No. 66 PRELIMINARY DRAWINGS OF LUNAR LIMB AREAS, VI

by Alika K. Herring August 4, 1965

1. Introduction

This paper is the last in a series that presents a total of 12 interpretive drawings of the limb areas of the moon which are intended to supplement the *Rectified Lunar Atlas.* Previous papers in this series have been published in *Comm. LPL* Nos. 4, 9, 19, 44, and 45.

The two drawings presented here extend the west lunar limb (astronautical direction) from 30° south latitude to the south pole. They are based on selected rectified photographs, the best of which are used as supplementary reference material. The method used to synthesize the photographs into drawings was fully described in *Comm. LPL* No. 4. The two modifications introduced in the second paper are continued here. These are (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 crater forms not well shown in the photographs. As before, those details which cannot be identified with reasonable certainty are omitted from the drawings.

Area 22 is shown in Figures 1–3. Because no suitable photographs showing sunset illumination were available for this area, it was drawn with the illumination originating over the center of face instead of from behind the limb, as was done in previous drawings (cf. *Comm. LPL* No. 4).

Areas 28 and 29 (Figs. 4-6) were combined to facilitate the representation and interpretation of detail. These areas 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 top instead of from the side.

2. Notes on the Figures

Figure 1 is the key chart to Area 22, and Figure 6, to Areas 28 and 29. These include a longitude and latitude grid at intervals of approximately 10° for identification and comparison purposes. The nomenclature of named features is given.

Area 22 (Fig. 3) covers the west lunar limb from 30° to 60° south latitude. The drawing is based on Yerkes photograph No. 1614 (rectified). The other reference photographs were rectified prints from Mt. Wilson (Nos. 171, 172, 230) and Yerkes (Nos. 1170, 1592, 1614), and unrectified prints from Yerkes (Nos. 1164, 1167, 1604, 1614) and McDonald (Nos. 74, 77, 372).

Areas 28 and 29 (Fig. 5) cover the west lunar limb from 60° south latitude to the south pole. The drawing is based on Pic du Midi photograph No. 28K (rectified). The other reference photographs were rectified prints from Yerkes (Nos. 445, 466, 1170, 1592), Lick (No. 189), Mt. Wilson (Nos. 97, 171), and McDonald (Nos. 22, 121), and unrectified prints from Yerkes (Nos. 962, 1167, 1170, 1543, 1592, 1607), McDonald (Nos. 74, 77, 121, 133, 372), Mt. Wilson (Nos. 97, 171), and Pic du Midi (Nos. 28-O, 27-L, 35).

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

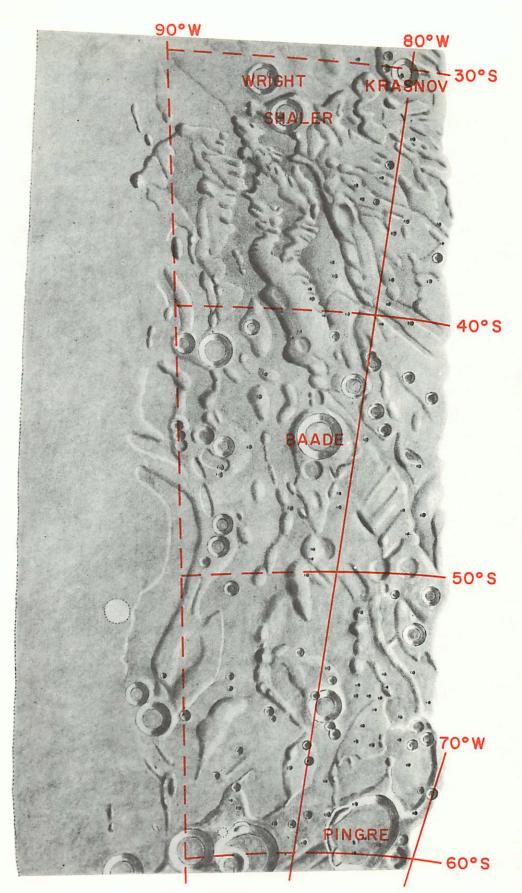


Fig. 1 Key chart to Area 22.

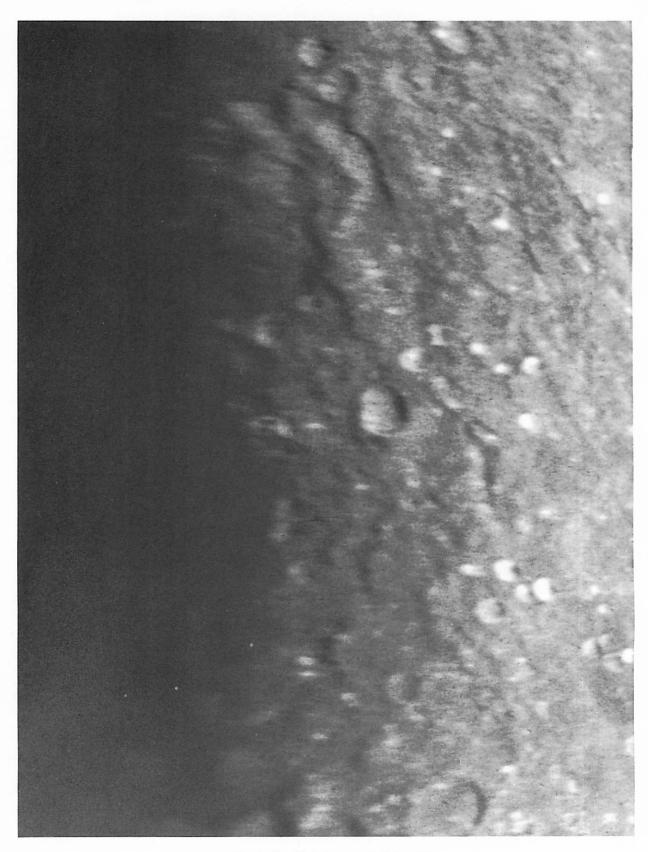


Fig. 2 Rectified photograph of Area 22.



Fig. 3 Rectified drawing of Area 22.

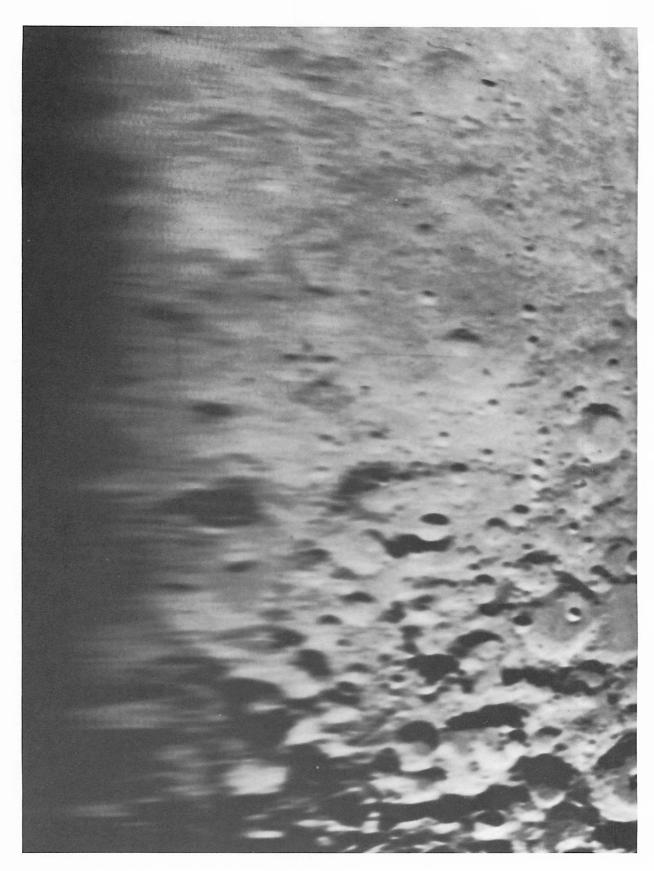


Fig. 4 Rectified photograph of Areas 28 and 29.

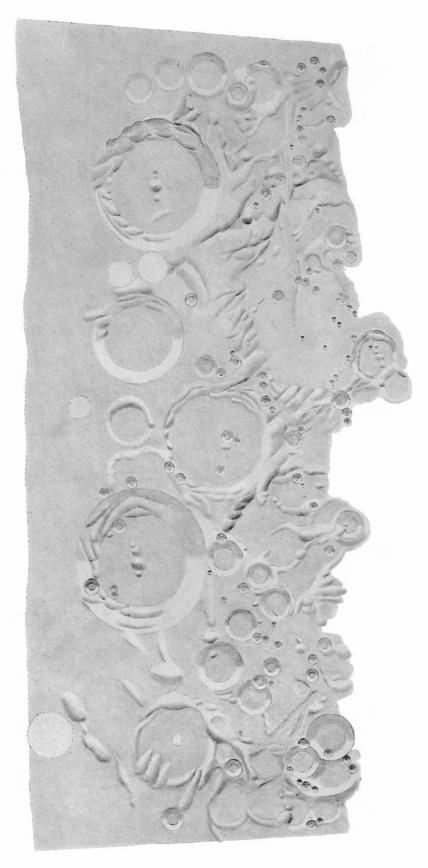


Fig. 5 Rectified drawing of Areas 28 and 29.

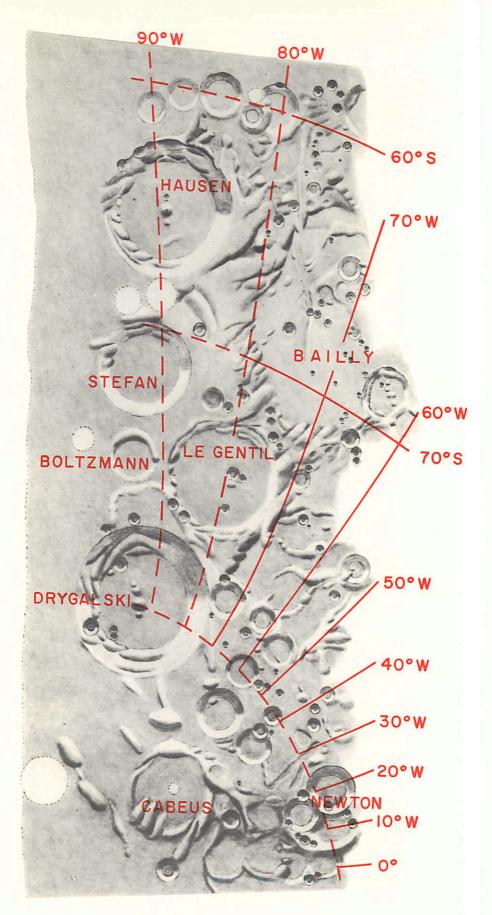


Fig. 6 Key chart to Areas 28 and 29.