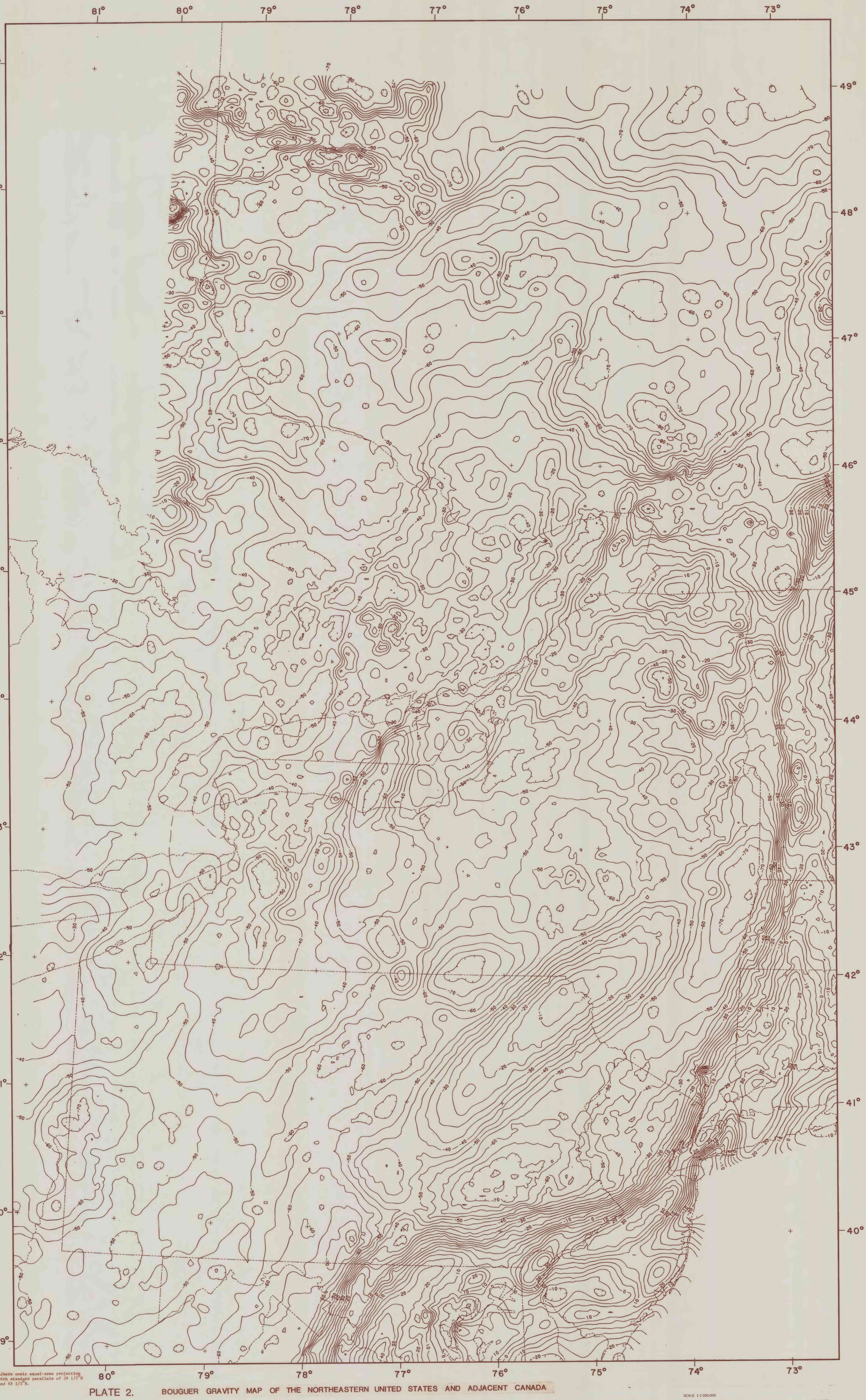
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT
80-2012



Albers conic equal-area projection with standard parallels of 29 1/2°N and 45 1/2°N.

EXPLANATION

Contours of Bouguer anomaly values drawn by computer from a 2.5 km by 2.5 km gridded representation of the data.

Contour interval is 5 milligals. Hachures are used to indicate gravity 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 (Morelli, 1974). Terrain corrections have been calculated from 0.895 km to 166.7 km using a modification of the terrain correction program of Plouff (1977). No terrain corrections have been applied for the zones closer than 0.895 km, 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.

Morelli, C., (ed.), 1974, The International Gravity Standardization Net 1971: International Association of Geodesy Special Publication, no. 4, 194 p.

Plouff, D., 1977, Preliminary documentation for a FORTRAN program to compute gravity terrain corrections based on topography digitized on a geographic grid: U.S. Geological Survey Open-File Report 77-534, 45 p.

SCALE 1:1 000 000

25 0 25 50 75 100 MILES

25 0 25 50 75 100 KILOMETERS

PLATE 2. BOUGUER GRAVITY MAP OF THE NORTHEASTERN UNITED STATES AND ADJACENT CANADA

- WESTERN PART