No. 44 PRELIMINARY DRAWINGS OF LUNAR LIMB AREAS, IV

by Alika K. Herring November 27, 1963

1. Introduction

This paper is the fourth in a series of six presenting a total of 12 drawings of the limb areas of the moon, which are intended to supplement the *Rectified Lunar Atlas*. Previous papers in the series are *Comm. LPL* Nos. 4, 9, and 19.

The two drawings presented here extend the west lunar limb (astronautical direction) from 30° north latitude to the north pole. They are based on selected rectified photographs, with the best available photographs used as supplementary reference material. This method was fully described in *Comm. LPL* No. 4.

The two modifications introduced in the second paper are continued here. These were: (a) the inversion of east and west with north placed at the top to conform to standard astronautical cartographic directions, and (b) the use of dotted circles to represent craters not well shown on the photographs (cf. Comm. LPL No. 9). As before, those details for which an identification cannot be made with reasonable certainty are omitted from the drawings.

Areas 1 and 2 were combined to facilitate the representation and interpretation of detail; see Plates 44.1-44.3. They were drawn with the apparent illumination coming from the west (astronautical direction) instead of from behind the limb (cf. Comm. LPL No. 4). Since the plates are oriented to maintain consistency in the position of the limb, the direction of illumination is from the bottom instead of from the side.

Area 4 is shown in Plates 44.4-44.6.

2. Notes on the Accompanying Plates

Plate 44.1 is the key chart to Areas 1 and 2, Plate 44.6 to Area 4. The plates have a longitude and lattitude grid in intervals of approximately 10° and are inserted for use in identification and comparison. The nomenclature of named features is given.

Areas 1 and 2 (Pl. 44.3) cover the west lunar limb from 60° north latitude to the north pole. The drawing was based on Mt. Wilson Nos. 189 and 324 (rectified). Other reference photographs were rectified prints of Lick No. 186, Yerkes Nos. 822 and 1335, McDonald Nos. 10 and 28, Mt. Wilson Nos. 81, 90, 124, 189, 226, and 324; and unrectified prints of McDonald Nos. 28 and 30, Yerkes No. 482, and Mt. Wilson Nos. 189, 226, and 324.

Area 4 (Pl. 44.5) covers the west lunar limb (astronautical direction) from 30 to 60° north latitude. It was drawn based on McDonald No. 373 (rectified) and Mt. Wilson No. 227 (rectified).

Other reference photographs were rectified prints of Lick No. 187, Mt. Wilson Nos. 226, 227, 231, and 252; and unrectified prints of McDonald No. 373 and Mt. Wilson Nos. 226, 227, 231, and 252.

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REFERENCES

Whitaker, E. A., Kuiper, G. P., Hartmann, W. K., and Spradley, L. H. 1963, *Rectified Lunar Atlas* (Tucson: University of Arizona Press).

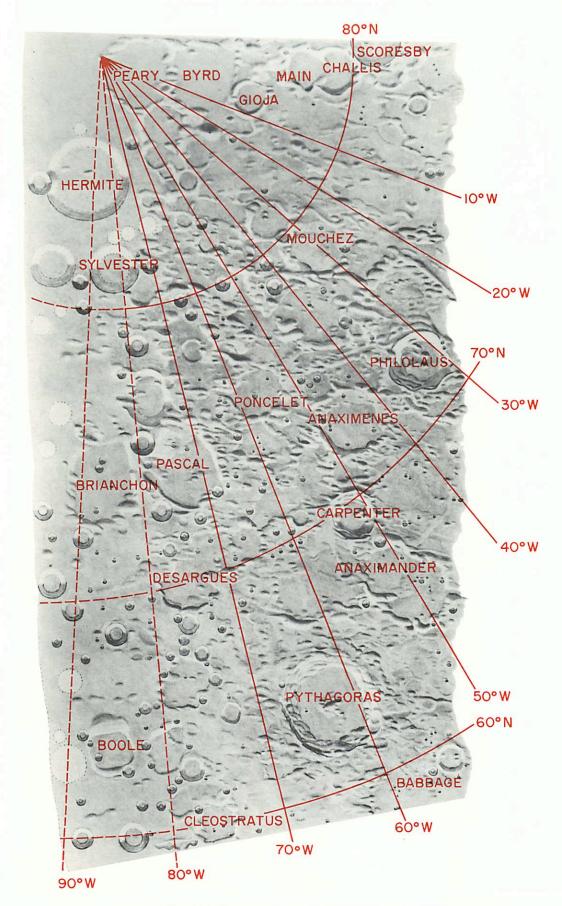


Plate 44.1. Key chart of Areas 1 and 2.

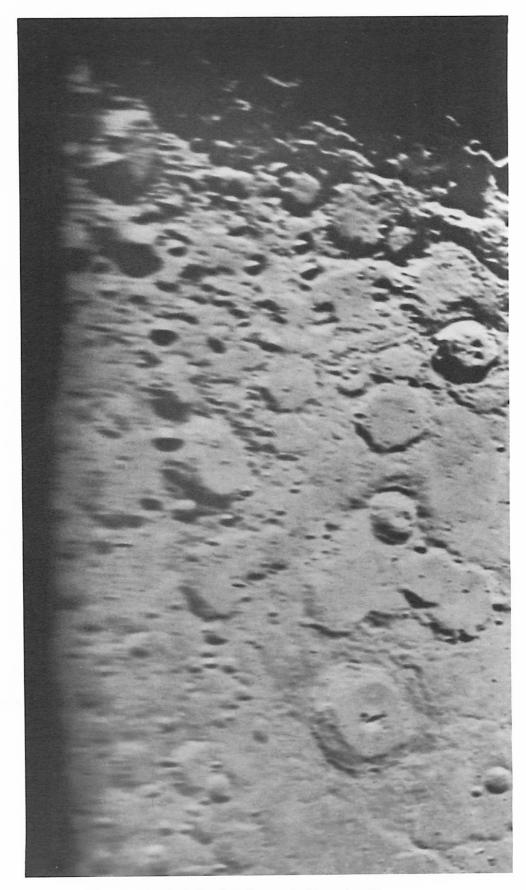


Plate 44.2. Rectified photograph of Areas 1 and 2.

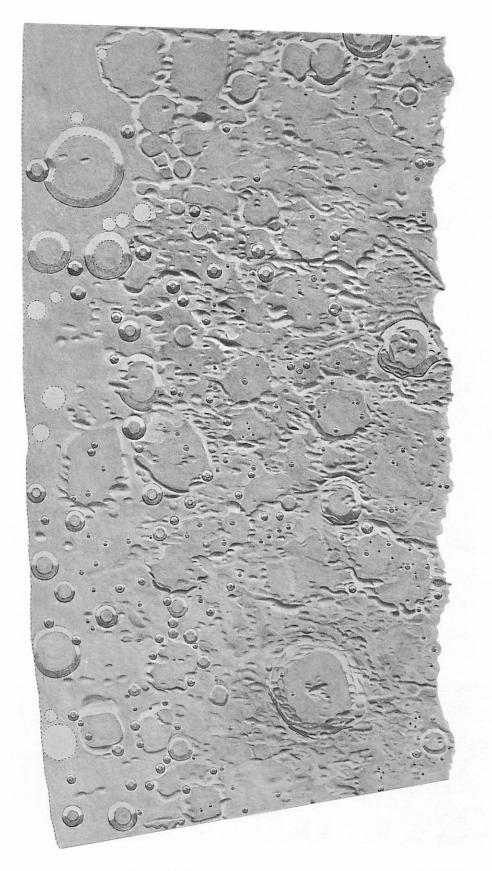


Plate 44.3. Rectified drawing of Areas 1 and 2.

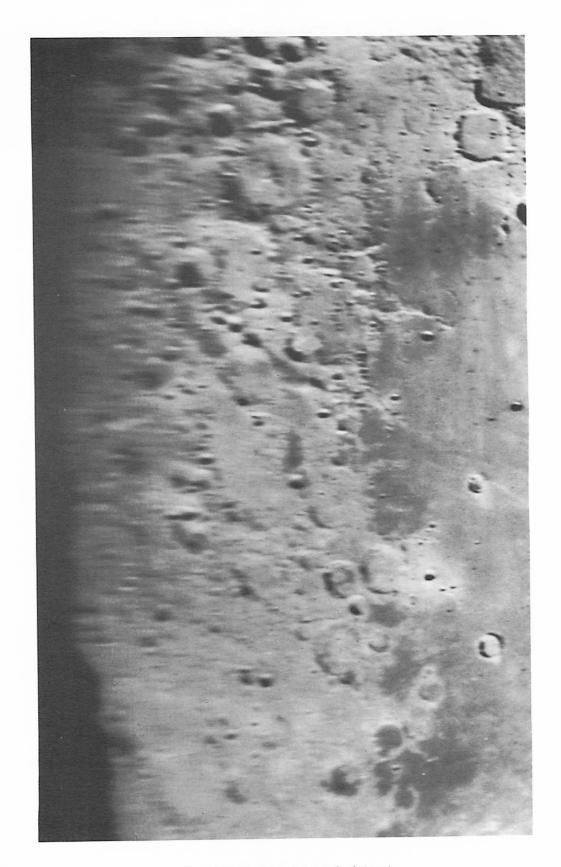


Plate 44.4. Rectified photograph of Area 4.



Plate 44.5. Rectified drawing of Area 4.

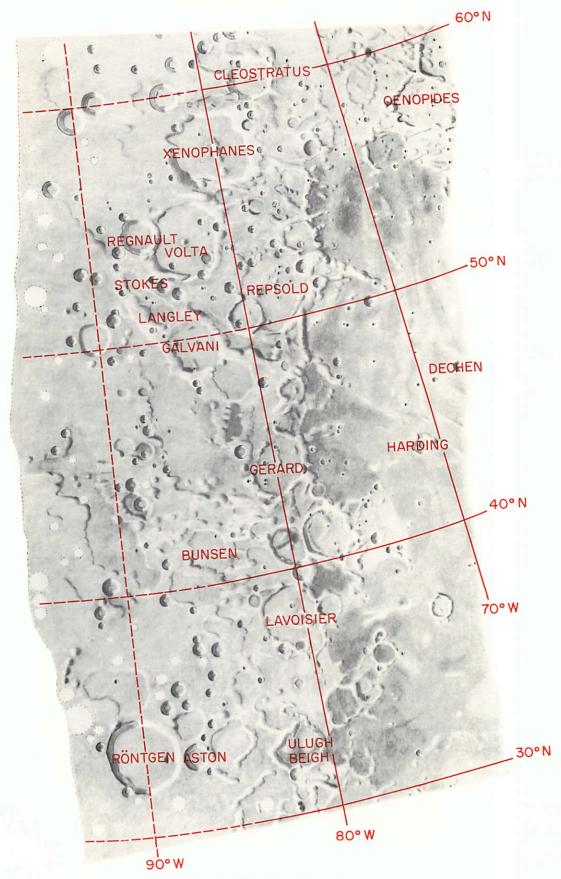


Plate 44.6. Key chart of Area 4.