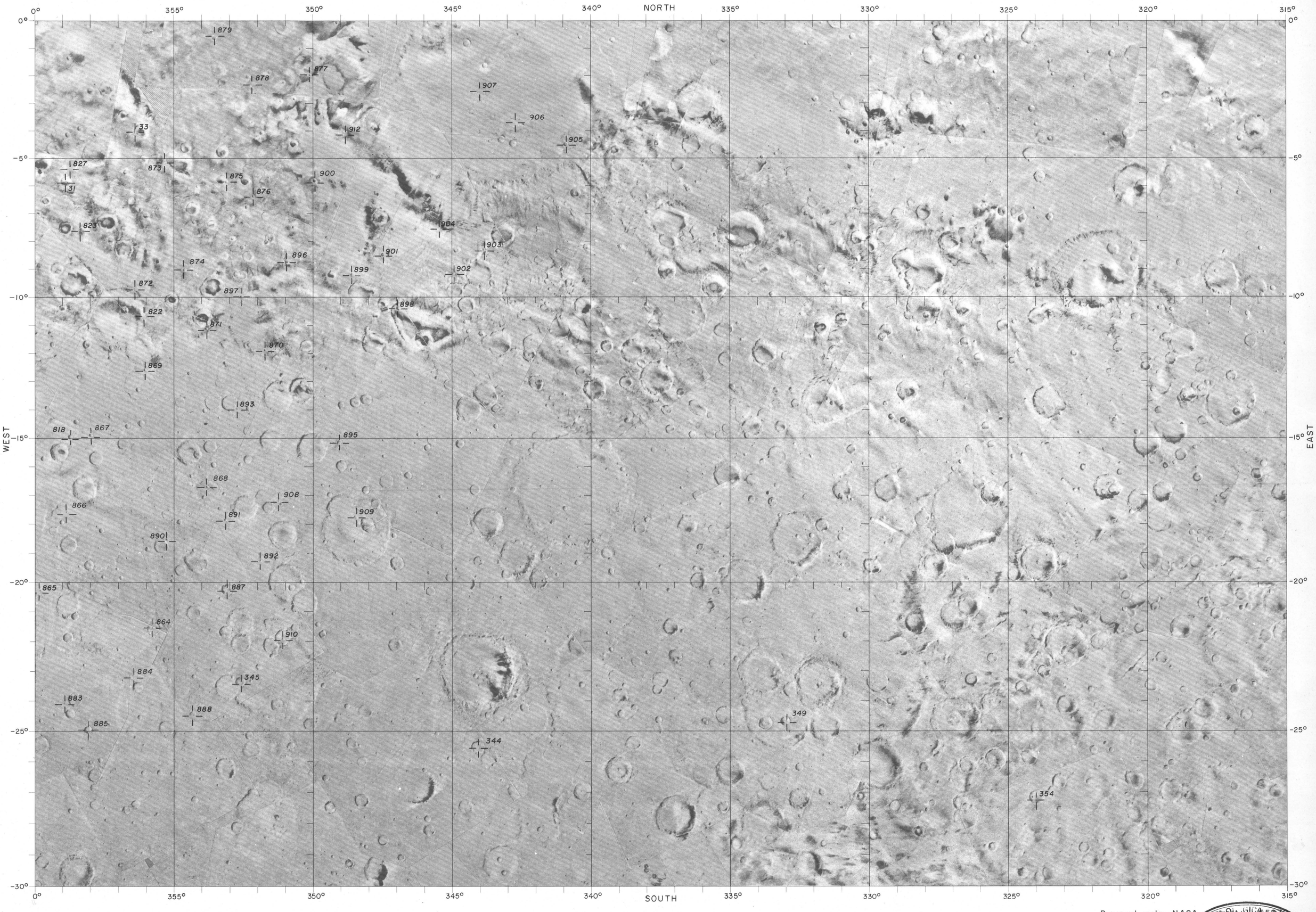
ATLAS OF MARS

SINUS SABAEUS
MC-20

M 5M -15/338 SM
(SEMICONTROLLED PHOTOMOSAIC)
1:5,000,000 CARTOGRAPHIC SERIES

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED FOR THE
LANGLEY RESEARCH CENTER
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



This mosaic was made with Mariner 9 pictures provided by the Jet Propulsion Laboratory (JPL), California Institute of Technology. The Image Processing Laboratory (IPL) of JPL processed the digital pictures to remove image artifacts and geometric distortions, to enhance high-frequency topographic detail while subduing low-frequency albedo variation, and to transform the pictures to a Mercator projection. The U.S. Geological Survey performed further artifact removal and modified contrast and tone of each picture analytically on the digital magnetic tapes provided by IPL for uniformity of tone and contrast within the mosaic. Photographic reproductions of the pictures were generated from the magnetic tapes and mosaicked by the U.S. Geological Survey.

Primary horizontal control points, where available, controlled the placement of pictures. Where these points were not available, picture placement was controlled by spacecraft tracking data and by matching images in overlap zones between pictures. Discrepancies in matching these images are less than 10 km over 90% of the mosaic. The number designations and positions of the primary control points, shown by broken crosses (—|—), are those given by Davies and Arthur (1973).

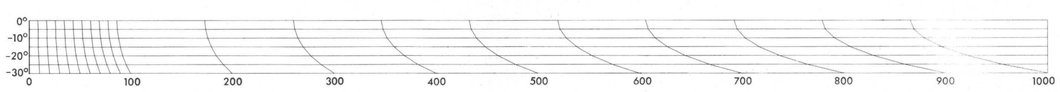
Aerographic latitudes are shown on this mosaic. The projection is based on a theoretical dynamical ellipticity of 1/192. The scale is based on an equatorial radius of 3393.4 km.

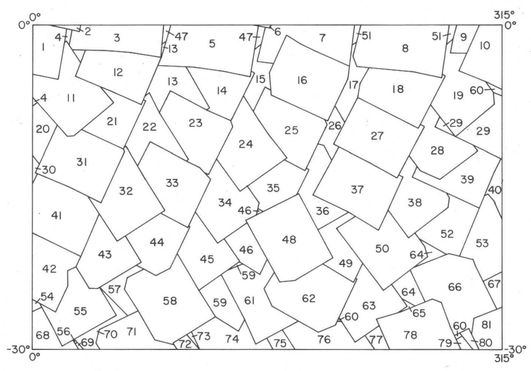
Selected References

Batson, R. M., 1973, Cartographic products from the Mariner 9 mission: Jour. Geophys. Res. (in press).

Davies, M. E., and Arthur, D. W. G., 1973, Martian surface coordinates: Jour. Geophys. Res. (in press).

SCALE 1:5,000,000 AT 0° LATITUDE
MERCATOR PROJECTION





INDEX OF PICTURES IN THE MOSAIC

IDENTIFICATION NUMBERS OF PICTURES IN THE MOSAIC

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3	6643313	30	8045623	57	5311423
4	6100603	31	6642823	58	8189339
5	6715203	32	8117513	59	6786533
6	6715273	33	6714713	60	6460123
7	6787163	34	8189479	61	8261299
8	6859123	35	6786673	62	6858493
9	6931153	36	8261439	63	8333329
10	6930803	37	6858633	64	6930523
11	8045763	38	8333469	65	5527303
12	6642963	39	6930663	66	8405289
13	8117653	40	8405429	67	7002483
14	6714853	41	6642753	68	8117303
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16	6786813	43	8117443	70	5311353
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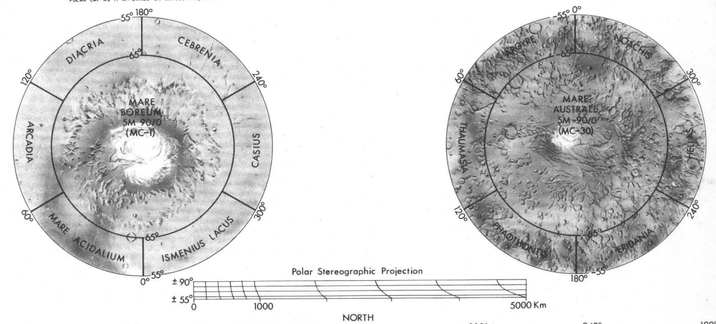
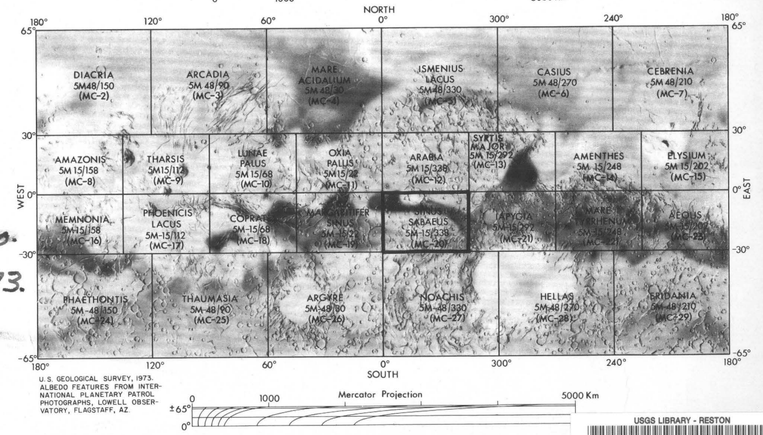
21	6642893	48	8261369	75	5455203
22	8117583	49	6858563	76	8333259
23	6714783	50	8333399	77	5527233
24	8189549	51	6316343	78	8405219
25	6786743	52	6930593	79	5599193
26	8261509	53	8405359	80	5599263
27	6858703	54	5239463	81	8477249

NORTH POLAR REGION
POLAR CAP AS IT APPEARED ON OCTOBER 12, 1972

SOUTH POLAR REGION
POLAR CAP AS IT APPEARED ON FEBRUARY 28, 1972





U.S. GEOLOGICAL SURVEY, 1973.
ALBEDO FEATURES FROM INTERNATIONAL PLANETARY PATROL PHOTOGRAPHS, LOWELL OBSERVATORY, FLAGSTAFF, AZ.

LOCATION OF QUADRANGLE ON MARS

Prepared under NASA contract L-5583

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