



THE LUNAR OBSERVER

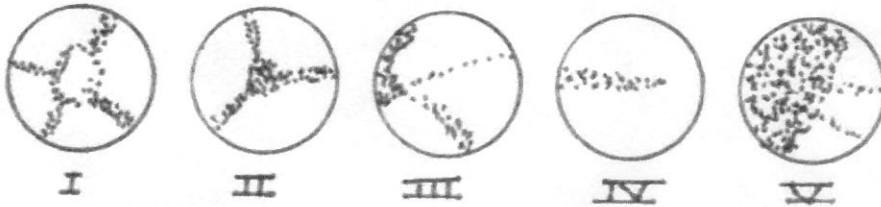
A MONTHLY NEWSLETTER FOR STUDENTS OF THE MOON

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Banded Craters



With this issue, instead of the regular "Feature of the Month", we open the book on a new and continuing project to investigate craters that exhibit dusky bands. Your observations of these interesting features are encouraged and solicited. The objective will be to chart the appearance and changes in the bands throughout a lunation, and from one lunation to the next. Please mail all sketches, photographs, and written accounts to the above address.

There are more than 100 craters that have been observed to have dusky bands on their inner walls and some of these appear to be variable. Those in the crater Aristarchus are the best known and are easily observed with a 3 inch refractor. The bands become visible shortly after sunrise, are most prominent under a high sun, and fade again as the sun sets. The bands of Aristarchus do not emanate from a central point in the crater but from a circular band concentric to the crater walls. Craters with this arrangement are classified as Type I banded craters; see the accompanying stylized drawings. The five major types of banded craters and an example of each type are as follows:

TYPE I (Aristarchus) Bands radiate from a central ring with a bright center.

TYPE II (Pytheas) Bands radiate from a central ring with a dark center.

TYPE III (Birt) Bands radiate from a non-central dark area.

TYPE IV (Messier) One or two bands with no nuclear region.

TYPE V (Moore) One or two bands radiating from a large dark region that covers approximately half the crater floor.

The following list of banded craters, their approximate diameters, and lunar coordinates is provided as a suggested starting point for this project, but observations of any banded craters will be gladly accepted. Be sure to include the dates and times of your observations since they will be of critical importance in this study.

Messier	10 km	47.6 degrees E	01.9 degrees S
Proclus	28 km	46.8 degrees E	16.1 degrees N
Dawes	18 km	26.4 degrees E	17.2 degrees N
Menelaus	27 km	16.0 degrees E	16.3 degrees N
Birt	17 km	08.5 degrees W	22.4 degrees S
Pytheas	20 km	20.6 degrees W	20.5 degrees N
Moore	10 km	32.8 degrees W	33.2 degrees S
Brayley	14 km	36.9 degrees W	20.9 degrees N
Bessarion	10 km	37.3 degrees W	14.9 degrees N
Aristarchus	40 km	47.4 degrees W	23.7 degrees N

From the Editor:

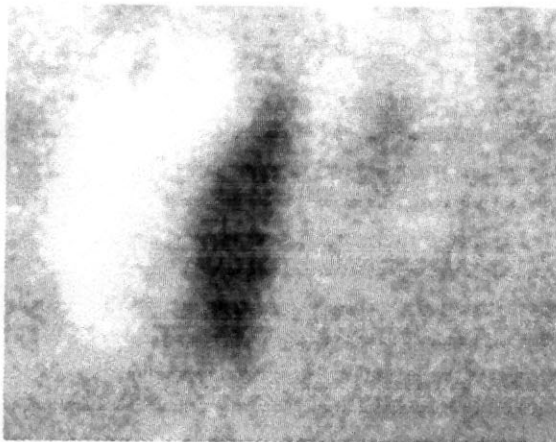
This issue marks the return of The Lunar Observer. The format has changed somewhat but the purpose of the publication remains the same: To provide a forum for the exchange of information among students of the Moon. Your contributions of articles, letters, observations, sketches, and photographs are sincerely requested and will be greatly appreciated.

This issue also marks the beginning of an observing project that I hope many of you will participate in, the study of lunar banded craters. Progress reports on the project, including the names of all contributors, will be published in these pages and submitted to the American Lunar Society (ALS) and the Association of Lunar and Planetary Observers (ALPO) for inclusion in their journals.

Clear and steady skies WMD

The Lunar Calendar for June 1997 (All Times UT)

June 3	13:00	Moon 1.6 degrees south of Mercury
June 5	07:05	New Moon. Start of Lunation 921
June 6	17:00	Moon 6 degrees south of Venus
June 12	05:00	Moon at apogee. 404,185 km from Earth
June 13	04:52	First Quarter
	16:00	Moon 0.3 degrees south of Mars
June 20	19:11	Full Moon
June 24	05:00	Moon at perigee. 366,494 km from Earth
	11:00	Moon 4 degrees north of Jupiter
June 27	12:43	Last Quarter
June 28	12:00	Moon 0.2 degrees north of Saturn



Half a Crater ?!

Alexey Arkhipov of the Institute of Radio Astronomy in Ukraine is presently engaged in a research project in which he searches NASA Clementine images for "ruinlike formations". During that search he came across this unusual crater and was kind enough to share it with The Lunar Observer.

The approximate coordinates of the 1.7 km crater are 126.3 W, 77.9 N, which places it near the north pole on the far side of the Moon. The crater obviously cannot be seen with a ground based telescope, but does anyone have a theory as to how such an unusual feature could have been formed?