

NOTES ON BASE
This is one map in a series of topographic map sheets covering the entire surface of Mars at nominal scale of 1:5,000,000 and 1:5,000,000 (Barton, 1973). The major source of map data was the Mariner 9 television experiment (Nasrany and others, 1970).

ADOPTED FIGURE
The figure of Mars used for the computation of the map projection is an oblate spheroid (flattening of 1/193) with an equatorial radius of 3393.4 km and a polar radius of 3375.7 km.

PROJECTION
The Lambert conformal conic projection is used for this sheet with standard parallels at 35°S and 50°S. A scale of 1:4,336,000 at lat. 30°S was chosen to match the scale at lat. 30°S of the adjacent Mercator projection. Longitude increases to the west in accordance with usage of the International Astronomical Union (IAU, 1971). Latitudes are stereographic (de Vaucouleurs and others, 1973).

CONTROL
Planimetric control is provided by photogrammetric triangulation using Mariner 9 pictures (Davies, 1973; Davies and Arthur, 1973) and the radio-tracked position of the spacecraft. The first meridian passes through the crater Alysia (latitude 5.14° S) within the crater Alysia. No simple statement is possible for the precision, but local consistency is 10-15 km, except along the northern edge where inconsistencies are as large as 20 km exist.

MAPPING TECHNIQUE
A series of mosaics of Lambert conformal conic projections of Mariner 9 pictures was assembled at 1:5,000,000.

Shaded relief was copied from the mosaics and portrayed with uniform illumination with the sun to the west. Many Mariner 9 pictures besides those in the base mosaic were examined to improve the portrayal (Leventhal and others, 1973). The shading is not generalized and may be interpreted with photographic reliability (fig. 1973).

Shaded relief analysis and representation were made by Jay L. Inge.

COLOR
No attempt was made on the map to precisely duplicate the color of the Martian surface, although the color used does approximate it.

NOMENCLATURE

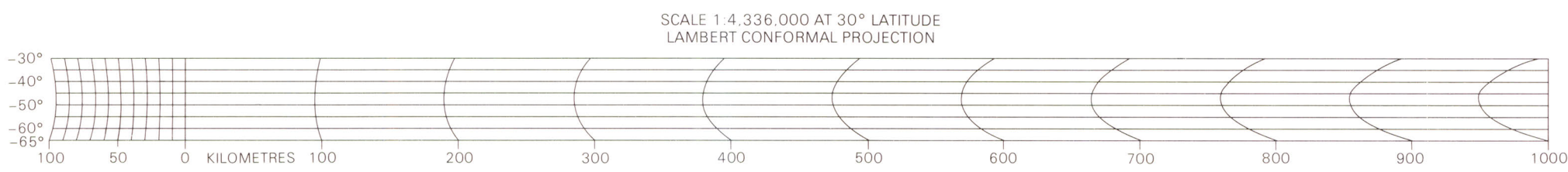
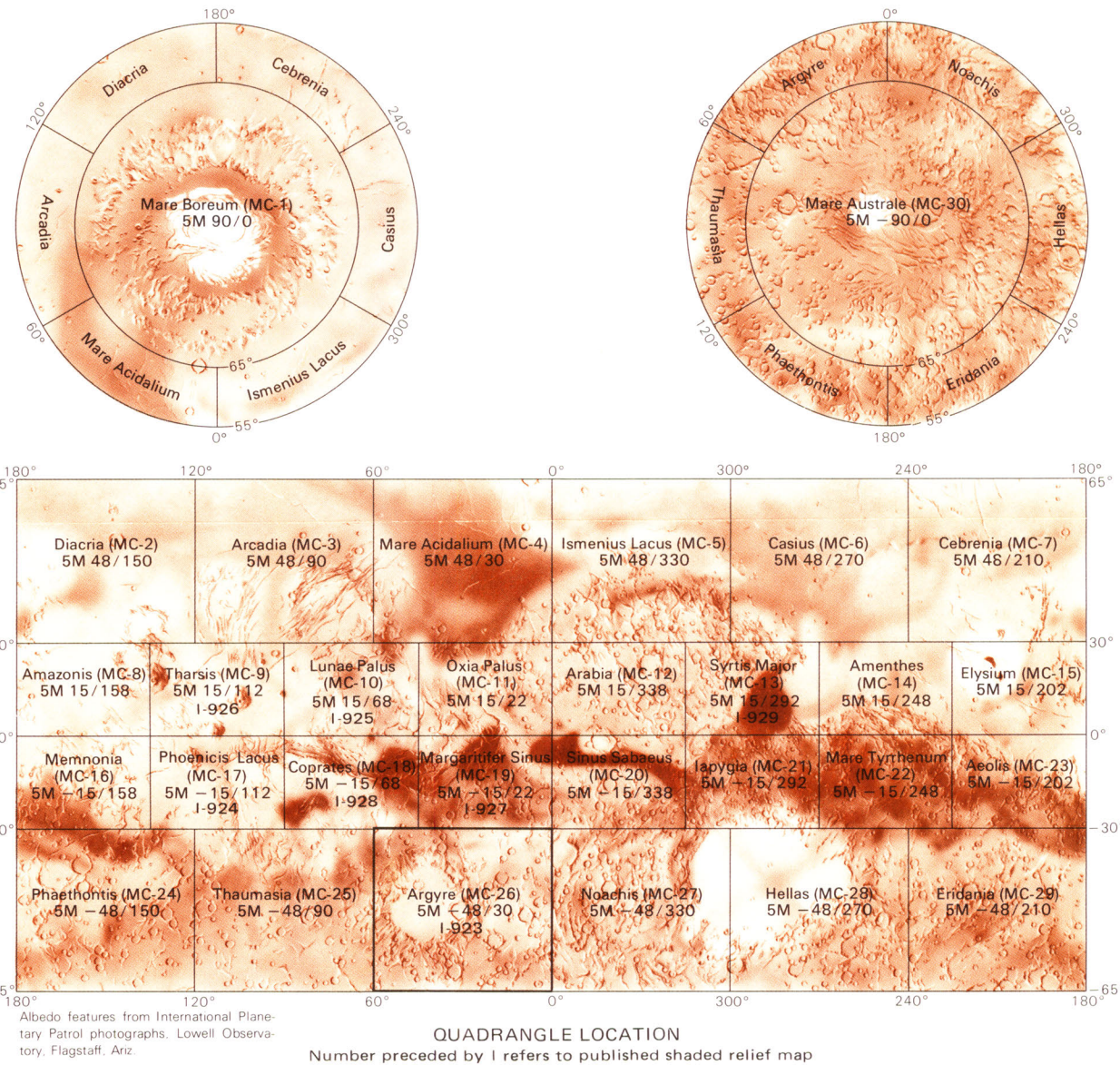
All names on this sheet are approved by the International Astronomical Union (IAU, 1974), except the following names which are provisional: Boreas, Rupes, Charitum Tholus, Ozza Rupes and Occiditum Fossae. Double and triple letter designations for craters refer to position on the map. Some craters have commemorative names; letter designations for these craters are shown in parentheses. Where craters lie mostly on an adjoining map, their letters are derived from the other map; where craters lie exactly on the boundary of two maps, their letters are derived from the eastern or southern map.

MC-26: Abbreviation for Mars Chart 26.

M 5M -48/30 R: Abbreviation for Mars 1:5,000,000 series; center of sheet, 48° S latitude, 30° longitude; shaded relief map, R.

REFERENCES

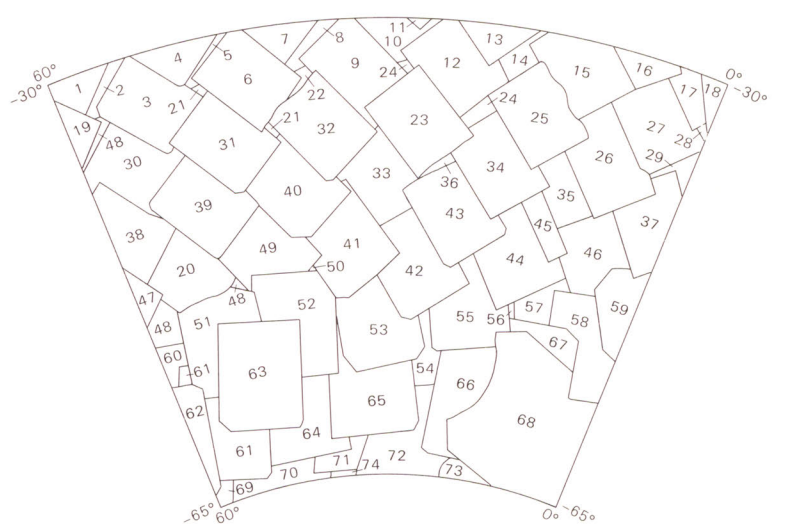
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SHADED RELIEF MAP OF THE ARGYRE QUADRANGLE OF MARS

MC-26
M 5M -48/30 R
1975

Interior—Geological Survey, Reston, Va.—1975—G75131
Prepared on behalf of the Planetary Programs Office,
National Aeronautics and Space Administration under order
no. W-11487.



Index No.	DAS No.	Index No.	DAS No.	Index No.	DAS No.
1	6211063	20	6354563	39	6354633
2	9088839	21	6598073	40	6359533
3	6282883	22	5957873	41	6485343
4	6282953	23	6486883	42	6187153
5	6180723	24	5812093	43	5187223
6	6284773	25	5187093	44	5289133
7	6354843	26	5239293	45	5239363
8	6230713	27	5239323	46	5311973
9	6426863	28	6028143	47	6028173
10	6426933	29	5311213	48	5398603
11	6426753	30	6284773	49	6426863
12	6486853	31	6284703	50	6856743
13	6486823	32	6486893	51	6284703
14	7973453	33	6486413	52	6487093
15	6187423	34	6187393	53	5168643
16	6045413	35	6028073	54	5238833
17	5239303	36	5811923	55	5398603
18	8117303	37	5311143	56	5958613
19	6210993	38	6284743	57	5311963

INDEX TO MARINER 9 PICTURES
The mosaic used to control the positioning of features on this map was made with the Mariner 9 A-camera pictures outlined above.

For sale by U.S. Geological Survey,
Denver, Colo. 80225, and Reston, Va. 22092, price \$1.00

Mars (Argyre quad.) Relief, 1:5,000,000, 1975.
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