



# THE LUNAR OBSERVER

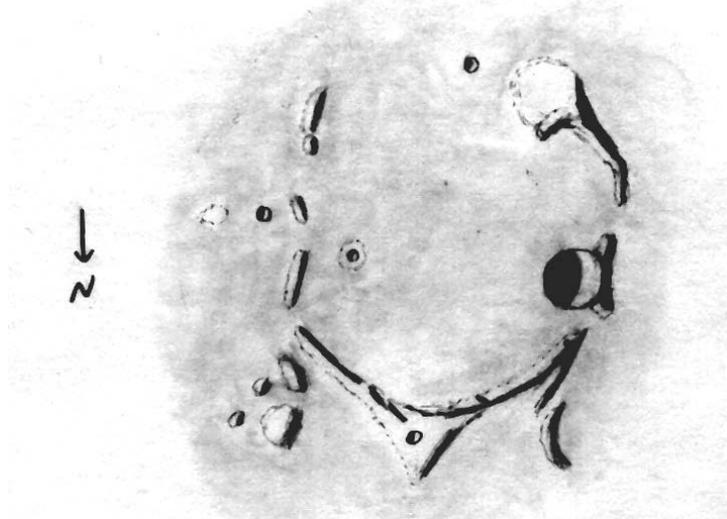
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AN INDEPENDENT NEWSLETTER FOR STUDENTS OF THE MOON . . . APRIL 2003

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## FEATURE OF THE MONTH



LADE – (1.3°S – 10.1°E)

Sketch and Text by Robert H. Hays, R. – Worth, Illinois, USA  
November 13, 2002 – 15cm Newtonian – 170X – Seeing 5-7/10

I sketched this crater on the evening of November 12/13, 2002 between the occultations of two faint stars. This broken crater is located northeast of Hipparchus. Lade has a fairly complete north rim, fragmentary east and west rims, but has nothing resembling a south rim. The general area has a light gray tint, though it is not in any mare area. The floor of Lade appeared very smooth with no hills and two craters. Lade M is the largest intact crater on the sketch. A tiny crater pit not on the Lunar Quadrant Map was noted inside the east rim of Lade, and had a small, bright halo. Outside Lade's east rim is Lade X; this small crater had no halo. I did see a small, bright spot east of Lade X, but was unable to note any shadow there. I noted Saucer S near the open south end of Lade, and an unnamed pit in a swelling along the north rim of Lade. There was a varied assortment of elevations which the sketch describes better than words. Partial ghost rings may be indicated by a short, curved spur northwest of Lade X and a curved ridge outside the northwest rim of Lade.

Editor: Lade can be found on Map 45 of Rukl's Atlas of the Moon.

# OBSERVATIONS RECEIVED

MICHAEL AMATO - WEST HAVEN, CONNECTICUT, USA  
Ray Maps of Aristarchus, Kepler

P.J. ANWAY – MUNISING, MICHIGAN, USA  
Sketch of Gassendi

ED CRANDALL - WINSTON-SALEM, NORTH CAROLINA, USA  
CCD Image of Pitatus, Mare Humorum, Hercules & Atlas, Mare Nectaris, Southern Highlands

DANIEL DEL VALLE - AGUADILLA, PUERTO RICO  
CCD Images of Darwin, Piazzzi, Aristarchus & Schroter's Valley (3), Copernicus, Inghirami & Schickard, Tycho & Maginus, Lacus Timoris, Rupes Mercator & Kies, Newton, Harbinger Mountains, Piccolomini & Altai Scarp

ROBERT H. HAYS, JR. - WORTH, ILLINOIS, USA  
Sketches of Rupes Recta, Rima Hesiodus, Atlas A & Atlas Companion, Atlas Companion, Democritus  
Photograph of Atlas & Atlas Companion  
Timings of 76 stars occulted by the Moon

K. C. PAU – HONG KONG, CHINA  
CCD Images of Rima Ariadaeus, Rima Hyginus, Valentine Dome, Rimae Hadley & Fresnel, Guericke, Pitavius, Rima Hyginus

ROBERT WLODARCZYK - CZESTOCHOWA, POLAND  
Sketches of Gassendi, Vitello & Lee & Doppelmayer

## LUNAR CALENDAR – APRIL 2003 (UT)

01 . . . 19:19 . . . New Moon (Start of Lunation 993)  
04 . . . 04:00 . . . Moon at Apogee (252,407 miles – 406,199 km)  
09 . . . 23:40 . . . First Quarter  
11 . . . 09:00 . . . Moon 3.9 Degrees NNE of Jupiter  
16 . . . 19:36 . . . Full Moon  
17 . . . 05:00 . . . Moon at Perigee (221,927 miles – 357,147 km)  
23 . . . 08:00 . . . Moon 3.3 Degrees S of Mars  
23 . . . 12:19 . . . Last Quarter  
24 . . . 07:00 . . . Moon 3.0 Degrees SSE of Neptune

Just as deep sky observers look for interesting objects between the stars,  
lunar observers can find many treasures

## BETWEEN THE CRATERS



### ALTAI SCARP

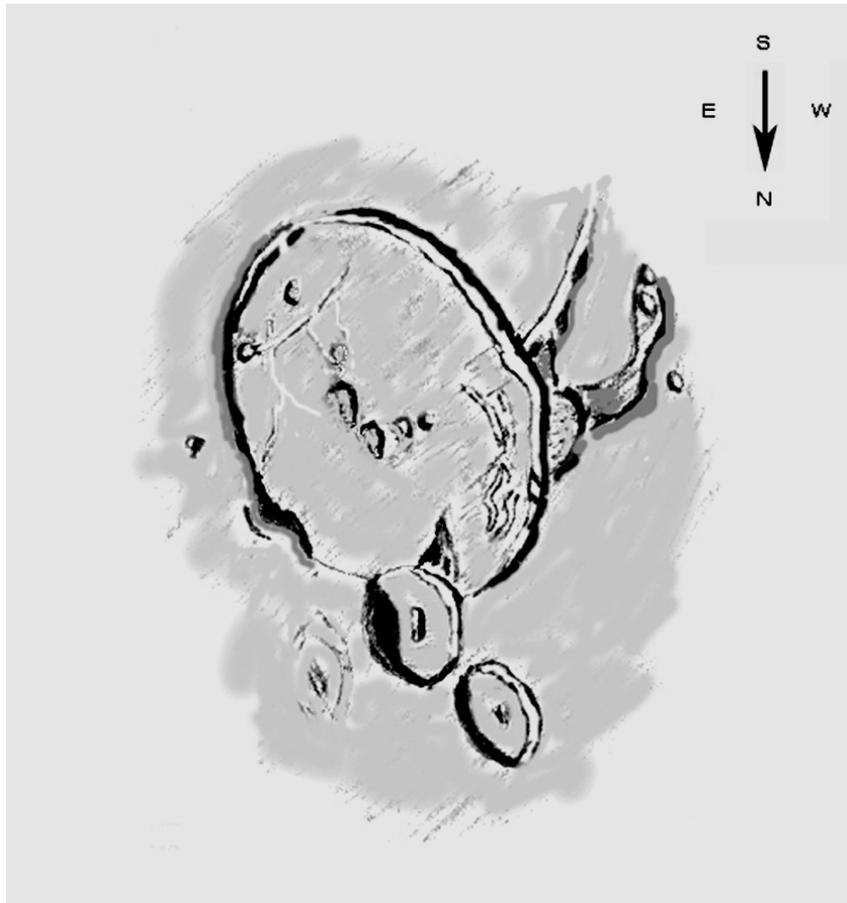
CCD Image by Daniel del Valle – Aguadilla, Puerto Rico  
March 22, 2003 – 8 inch SCT – Logitech QuickCam

#### Text by Bill Dembowski

Following the southern and western curve of Mare Nectaris, at a distance of roughly 250 km (150 miles), is the Altai Scarp. Originally thought to be a mountain range and, therefore, listed as Montes Altai in some older references, it is actually an escarpment. This means that it is not the result of an upheaval of the lunar surface, but rather the collapse of adjoining ground. It runs for about 480 km (300 miles) from the crater Piccolomini in the south to an area just east of Tacitus in the north. Although the ground falls away rapidly in the direction of Mare Nectaris, giving it a height of about 1,800 meters (6,000 ft.), it isn't much higher than its surroundings on the opposite side. It can be seen, even through binoculars, as a distinct dark line trailing like a tail behind Piccolomini.

Mare Nectaris is approximately 350 km (217 miles) in diameter, but it represents only a portion of the Nectaris Basin. The Basin has a diameter of approximately 860 km (535 miles) with Rupes Altai marking the outer ring of the multiring basin. As you view the Altai Scarp, keep this in mind, and see if you can “extend” its length by detecting additional evidence of the outer ring. This region of the Moon is heavily cratered so it will be easy to be led astray, but that's all part of the fun.

# LUNAR NOTEBOOK



## GASSENDI

Sketch and Notes by P.J. Anway – Munising, Michigan, USA  
March 14, 2003 (2:30 UT) – 8 inch f/7 Newtonian – 200X

### Observing notes:

I sketched Gassendi when it was about 200 miles from the terminator and the sun was about 20 degrees altitude. The relief seemed to bring out Rimae Gassendi, the complex system of clefts inside the 470 square miles of walled plain. This network of rilles is my favorite feature of Gassendi and their appearance changes considerably with relatively small changes of lighting angle.

Besides the system of rilles, there is an impressive central mountain complex that consists of three main peaks. I also was able to make out four smaller potmarks on the floor of the plain.

Another feature of interest is a triangular shadow that protrudes south and west from Gassendi A. I notice this in almost every image or sketch of Gassendi where the floor of the plain is lit. There is no evident formation on the lettered crater that could cause this feature of Gassendi's floor and I have yet to read any information about it. I would welcome any reader's input about its origin.

# RESPONSE TO TLO's MARCH LUNAR CHALLENGE



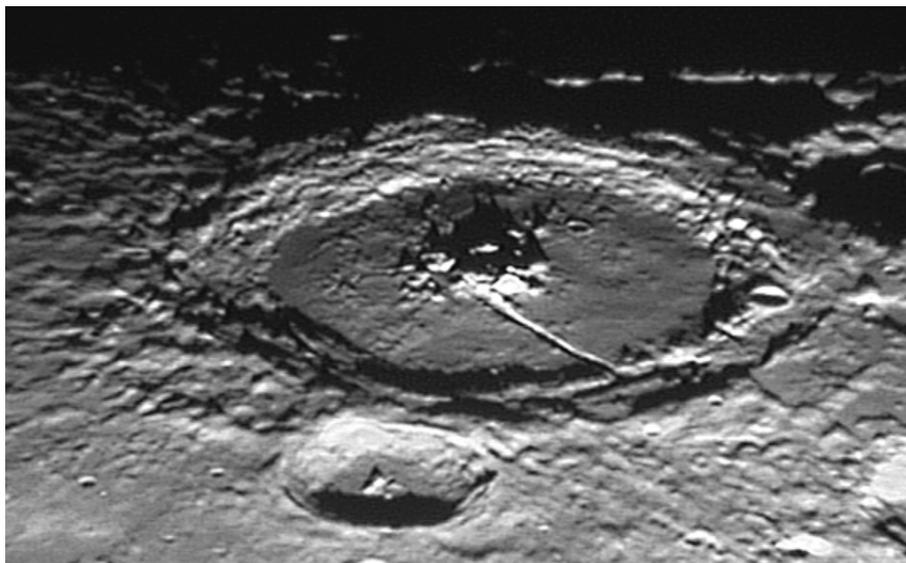
## CRATER CHAIN ON RIM OF HERCULES

Enlarged portion of CCD image

Ed Crandall – Winston-Salem, North Carolina, USA

March 11, 2003 – 10 inch Newt. – Starlight Xpress HX-516

# TOPOGRAPHICAL STUDIES

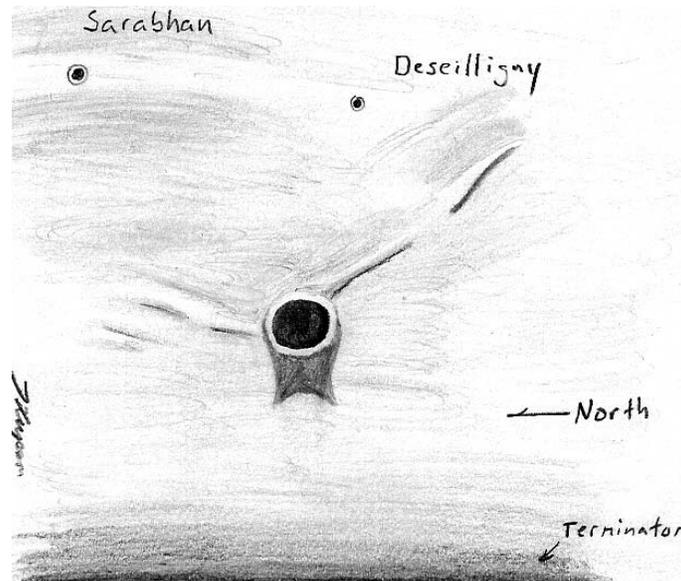


## PETAVIUS

CCD Image by K.C. Pau – Hong Kong, China

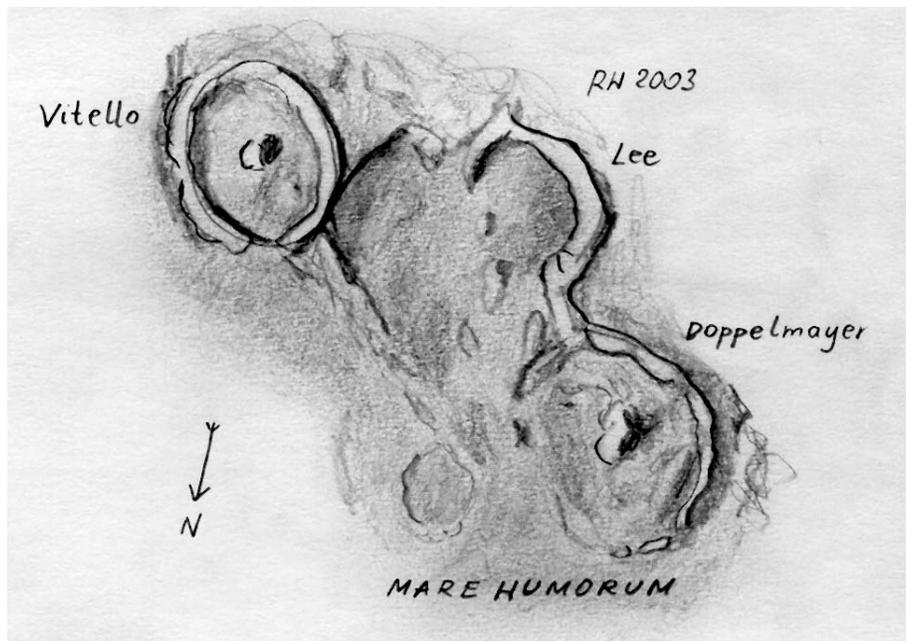
February 19, 2003 – 212mm Newt.-Cass.

# TOPOGRAPHICAL STUDIES



## BESSEL

Sketch by Walter Kupson III – Middlebury, Connecticut, USA  
February 7, 2003 - 8 inch Meade Starfire Newtonian – 228X



## VITELLO, LEE, & DOPPELMAYER

Sketch by Robert Włodarczyk – Czestochowa, Poland  
February 12, 2003 - 150mm Newtonian – 120X