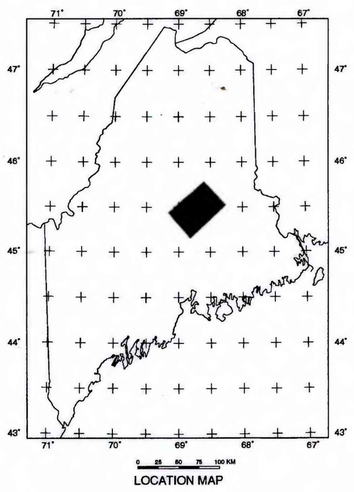
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

OPEN-FILE REPORT 93-385 A

69° 7'30" 68°52'30" 68°37'30" 68°22'30"

45°45' 0" 45°30' 0" 45°15' 0"



LOCATION MAP

EXPLANATION

MAGNETIC INTENSITY CONTOURS

Contour interval 10 nT. Hachures indicate closed areas of lower magnetic intensity.

Discussion

This map presents total-field aeromagnetic data acquired by a private geophysical contractor in May, June, and July of 1959 (Wing, 1959). The survey was flown at a mean elevation of 500 feet above ground along 1/4 to 1/2 mile spaced flightlines oriented in a northwest direction. Several additional flightlines were flown in a northeast direction. Total-field intensity measurements were made at intervals averaging 120 feet. The USGS converted the analog data to digital point data by means of computer program GSMAP (Selner and Taylor, 1989). The locations of the flightlines (provided on a separate map) were transferred to the 20 nanoTesla contour interval map provided by Wing (1959). Each intersection of the contours with the flightlines was then digitized. The output of GSMAP was converted to ASCII using program GSMUTIL (Selner and Taylor, 1989) and further converted to single point data using unpublished USGS program GSM2XYZ. The data were then converted to a Lambert Conformal Conic projection with a central meridian of -69 degrees West longitude and a base latitude of 0 degrees. The digitized data were then gridded (Webring, 1981) and contoured (Godson and Webring, 1982) to produce this map. The digital data are also presented on an accompanying 5 1/4 inch diskette which can be read by an IBM-compatible personal computer. These digital data are compatible with the geophysical computer programs given by Cordell and others (1992) which enable gridding, displaying, and creating various derivative and interpretive products.

References

Cordell, Lindrith, Phillips, J.D., and Godson, R.H., 1992, U.S. Geological Survey potential-field geophysical software, Version 2.0: U.S. Geological Survey Open-File Report 92-18-A-G, 16 p. and 6 diskettes.

Godson, R.H., and Webring, M.W., 1982, CONTOUR: A modification of G.I. Evenden's general purpose contouring program: U.S. Geological Survey Open File Report 82-797, 74 p.

Selner, G.I., and Taylor, R.B., 1989, GSDRAW and GSMAP System version 6.0: Graphics programs and utility programs for the IBM PC and compatible microcomputers to assist compilation and publication of geologic maps and illustrations: U.S. Geological Survey Open-File Report 89-373 A and B, 144 p. and 5 diskettes.

Webring, M.W., 1981, MINC: A gridding program based on minimum curvature: U.S. Geological Survey Open-File Report 81-1224, 43 p.

Wing, L.A., 1959, An aeromagnetic and geologic reconnaissance survey of portions of Penobscot, Piscataquis, and Aroostook counties, Maine: Maine Geological Survey GP and G Survey No. 4, 7p., 4 maps, scale approx. 1:186,000.

SCALE 1:125 000

5 4 3 2 1 0 5 MILES

5 4 3 2 1 0 5 10 KILOMETERS

TOTAL-FIELD AEROMAGNETIC MAP OF PORTIONS OF PENOBSCOT, PISCATAQUIS, AND AROOSTOOK COUNTIES, MAINE

BY
KEVIN R. BOND

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