



# THE LUNAR OBSERVER

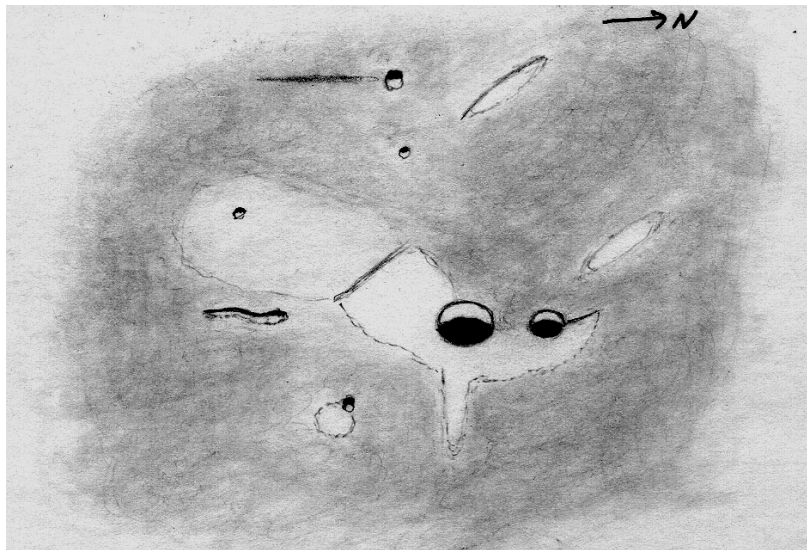
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AN INDEPENDENT NEWSLETTER FOR STUDENTS OF THE MOON – OCTOBER 2003

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## FEATURE OF THE MONTH



BESSARION – (14.9°N – 37.3°W)

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

February 13, 2003 – 15cm Newtonian – 170x – Seeing 5-7/10

I sketched this crater and vicinity on the evening of February 12/13, 2003 while timing three occultations. Bessarion is in Oceanus Procellarum, north of Kepler. It has a halo which is quite irregular. The halo is brightest south and east of Bessarion, but was not noticed to the northwest of this crater. This halo also wraps itself partway around Bessarion E (north of Bessarion), ending in a strip of shadow extending north from E. I noticed a sharp projection of this halo, much like an ordinary ray, east of Bessarion. To the southwest, a strip of shadow separates the bright halo at Bessarion from a less bright area to the southwest (but still brighter than the mare). I saw a small peak in this less bright area. The larger peak Bessarion eta lies southeast of Bessarion and has a small bright area to its east. A short ridge with two bands was seen southwest of Bessarion eta. West of Bessarion are the peaks Bessarion zeta and theta with a short wrinkle noted south of theta. North of these two peaks was a bright streak with a bit of shadowing noted. A similar bright streak was seen west of Bessarion E, but this feature had no shading. There are no other craters on this sketch other than Bessarion and Bessarion E.

# OBSERVATIONS RECEIVED

ED CRANDALL - WINSTON-SALEM, NORTH CAROLINA, USA  
CCD Image of South-Central Region, Clavius, Mare Imbrium & Mare Frigoris

DANIEL DEL VALLE - AGUADILLA, PUERTO RICO  
CCD Images of Proclus, Maurolycus, Theophilus, Zagut, Gassendi (4), Pythagoras

WILLIAM ELSBURY – MASON CITY, IOWA, USA  
Video Stills of Mare Imbrium, Aristillus & Cassini & Archimedes, Insularum Aestuum, Caucasus Mountains (2), Triesneker Area

HOWARD ESKILDSEN – OCALA, FLORIDA, USA  
CCD Image of Mare Crisium, 17-day Moon, Ray Systems of Copernicus & Kepler & Aristarchus

JACK KRAMER - LIBERTYVILLE, ILLINOIS, USA  
CCD Images of Mare Crisium (3), Mare Fecunditatis

K. C. PAU – HONG KONG, CHINA  
Video Stills of Copernicus & Kepler & Aristarchus, Messier & Messier A, Valentine Dome, Rima Hadley, Eudoxus, Dorsum Buckland, Bessel, Rimae Triesnecker, Rupes Recta

DOUG SLAUSON – SWISHER, IOWA, USA  
CCD Images of Aristarchus & Herodotus, Petavius, Guithuisen

ROBERT WLODARCZYK - CZESTOCHOWA, POLAND  
Sketches of Deslandres, Sinus Iridum

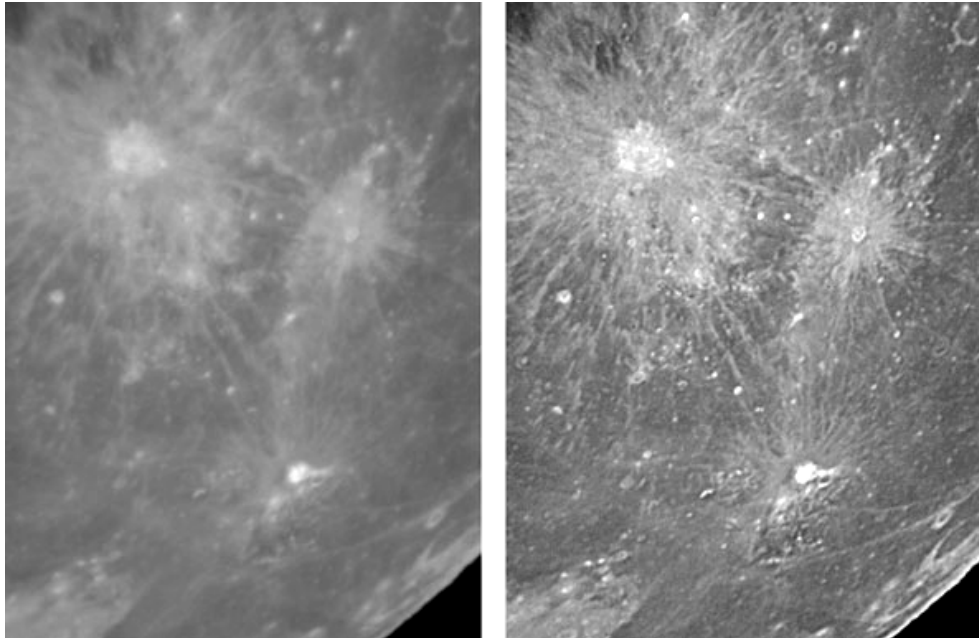
## From the Editor:

Observations submitted for publication are best if they 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)

Clear and steady skies ..... WMD

# IMAGE ENHANCEMENT



BEFORE

AFTER

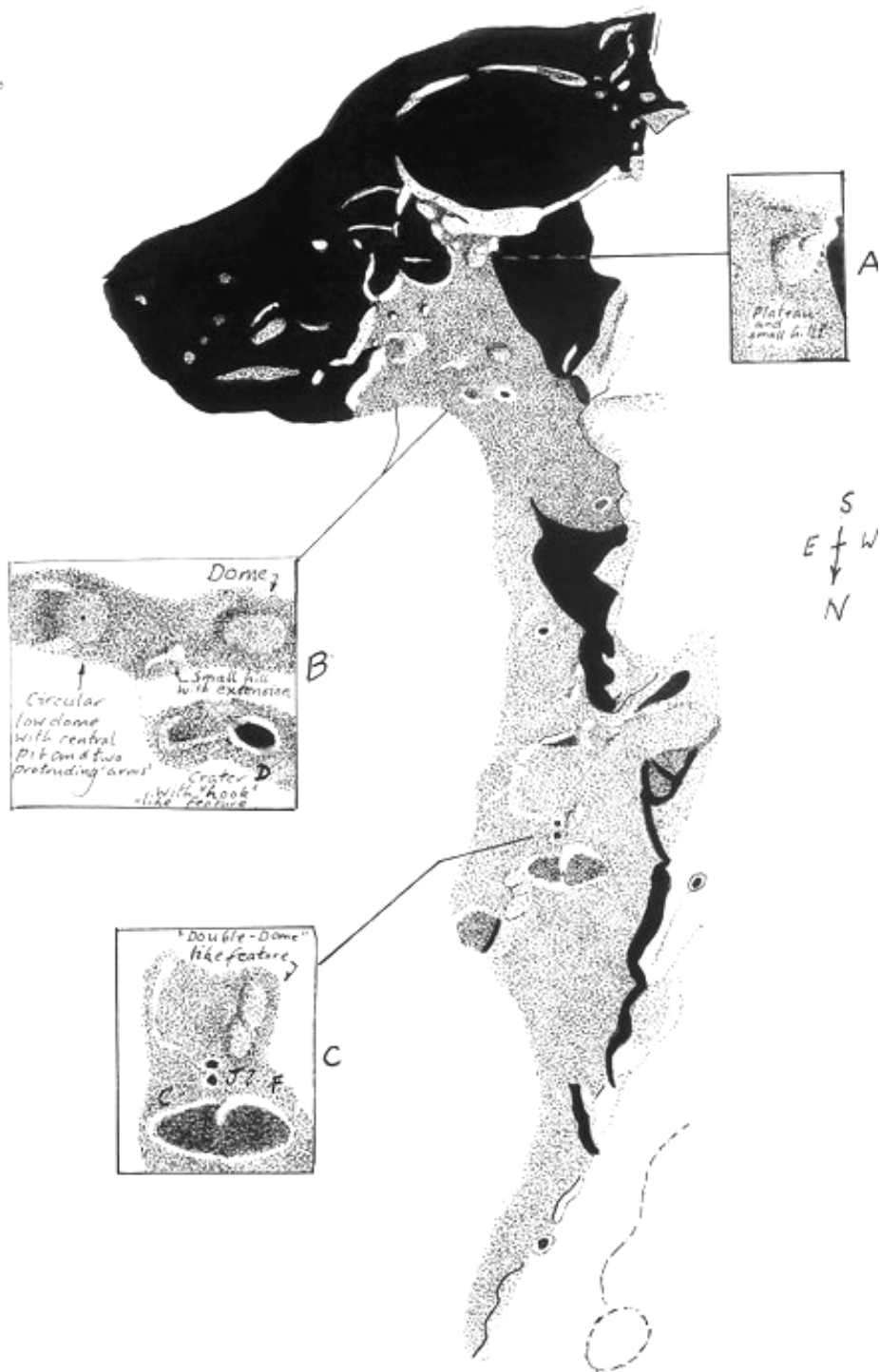
Ray Systems of Copernicus, Kepler, & Aristarchus  
CCD Image by Howard Eskildsen – Ocala, Florida, USA  
September 13, 2003 – Meade ETX-125 & Nikon Coolpix 880

The above images clearly show the advantages of digital image enhancement. Howard Eskildsen used Adobe Photoshop Elements to perform unsharp masking and to improve brightness and contrast on the “Before” image to achieve the “After”. The increase in information realized from these procedures is immediately apparent.

## LUNAR CALENDAR – OCT. 2003 (UT)

- 02 . . . 19:11 . . . First Quarter
- 05 . . . 02:00 . . . Moon 5.1 Degrees SSE of Neptune
- 10 . . . 07:27 . . . Full Moon
- 14 . . . 03:00 . . . Moon at Apogee (252,085 miles – 405,680 km)
- 18 . . . 12:32 . . . Last Quarter
- 25 . . . 12:50 . . . New Moon (Start of Lunation 1000)

# LUNAR NOTEBOOK



## ALTAI SCARP

Sketch and Notes by Colin Ebdon – Colchester, Essex, England  
October 5, 2001 – 10 inch Newtonian – 236x

# Notes on sketch of Altai Scarp – Colin Ebdon

This was intended to be one in a series of drawings of the appearance of the Altai Scarp under various lighting conditions. However, my attention was increasingly drawn to the topographical detail to the East of the scarp, which displayed a number of interesting features worthy of closer scrutiny, and requiring confirmation by others.

The surface was very rough in places and difficult to depict with accuracy. However, some features of note were recorded, and would be worth following up on nights of fine seeing. These can be described as per the inset drawings on the observation as:

- A) A small plateau, or dome-like feature adjoining Piccolomini, with a small hill or peak on top.
- B) A well recorded dome, shown in Rukl's atlas, with a number of interesting features nearby, comprising the crater D, which appeared to have a hook-like extension terminating in a shallow depression. A small hill, with a short, bright, extension, and a low, circular, dome-like feature with a central pit, and having two extending 'arms'. The latter object is not shown in Rukl, but does seem to be clearly depicted in the 'Times' Atlas – although seemingly more in the position of the better known classical dome, which does not seem to be separately shown in the 'Times' at all!
- C) A small 'double dome' like feature, adjoining two craterlets, the northernmost one probably being the crater J, itself adjacent to the doublet C/F.

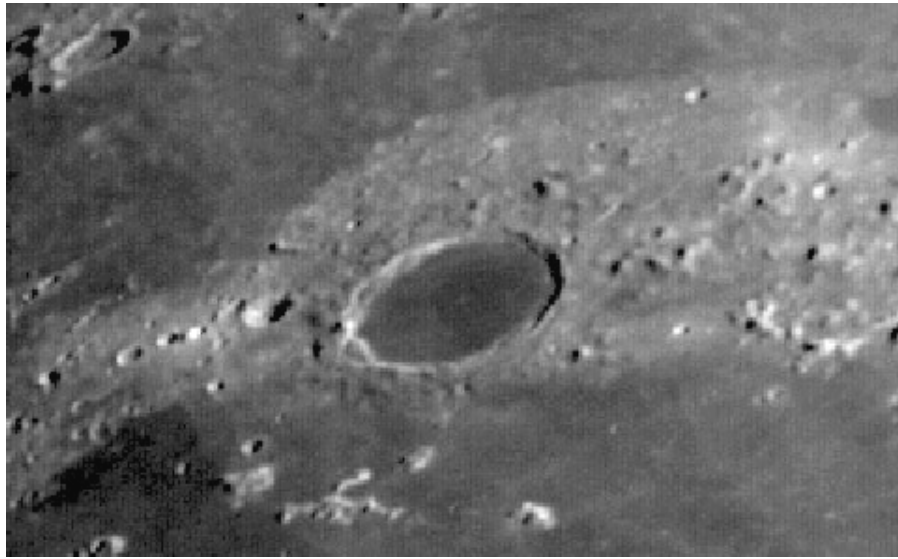
## TOPOGRAPHICAL STUDIES



### PYTHAGORAS

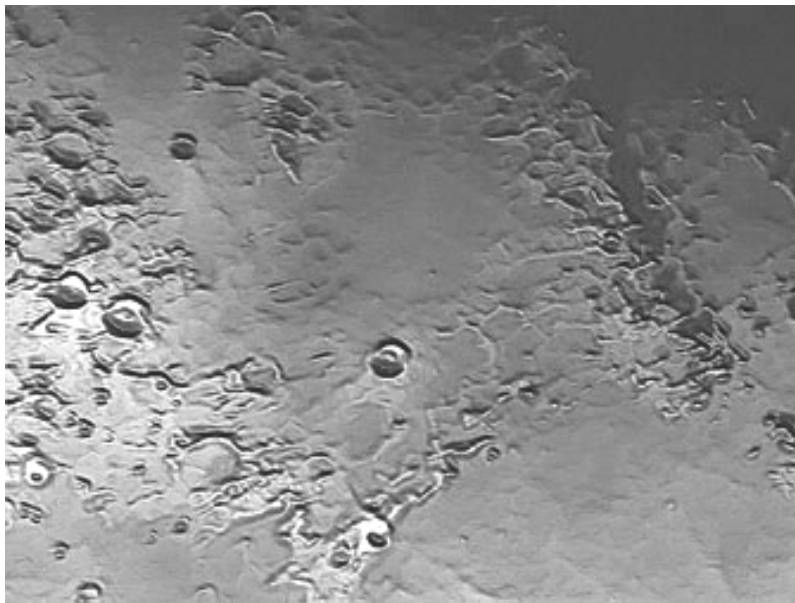
CCD Image by Daniel del Valle – Aguadilla, Puerto Rico  
September 8, 2003 – 8 inch SCT – Logitech QuickCam

# TOPOGRAPHICAL STUDIES



## PLATO

CCD Image by Doug Slauson – Swisher, Iowa, USA  
April 13, 2003 - 9-1/4 inch SCT – SBIG STV Camera



## MANILIUS & ENVIRONS

Video Still by Bill Elsbury – Mason City, Iowa, USA  
8 inch SCT – Astrovid Camera

EDITOR: Enhanced to emphasize relief