

BOUGUER ANOMALY FIELD Northeastern British Columbia

LEGEND

- Gravity Station •
- Gravity Depression ☉

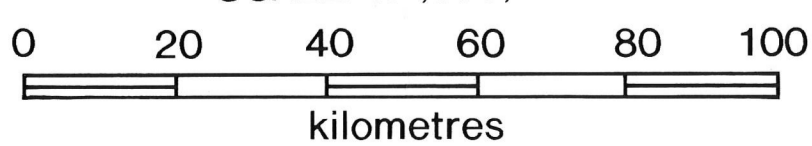
The gravity data were gridded at 2 kilometres and contoured at 5 mGal intervals. It is also available in digital format from the Geophysical Data Centre, 1 Observatory Crescent, Ottawa, K1A 0Y3.

Lambert Conformal Conic Projection

Central Meridian W124°

Standard Parallels N 53° 50.00 and N 57° 10.00

SCALE 1:1,000,000



This map has been compiled from approximately 3100 measurements retrieved from the National Geophysical Data Base, Geophysics Division, Ottawa. Gravity measurements have been reduced to the International Gravity Standardization Net 1971 (IGSN71) datum. Theoretical gravity values have been calculated from the Geodetic Reference System 1967 (GRS67) gravity formula. A standard density of 2670 kg m⁻³ has been used in the Bouguer correction.

This compilation features data from the 1988 and 1989 regional surveys which recently have been added to the data base. Both of the surveys were conducted by personnel from the Geological Survey of Canada. Station coordinates and elevation was derived using a Litton Dash II Inertial Survey System operated and maintained by the Geodetic Survey of Canada. The remainder of the map area was surveyed during the period 1966-1972 by personnel from the Earth Physics Branch, Ottawa (now the Geophysics Division). Prior to 1968, stations were commonly positioned using 1:250,000 scale maps and elevations were determined using altimetry and whenever possible geodetic benchmarks. Commencing in 1968, the majority of gravity observations were made at geodetic control points (horizontal and vertical) which had been established through a cooperative program with the Surveys and Mapping Branch of the Department of Energy Mines and Resources.

Gravity stations observed during the 1988 and 1989 surveys were terrain corrected out to a distance of 30 km using a 1 km by 1 km inhouse digital terrain file. Earlier surveys relied on the Bible method or a combination of the Bible method and prism method for calculating the correction.

For further information regarding these earlier surveys refer to the Gravity Map Series of the Earth Physics Branch: Gravity Measurements in British Columbia, 1973 by Stacey, R.A., Boyd, J.B., Stephens, L.E., and Burke, W.E.F., 13pp.

Copies of this map may be obtained from Island Blue Print, 905 Fort St., Victoria, B.C. V8V 3K3

