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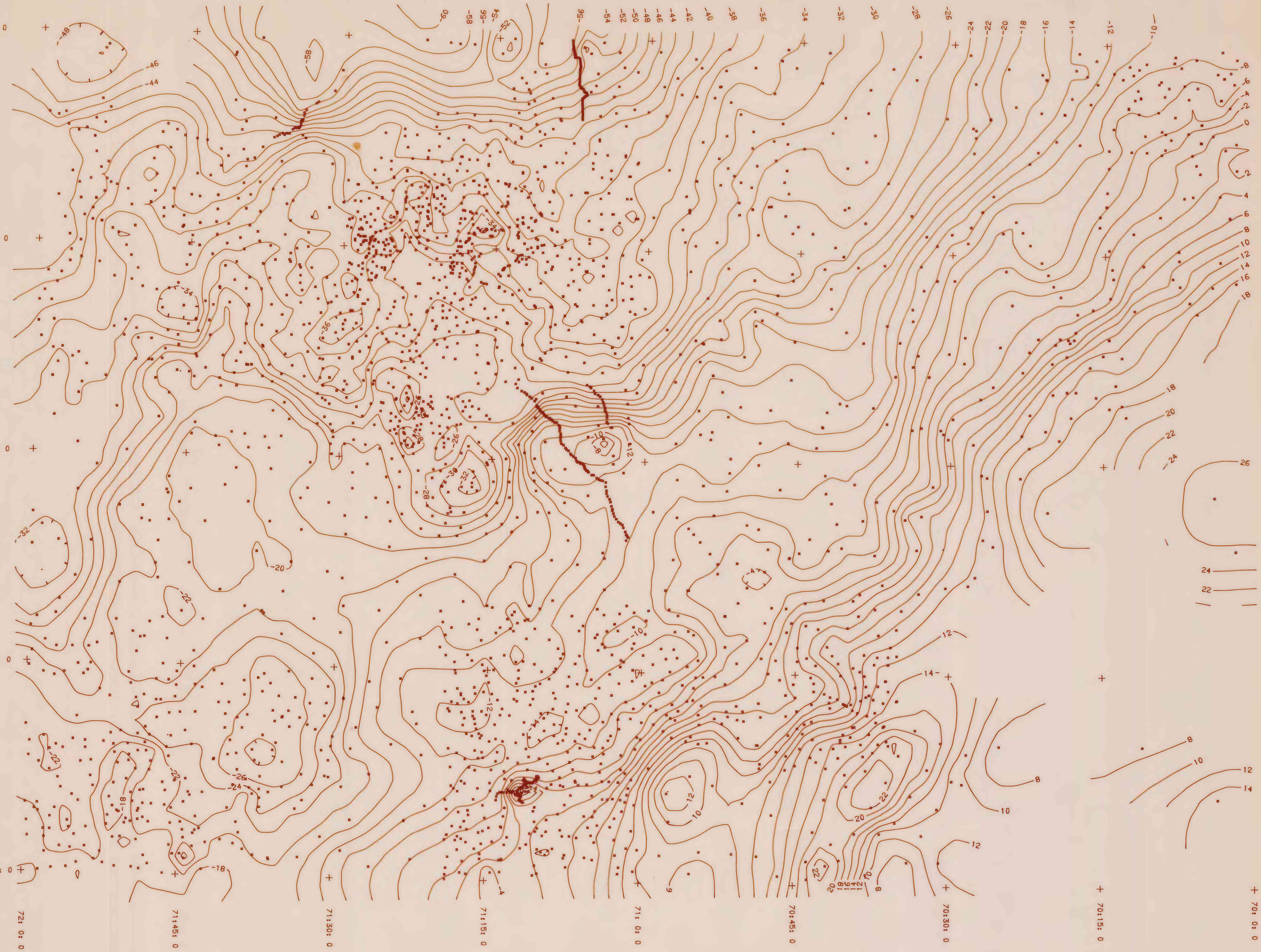
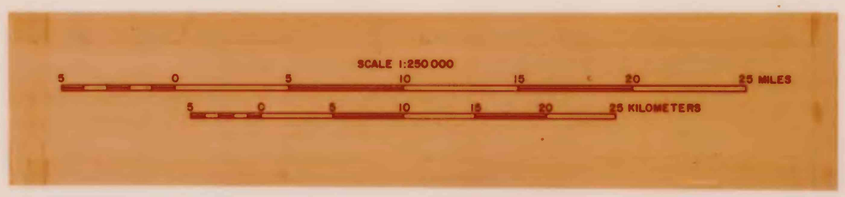
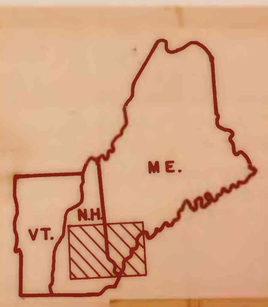
79-872







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 reviewed for conformity to Geological Survey standards.

EXPLANATION

Contours of Bouguer anomaly values drawn by computer from a 2 km by 2 km gridded representation of the data.

Contour interval is 2 milligals. Hachures are used to indicate gravity lows. Small squares (▫) mark the locations of individual stations. UTM projection.

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.

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DATA SOURCES

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Unpublished data: W. A. Bothner (University of New Hampshire), R. Anderson (Dartmouth College), D. S. Hedge (SUNY at Buffalo), and M. F. Kane (U.S. Geological Survey).