

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 (Batson and others, 1980). Sources for the series were 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 Callisto are based on a sphere with a radius of 2400 km. The projections have common scales of 14,780,000 at lat $\pm 21.3^\circ$ and 14,769,000 at lat $\pm 65.2^\circ$. 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, Saga, is centered on lat 0.6° N, long 320° .

MAPPING TECHNIQUE

Digital mosaics were assembled at a digital scale of $1/32^\circ$ (1.3 km) per pixel according to methods described by Batson (1987) and Edwards (1987) and transformed to the projections described above. Details from an unpublished, 1:15,000,000-scale, airbrush drawing were combined with the mosaic in regions where image data were very poorly resolved. The mosaic was retouched to obtain uniform tonal balance. Extreme variations in picture resolution precluded comparable display of the images used for the map compilation. Further limitations were imposed by dark albedo markings, which tend to obscure distinctive surface details.

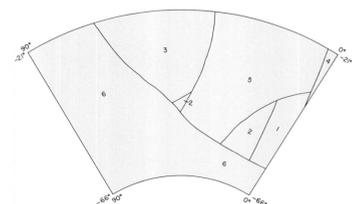
Digital processing and mosaicking were done by Kevin F. Mullins.

NOMENCLATURE

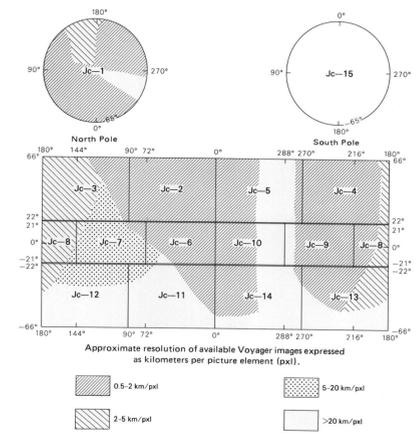
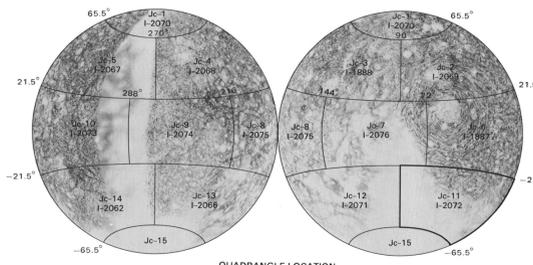
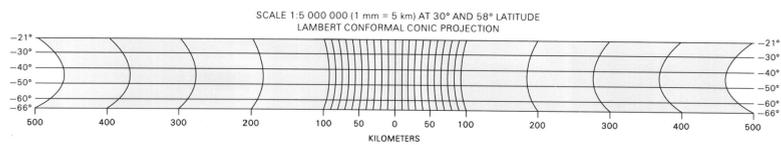
Names on this sheet are approved by the International Astronomical Union (1980, 1988).
Jc 5M -44/45 CMN: Abbreviation for Jupiter, Callisto (satellite); 1:5,000,000 series; center of sheet, lat 44° S, long 45° ; controlled photomosaic (CM), nomenclature (N).
Jc-11: Abbreviation for Jupiter, Callisto, sheet 11.

REFERENCES

- Batson, R.M., 1987, Digital cartography of the planets: New methods, its status, and its future. *Photogrammetric Engineering and Remote Sensing*, v. 53, no. 9, p. 1211-1218.
- Batson, R.M., Bridges, P.M., Inge, J.L., Isbell, Christopher, Masursky, Harold, Sirochell, M.E., and Tyler, 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. 8635-8637.
- Edwards, Kathleen, 1987, Geometric processing of digital images of the planets. *Photogrammetric Engineering and Remote Sensing*, v. 53, no. 9, p. 1219-1222.
- International Astronomical Union, 1980, Working Group for Planetary System Nomenclature, in 17th General Assembly, Montreal, 1979, *Transactions: International Astronomical Union Proceedings*, v. 17B, p. 297-304.
- 1988, Working Group for Planetary System Nomenclature, in 20th General Assembly, Baltimore, 1988, *Transactions: International Astronomical Union Reports on Astronomy*, v. 20A, p. 706.



VOYAGER 1		VOYAGER 2		VOYAGER 1	
Index No.	Picture No.	Index No.	Picture No.	Index No.	Picture No.
1	1723 J1+0	6	620 J2-4	1747 J1+0	
2	1731 J1+0			115 J1+1	
3	1755 J1+0			118 J1+1	
4	127 J1+1			133 J1+1	
5	130 J1+1			143 J1+1	
				152 J1+1	



CONTROLLED PHOTOMOSAIC OF THE ADLINDA QUADRANGLE OF CALLISTO
Jc 5M -44/45 CMN

(Jc-11)
1990

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.