

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 (Barton 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 +21.5° and 1:4,749,600 at lat -65.2°. 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, Anat, 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

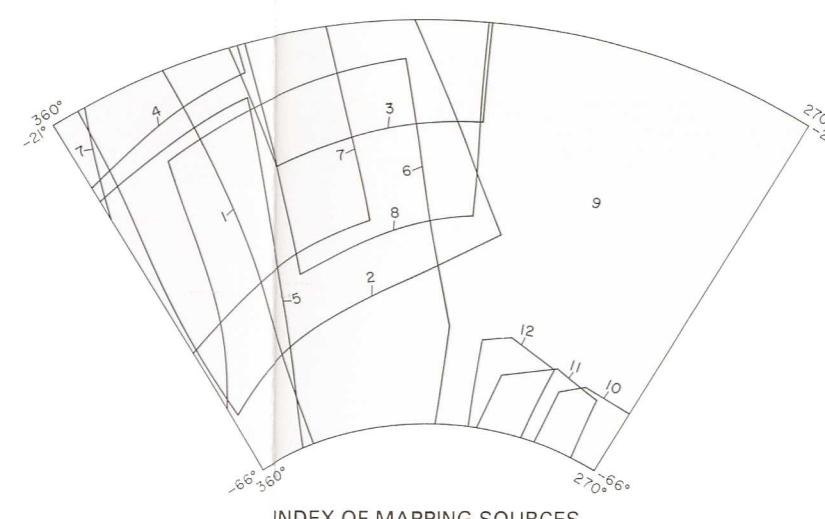
Names on this sheet are approved by the International Astronomical Union (IAU), 1980, 1986 and 1988.

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).

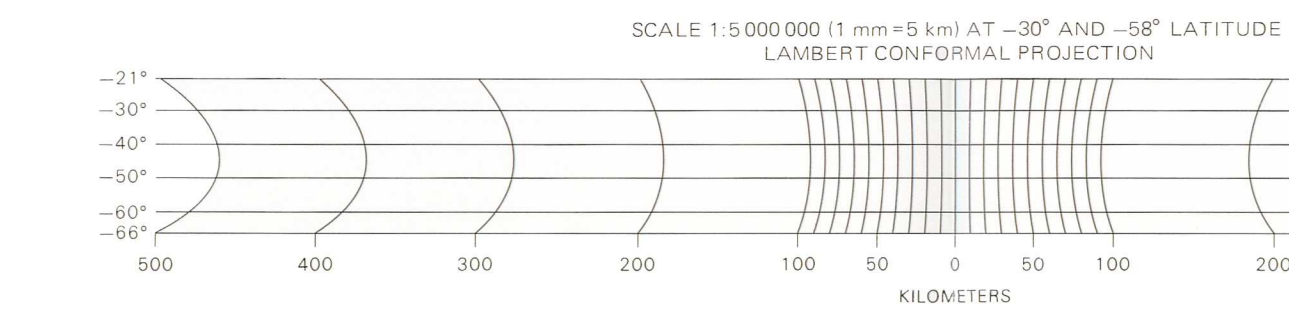
Abbreviation for Jupiter, Ganymede; sheet 14.

REFERENCES

- Barton, R.M., Bridges, P.M., Inge, J.L., Isbell, Christopher, Masursky, Harold, Strobel, M.E., and Tynes, R.L., 1980, 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. 8633-8637.
- Inge, J.L., 1972, Principles of lunar illustration. Aeronautical Chart and Information Center Reference Publication 72-1, 69 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.

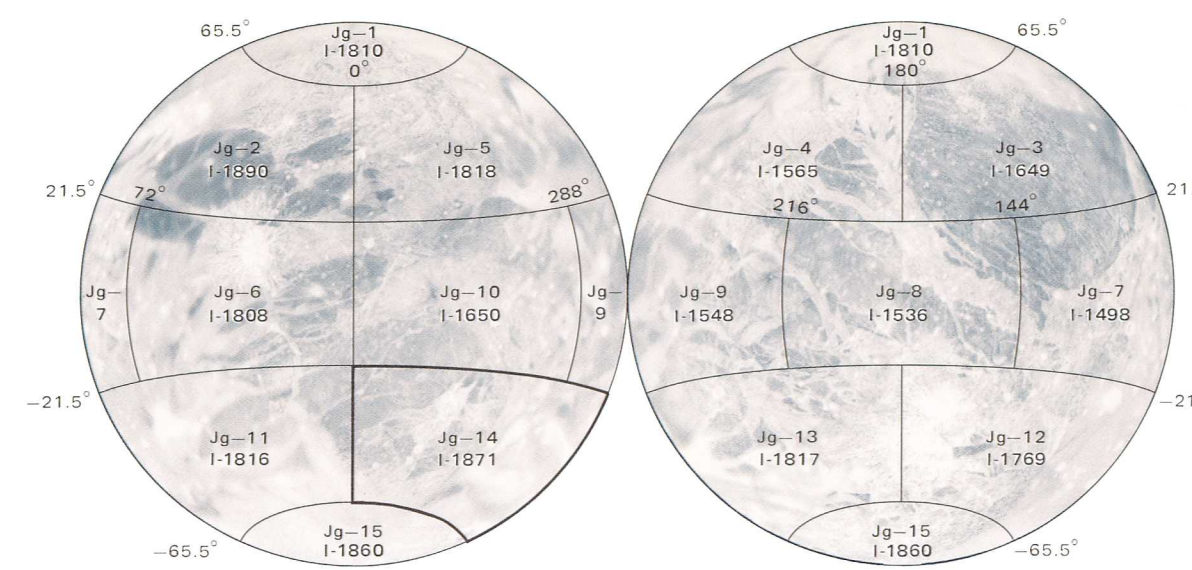


The rendition of features on this map was controlled by reference to the primary source pictures outlined above. Supplemental source images used during the compilation are listed separately. Copies of various enhancements of these pictures are available from National Space Science Data Center, Code 601,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

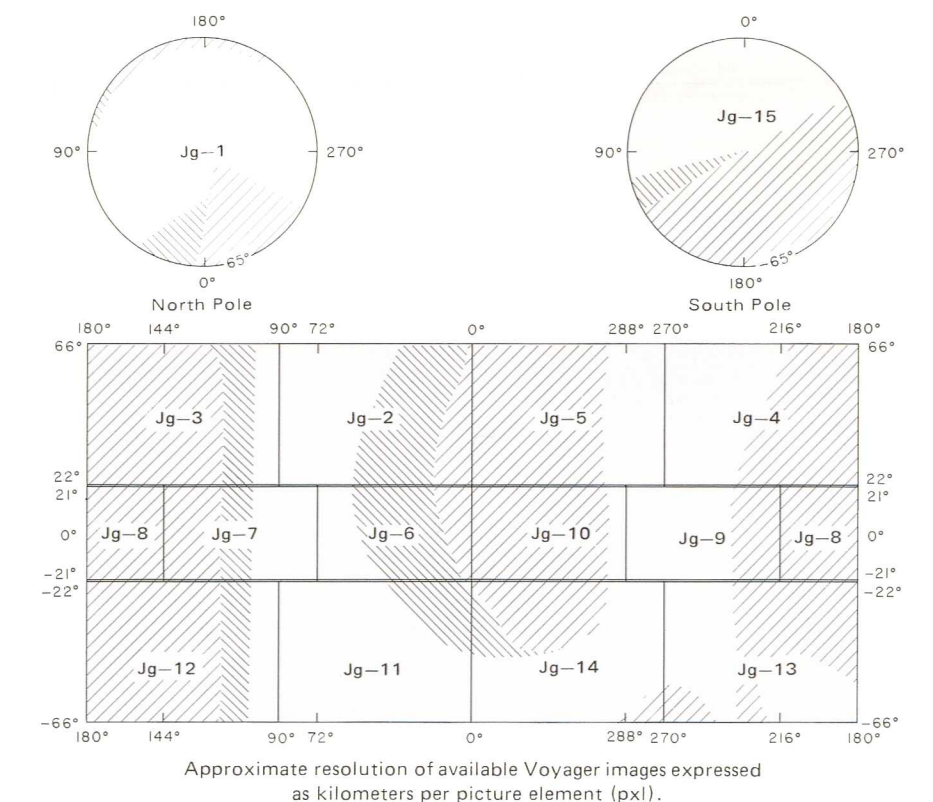


INTERNATIONAL GEOLOGICAL SURVEY, RESTON, VA—1988
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VOYAGER 1		VOYAGER 2		VOYAGER 1		VOYAGER 2	
Primary Source		Primary Source		Supplemental Source		Supplemental Source	
Index No.	Picture No.	Index No.	Picture No.	Picture No.	Picture No.	Picture No.	Picture No.
1	0780J1+000	10	0884J2-001	0823J1+000	0842J2-001		
2	0835J1+000	11	0882J2-001	0832J1+000	0842J2-001		
3	0841J1+000	12	0882J2-001	0832J1+000	0842J2-001		
4	0823J1+000			1054J1+000			
5	0931J1+000			1071J1+000			
6	0923J1+000			0915J1+000			
7	0931J1+000			0915J1+000			
8	0941J1+000			0915J1+000			
9	0780J1+000			0915J1+000			



Number preceded by 1 refers to published topographic map



Approximate resolution of available Voyager images expressed as kilometers per picture element (pxl).

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.