

NOTES ON BASE
This is one map in a series of topographic map sheets covering the entire surface of Mars at nominal scales of 1:25,000,000 and 1:5,000,000 (Barton, 1973). The major source of map data was the Mariner 9 television experiment (Masursky and others, 1970).

ADDITIONAL FIGURE
The figure of Mars used for the computation of the map projection is an oblate spheroid (flattening of 1/192) with an equatorial radius of 3393.8 km and a polar radius of 3375.7 km.

PROJECTION
The Lambert conformal conic projection is used for this sheet with standard parallels at 33.8° and 69.2°. A scale of 1:4,336,000 at lat. 30° was chosen to match the scale at lat. 30° of the adjacent Mercator projection. Longitudes increase to the west in accordance with usage of the International Astronomical Union (IAU, 1971). Latitudes are areographic (de Vancouleurs 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 Airy-0 (lat. 5.19° S) within the crater Airy. No simple statement is possible for the precision, but local consistency is about 10 km.

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 derived 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 (Levinthal and others, 1973). The shading is not generalized and may be interpreted with photographic reliability (figs. 1972).

Shaded relief analysis and representation were made by Patricia M. Bridges.

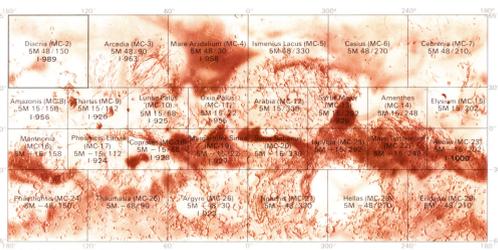
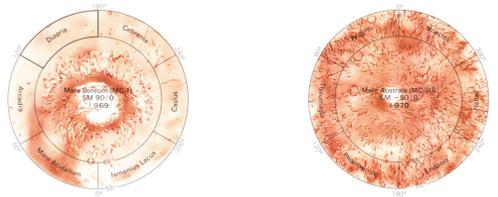
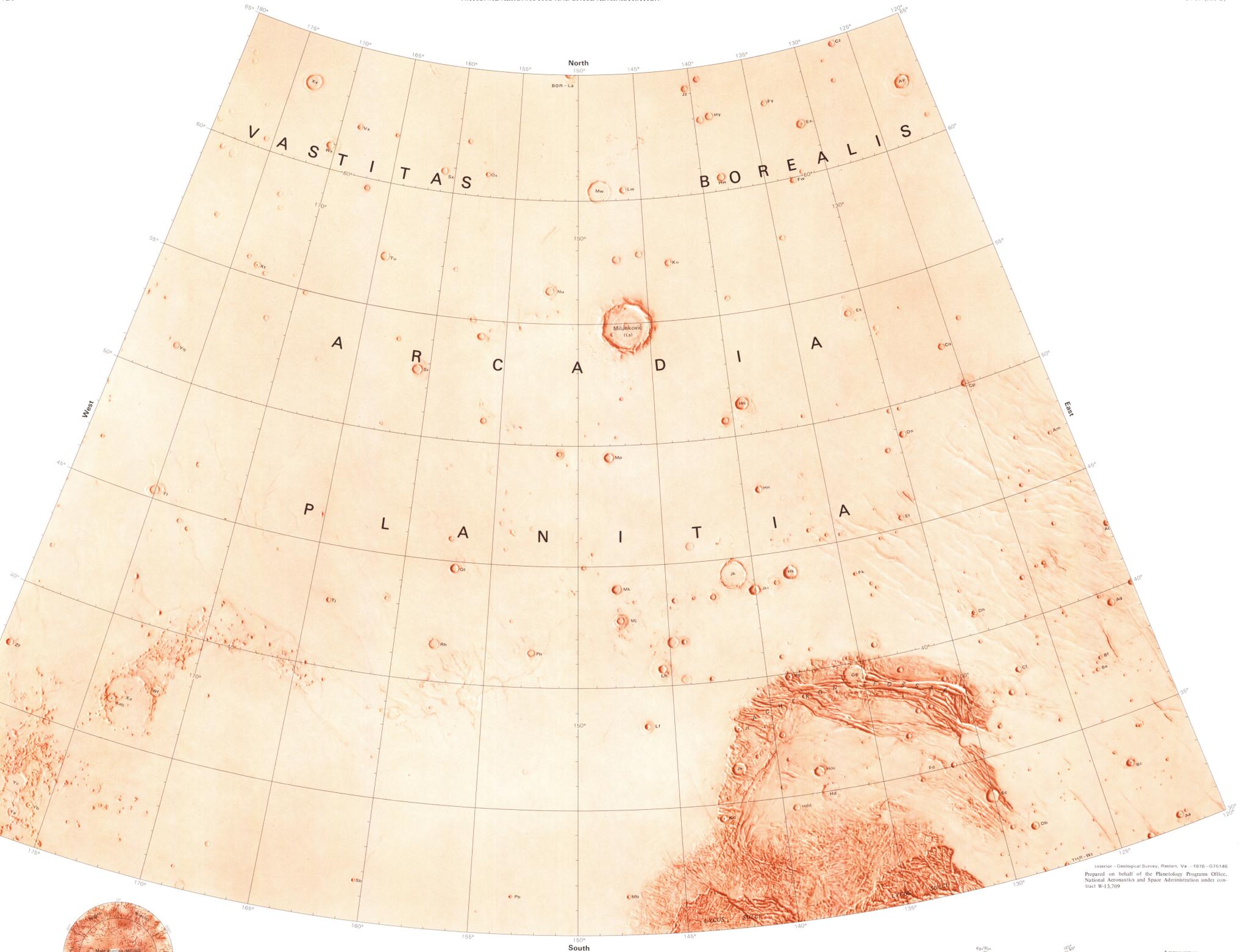
COLOR
No attempt was made on the map to precisely duplicate the color of the Martian surface, although the color used does approximate it.

NOMENCLATURE
All names on this sheet are approved by the International Astronomical Union (IAU, 1974), except the following names which are proposed: Acherson, Isaac and Lycas Saki. 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 north on an adjoining map, their letters are derived from the other map; where craters lie south on the boundary of two maps, their letters are derived from the eastern or southern map.

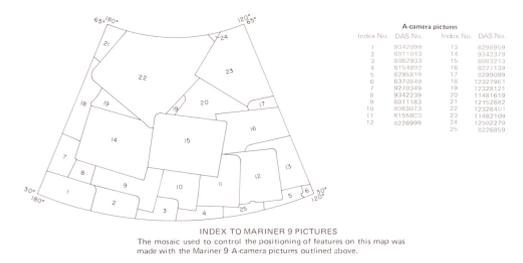
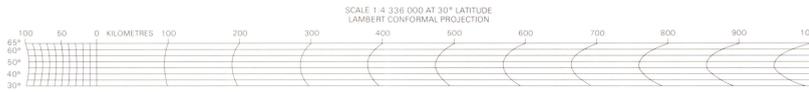
MC-2: Abbreviation for Mars Chart 2, M 5M 48/150 R; abbreviation for Mars 1:5,000,000 series; center of sheet, 48° N latitude, 150° longitude; shaded relief map, R.

REFERENCES

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QUADRANGLE LOCATION
Number preceded by 1 refers to published shaded relief map.



SHADED RELIEF MAP OF THE DIACRIA QUADRANGLE OF MARS

MC-2
M 5M 48/150 R
1976



Mars (Diacria quad.) Relief 1:5,000,000 1976. Cop-1

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