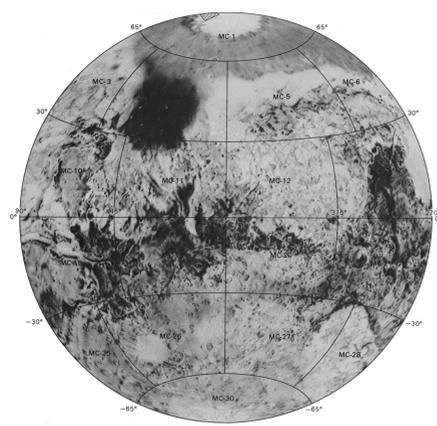
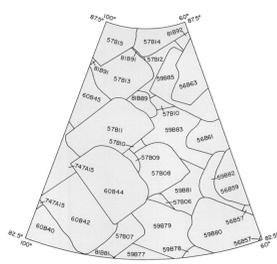


INTERIOR—GEOLOGICAL SURVEY, RESTON, VA—1588—088105
 Prepared on behalf of the Planetary Geology Program, Planetary Division, Office of
 Space Science, National Aeronautics and Space Administration, under contract
 W-13,789.

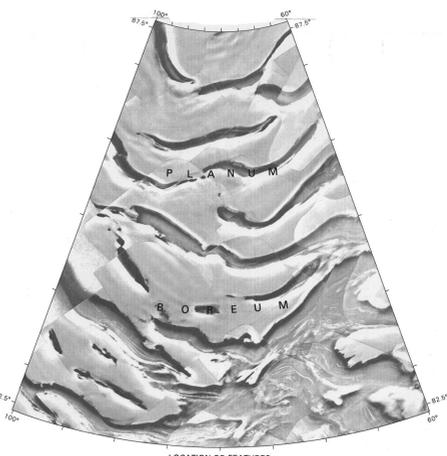


QUADRANGLE LOCATION
 Photomosaic location is shown in the western hemisphere
 of Mars. An outline of 1:5,000,000-scale quadrangles is
 provided for reference.

NOTES ON BASE
 This photomosaic is part of a series of quadrangles selected to show areas of special
 interest on Mars. Viking Orbiter high-resolution pictures (less than 100 m per picture
 element) were used to make the mosaic. The images have been digitally enhanced to
 accentuate high-frequency detail. Image placement is based on the 1978 control net
 (Davies and others, 1978), the 1982 control net (Davies and Katayama, 1983), and the
 Mars control network (Wu and Schaller, 1984). These nets contain published standard
 errors of approximately 5 km, and agreement of points common to the nets may differ
 by as much as 1 cm at map scale. Image points from 1:2,000,000-scale controlled
 photomosaics were transferred to the Polar Stereographic projection where control
 points are sparse or not available.
 The density, distribution, precision, and accuracy of available control points used for
 this map series are extremely variable. A block of mosaics compiled in areas of
 optimum control-point distribution is not likely to match adjacent blocks previously
 compiled in areas of sparse or imprecise control. Where discrepancies exist between
 adjacent mosaics, the more recent compilation is probably more accurate. No
 attempt was made to resolve large edge discrepancies with previous compilations.
 The Transverse Mercator and Polar Stereographic projections are used for this
 series. The Polar Stereographic projection has a scale of 1:500,000 at lat. ±87.5° and
 1:500,300 at the poles. The projection scales are based on an oblate spheroid (flattening
 of 1/292) with an equatorial radius of 3393.4 km and a polar radius of 3372.7 km.
NOMENCLATURE
 All names shown on the reduced base mosaic are approved by the International
 Astronomical Union (IAU, 1977).
 Abbreviation for Mars, 1:500,000 series; center of sheet
 at 85° N, long 80° W; controlled photomosaic (CM).
REFERENCES
 Davies, M.E., and Katayama, F.Y., 1983, The 1982 control network of Mars: *Journal
 of Geophysical Research*, v. 88, no. B9, p. 7503-7504.
 Davies, M.E., Katayama, F.Y., and Roth, J.A., 1978, Control net of Mars: February
 1978: The Rand Corporation, R-2309-NASA, 91 p.
 International Astronomical Union, 1977, Working Group for Planetary System
 Nomenclature, in 16th General Assembly, Grenoble, 1976, Proceedings: Interna-
 tional Astronomical Union Transactions, v. 16B, p. 321-325, 331-336, 355-362.
 Wu, S.S.C., and Schaller, J.J., 1984, Mars control network: *American Society of
 Photogrammetry*, in Technical papers of the 50th annual meeting of the American
 Society of Photogrammetry, v. 2, Washington, D.C., March 11-16, 1984, p.
 404-403.



INDEX OF VIKING PICTURES
 The mosaic was made with the Viking pictures outlined
 above. Copies of various enhancements of these pictures
 are available from National Space Science Data Center,
 Code 601, Goddard Space Flight Center, Greenbelt, MD
 20771.



LOCATION OF FEATURES
 Contrast in the reduced base mosaic was purposely suppressed to
 emphasize the names.

MTM 85080
CONTROLLED PHOTOMOSAIC OF PART OF THE CHASMA
BOREALE REGION OF MARS
M 500K 85/80 CM
1986

NOTE TO USERS
 Users noting errors or omissions are urged to indicate them on the
 map and to forward it to U.S. Geological Survey, Building 4, Room
 454, 2255 North Gemini Drive, Flagstaff, Arizona 86001. A replace-
 ment copy will be returned.

For sale by U.S. Geological Survey, Map Distribution,
 Box 32086, Federal Center, Denver, CO 80225.