

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 (Batton, 1973). The major source of map data was the Mariner 9 television experiment (Mausury 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 Mercator projection is used for this sheet, with a scale of 1:5,000,000 at the equator and 1:4,260,000 at lat 30°. Longitudes increase to the west in accordance with usage of the International Astronomical Union (IAU, 1971). Latitudes are areographic (de Vaucouleurs and others, 1973).

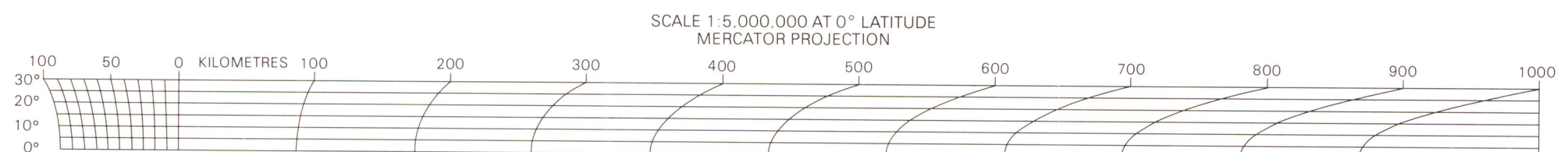
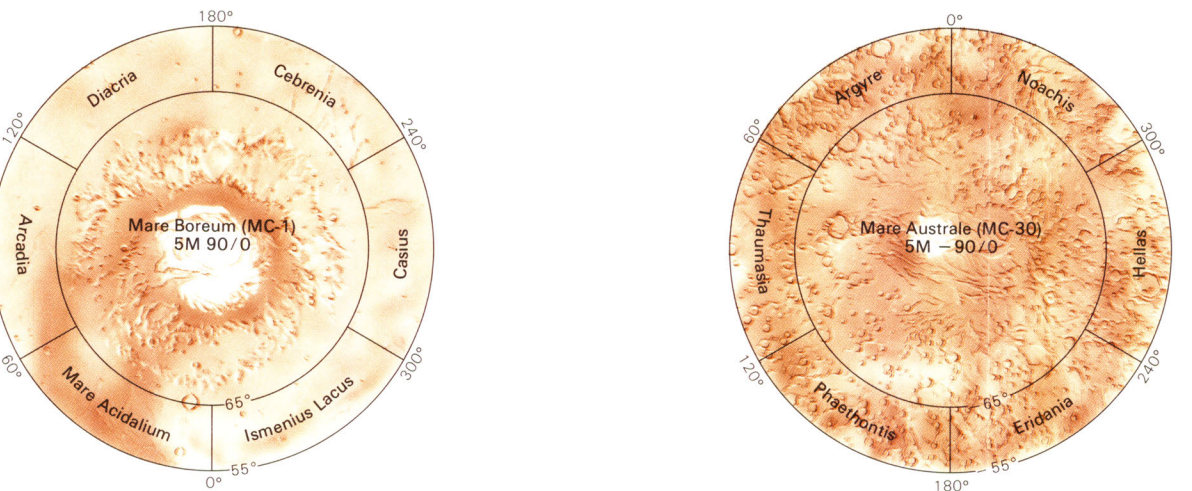
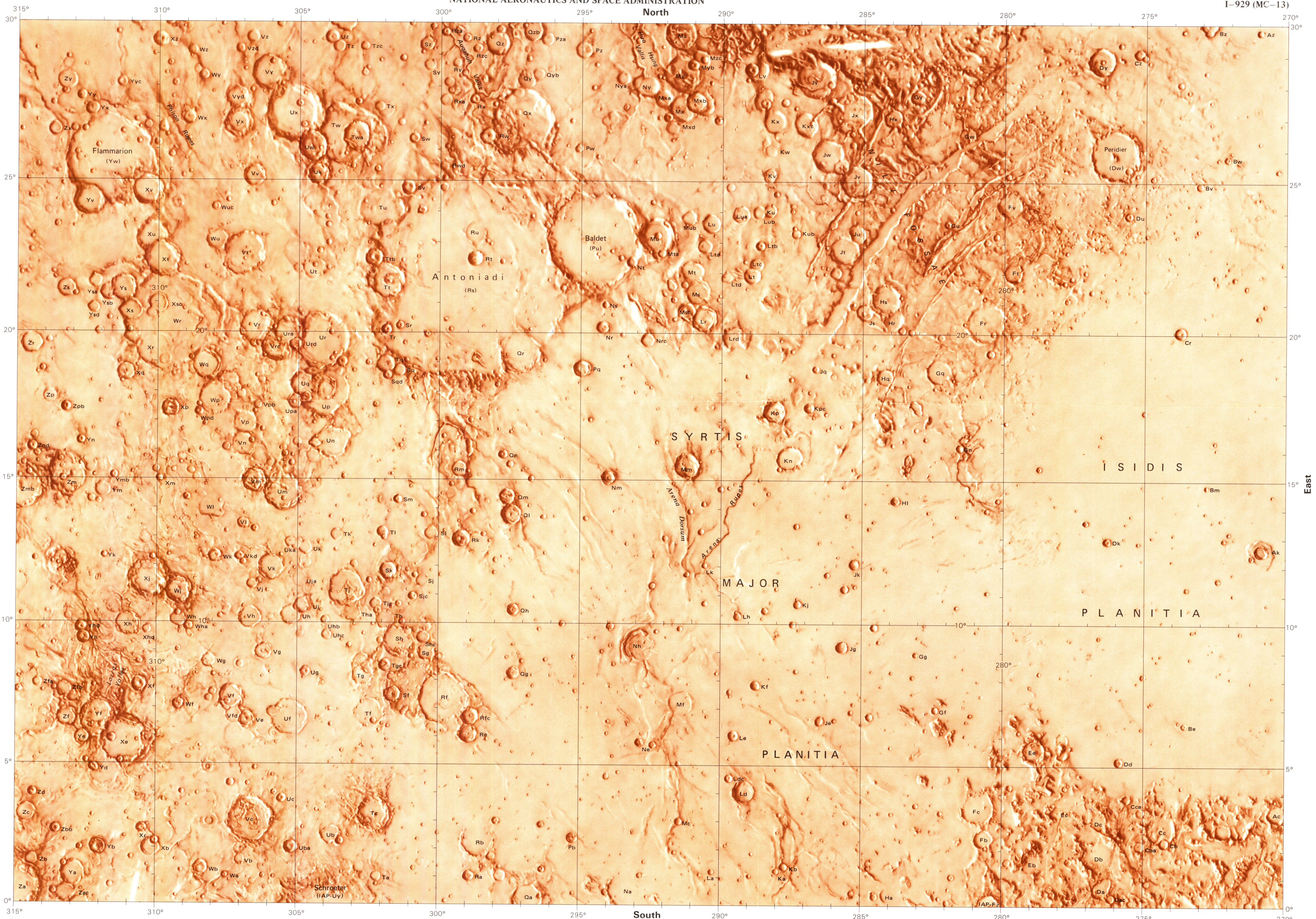
CONTROL
Planimetric control is provided by photogrammetric triangulation using Mariner 9 pictures (Davies, 1973; Davies and Arthur, 1973) and the radio-tracked position of the spacecraft. The first meridian passes through the crater Airy (latitude 5.19° S) within the crater Airy. No simple statement is possible for the precision, but local consistency is 10-15 km.

MAPPING TECHNIQUE
A series of mosaics of Mariner 9 projections of Mars were assembled at 1:5,000,000. Shaded relief was copied from the mosaics and portrayed with uniform illumination with the sun from 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. 19-23). 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 provisional: Arena Dorsum, Arena Rupes, Locas Vallis, and Plinius Rupes. 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-13: Abbreviation for Mars Chart 13, M SM 15/292 R; Abbreviation for Mars 1:5,000,000 series; center of sheet, 15° latitude, 292° longitude; shaded relief map, R.

REFERENCES
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1974, Physical study of planets and satellites, in Proc. 15th General Assembly, 1973: Internat. Astron. Union Trans., v. XV, p. 105-108.
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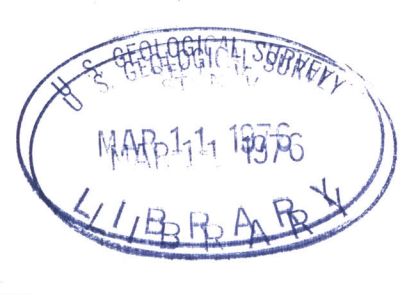
QUADRANGLE LOCATION
Number preceded by 1 refers to published shaded relief map

Dacia (MC-2) SM 48/150	Arenas (MC-3) SM 48/90	Mare Acostium (MC-4) SM 48/30	Imeneus Lacus (MC-5) SM 48/120	Cavia (MC-6) SM 48/270	Cebrenia (MC-7) SM 48/210		
Araonius (MC-8) SM 15/188	Phoenicia (MC-9) SM 15/158	Lutae Fossae (MC-10) SM 15/168	Dnae Palus (MC-11) SM 15/222	Arabis (MC-12) SM 15/238	Syrtis Major (MC-13) SM 15/292	Amenthes (MC-14) SM 15/258	Elysium (MC-15) SM 18/202
Merenopia (MC-16) SM 15/158	Phoenicia (MC-17) SM 15/158	Cerberus (MC-18) SM 15/122	Phoenicia (MC-19) SM 15/122	Phoenicia (MC-20) SM 15/122	Phoenicia (MC-21) SM 15/242	Mare Tyrrhenum (MC-22) SM 15/242	Arabis (MC-23) SM 18/202
Phoenicia (MC-24) SM 48/150	Thaumasus (MC-25) SM 48/90	Argyre (MC-26) SM 48/30	Nokxia (MC-27) SM 48/120	Hellas (MC-28) SM 48/270	Elysium (MC-29) SM 48/210		

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6	8065889	26	7147213
7	6850753	27	7219273
8	7003743	28	7291223
9	7075773	29	6921223
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SHADED RELIEF MAP OF THE SYRTIS MAJOR QUADRANGLE OF MARS
MC-13
M SM 15/292 R
1975



Mars (Syrtis Major quad.), Relief, 1:5,000,000, 1975.
Cop 1

G3700
swar
.G438
1-929
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