

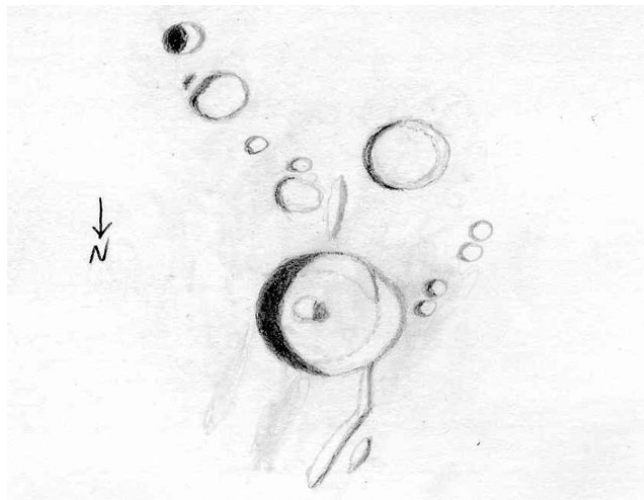


THE LUNAR OBSERVER

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

FEATURE OF THE MONTH - APRIL 2008



HELL

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

December 19, 2007 – 00:40 to 01:14 UT

15cm Newtonian - 170x - Seeing: 5-7/10

I sketched this crater and vicinity on the evening of Dec. 18/19, 2007. Hell is the most conspicuous crater within the large ruined ring Deslandres, southeast of Mare Nubium. This crater has a substantial central peak, a rather pointed west end, and some flattening or an indentation on its southwest rim. A long, narrow ridge begins at its northwest rim, and extends north, then northeastward from there. Hell A is southwest of Hell, and is much shallower. Hell C is farther to the southeast. This crater is also quite shallow, but it also has a flattened southeast rim. Hell E is southeast of C; this crater is smaller but deeper than C. There are a few other shallow craters between Hell and Hell C. The one nearest to C is probably Hell T, but the others are unlabeled. There is a chain of four craters extending southwestward from the west end of Hell. The two northern ones are Hell W and V. The southernmost one is Hell U; the one immediately north of U is unlabeled on the Lunar Quadrant Map. Hell W and V also appear to be deeper than Hell U and its companion. There are a few other strips of shadow in this area aligned approximately north-south.

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 - APRIL 2008 (UT)

Apr. 02	09:00	Moon 0.28 Degrees WSW of Neptune
Apr. 04	07:00	Moon 2.8 Degrees NNW of Uranus
Apr. 04	21:00	Moon 4.2 Degrees NNW of Venus
Apr. 05	08:00	Moon 5.1 Degrees NNW of Mercury
Apr. 06	03:55	New Moon (Start of Lunation 1055)
Apr. 07	20:00	Moon at Perigee (361,082 km - 224,366 miles)
Apr. 12	06:00	Moon 1.2 Degrees N of Mars
Apr. 12	18:31	First Quarter
Apr. 15	17:00	Moon 2.3 Degrees SSW of Saturn
Apr. 20	10:24	Full Moon
Apr. 23	10:00	Moon at Apogee (405,944 km - 252,242 miles)
Apr. 27	06:00	Moon 2.7 Degrees SSE of Jupiter
Apr. 28	14:13	Last Quarter
Apr. 29	20:00	Moon 0.37 Degrees NNE of Neptune

CALL FOR OBSERVATIONS: **FOCUS ON: Rupes Recta & Surroundings**

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 **May 2008** edition will be **Rupes Recta (The Straight Wall)**. 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 this feature to your observing list and send your favorites to Dembowski@zone-vx.com

Deadline for inclusion in the Rupes Recta article is April 20, 2008

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)

OBSERVATIONS OF TOTAL LUNAR ECLIPSE

FEBRUARY 21, 2008

Text and Drawings by Robert H. Hays, Jr. – Worth, Illinois, USA

I had an excellent view of the total lunar eclipse on Feb. 20/21, 2008 from home. I had a nice, clear sky throughout the event, and watched it from first penumbral visibility to last. Most visual observing was done with my 6-inch reflector at 58x or 68x, and a 5-inch Celestron and two Nikons were used for photography.

I first noted the penumbral shading at 1:08 UT with the 6-inch at 58x. This shading gradually intensified and took on a smoky-brown tint near first umbral contact. During the early partial phases, I went on a crater-timing binge with WWV signals playing continuously. Sometimes I used a stopwatch, but I generally watched the umbra's edge pass over the crater while listening to WWV. A tape recorder was used for closely spaced events and for large craters when I noted the start and end of ingress. I ended up with 13 crater entrances. Their estimated accuracies are 10-15 seconds. It would take only that long for the umbra's apparent motion to be evident near a crater. The contact timings were less distinct with accuracies of 15-20 seconds.

Colors started showing up inside the umbra early. There was already a warm orange-brown tint by 1:53 UT; this foretold a bright eclipse. As the partial phases progressed, the lunar limb farthest inside the umbra began showing a vivid red color. This color seemed especially bright near the cusps of the sunlit crescent. The umbra was always edged by a narrow blue-gray band. This pale blue-gray color replaced the last bit of cream-colored light as totality began. Somehow, this event appeared less crisp than it had at eclipses in May, 2003 and October, 2004.

I checked for possible occultations as totality neared. I knew that the moon would hide the double star SAG 99036 (X15425) by checking the RASC Observer's Handbook. I watched an unidentified star disappear shortly after totality began. Later, I timed the disappearances of the double star. This pair was occulted rather far north on the moon. The two stars were far enough apart to be clearly resolved at 68x. They were hidden shortly before mid-eclipse.

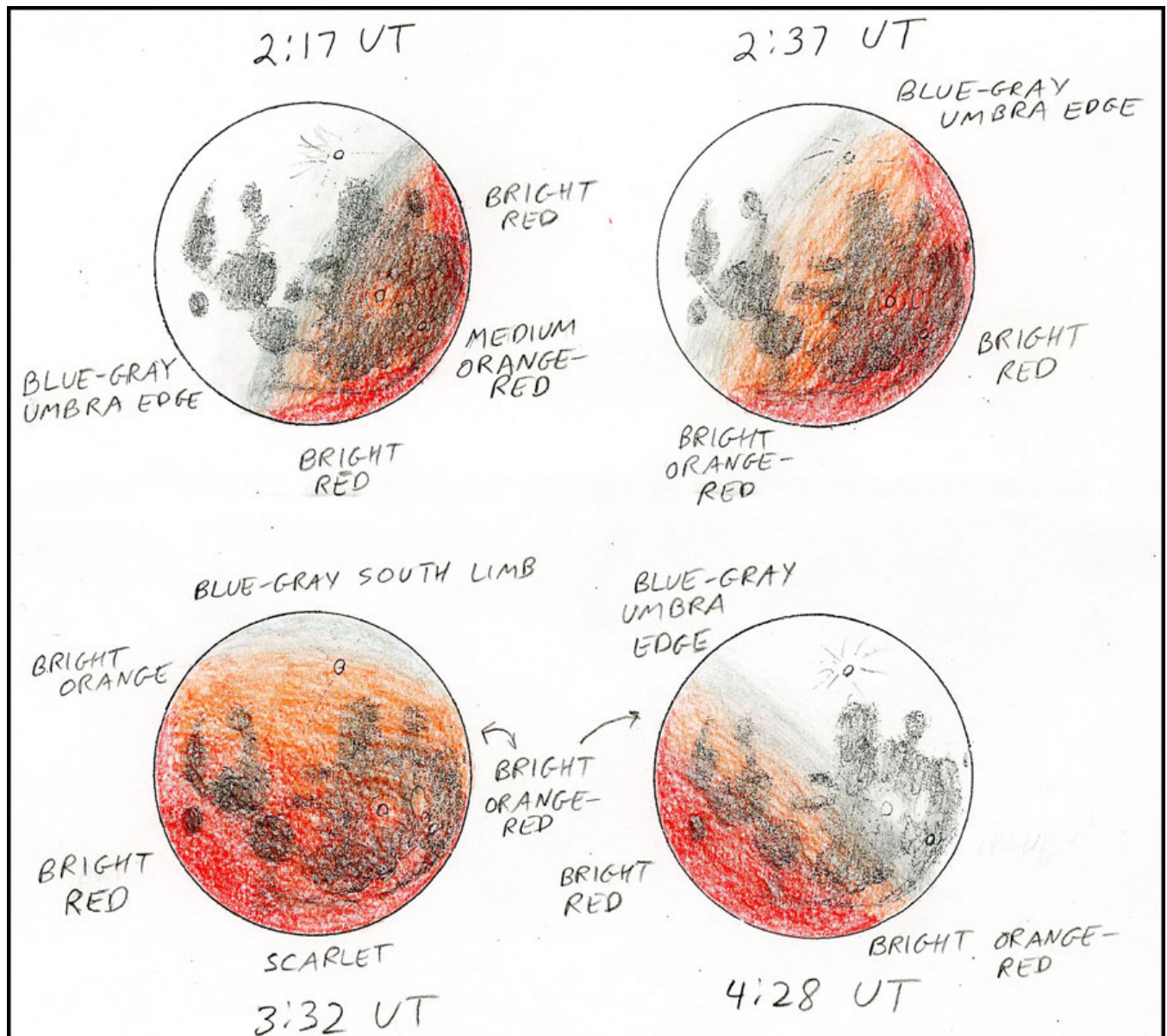
This was indeed a bright eclipse. Most of the moon during totality was a bright orange-red except for a blue-gray southern limb. The northern limb was an especially vivid red. It reminded me of a red Venus Paradise colored pencil. The area north of Mare Crisium was also a vivid red during the latter part of totality. Small, bright craters were easily visible anywhere on the moon with the 6-inch during totality, and the maria were conspicuous without optical aid. Even from a suburban location, the eclipse darkened the sky substantially, and Saturn and Regulus became more prominent near the moon. The Saturn-Moon-Regulus trio was best appreciated with the naked eye; they were a little too spread out for telephoto or binocular views. I gave this eclipse a Danjon rating of $L = 3.5$ at 3:27 UT with the naked eye.

Totality ended much as it had begun. The reappearances of the double SAO 99036 occurred about ten minutes later. I had tuned to CHU by this time since WWV reception was becoming erratic. A clicker which had worked fine earlier, didn't work as well this time, and voice signals helped. The bright companion reappeared just after the start of a seconds beat which helped; the tape recording told me which one. The secondary, however, reappeared during a two-second gap around the omitted 29th-second beat. The emerging moon was not yet bright enough to interfere. The occultation observations are shown with the moon at the same size and orientation as the star field. The unidentified star occulted early in totality is designated 'C' to distinguish it from the A and B components of SAO 99036. A star

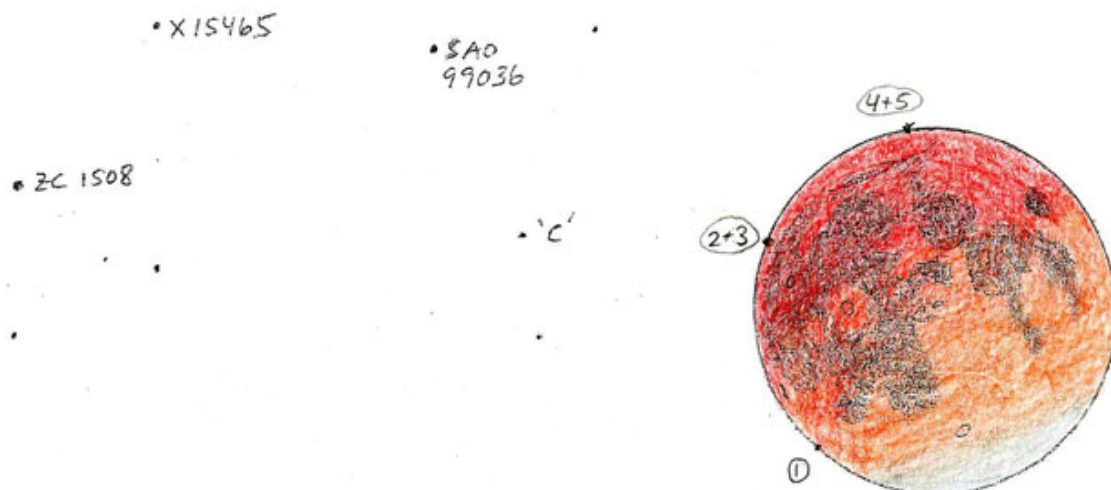
south of 'C' would at best been barely hidden by a bright southern limb, and was not timed. The moon's steep southeastern motion carried it well south of X 15465 and ZC 1508, and stars south of ZC 1508 would not have been occulted inside the umbra.

I finally started a series of crater exits well after the occultations. They were made in the same manner as the entrances except that CHU was used. I was increasingly aware at how fast the time was passing. The colors in the umbra faded as the moon brightened. I ended up with nine crater exits. The last orange-red coloration inside the umbra was gone at 5:00 UT, and last contact came nine minutes later. I then followed the penumbral shading as it became increasingly less conspicuous. The lunar glare seemed especially strong, and I couldn't follow the penumbra as long as I thought I could. I lost it at 5:42 UT with the 6-inch.

This was a busy night, and I probably tried to do too much at times, but this was a beautiful event, and the last good eclipse for a long time. It was a chilly evening with the temperature of 16° F (-9° C) at 1:00 UT, and 11° F (-12° C) at 6:00 UT. Much of the time, I wasn't aware of the cold! The good weather was certainly a welcome break in what has been a very cloudy winter in this area.



OCCULTATIONS DURING TOTAL LUNAR ECLIPSE - FEBRUARY 21, 2008 - WORTH, IL
 Long. 87 48' 08.8" W Lat. 41 41' 05.8" N Elev. 185 Meters
 6" reflector at 68x, stopwatch/signals and tape recorder used with WWV/CHU



NO.	STAR	EVENT	UT TIME	PERS. EQ'N.	ACC.	COMMENTS
1	'C'	D	3:08:09.5	0.3s	0.1s	Unidentified star, mag. $\approx 9\frac{1}{2}$. Disappeared shortly after start of totality. Easy to time. A similar star to the south was not timed.
2	SAO 99036 B	D	3:20:35.8	0.4	0.1	Fainter component of double star, about same mag. as star 'C'. Lies about 5" SW of brighter component.
3	SAO 99036 A	D	3:20:53.0	0.3	0.1	Brighter component of double star, mag. about 8.6. Very nice & easy on vivid red limb.
4	SAO 99036 A	R	4:01:16.2	0.3	0.1	Occurred after totality ended, otherwise much like the view at the D.
5	SAO 99036 B	R	4:01:29.0	0.5	0.3	This event was not as well timed as the D.

WWV at 5 MHz was used for events 1-3, while CHU at 3.33 MHz was used for 4-5.

The sketch is a general view. It is not intended to depict the eclipse at a particular time.

UMBRAL CONTACTS & CRATER TIMINGS

Robert H. Hays, Jr.

UMBRAL CONTACTS

CONTACT I -----1:43:00
CONTACT II -----3:00:40
CONTACT III -----3:50:50
CONTACT IV -----5:08:55

CRATER ENTRANCES

GRIMALDI ----- 1:47:50
ARISTARCHUS----- 1:49:10
KEPLER ----- 1:53:25
PYTHEAS ----- 1:59:50
COPERNICUS ----- 2:01:30
PLATO ----- 2:05:10
MANILIUS ----- 2:16:05
MENELAUS ----- 2:19:40
PLINIUS ----- 2:23:40
DIONYSIUS ----- 2:23:50
TYCHO ----- 2:26:50
PROCLUS ----- 2:34:25
LANGRENUS ----- 2:47:35

CRATER EXITS

COPERNICUS ----- 4:26:45
PYTHEAS ----- 4:30:10
DIONYSIUS----- 4:41:45
MANILIUS ----- 4:42:10
PLATO ----- 4:43:50
MENELAUS ----- 4:45:55
PLINIUS ----- 4:48:40
LANGRENUS ----- 4:53:00
PROCLUS ----- 4:58:45

OBSERVATIONS OF TOTAL LUNAR ECLIPSE

FEBRUARY 21, 2008

Text and Images by Howard Eskildsen – Ocala, Florida, USA

Contact times (naked eye):

U1: 01:36:23
U2: 02:59:18
U3: 03:53:05
U4: 05:09:32

I started observing the Moon about 10 minutes prior to predicted time of U1 and did not look at time on the Garmin GPS until I believed the contact had occurred. I started observing for U2 after the final crater timing (Langrenus) and did not look at the time again until I believed contact had occurred. Timings for U3 and U4 were done in a similar fashion, using Garmin GPS time. I estimate limit of error to be ± 2 seconds.

Occultation Timing

An approximately 7th magnitude star was occulted at 03:17:12 ± 3 seconds (increased uncertainty due to fumbling to find the timer). I do not know what star it was, but it disappeared at the limb near Riccioli.

Crater Contact Timings (UT)

	Crater Immersion – Mid-Crater Contact	Emersion – Mid-Crater Contact
Grimaldi	01:47:49	04:05:15
Aristarchus	01:48:54	04:21:02
Kepler	01:52:53	04:18:27
Billy	Missed	Missed
Pytheas	01:58:25	04:30:35
Copernicus	02:01:06	04:26:04
Timocharis	02:02:57	04:35:23
Plato	02:04:52	04:43:40
Campanus	02:10:20	Missed
Aristoteles	02:13:42	04:52:05
Eudoxus	02:14:15	04:51:26
Manilius	02:15:27	04:42:00
Menelaus	02:18:43	04:45:56
Dionysius	02:23:15	04:41:52
Plinius	02:23:29	Missed
Tycho	02:26:53	04:06:47
Proclus	02:33:53	04:58:40
Taruntius	02:37:04	Missed
Goclenius	02:41:04	Missed
Langrenus	02:27:00	Missed

Danion Luminosity Estimates:

L2 at 03:08:00 and at 03:28:00, naked eye

Other General Comments:

I observed the eclipse from 01:25:00 through 05:12:00. Contact timings were naked eye, and the crater timings were mostly made through an Orion ED80 f7/5 with an Orion Expanse 9mm eyepiece. A few of the immersion crater timings were made through an Orion Express 80 f/6 telescope with 15mm Plossl eyepiece. There were several additional spectators during the first part of the eclipse, and I had to share telescopes. Most photos were taken with a Meade 6" refractor with 40mm MaxView eyepiece and Nikon Coolpix 4300. The low-magnification photos at mid-eclipse were taken through the Orion Express 80, same eyepiece and camera as the other photos. Time data is printed on the photos.

Timing of the photos was taken from the corrected reading on the camera data attached to the photo. The camera had been calibrated earlier in the evening and correction factor determined, which I believe to be +/- 1 seconds. The spread sheet showing the correction calculations is available and included with the mailed report.

Other times were read from a Garmin GPS which was within <1 second of readings of Official US Time website and two clocks synchronized automatically with WWV. Estimates of error consider the variation of the clock as well as error introduced while stopping the observation, putting on glasses and reading the time.

The sky was completely cloudy less than an hour prior to the start of the umbral phase. About half an hour before it started, the clouds began to break up and conditions generally improved through the end of totality. A few thin clouds did pass by now and then. Cirrus began to slowly filter the moonlight after totality and gradually thickened until only the Moon, Saturn and Regulus were visible at the end of totality. This made it difficult to time the latter half of the crater emersions, and I missed several of them even though I was looking closely. In general I was very lucky to get to observe this eclipse at all.

I prepared for the eclipse the night before by observing the moon with the Orion ED 80 until I knew the precise location of the craters for the timings. I was already familiar with nearly all of them, but the low magnification and orientation through the telescope took some getting used to. While I believe that this greatly improved my success rate, I should have spent more time studying their exact location in relation to their surroundings. On the emersion timings, I missed several because I did not know precisely where to look for them to appear and did not identify them until the shadow had already passed them by. The cirrus clouds at the end made it impossible to see even the bright Proclus before it passed out of the umbra.



A.L.P.O. LUNAR COORDINATORS

Dr. Anthony Cook – Coordinator, Transient Lunar Phenomena atc@aber.ac.uk

Brian Cudnik – Coordinator, Lunar Meteoritic Impact Search cudnik@sbcglobal.net

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

William M. Dembowski – Coordinator, Lunar Topographical Studies
& Selected Areas Program Dembowski@zone-vx.com

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

LUNAR TOPOGRAPHICAL STUDIES

Coordinator - William M. Dembowski, FRAS

dembowski@zone-vx.com

OBSERVATIONS RECEIVED

MAURICE COLLINS - PALMERSTON NORTH, NEW ZEALAND

Digital images of Ptolemaeus, Deslandres, Alphonsus, Northern regions, Archimedes & Alpine Valley, Eastern Mare Imbrium, Southern regions, Terminator of 8-day Moon (3)

ED CRANDALL - WINSTON-SALEM, NORTH CAROLINA, USA

Digital images of Posidonius, Dorsa Smirnov, Carrel & Jansen, Torricelli, Madler to Daguerre, Dorsa Aldrovandi-Rima Littrow-Catena Littrow

HOWARD ESKILDSEN - OCALA, FLORIDA, USA

Digital images of Oceanus Procellarum, Mare Nectaris (2), Western Procellarum, Mare Fecunditatis, Crater chain at eastern limb

Banded crater report forms with digital images of Davy-A, Guericke-B, Aristarchus, Aristillus, Birt, Bode, Brayley, Conon, Damoiseau-E, Pytheas, Theaetetus

Report of total lunar eclipse including 24 digital images, crater timings, and contact timings

ROBERT H. HAYS, JR. - WORTH, ILLINOIS, USA

Report of total lunar eclipse including five drawings, crater timings, and contact timings

RIK HILL - TUCSON, ARIZONA, USA

Digital images of Rupes Recta to Werner, Arzachel, Herschel to Rupes Recta, Sacrobosco

PAULO LAZZAROTTI - MASSA, ITALY

Digital images of South Polar region, Stofler & Maurolycus region

RAFAEL BENAVIDES PALENCIA - POSADAS, CORDOBA, SPAIN

Digital images of Marius Hills, Babbage, Schickard, Hansteen-Billy-Sirsalis-Cavendish

ANDY MILLER - CONNEAUT, OHIO, USA

Digital image of Rupes Recta

PHILIP MORGAN - WORCESTERSHIRE, ENGLAND

Drawing of Rupes Recta and Birt

K. C. PAU - HONG KONG, CHINA

Digital images of Rupes Recta, Gassendi

ANTONIUS SCHALKEN - MELBOURNE, AUSTRALIA

Digital images of Rupes Recta (2), Rima Lassell

LARRY TODD - DUNEDIN, NEW ZEALAND

Digital image of Rupes Recta

ROBERT WLODARCZYK - CZESTOCHOWA, POLAND

Drawing of Janssen-Fabircius-Metius

RECENT TOPOGRAPHICAL OBSERVATIONS



BABBAGE

Digital image by Rafael Benavides Palencia – Posadas, Cordoba, Spain

January 20, 2008 – Seeing: 6/10 – Trans: 5/6

Celestron C11 SCT – 2x Barlow – Luna-QHY 5 Mono Camera



EASTERN MARE IMBRIUM

Digital image by Maurice Collins – Palmerston North, New Zealand

March 15, 2008 – 07:05 UT

Meade ETX-90 – Fuji A800 Camera afocal with 17mm SWA Eyepiece

RECENT TOPOGRAPHICAL OBSERVATIONS



TORRICELLI

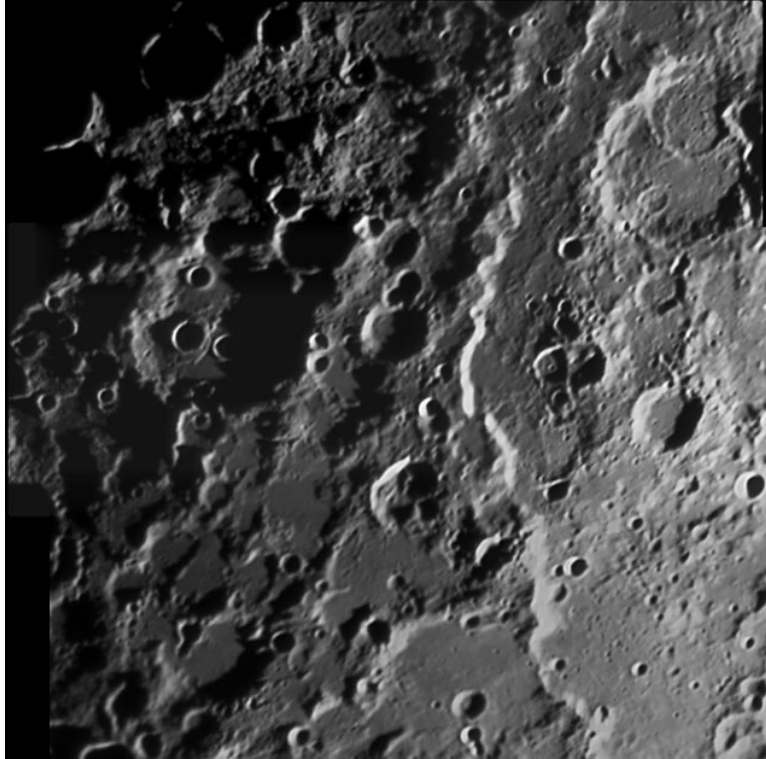
**Digital image by Ed Crandall – Winston-Salem, North Carolina, USA
March 13, 2008 – 00:22 UT – Colong: 341 – Seeing: 5/10 – Trans: 4/6
254mm f/7 Newtonian – 2x Barlow – Philips Toucam**



MARE NECTARIS

**Digital image by Howard Eskildsen
Ocala, Florida, USA
March 13, 2008 – 00:24 UT
Seeing: 6/10 – Trans: 5/6
Meade 6 inch f/8 Refractor
2x Barlow - Orion StarShoot II**

RECENT TOPOGRAPHICAL OBSERVATIONS

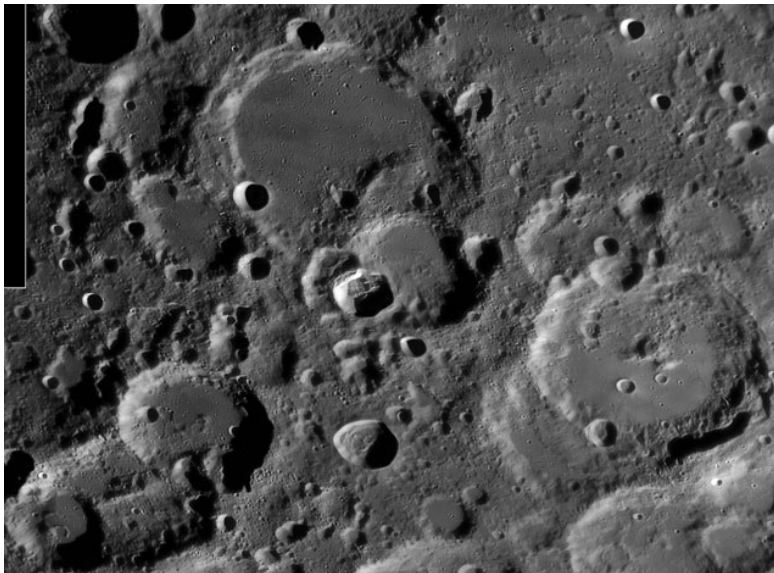


SACROBOSCO

Digital image by Rik Hill – Tucson, Arizona, USA

February 13, 2008 – 02:00 UT – Seeing: 7/10

Celestron C14 SCT – 2x Barlow – UV/IR Blocking Filter - SPC900NC Camera



STOFER – MAUROLYCUS – HERACLITUS

Digital image by Paolo Lazzarotti – Massa, Italy

February 14, 2008 – 19:07 UT – Seeing: 4-6/10 – Trans: 3/5

Gladius CF-315 Lazzarotti Opt. Scope – Edmund Optics R Filter

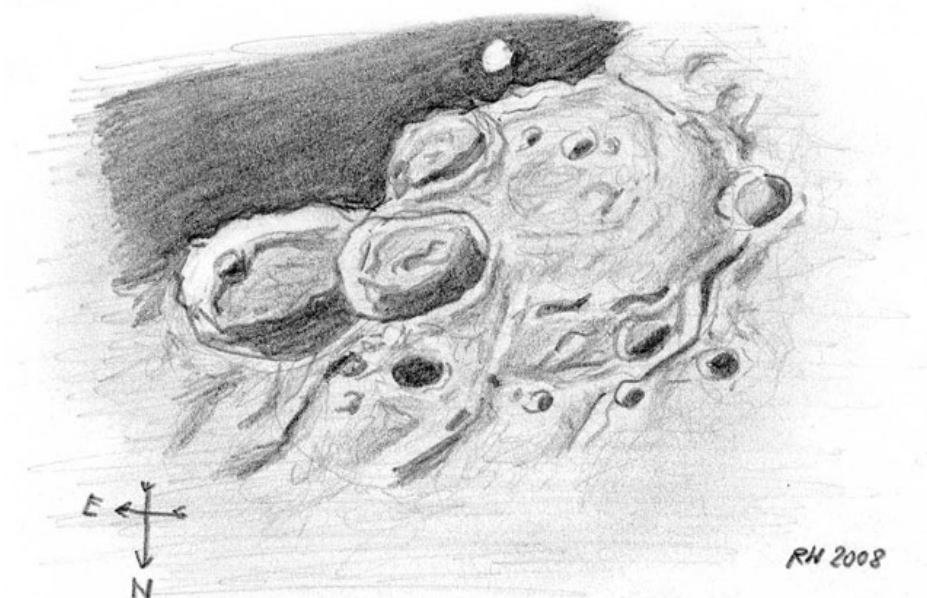
LVI 1392 PRO Experimental Camera

RECENT TOPOGRAPHICAL OBSERVATIONS



GASENDI

Digital image by K.C. Pau – Hong Kong, China
October 22, 2007 – 13:55 UT – Colong: 47 – Seeing: 5-6/10 – Trans: 5/10
250mm f/6 Newtonian – 5x Barlow – DMK 31AF03.AS - Camera



JANSSEN – FABRICIUS – METIUS

Drawing by Robert Włodarczyk – Czestochowa, Poland
February 24, 2008 – 223:30 UT – Seeing: 5/10 – Trans: 4/6
12cm f/7.5 Newtonian – 112x

BRIGHT LUNAR RAYS PROJECT

Coordinator - William M. Dembowski, FRAS

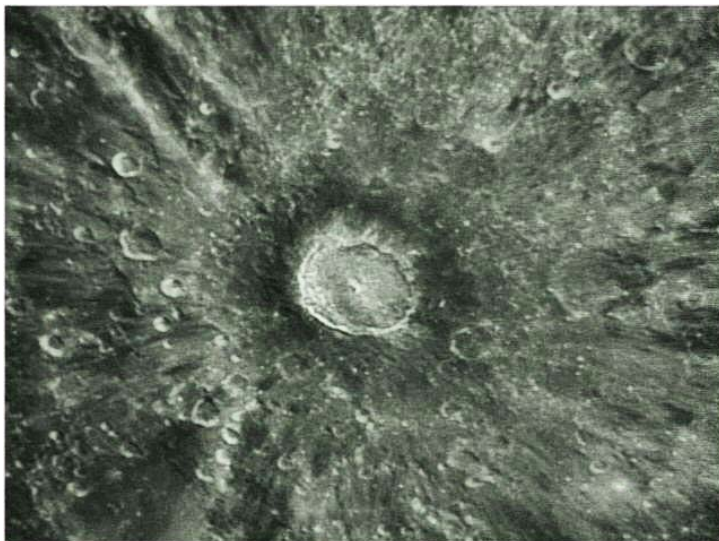
Bright Lunar Rays Project Website:

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



TYCHO WITH RAYS NOT VISIBLE

**Digital image by Ed Crandall
Winston-Salem, North Carolina, USA
March 13, 2003 – 02:15 – Seeing: 5/10
10 inch f/14 Newtonian
Starlight Xpress HX-516 Camera**



TYCHO WITH RAYS VISIBLE

**Digital image by
Rafael Benavides Palencia
Posadas, Cordoba, Spain
December 14, 2005 – 22:32 UT
15cm f/8 Refractor
2x Barlow – IR Blocking Filter
Philips Toucam Pro**

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: Davy A and Davy G

Observer: Howard Eskildsen Observing Station: Ocala, Florida

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

Telescope: Meade 6" Refractor 152 mm f/8

Imaging: Orion StarShoot II Filters: None

Seeing: 7/10 Transparency: 6/6

Date (UT): 2008/01/28 Time (UT): 11:09

Colongitude: 157.6

Position of crater:	Selen. Long.	Selen. Lat.
Davy A	7.7° West	12.2° South
Davy G	5.1° West	10.4° South

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

Image (North up):

Comments:



Davy A (white arrow) has some interesting patterns in the floor. The nature of the markings will be fun to observe at different colongitudes. Davy G (dark arrow) is bright on the southeastern half and dark on the northwestern side. Is this simply illumination artifact or is there more to be discovered in future views? Finally there is the delightful distraction of Catena Davy in the center of the field of view.

LUNAR TRANSIENT PHENOMENA

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

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

LTP NEWSLETTER - APRIL 2008

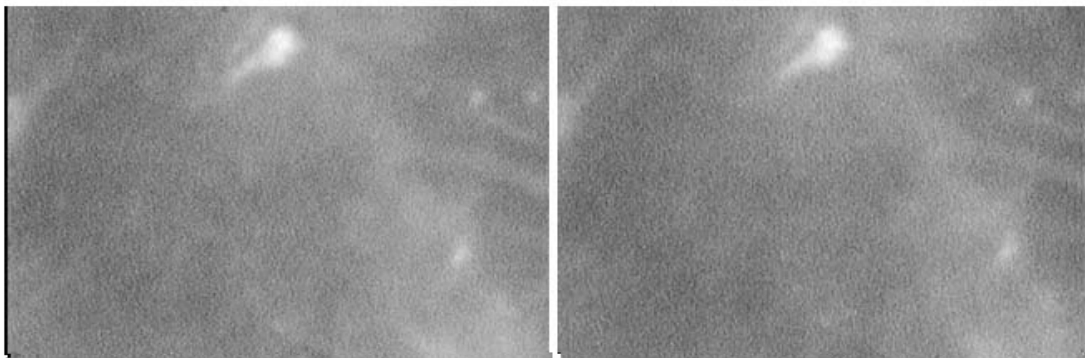
Dr. Anthony Cook - Coordinator

Observations for February 2008 were received from the following observers: Jay Albert (FL, USA), Herbie Bradley (Great Malvern, UK), Clive Brook (Plymouth, UK), myself (Newtown, UK), Marie Cook (Mundesley, UK), and Ken Hall (Warrington, UK). I would like to welcome Herbie and Ken to the LTP team.

I hope that at least some of you had better luck with the lunar eclipse than I did. Newtown, Powys in Wales, I am learning is infamous for it's cloudy weather and strong winds. Was anybody observing on the night of the eclipse at UT 03:20UT? It is at this time that George Varos (USA) recorded a flash in the eclipse shadow. If any of you videoed the eclipse, then please re-examine the recording around this time and look in the south of Oceanus Procellarum, area roughly between Grimaldi and Kepler. If anybody can confirm this then you should let Brian Cudnik bmcudnik@pvamu.edu or myself know as this will be the first time that an impact flash has been seen during a lunar eclipse! On another interesting note was anyone observing west of the Mare Crisium area, near Proclus, on Feb 11 at UT19:21? A report I have received from Herbie Bradley, via Alan Wells, suggests that there might have been a LTP. I will let you have more details later.

During March I was able to try out the Radon emission line Moon Blink device for the first time. The episodic emission of Radon gas is currently the most popular explanation that you will find in refereed published papers that attempt to explain LTP. There were some teething problems with scattered light in my initial experiments, but these will be ironed out and I am sure that the image quality will improve. Below are 1/25th sec exposures in 860 nm (Radon) and 840 nm wavebands. Image quality was not good in such short exposures, and one can see much more detail at the TV frame rate when viewing the recording or live on the monitor at the telescope. However the quality is sufficient to see how similar this region of the Moon was in both wavebands. Altogether five hours of moon blink observations were made using these filters, but unfortunately nothing was detected. I was hoping for a chance of detecting some spectral emission because the equipment is an order or two magnitude more color sensitive, for detecting Radon emission lines, than the eye (although the eye would detect the deep red 745 nm line instead of the 860nm near IR line). However it is early days yet and I guess a few more tens of hours observing should be enough to prove or disprove the Radon gas theory as being a primary cause of color LTPs seen from Earth. Optical LTP occur at a rate of one per tens to hundreds of hours of observing, so it is not unreasonable to expect the Radon Moon Blink device to detect more frequent, but fainter, minor emissions that the eye would miss.

Next month I will report the latest findings relevant to LTPs from the 39th Lunar and Planetary Science Conference (LPSC) in Houston (League City), Texas. Unfortunately the deadline for writing this article is just a before the conference starts.

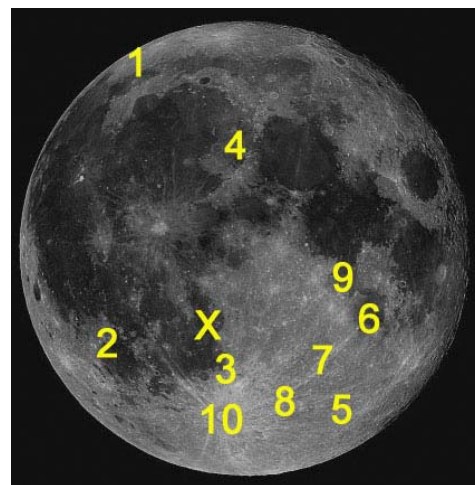


Predicted observing times, including the more numerous illumination only events can be found on the following web site: <http://users.aber.ac.uk/atc/LTP/LTP.htm> . For members who do not have access to the internet, please drop me a line and I will post predictions to you. If you would like to join the 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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KEY TO IMAGES IN THIS ISSUE

1. Babbage
2. Gassendi
3. Hell
4. Imbrium, Mare
5. Janssen
6. Nectaris, Mare
7. Sacrobosco
8. Stofler
9. Torricelli
10. Tycho



(X = Rupes Recta – Next Focus On Target)

ERRATA: TLO March 2008 issue, Page 11

Fred Corno's drawing of wrinkle ridges on the floor of Mare Humorum was misidentified as being Dorsa Smirnov in Mare Serenitatis.