

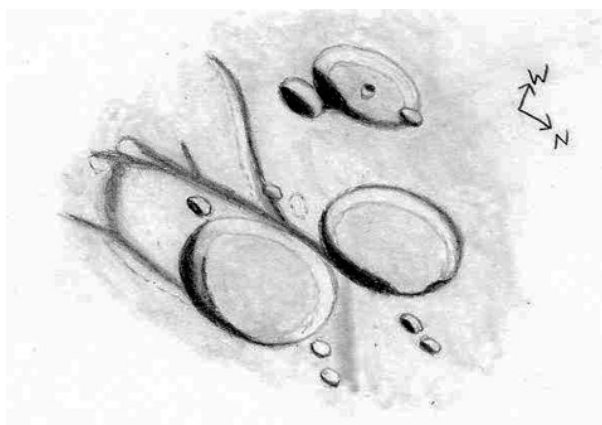


THE LUNAR OBSERVER

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>
219 Old Bedford Pike (Elton) - Windber, PA 15963

FEATURE OF THE MONTH - JUNE 2008



ROST & WEIGEL

Sketch and text by Robert H. Hays, Jr. - Worth, Illinois, USA

January 20, 2008 – 04:30 to 04:42 UT

15cm Newtonian - 170x - Seeing: 6-8/10

I sketched these craters and vicinity on the evening of January 19/20, 2008 before the moon hid 136 Tauri. These craters are southeast of Schiller and the Schiller-Zucchi basin. Rost is the largest crater in this sketch. It has a smooth, featureless floor and a south rim that appears terraced. The small crater Rost N is near the south rim of Rost, and has a bright interior. Two shallow unnamed pits are near Rost's north rim. Rost A is nearly as large as Rost, and abuts its northwest rim. Its interior is likewise smooth, but its east rim is quite irregular judging from its shadow. There are also two small craters northwest of Rost A which are similar to the pair near Rost's north rim, but perhaps deeper. Weigel is the sizable crater west of Rost and Rost A. Weigel has a central peak and substantial shadowing inside its southeast rim. Weigel A is the deep crater that abuts this rim of Weigel, and also has a bright interior. A smaller unnamed crater overlaps the north rim of Weigel; its interior is not as bright as that of Weigel A. There are several ridges and strips of shadow nearby. Some of them form what might be a partial ghost ring along the south rim of Rost, and surrounding Rost N. A fairly crisp strip of shadow gently curves away from the west side of Rost. It appears to be a fault at first, but there is slight brightening on its sunward side indicating a slope there. A small/poorly-defined crater may lurk in this shadow near Rost, and a shadowless bright patch is near this feature and Rost A.

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.

LUNAR CALENDAR - JUNE 2008 (UT)

June 03	13:00	Moon at Perigee (357,250 km - 221,985 miles)
June 03	17:00	Moon 4.9 Degrees N of Venus
June 03	19:23	New Moon (Start of Lunation 1057)
June 04	04:00	Moon 6.4 Degrees N of Mercury
June 08	01:00	Moon 1.0 Degrees SSW of Mars
June 09	07:00	Moon 2.8 Degrees SSW of Saturn
June 10	15:02	First Quarter
June 16	17:00	Moon at Apogee (406,228 km - 252,418 miles)
June 18	17:30	Full Moon
June 20	14:00	Moon 2.4 Degrees SSE of Jupiter
June 23	08:00	Moon 0.78 Degrees NW of Neptune
June 25	13:00	Moon 3.6 Degrees NNW of Uranus
June 26	12:10	Last Quarter

CALL FOR OBSERVATIONS: FOCUS ON: Aristarchus Plateau

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 **July 2008** edition will be the **Aristarchus Plateau**. 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 Aristarchus Plateau article is June 20, 2008

FUTURE FOCUS ON ARTICLES:

In order to provide more lead time for potential contributors the following targets have been selected:

Aristoteles to Eudoxus **TLO Issue: Sept. 2008**

Deadline: August 20, 2008

Bullialdus to Kies **TLO Issue: Nov. 2008**

Deadline: October 20, 2008

Project Gutenberg has taken a large number of books that are in the public domain and placed them online for the copyright free use of anyone wishing to download them. The following is an excerpt from "The Moon" by Thomas Gwyn Elger, originally published by London George Philip & Son in 1895 and reprinted here for its historical interest.

BRIGHT RAY SYSTEMS

The Moon - A Full Description and Map of its Principal Physical Features By Thomas Gwyn Elger, FRAS

Reference has already been made to the faint light streaks and markings often found on the floors of the ring-mountains and in other situations, and to the brilliant *_nimbi_* surrounding some of the smaller craters; but, in addition to these, many objects on the moon's visible surface are associated with a much more remarkable and conspicuous phenomenon--the bright rays which, under a high sun, are seen either to radiate from them as apparent centres to great distances, or, in the form of irregular light areas, to environ them, and to throw out wide-spreading lucid beams, extending occasionally many hundreds of miles from their origin. The more striking of these systems were recognised and drawn at a very early stage of telescopic observation, as may be seen if we consult the quaint old charts of Hevel, Riccioli, Fontana, and other observers of the seventeenth century, where they are always prominently, though very inaccurately, portrayed. The principal ray-systems are those of Tycho, Copernicus, Kepler, Anaxagoras, Aristarchus, Olbers, Byrgius A, and Zuchius; while Autolycus, Aristillus, Proclus, Timocharis, Furnerius A, and Menelaus are grouped as constituting minor systems. Many additional centres exist, a list of which will be found in the appendix.

The rays emanating from Tycho surpass in extent and interest any of the others. Hundreds of distinct light streaks originate round the grey margin of this magnificent object, some of them extending over a greater part of the moon's visible superficies, and "radiating," in the words of Professor Phillips, "like false meridians, or like meridians true to an earlier pole of rotation." No systematic attempt has yet been made to map them accurately as a whole on a large scale, for their extreme intricacy and delicacy would render the task a very difficult one, and, moreover, would demand a long course of observation with a powerful telescope in an ideal situation; but Professor W.H. Pickering, observing under these conditions at Arequipa, has recently devoted considerable attention both to the Tycho and other rays, with especially suggestive and important results, which may be briefly summarised as follows:

(1.) That the Tycho streaks do not radiate from the apparent centre of this formation, but point towards a multitude of minute craterlets on its south-eastern or northern rims. Similar craterlets occur on the rims of other great craters, forming ray-centres.

(2.) Speaking generally, a very minute and brilliant crater is located at the end of the streak nearest the radiant point, the streak spreading out and becoming fainter towards the other end. The majority of the streaks appear to issue from one or more of these minute craters, which rarely exceed a mile in diameter.

(3.) The streaks which do not issue from minute craters, usually lie upon or across ridges, or in other similar exposed situations, sometimes apparently coming through notches in the mountain walls.

(4.) Many of the Copernicus streaks start from craterlets within the rim, flow up the inside and down the outside of the walls. Kepler includes two such craterlets, but here the flow seems to have been more uniform over the edges of the whole crater, and is not distinctly divided up into separate streams.

(5.) Though there are similar craters within Tycho, the streaks from them do not extend far beyond the walls. All the conspicuous Tycho streaks originate outside the rim.

(6.) The streaks of Copernicus, Kepler, and Aristarchus are greyish in colour, and much less white than those associated with Tycho: some white lines extending south-east from Aristarchus do not apparently belong to the system. In the case of craterlets lying between Aristarchus and Copernicus the streaks point away from the latter.

(7.) There are no very long streaks; they vary from ten to fifty miles in length, and are rarely more than a quarter of a mile broad at the crater. From this point they gradually widen out and become fainter. Their width, however, at the end farthest from the crater, seldom exceeds five miles.

These statements, especially those relating to the length of the streaks, are utterly opposed to prevailing notions, but Professor Pickering specifies the case of the two familiar parallel rays extending from the north-east of Tycho to the region east of Bullialdus. His observations show that these streaks, originating at a number of little craters situated from thirty to sixty miles beyond the confines of Tycho, "enter a couple of broad slightly depressed valleys. In these valleys are found numerous minute craters of the kind above described, with intensely brilliant interiors. When the streaks issuing from those craters near Tycho are nearly exhausted, they are reinforced by streaks from other craters which they encounter upon the way, the streaks becoming more pronounced at these points. These streaks are again reinforced farther out. These parallel rays must therefore not be considered as two streaks, but as two series of streaks, the components of which are placed end to end."

Thus, according to Professor Pickering, we must no longer regard the rays emanating from the Tycho region and other centres as continuous, but as consisting of a succession of short lengths, diminishing in brilliancy but increasing in width, till they reach the next crater lying in their direction, when they are reinforced; and the same process of gradual diminution in brightness and reinforcement goes on from one end to the other.

The following explanation is suggested to account for the origin of the rays: "The earth and her satellite may differ not so much as regards volcanic action as in the densities of their atmospheres. Thus if the craterlets on the rim of Tycho were constantly giving out large quantities of gas or steam, which in other regions was being constantly absorbed or condensed, we should have a wind uniformly blowing away from that summit in all directions. Should other summits in its vicinity occasionally give out gases, mixed with any fine white powder, such as pumice, this powder would be carried away from Tycho, forming streaks."

The difficulty surrounding this very ingenious hypothesis is, that though, assuming the existence of pumice-emitting craters and regions of condensation, there might be a more or less lineal and streaky deposition of this white material over large areas of the moon, why should this deposit be so definitely arranged, and why should these active little craters happen to lie on these particular lines?

The confused network of streaks round Copernicus seem to respond more happily to the requirements of Professor Pickering's hypothesis, for here there is an absence of that definiteness of direction so manifestly displayed in the case of the Tycho rays, and we can well imagine that with an area of condensation surrounding this magnificent object beyond the limits of the streaks, and a number of active little craters on and about its rim, the white material ejected might be drawn outwards in every direction by wind currents, which possibly once existed, and, settling down, assume forms such as we see.

Nasmyth's well-known hypothesis attributes the radiating streaks to cracks in the lunar globe caused by the action of an upheaving force, and accounts for their whiteness by the outwelling of lava from them which has spread to a greater or less distance on either side. If the moon has been fractured in this way, we can easily suppose that the craters formed on these fissures, being in communication with the interior, might eject some pulverulent white matter long after the rest of the surface with its other types of craters had attained a quiescent stage.

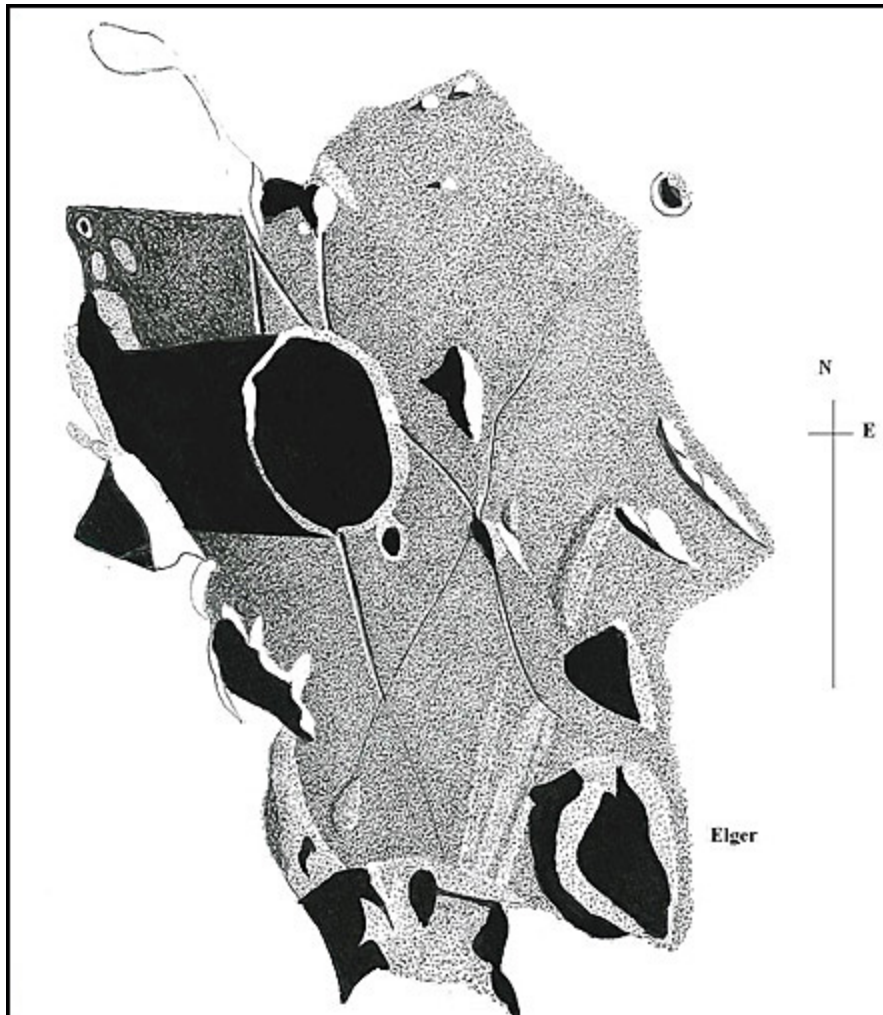
The Tycho rays, when viewed under ordinary conditions, appear to extend in unbroken bands to immense distances. One of the most remarkable, strikes along the eastern side of Fracastorius, across the Mare Nectaris to Guttemberg, while another, more central, extends, with local variations in brightness, through Menelaus, over the Mare Serenitatis nearly to the north-west limb. This is the ray that figures so prominently in rude woodcuts of the moon, in which the Mare Serenitatis traversed by it is made to resemble the Greek letter PHI. The Kepler, Aristarchus, and Copernicus systems, though of much smaller extent, are very noteworthy from the crossing and apparent interference of the rays; while those near Byrgius, round Aristarchus, and the rays from Proclus, are equally remarkable.

[Nichol found that the rays from Kepler cut through rays from Copernicus and Aristarchus, while rays from the latter cut through rays from the former. He therefore inferred that their relative ages stand in the order, Copernicus, Aristarchus, Kepler.]

As no branch of selenography has been more neglected than the observation of these interesting but enigmatical features, one may hope that, in spite of the exacting conditions as to situation and instrumental requirements necessary for their successful scrutiny, the fairly equipped amateur in this less favoured country will not be deterred from attempting to clear up some of the doubts and difficulties which at present exist as to their actual nature.

OBSERVATION OF RAMSDEN

By Colin Ebdon



**Drawing by Colin Ebdon – Colchester, Essex, England
February 16, 2008 – 22:00 to 23:00 UT
7 inch f/15 Maksutov-Cassegrain – 236x
Seeing: AII (Good) – Transparency: Good**

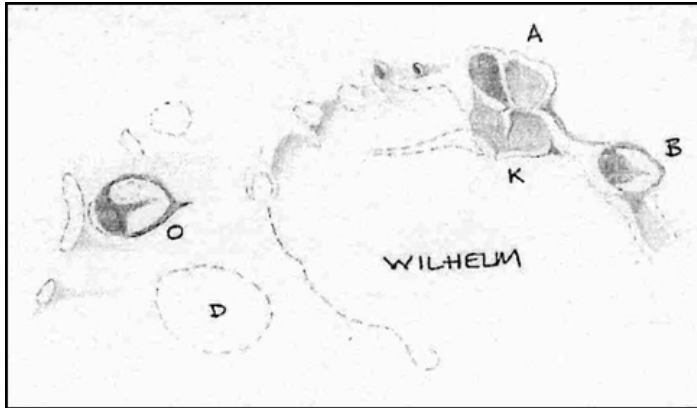
OBSERVING NOTES:

In this drawing, Ramsden is depicted with North at the top for ease of reference to Rukl's atlas, with which comparisons are made. Although there was general agreement in respect of the rille system as depicted, there was no sign that the rille extending southwards to Elger branches as shown in Rukl, although the main rille appeared to the observer to extend nearly all the way to Elger and not fall as short as shown in Rukl. Oddly, although the rille extending North-eastwards to the crater Marth was easily seen, there was no sign of the extended branch in the rille shown running easterly from it as depicted in Rukl. As previously noted, part of the inner North-west rim of Ramsden crater is extremely bright under all lighting conditions.

OBSERVATIONS OF BANDED CRATERS

By Nigel Longshaw – Chadderton, Lancashire, England

**The following are excerpts from the observing notebooks of Nigel Longshaw.
The drawings are presented in their draft form only.**

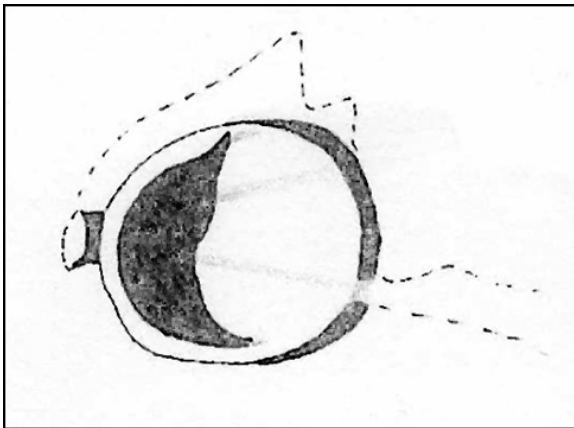


WILHELM A-B-K-O

**19 December 1999 - 21:25 to 21:40 UT
Colong: 54.91 - Seeing: AIII-AII
150mm Mak-Cass – x180**

**A – Conon type
B – Conon type
K – Messier type
O – Aristarchus type**

A very interesting group all cataloged as banded craters, however, evidence for any banding was only suspected in 'B' and 'O'. These two craters, although small, exhibited a "Messier" like appearance with quite distinct banding as an elongation of the interior shadow. Craters 'K' and 'A' exhibited some very interesting structure namely a ridge-like formation crossing both craters in N/S direction. This pair would make an interesting subject for future observation. The whole area was crossed by ejecta streaks emanating from Tycho.

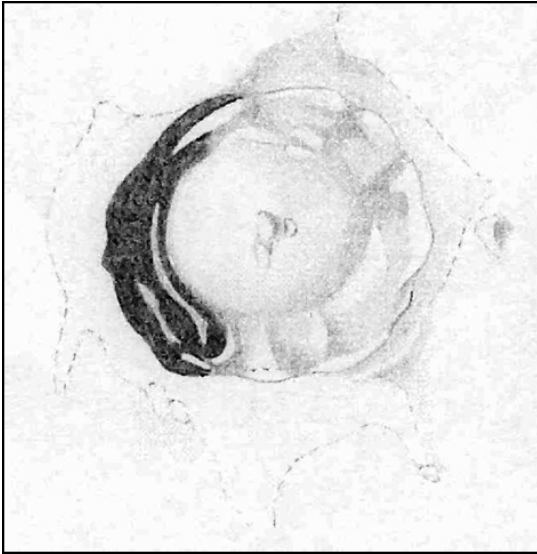


BRAYLEY

(Moore type?)

**12 May 1984 - 21:36 to 21:45 UT
Colong: 45.55 - Seeing: AIII-AII
4 inch Refractor – x217**

Banded structure obvious at x104; mentioned in "Lunar Craters" by Moore. Lies at the intersection of rays from Copernicus and Aristarchus

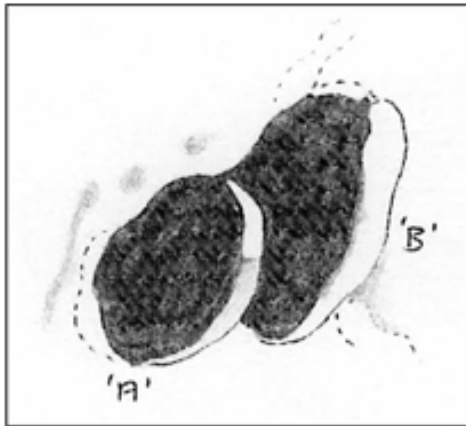


ARISTILLUS

(Aristarchus type)

**14 March 2000 - 21:00 to 21:25 UT
 Colong: 20.68 to 20.88 - Seeing: AIII
 90mm Mak-Cass – x104 and x138**

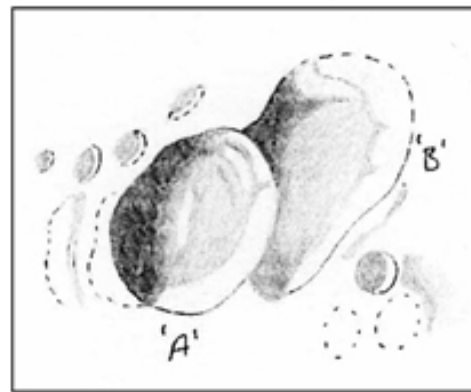
Very similar to Aristarchus in many ways (radial bands, darker floor at base of wall, evidence of terracing within shadowed area). However, the inner walls of Aristillus reminded me very much of ‘slumping’ of crater walls – bands possibly exposed material or shadows caused by the slumped material. A detailed account of the inner walls would be beneficial.



REICHENBACH A and B (Conon type) – 90mm Mak-Cass – x138

**19 April 1999 – 20:17 to 20:25 UT
 Colong: 317.34 – Seeing: AII**

Possible suggestion of banding on western walls.

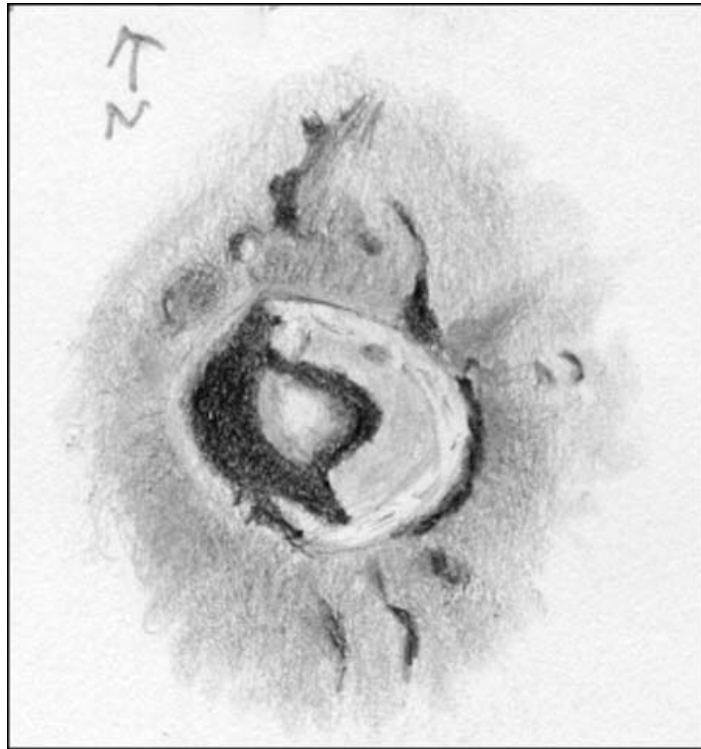


**20 April 1999 – 20:55 to 21:05 UT
 Colong: 329.88 – Seeing: AIII-AII**

Not much evidence of banding apart from that possibly on S/W wall of ‘A’. West walls of ‘B’ seemed low and ill defined.

OBSERVATION OF ALPETRAGIUS

Drawing and text by Jay Albert



ALPETRAGIUS

Drawing by Jay Albert - Lake Worth, Florida, USA

May 13, 2008

Celestron 11 inch SCT – 400x – No Filter

During one of my lunar observing sessions this month for ALPO's Lunar Transient Phenomena program I made my first lunar sketch in a couple of years. I was checking an LTP in Alphonsus and couldn't help noticing Alpetragius. I've seen this crater many times before and was always fascinated by it.

Alpetragius is just to the SW of the much larger crater Alphonsus in the heavily cratered lunar highlands. Although smaller than its neighbors, Alpetragius is no slouch. It is 40km across and 3900 meters deep and was named for a 12th century Arab astronomer (according to Rukl). To me, what makes this crater so extraordinary is its gigantic central peak. This peak is larger in area in relation to its surrounding crater than any other I can recall seeing. I caught it while the solar angle was low enough to show details in good relief. The sunlight was hitting the large central peak and the west wall, which shows some terracing. This pencil drawing was made using my Celestron 11" SCT with a 7mm orthoscopic eyepiece (400x) without filters and scanned from my sketchbook to my computer.

LUNAR TOPOGRAPHICAL STUDIES

Coordinator - William M. Dembowski, FRAS

dembowski@zone-vx.com

OBSERVATIONS RECEIVED

JAY ALBERT - LAKE WORTH, FLORIDA, USA

Drawing of Alpetragius

WAYNE BAILEY - SEWELL, NEW JERSEY, USA

Digital image of Aristoteles & Eudoxus, Atlas & Hercules

Banded Crater Report Forms with digital images of Theaetetus, Aristillus

MAURICE COLLINS - PALMERSTON NORTH, NEW ZEALAND

Digital images of First Quarter Moon, Western Mare Imbrium & Oceanus Procellarum

ED CRANDALL - WINSTON-SALEM, NORTH CAROLINA, USA

Digital images of J.Herschel, Prinz, Mons Gruithuisen delta and gamma

COLIN EBDON - COLCHESTER, ESSEX, ENGLAND

Drawings of Ramsden, Prinz

HOWARD ESKILDSEN - OCALA, FLORIDA, USA

Digital images of Aristoteles & Eudoxus, Bullialdus & Kies, Kepler rays, Pythagoras area rays, Pytheas rays, Mare Tranquillitatus & Arago domes, Northeastern limb, Full Moon

Banded Crater Report Forms with digital images of Anaxagoras (2), Burg, Agatharchides-A, Aristarchus, Aristillus, Bessarion, Birt, Bode, Brayley, Conon, Damoiseau-E, Davy-A&G, Kepler, Menelaus (2), Millichius, Nicollet, Pytheas, Theaetetus, Dawes (2), Maury

PETER GREGO - REDNAL, BIRMINGHAM, ENGLAND

PDA drawings of Prinz (2) - Drawings of Aristarchus (2), Aristarchus & Herodotus

RIK HILL - TUCSON, ARIZONA, USA

Digital images of Furnerius to Petavius, Aristarchus and vicinity (5)

NIGEL LONGSHAW - CHADDERTON, LANCASHIRE, ENGLAND

Drawings of banded craters Konig, Darney, Guericke-B, Nicollet, Brayley, Agatharchides-A, Cavendish-E, Opelt-E, Wilhelm A-B-K-O, Kies-A, Pytheas, Reichenbach A&B, Palmieri-E, Aristillus, Aristarchus (3), Cassini-C

ANDY MILLER - CONNEAUT, OHIO, USA

Digital image of Aristarchus Plateau

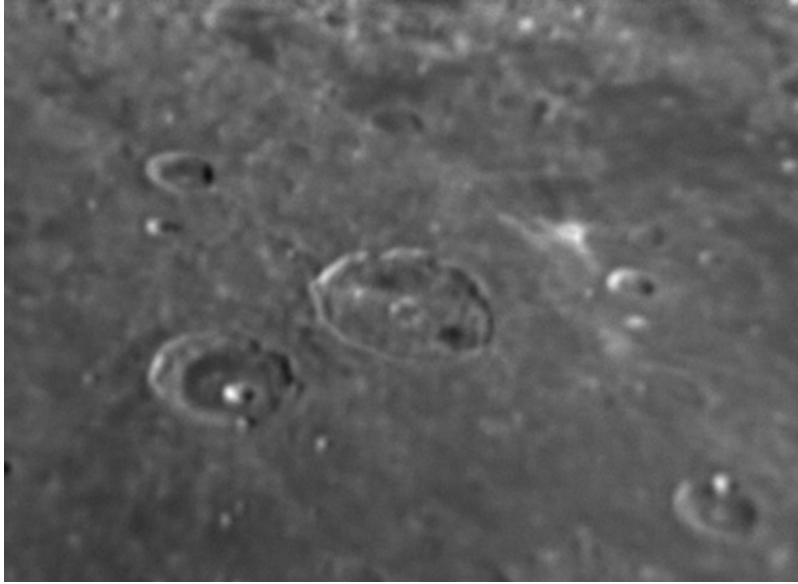
PHIL MORGAN - WORCESTERSHIRE, ENGLAND

Drawing of Aristarchus Plateau

JOHN SABIA - FLEETVILLE, PENNSYLVANIA, USA

Digital image of Aristarchus Plateau

RECENT TOPOGRAPHICAL OBSERVATIONS



ATLAS & HERCULES

Digital image by Wayne Bailey – Sewell, New Jersey, USA
May 14, 2008 – 03:08 UT – Colong: 17.0 – Seeing: 3/10 – Trans: 4/6
11 inch f/10 SCT – 2x Barlow – IR72 Filter – Lumenera Skynyx Camera



FIRST QUARTER MOON

Digital mosaic by Maurice Collins – Palmerston North, New Zealand
May 12, 2008 – 08:10 to 08:30 UT
ETX-90 Mak-Cass – Meade LPI Camera

RECENT TOPOGRAPHICAL OBSERVATIONS



MONS GRUITHUISEN DELTA AND GAMMA

Digital image by Ed Crandall – Winston-Salem, North Carolina, USA
April 17, 2008 – 01:08 UT – Seeing: 4/10 – Trans: 4/6
254mm f/7 Newtonian – 2x Barlow – Philips Toucam



MARE TRANQUILLITATIS & ARAGO DOMES

Digital image by Howard Eskildsen – Ocala, Florida, USA
April 12, 2008 – 00:44 UT – Seeing: 7/10 – Trans: 5/6
Meade 6 inch f/8 Refractor – 2x Barlow – Orion StarShoot II Camera

RECENT TOPOGRAPHICAL OBSERVATIONS



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
 - Colongitude (if possible)
 - 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)
-

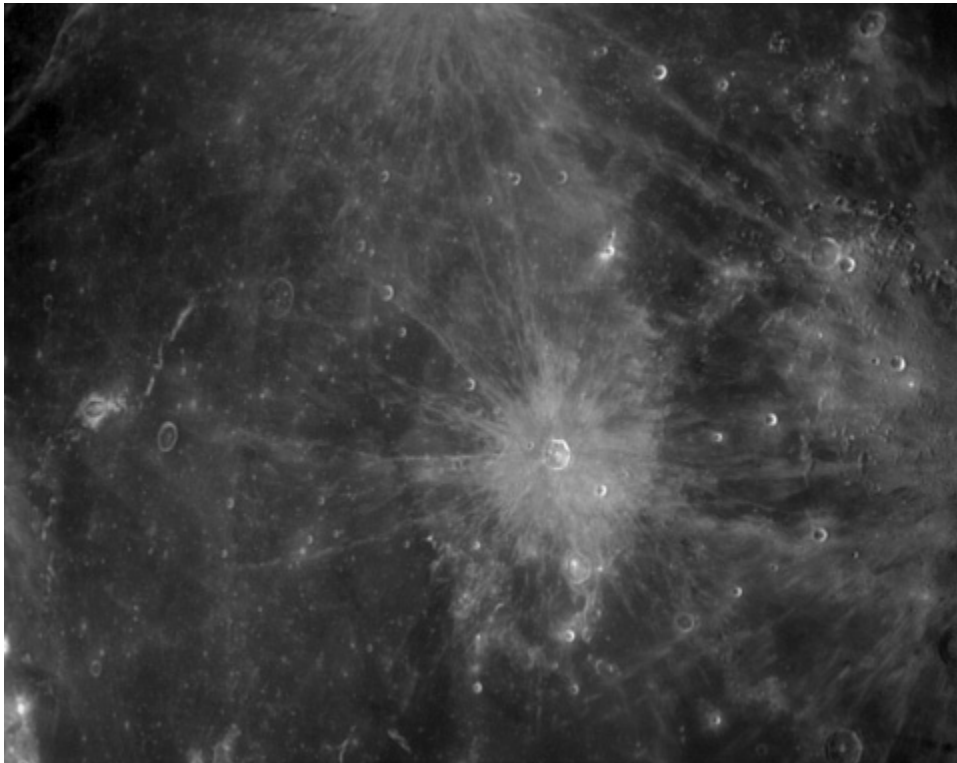
BRIGHT LUNAR RAYS PROJECT

Coordinator - William M. Dembowski, FRAS

Bright Lunar Rays Project Website:

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

RECENT RAY OBSERVATION



KEPLER RAY SYSTEM

Digital image by Howard Eskildsen – Ocala, Florida, USA

April 26, 2008 – 09:23 UT

Seeing: 8/10 – Trans: 5/6

Meade 6 inch f/8 Refractor – 2x Barlow

Orion StarShoot II Camera

BANDED CRATERS PROGRAM

Coordinator - William M. Dembowski, FRAS

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

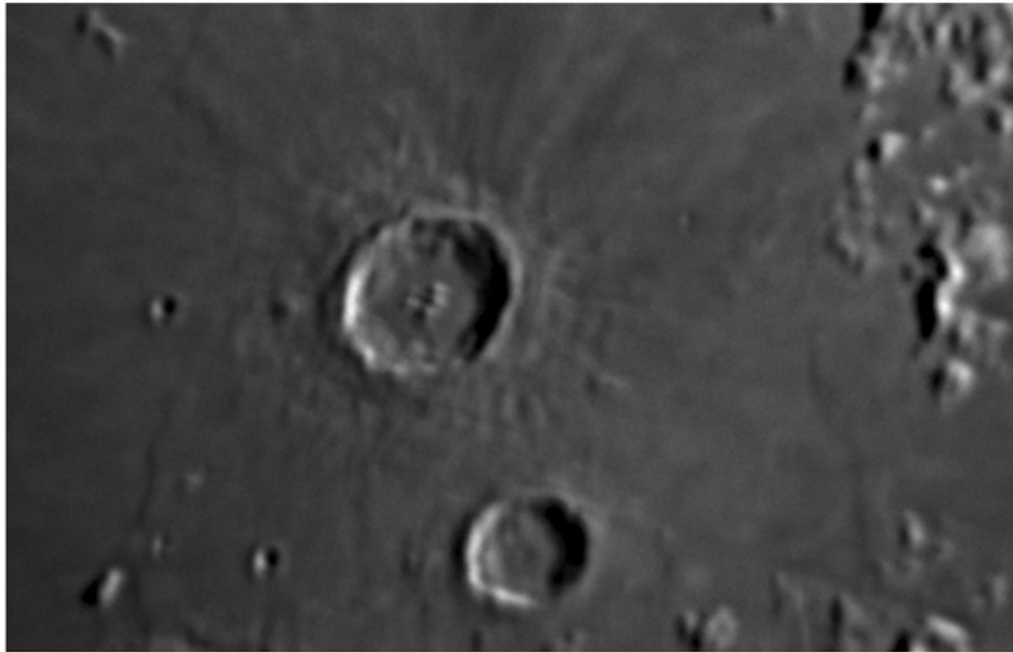
A.L.P.O. Lunar Section: Selected Areas Program Banded Craters Observing Form

Crater Observed: Aristillus
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: 3/10 Transparency: 4/6
Date (UT): 2008/05/14 Time (UT): 03:19
Colongitude: 17.1 Latitude: +1.6
Position of crater: Selen. Long. Selen. Lat.
1.2° East 33.9° North

Comments:

Lunar Atlas Used as Reference: Rukl, Atlas of the Moon, Revised Updated Ed.

Image (North up): (East right):



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

Crater Observed: Anaxagoras

Observer: Howard Eskildsen

Observing Station: Ocala, Florida

Mailing Address: P.O. Box 830415, Ocala, Florida, 34483

Telescope: Meade Refractor 15.2 cm f/8

Imaging: Orion Starshoot II, 2X Barlow (left image), Filters: None

Seeing: 4/10 Transparency: 5/6

Date (UT): 2008/03/22 Time (UT): 02:14

Colongitude: 89.4°

Position of crater:

Selen. Long.

Selen. Lat.

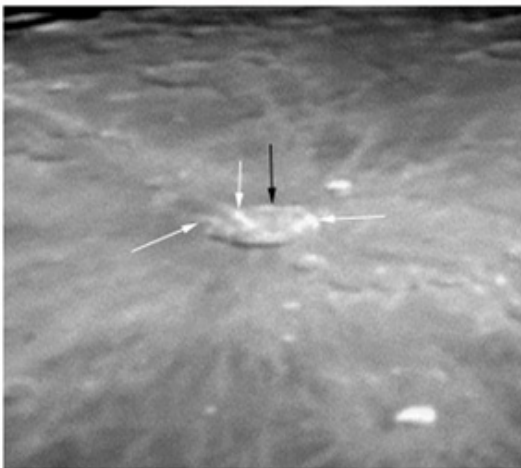
10.1° West

73.4° North

Lunar Atlas Used as Reference: Virtual Moon Atlas Expert Version 2.1 2004-11-07

Images (north up):

Comments:



Three distinct light bands are marked with white arrows. A subtle gray band is marked by black arrow. The floor of the crater has bright albedo and may be the location of central peaks.

LUNAR TRANSIENT PHENOMENA

Coordinator – Dr. Anthony Cook – atc@aber.ac.uk

Assistant Coordinator – David O. Darling - DOD121252@aol.com

LTP NEWSLETTER - JUNE 2008

Dr. Anthony Cook – Coordinator

Observations for April 2008 were received from the following observers: Paul Abel (Leicester, UK), Jay Albert (FL, USA), Richard Bossman (The Netherlands), Brook_C (Plymouth, UK), Maurice Collins (New Zealand), myself (Aberystwyth and Newtown, UK), Marie Cook (Mundesley, UK), Peter Grego (Birmingham, UK), Michael Hather (UK), Trevor O'Donoghue (Ireland), and Don Spain (KY, USA).

Three brief items of news: The reorganization of the directory structure of my digitized LTP archive is still progressing – I hope to have more to report next month. One of the robot telescopes that I brought with me from the University of Nottingham last year is mostly fully functioning now and I have been using this primarily to look for impact flashes in Earthshine. I have also used the scope for taking white light images of a fair proportion of the illuminated side of the Moon (every 5 seconds), to emulate Prof Arlin Crott's work at Cerro Tololo. Alas British weather permits only a fraction of the 300 hours per month that his team puts in. Lastly, at the time of writing (around 10th May) I am about to commence a new session of Radon/Argon/Hydrogen emission line detection on the Moon – this time technicians at Aberystwyth University have fitted a digital stepping motor, so each filter will be in view and stationary for exactly one second. On previous occasions the filters were rotated into view manually initially, and then later by an analog motor – neither of these earlier methods proved satisfactory and it was always complicated to establish which filter was in front of the camera at what time.

On April 13th the BAA Lunar Section Director, Alan Wells telephoned me – to say that he had a telephone report of a LTP, from John Armitage, that an event was ongoing. The call was received at UT 20:50 and the general area was the Apennine Mountain range. Unfortunately as this region was huge, and there was no further information, I had little information to decide on whether to issue a LTP alert. Because we get very few LTP reports, and many LTP are very short duration, it seemed prudent to issue an alert promptly to as many observers as possible. So I gradually worked my way through some of my LTP alert observer telephone numbers, I emailed and phoned David Darling to issue a world wide email alert, and also text messaged the GLR and UAI groups in Italy. The rest of the night I obtained Moon Blink video of the region. Many observers were clouded out, especially in southern and eastern England. Despite the ambiguity of the geographical location of the suspected LTP, the overall observational response was amazing. None of the observers that I alerted though, including myself, saw anything unusual. A few days later I received the reports from the original observers. The first observer A. Jaworsk (Burntwood, Staffordshire, UK) observed that Mt Pico, and another nearby mountain, were especially bright, and thought that they were perhaps brighter than expected for that phase of the Moon. An image was taken. John Armitage (Cannock, Staffordshire, UK) thought that although these were bright, that they were just slopes catching the sunlight. Instead he suspected some bright spots between Aratus and Joy craters might be slightly anomalous, although here again they could have been slope related. Having seen the image now, and reviewed everybody's observations, I can now confirm that in all instances the LTP were probably just sunlight catching the slopes of sunward facing mountain peaks.

So unfortunately this LTP alert turned out to be n X-LTP - so what can we learn? Firstly observers should contact me directly as it is easier for me to ascertain what they actually saw and it speeds up issuing an alert. The response by all observers concerned was reasonably fast and so too were follow up observations, so I would like to thank all of those involved and the observations that you have supplied can still be used for repeat illumination studies and by the Topographic sections of the BAA and ALPO. Lastly, John Armitage told me about another LTP that he had suspected from 2006 Feb 09 in Aristarchus, so I have made a note of this and will investigate further.

Repeat illumination and illumination/libration predictions can be found on the following web site: <http://users.aber.ac.uk/atc/LTP/LTP.htm> . 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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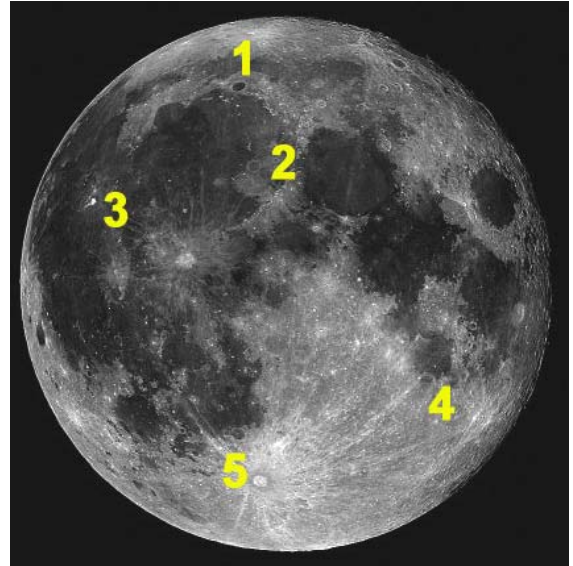
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KEY TO BANDED CRATER IMAGES IN THIS ISSUE

1. Anaxagoras
2. Aristillus
3. Brayley
4. Reichenbach
5. Wilhelm



KEY TO OTHER IMAGES IN THIS ISSUE

1. Alpetragius
2. Atlas & Hercules
3. Arago
4. Gruithuisen, Mons
5. Hase, Rima
6. Kepler
7. Ramsden
8. Rost & Weigle

