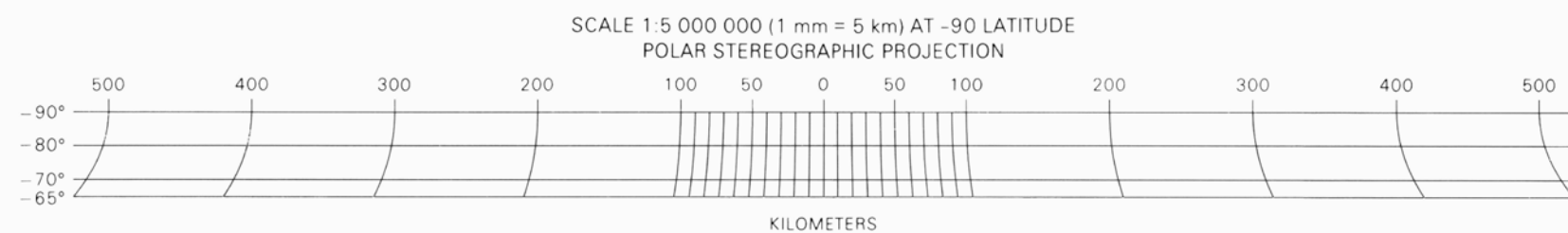


INTERIOR—GEOLOGICAL SURVEY, RESTON, VA—1987—7657 23  
Prepared on behalf of the Planetary Geology and Geophysics Program, Planetary Division, Office of Space Science and Applications, National Aeronautics and Space Administration, under contract W-15.014.



**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 (Bates and others, 1980). The source for this 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 ±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.

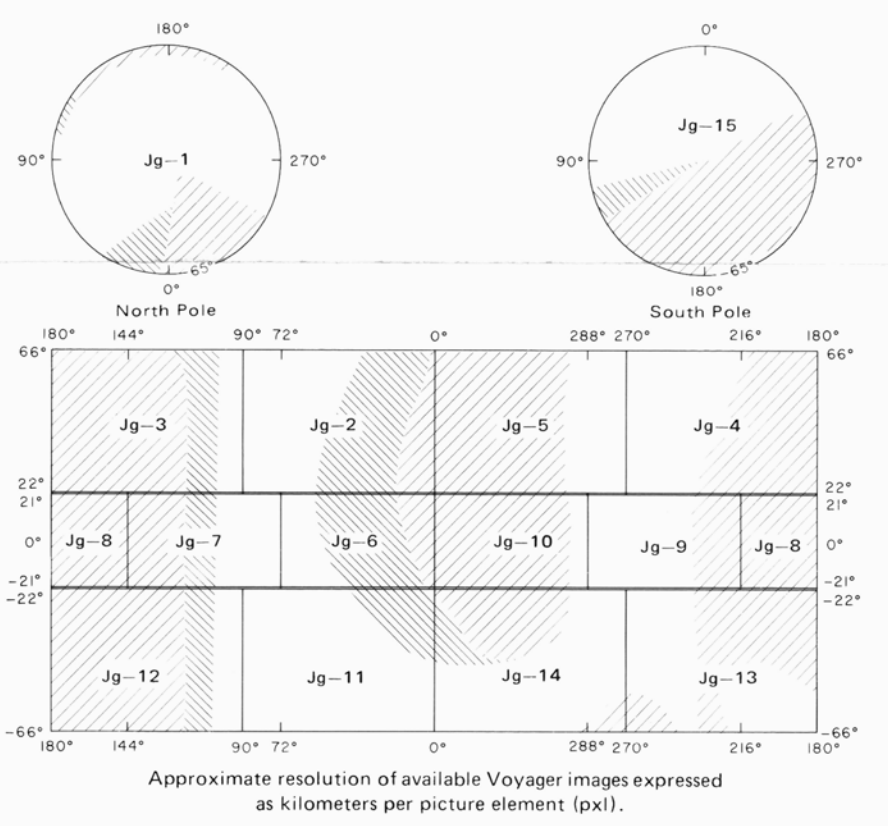
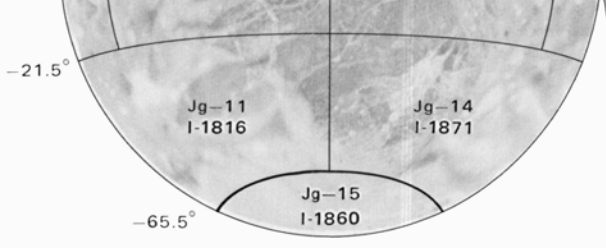
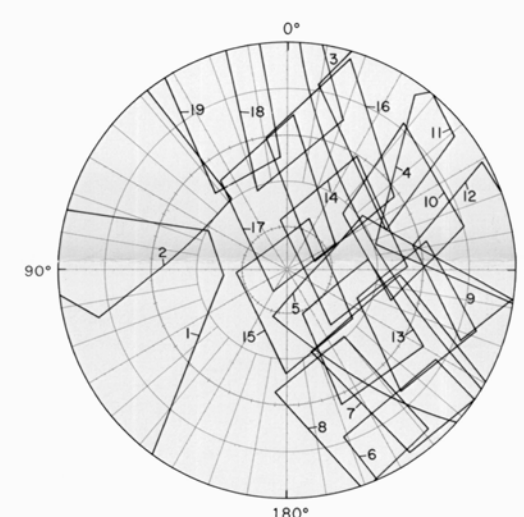
The colors chosen for this map are intended to provide optimum discrimination of detail and do not represent the color of Ganymede. Image analysis and airbrush representation were made by Jay L. Inge and Barbara J. Hall.

**NOMENCLATURE**

Names on this sheet are approved by the International Astronomical Union (IAU, 1980) except for provisional names which are indicated by an asterisk. Jg 5M -90/0 AN: Abbreviation for Jupiter, Ganymede (satellite); 1:5,000,000 series; center of sheet lat 90° S, long 0°; shaded relief with albedo markings (A), nomenclature (N).

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- Inge, J.L., 1972, Principles of lunar illustration: Aeronautical Chart and Information Center Reference Publication RP-72-1, 60 p.
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VOYAGER 1		VOYAGER 2		VOYAGER 1		VOYAGER 2	
Index No.	Picture No.	Index No.	Picture No.	Index No.	Picture No.	Index No.	Picture No.
1	785J1-0	3	4312-1	318J1-2	5242-1		
2	933J1-0	4	5302-1	185J1-2	5272-1		
		5	5332-1	785J1-0	5362-1		
		6	5882-1		5882-1		
		7	5922-1		5882-1		
		8	5842-1		5902-1		
		9	6582-1		6842-1		
		10	6602-1		6722-1		
		11	6622-1		6882-1		
		12	6662-1				
		13	6702-1				
		14	6742-1				
		15	6782-1				
		16	6782-1				
		17	6802-1				
		18	6842-1				
		19	6862-1				

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



**SHADED RELIEF AND SURFACE MARKINGS  
OF THE HATHOR REGION OF GANYMEDE**

Jg-15

Jg 5M -90/0 AN

1987

**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.

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