

#### NOTES ON BASE

This sheet is one in a series of maps that cover the surfaces of the Galilean satellites of Jupiter at a nominal scale of 1:5,000,000 (Baton and others, 1980). The source for the series was Voyager 1 and 2 images. Essential features of the mapping are noted below.

#### CARTOGRAPHIC CONTROL

Mercator, Lambert Conformal Conic, and Polar Stereographic projections used for the maps of Ganymede are based on a sphere with a radius of 2638 km. The projections have common scales of 1:4,780,000 at lat 21.3° and 1:4,769,000 at lat 26.2°. Longitude increases to the west in accordance with astronomical convention. Planimetric control was derived by photogrammetric triangulation using Voyager 1 and 2 pictures (Davies and Katayama, 1981). The meridians are numbered so that the reference crater, Anax, is centered on lat 2.8° S, long 128°.

#### MAPPING TECHNIQUE

A series of mosaics of Voyager 1 and 2 pictures was assembled at 1:5,000,000 scale using projections described above. Sizes, shapes, and positions of features were taken from the base mosaic using portrayal and interpretation techniques described by Inge (1972) and Inge and Bridges (1976). Surface relief is shown as if illuminated from the west. Albedo markings are shown as they appear on the Voyager pictures. Extreme variations in picture resolution precluded consistent interpretation and portrayal of the pictures used for map compilation. Further limitations were imposed by dark albedo markings, which tend to obscure distinctive surface details. The colors chosen for this map are intended to provide optimum discrimination of detail and do not represent the color of Ganymede.

Image analysis and airbrush representation were made by Patricia Hagerty Gray and Patricia M. Bridges.

#### NOMENCLATURE

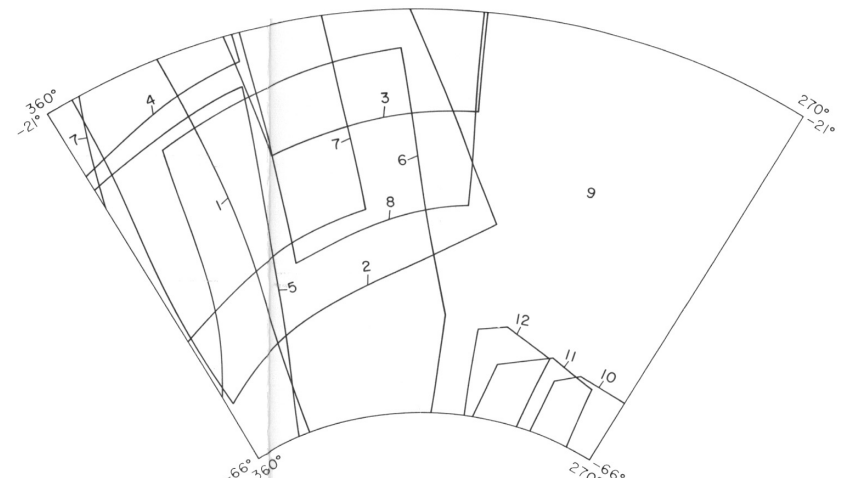
Names on this sheet are approved by the International Astronomical Union (IAU, 1980, 1986 and 1988).

Jg 5M—44/315 AN. Abbreviation for Jupiter, Ganymede (satellite); 1:5,000,000 series; center of sheet, lat 44° S, long 315°; shaded relief with albedo markings (A), nomenclature (N).

Jg 14. Abbreviation for Jupiter, Ganymede; sheet 14.

#### REFERENCES

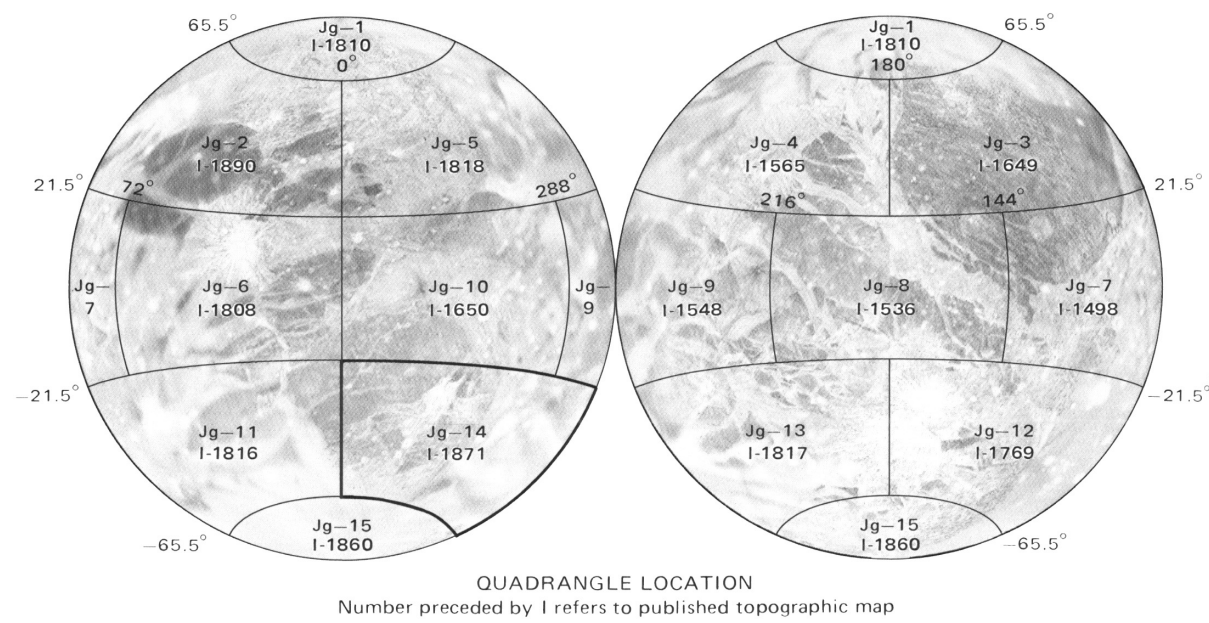
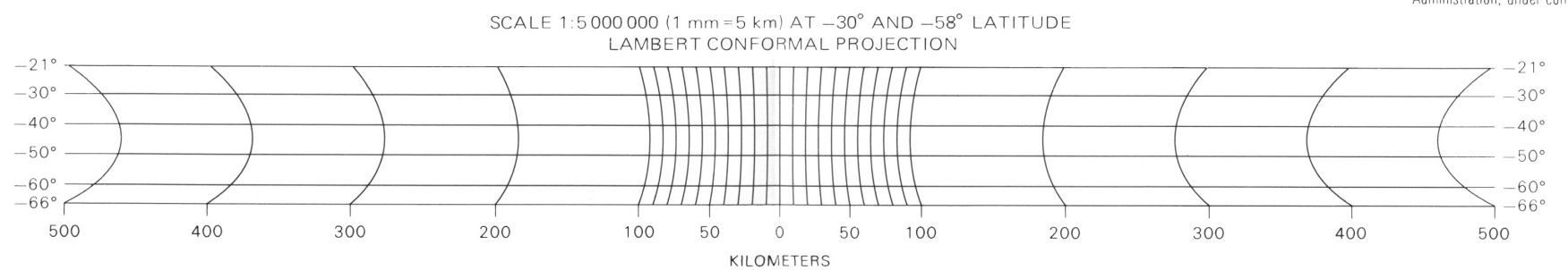
- Baton, R.M., Bridges, P.M., Inge, J.L., Isbell, Christopher, Masursky, Harold, Strobel, M.E., and Tyner, R.L., 1988, Mapping the Galilean satellites of Jupiter with Voyager data: Photogrammetric Engineering and Remote Sensing, v. 46, no. 10, p. 1303-1312.
- Davies, M.E., and Katayama, F.Y., 1981, Coordinates of features on the Galilean satellites: Journal of Geophysical Research, v. 86, no. A10, p. 8655-8667.
- Inge, J.L., 1972, Principles of linear illustration: Aeronautical Chart and Information Center Reference Publication 72-1, 60 p.
- Inge, J.L., and Bridges, P.M., 1976, Applied photointerpretation for airbrush cartography: Photogrammetric Engineering and Remote Sensing, v. 42, no. 6, p. 749-760.
- International Astronomical Union, 1980, Working Group for Planetary System Nomenclature, in 17th General Assembly, Montreal, 1979, Proceedings: International Astronomical Union Transactions, v. 17B, p. 297-304.
- , 1986, Working Group for Planetary System Nomenclature, in 19th General Assembly, New Delhi, 1985, Proceedings: International Astronomical Union Transactions, v. 19B, p. 350-353.
- , 1988, Working Group for Planetary System Nomenclature, in Reports on Astronomy: International Astronomical Union Transactions, v. 20A, p. 705-706.



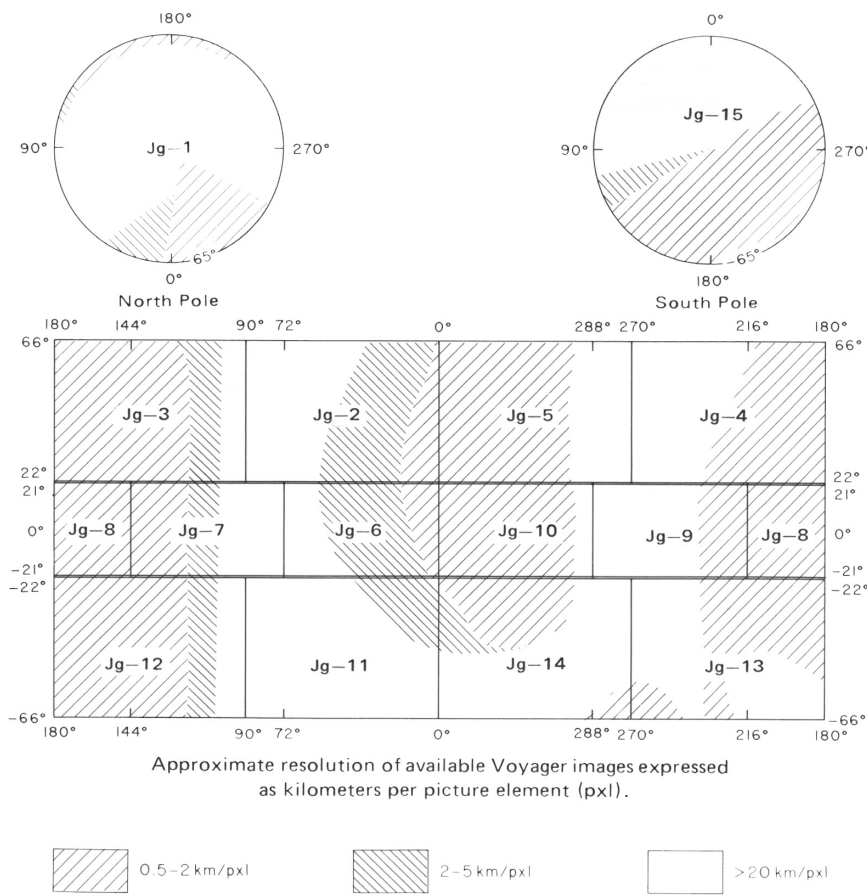
#### INDEX OF MAPING SOURCES

The rendition of features on this map was controlled by reference to the primary source pictures outlined above. Supplemental source images used during the compilation are listed separately. Copies of various enhancements of these pictures are available from National Space Science Data Center, Code 601, Goddard Space Flight Center, Greenbelt, MD 20771.

VOYAGER 1		VOYAGER 2		VOYAGER 1		VOYAGER 2	
Primary Source		Primary Source		Supplemental Source		Supplemental Source	
Index No.	Picture No.	Index No.	Picture No.	Index No.	Picture No.	Index No.	Picture No.
1	0793.1-1000	10	0584.2-001	0152.1-1000	0584.2-001	0152.1-1000	0584.2-001
2	0833.1-1000	11	0686.2-001	0181.1-1000	0686.2-001	0181.1-1000	0686.2-001
3	0891.1-1000	12	0686.2-001	0212.1-1000	0686.2-001	0212.1-1000	0686.2-001
4	0923.1-1000			0252.1-1000		0252.1-1000	
5	0931.1-1000			1004.1-1000		1004.1-1000	
6	0933.1-1000			1003.1-1000		1003.1-1000	
7	0933.1-1000			0015.1-003		0015.1-003	
8	0941.1-1000			0516.1-002		0516.1-002	
9	0786.1-002			0178.1-002		0178.1-002	
				165.11-002		165.11-002	



QUADRANGLE LOCATION  
Number preceded by 1 refers to published topographic map



## SHADED RELIEF AND SURFACE MARKINGS OF THE NAMTAR QUADRANGLE OF GANYMEDE

Jg-14

Jg 5M—44/315 AN

1988

#### 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 replacement copy will be returned.

For sale by U.S. Geological Survey, Map Distribution, Box 25286, Federal Center, Denver, CO 80225