DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN FILE REPORT
No. 74-146

EXPLANATION

Gravity contours

Dashed where approximately located. Contour interval 5 milligals. Hachured contours indicate areas of low gravity closure

Gravity station

A density of 2.67 grams per cubic centimetre was assumed in reducing the data to the complete Bouguer anomaly. Terrain corrections were computed on a digital computer for all stations, except from source area 1, to a radius of 166.7 kilometres by a method described by Plouff (1966). Terrain corrections from source area 1 were computed to a radius of 166.7 kilometres with templates by a method described by Hammer (1939). Theoretical gravity was computed from the International Formula. The gravity values were referenced to the Denver, Colo., airport base station (Woollard, 1958) and base station WU 7 at the Colorado School of Mines, Golden, Colo. (Behrendt and Woollard, 1961).

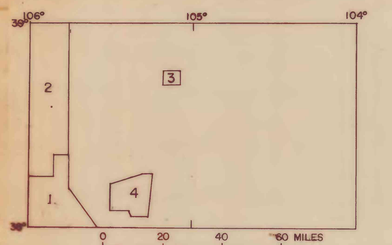
REFERENCES

Behrendt, J. C., and Woollard, G. P., 1961, An evaluation of the gravity control network in North America: Geophysics, v. 26, no. 1, p. 65.

Hammer, Sigmund, 1939, Terrain corrections for gravimeter stations: Geophysics, v. 4, p. 184-194.

Plouff, Donald, 1966, Digital terrain corrections based on geographic coordinates [abs.]: Geophysics, v. 31, no. 6, p. 1208.

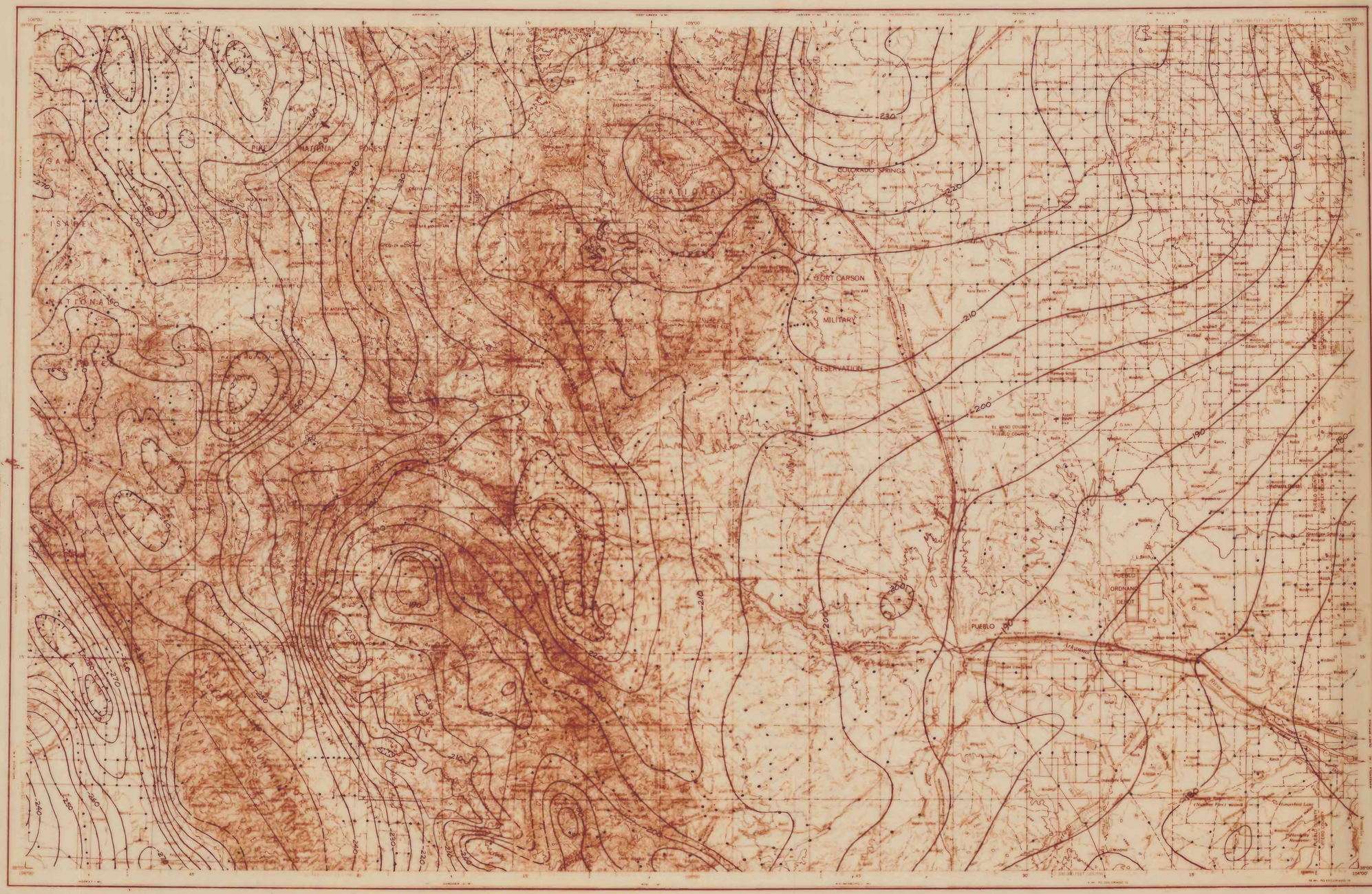
Woollard, G. P., 1958, Results for a gravity control network at airports in the United States: Geophysics, v. 23, no. 3, p. 532.



INDEX SHOWING SOURCES OF DATA

1. Case, J. R., and Karig, D. E., 1966, Gravity survey in the San Luis Valley area, Colorado: U.S. Geol. Survey open-file report, 22 p.
2. Case, J. E., U.S. Geol. Survey, unpublished gravity data.
3. Kleinkopf, M. D., Peterson, D. L., and Gott, Garland, 1970, Geophysical studies of the Cripple Creek mining district, Colorado: Geophysics, v. 35, no. 3, p. 490-500.
4. Kleinkopf, M. D., and Peterson, D. L., U.S. Geol. Survey, unpublished gravity data.

Note: Gravity station locations from sources 3 and 4 are too numerous to show.



Base from U.S. Geological Survey, 1962

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
TRANSVERSE MERCATOR PROJECTION

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

GRAVITY MAP OF THE PUEBLO 1° x 2° QUADRANGLE, COLORADO

by

D.L. Peterson, M.D. Kleinkopf, and D.M. Wilson

1974