



BOUGUER GRAVITY ANOMALY MAP OF THE SOCORRO REGION

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Over the past few years, we have compiled a gravity data base for the state of New Mexico and published regional maps (Cordell and others, 1982; Keller and Cordell, 1983). This data base presently contains approximately 37,000 readings and is carefully edited and maintained in the standard format. It is also tied to a common gravity datum (IGSN-71; Morelli, 1976). The map shown was constructed using these data. Sea level was used as an elevation datum and a density of 2.67 gm/cm³ was used in the Bouguer correction. Outer-zone terrain corrections were calculated for zones extending from 0.89 km to 167 km away from each station (Hammer, 1939). These calculations employed a set of averaged elevations on a grid interval of 30" of latitude and longitude and a terrain correction program written by Plouff (1977). The computer contours were drawn

using a modified version of the Surface II graphics system (Sampson, 1978) at a contour interval of 2 milligals.

REFERENCES

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