

**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 and polar stereographic projections used for the maps of Europa are based on a sphere with a radius of 1549 km and a common scale of 1:4,248,000 at lat. 45°. Longitudes increase 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, Clio, is centered on lat. 1.3° N., long. 182°.

**MAPPING TECHNIQUE**

A series of mosaics of Voyager 1 and 2 pictures was assembled at 1:5,000,000 using projections described above. Sires, 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 resolution of the pictures used for map compilation precluded consistent interpretation and portrayal. 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 Europa. Image analysis and airbrush representation were made by Susan L. Davis.

**NOMENCLATURE**

Names on this sheet are approved by the International Astronomical Union (IAU, 1977 and 1980) except for the provisional names listed below.

Provisional names: Delphi Flexus, Phocis Flexus, Rhiannon, and Thymia Linea.

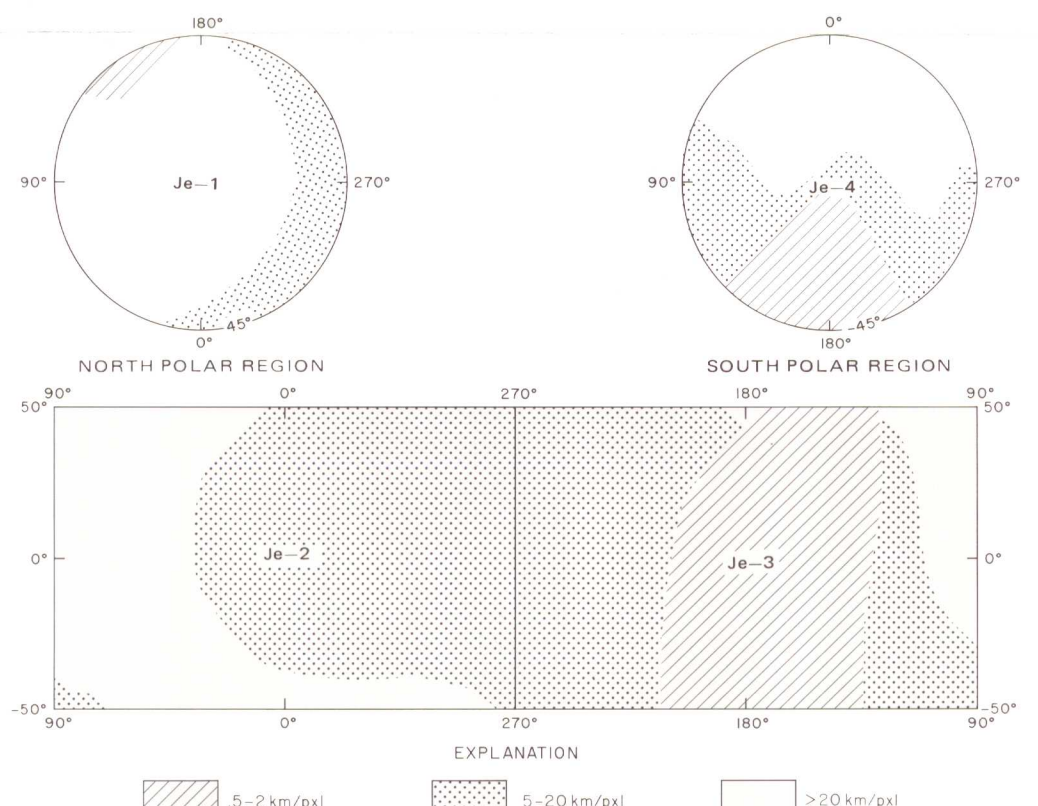
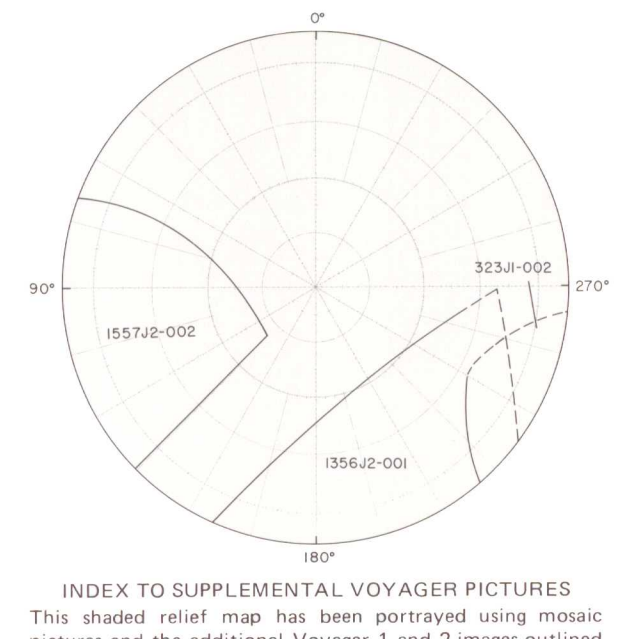
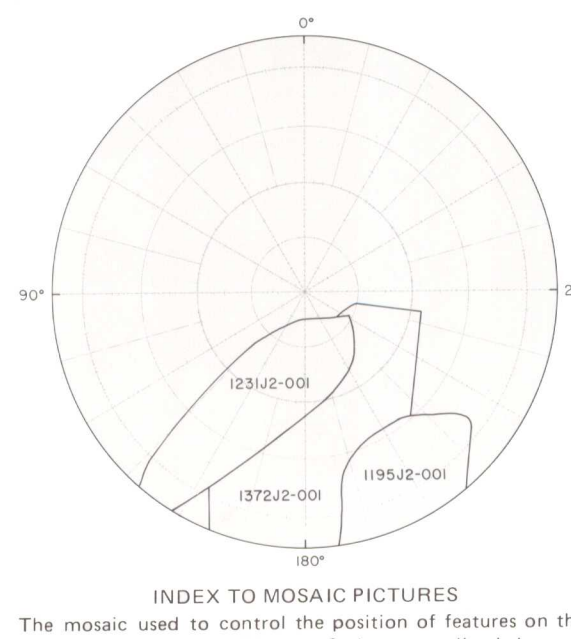
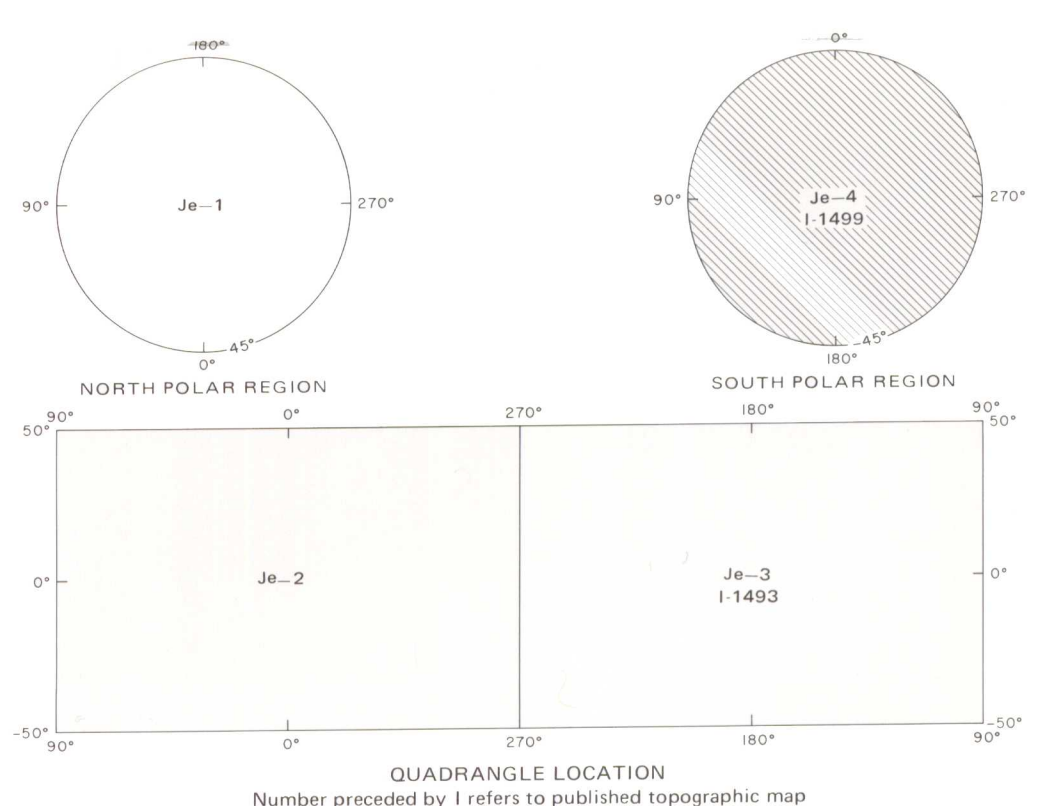
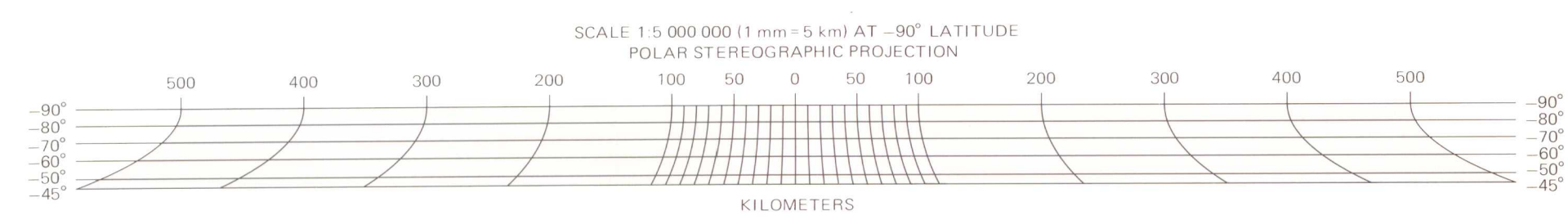
Je 5M-90/0 AN: Abbreviation for Jupiter, Europa (satellite); 1:5,000,000 series; center of sheet, lat. -90° S., long. 0°; shaded relief and albedo markings (A), nomenclature (N).

Je-4: Abbreviation for Jupiter, Europa, sheet 4.

**REFERENCES**

- Barton, R. M., Bridges, P. M., Inge, J. L., Isbell, Christopher, Masursky, Harold, Strobel, M. E., and Tyner, R. L., 1980. Mapping the Galilean satellites of Jupiter with Voyager data. Photogrammetric Engineering and Remote Sensing, v. 46, no. 10, p. 1301-1312.
- Davies, M. E., and Katayama, K. Y., 1981. Coordinates of features on the Galilean satellites. Journal of Geophysical Research, v. 86, no. A19, p. 8635-8657.
- Inge, J. L., 1972. Principles of lunar illustration: Aeronautical Chart and Information Center Reference Publication RP-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.
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- , 1980. Working Group for Planetary System Nomenclature, in 17th General Assembly, Montreal, 1979. Proceedings. International Astronomical Union Transactions, v. 17B, p. 297-304.

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W-13,709



**SHADED RELIEF AND SURFACE MARKINGS OF THE SIDON FLEXUS REGION OF EUROPA**

Je-4  
Je 5M-90/0 AN  
1984

**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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U.S. Geological Survey, Box 25286, Federal Center, Denver, CO 80225