



Prepared on behalf of the Planetary Geology Program, Solar System Exploration Division,
Office of Space Science, National Aeronautics and Space Administration, under contract
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ADOPTED FIGURE
The figure of Mars used for computation of the map projection is an oblate spheroid (flattening of 1/192) with an equatorial radius of 3,393.4 km and a polar radius of 3,375.7 km.

PROJECTION
Mercator, Lambert Conformal Conic, and Polar Stereographic projections are used for this map series. The scale of the series is 1:2,000,000 at lat $\pm 27.476^\circ$ (Mercator), lat $\pm 35.83^\circ$ and $\pm 59.17^\circ$ (Lambert), and lat $\pm 75.008^\circ$ (Polar Stereographic). The projections have common scales of 1:1,952,947 at lat $\pm 30^\circ$ and 1:1,939,394 at lat $\pm 65^\circ$.

CONTROLS

Contours were generated from stereopairs of stereo-
scopes using Viking Orbiter pictures. The parameters for stereo-
models were computed analytically, based on the adjusted
positions and orientations of the spacecraft camera and the
orbiter. The positions and orientations of the spacecraft were established
by analytical photogrammetric aerotriangulation (Wu and
Schäfer, 1984) using the General Integral Analytical Triangulation
Program (GATP) (Schäfer, 1984). The positions and orientations of
the controls used in the control network include the Viking Orbiter
Secondary Experiment Data Record, radar occultation measure-
ments from Mariner 9 and Viking Missions (Klose and others,
1972; Schabert, 1972; Schabert and others, 1972; Schabert,
Downs and others, 1975), and the Mars primary control net-
work of the Rand Corporation (Davies and others, 1978).

Elevation values (expressed in meters) are given with respect to
the datum of the Viking Orbiter Secondary Experiment Data Rec-
ord. Gravity field descriptions in terms of fourth-order and fourth-
degree spherical harmonics combined with a 6.1 millibar atmospheric
pressure surface derived from Mariner 9 radar occultation mea-
surements (Schabert and others, 1972; Klose and others, 1972; Wu,
1981; Schabert, 1981).

Local mismatches between contour lines shown here and images on controlled photomosaics are the result of improvements in control nets during the course of compilation. Estimated elevation accuracy is approximately 1 km (one contour interval).

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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 412, 2255 North Gemini Drive, Flagstaff, AZ 86001. A replacement copy will be returned.



This topographic map was made from the pairs of 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.



In order to emphasize the names, contrast was purposely suppressed in this reduced copy of the controlled photomosaic (I-1377) of this quadrangle. All names are approved by the International Astronomical Union.



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