BOUGUER GRAVITY MAP OF THE PORTLAND 1' x 2' QUADRANGLE, MAINE AND NEW HAMPSHIRE

BY

W.A. BOTHNER, R.W. SIMPSON AND R.P. KUCKS

1979

This map is preliminary and has not been edited or checked for consistency to Geological Survey standards.

EXPLANATION:

Contours of Bouguer anomaly values drawn by computer from a 1 km by 2 km grid representation of the area.

Contours interval is 2 milli-gal.

Numbers are used to indicate gravity lows. Small triangles mark the locations of individual stations, 100 projection.

Anomalies were calculated relative to the 1967 model.

Reference System Formula for Absolute Gravity (International Association of Geodesy, 1971) and Terrain corrections were calculated from the N.G.S. Terrain Data of 1963 (Noll, 1964). Terrain corrections have been calculated from 0.000 to 0.100 mgals using a modification of the terrain correction program of Pfaff (1967). No terrain corrections have been applied for the area closer than 0.094 km. Remaining anomalies resulting from this analysis are substantially less than 0.1 mgals.

REFERENCES CITED:


Pfaff, H., 1967, Velocity correction for a BEYGM program to compute gravity terrain corrections based on spherical harmonic coefficients computed from a geodetic grid I, 44 p.