Association of Lunar & Planetary Observers
ALPO
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THE LUNAR OBSERVER

RECENT BACK ISSUES: http://www.zone-vx.com/tlo_back.html

A PUBLICATION OF THE LUNAR SECTION OF THE A.L.P.O.
EDITED BY: William M. Dembowski, F.R.A.S. - dembowski@zone-vx.com
Elton Moonshine Observatory - http://www.zone-vx.com
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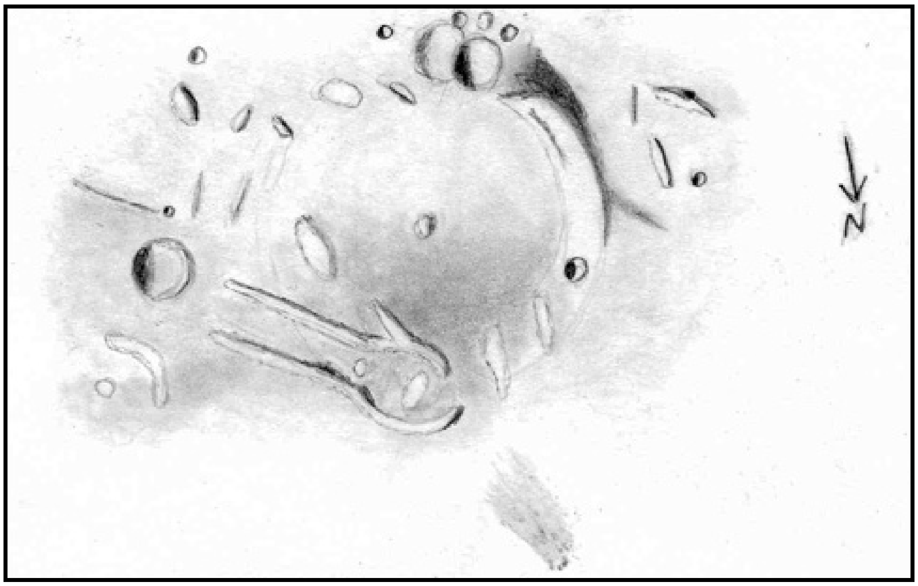
FEATURE OF THE MONTH – OCT. 2008



JULIUS CAESAR

Sketch and text by Robert H. Hays, Jr. - Worth, Illinois, USA
May 13, 2008 – 02:02 to 02:48 UT
15cm Newtonian - 136x - Seeing: 7-8/10

I drew this crater and vicinity on the evening of May 12/13, 2008 after watching two occultations. This crater is located between Mares Tranquillitatis and Vaporum. It looks fairly complete at first, but closer inspection shows that it is far from complete. The only intact rim is toward the southwest. The rest of its rim ranges from spotty to nonexistent. There is what appears to be a small central peak, and a larger peak to the east that may be part of an old rim. The most obvious feature of Julius Caesar is its dark north half. It is not adjacent to any mare. The darkest area extends from the aforementioned large peak on the east side to the west rim near Julius Caesar B. The broken ring to the north is Julius Caesar G, and it has the same tint as the north half of the main crater. There is a large, relatively bright patch on its floor. Julius Caesar G forms a spoon-shaped enclosure with two narrow ridges extending eastward. There is another bright patch between these ridges.

Sosigenes is the crater just east of these ridges, and it has a dull interior. North of this crater are two more shadowless bright areas, and the pit Sosigenes B is to its south. A short, narrow ridge extends eastward from Sosigenes B, and separates dark, marelike material to its north, and lighter terrain to its south. There is an assortment of peaks and ridges in this lighter area, along with the small pit Julius Caesar D. The peak north of D is particularly bright. Julius Caesar A is the large, complete crater on the south edge of J.C.; it overlaps a similar, but less crisp crater to its east. Three small pits and a small peak are south of this pair, and a short ridge is to the northeast of them. Another bright patch is also in this area. A few short strips of shadow and a small pit lie south of a spur extending from the west rim of Julius Caesar. Two more bright areas are between Julius Caesar B and G, and stand out well amid their dark surroundings.

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LUNAR CALENDAR - OCT. 2008 (UT)

Oct. 01	00:00	Moon 5.0 Degrees SSW of Mars
Oct. 01	23:00	Moon 4.8 Degrees SSW of Venus
Oct. 05	11:00	Moon at Apogee (404,715 km - 251,478 miles)
Oct. 07	08:00	Moon 2.4 Degrees S of Jupiter
Oct. 07	09:05	First Quarter
Oct. 10	09:00	Moon 0.81 Degrees NW of Neptune
Oct. 12	12:00	Moon 3.5 Degrees NNW of Uranus
Oct. 14	20:03	Full Moon
Oct. 17	06:00	Moon at Perigee (363,826 km - 226,071 miles)
Oct. 21	11:56	Last Quarter
Oct. 25	04:00	Moon 4.5 Degrees SSW of Saturn
Oct. 27	11:00	Moon 6.5 Degrees SSW of Mercury
Oct. 28	23:14	New Moon (Start of Lunation 1062)
Oct. 29	22:00	Moon 4.9 Degrees SSW of Mars

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CALL FOR OBSERVATIONS:
FOCUS ON: Bullialdus to Kies

Focus on is a bi-monthly series of articles which includes observations received for a specific feature or class of features. The subject for the **November 2008** edition will be the region from **Bullialdus to Kies**. Observations of all kinds (electronic or film based images, drawings, etc.) are welcomed and invited. Keep in mind that observations do not have to be recent ones, so search your files and/or add these fascinating features to your observing list and send your favorites to:

Dembowski@zone-vx.com or **dembowski@alpo-astronomy.org**

Deadline for inclusion in the Bullialdus/Kies article is October 20, 2008

AN INVITATION TO JOIN THE A.L.P.O.

The Lunar Observer is a publication of the Association of Lunar and Planetary Observers that is available for access and participation by non-members free of charge, but there is more to the A.L.P.O. than a monthly lunar newsletter. If you are a non-member you are invited to join our organization for its many other advantages.

We have sections devoted to the observation of all types of bodies found in our solar system. Section coordinators collect and study members' observations, correspond with observers, encourage beginners, and contribute reports to our Journal at appropriate intervals.

Our quarterly journal, **The Strolling Astronomer**, contains the results of the many observing programs which we sponsor including the drawings and images produced by individual amateurs. Additional information about the A.L.P.O. and its Journal can be found on-line at: **http://www.alpo-astronomy.org/index.htm** I invite you to spend a few minutes browsing the Section Pages to learn more about the fine work being done by your fellow amateur astronomers.

To learn more about membership in the A.L.P.O. go to: **http://www.alpo-astronomy.org/main/member.html** which now also provides links so that you can enroll and pay your membership dues online.

HALF-HOURS WITH THE TELESCOPE

Being a popular guide to the use of the telescope as a means of amusement and instruction

By Richard A. Proctor, B.A., F.R.A.S.

The moon perhaps is the easiest of all objects of telescopic observation. A very moderate telescope will show her most striking features, while each increase of power is repaid by a view of new details. Yet in one sense the moon is a disappointing object even to the possessor of a first-class instrument. For the most careful and persistent scrutiny, carried on for a long series of years, too often fails to reward the observer by any new discoveries of interest. Our observer must therefore rather be prepared to enjoy the observation of recognised features than expect to add by his labours to our knowledge of the earth's nearest neighbour.

Although the moon is a pleasing and surprising telescopic object when full, the most interesting views of her features are obtained at other seasons. If we follow the moon as she waxes or wanes, we see the true nature of that rough and bleak mountain scenery, which when the moon is full is partially softened through the want of sharp contrasts of light and shadow. If we watch, even for half an hour only, the changing form of the ragged line separating light from darkness on the moon's disc, we cannot fail to be interested. "The outlying and isolated peak of some great mountain-chain becomes gradually larger, and is finally merged in the general luminous surface; great circular spaces, enclosed with rough and rocky walls many miles in diameter, become apparent; some with flat and perfectly smooth floors, variegated with streaks; others in which the flat floor is dotted with numerous pits or covered with broken fragments of rock. Occasionally a regularly-formed and unusually symmetrical circular formation makes its appearance; the exterior surface of the wall bristling with terraces rising gradually from the plain, the interior one much more steep, and instead of a flat floor, the inner space is concave or cup-shaped, with a solitary peak rising in the centre. Solitary peaks rise from the level plains and cast their long narrow shadows athwart the smooth surface. Vast plains of a dusky tint become visible, not perfectly level, but covered with ripples, pits, and projections. Circular wells, which have no surrounding wall dip below the plain, and are met with even in the interior of the circular mountains and on the tops of their walls. From some of the mountains great streams of a brilliant white radiate in all directions and can be traced for hundreds of miles. We see, again, great fissures, almost perfectly straight and of great length, although very narrow, which appear like the cracks in moist clayey soil when dried by the sun."

But interesting as these views may be, it was not for such discoveries as these that astronomers examined the surface of the moon. The examination of mere peculiarities of physical condition is, after all, but barren labour, if it lead to no discovery of physical variation. The principal charm of astronomy, as indeed of all observational science, lies in the study of change—of progress, development, and decay, and specially of systematic variations taking place in regularly-recurring cycles. And it is in this relation that the moon has been so disappointing an object of astronomical observation. For two centuries and a half her face has been scanned with the closest possible scrutiny; her features have been portrayed in elaborate maps; many an astronomer has given a large portion of his life to the work of examining craters, plains, mountains, and valleys, for the signs of change; but until lately no certain evidence—or rather, no evidence save of the most doubtful character—has been afforded that the moon is other than "a dead and useless waste of extinct volcanoes." Whether the examination of the remarkable spot called Linné—where lately signs were supposed to have been seen of a process of volcanic eruption—will prove an exception to this rule, remains to be seen. The evidence seems to me strongly to favour the supposition of a change of some sort having taken place in this neighbourhood.

The sort of scrutiny required for the discovery of changes, or for the determination of their extent, is far too close and laborious to be attractive to the general observer. Yet the kind of observation which avails best for the purpose is perhaps also the most interesting which he can apply to the lunar details. The peculiarities presented by a spot upon the moon are to be observed from hour to hour (or from day to day, according to the size of the spot) as the sun's light gradually sweeps across it, until the spot is fully lighted; then as the moon wanes and the sun's light gradually passes from the spot, the series of observations is to be renewed. A comparison of them is likely—especially if the observer is a good artist and has executed several faithful delineations of the region under observation, to throw much light upon the real contour of the moon's surface at this point.

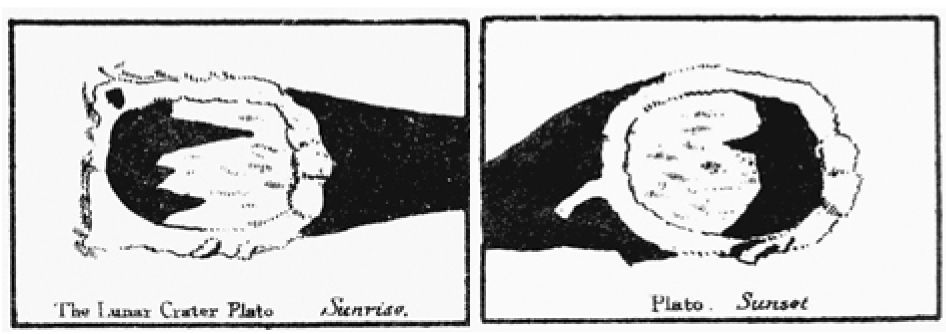

PLATE 7

In the two lunar views in Plate 7 some of the peculiarities I have described are illustrated. But the patient observer will easily be able to construct for himself a set of interesting views of different regions.

It may be noticed that for observation of the waning moon there is no occasion to wait for those hours in which only the waning moon is visible *during the night*. Of course for the observation of a particular region under a particular illumination, the observer has no choice as to hour. But for generally interesting observations of the waning moon he can wait till morning and observe by daylight. The moon is, of course, very easily found by the unaided eye (in the day time) when not very near to the sun; and the methods described in Chapter V will enable the observer to find the moon when she is so near to the sun as to present the narrowest possible sickle of light.

One of the most interesting features of the moon, when she is observed with a good telescope, is the variety of colour presented by different parts of her surface. We see regions of the purest white—regions which one would be apt to speak of as *snow-covered*, if one could conceive the possibility that snow should have fallen where (now, at least) there is neither air nor water. Then there are the so-called seas, large grey or neutral-tinted regions, differing from the former not merely in colour and in tone, but in the photographic quality of the light they reflect towards the earth. Some of the seas exhibit a greenish tint, as the Sea of Serenity and the Sea of Humours. Where there is a central mountain within a circular depression, the surrounding plain is generally of a bluish steel-grey colour. There is a region called the Marsh of Sleep, which exhibits a pale red tint, a colour seen also near the Hyrcinian mountains, within a circumvallation called Lichtenburg. The brightest portion of the whole lunar disc is Aristarchus, the peaks of which shine often like stars, when the mountain is within the unillumined portion of the moon. The darkest regions are Grimaldi and Endymion and the great plain called Plato by modern astronomers—but, by Hevelius, the Greater Black Lake.

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Editor's Note:
What I found most interesting in the above text was Proctor's view that lunar observations are of little scientific interest because: ***no evidence save of the most doubtful character — has been afforded that the moon is other than "a dead and useless waste of extinct volcanoes."***
(It's a good thing that we kept looking anyway.) ………………. **W.M.D.**

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When submitting observations to the A.L.P.O. Lunar Section

In addition to information specifically related to the observing program being addressed, the following data should always be included:

Name and location of observer
Name of feature
Date and time (UT) of observation
Size and type of telescope used
Orientation of image: (North/South - East/West)
Seeing: 1 to 10 (1-Worst 10-Best)
Transparency: 1 to 6
Magnification (for sketches)
Medium employed (for photos and electronic images)

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David O. Darling – Asst. Coordinator, Transient Lunar Phenomena DOD121252@aol.com

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Marvin W. Huddleston – Coordinator, Lunar Dome Survey kc5lei@comcast.net

LUNAR TOPOGRAPHICAL STUDIES

Coordinator - William M. Dembowski, FRAS
dembowski@zone-vx.com

OBSERVATIONS RECEIVED

WAYNE BAILEY - SEWELL, NEW JERSEY, USA
Digital images of Cleomedes & Lacus Bonitatis, Atlas & Hercules, Byrgius-A, Schickard, Kepler, Bullialdus & Kies (6), Alphonsus

Banded Crater Report Forms with digital images of Proclus, Birt, Menelaus, Kies-A, Aristarchus, Darney, Drebbel-J,

MAURICE COLLINS - PALMERSTON NORTH, NEW ZEALAND
Digital images of Clavius, Petavius, Mare Humboldtianum & Endymion, Langrenus, Ptolemaeus (8), Ptolemaeus-Alphonsus-Rupes Recta, 1.45-day Moon, 4.6-day Moon, Alexander, First Qtr. Moon, 7-day Moon (3), 8-day Moon, 20-day Moon (2), Full Moon

ED CRANDALL - WINSTON-SALEM, NORTH CAROLINA, USA
Digital images of Capuanus-Kies-Hippalus, Kies

HOWARD ESKILDSEN - OCALA, FLORIDA, USA
Digital images of Humboldt (2),

Banded Crater Report Forms with digital images of Ariadaeus (2), Aristillus (2), Burg (2), Conon (2), Dawes, Maury (2), Menelaus (2), Messier (2), Proclus (2), Rosse (2), Silberschlag (2), Theaetetus (2), Anaxagoras, Aristarchus, Bessarion, Birt, Bode, Brayley, Damoiseau-E, Davy-A & G, Dawes, Kepler, Milichius, Nicollet, Pytheas, Guericke-B

PETER GREGO - ST. DENNIS, CORNWALL, UK
PDA drawing of Riccioli

RIK HILL - TUCSON, ARIZONA, USA
Digital images of Sabine & Ritter, Torricelli, Langrenus, Petavius

BRUCE KINGSLEY - MAIDENHEAD, UK
Digital images of Hyginus & Triesnecker, South Polar Region

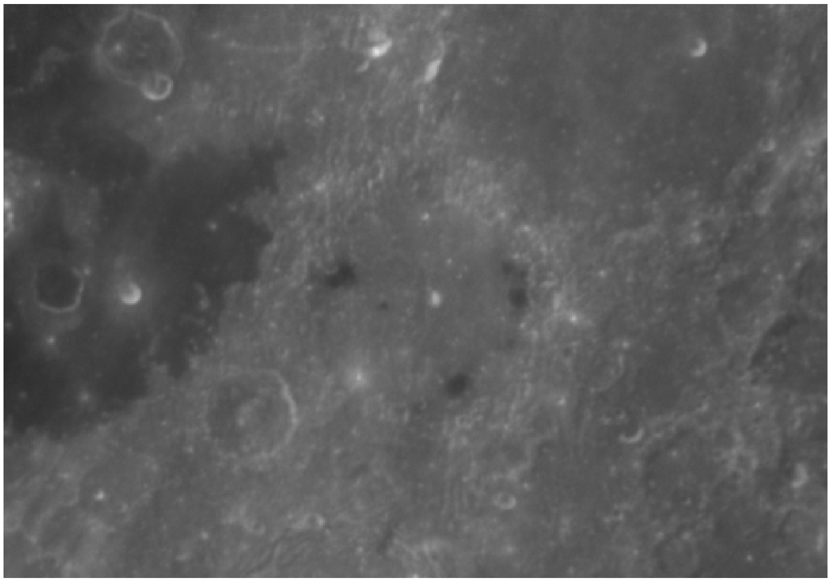
PAOLO LAZZAROTTI - MASSA, ITALY
Digital images of Plato & Montes Alpes, Kies & Pitatus, North Polar Region, Mare Insularum

MICHEL LEGRAND - COUYERE, FRANCE
Digital images of Bullialdus, Clavius, Copernicus, Sinus Iridum & Plato, Sinus Iridum & Lambert

ANDREW MARTIN - ROCKVILLE, MARYLAND, USA
Written observations of ray systems of Aristarchus, Kepler, Glushko

MIKE MATTEI – LITTLETON, MASSACHUSETTS, USA
Digital images of Mare Crisium, Bullialdus

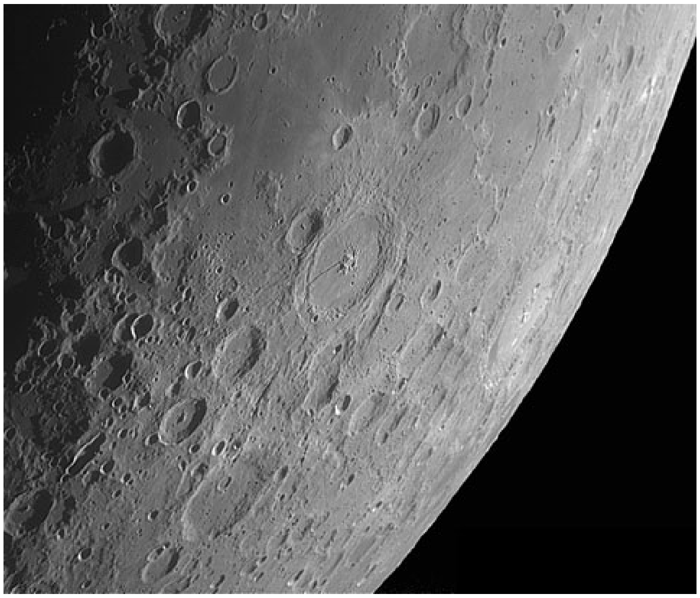
RECENT TOPOGRAPHICAL OBSERVATIONS



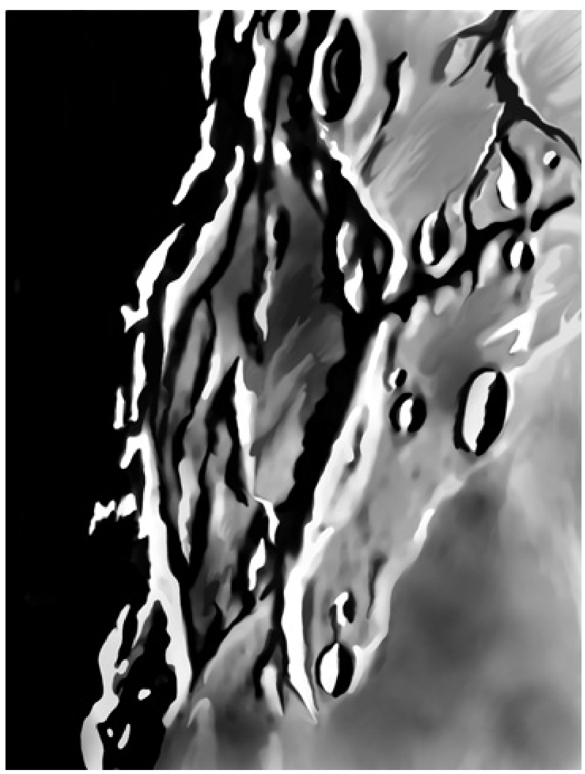
ALPHONSUS
Digital image by Wayne Bailey – Sewell, New Jerzsey, USA
August 19, 2008 – 05:18 UT – Colongitude 123.1
Celestron C11 SCT at f/20 – Seeing: 4/10 – Trans: 4/6
Lumenera Skynyx 2-1M – Schuler IR72 Filter

NEAR FULL MOON
Digital image by Maurice Collins – Palmerston North, New Zealand
September 14, 2008 – Celestron 8 inch SCT
Meade LPI – Super Saturated Color

RECENT TOPOGRAPHICAL OBSERVATIONS

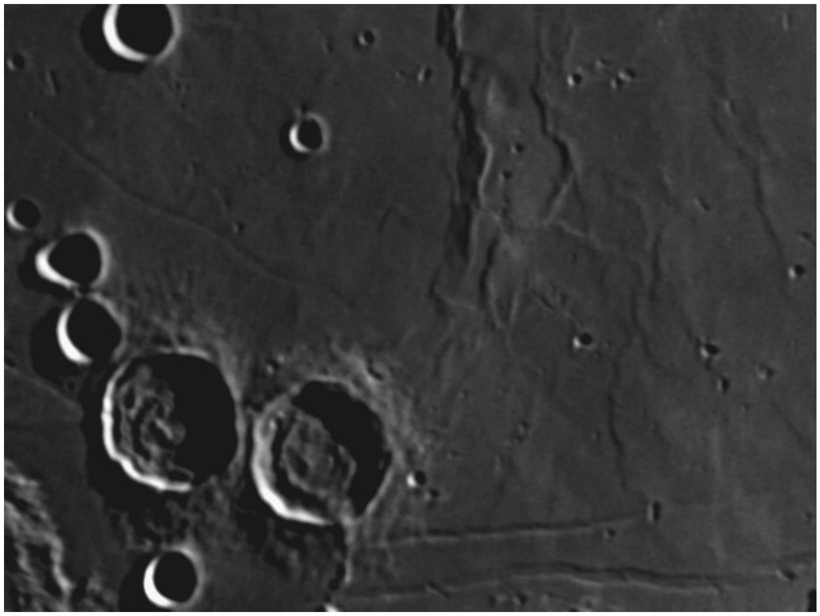


PETAVIUS & HUMBOLDT
Digital image by Howard Eskildsen – Ocala, Florida, USA
August 6, 2008 – 00:32 UT - Seeing: 7/10 – Trans: 4/6
Meade 6 inch f/8 Refractor – 2x Barlow – Orion StarShoot II

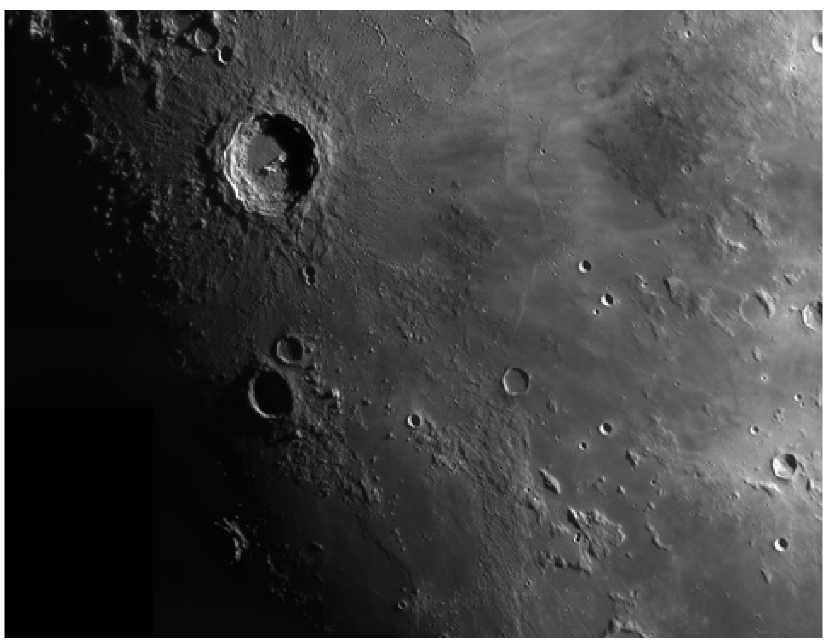


RICCIOLI
PDA Drawing by Peter Grego – St. Dennis, Cornwall, UK
September 13, 2008 – 22:05 to 22:45 UT – Colong: 76.6 to 76.9 - Seeing: AIII
200mm SCT – 200x – Binoview – PDA sketch enhanced in Photo Paint

RECENT TOPOGRAPHICAL OBSERVATIONS

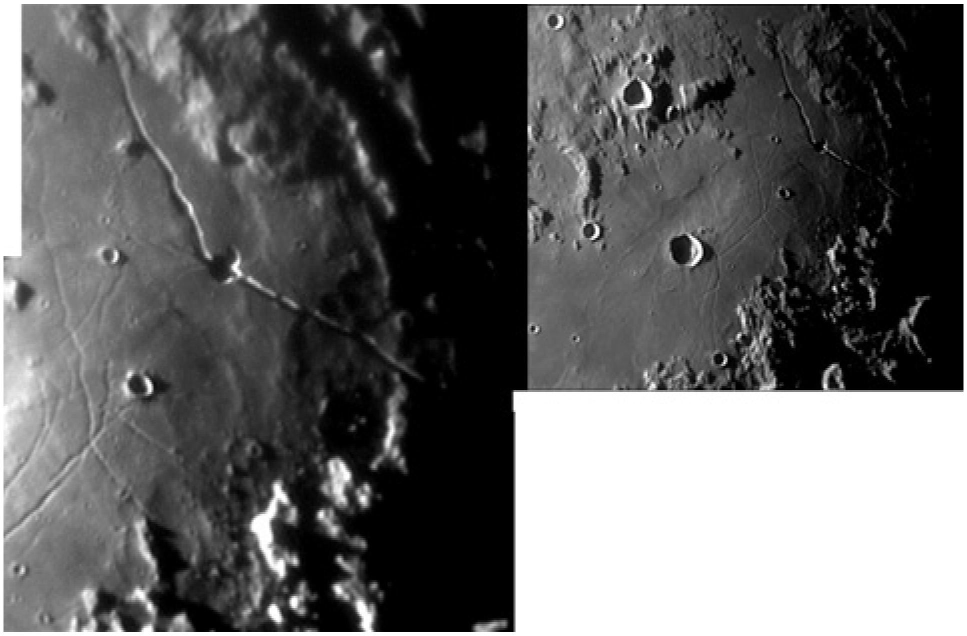


SABINE & RITTER
Digital image by Rik Hill – Tucson, Arizona, USA
June 10, 2008 – 03:22 UT – Seeing: 8/10
Celestron C14 SCT – 2x Barlow
SPC900NC Camera – UV/IR Blocking Filter – 200/2000 Frames



MARE INSULARUM
Digital Mosaic by Paolo Lazzarotti – Mt. Giogo, Massa, Italy
May 14, 2008 – 19:10 + 19:14 + 19:17 + 19:37 UT - Seeing: 5-7/10 – Trans: 1-3/5
Gladius CF-315 Lazzarotti Opt. Scope – LVI-1392 PRO Experimental Camera
Edmunds Optics R Filter – 31msec. Exposure – 90/2000 Frames

RECENT TOPOGRAPHICAL OBSERVATIONS



RIMA HYGINUS & RIMAE TRIESNECKER
Digital Composite by Bruce Kingsley – Maidenhead, UK
August 23, 2008 – Narrowfield (f/33) 04:03 & 04:08 UT– Widefield (f/14) 03:51 UT
Seeing: Poor (4/10) – Trans: Good - 280mm SCT – Skynyx 2-0 Mono Camera

SINUS IRIDUM TO LAMBERT
Digital Image by Michel LeGrand – Couyere, France
September 10, 2008 – 19:35 UT – Seeing: Poor, high turbulence
62cm Cassegrain at Pic de Chateaurenard (French Alps)

BRIGHT LUNAR RAYS PROJECT

Coordinator - Willliam M. Dembowski, FRAS

Bright Lunar Rays Project Website:

http://www.zone-vx.com/alpo-rays.html

One of the objectives of the Bright Lunar Rays Project is to determine if rayed craters are more prevalent on highland or marial regions. Working toward that objective, Andrew Martin performed an analysis of the rays systems shown on the project's online list: and submitted the following report.

…………………… W.M.D.

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Total features: 260

Total count of features	Maria - 136	Highland - 124
% of total features	Maria - 52%	Highland - 48%

Procedure used to identify features:

Each feature was located using the Virtual Moon Atlas (VMA) using the Clementine Photographic Texture setting. Some features could have fallen in either classification based on its location. In these cases a judgment was rendered based proximity to either maria or highland. As such there is an uncalculated error rate and the outcome could change depending upon this judgment.

Based on how close these numbers are and the potential error caused by having to make a judgment call, it would seem to me that the Maria and Highlands are equally favored for having ray craters.

What is interesting is normally you would suspect the maria being younger would have fewer ray craters, but when you consider the mechanics of what creates a ray crater (the speed of the object and the material it's impacting) it would seem that each terrain has an equal chance of forming ray craters.

But as you point out it's harder to determine in the highlands because of lack of contrast. Although if we are to consider age based on some form of ray presence (chemically aged or otherwise), the highlands with its older craters would lack ray systems overall putting the younger maria on par with it as craters are formed.

So in conclusion, when one factors in some form of subjective error caused by craters being close to either terrain and the fact that the age of ray craters are young in comparison to the whole of the moon there is a good chance ray craters will favor either maria or highlands despite my current outcome.

…………… Andrew Martin SFO

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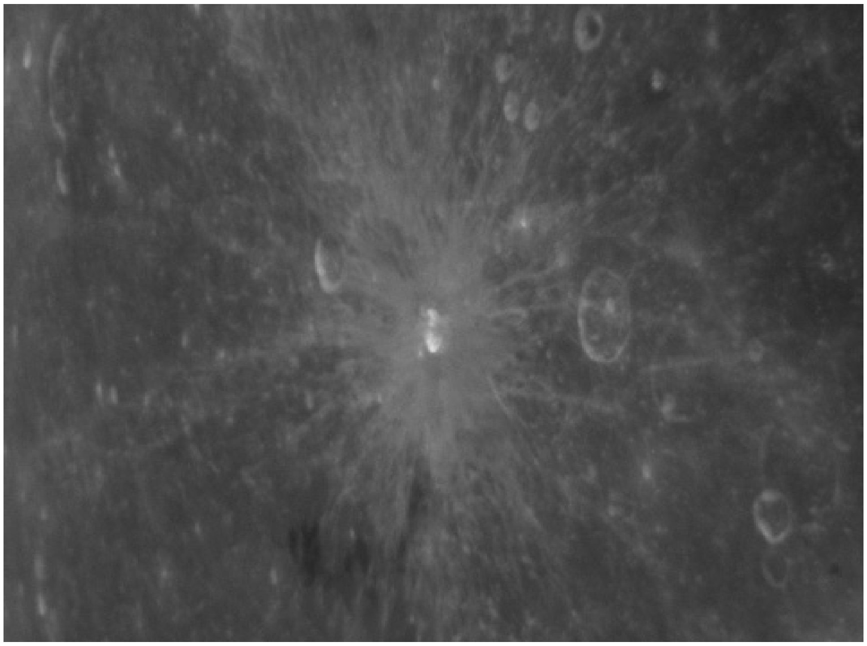
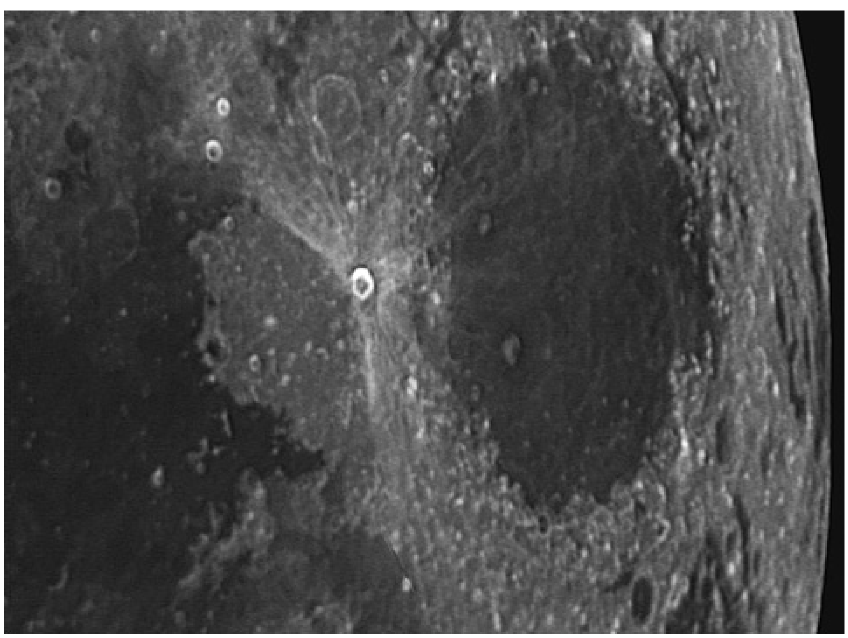
List of rayed craters: http://www.zone-vx.com/alpo-rays-table.pdf
List of project objectives: http://www.zone-vx.com/rays-objectives.pdf
Spreadsheet compiled by Mr. Martin: http://www.zone-vx.com/alpo-rays-dist.xls

RECENT RAY OBSERVATIONS



BYRGIUS-A
Digital image by Wayne Bailey – Sewell, New Jersey, USA
August 19, 2008 – 05:46 UT – Colongitude: 123.4 – Seeing: 4/10 – Trans: 4/6
Celestron C11 SCT at f/20 – Schuler IR72 Filter
Lumenera Skynyx 2-1M Camera



PROCLUS
Digital image by Bill Dembowski – Elton, Pennsylvania, USA
August 13, 2008 – 02:47 UT – Colongitude: 48.6 - Seeing: 3/10
Celestron 8 inch SCT – NexImage Camera

BANDED CRATERS PROGRAM

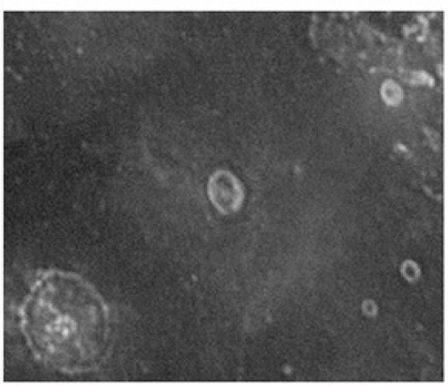
Coordinator - Willliam M. Dembowski, FRAS

Banded Craters Program Website: http://www.zone-vx.com/alpo-bcp.html

A.L.P.O. Lunar Section: Selected Areas Program Banded Craters Observing Form

Crater Observed: Dawes
Observer: Howard Eskildsen Observing Station: Ocala, Florida
Mailing Address: P.O. Box 830415, Ocala, Florida, 34483
Telescope: Meade 6" Refractor 152 cm f/8
Imaging: Orion StarShoot II, 2X Barlow, Filters: None
Seeing: 7/10 Transparency: 5/6
Date (UT): 2008/09/13 Time (UT): 01:53
Colongitude: 68°
Position of crater: Selen. Long. 26.4° East Selen. Lat. 17.2° North
Lunar Atlas Used as Reference: Virtual Moon Atlas Expert Version 2.1

Image (North up):



Comments:

Broad bright band crosses the crater nearly horizontally. There is also a dark band crossing the southern margin of the crater.

A.L.P.O. Lunar Section: Selected Areas Program Banded Craters Observing Form

Crater Observed: Birt
Observer: Wayne Bailey   Observing Station: Sewell, NJ
Mailing Address: 17 Autumn Lane, Sewell, NJ 08080
Telescope: Celestron SCT   28 cm   f/20
Imaging: Skynyx 2-1M   Filters: Schuler IR72
Seeing: 4/10   Transparency: 4/6
Date (UT): 2008/08/19   Time (UT): 05:26
Colongitude: 123.2   Latitude: -0.2
Position of crater: Selen. Long.   Selen. Lat.
08.5° West   22.4° South
Lunar Atlas Used as Reference: Rukl, Atlas of the Moon, Revised Updated Ed.

Image (North up): (East right):

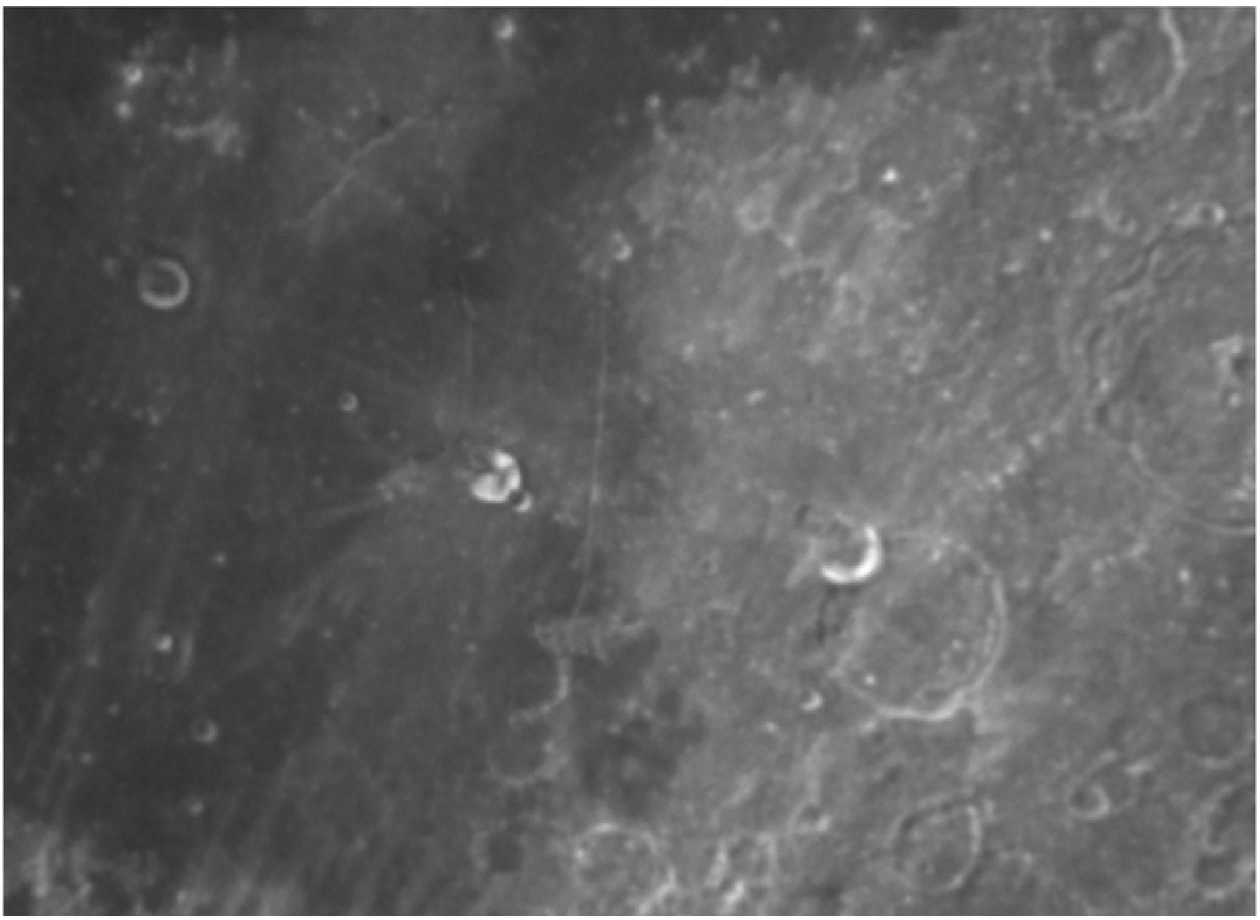
Comments:

Two broad, dark, intersecting bands. One oriented N-S, the other extending W from it.

Two other banded craters are in this image:

Thebit A with two indistinct dark bands on the NE and SE walls is east of Birt. The NE band is approximately aligned with the adjacent section of the wall of Thebit.

Nicollet is northwest of Birt but shows no obvious bands.



LUNAR TRANSIENT PHENOMENA

Coordinator – Dr. Anthony Cook – atc@aber.ac.uk
Assistant Coordinator – David O. Darling - DOD121252@aol.com

LTP NEWSLETTER - OCTOBER 2008

Dr. Anthony Cook - Coordinator

Observations for August 2008 were received from the following observers: Clive Brook (Plymouth, UK), Jay Albert (FL, USA), Maurice Collins (New Zealand), myself (Aberystwyth, UK), and Marie Cook (Mundesley, UK). On Sep 4th, Maurice Collins re-observed Proclus under the same illumination conditions as Herbie Bradley's LTP report from 2008 Feb 10. I sent a copy of the image to Herbie, and he was able to confirm that Proclus was much brighter than its normal appearance in Maurice's image. On 2008 Jul 07 Maurice Collins generated an image mosaic of Mare Crisium that showed a very bright spot on the north shore that was even brighter than Proclus. I can now confirm that this feature is related to a combination of bright craterlet on the sunward slope of a mountain. Several members have kindly sent me observations to that this feature: Steve Linscott (2000 Jul 5 an image), Don Spain (2005 Jan 15 a chart), Mike Mattei (2005 Mar 14 an image), Howard Eskildsen (images from 2006 May 2 and 6) and Maurice Collins (2008 Sep 4 image). Fig 1 shows one of Howard Eskildsen's images that differ from Maurice Collin's image by just 1 deg in solar altitude. In the middle is a single image that Maurice Collins obtained on 2008 Jul 7 (this and other images went into the mosaic) and on the right is the image mosaic itself showing the anomaly. I now suspect that the mosaic spot has been perhaps a little over-sharpened in the processing and so it is now safe to remove this low weight=1 LTP from the database. I would like to thank all observers who sent me images – these are never wasted but go into a separate routine database, and so I will eventually be able to call up routine observations of normal appearances.

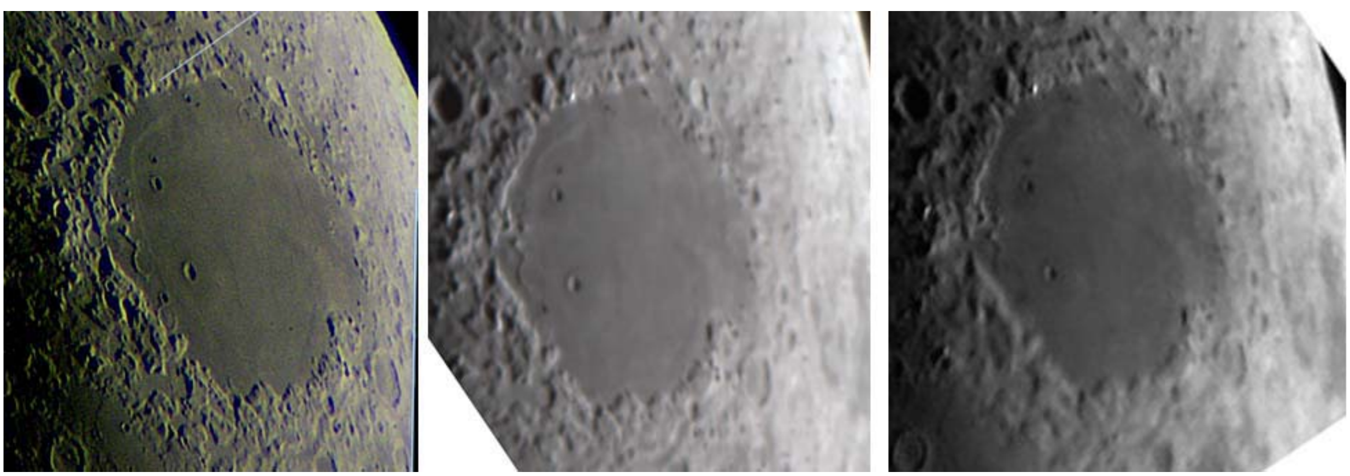


FIGURE 1

Fig 1. Left - image by H.Eskildsen (solar altitude 10.7 deg). Middle – single image by Maurice Collins (solar altitude 11.7 deg). Right – image mosaic by Maurice Collins showing (now false) anomaly (solar altitude 11.7 deg).

Although I have not completely finished entering the LTP database, it now contains some 1852 TLP entries. Just out of interest in table 1 are listed the top thirty LTP sites, though I should stress that I have not attempted to include observational weights yet or attempted to normalize these statistics by dividing through by the total number of routine observations for each feature. These results (they are an update on those published in the BAA Lunar Section circular that some of you may receive?) are broadly in line with David Darling's table on his web site: http://www.ltpresearch.org/MANUAL/chap4.html .

TABLE 1

Feature	LTPs	Feature	LTPs	Feature	LTPs
Aristarchus	487	Mons Piton	24	Promontorium_Agarum	15
Plato	161	Tycho	23	Bullialdus	14
Proclus	129	Herodotus	23	Messier	13
Gassendi	62	Picard	21	Menelaus	13
Alphonsus	57	Theophilus	19	Sinus Iridum	11
Mare Crisium	49	Manilius	19	Grimaldi	11
Torricelli B	39	Mons Pico	16	Atlas	10
Copernicus	40	Eratosthenes	16	Archimedes	10
Agrippa	34	South Pole	15	Kepler	9
Censorinus	31	Ross D	15	Daniell	9

Table 1 Frequency of LTP according to feature.
A preliminary test of the new ALPO/BAA database of LTP reports.

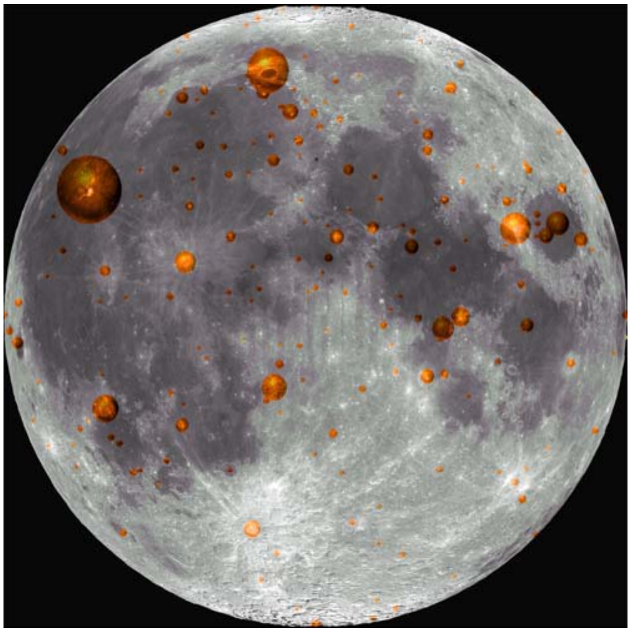


FIGURE 2

Fig 2 Distribution of LTPs on the Moon – the area of spot is proportional to frequency of LTP per feature.

The rather curious figure 2 above is an attempt to show the global distribution of LTPs, as reflected in the LTP database at present. We have been told in the past that LTP tend to occur around Mare edges. Well this plot shows that this is perhaps not the case and instead it might be safer to say that LTP appear to prefer to be located away from highland areas, towards basins. I should add that in this plot I have removed observations from the two most enthusiastic observers that others have criticized in the past, and also removed observations made during Apollo missions in case there were too many inexperienced observers participating at the time. It will be interesting to see what the plot will look like when I get around to weighting all the observations.

Predictions, including the more numerous illumination only events can be found on the following web site: http://users.aber.ac.uk/atc/LTP/LTP.htm . If you want your observing site to be added to the set of prediction data, please let me know. For members who do not have access to the internet, please drop me a line and I will post predictions to you. If you would like to join the LTP telephone alert team, please let me know your phone No. and how late you wish to be contacted. If in the unlikely event you see a LTP, 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!

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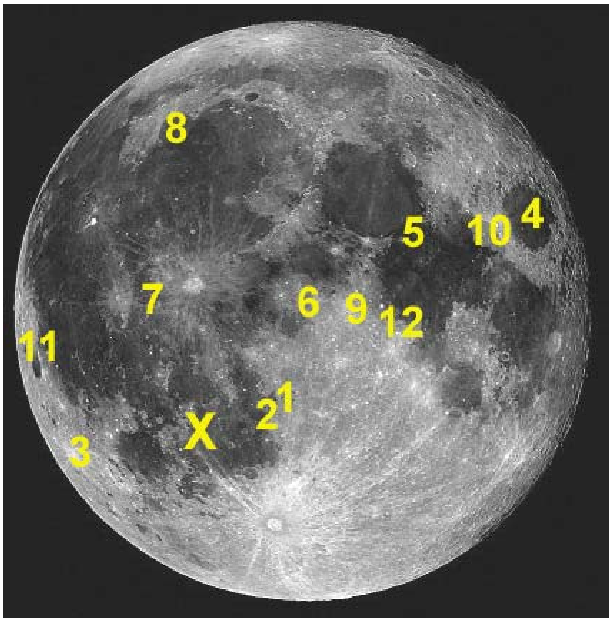
KEY TO IMAGES IN THIS ISSUE

1. **Alphonsus**
2. **Birt**
3. **Byrgius-A**
4. **Crisium, Mare**
5. **Dawes**
6. **Hyginus & Triesnecker**
7. **Insularum, Mare**
8. **Iridum, Sinus**
9. **Julius Caesar**
10. **Proclus**
11. **Riccioli**
12. **Sabine & Ritter**



X = Bullialdus & Kies
Next *FOCUS ON* Target