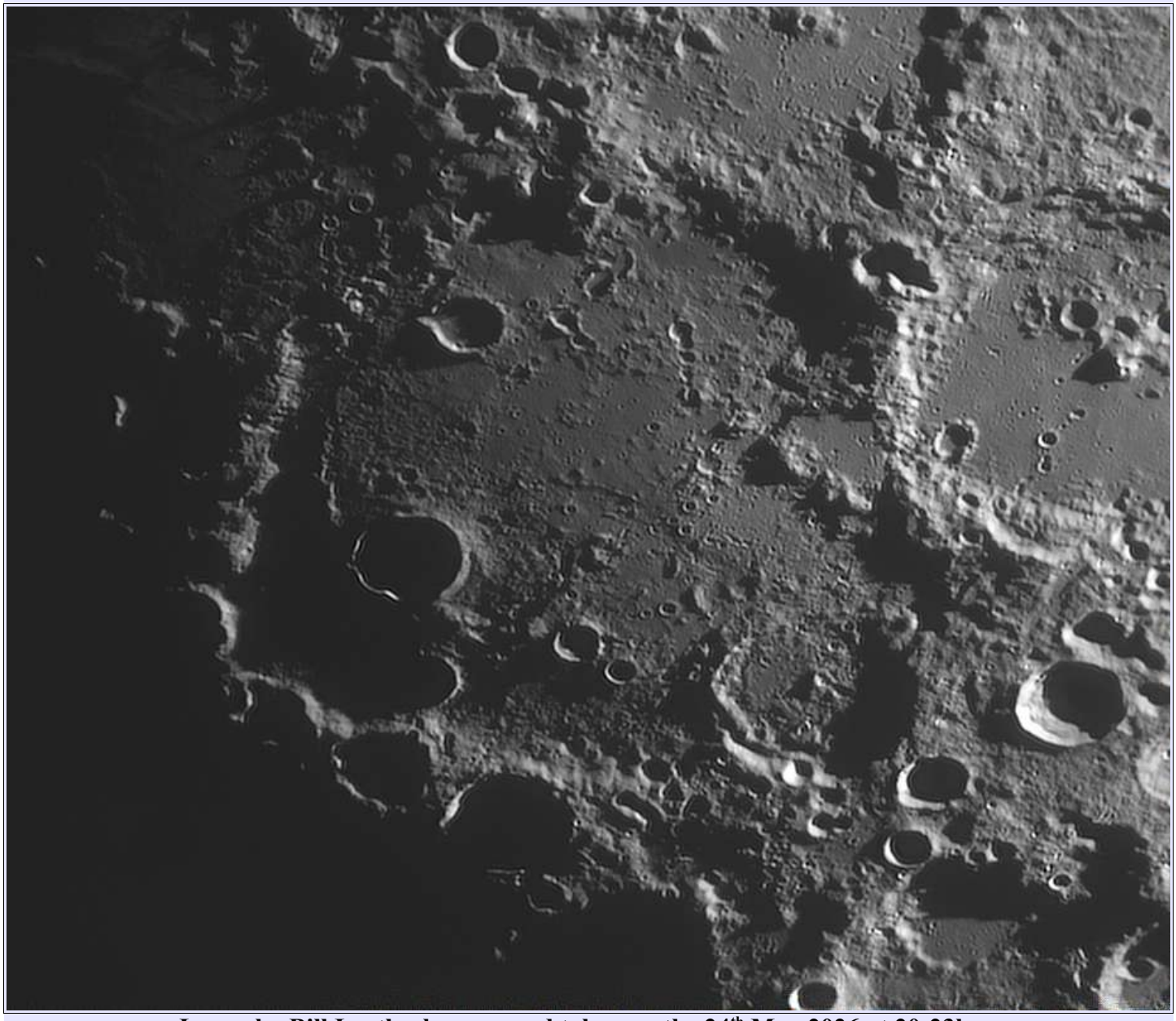


Image by Bill Leatherbarrow and taken on the 24th May 2026 at 20:23hrs.

Hunter's Moon.



Image by Mazin Younis and taken on the 25th October 2026 at 19:48:02

Moon over Southwick West Sussex.



Image by Mike Harvey with details as shown.

Sunrise over Ptolemaeus.

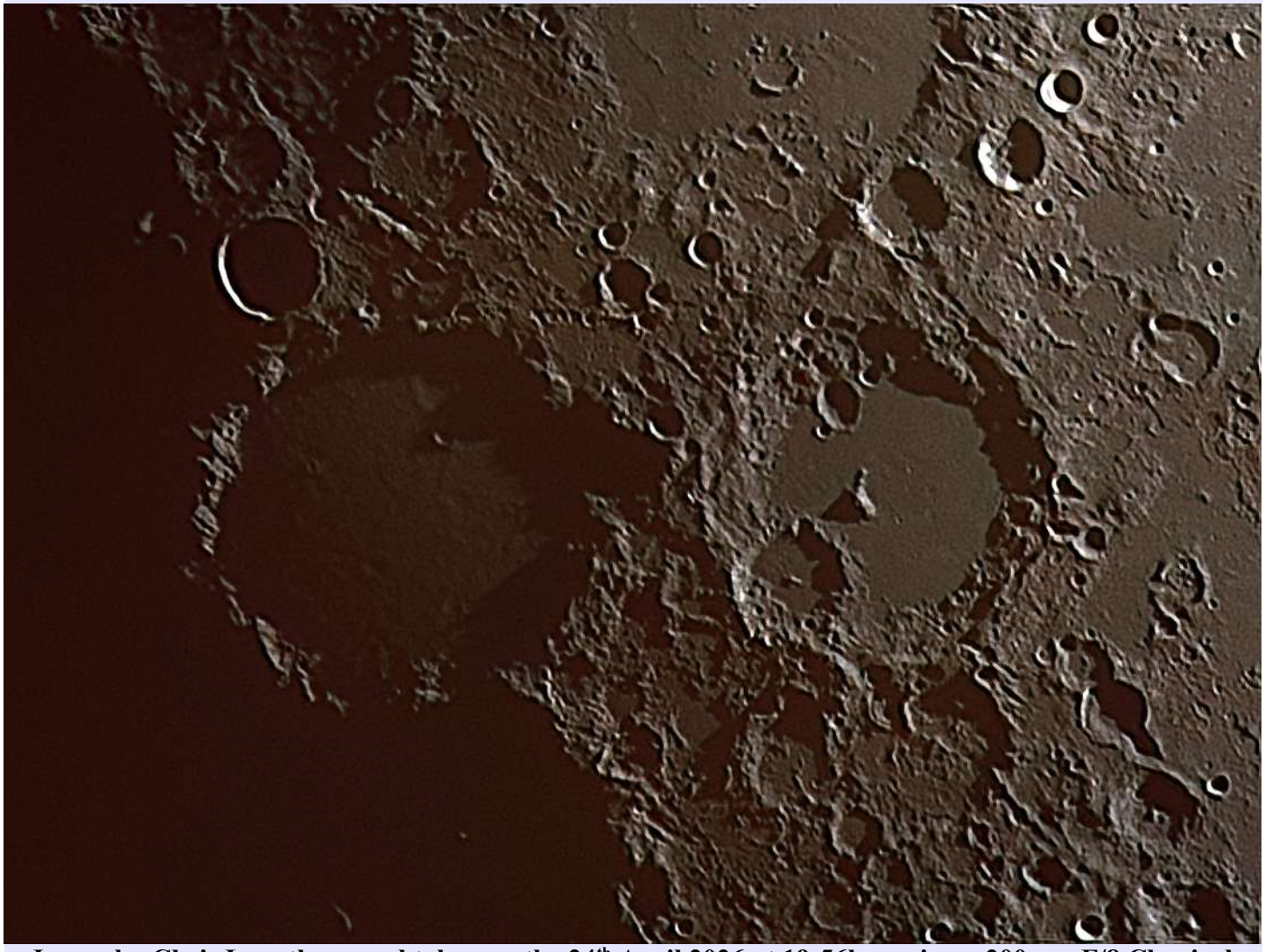


Image by Chris Longthorn and taken on the 24th April 2026 at 19:56hrs using a 200mm F/8 Classical Cassegrain, 2 x tele-extender and ZWO ASI 224MC colour camera.

Mineral Moon.



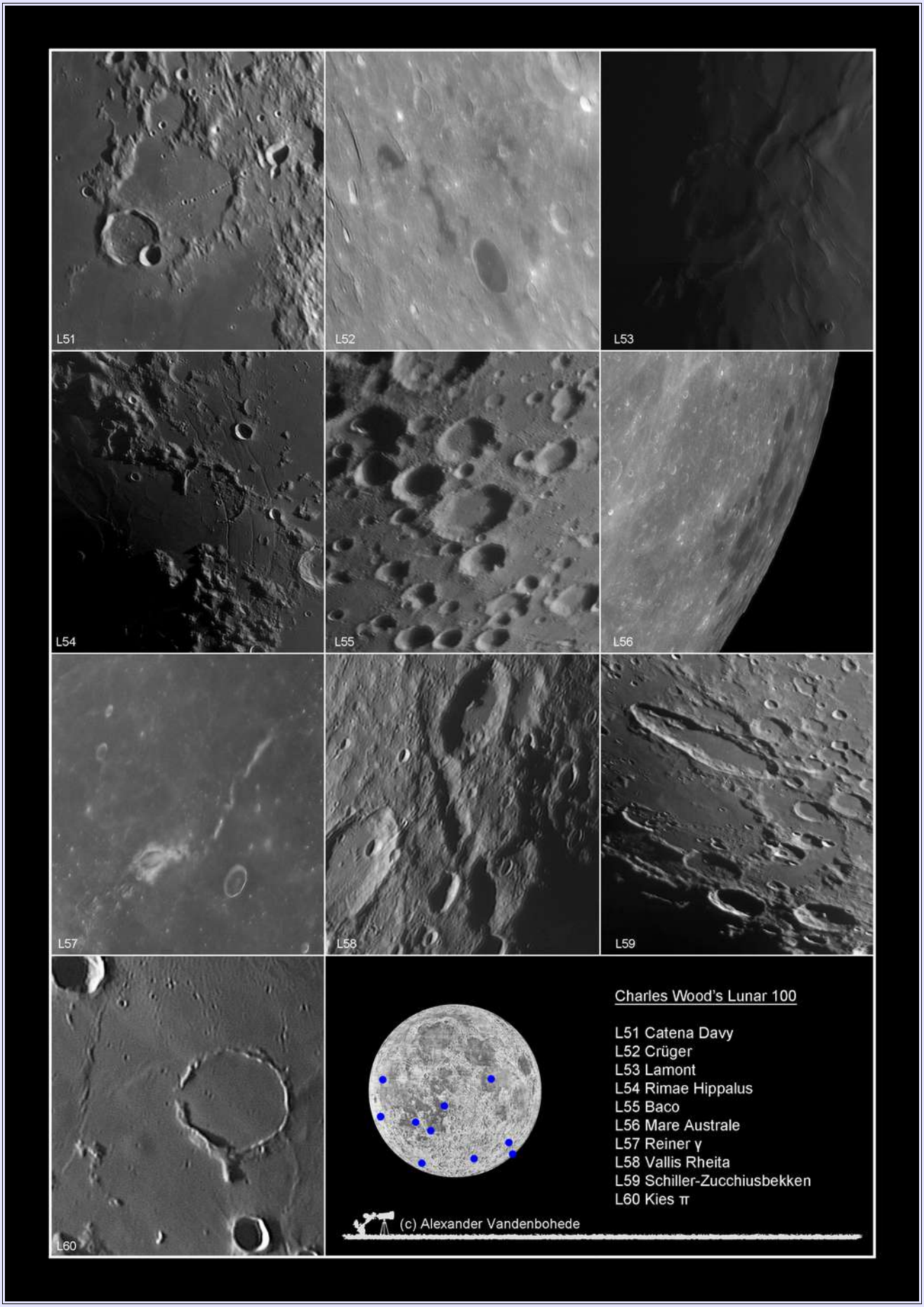
Image by Raidel Sosa Armas and taken on the 21st October 2026 at 23:54 UTC.

7.2 Day old Moon.



Image by Maurice Collins with details as shown.

Chuck Woods Lunar 100, 51 – 60.



Images by Alexander Vandenbohede.

Mare Crisium, Proclus and Taruntius.

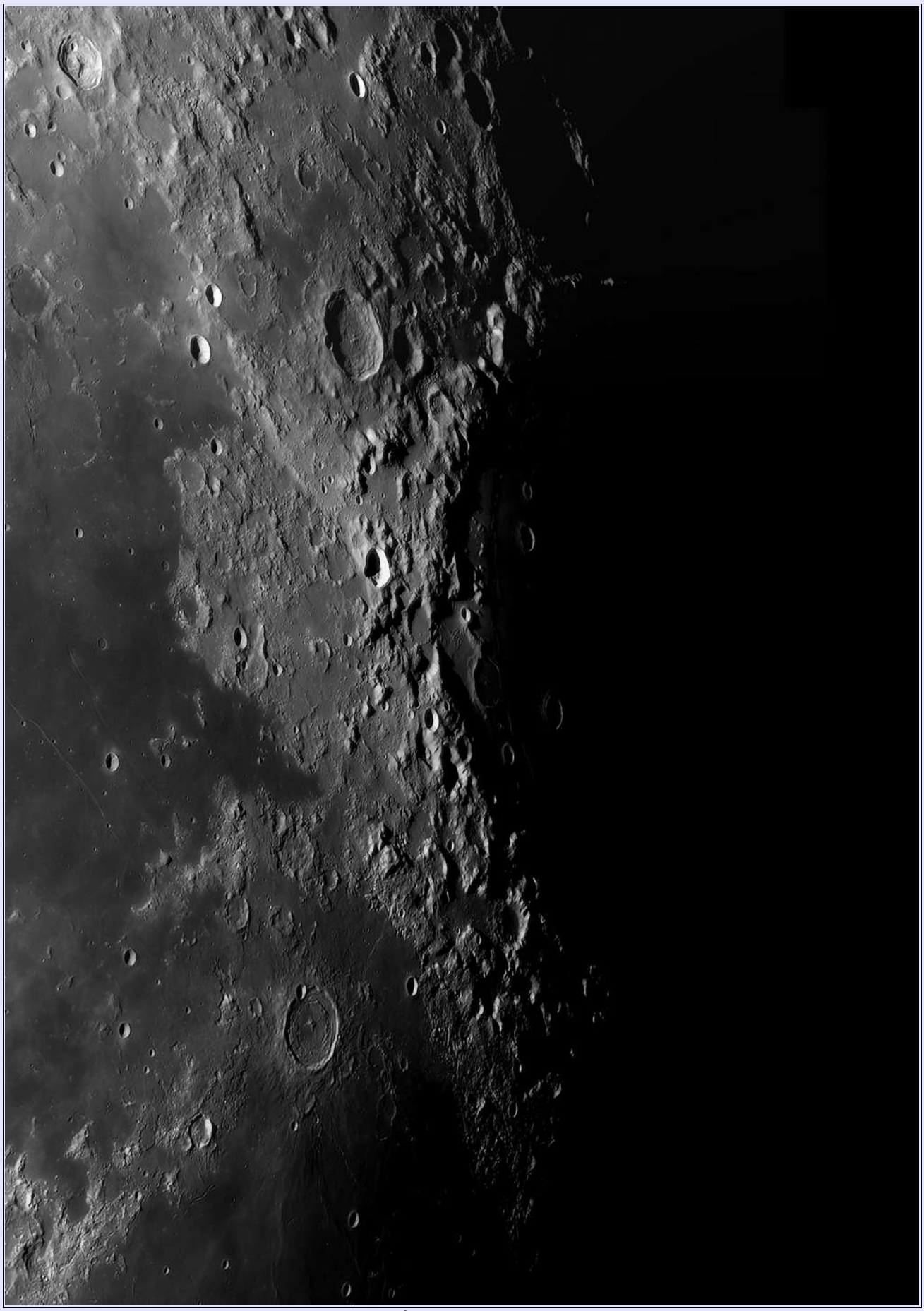


Image by Jeff Grainger and taken on the 29th September 2026 at 00:46UT using a C11 Edge, ASI 678 mono and 685nm IR filter.

Clavius.

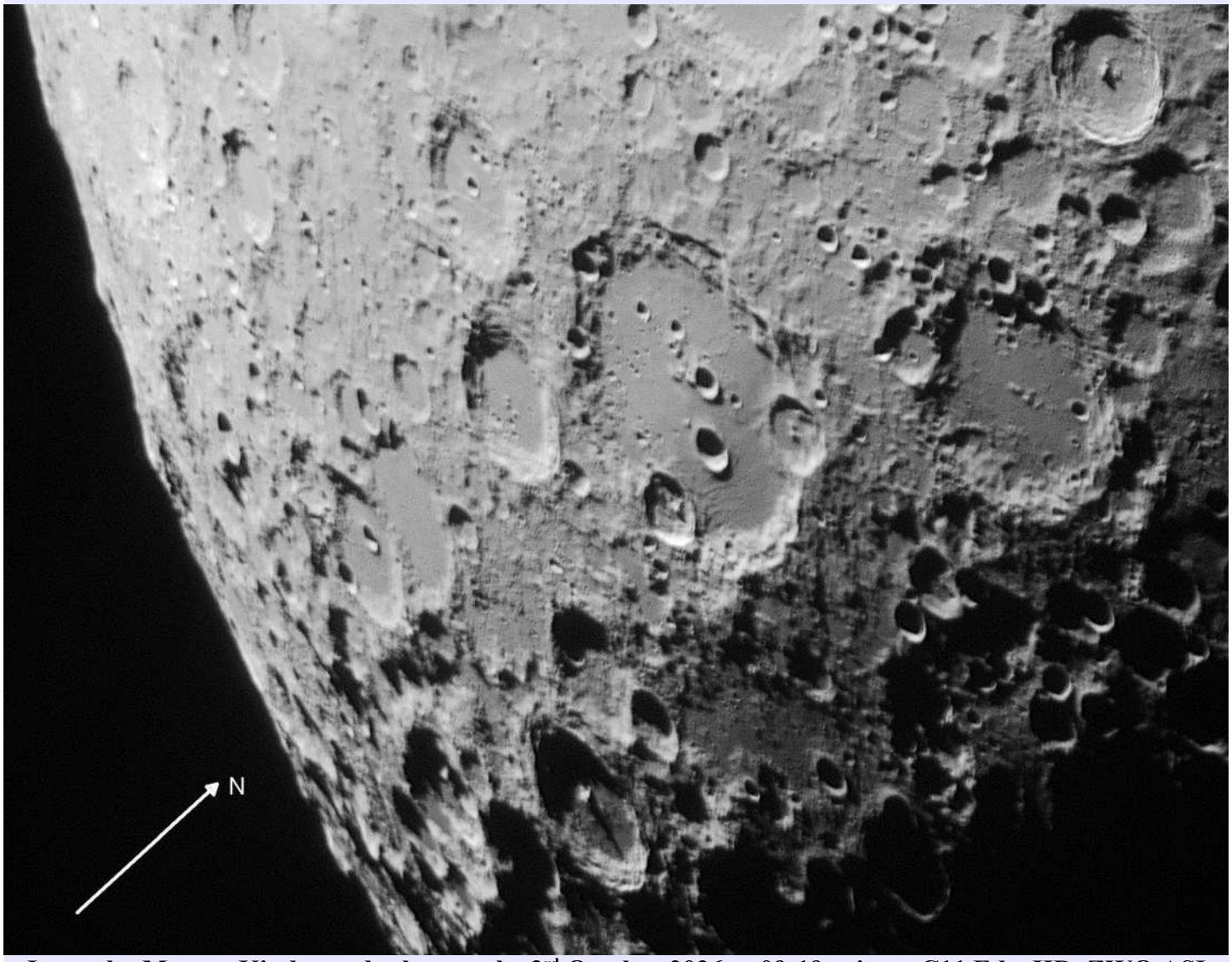


Image by Martyn Kinder and taken on the 3rd October 2026 at 09:19 using a C11 EdgeHD, ZWO ASI 174MM and IR Pass filter.

Clavius, Scheiner and Blancanus.

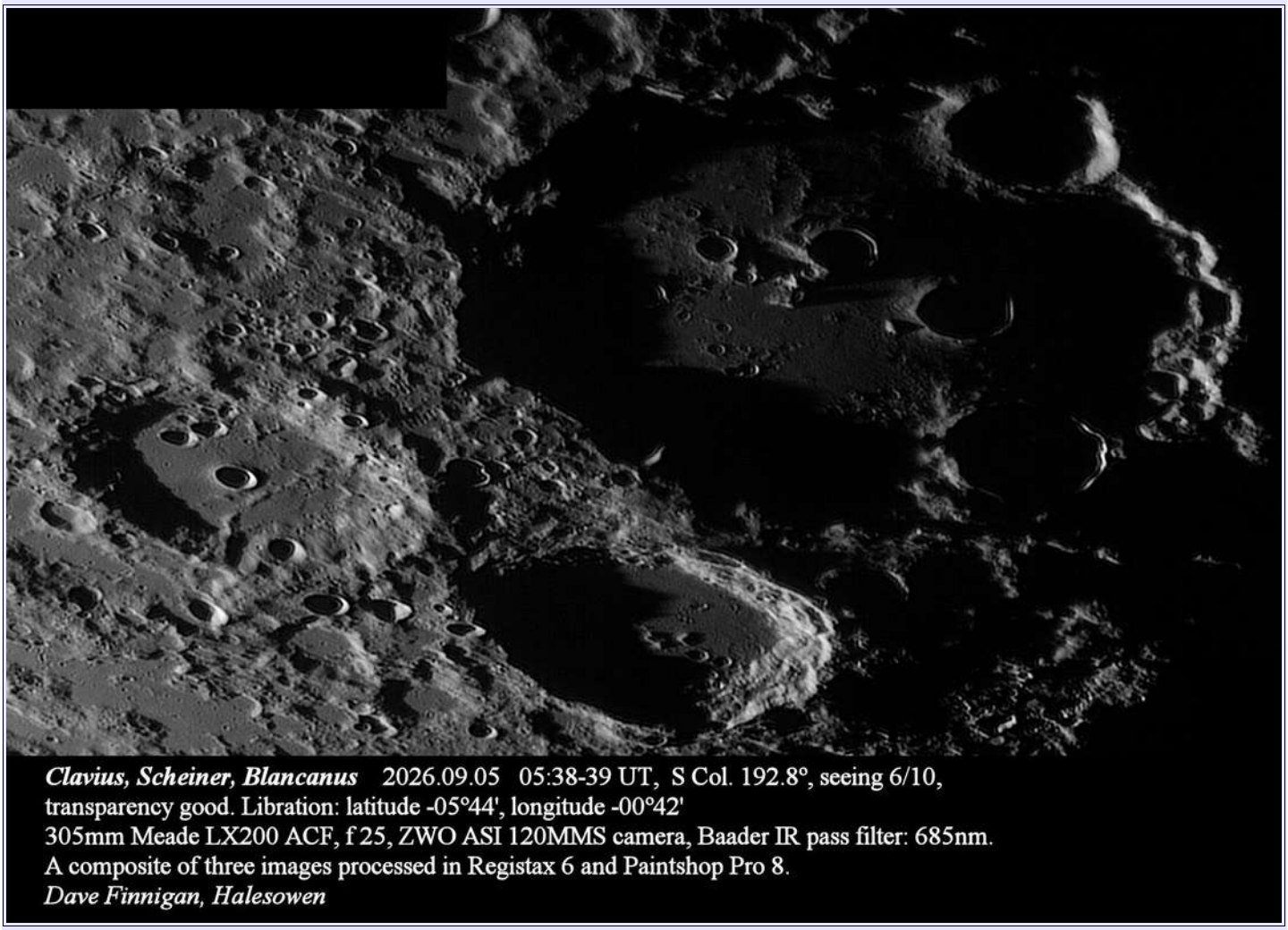


Image by Dave Finnegan with details as shown.

Waning Gibbous Moon (96.1%, 17.22 days).

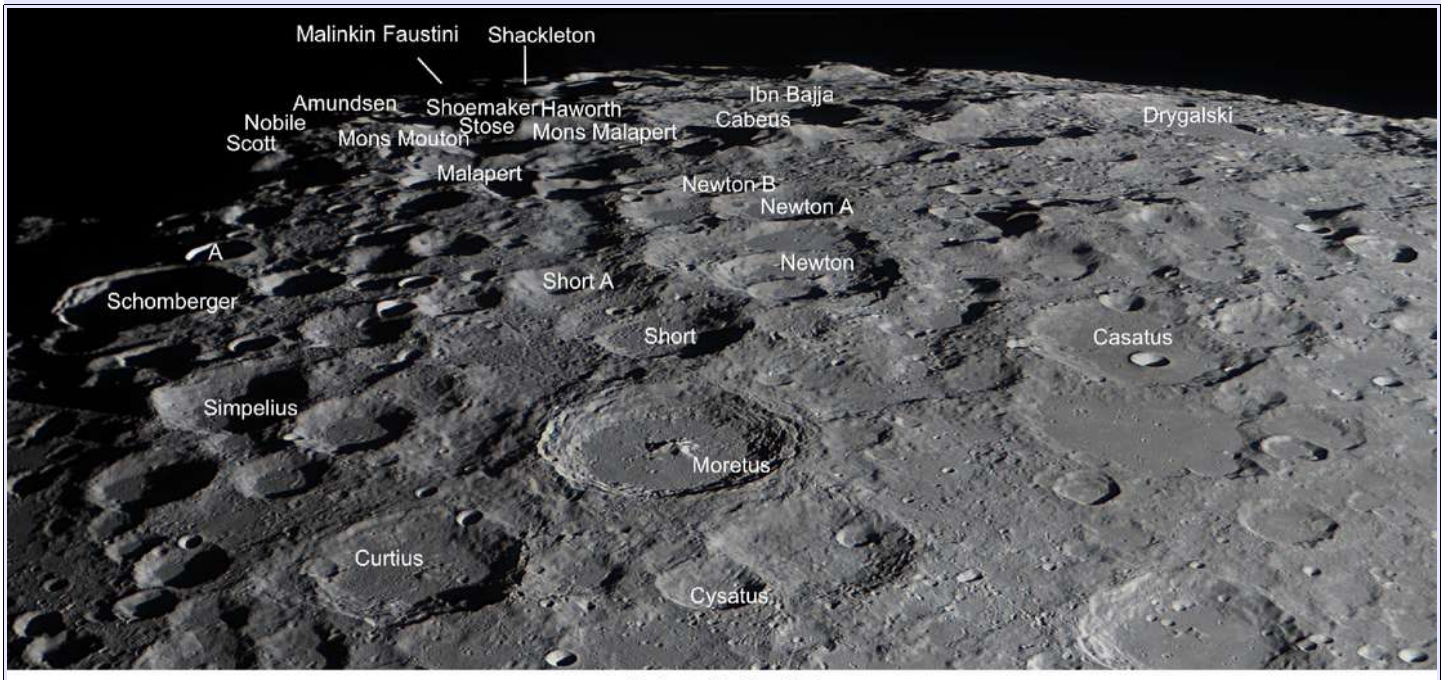


Image by Uploaded by Neil Webster and taken on the 28th October 2026 at 21:00:00 using a 115mm APO, EQ6 R, ZWO ASI290MM, Astronomik Filter (642 – 840nm).

Moretus and the South Pole



Moretus and Southern Limb
1 October 2026 0534
C11 AZEQ6 f20 Saturn-C ADC
Mark Radice RefreshingViews.com



Moretus and Southern Limb
1 October 2026 0534
C11 AZEQ6 f20 Saturn-C ADC
Mark Radice RefreshingViews.com

Images and annotation of lower image by Mark Radice who commented: *With an early start for work, I popped to the shed for a quick Moon and Mars session before setting off. The C11 with a x2 powermate is quite a telephoto lens which, when coupled with the too-rare good seeing, revealed some amazing surface details.*

Interestingly, the libration had tilted the lunar south pole towards us. I used the LRO quickmap to crater hop from Moretus to, I believe, all the way to Shackleton (who ironically never made it to the Earth's south pole). I must say it was pretty tricky to align a narrow edge on crater with the overhead map from Quickmap so corrections welcome.

Arzachel, Alphonsus and Ptolemaeus.

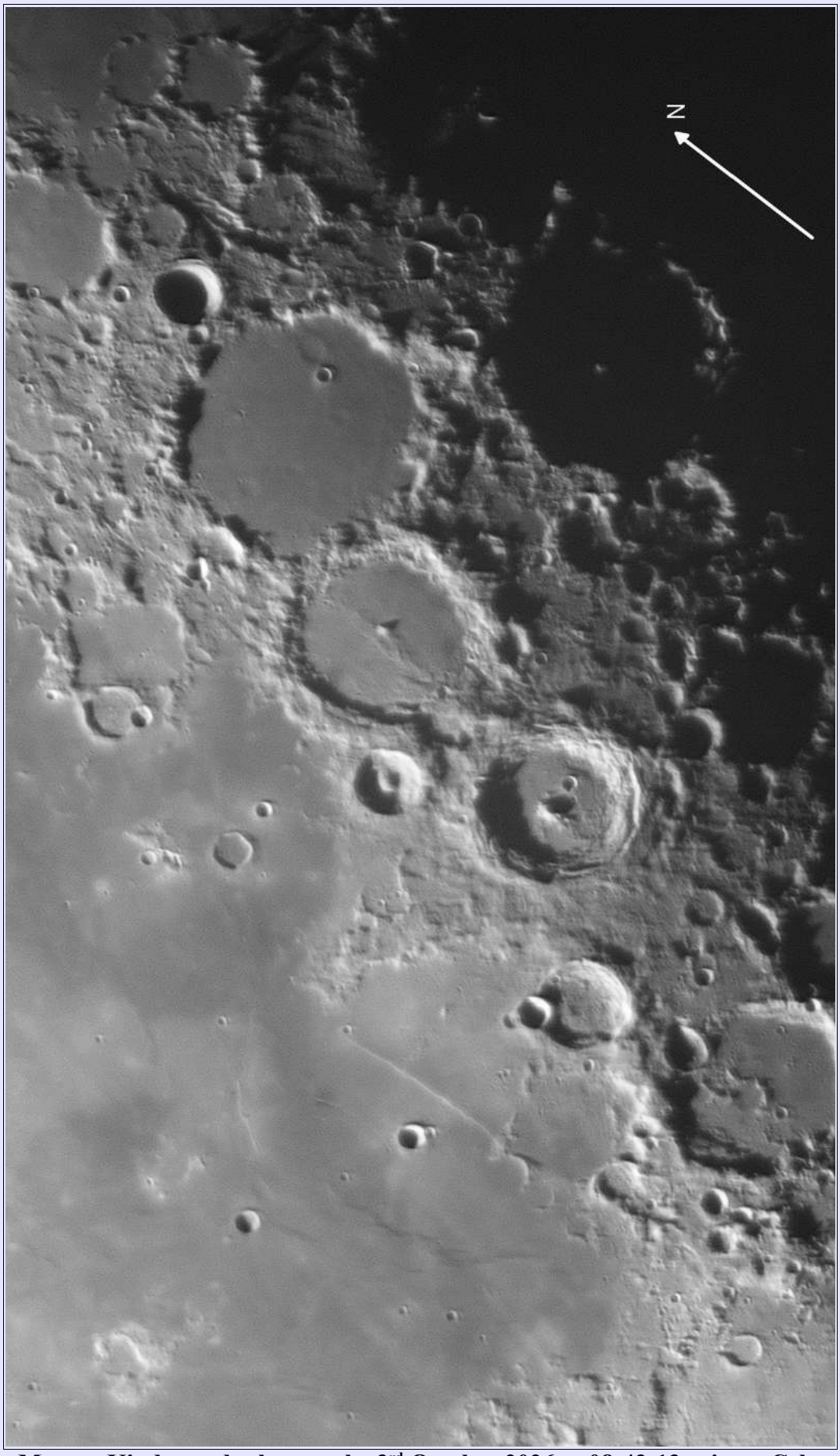


Image by Martyn Kinder and taken on the 3rd October 2026 at 08:43:13 using a Celestron C11 EdgeHD","ZWO ASI174MM

Clavius.

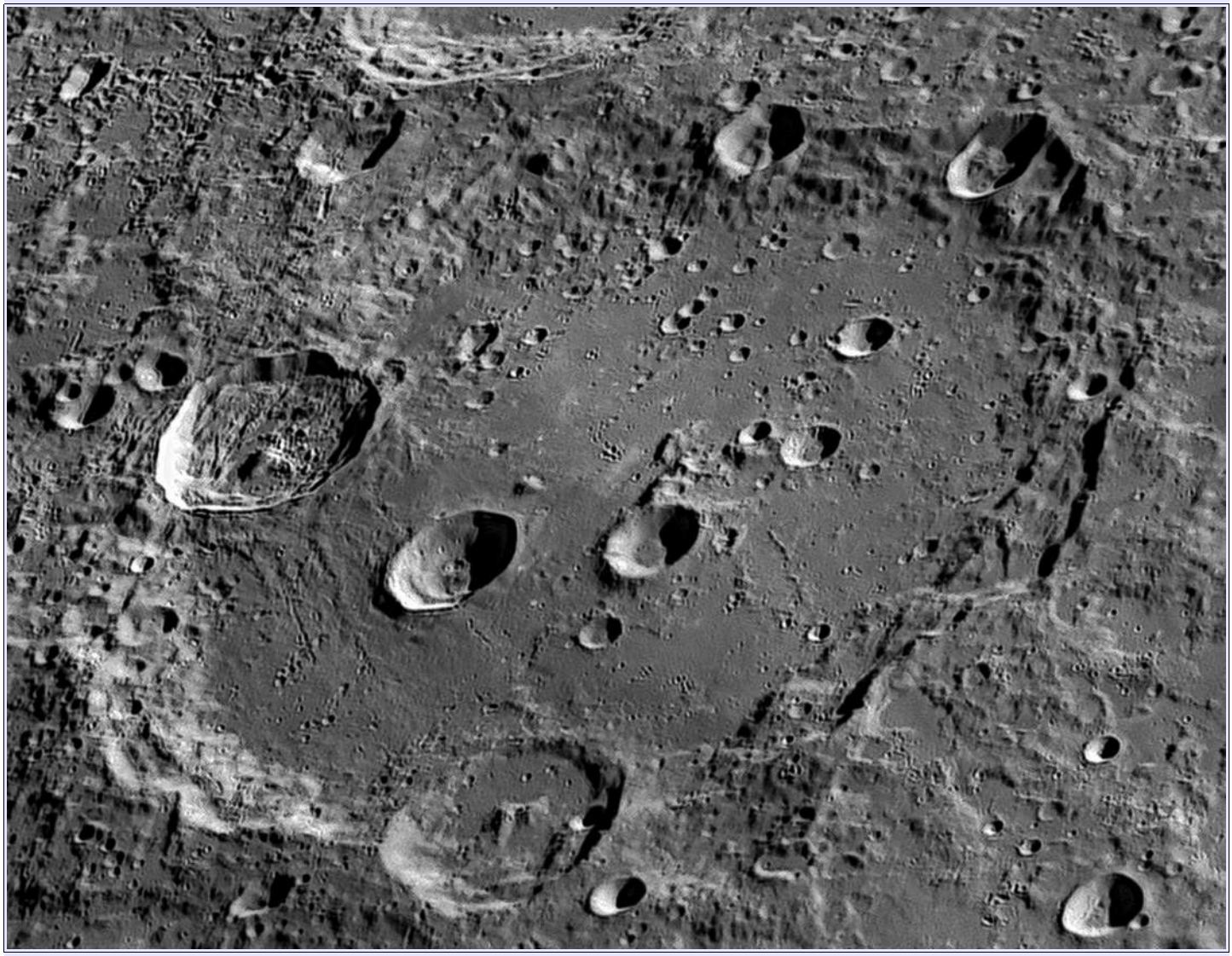


Image by Leo Aerts and taken on the 2nd October 2026 at 01:53UT using a C14, green filter, ASI 290MM.

LUNAR GEOLOGICAL CHANGE DETECTION PROGRAMME

TLP Reports: No further TLP reports have been received since the last newsletter.

Routine reports received for August included: Leo Aerts (Belgium – BAA) imaged: Bailly, Hausen, Mare Crisium, Montes Cordilleras, Schickard, Vallis Schroteri, and several features. Peter Anderson (BAA - Australia) imaged: the Full Moon to provide reference images for the partial lunar eclipse. Steve Brown (BAA – North York Moors) imaged: the Moon. Maurice Collins (ALPO/BAA/RASNZ – New Zealand) imaged: earthshine, and several features. Anthony Cook (ALPO/BAA Newtown, UK) imaged: the partial solar eclipse in white light and then the partial lunar eclipse in polarised light and with a compact digital SLR camera with telephoto. Ruth Culen (Aberath, UK) made visual descriptions of: the partial lunar eclipse. Masimo Giuntoli (BAA – Italy) observed: Cavendish E. Rik Hill (ALPO/BAA - Tucson AZ) imaged: Langrenus. Mike Greenhill-Hooper (BAA – France) imaged: the partial lunar eclipse. Mike Harvey (BAA Southwick, UK) imaged: several features. Chris Longthorn (BAA – Rugby, UK) imaged: Aristarchus and Gassendi. Francesco Modello (UAI – Italy) imaged: Plato. Neil Morrison (BAA – Crawley, UK) imaged: the partial eclipse. Pauline Phillips (BAA – Newbury, UK) imaged: the partial lunar eclipse. Grant Privett (Broad Chalke, UK – BAA) imaged the partial lunar eclipse. Richard Severn (BAA - Spain) imaged the total solar eclipse. David Strange (Norman Lockyer Observatory, UK – BAA) imaged: the partial lunar eclipse. Dmytro Shestakov (Ukraine) imaged: the partial lunar eclipse. Bob Stuart (Rhayader, UK – BAA) imaged the partial solar eclipse. Franco Taccogna (Italy – UAI) imaged: Mones Caucasus, the partial lunar eclipse, Plato, Promontorium Heraclides and several features. Peter Tickner (Berkshire, UK – BAA) imaged: the partial lunar eclipse. Aldo Tonon (Italy – UAI) imaged: Plato. Alex Vincent (Worthing, UK – BAA) imaged: the partial lunar eclipse. James Waltich (Wilkes-Barre, PA, USA – ALPO) imaged: Aristarchus and several features. Ivan Walton (SLOOH telescope Siding Springs - BAA) imaged: several features. James Weightman (Cirencester, UK – BAA) the partial lunar eclipse. Honor Wheeler (Dick Chambers Observatory, UK – BAA) imaged the partial lunar eclipse., Mazin Younis (Morocco – BAA) imaged: the partial lunar eclipse.

Space X Falcon 9 Impact: On 2026 Aug 5 Leo Aerts (BAA) to was able to image the limb region around the time of the impact (Fig 1 - left) and shortly afterwards (Fig 1 – centre). Like many observers though, as you can see from the Fig.1 no obvious sign of a plume can be seen on the NW limb of the Moon. The main evidence for a plume was detected by professional observatories using spectroscopes.

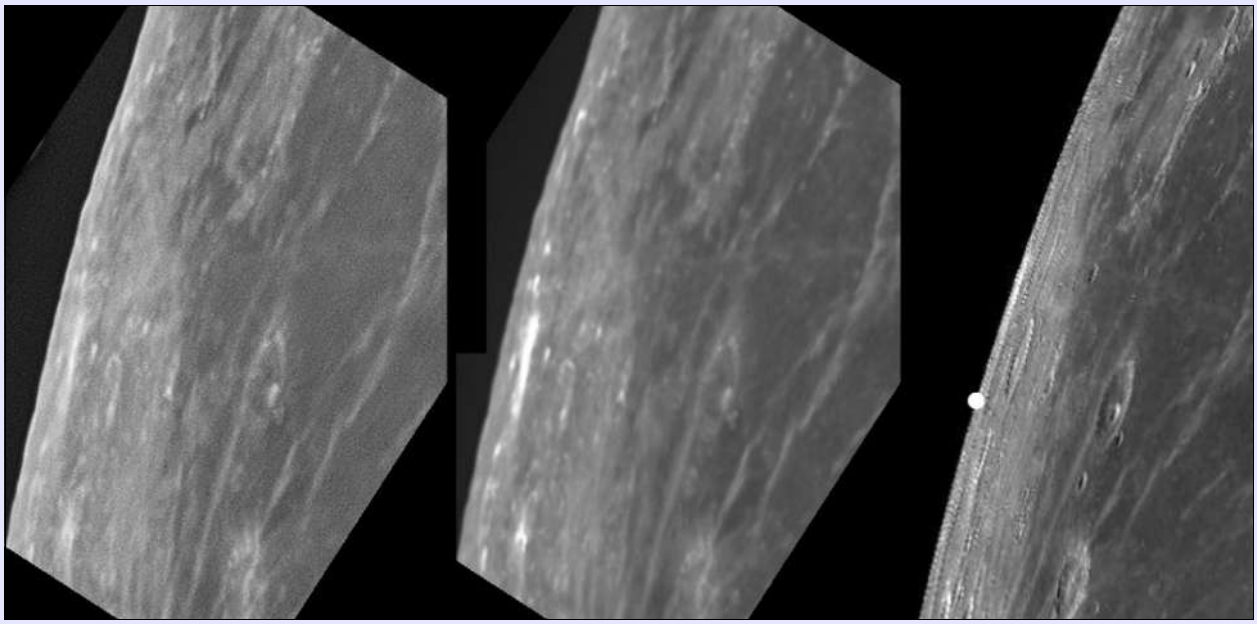


Figure 1. The limb region of the Moon near Einstein crater, orientated with north towards the top. (Left) Taken on 2026 Aug 05 UT 06:35:37UT). (Centre) Taken on 2026 Aug 05 06:36:39UT. (Right) NASA Quickmap web page showing the location of Einstein crater, over the limb – the impact site was just to the north of this – depicted by the white circle symbol.

Aristarchus: On 2026 Aug 17 UT 06:59 Maurice Collins (ALPO/BAA/RASNZ) imaged earthshine about 1 hour before similar illuminated lunar phase conditions to the following report:

On 1786 Dec 24 Schroter observed Aristarchus to be extraordinarily bright on the dark side of the Moon. Cameron 1978 catalog ID=30 and weight=4. ALPO/BAA catalog weight=2.



Figure 2. Earthshine as imaged by Maurice Collins on 2026 Aug 17 UT 06:59 with a Dwarf 3 telescope and re-orientated with north towards the top.

Although we are an hour early than the predicted time, I think that in view of the very bright nature of Aristarchus, seen in Fig.2, we can probably lower the ALPO.BAA weight from 2 to 1, though it's possible that libration/viewing angle might affect the brightness of Aristarchus.

Plato: On 2026 Aug 26 UAI observers: Aldo Tono, Franco Taccogna and Francesco Modello imaged this crater for the following repeat illumination request:

BAA Request: Two observers have reported colour on the rim around this colongitude, once in 1938, and again in 2013. Please take a look and report what you see, and where on the rim. Please send any high-resolution images, detailed sketches, or visual descriptions to: a t c @ a b e r . a c. u k .



Figure 3. Colour saturation enhanced images of Plato taken by UAI observers on 2026 Aug 26 with north towards the top. **(Left)** 18:53 UT by Francesco Momdello. **(Centre)** 19:29UT by Aldo Tonon. **(Right)** 20:41UT by Franco Taccogna.

The 1938 report was from W.E. Fox who saw a golden-brown spot-on Plato's east wall, with colour often extending along Plato's inner south wall. The 2013 report was by Raffaello Braga of Milan who saw a remarkable gold glow on the eastern rim. The Mondello (Fig.3 Left) and Tonon (Fig.3 Centre) images show no golden spot on the eastern wall despite having their saturation increased. Franco Taccogna's image (Fig 3 – Right) already had a slight yellow cast everywhere and so this was amplified when the saturation was increased. Nevertheless, no extra gold colour can be seen on the eastern rim. We shall therefore leave the 2013 and 1938 TLP report weights as they are.

Partial Lunar Eclipse on 2026 Aug 28: Lunar eclipses have a fair share of associated TLP reports. If the TLP were to be hypothetically a result of some physical process on the Moon during eclipses, then two trigger mechanisms could be: a) the Moon is passing through the Earth's magnetotail and this can lead to: shielding from the solar wind, electrostatic charging, a few terrestrial atmospheric ions can reach the surface etc, and b) there is a drop in temperature that can lead to contraction of rocks. How these would manifest themselves as TLP is an open question. Interestingly there are several TLP reports during eclipses: unusual brightening's, flashes, and some really unbelievable reports of the angular sizes of some small craters changing? For now, I will just show a few of the excellent sample images received in Fig.3. Fig.3 (Far Right) has been included as a reference image of what the Moon should look like without a shadow.



Figure 3. 2026 Aug 28 example lunar images taken by BAA observers with north towards the top. **(Far Left)** Taken by James Weightman (BAA) at 02:50UT. **(Left)** Taken by Honor Wheeler at 04:13UT. **(Centre)** Taken by Pauline Phillips at 04:14UT. **(Right)** Taken by Mike Greenhill-Hooper at 04:38UT. **(Far Right)** A near full Moon comparison image taken by Peter Anderson at 10:45UT.

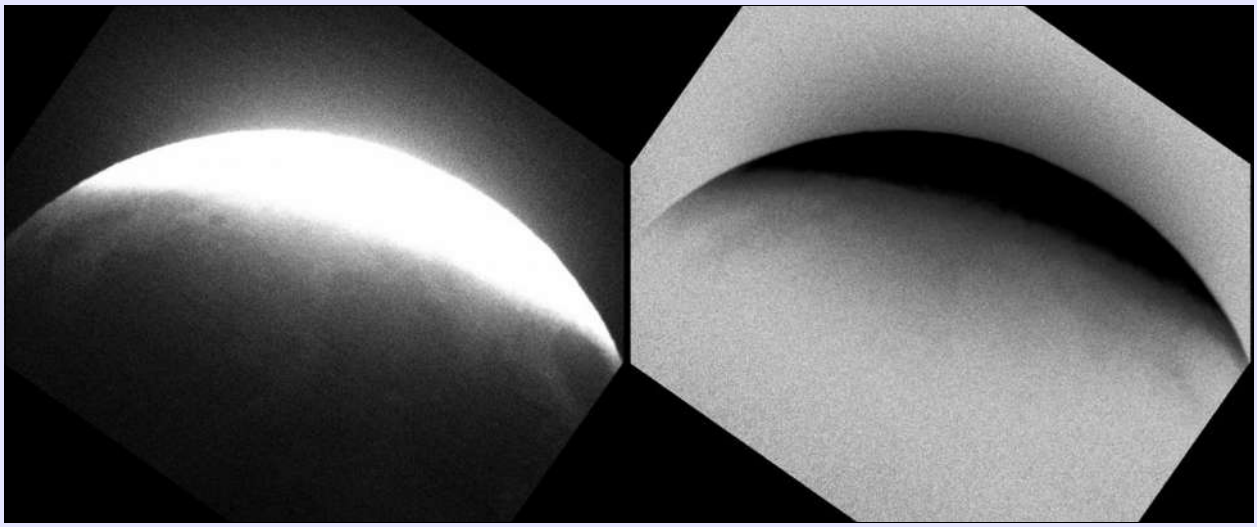


Figure 4. The lunar eclipse on 2026 Aug 28 UT 03:55 with north towards the top. **(Left)** Visible light image. **(Right)** Degree of polarisation image.

I observed the partial lunar eclipse using a polarised light camera, on a 20 cm Newtonian from Newtown, Mid Wales. Conditions were far from ideal, mostly cloudy and a few scant observations made through gaps through the clouds, with the Moon already quite low. Cirrus was often present. Amazingly, despite the poor conditions, some results were obtained. The camera saturated on the bright penumbra as you can see in Fig 4 (left), but in the umbral region in the polarised light image we can see several features such as Plato and Mare Crisium. The polarised light image appears as a reversal of the albedo. This is odd though because at Full Moon, or zero phase, the polarisation should be zero, and yet we are seeing features here? However, as we move towards the centre of the umbra, the Moon is lacking in detail i.e. no polarisation – agreeing with what we would expect, or perhaps it was just lack of photons? Moving towards the edge of the umbra the amount of polarisation drops as it gets darker in Fig 4 (right). Whether this is a real effect, or something to do with the glare from the brighter penumbral region is uncertain. I showed the images to ALPO's Wayne Bailly, another polarised light astronomer, and he commented:

"I think that what you're seeing MAY be partially polarized light illuminating the moon near the edge of the umbra. I think you're right that within the central umbra symmetry of the scattered light should result in net zero polarization. However, at any point on the Earth's limb, the light would be at least partially polarized by scattering (plane of polarization tangential to the limb?). At first glance, it appears that the symmetry would be broken as you approach the edge of the umbra and the illumination would be produced preferentially by scattering from the adjacent earth limb. So, it would be partially polarized in a plane tangential to the umbra. You would then have polarized light reflecting from a polarizing lunar surface, so polarization features might appear. If this reasoning is correct, then a similar effect should appear in the inner penumbra, due to dilution with unpolarized light, which might enhance surface polarization features (depending on their polarization angle), but would probably be a weak effect."

Kepler: On 2026 Aug 28 UT 11:11 Ivan Walton, using the Siding Springs SLOOH robotic telescope, imaged the Moon under similar illumination to the following report:

Kepler 1967 Oct 19 UT 05:00 Observed by Classen (Pulnitz Obs. East Germany, 8" reflector) and Corralitos Observatory (Organ Pass, NM, USA, 24" reflector + moon blink) "It was 1 mag brighter than Aristarchus when normally Aris. is 0.3mag. brighter than Kep. Corralitos MB did not confirm." NASA catalog weight=4. NASA catalogue ID #1052. ALPO/BAA weight=2.

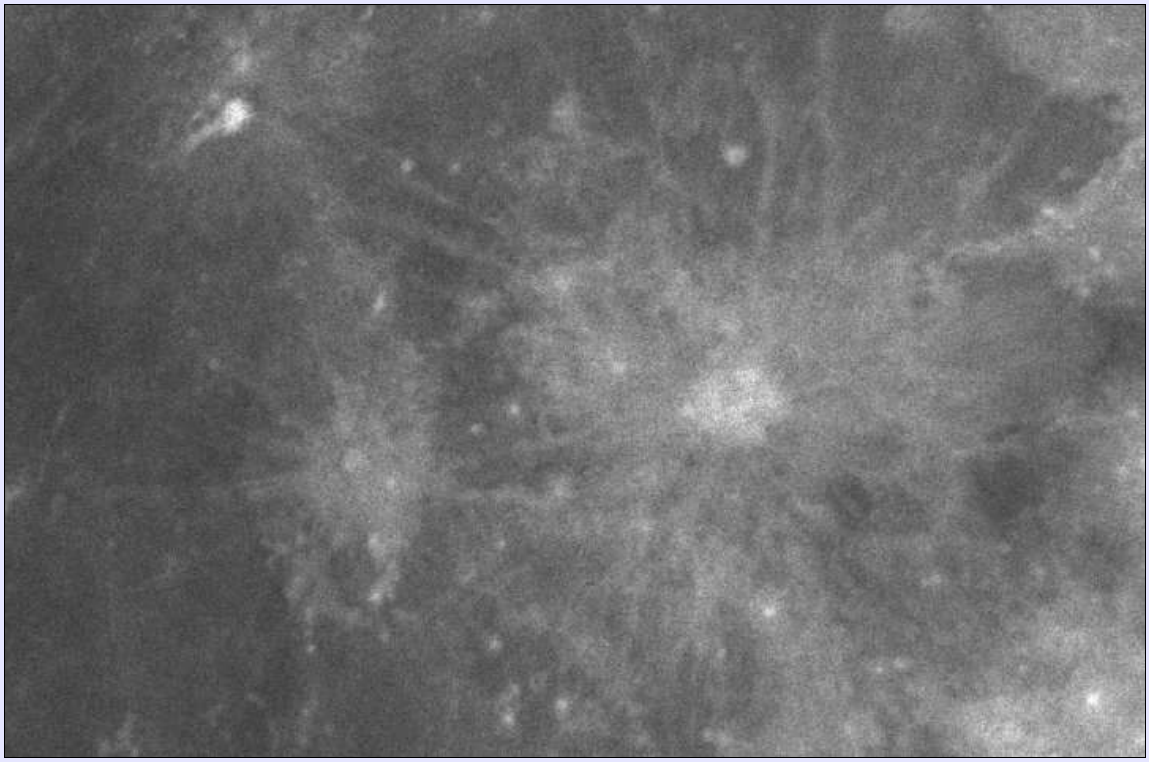


Figure 5. 2026 Aug 28 UT 11:11 - a sub-section of Ivan Walton image, of the three bright ray craters, Aristarchus, Kepler and Copernicus. Orientated with north towards the top.

Taking brightness measurements, from Fig 5, I find that Aristarchus is DN=224, and Kepler is DN=157. The equates to Aristarchus being 0.4 magnitudes brighter than Kepler. This is close to what Cameron describes as normal. So whatever Classen saw in 1967 was abnormal unless there was some libration effect (viewing angle) taking place? The fact that Corralitos observatory claims not to have detected this could be simply that they were observing at a different time, and once the Moon has risen above the horizon at New Mexico, the TLP effect was already over. We shall leave the ALPO/BAA weight at 2 for now.

General Information: For repeat illumination (and a few repeat libration) observations for the coming month - these can be found on the following web site: http://users.aber.ac.uk/atc/lunar_schedule.htm . By re-observing and submitting your observations, only this way can we fully resolve past observational puzzles. If in the unlikely event you do ever see a TLP, firstly read the TLP checklist on http://users.aber.ac.uk/atc/alpo/ltp.htm , and if this does not explain what you are seeing, please give me a call on my cell phone: +44 (0)798 505 5681 and I will alert other observers. Note when telephoning from outside the UK you must not use the (0). When phoning from within the UK please do not use the +44! Twitter TLP alerts can be accessed on https://twitter.com/lunarnaut .

Dr Anthony Cook, Department of Physics, Aberystwyth University, Penglais, Aberystwyth, Ceredigion, SY23 3BZ, WALES, UNITED KINGDOM. Email: atc @ aber.ac.uk

Lunar Calender for November 2026.

Date	UT	Remarks
1	20:28	Last Qurater
2	01:00-06:30	Earthshine (45% Illuminated Moon) - Look for sporadic impact flashes
2	01:00-01:40	Aristrachus: is the crater very bright in comparison to other craters?
3	02:30-06:30	Earthshine (34% Illuminated Moon) - Look for sporadic impact flashes
3	02:30-03:30	Riccioli: Colour images needed or study for colour visually
4	03:50-06:30	Earthshine (24% Illuminated Moon) - Look for impacts from Southern Taurids (ZHR=5 25 km/s)
4	06:15-07:15	Vitello: Images or skteches needed
5	05:10-06:30	Earthshine (16% Illuminated Moon) - Look for impacts from Southern Taurids (ZHR=5 25 km/s)
5	05:15-05:22	Nu Leo occultation re-appearance on SE dark limb (m=4.3)
9	7:02	New Moon
11	16:00	Moon at lowest Dec of -28 deg
13	17:51	Moon at Apogee - furtherst from us
14	17:00-17:30	Earthshine (25% illuminated Moon) - Look for impacts from Leonids (ZHR=15, 71 km/s)
14	18:18 ± few min	Occultation of 52 Sgr (m=4.6) near dark NNE limb (not from Scotland)
15	17:00-18:15	Earthshine (34% illuminated Moon) - Look for impacts from Leonids (ZHR=15, 71 km/s)
16	16:50-19:00	Earthshine (43% illuminated Moon) - Look for impacts from Leonids (ZHR=15, 71 km/s)
16	19:15-19:50	Ukert - Lunar V Clair-Obscur effect
16	19:15-19:50	Werner - Lunar X Clair-Obscur effect
17	11:48	First Quarter
17	16:25-16:45	Montes Teneriffe & surrounds: images/sketches needed
17	16:50-20:00	Earthshine (53% illuminated Moon) - Look for impacts from Leonids (ZHR=15, 71 km/s)
17	20:40-21:15	Plato: Observe/image/sketch when shadow spires reach craterlets on the floor
18	17:15-21:00	Earthshine (63% illuminated Moon) - Look for impacts from Leonids (ZHR=15, 71 km/s)
18	19:30-20:20	Copernicus: Sunrise over this crater
19	16:10-17:00	How sharp is the rim of Daniell crater?
20	23:00-00:45	Promontorium Laplace: Image in colour or look for colour visually
20	01:41-01:45	Occultation of 51 Psc (m=5.8) occulted near W linb
20	15h	Favourable views of SW limb & farside (Max libration 8.5°) +/- 2 days
21	17:10-18:45	Kepler: Any sign of a star-lke point just outside E. wall and does it have colour?
22	16:15-16:25	Ocultation of Epsilon Ari (m=4.7) and shortly after X54005 (m=5.6) occulted on NW limb
23	16:25-20:00	Plato: Images or sketches needed
23		Inghirami crater well presented due to libration today
23	16:45-17:10	Bailly crater: can you detect any colour with images or visually?
23	14:53	Full Moon
24		Pingre crater well presneted due to libration today
24	2:35	Southern limb well presneted due to libration
25		Le Gentil crater well presneted due to libration today
25	04:23-04:27	Reappearance of occulted star HIP 26396 (m=5.8) on SE dark limb
25	22:15-02:10	Schickard: images needed
25	20:59	Moon at Perigee - closest to us
26		Schomberger crater well presented due to favourable libration today
26	2:00	Moon at highest Dec of +27°
26	05:30-07:20	Peirescius crater: how bright is it tonight?
26	23:40-01:30	Cleomedes: images of shadow filled interior needed
27	06:00-08:00	Aristarchus: images (colour) or skecthes needed
28	02:15-04:15	Aristarchus: images (colour) or skecthes needed
29	02:30-04:20	Posidonius J - images or sketches needed, especially of central area
30	06:45-08:00	Aristrachus: Images or sketches needed

Some of this data supplied by ALPO's Stan Sienkiewicz