



NOTES ON BASE
This is one sheet in a shaded relief map series of the middle latitudes of the terrestrial planets. The primary source of the map data was Viking Orbiter images.

ADOPTED FIGURE
The map projection is based on a sphere with a radius of 3385 km.

PROJECTION
The stereographic projection is used for this map, with the projection center at 10° S, long 44° W. The scale of the projection is 1:1,135,000 at the center, 1:5,000,000 at 1100 km from the center, and 1:14,750,000 at the edge of the map.

CONTROL
Planimetric control was provided by the 1978 control net of Mars (Davies and others, 1978). The first meridian passes through the crater Argus (lat 5.142° S, long 44° W) located within the crater Argus.

MAPPING TECHNIQUE
Mapping techniques, similar to those described by Hansen (1973), were used to construct a mosaic from Viking and Mariner 9 images transformed to a stereographic projection. Shaded relief was drawn with uniform illumination from the left. The picture base in the inset below was used in detail, and surface forms portrayed with the shading techniques described by King and Bridges (1975). The shading is not generalized, and may be interpreted with near photographic reliability. Shaded relief analysis and representation were made by F. M. Bridges.

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

NOMENCLATURE
All names on this sheet are approved by the International Astronomical Union (IAU, 1974, 1975). Double and triple letter designations for craters have been omitted. Linear designations can be found on appropriate quadrangles of the 1:5,000,000 Topographic Series of the Atlas of Mars.

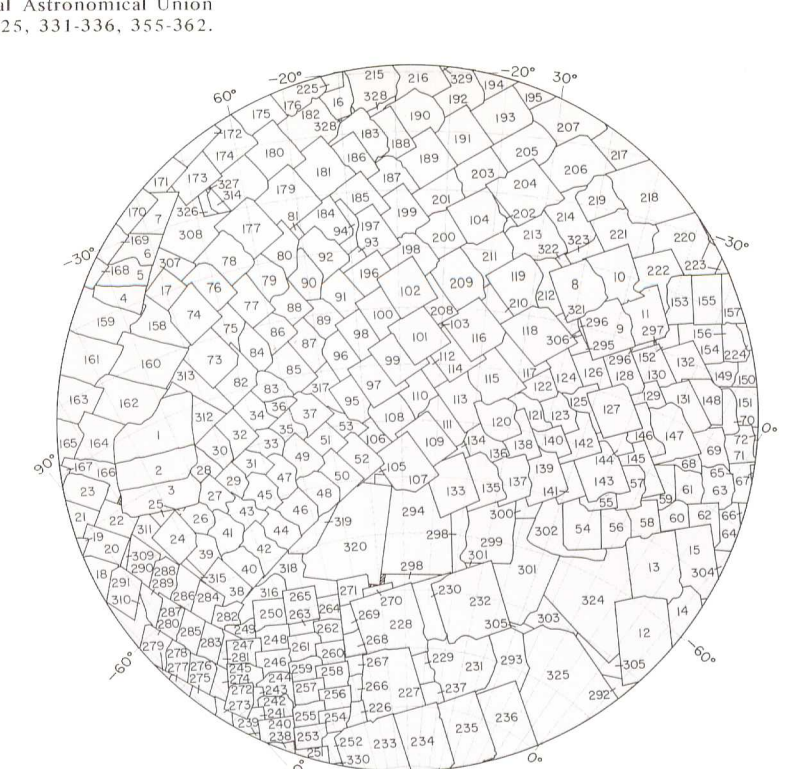
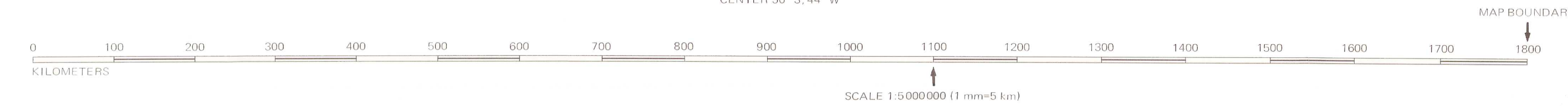
ABBREVIATIONS
M 5M-50/44 RN: Abbreviation for Mars 1:5,000,000 series, center of sheet, 50° S, lat. 44° W, long. shaded relief, R, nomenclature, N.

REFERENCES
Bates, R. M., 1973, Television cartography: U.S. Geological Survey Open-File Report, Astrogeology 58, 33 p.
Hansen, C. E., Kuzanyan, E. V., and Roth, J. A., 1978, Control net of Mars: February 1978: The Rand Corporation, R-2009-NA, 64p, 1978.
King, J. L., and Bridges, F. M., 1975, Applied photostereography for planetary cartography: Photogrammetric Engineering and Remote Sensing, v. 42, no. 6, p. 749-760.
International Astronomical Union, 1974, Physical study of the planets and satellites in 1974 Central Assembly, 1973, Proceedings, International Astronomical Union Transactions, 1, 2B, p. 161-165.
1977, Physical study of the planets and satellites, in 16th General Assembly, 1976, Proceedings, International Astronomical Union Transactions, v. 148, p. 325, 331-336, 355-362.

Interior—Geological Survey, Reston, Va.—1980—GB0145
Prepared on behalf of the Lunar Programs Office, National Aeronautics and Space Administration under contract W-13, 130

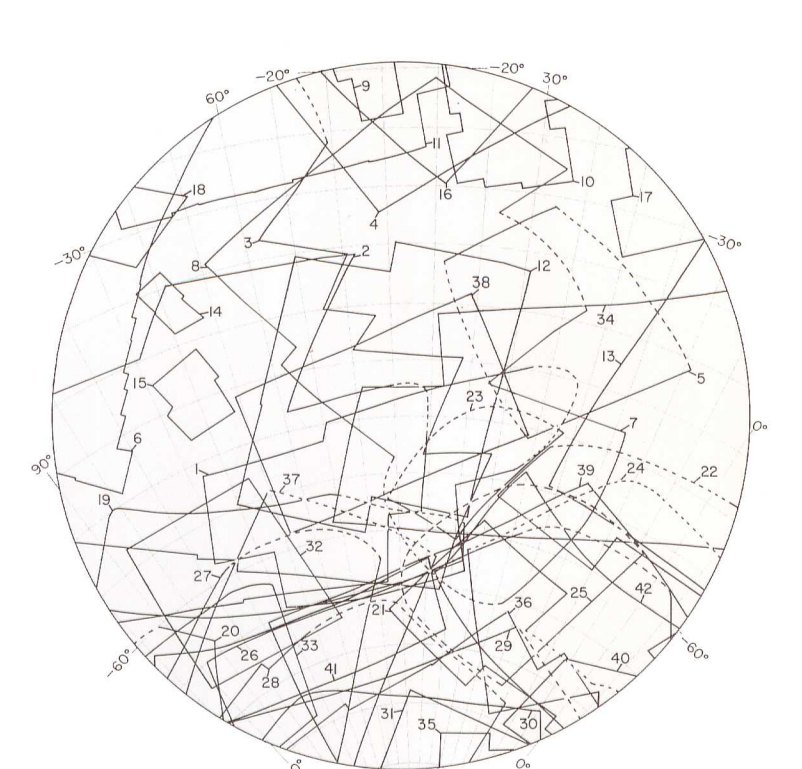
NOTE TO USERS
Users cutting orders or annotations are asked to indicate them on the map and to forward the map to U.S. Geological Survey, Building 4, Room 64, 2255 North Gemini Drive, Flagstaff, Arizona 86001. A replacement copy will be returned.

South
STEREOGRAPHIC PROJECTION
CENTER 50° S, 44° W



INDEX TO VIKING AND MARINER 9 PICTURES
The reason used to control the positioning of features on this map was made with the Viking and Mariner 9 A camera pictures outlined above. Useful coverage is not available in cross-hatched areas. The D25 number may differ slightly locally by 50 among various versions of the same picture. Copies of various enhancements of these pictures are available from National Space Science Data Center, Code 601.4, Goddard Space Science Data Center, Greenbelt, MD 20771.

Table with columns for Viking 1, Viking 2, and Mariner 9 Pictures. Each column lists picture numbers and their corresponding D25 numbers.



SUPPLEMENTAL SOURCE INDEX
The Viking pictures outlined above were used to clarify and augment details in the shaded relief map. Copies of various enhancements of these pictures are available from National Space Science Data Center, Code 601.4, Goddard Space Science Data Center, Greenbelt, MD 20771.

SHADED RELIEF MAP OF THE ARGYRE PLANITIA OF MARS
M 5M-50/44 RN
1980