AN INDEPENDENT NEWSLETTER FOR STUDENTS OF THE MOON - February 2004 EDITED BY: William M. Dembowski, FRAS - Elton Moonshine Observatory 219 Old Bedford Pike (Elton) - Windber, PA 15963 - Dembowski@Adelphia.net

## FEATURE OF THE MONTH



> SCORESBY ( $77.7^{\mathrm{O}} \mathrm{N}-14.1^{\mathrm{O}} \mathrm{E}$ ), CHALLIS, \& MAIN Sketch and Text by Robert H. Hays, Jr. - Worth, Illinois, USA July 16, 2003 - 10:00 to 10:22 UT - Seeing 7-8/10

> 15 cm Newtonian Reflector - 170x

I drew these craters near the lunar north pole on the morning of July 16, 2003 after a nearly grazing occultation of 6th magnitude ZC 3227. The lunar libration was favorable for these craters so they were better placed than usual for observation. They caught my eye since the star disappeared near them. Scoresby is a fairly large crater with two peaks inside its southern rim, a short ridge west of center, and two small craters inside the north rim that made a close pair. The shallow crater south of Scoresby is Scoresby P, according to the Lunar Quadrant Map. To the west are two partial rings, the larger being Scoresby Q. Some strips of shadow were seen north and east of Scoresby, some parallel to its rim. Challis and Main are two smaller craters northwest of Scoresby. I saw no detail on their floors except for a bit of shadow inside the west rim of Main. I also saw a small crater along the northeast rim of Main. I could not see a common wall between these craters. There is a break in the rims where their floors overlap. These two craters also appear to be much shallower than Scoresby; perhaps they have been flooded.

## OBSERVATIONS RECEIVED

MICHAEL AMATO - WEST HAVEN, CONNECTICUT, USA
Ray Maps of Menelaus(3), Messier(3), Proclus(3), Kepler(4), Aristarchus(4)
Sketch of Plato

RAFAEL BENAVIDES - CORDOBA, SPAIN
Digital Images of Doppelmayer, Gassendi, Hainzel, Montes Gruithuisen, Montes Harbinger

ED CRANDALL - WINSTON-SALEM, NORTH CAROLINA, USA
Digital Images of Archimedes, Gassendi

DANIEL DEL VALLE - AGUADILLA, PUERTO RICO
Digital Images of Helmholtz, Plato, Cassini, Parrot, Walter, Apennine Mts.,

## HOWARD ESKILDSEN - OCALA, FLORIDA, USA

Digital Images of Plato \& Mare Imbrium(2), Copernicus \& Eratosthenes, Clavius \& Tycho

ROBERT H. HAYS, JR. - WORTH, ILLINOIS, USA
Complete report of total lunar eclipse including 5 sketches, 6 photographs, umbral contact timings, and crater timings.

JACK KRAMER - LILY LAKE, ILLINOIS, USA
Digital Image of Mare Nectaris
K. C. PAU - HONG KONG, CHINA

Digital Images of Manilius, Madler, Lamont, Dorsa Smirnov, Archimedes

JOHN SUSSENBACH - THE NETHERLANDS
Digital Images of Aristarchus, B.Bond, Bullialdus, Burg, Clavius, Copernicus, Erathostenes, Fracastorius, Gassendi

ALEXANDER VANDENBOHEDE - BELGIUM
Digital Images of Strabo, Kies, Konig

## TARGET: ATLAS



## ATLAS \& HERCULES <br> Image by K.C. Pau - Hong Kong, China <br> June 17, 2003 - 19:15 UT <br> CN212 Telescope - 2x Barlow - Philips TouCam Pro

## Text by Bill Dembowski:

Near the northeastern limb of the Moon lies a magnificent pair of craters Hercules and this month's target, Atlas. Atlas has a diameter of 87 km with walls that rise 3,000 meters above its surroundings. The interior is relatively bright and, rather than a major central peak, has a small group of central hills. There are also what appear to be the remnants of a ring concentric to the outer walls.

Of great interest are three systems of rilles that cross the crater's floor. In addition to observing these rilles shortly after sunrise on Atlas, about four days after New Moon, give them a good look about three days after Full Moon. They often present themselves well at this time and three nights after Full Moon is not too late in the evening to catch a good look at the Moon.

Another fascinating feature on the floor of Atlas is its pair of dark spots, one to the north and the other to the south. Both have been reported as being variable in tonality. Large telescopes have revealed the presence of central craters in the dark spots suggesting some volcanic involvement. Plotting the tonality of the spots over time would be a project of great interest.

This striking crater can be found on Map \#15 of Rukl's Atlas of the Moon

## LUNAR CALENDAR - FEB. 2004 (UT)

$03 \ldots$ 04:00 $\ldots$ Moon 4.5 Degrees N of Saturn
$06 \ldots 08: 49 \ldots$ Full Moon
$07 \ldots 09: 00 \ldots$ Moon 4.4 Degrees NNE of Regulus
$11 \ldots$ 10:00 $\ldots$ Moon 3.9 Degrees NNE of Spica
$13 \ldots$ 13:40 $\ldots$ Last Quarter
$16 \ldots 08: 00 \ldots$ Moon at Perigee $(228,865$ miles $-368,312 \mathrm{~km})$
$19 \ldots 03: 00 \ldots$ Moon 5.0 Degrees SSE of Neptune
$20 \ldots 09: 20 \ldots$ New Moon (Start of Lunation 1004)
$23 \ldots$ 22:00 $\ldots$ Moon 2.7 Degrees SSE of Venus
$26 \ldots 02: 00 \ldots$ Moon 0.84 Degrees SSE of Mars
$27 \ldots$ 10:00 $\ldots$ Moon 2.6 Degrees SSE of Pleiades
$28 \ldots 03: 24 \ldots$ First Quarter
$28 \ldots 04: 00 \ldots$ Moon 7.7 Degrees NNW of Aldebaran
$28 \ldots$ 11:00 $\ldots$ Moon at Apogee $(251,195$ miles $-404,248 \mathrm{~km})$

## TOPOGRAPHICAL STUDIES



## KIES

Image by Alexander Vandenbohede - Gent, Belgium
November 4, 2003-19:40 UT
$20 \mathrm{~cm} \mathrm{f} / 15$ Refractor - Webcam (Afocal)

## TOPOGRAPHICAL STUDIES



## MARE NECTARIS

Image by Jack Kramer - Lily Lake, Illinois, USA June 26, 2001 - 08:50 pm CDST
4 inch Refractor - 10mm Radian eyepiece - Sony S70


## LACUS MORTIS \& BURG

Image by John Sussenbach - The Netherlands September 15, 2003
11 inch SCT - 3x Barlow - Toucam Pro

## TOPOGRAPHICAL STUDIES



## DOPPELMAYER

Image by Rafael Benavides - Posadas, Cordoba, Spain
January 3, 2004-20:40 UT
9-1/4 inch SCT - 2x Barlow - Toucam Pro


## LAMONT

Image by K.C. Pau - Hong Kong, China
December 29, 2003 - 12:09 UT
10 inch Newtonian - 2.5x Barlow - Toucam Pro

