



# THE LUNAR OBSERVER

RECENT BACK ISSUES: [http://www.zone-vx.com/tlo\\_back.html](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](mailto:dembowski@zone-vx.com)  
Elton Moonshine Observatory - <http://www.zone-vx.com>  
219 Old Bedford Pike (Elton) - Windber, PA 15963

## FEATURE OF THE MONTH - MARCH 2008



### NEPER & BANACHIEWICZ

Sketch and text by Robert H. Hays, Jr. - Worth, Illinois, USA  
November 25, 2007 – 02:18 to 02:44 UT  
15cm Newtonian - 136x - Seeing: 6-7/10

I observed this area on the evening of Nov. 24/25, 2007. This area is just north of Mare Smythii very near the east limb. The libration was relatively favorable that night, and the terminator was nearby, so I decided to draw it. The moon was only 12 hours past full. Neper is the largest crater in the sketch. It has a central peak that was slipping into shadow even as I watched. Its interior shadow showed considerable irregularities on its still-sunlit east rim. The conspicuous crater just to the west is probably Neper D. Its shadowing indicates a jagged west rim. There is substantial shadow along the northeast rim of Neper D, but not on the southeast rim. A conspicuous hill lies just west of Neper D, and more strips of shadow are in the area. Banachiewicz is the large crater just southwest of Neper. It has a jagged-looking peak south of its center. The crater near this peak is Banachiewicz B, and E is the less well-defined crater south of B. Schubert is the fairly large crater south of Banachiewicz. I saw no detail on this crater's floor, but a tiny, bright pit lies near the south end of Schubert. Just south of Schubert (not drawn) is Mare Smythii. There is a variety of shadowing east of Schubert and Banachiewicz which was hard to sketch because of complex and changing appearances. There are two craters on the north end of Banachiewicz, not far from Neper, that are not even shown on the LQ map.

## 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 - MARCH 2008 (UT)

Mar. 03	02:00	Moon 3.6 Degrees S of Jupiter
Mar. 05	15:00	Moon 0.28 Degrees ESE of Mercury
Mar. 05	20:00	Moon 0.33 Degrees NNE of Venus
Mar. 05	22:00	Moon 0.26 Degrees ESE of Neptune
Mar. 07	17:14	New Moon (Start of Lunation 1054)
Mar. 07	19:00	Moon 2.6 Degrees NNW of Uranus
Mar. 10	21:40	Moon at Perigee (366,301 km - 227,609 miles)
Mar. 14	10:45	First Quarter
Mar. 15	03:00	Moon 1.7 Degrees N of Mars
Mar. 19	13:00	Moon 2.4 Degrees SSW of Saturn
Mar. 21	18:39	Full Moon
Mar. 26	20:14	Moon at Apogee (405,093 km - 251,713 miles)
Mar. 29	21:48	Last Quarter
Mar. 30	19:00	Moon 3.1 Degrees SSE of Jupiter

## 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](mailto: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)

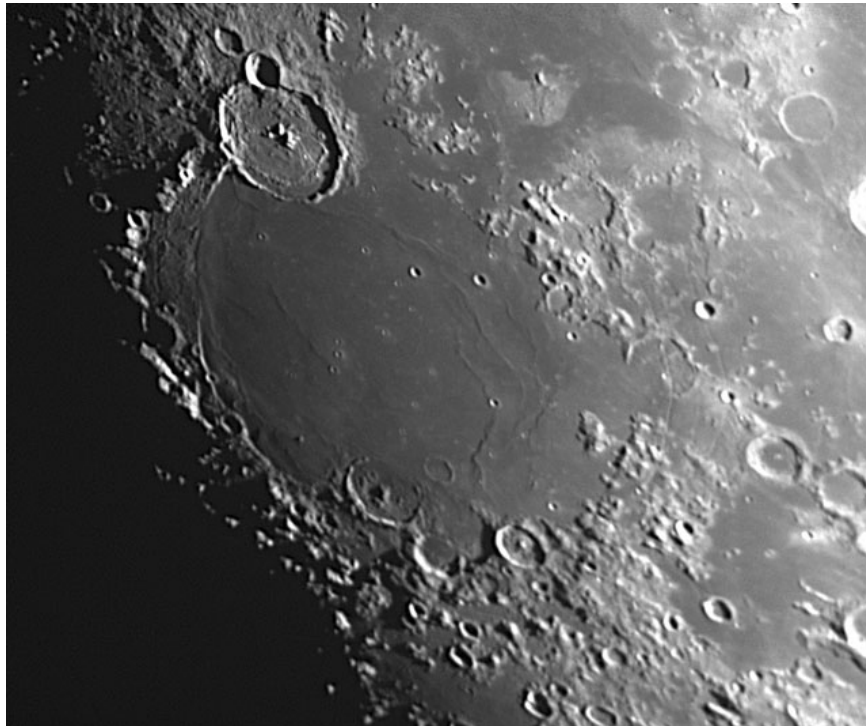
# **FOCUS ON: Wrinkle Ridges**

**William M. Dembowski, FRAS**

**Coordinator, Lunar Topographical Studies**

Wrinkle ridges are winding, rope-like features that snake across virtually all mare surfaces. Rarely exceeding 300 meters in height, they are relatively easy to observe because of the smoothness of the terrain on which they appear. Naturally, being of low profile, one must observe them when they are near the terminator.

The result of subsidence, wrinkle ridges formed when the relatively heavy mare lavas overburdened the lighter surface materials and caused them to collapse. Nowhere is this more apparent than in the region of Mare Humorum where the wrinkle ridges form a near perfect circle within the mare (Figure 1).



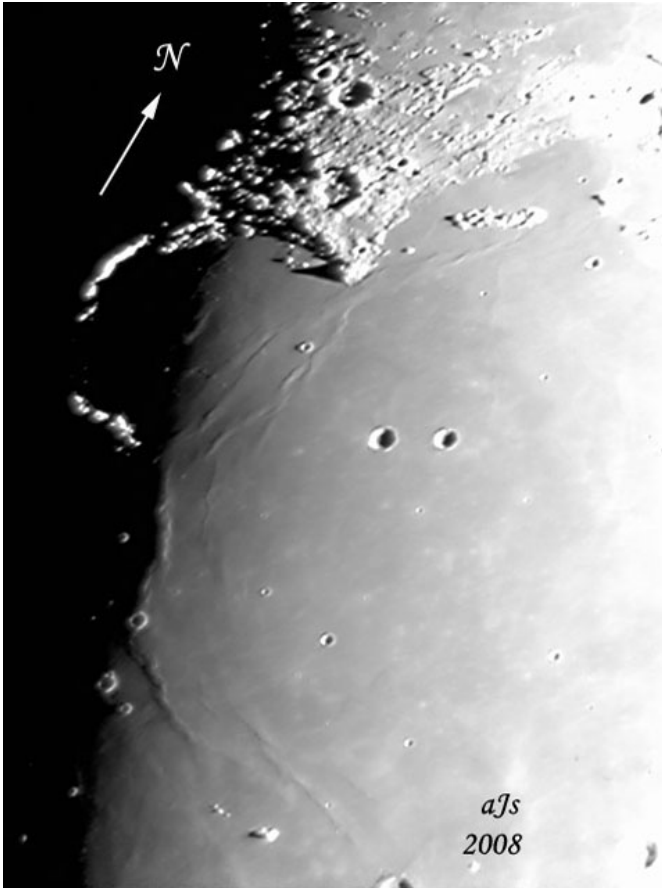
**FIGURE 1**

## **MARE HUMORUM**

**Digital image by Wayne Bailey – Sewell, New Jersey, USA**

**July 26, 2007 – 02:52 UT – Colongitude: 47.0 - Seeing: 5/10 – Trans: 5/6  
Celestron C11 f/10 SCT – Lumenera Skynyx 2-1M – Schuler IR72 Filter**

A similar configuration can be seen in Mare Imbrium where the wrinkle ridges clearly follow the contour of the mare borders (Figure 2). Some early astronomers interpreted these ridges as being the waves of a sea breaking toward its shores. It was apparently of no consequence that they never reached their destination.



**FIGURE 2**  
**MARE IMBRIUM**  
Digital image by  
Antonius Schalken  
Melbourne, Australia  
August 4, 2006 – 09:39 UT  
15cm f/10 Rumak-Maksutov  
Philips Toucam 840K

**EDITOR'S NOTE:**  
Also see Tony's observing notes  
for this image on Page 8

The above examples are related to the subsidence of circular basins. By contrast, when the mare is one of irregular shape, the wrinkle ridges tend to follow suit. Figure 3 shows the tangle of ridges on the non-circular Mare Frigoris.



**FIGURE 3**  
**MARE FRIGORIS**  
Digital image by Wayne Bailey - Sewell, New Jersey, USA  
August 2, 2007 – 06:05 UT - Colong: 134.0 - Seeing: 3/10 – Trans: 5/6

**Celestron C11 f/10 SCT – Lumenera Skynyx 2-1M – Schuler IR72 Filter**

Sometimes the subsiding lava, still being somewhat plastic, collapsed onto an underlying structure and conformed to its shape. This produced the fascinating features known as ghost craters. A fine example of this process can be seen in the ghost crater Lamont (Figure 4). Not only is Lamont a sizeable features in itself (75 km in diameter), but it marks the center of a system of wrinkle ridges that reaches an impressive diameter of 350 km.



**FIGURE 4**  
**LAMONT**

**Cropped from original digital image  
by Paulo Lazzarotti – Massa, Italy  
April 23, 2007 – 21:02 UT  
Seeing: 6/10 – Trans: 3/5  
Gladius CF-315 Lazzarotti Opt. Scope  
Lumenera Infinity 2-1M Camera**

Undoubtedly the most famous wrinkle ridge of them all is Dorsa Smirnov, aka the Serpentine Ridge (Figure 5). Located on the eastern side of Mare Serenitatis, it is easily seen in even the smallest telescopes. Dorsa Smirnov is actually a part of a very complex system of ridges. The Serpentine Ridge starts rather indistinctly in the north near the crater Posidonius and works its way south where it is joined by Dorsa Lister. Dorsa Lister then sweeps westward to the crater Bessel where several smaller ridges, including Dorsum von Cotta, continue the arc northward to complete the circle.

**FIGURE 5**  
**DORSA SMIRNOV**  
**Digital image by**  
**Ed Crandall**

**Winston-Salem, N. Carolina, USA**  
**January 13, 2008 - 23:22 UT**  
**Seeing: 3/10 – Trans: 3/6**  
**110mm f/6.5 APO Refractor**  
**3x Barlow – Philips Toucam**



Two of the more interesting wrinkle ridges do not lie on the large maria but within craters. Brim-full Wargentín, near the extreme southwestern limb of the Moon has a raised floor dominated by a system of wrinkle ridges that resemble a crow's foot (Figure 6). Endymion on the northeastern limb, diagonally opposite Wargentín, also has a wrinkle ridge on its floor (Figure 7). This particular ridge can be quite elusive and offers a nice challenge to even experienced observers.



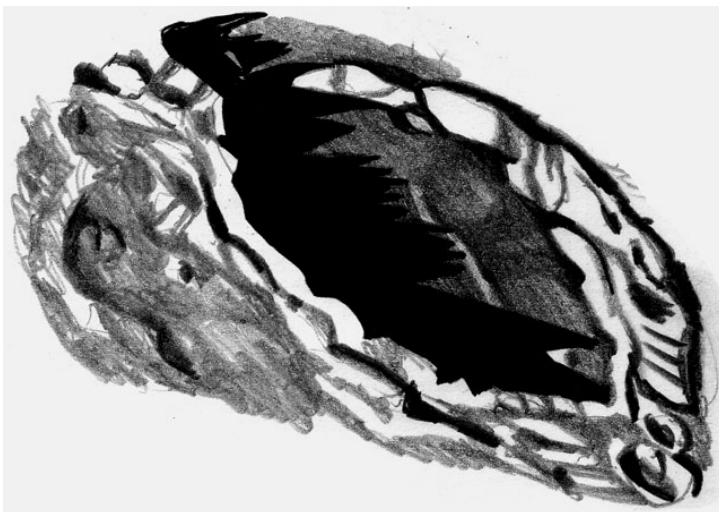
**FIGURE 6**

**WARGENTIN**

**Digital image by Howard Eskildsen – Ocala, Florida, USA**

**June 1, 2004 – 00:56 UT**

**10 inch Refractor**



**FIGURE 7**

**ENDYMION**

**Drawing by Peter Grego**

**Rednal, Birmingham, England**

**September 1, 2004 – 23:50/00:25 UT**

**8 inch SCT – 200x**

**REFERENCES:**

Burnham, Robert, "The Moon: Rilles & Wrinkle Ridges", Astronomy Magazine (1981)

Dembowski, William M., "Wrinkle Ridges", Selenology, Vol. 23 No. 4, Winter 2004

Rukl, Antonin, "Atlas of the Moon", Paul Hamlyn Publishing, 1990

Schultz, Peter H., "Moon Morphology", Univ. of Texas Press, 1976

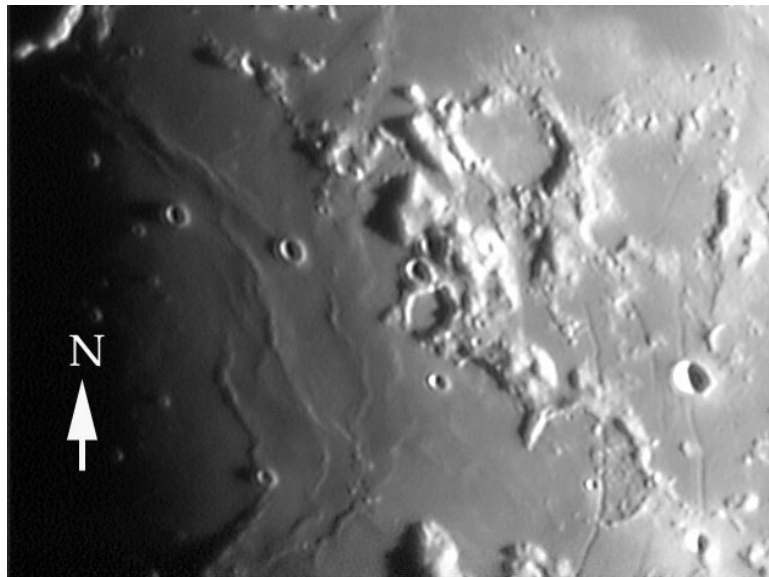
# WRINKLE RIDGES IN SINUS IRIDUM AND MARE HUMORUM

By Antonius Schalken

## OBSERVING NOTES FOR IMAGE OF SINUS IRIDUM (FIGURE 2 – PAGE 5)

To the south of Sinus Iridum we find one of the few (one of only 21) named wrinkle ridges (dorsum Heim - 32.0N 29.8W). Though the only named ridge in this area, I took these series of video clips of Mare Imbrium and Sinus Iridum to show the extensive lava flows that occur from Mare Imbrium into the embayment of Sinus Iridum. The relatively good seeing conditions on this day and low incident illumination ( $< 10^\circ$  above local horizon) enables one to see wrinkle ridges extending from the crater Herschel (bottom of main image) to Laplace Promontory at the northern end of Sinus Iridum.

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### MARE HUMORUM

Digital image by Antonius Schalken - Melbourne, Australia

September 3, 2006 – 11:45 UT – Colong: 38.5

15cm f/20 Rumak-Maksutov

Philips Toucam Pro II 840K

### OBSERVING NOTES:

The image of Mare Humorum was a case of fortuitous observing; I was looking at recording the rilles bordering this Mare and ended up by getting, also, the ridges of solidified lava flows. Working our way inwards we have a set of concentric rilles (including Hippalus – Rühl chart 52 and 53) and then the wave-like ridges. From the angle of sunlight and shadows cast by the ridges they appear to rise gently from east to west and fall abruptly beyond the apex. I find that such features are best observed where incident sunlight is less than  $10^\circ$  above local horizon.



# WRINKLE RIDGES IN OCEANUS PROCELLARUM

By Wayne Baily



## OCEANUS PROCELLARUM

Digital image by Wayne Bailey - Sewell, New Jersey, USA

February 17, 2008 – 03:46/04:02 UT Colong: 36.9 - Seeing: 4/10 – Trans: 4/6  
Celestron C11 f/10 SCT – Lumenera Skynyx 2-1M – Schuler IR72 Filter

### OBSERVING NOTES:

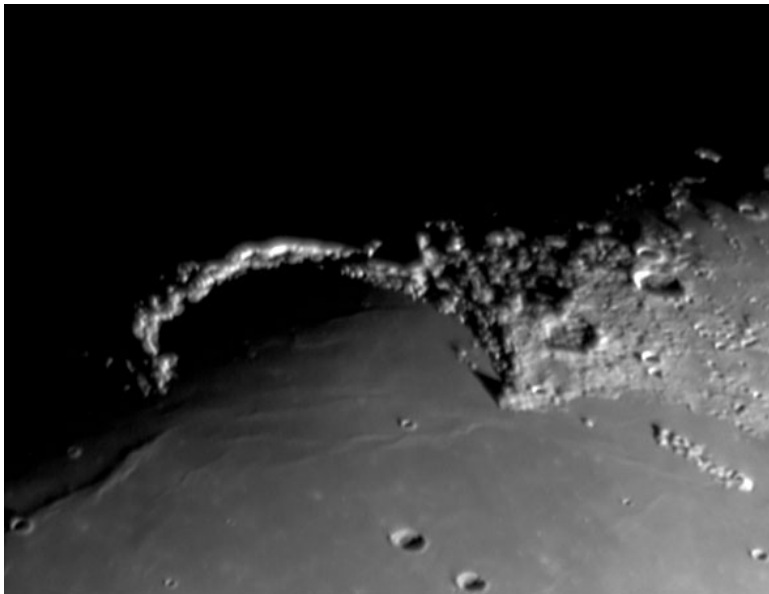
The group of ridges northwest of Euclides caught my attention because the other groups of ridges I've imaged are either (more or less) parallel ridges, or appear to be two twisted (or braided) ridges. This group appears to be an overlapping mass of several ridges. The dog-legged ridge trending northeast toward Lansberg appears braided. The northwestern ridges appear more or less parallel (possibly subdivided into two or three different groups). But the ridges in the center and southeast of the cluster show no obvious pattern. They trend several different directions, sometimes appearing to cross other ridges, or terminating abruptly at another ridge. Is this successive generations of ridges, or is it simply a more complex example of ridges?

# ADDITIONAL WRINKLE RIDGE OBSERVATIONS



MARE IMBRIUM

Digital image by Andy Miller – Conneaut, Ohio, USA  
4 inch Refractor – 17mm EP – Handheld digital camera (afocal)



SINUS IRIDUM

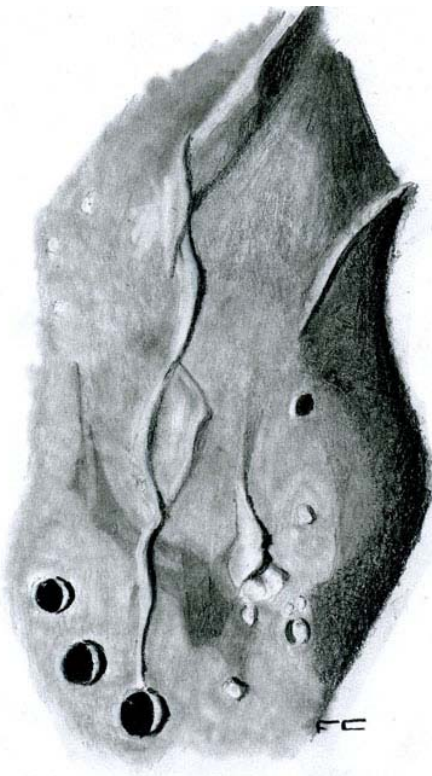
Digital image by Klaus Petersen – Glinde, Germany  
February 16, 2008 – 22:52 UT – Seeing: 4/10  
Meade 8 inch LX200 SCT – Philips Toucam – IR Block Filter

# ADDITIONAL WRINKLE RIDGE OBSERVATIONS



## RIDGES NEAR PLINIUS

Digital image by Donald Spain – Louisville, Kentucky, USA  
April 23, 2007 – 00:51 UT – Seeing: 6/10 – Trans: 5/6  
6 inch Refractor – 2x Barlow – Meade LPI Camera



## DORSA SMIRNOV

Drawing by Fred Corno  
Settimo Torinese, Italy  
January 13, 2008 – 22:35 to 22:55 UT  
Seeing: 8/10  
Takahashi FS128 APO Refractor – 208x

# ADDITIONAL WRINKLE RIDGE OBSERVATIONS



## MARE HUMORUM NEAR HIPPALUS

Digital image by Rafael Benavides Palencia

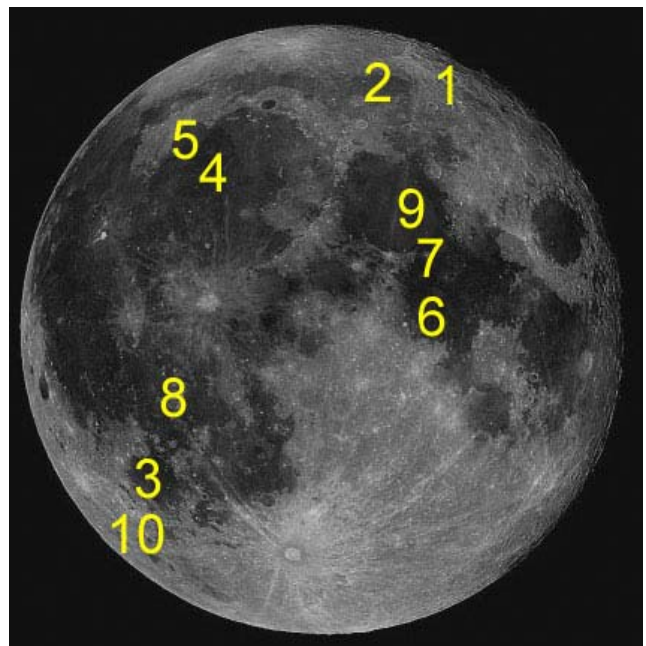
Posadas, Cordoba, Spain

January 19, 2008 – 21:40 UT – Seeing: 5/10 – Trans: 5/6

Celestron 11 inch SCT – 2x Barlow – Luna-QHY 5 Mono Camera

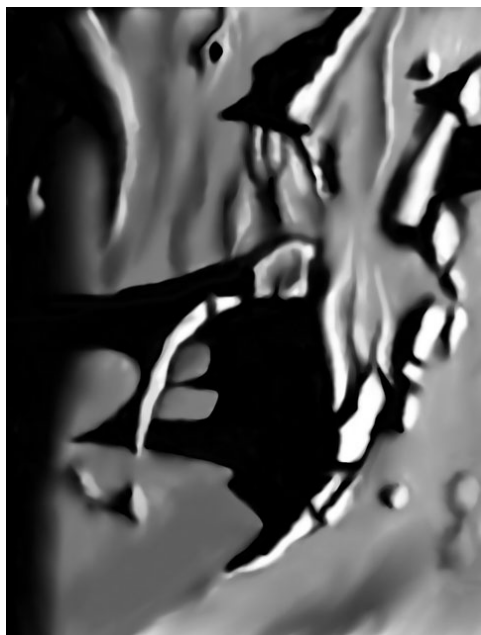
## KEY TO WRINKLE RIDGE IMAGES

1. Endymion
2. Frigoris, Mare
3. Humorum, Mare
4. Imbrium, Mare
5. Iridum, Sinus
6. Lamont
7. Plinius
8. Procellarum, O. (Euclides)
9. Smirnov, Dorsa
10. Wargentia



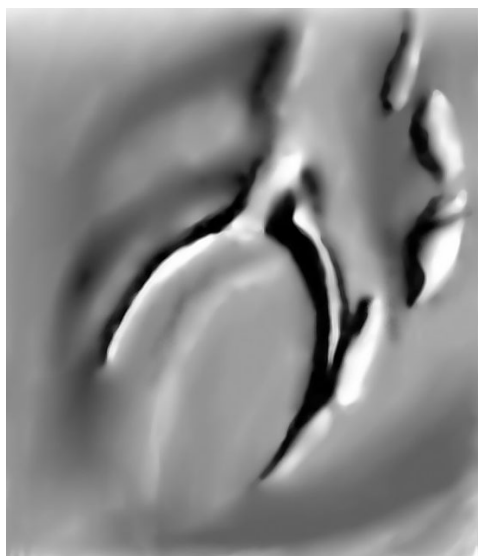
# **OBSERVATIONS OF PRINZ**

By Peter Grego – Rednal, Birmingham, England



## **PRINZ #1**

**PDA Drawing**  
**February 17, 2008 – 22:15 UT**  
**200mm SCT – 200x**



## **PRINZ #2**

**PDA Drawing**  
**February 18, 2008 – 22:45 UT**  
**200mm SCT – 200x**

### **OBSERVING NOTES FOR PRINZ #2**

Tonight's seeing wasn't as good as last night's, and of course less topographic detail was visible because of the higher angle of illumination. I was however intrigued by a semicircular feature within Prinz which gave the impression of being a low narrow ridge running parallel to the western wall; it was a little brighter than the general floor tone, and slightly darker to its west. It may have been a simple albedo feature, but I have never observed it before.

# ISS AND THE MOON

By Alexander Vandenbohede – Ghent, Belgium



On 11 February 2008, I was very lucky to observe a transit of the ISS over the Moon. I went about 20 km south of my normal observation location in Brugge (Belgium) to be in the right place. The attached picture is a combination of two images: one exposed for the Moon and one exposed for the ISS. Pictures are taken with a Konica Minolta DSLR Dynax D5 and sigma 50-500 zoom lens.

The path of the ISS shows a curvature. The excitement of some co-observers (and perhaps of myself) produced some vibrations. During the transit, Atlantis (STS-122) was coupled to the ISS and the astronauts were busy with the unloading of the European module Columbus.

## A.L.P.O. LUNAR COORDINATORS

Dr. Anthony Cook – Coordinator, Transient Lunar Phenomena [atc@aber.ac.uk](mailto:atc@aber.ac.uk)

Brian Cudnik – Coordinator, Lunar Meteoritic Impact Search [cudnik@sbcglobal.net](mailto:cudnik@sbcglobal.net)

David O. Darling – Asst. Coordinator, Transient Lunar Phenomena [DOD121252@aol.com](mailto:DOD121252@aol.com)

William M. Dembowski – Coordinator, Lunar Topographical Studies  
& Selected Areas Program [Dembowski@zone-vx.com](mailto:Dembowski@zone-vx.com)

Marvin W. Huddleston – Coordinator, Lunar Dome Survey [kc5lei@comcast.net](mailto:kc5lei@comcast.net)

# **LUNAR TOPOGRAPHICAL STUDIES**

Coordinator - William M. Dembowski, FRAS

[dembowski@zone-vx.com](mailto:dembowski@zone-vx.com)

## **OBSERVATIONS RECEIVED**

WAYNE BAILEY - SEWELL, NEW JERSEY, USA

Digital images of Mare Humorum, Mare Frigoris, Mare Fecunditatis, Sinus Aestuum, Mare Nubium, Lansberg-Norman region, Agatharchides region

FRED CORNO – SETTIMIO TORINESE, ITALY

Drawings of Mare Humorum, Mare Serenitatis

HOWARD ESKILDSEN - OCALA, FLORIDA, USA

Banded crater report forms with digital images of Anaxagoras, Menelaus, Proclus, Conon

ALEXANDROS FILOTHODOROS – SAMOS, GREECE

Digital image and LTVT measurements of area near Proclus & Mare Crisium

PETER GREGO - REDNAL, BIRMINGHAM, ENGLAND

PDA Drawings of Prinz (2)

RAFAEL BENAVIDES PALENCIA - POSADAS, CORDOBA, SPAIN

Digital images of Hippalus region (2), Palus Epidemiarum, Mare Humorum, Gassendi, Sirsalis-Mersenius-Billy-Hansteen

KLAUS PETERSEN – GLINDE, GERMANY

Digital images of Posidonius, Clavius, Sinus Iridum,

TONY SCHALKEN – MELBOURNE, AUSTRALIA

Digital images of Geikie & Mawson, Mare Humorum, Mare Imbrium, Sinus Iridum

DONALD SPAIN - LOUSVILLE, KENTUCKY, USA

Digital images of Plinius (2)

# RECENT TOPOGRAPHICAL OBSERVATIONS



## PALUS EPIDEMIARUM

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

January 18, 2008 – 1929 UT – Seeing: 6/10 – Trans: 5/6

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



## CLAVIUS

Digital image by Klaus Petersen – Glinde, Germany

February 168, 2008 – 22:40 UT – Seeing: 4/10

Meade 8 inch LX200 SCT – IR Block Filter – Philips Toucam 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: Conon

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, Filters: none

Seeing: 4/10 Transparency: 5/6

Date (UT): 2008/01/22 Time (UT): 01:24

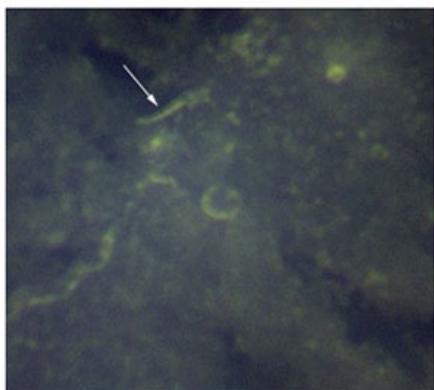
Colongitude: 79.5°

Position of crater:	Selen. Long.	Selen. Lat.
	2.0° East	21.6° North

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

Image (north up):

Comments:



Dark rays are barely visible along Conon's western rim. A strange bar (arrow) angles a short distance across the upper left of the photo. I had not noticed it before, but on review of other photos of the area, this is real and not an artifact. It deserves further attention and explanation.

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

Crater Observed: Bessarion  
Observer: Wayne Bailey Observing Station: Sewell, NJ  
Mailing Address: 17 Autumn Lane, Sewell, NJ 08080  
Telescope: Celestron SCT 28 cm f/10 + 2x Barlow  
Imaging: Skynyx 2-1M Filters: Schuler IR72  
Seeing: 5/10 Transparency: 4/6  
Date (UT): 2008/01/19 Time (UT): 01:36  
Colongitude: 43.0 Latitude: -0.8  
Position of crater: Selen. Long. Selen. Lat.  
37.3° West 14.9° North  
Lunar Atlas Used as Reference: Rukl, Atlas of the Moon, Revised Updated Ed.

Comments:

Bright band on Southwest wall flanked on north by dark band.

Image (North up): (East right):



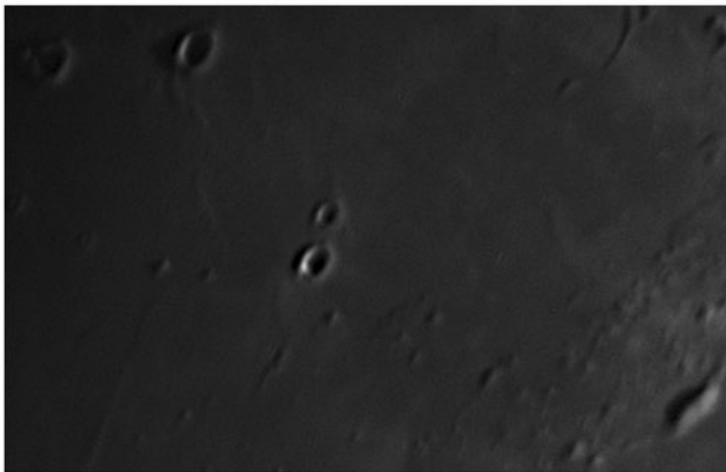
A.L.P.O. Lunar Section: Selected Areas Program Banded Craters Observing Form

Crater Observed: Bessarion  
Observer: Wayne Bailey Observing Station: Sewell, NJ  
Mailing Address: 17 Autumn Lane, Sewell, NJ 08080  
Telescope: Celestron SCT 28 cm f/10 + 2x Barlow  
Imaging: Skynyx 2-1M Filters: Schuler IR72  
Seeing: 5/10 Transparency: 4/6  
Date (UT): 2008/01/19 Time (UT): 01:36  
Colongitude: 43.0 Latitude: -0.8  
Position of crater: Selen. Long. Selen. Lat.  
37.3° West 14.9° North  
Lunar Atlas Used as Reference: Rukl, Atlas of the Moon, Revised Updated Ed.

Comments:

Bright band on Southwest wall flanked on north by dark band.

Image (North up): (East right):



# **LUNAR TRANSIENT PHENOMENA**

Coordinator – Dr. Anthony Cook – [atc@aber.ac.uk](mailto:atc@aber.ac.uk)

Assistant Coordinator – David O. Darling - [DOD121252@aol.com](mailto:DOD121252@aol.com)

## **LTP NEWSLETTER - MARCH 2008**

Dr. Anthony Cook - Coordinator

Observations for January 2008 were received from the following observers: Jay Albert (FL, USA), Clive Brook (Plymouth, UK), Maurice Collins (New Zealand) and Marie Cook (Mundesley, UK). I was particularly interested in Jay Albert's description of the Teneriffe Mountain range on 2008 Jan 16. He was observing at his local astronomy club with the fifth grade at a local school: "At 01:20, I saw two peaks illuminated within the shadow of the night side past the terminator. Both were very bright, but the more S peak had a brilliant, yellow, flame-like point that was quite beautiful. It was so impressive at 188x, that the kids and even the adults who saw it oohed and aahd and called their friends over to see it". He used a 6" Celestron Nexstar telescope at x188 with seeing at 6/10. Now compare this with an original LTP report by Hart and others from Glasgow Scotland from 1854 Dec 27 UT 18:00-23:00 (10" reflector) made under very similar illumination conditions: "Two luminous fiery spots on bright side on either side of a ridge, contrasting color. Seemed to be two active volcanoes. Ridge was normal color. Spots were yellow or flame color. Never seen before in 40 years. of observing." In the Cameron LTP catalog from 1978, the original 1854 report (Catalog ID #129) was given a high weight of a 4. Perhaps because it was seen by an experienced observer and others, and perhaps also because the report just sounds genuine. However Jay Albert's observation from January this year describes something very similar, although only one of the spots was apparently yellow this time. So my best guess is that the peaks concerned just had slopes that were catching the sunlight and so were naturally bright. Timing and viewing angle effects can make a lot of difference to how the peaks appear. Other peaks such as Piton and Pico can exhibit similar brilliance. Maybe atmospheric flaring effects in our atmosphere were to blame for the color seen on both occasions? – I sometimes see similar effects when looking at bright, but small, planetary disks or stars.

In March I plan to attend the 39th Lunar and Planetary Science Conference (LPSC) in Houston (League City), Texas. I will hope to keep you informed of any recent developments in LTP. I know for a fact that Prof. Arlin Crotts will be presenting some results of his robotic telescope LTP network and his plans for future multispectral imaging of the lunar surface, looking for permanent signs of changes to surface color. I also note that at the European Geophysical Union (EGU) conference in Vienna, Austria in April there will be one or possibly two abstracts on LTP/Radon. At EGU there is also a paper on the LEO satellite by the German Aerospace agency that in 2012 will fly within 50km of the lunar surface mapping the whole of the Mon's surface to better than 1m resolution – it will also be looking for impact flashes with a specially designed high time resolution camera. I will let you know in the next LTP article about what was said at LPSC, and hopefully a month later what was discussed at EGU. You may be able to preview the abstracts by going to the respective conference web sites on:

LPSC conference: <http://www.lpi.usra.edu/meetings/lpsc2008/pdf/program.pdf>

EGU conference: <http://meetings.copernicus.org/egu2008>

On: <http://users.aber.ac.uk/atc/LTP/ltp.htm> you will find some repeat conditions for when a feature will exhibit the same illumination and libration as was seen for a historical LTP observation from the past. By re-observing and submitting your observations, we will get a clear understanding of what the feature ought to have looked like at the time. Only this way can we really fully analyze past LTP reports. I have also included some Earthshine observing sessions.

If you have never attempted some of these repeat illumination/libration events before, please do have a go this month as there are lots on and we stand a very good chance to learn about the normal appearance of these features from which we can compare with the original LTP reports. In particular Mar 20/21, Mar 22/23, and one of the famous Alphonsus Kozyrev LTP on Mar 28th. The latter is especially important because the tidal stresses on the Moon from the gravitational pull of the Earth and the Sun will be very similar to that back in 1959 and if the presumed gas release that Kozyrev observed was due to the tides then there is a slight chance that this may re-occur. I say a “slight chance” because so far predictions of repeats of colored LTP have had a low success rate and the tidal stress explanation for release of gases from within the Moon (and this in turn becoming ionized in sunlight and seen from Earth) is still only a theory – but we should at least try and for that I need your assistance, although in this instance this is one for European observers only alas!

Further predictions, including the more numerous illumination only events can be found on the following web site: <http://users.aber.ac.uk/atc/tlp/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!

Dr. Anthony Cook, Institute of Mathematical and Physical Sciences, Aberystwyth University, Penglais, Aberystwyth, Ceredigion, SY23 3BZ, WALES, UNITED KINGDOM. Email: [atc@aber.ac.uk](mailto:atc@aber.ac.uk)

## KEY TO IMAGES IN THIS ISSUE

1. Bessarion
2. Clavius
3. Conon
4. Epidemiarum, Palus
5. Neper
6. Prinz
7. Pytheas

