

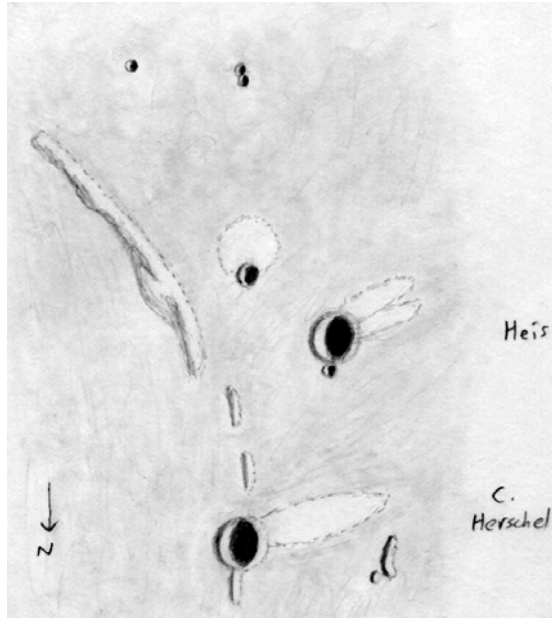
THE LUNAR OBSERVER

AN INDEPENDENT NEWSLETTER FOR STUDENTS OF THE MOON . . . JANUARY 2001

EDITED BY: Bill Dembowski - ALPO Coordinator, Lunar Topographical Studies - President, American Lunar Society

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FEATURE OF THE MONTH



C. HERSCHEL ($34.5^{\circ}\text{N} - 31.2^{\circ}\text{W}$) & HEIS ($32.4^{\circ}\text{N} - 31.9^{\circ}\text{W}$)

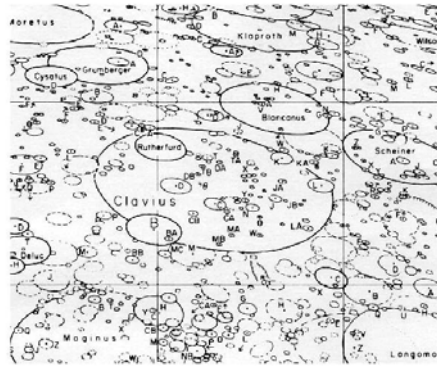
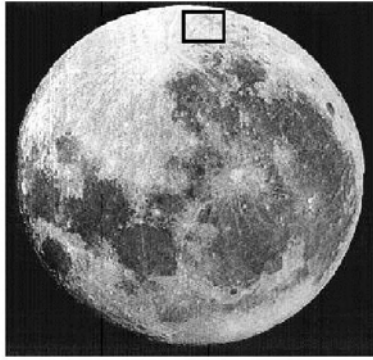
Sketch and Text by Robert H. Hays, Jr. - Worth, Illinois, USA

July 25, 2000 - 6 inch Newtonian - 170X - Seeing 7-8/10

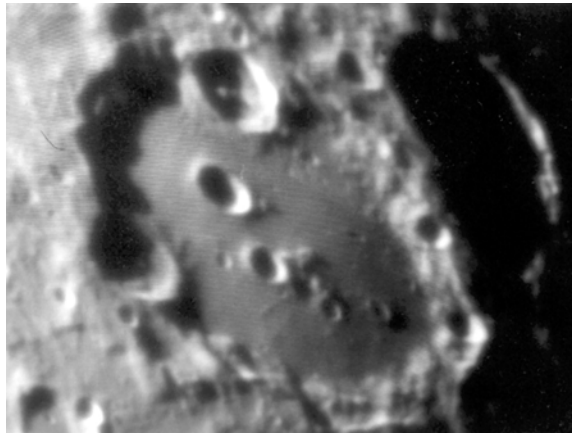
I sketched these craters and vicinity on the morning of July 25, 2000 shortly after timing reappearances of 9th magnitude stars that formed a close double. These craters are in northwest Mare Imbrium. The crater Heis D is southeast of Heis, while Heis A is on the north rim of Heis. Three small craters were noted to the south of these features. The large peak (with a small companion) west of C. Herschel is Herschel zeta. A wrinkle ridge was seen east of Heis and northeast of the three small craters previously mentioned. This ridge tried to split in two near Heis D as though going around a knot in wood. I saw three low ridges bracketing C. Herschel that approximately continued the line of the wrinkle ridge. There were variously shaped bright patches adjoining the three largest craters in this sketch to the south and west. They didn't look like ordinary rays and there was no indication of relief.

Editor: This region of the Moon can be found on Map 10 of Rukl's Atlas of the Moon.

EXPLORING THE MOON



Map used with permission of Lunar & Planetary Laboratory - University of Arizona



Hybrid Image by Bill Dembowski - Elton, Pennsylvania, USA
July 22, 1999 - 5 inch Refractor - Seeing 4/10
Astrovid Video Camera - Photograph of High Resolution Monitor

Too often we ignore the beauty of the "classic" craters in search of obscure rilles, rays, and domes. This month take the time to revisit and explore Clavius. With a diameter of 140 miles (225 km), Clavius is one of the most spectacular and easy to locate craters on the Moon. In addition, it comes into prominence around the time of First Quarter, one of the most popular times to view the Moon.

The walls of Clavius are punctuated by two major craters, Porter on the northeast and Rutherford on the southeast. Both craters are in the 30 mile (50 km) range and have central peaks. The peaks are quite dissimilar however, and warrant a serious comparison. A series of ridges radiate from Rutherford onto the floor of Clavius but are not always easy to see. The floor of Clavius itself is a treasure house of details, a trait which makes it a favorite for assessing the quality of a lunar telescope or camera. It is the reason, in fact, why I chose Clavius as the subject of the first image (above) taken with a new imaging system.

Center stage on the floor of Clavius is a sweeping arc of small craters, each of diminishing size. Seemingly anchored by Rutherford on the southeast rim the first crater in the arc that we encounter is Clavius D (17 miles, 28 km). Clavius D has a central peak which can be rather difficult to spot because of the depth of the crater in comparison to the height of the peak. Clavius D is followed by Clavius C (13 miles, 21 km), Clavius N (8 miles, 13 km), and Clavius J (7.5 miles, 12 km). Dozens of other, smaller craters dot the floor of Clavius making it a real eyeful when near the terminator. Be sure, however, to also check the floor of Clavius under a high sun for rays sweeping across its floor from nearby Tycho.

RECEIVED DURING THE MONTH

MICHAEL AMATO - WEST HAVEN, CONNECTICUT, USA

Ray Maps of Proclus (3), Messier (3), Menalaus (4)

DANIEL DEL VALLE - AGUADILLA, PUERTO RICO

Sketches of Anaxagoras (5), Cauchy & domes, Valentine dome, Triesnecker

COLIN EBDON, COLCHESTER, ESSEX, ENGLAND

Sketches of Eratosthenes & Stadius, Proclus & Palus Somnii

RAFFAELLO LENA - ROME, ITALY

Sketch of Unnamed feature near Atlas

HARRY PULLEY - GUELPH, ONTARIO, CANADA

CCD Images of Menelaus, Thales, Stevinus A & Furnerius A

ROBERT WLODARCZYK - CZESTOCHOWA, POLAND

Sketches of Picard & Yerkes, Petavius, Unnamed feature near Atlas

LUNAR CALENDAR - JANUARY 2001 (UT)

2 22:32 First Quarter
6 02:00 Moon 2.0 Degrees SSE of Saturn
9 20:25 Full Moon (Total lunar eclipse)
10 09:00 Moon at Perigee (221,910 miles - 357,120 km)
16 12:36 Last Quarter
21 04:00 Moon 0.72 Degrees N of asteroid Ceres
24 13:08 New Moon (Start of Lunation 966)
24 19:00 Moon at Apogee (252,626 miles - 406,551 km)
26 05:00 Moon 2.9 Degrees SSE of Mercury
27 10:00 Moon 0.75 Degrees NNW of asteroid Vesta

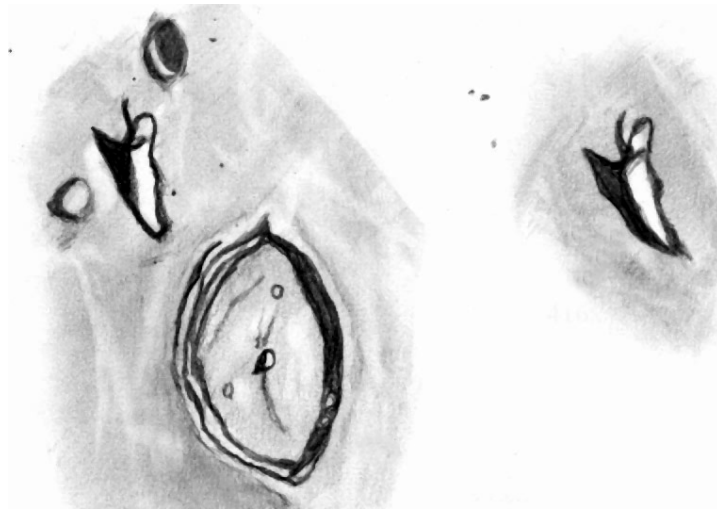
From the Editor:

This issue marks the beginning of the fifth year of publication of The Lunar Observer. I would like to thank all the faithful readers and contributors who are truly the ones responsible for whatever success this newsletter has enjoyed.

Raffaello Lena of the Geologic Lunar Research Group submitted an observation of the unnamed feature near the crater Atlas which is included in this month's Topographical Studies section. His organization has a fine website located at <http://digilander.iol.it/gibbidomine/> This site will soon include a report on this fascinating feature; be sure to check it out.

Clear and steady skies WMD

TOPOGRAPHICAL STUDIES

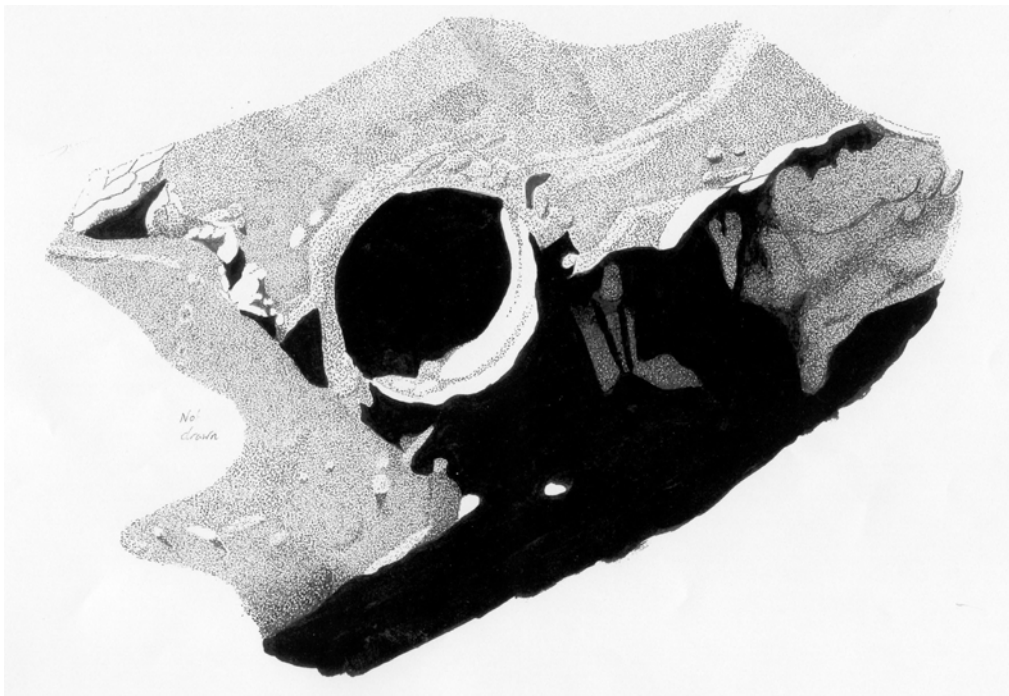


UNNAMED FEATURE NEAR ATLAS

Sketches by Raffaello Lena - Rome, Italy

August 17, 2000 - 250mm SCT

250X (Left) - 416X (Right)



ERATOSTHENES & STADIUS

Sketch by Colin Ebdon - Colchester, Essex, England

June 10, 2000 - 10 inch Newtonian - 183X