

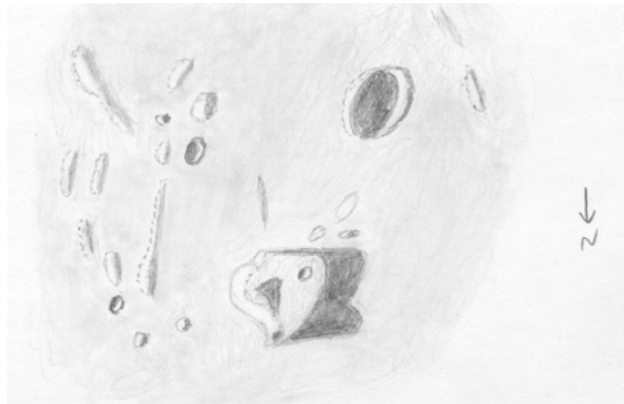


THE LUNAR OBSERVER

A MONTHLY NEWSLETTER FOR STUDENTS OF THE MOON JANUARY 1999
EDITED BY: BILL DEMBOWSKI. . 219 OLD BEDFORD PIKE. . WINDBER, PA 15963. . DEMBOW@TWD.NET

FEATURE OF THE MONTH

Gruithuisen & Vicinity (32.9N - 39.7W)



Sketch by Robert H. Hays, Jr. - Worth, Illinois

15cm Reflector - 170X - October 2, 1998 - Seeing 6/10

On the indistinct border between the Oceanus Procellarum and Mare Imbrium lies a rather nondescript crater, Gruithuisen. Named for Franz von Gruithuisen, an eccentric German selenographer, this 16 km crater is, however, surrounded by some very interesting features.

On October 2, 1998, Robert H. Hays, Jr. of Worth, Illinois sketched the area and submitted this report:

"I sketched this rather strange area on the evening of October 1/2. After timing the disappearance of 29 Capricorni. Gruithuisen itself is a very ordinary crater in northwest Oceanus Procellarum. The main feature is the triangular chunk Gruithuisen Zeta. At first it reminded me of Rumker but Gruithuisen Zeta does appear to be one large slab. I have tried sketching it the way I saw it. It had a bright sunward face. There was a large, triangular, detached patch of shadow east of its center and a small detached shadow near its north point. I saw a small crater near its southwest corner whose sunlit part was quite bright. Most of Gruithuisen Zeta had the same gray as the nearby mare. East of Gruithuisen was Gruithuisen H, and another crater was seen of Gruithuisen Zeta. Near these craters were several elongated hills or ridges, mostly aligned north-south. Several other small elevations were seen in the general area."

Gruithuisen can be found on Map #9 of Rukl's Atlas of the Moon.

LUNAR CALENDAR - JANUARY 1999 (UT)

2	02:50	Full Moon
9	14:22	Last Quarter
11	12:00	Moon at Apogee (404,819 km)
17	15:47	New Moon (Start of Lunation 941)
19	07:00	Moon 1.9 Degrees North of Venus
22	00:00	Moon 1.7 Degrees South of Jupiter
24	07:00	Moon 2.3 Degrees South of Saturn
24	19:16	First Quarter
26	22:00	Moon at Perigee (369,247 km)
27	06:00	Moon 0.5 Degrees North of Aldebaran
31	16:07	Full Moon (Penumbral lunar eclipse)

OBSERVATIONS RECEIVED DURING THE MONTH

COLIN EBDON - LONDON, ENGLAND

.....Sketches of Posidonius, Darwin, Mare Humboldtianum, Cleomedes

DANIEL DEL VALLE - AGUADILLA, PUERTO RICO

.....Sketches of Ross & Maclear, Macrobius & Trisserand, Proclus

From the Editor:

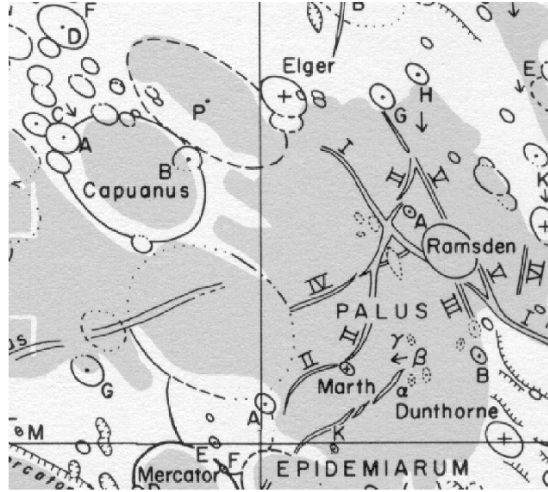
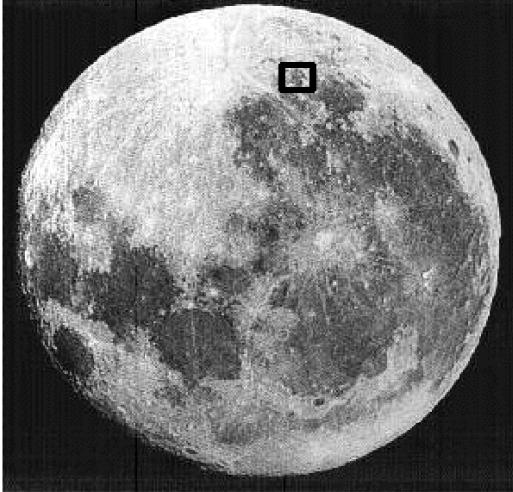
Sufficient interest has been shown in the proposed joint ALPO/BAA Lunar Rays Project and it is now a reality. Anyone wishing to join in the study of these fascinating features please contact the Editor at the address shown on Page One. Sketches, photographs, and electronic images by observers of all skill and experience levels are welcome.

Have you ever seen a detailed map of the bright lunar rays?

Here's your chance to contribute to the compilation of one.

Clear and steady skies . . . WMD

EXPLORING THE MOON



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

Our exploration this month takes us to the southwest corner of the Moon and Palus Epidemiarum, the Marsh of Epidemics. Our first stop is the crater Capuanus, named for the Italian astronomer Francesco Capuano di Manfredonia. Capuanus is a 60 km wide flooded crater with walls that are about 2400 meters high. What makes Capuanus so remarkable is that its dark floor is elevated above its surroundings, much like the more famous Wargentini. Beginning observers should look for several craters on the walls of Capuanus (notably A and B on the map), and for the three mountain arms that reach to the northwest. The floor of the crater itself is rather featureless but, when quite near the terminator, experienced observers should be able to find a few small craterlets and up to four round hills. Also, be sure to check out the major rille to the north of Capuanus that runs from Hesiodus to the northernmost mountain arm.

To the northwest of Capuanus is the 25 km. crater named for Jesse Ramsden, instrument maker and designer of the Ramsden eyepiece. It is not Ramsden itself that we will be exploring, but a wonderful network of rilles that radiate from a point just southeast of that crater. One branch reaches to the northernmost mountain arm of Capuanus. A second rille runs due north to the small crater Marth, while a third runs west to Ramsden itself. Several other rilles extend to the southern shore of Palus Epidemiarum. Tracing the course and extent of these and other rilles in the region make for a fascinating observing experience. And, since they run in a variety of directions, not all of the rilles in this system will be visible under the same lighting conditions.

As always, your sketches, images and notes from this exploration are welcomed and encouraged.

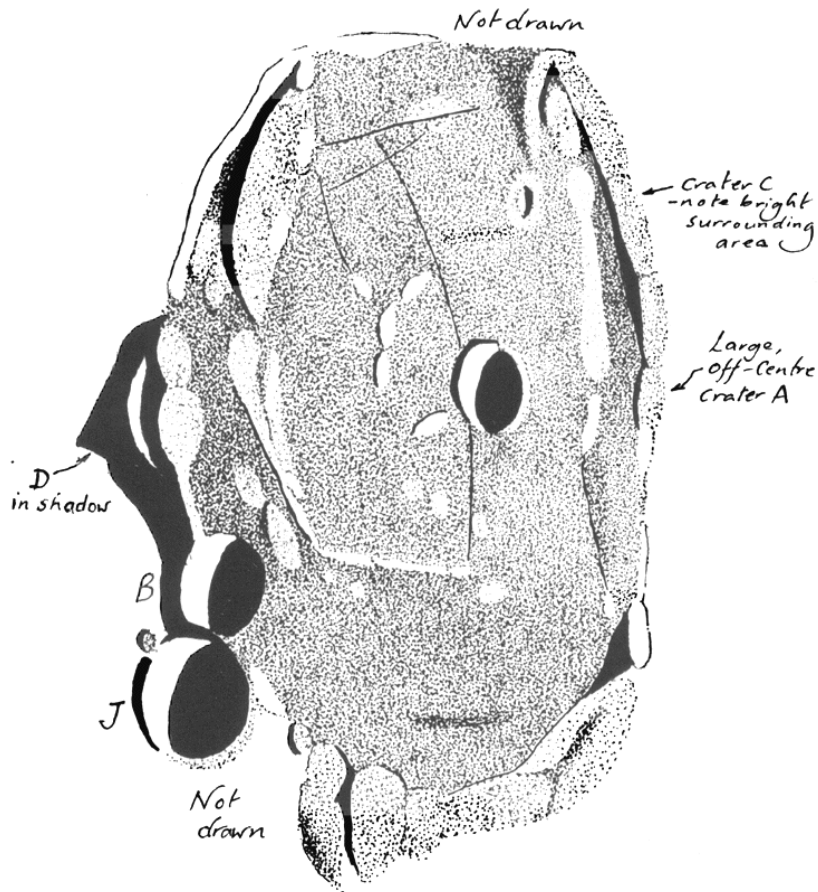
Question of the Month:

Q: How old is the Moon?

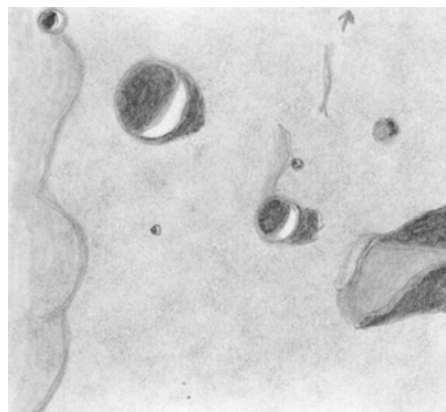
A: The age of the Moon, based on the study of rocks returned by the Apollo missions, is approximately 4.5 billion years. The youngest rocks found (from the maria regions) were about 3.1 billion years old.

Used here, one billion is equal to 1,000 million.

TOPOGRAPHICAL STUDIES



POSIDONIUS - Sketch by Colin Ebdon - London, England
October 10, 1998 - 25cm Newtonian - 183X - North is down



ROSS & MACLEAR - Sketch by Daniel del Valle - Aguadilla, Puerto Rico
November 24, 1998 - 90mm Maksutov-Cassegrain - 166X - North is up