

# COMPLETE BOUGUER GRAVITY MAP OF THE SHERBROOKE AND LEWISTON 1 X 2° QUADRANGLES, MAINE, NEW HAMPSHIRE, VERMONT, AND ADJACENT QUEBEC

DEPARTMENT OF THE INTERIOR  
UNITED STATES GEOLOGICAL SURVEY

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### EXPLANATION

Contours of Bouguer anomaly values drawn by computer from a 2km by 2km gridded representation of the data. Hatchures are used to indicate gravity highs and lows. Anomalies were calculated relative to the 1967 Geodetic Reference System formula for theoretical gravity (International Association of Geodesy, 1971), and base values were adjusted to conform to the International Gravity Standardization Net of 1971 (Morilli, 1974). Terrain corrections have been calculated from 0.895km to 166.7km using a modification of the terrain correction program of Plouff (1977). No terrain corrections have been applied for the zones closer than 0.895km, but in most cases errors resulting from this omission are substantially less than 1.0 mgal.

### REFERENCES CITED

International Association of Geodesy, 1971, Geodetic Reference System 1967: International Association of Geodesy Special Publication, no. 3, 116 p.  
Morilli, C. (ed.), The International Gravity Standardization Net 1971: International Association of Geodesy Special Publication, no. 4, 194 p.  
Plouff, B., 1977, Preliminary documentation for a FORTRAN program to compute gravity terrain based on topography digitized on a geographic grid: U.S. Geological Survey Open-File Report 77-534, 45 p.

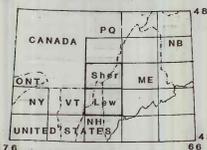


SCALE 1:250,000 UTM PROJECTION  
◇ GRAVITY STATION  
CONTOUR INTERVAL 2 Mgals

by Wallace A. Bothner

1985

### INDEX MAP



### SOURCE OF DATA

Bothner, W.A., Simpson, R.W., and Diment, W.H., 1980, USGS OF 80-560  
Bothner, W.A., Carnese, M.J., Gage, T.B., and Jahrling, C.E., USGS unpublished data

This map is preliminary and has not been edited or reviewed for conformity to Geological Survey standards