

NOTES ON BASE
This is one sheet in a series of topographic map sheets covering that part of the surface of Mercury that was illuminated during the Mariner 10 encounters (Davies and Batson, 1975). The source of map data was the Mariner 10 television experiment (Murray, 1975).

ADOPTED FIGURE
The map projections are based on a sphere with a radius of 2439 km.

PROJECTION
The Mercator projection is used for this sheet, with a scale of 1:5,000,000 at the equator. Latitudes are based on the assumption that the spin axis of Mercury is perpendicular to the plane of the orbit. Longitudes are positive westwards in accordance with the usage of the International Astronomical Union (IAU, 1971). Mercurians are numbered so that a reference crater named Hun Kal (at 0.6° S) is centered on long 20° (Murray and others, 1974; Davies and Batson, 1975).

CONTROL
Planimetric control is provided by photogrammetric triangulation using Mariner 10 pictures (Davies and Batson, 1975). Discrepancies between images in the base mosaic and computed control point positions appear to be less than 10 km. No attempt was made to resolve discrepancies in feature positions on this sheet and those on the Kuiper quadrangle to the east, because the Kuiper quadrangle was controlled by an earlier, more preliminary net. Discrepancies as large as 30 km were noted along the southern part of the boundary between these sheets.

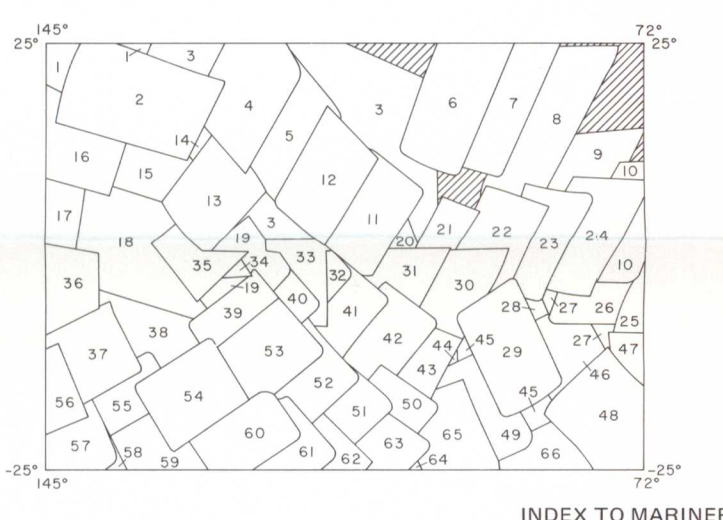
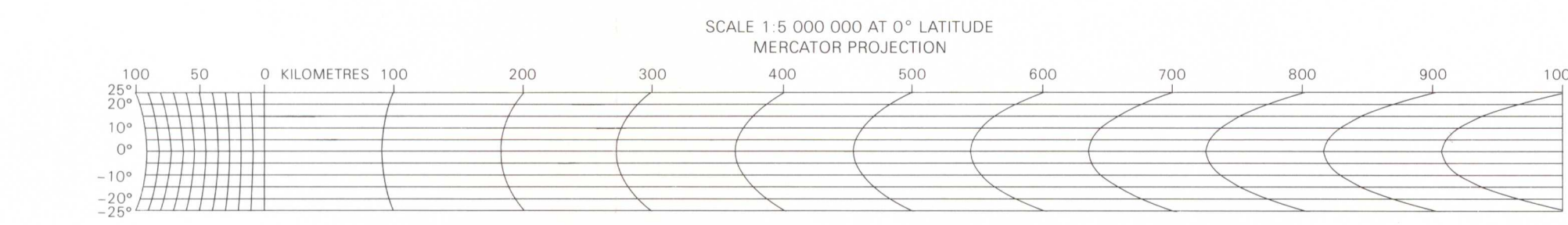
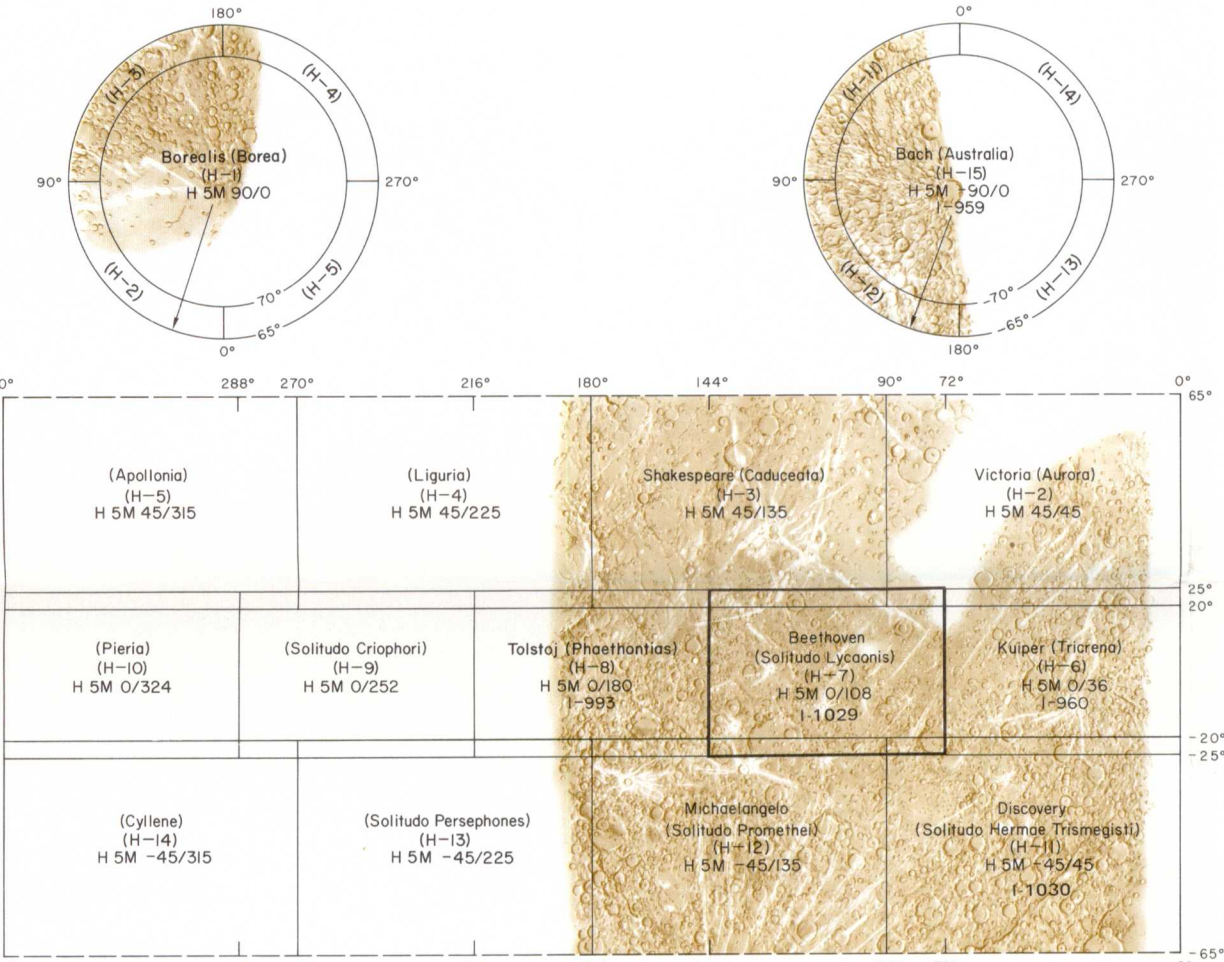
MAPPING TECHNIQUES
Mapping techniques are similar to those described by Batson (1973a, 1973b). A mosaic was made with pictures that had been digitally transformed to the Mercator projection. Shaded relief was copied from the mosaics and portrayed with uniform illumination with the sun to the west. Many Mariner 10 pictures, besides those in the base mosaic were examined to improve the portrayal. The shading is not generalized, and may be interpreted with near photographic reliability (Inge, 1972, Inge and Bridges, 1976).

COLOR
The color of the shaded relief was selected for optimum discrimination of detail and is not intended to represent the color of Mercury even approximately.

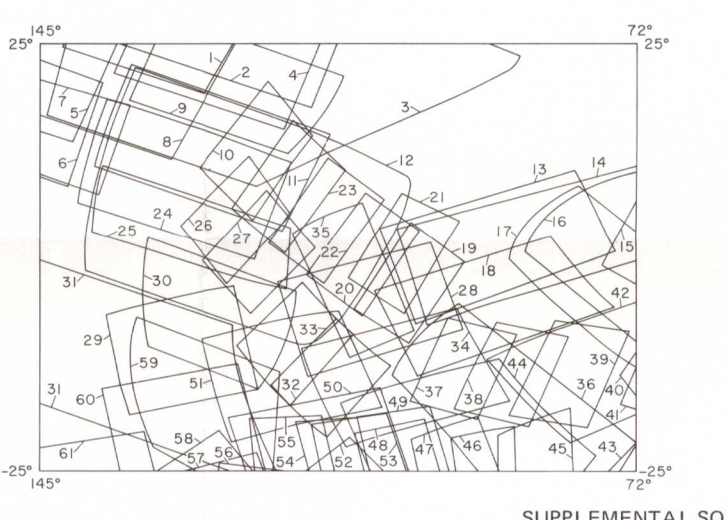
NOMENCLATURE
All names on this sheet are approved by the International Astronomical Union (IAU, 1977).

H-7: Abbreviation for Mercury (Hermes) sheet number 7.
H 5M 0/108 R: Abbreviation for Mercury (Hermes) 1:5,000,000 series; center of sheet, latitude, 108° longitude; shaded relief map, R.

REFERENCES
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Index No.	FDS No.	Index No.	FDS No.	Index No.	FDS No.
1	000182	33	166732	45	166698
2	000178	24	166711	46	166591
3	000098	26	166763	47	166639
4	166786	26	166764	48	166539
5	166785	27	166805	49	166599
6	166768	28	166697	50	166739
7	166767	29	166626	51	166806
8	166766	30	166781	52	166807
9	166765	31	166782	53	166808
10	166770	32	166715	54	166816
11	166769	33	166684	55	166821
12	166784	34	166810	56	166828
13	166786	35	166804	57	166827
14	166792	36	000215	58	166826
15	000179	37	166822	59	166829
16	000183	38	000211	60	166815
17	000214	39	166829	61	166814
18	000210	40	166802	62	166813
19	166803	41	166784	63	166811
20	166804	42	166793	64	166842
21	166774	43	166790	65	166790
22	166773	44	166693	66	166640



Index No.	FDS No.	Index No.	FDS No.	Index No.	FDS No.
1	000177	23	166760	45	166703
2	000172	24	000209	46	166704
3	000212	25	000206	47	166705
4	000189	26	166797	48	166706
5	000212	27	166797	49	166707
6	000213	28	166817	50	166882
7	000183	29	166808	51	166883
8	000204	30	000206	52	166812
9	000179	31	000217	53	166812
10	166791	32	166810	54	166791
11	000208	33	166800	55	166808
12	000282	34	166876	56	166714
13	166805	35	166805	57	166807
14	166811	36	166816	58	166819
15	166819	37	166809	59	166809
16	166878	38	166878	60	166889
17	166864	39	166779	61	166889
18	166884	40	166838		
19	166827	41	166779		
20	166788	42	166862		
21	166782	43	166852		
22	166789	44	166875		

**SHADED RELIEF MAP OF THE BEETHOVEN QUADRANGLE OF MERCURY
(SOLITUDO LYCAONIS ALBEDO PROVINCE)**

**H-7
H 5M 0/108 R
1977**