

AEROMAGNETIC ANOMALY MAP OF THE UNITED STATES ATLANTIC CONTINENTAL MARGIN

By
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1977

EXPLANATION

○ DSDP 105
Drill site—DSDP, Deep Sea Drilling Project core, continental offshore Stratigraphic Test

..... 100 M.....
Bathymetric contour—In meters. Modified from bathymetric charts of the Atlantic continental margin by Muller and Holland (1970) and Tuchus, Phillips, and Prada (1970)

— 51700 —
Magnetic contour—In nanoteslas (1 nT = 1 gamma). Contour interval, 50 nT. Shaded areas indicate areas of lower magnetic intensity. In some areas, IORP has been removed from data (see "Data sources")

▲
Seamount

REFERENCES

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DATA SOURCES

AREA A - 1975 high-sensitivity aeromagnetic survey flown, reduced, compiled, and originally contoured by IAG Resources, Inc. 50-nT (1 nT = 1 gamma) contours compiled by K. Kilgord from 1:250,000-scale 2-nT/100-m; 50-nT contour map with minor modifications around seamounts; information was incorporated from more detailed magnetic surveys by the U.S. Naval Oceanographic Office (USNO) (Malpas, 1963). Corrections for diurnal variations and navigational errors were made by using a leveling system based on line-line crossings; International Geomagnetic Reference Field (IGRF) (based on 1965 coefficients updated to mid-1975 (IAGA, 1969)) was digitally removed; a constant, 52,000 nT, was then added to all readings. Instrument - metastable helium high-sensitivity magnetometer. Flight-line spacing - indicated on location maps. Flight elevation - 400 m in all areas with the exception of 310 m on the 2.4 x 16 km grid over Georges Bank.

AREA B - 1964/1966 aeromagnetic survey flown and compiled by the USNO (U.S. Naval Oceanographic Office, 1966). Taylor, Prada, and Dennis (1968); 50-nT contours compiled by K. Kilgord by graphically removing the IORP (based upon 1965 coefficients (IAGA, 1969)) from total-magnetic-intensity contour maps (U.S. Naval Oceanographic Office, 1966). Instrument - fluxgate magnetometer and metastable helium high-sensitivity magnetometer.

