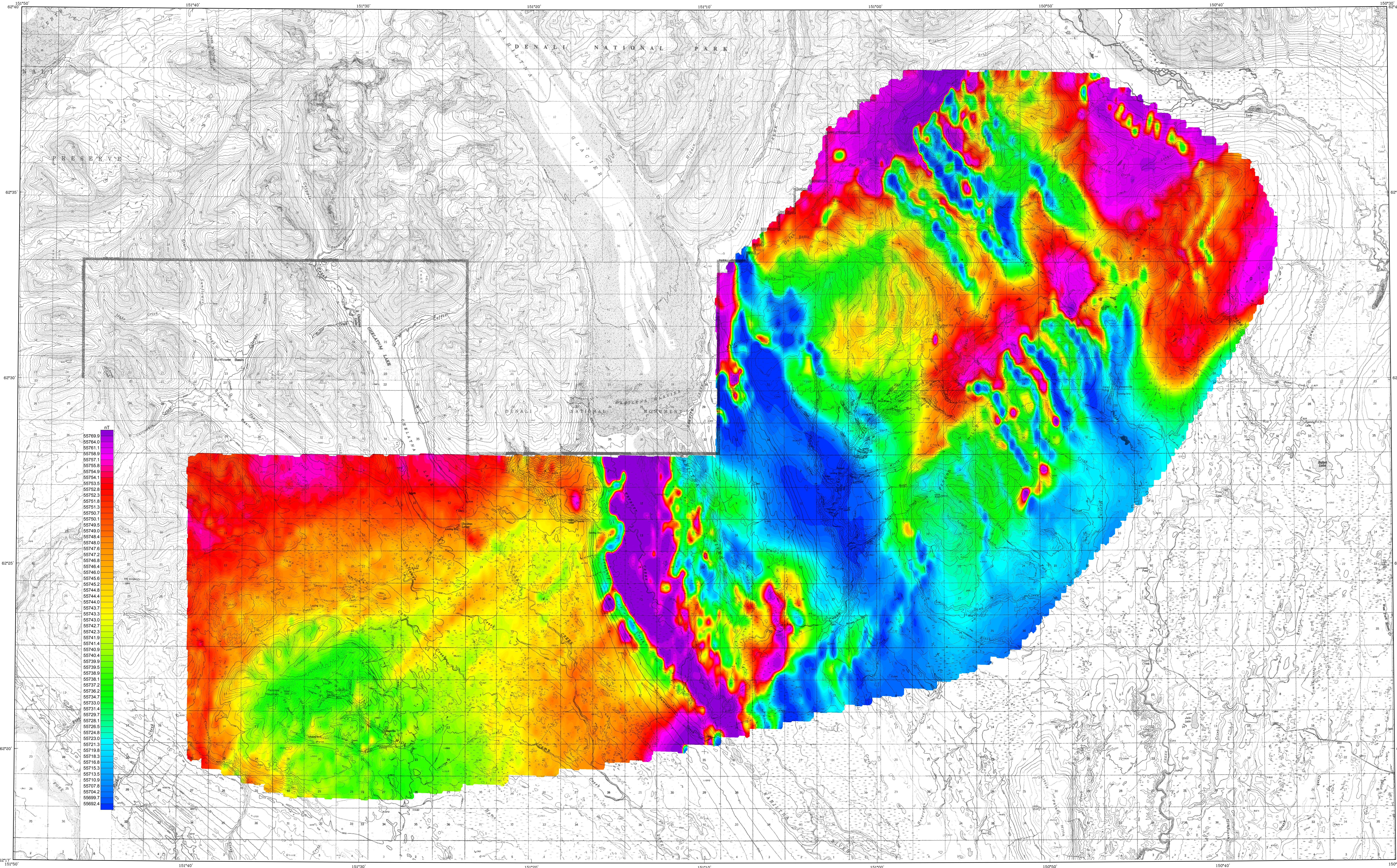




DESCRIPTIVE NOTES

The geophysical data were acquired with a DIGHEM[®] Electromagnetic (EM) system, a Sinterex cesium CS2 magnetometer, and a Herz HLF system installed in an AS550B-1 Squirrel helicopter. In addition, the survey recorded data from a radar altimeter, GPS navigation system, 50/60 Hz monitors and video camera. Flights were performed at a mean terrain clearance of 200 feet along survey flight lines with a spacing of a quarter of a mile. The lines were flown perpendicular to the flight lines at intervals of approximately 3 miles.

A Seracel Real-Time Differential Global Positioning System (RT-DGPS) was used for both navigation and flight path recovery. The helicopter position was positioned to a relative accuracy of better than 10 m. Flight path positions were processed using the Clark 1986 (UTM) spheroid, 1927 North American datum using a central meridian (CM) of 152°W, north constant of 0 and an east constant of 500,000. Positional accuracy of the presented data is better than 10 m with respect to the UTM grid.

TOTAL MAGNETIC FIELD

The magnetic total field contours were produced using digitally recorded data from a Sinterex cesium CS2 magnetometer, with a sampling interval of 0.1 seconds. The magnetic data were (1) corrected for diurnal variations by subtraction of the digitally recorded base station magnetic data, (2) leveled to the tie line data, and (3) interpolated onto a regular 100 m grid using a modified Akima (1970) technique. The regional variation (or IGR gradient, 1985, updated to October 1996) was removed from the leveled magnetic data.

LOCATION INDEX

SCALE 1:63,360

1 0 1 2 3 4 MILES

1 0 1 2 3 4 5 KILOMETERS

CORRESPONDING 100 FEET DATUM MEAN SEA LEVEL

TOTAL MAGNETIC FIELD OF THE PETERSVILLE MINING DISTRICT, ALASKA

PARTS OF TALKETNA QUADRANGLE

by
Laurel E. Burns, Fugro Airborne Surveys Corp., and Stevens Exploration Management Corp.
2004

DESCRIPTION

The map has been compiled and drawn under contract between the State of Alaska, Department of Natural Resources, Division of Geological & Geophysical Surveys, and Stevens Exploration Management Corp. The map was produced by Fugro Airborne Surveys and supercedes the earlier full color version released by DGG in 1997. Airborne geophysical data for the area were acquired and processed in 1996 under contract between the DGG and WCA. Mining and Geological Consultants, Inc. The subcontractor acquiring and processing the data was DIGHEM, a division of CGO Canada Ltd. Other products from this survey are available from DGG, 3354 College Road, Fairbanks, Alaska, 99709-3707.