



# THE LUNAR OBSERVER

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AN INDEPENDENT NEWSLETTER FOR STUDENTS OF THE MOON – MAY 2004

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## FEATURE OF THE MONTH



### BILLY (Rukl Map #40)

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

December 6, 2003 – 1:40 to 2:14 UT

15cm Newtonian – 170x – Seeing 6-7/10

I drew this crater on the evening of December 5/6, 2003 between two occultations. Billy is at the extreme southern end of Oceanus Procellarum, northwest of Gassendi. This is a modest crater with a smooth floor that was devoid of detail. The rim was complete, but seemed fairly low with modest irregularities as shown by the shadows. The floor had the same tint as the nearby 'ocean'. I could not see any breaks in its walls, but this crater may somehow have been flooded with mare material. There is mare material south and north of Billy with strips of lighter terrain to the southeast and west. Billy D is the conspicuous crater in the lighter area to the southeast, while Billy K is the pit in the 'ocean' to the northeast. The Lunar Quadrant Map shows Billy E to the south, but I saw a small peak there instead. The large elevation north of Billy is Hansteen alpha. A tiny peak was noted between that mountain and Billy, much like the one seen at Billy E's location. Several other elevations were drawn south and east of Billy, especially near Billy D. The map shows rilles south of Billy, but I saw nothing of them except perhaps a short stretch west of Billy D. There was also some wrinkling near Billy K.

# OBSERVATIONS RECEIVED

MICHAEL AMATO - WEST HAVEN, CONNECTICUT, USA

Ray maps of Menelaus (2), Messier, Aristarchus (2), Kepler (2), Proclus,

ED CRANDALL - WINSTON-SALEM, NORTH CAROLINA, USA

Digital image of Mare Imbrium

DANIEL DEL VALLE - AGUADILLA, PUERTO RICO

Digital images of Theophilus & Cyrillus & Catherina, Ammonius, Arzachel, Heraclitus, Purbach, Walter, Zach

Sketch of Timocharis, Bettinus & environs, Sirsalis

COLIN EBDON - COLCHESTER, ESSEX, ENGLAND

Sketches of Guericke, Montes Rhipaeus

WILLIAM ELSBURY – MASON CITY, IOWA, USA

Digital image of Rima Ariadaeus, Proclus (2), Theophilus, Sacrobosco & environs, Madler, Menelaus

HOWARD ESKILDSEN – OCALA, FLORIDA, USA

Digital images of Valentine Dome, Arago Domes, Apollo 16 landing site (central highlands). Ariadaeus, Colchis Highland, Janssen & Rhieta Valley, Mare Nectaris, Mare Nubium

JACK KRAMER – LILY LAKE, ILLINOIS, USA

Digital images of Aristarchus, Kepler, Tycho & Clavius, Clavius

CLAUDE LIBERT - GENT, BELGIUM

Digital images of Alpine Valley, Alphonsus, Archimedes, Cassini, Deslandres, Maurolycus, Purbach, Triesnecker

K. C. PAU – HONG KONG, CHINA

Digital images of Eratosthenes, Timocharis, Timocharis & Mare Imbrium, Philolaus, Pythagoras

JOHN SUSSENBACH – THE NETHERLANDS

Digital images of Arzachel, Copernicus (3), Clavius, Pitatus, Plato

ROBERT WLODARCZYK - CZESTOCHOWA, POLAND

Sketches of Reinhold, Gassendi & Letronne, C. Herschel & Heis

## OBSERVATIONS SUBMITTED SHOULD INCLUDE THE FOLLOWING::

Name and location of observer

Name of feature

Date and time (UT) of observation

Size and type of telescope used

Magnification (for sketches)

Medium employed (for photos and electronic images)

# FROM THE EDITOR:

This marks the final issue of TLO as an independent newsletter. Hereafter, The Lunar Observer will be an official publication of the Lunar Section of the Association of Lunar and Planetary Observers (ALPO). Much of the familiar TLO will remain, including its availability to the general public. Beginning in June, however, it will also include information specifically directed to ALPO members and projects. ALPO Lunar Observing Sections that will be contributing to this newsletter include:

Selected Areas Program,  
Bright Banded Craters,  
Dark-Haloed Craters .....

Coordinated by Julius Benton, Ph.D.  
[jlbaina@msn.com](mailto:jlbaina@msn.com)

Lunar Transient Phenomena .....

Coordinated by Dr. Anthony Cook  
[cc@cs.nott.ac.uk](mailto:cc@cs.nott.ac.uk)

Assisted by David O. Darling  
[DOD121252@aol.com](mailto:DOD121252@aol.com)

Lunar Dome Survey .....

Coordinated by Marvin Huddleston, F.R.A.S.  
[kc5lei@comcast.net](mailto:kc5lei@comcast.net)

Topographical Studies,  
Bright Impact Rays .....

Coordinated by William Dembowski, F.R.A.S.  
[dembowski@adelphia.net](mailto:dembowski@adelphia.net)

Meteoritic Impact Search .....

Coordinated by Brian Cudnik  
[cudnik@sbcglobal.net](mailto:cudnik@sbcglobal.net)

Lunar & Solar Eclipses .....

Coordinated by Michael Reynolds, Ph.D.  
[astrogator90@aol.com](mailto:astrogator90@aol.com)

Although it is not necessary to be an ALPO member in order to submit observations to the above research projects, it is recommended that you join the Association in order to gain the full benefit of the observing programs.

Clear & steady skies, WMD .....

# LUNAR CALENDAR – MAY 2004 (UT)

04 . . . 20:34 . . . Full Moon – Total Lunar Eclipse  
(Not visible from North America)

06 . . . 05:00 . . . Moon at Perigee (223,576 miles – 359,801 km)

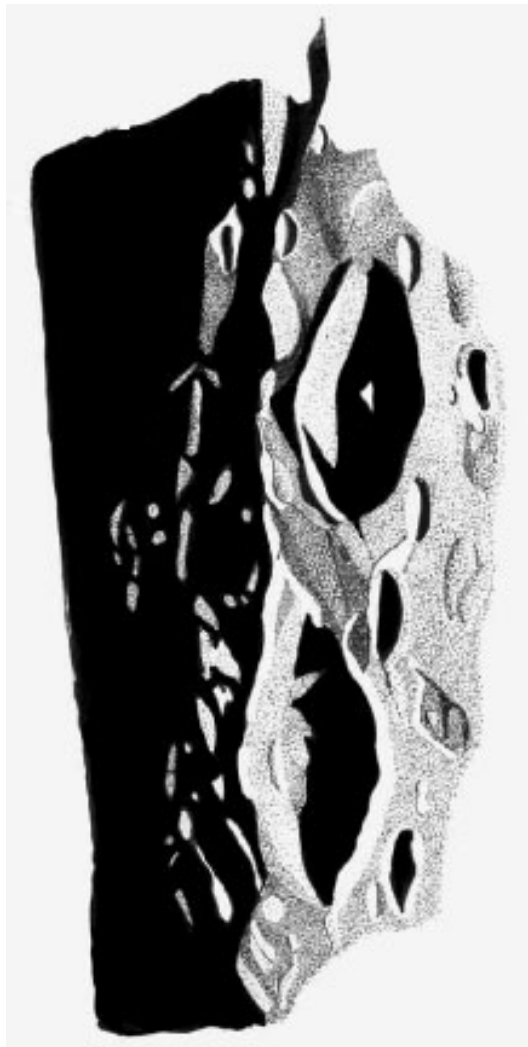
11 . . . 11:05 . . . Last Quarter

19 . . . 04:53 . . . New Moon (Start of Luration 1007)

21 . . . 12:00 . . . Moon at Apogee (252,441 miles – 406,253 km)

27 . . . 07:57 . . . First Quarter

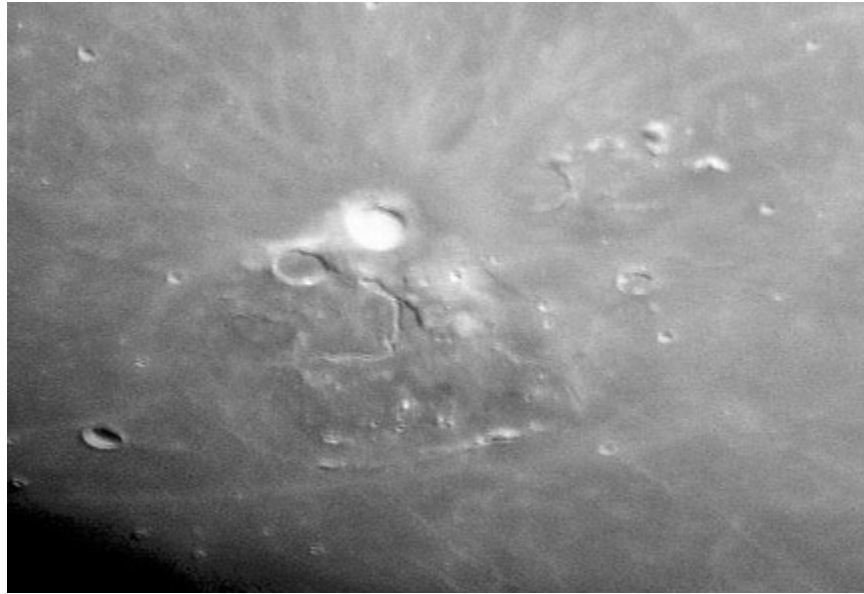
## TOPOGRAPHICAL STUDIES



STEVINUS & SNELLIUS

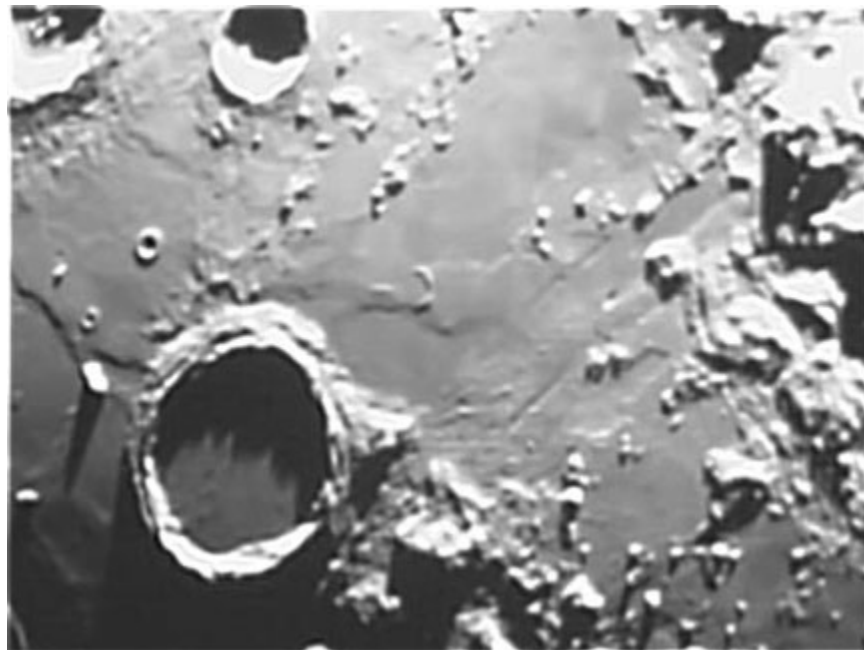
Sketch by Colin Ebdon – Colchester, Essex, England  
January 10, 2004 – 10 inch Newtonian – 183x 236x

# TOPOGRAPHICAL STUDIES



## ARISTARCHUS

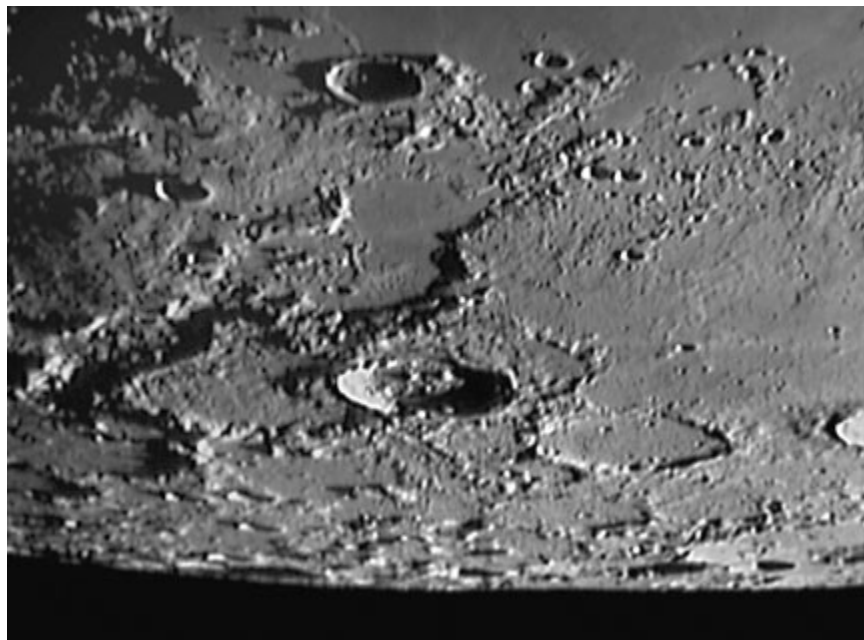
Digital Image by Jack Kramer – Lily Lake, Illinois, USA  
April 2, 2004 - 6 inch Refractor – Sony S70 CCD Camera



## ARCHIMEDES

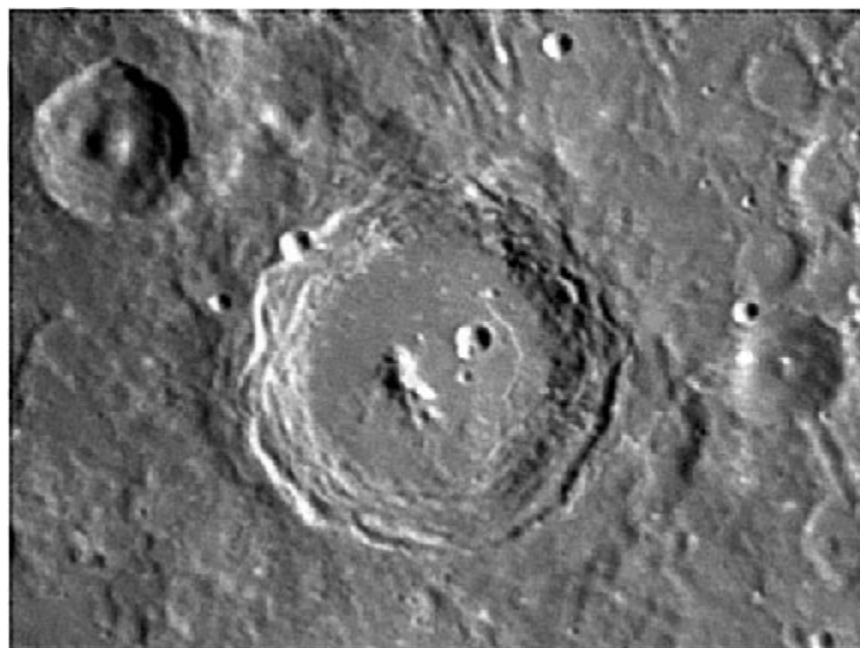
Digital Image by Claude Libert – Gent, Belgium  
April 13, 2004 – 12 inch SCT – Sony CCD Digital Camera

# TOPOGRAPHICAL STUDIES



## PHILOLAUS

Digital Image by K.C. Pau – Hong Kong, China  
February 13, 2004 – 10 inch Newtonian – Philips Toucam Pro



## ARZACHEL

Digital Image by John Sussenbach – The Netherlands  
March 30, 2004 – 11 inch SCT – Philips Toucam Pro