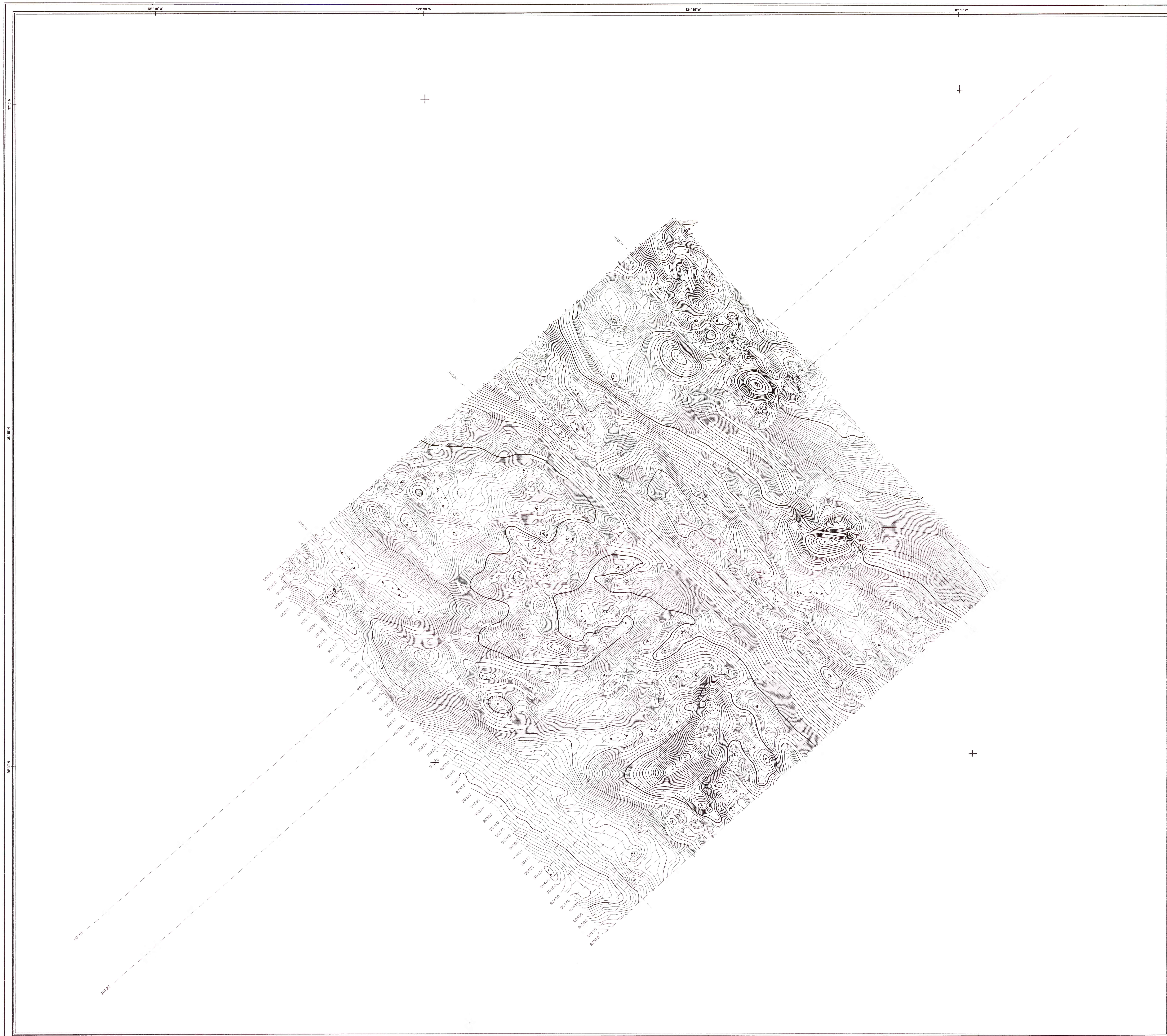
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

OPEN-FILE REPORT 96-693



AEROMAGNETIC MAP OF THE NORTHERN GABILAN RANGE AREA ON PART OF THE MONTEREY 1° BY 2° QUADRANGLE, CALIFORNIA

BY
U. S. GEOLOGICAL SURVEY
1996

EXPLANATION

Square: Grid North
Star: True North
Arrow: Magnetic North

Angles presented were calculated at 36° 40' N Latitude and 121° 20'W Longitude at an altitude of 520 m (1700 ft)
Use diagram for reference only

Grid North-True North: 0° 54' 0"
Grid North-Magnetic North: 16° 3' 36"

Inclination 60° 46 48"

Declination rate of change -0° 2' 24"
Inclination rate of change -0° 1' 12"
per year from 1995.17

FLIGHT PATH

Navigation and flight path recoverywere conducted using a Global Positioning System (GPS) satellite navigation system.

Traverse lines were flown at an azimuth of 50°-230° with an average line spacing of 805 m (2640 ft).

Survey lines flown at nominal terrain clearance of 305 m (1000 ft) above ground. Lines have an average aircraft terrain clearance of 520 m (1700 ft), except for lines 90165 and 90225 which were flown at constant barometric altitude of 2000 m (6560 ft). Terrain clearance was monitored by radar and barometric altimeters.

Flight line identification numbers are shown along southwest edge of map area and at a limited number of locations interior to the map. Tie line identification numbers are shown along the northwest edge of the map area.

TOTAL FIELD MAGNETIC DATA

Total field magnetic intensity data were measured by a tail stinger mounted Scintrex H8 optically pumped cesium vapour magnetometer with RMS AADC04 compensator.

Data have been corrected for diurnal variations using a magnetic base station and tie lines.

Residual magnetic data shown by contours represent corrected total field magnetic intensity minus the International Geomagnetic Reference Field (IGRF).

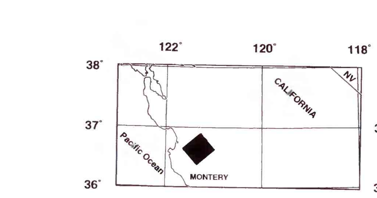
The total intensity magnetic value at 23:16:00 on February 12, 1995 (36° 23' 49.7" Latitude, 121° 18' 13.2" Longitude) is 49546.0 nT less than before the IGRF removal.

Gridding interval is 200 m X 200 m and gridding direction is 140°.

Map contours are in nanoTeslas (nT), and are multiples of those listed below:

- 1 nT
- 5 nT
- 25 nT
- 100 nT
- 500 nT
- H Magnetic high
- L Magnetic low

[Hachures (▼)indicate closed lows]

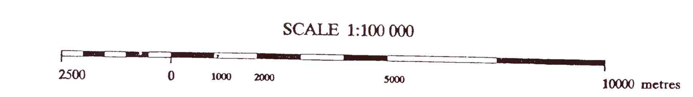


SURVEY LOCATION

Projection: UTM 1983 North American datum
Central meridian: 123° West
Survey flown February, 1995

Flown and compiled by AERODAT, Inc.,
Mississauga, Ontario, Canada

SCALE 1:100 000



This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic Code. Any use of trade, firm or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.