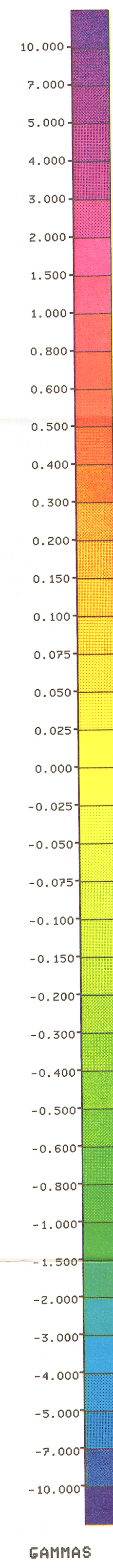
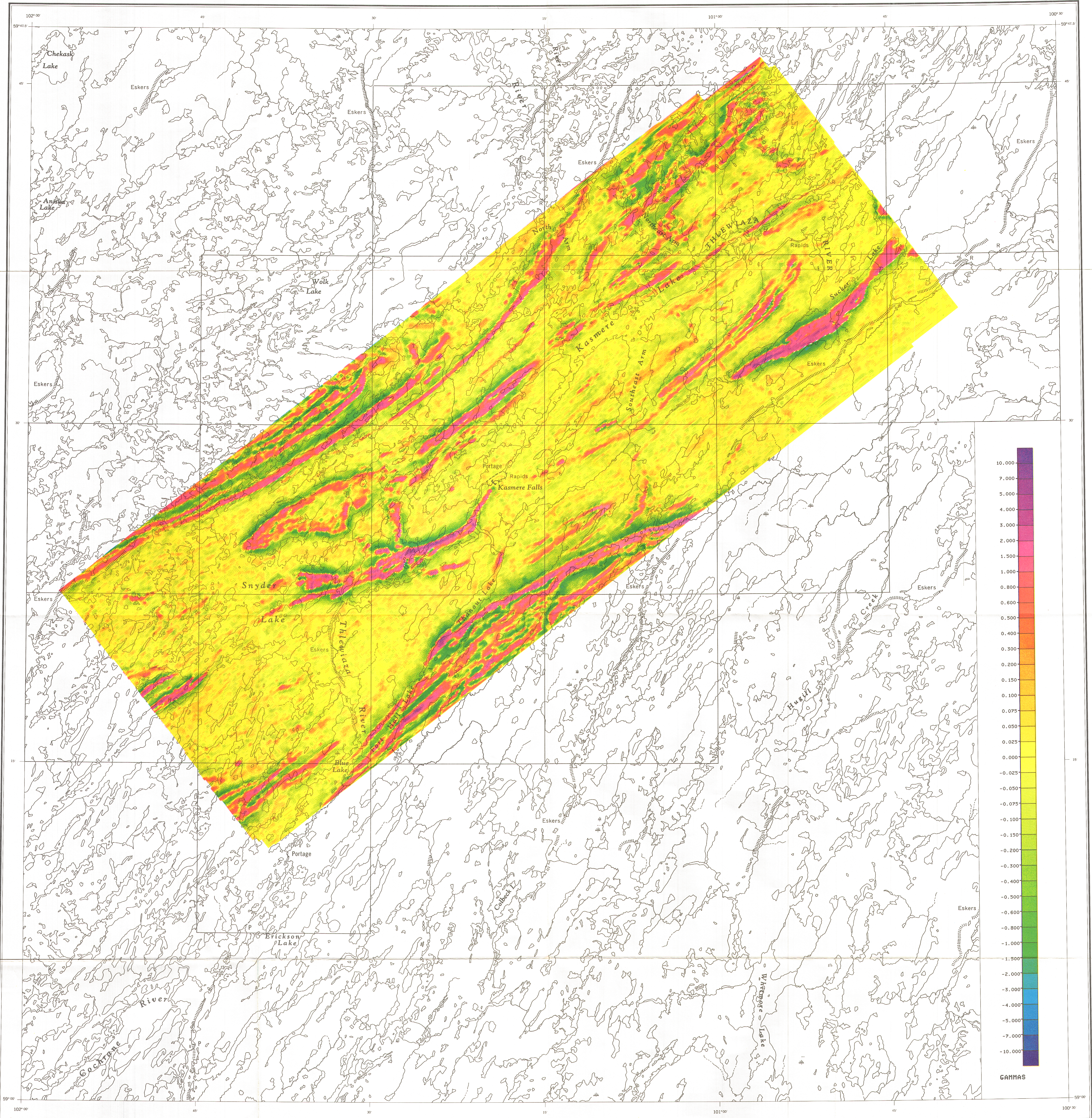




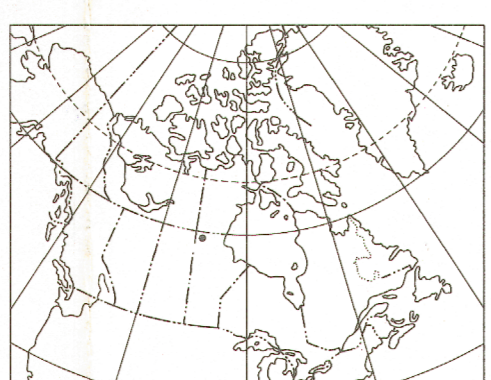
GEOLOGICAL SURVEY OF CANADA  
DEPARTMENT OF ENERGY, MINES AND RESOURCES

EXPERIMENTAL COLOUR COMPILE  
(HIGH RESOLUTION AEROMAGNETIC VERTICAL GRADIENT)

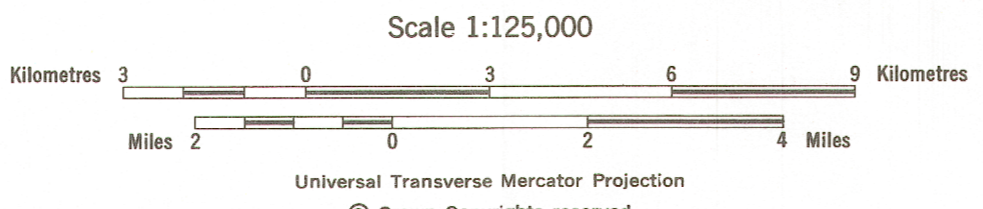


Some of this map may be obtained from the Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0E8

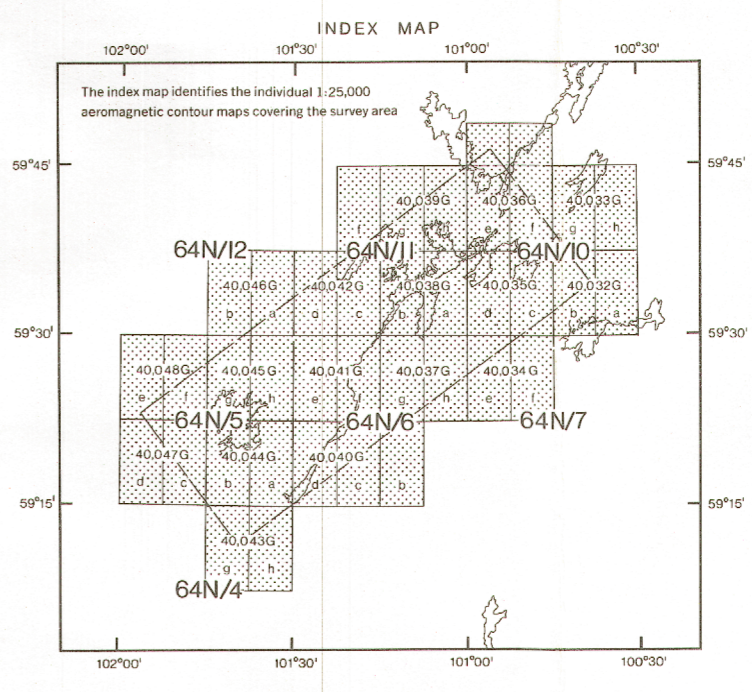
**EXPERIMENTAL COLOUR COMPOSITE MAP**  
This map was made by fully computer assisted techniques. Aeromagnetic digital data values were interpolated at the nodes of a regular grid covering the survey area. Each grid cell was 40 cm square. A colour code was assigned to each cell according to the aeromagnetic value within the cell. (See colour scale at right). The data were output on an APPLICON colour jet plotter to produce a colour field map identical to the one above. To facilitate colour printing, a colour separation was made automatically with the plotter to give the yellow, cyan and magenta components of the map as separate sheets. This type of map has been used for the overall amplitude distribution and regional variation within the survey area. The Geological Survey of Canada would appreciate your comments concerning the merits of this type of compilation as compared to the photo reduction composite.



MAP C45, 003G (EXPERIMENTAL)  
**KASMERE LAKE**  
MANITOBA



Universal Transverse Mercator Projection  
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This map has been compiled from digitally recorded high-sensitivity aeromagnetic data obtained by two self-orienting rubidium-vapour magnetometers installed in twin helicopters on the C-130 Hercules B50 aircraft. The magnetometers are vertically separated by a distance of 2.08 metres with each measuring the total magnetic field to a resolution of 0.02 gammas.  
Flight altitude was 150m above ground at 300m average flight line spacing. Double control lines were flown at an average spacing of 12 kilometres.  
The vertical gradient values, which approximate closely to the first vertical derivative of the earth's total field, are obtained by dividing the difference between the total field readings of the two magnetometers by their vertical separation.  
The vertical gradient data was filtered with a digital operator to remove instrument noise. The vertical gradient data from the control lines was not used in the compilation of the map. The data was edited, compiled and labelled by automatic computer process.  
Aeroborne survey and digital compilation was carried out by Resource Geophysics and Geochemistry Division, Geological Survey of Canada. The survey operations took place in August and September 1977 using Beechcraft Queenair G-350 aircraft CF-W20.  
The topography for this map was reproduced from 1:250,000 topographical map sheets, published by the Department of Energy, Mines and Resources, Ottawa.

Printed by the Survey and Mapping Branch, 1980

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