U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Prepared in cooperation with the
JET PROPULSION LABORATORY, CALIFORNIA INSTITUTE OF TECHNOLOGY
for the VOYAGER IMAGING SCIENCE TEAM
of the NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

ATLAS OF NEPTUNIAN SATELLITES
1:15,000,000 TOPOGRAPHIC SERIES
TRITON
Nt 15M 1AN, 1992
I–2154

North

West

East

South

TRAILING HEMISPHERE

NEPTUNE-FACING HEMISPHERE

LEADING HEMISPHERE

SCALE 1:15 000 000 (1 mm = 15 km) AT 0° LATITUDE
MERCATOR PROJECTION

KILOMETERS

INTERIOR—GEOLOGICAL SURVEY, RESTON, VA–1992

Prepared on behalf of the Voyager Imaging Science Team under Jet Propulsion Laboratory contract WO–8395

NOTES ON BASE

This map was compiled from Voyager 2 images of Triton. The Polar Stereographic and Mercator projections are based on a sphere with a diameter of 2,700 km. The projections have a common scale of 1:8,388,000 at lat 56° S. Because of the retrograde rotation of Triton, longitude increases to the east, in accordance with astronomical convention. Planimetric control is based on information provided by the Navigation Ancilliary Information Facility (NAIF) of the Jet Propulsion Laboratory. NAIF parameters (spacecraft position, camera orientation, and position and orientation of Triton) were used for the single Voyager frame (1550N2-001) covering the Neptune-facing hemisphere at the highest available resolution, as were spacecraft positions of all other frames. Camera orientations for frames in the mosaic were modified as required to fit the control frame.

Digital mosaics were assembled at a digital scale of 1/16° (1.5 km) per pixel according to methods described by Batson (1987) and Edwards (1987), and they were transformed to the projections described above.

All landforms are shown as if illuminated from the south by using interpretation techinques described by Inge and Bridges (1976). Surface markings are also shown. Differences in image resolution precluded map portrayal at uniform levels of detail.

Airbrush representation was made by Jay L. Inge.

Digital processing and mosaicking were done by Kathleen Edwards and Tammy L. Becker.

NOMENCLATURE

All names on this sheet are approved by the International Astronomical Union (in press).

Nt 15M 1AN: Abbreviation for Neptune, Triton (satellite); 1:15,000,000 series; first edition; shaded relief with albedo markings (A), nomenclature (N).

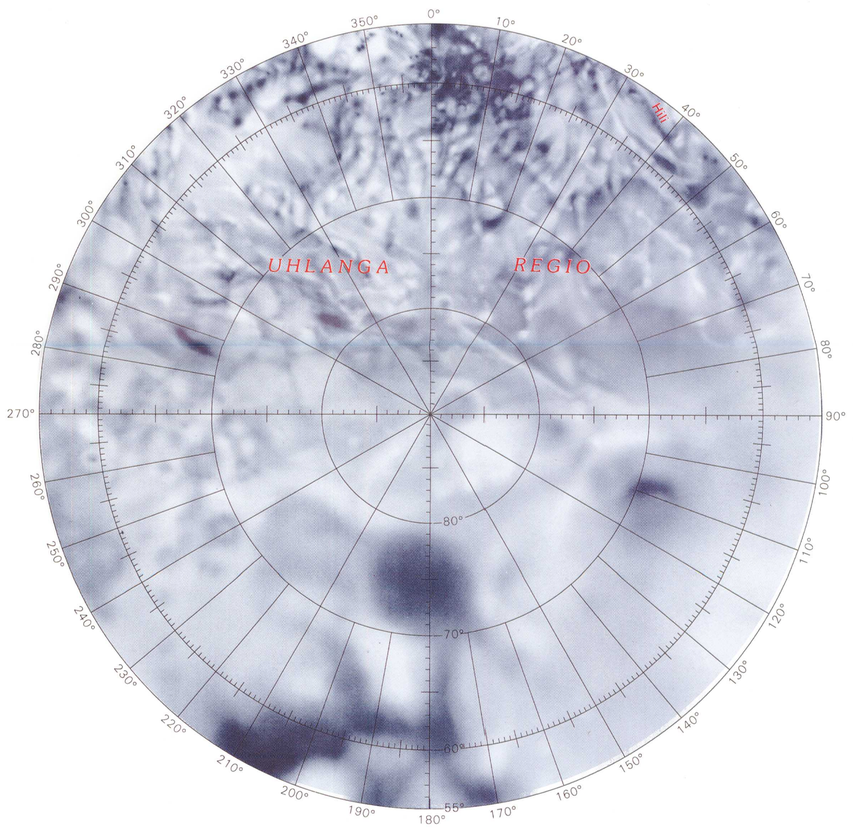
REFERENCES

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.

Edwards, Kathleen, 1987, Geometric processing of digital images of the planets: Photogrammetric Engineering and Remote Sensing, v. 53, no. 9, p. 1219–1222.

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.

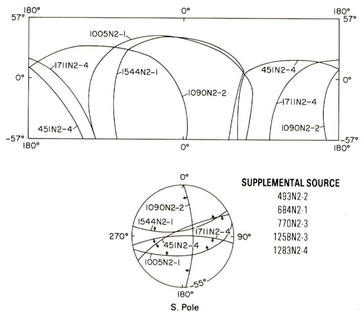
International Astronomical Union, in press, Working Group for Planetary System Nomenclature, *in* Proceedings of the 21st General Assembly, Buenos Aires, 1991: Transactions of the International Astronomical Union.



SOUTH POLAR REGION

SCALE 1:9 172 068 (1 mm = 9.2 km) AT –90° LATITUDE
POLAR STEREOGRAPHIC PROJECTION

KILOMETERS



SUPPLEMENTAL SOURCE
483N2-2
684N2-1
77ON2-3
1259N2-3
1283N2-4

INDEX OF MAPPING SOURCES

The map was made from Voyager 2 images outlined above. Supplemental source images used during compilation are listed separately. Copies of various enhancements of these images are available from National Space Science Data Center, Code 601, Goddard Space Flight Center, Greenbelt, MD 20771.

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, AZ 86001. A replacement copy will be returned.

PICTORIAL MAP OF TRITON

1992

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