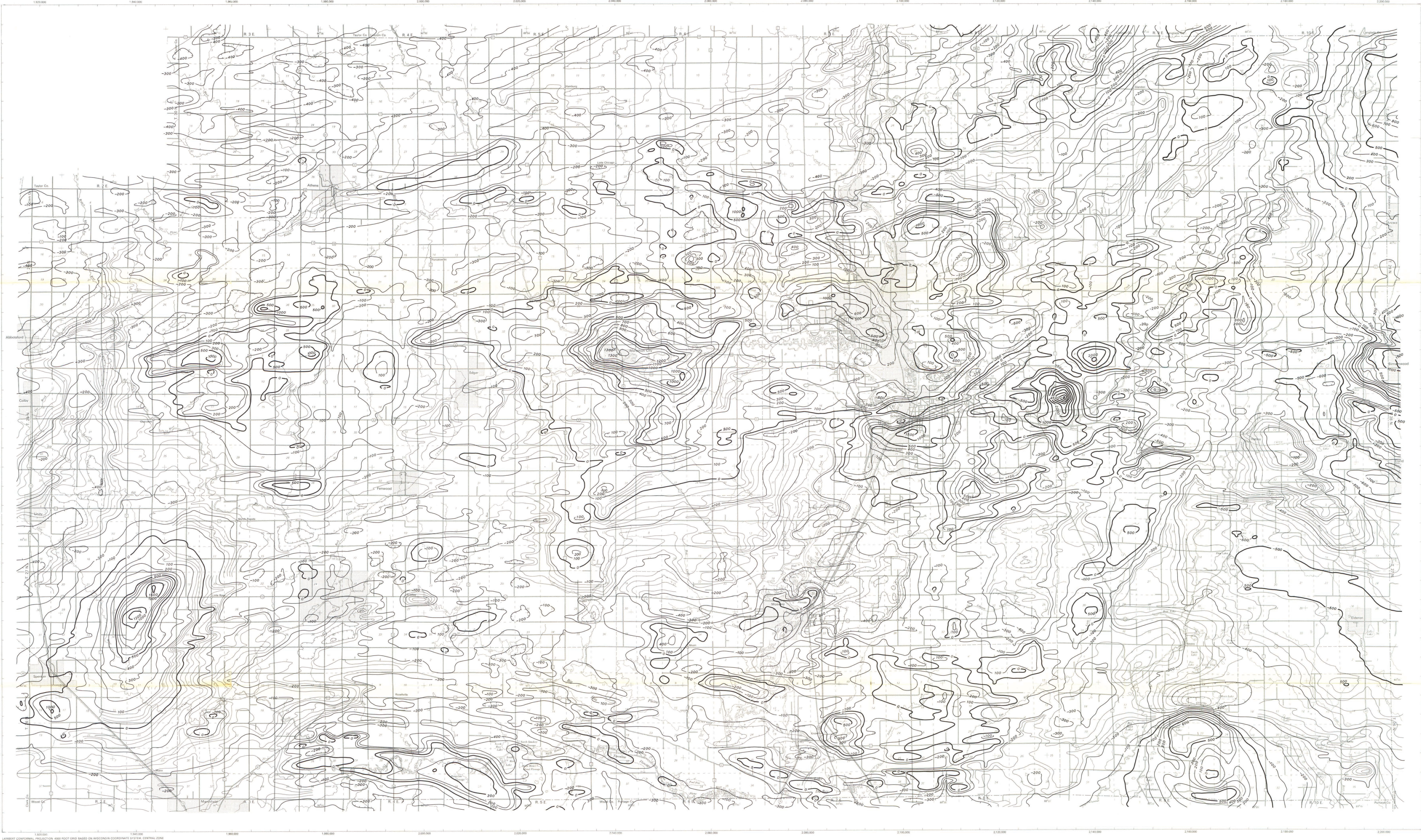


AEROMAGNETICS OF MARATHON COUNTY, WISCONSIN

INFORMATION CIRCULAR
NUMBER 45

PLATE 2



LATEST CONFORMAL PROJECTION 4800 FOOT GRID BASED ON WISCONSIN COORDINATE SYSTEM, CENTRAL ZONE

EXPLANATION

20 Gammas

100 Gammas

500 Gamma Index

20 Gamma contours are suppressed in areas of high gradient.
Total isometric contours relative to IGRF-1965. (Fabiano and Peddie, 1969)

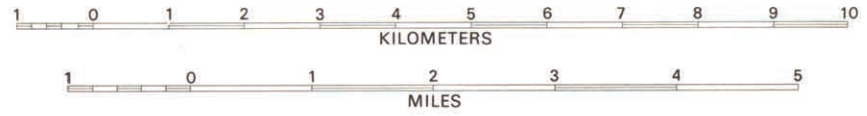
The magnetic field was measured with a proton magnetometer flown at a constant radar altitude of 150 meters above ground level with 0.8 kilometers north-south flight line spacing. In general, flight lines coincide with section lines. Data points along flight lines are spaced approximately 50 meters apart. Navigation errors were held to less than ± 150 meters cross track and ± 60 meters along track. Aeromagnetic data for a given 15' quadrangle map area were gathered within a single 8 hour period using a tie line for temporal control.

The data for each 15' quadrangle is computer processed by interpolating to 1024 points along flight lines and 64 points across flight lines by use of a Lagrange polynomial fit. The data have been adjusted to the IGRF datum for the year in which collected. E. B. Fabiano and N. W. Peddie, 1969. Grid values of total magnetic intensity, IGRF-1965: U.S. Esso Tech. Rept. 351.

Aeromagnetic anomalies are caused by variations in rock types and structure at unknown depths below and at land surface. Magnetic highs normally indicate the presence of basic rocks such as diabase, gabbro, or serpentine which contain relatively large amounts of iron. By using additional geological information, various rock units or structural features may be traced on aeromagnetic maps. However, without the additional information, interpretation of a given anomaly may not be possible. Workers are cautioned that resolution on these maps is approximately 17 times greater along flight lines than across flight lines.

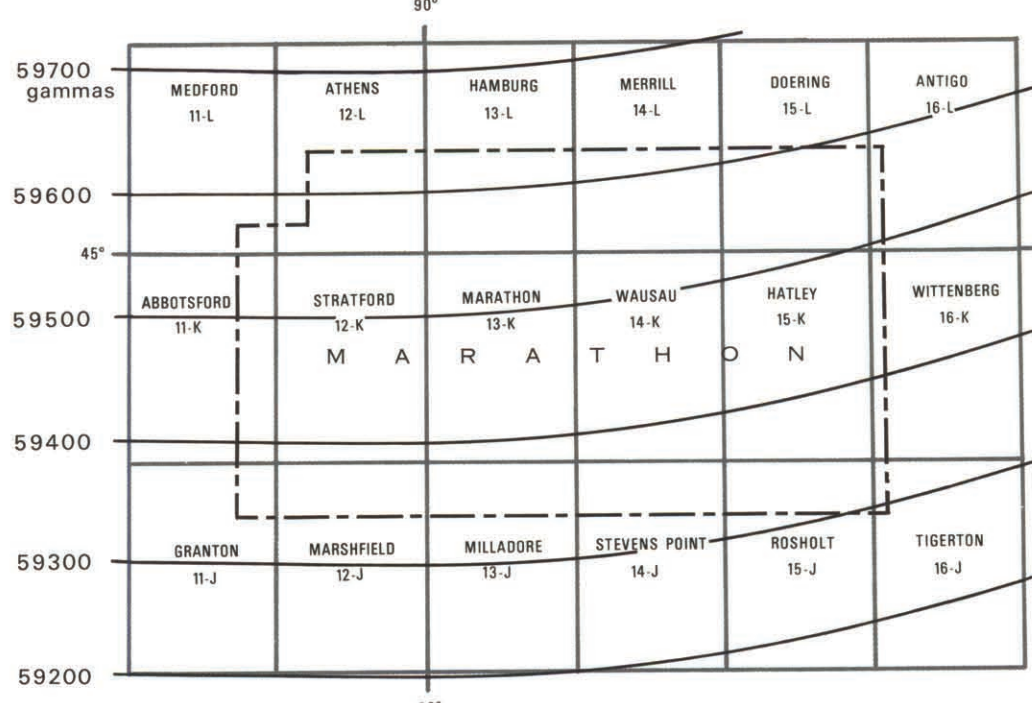
SCALE

1:100,000

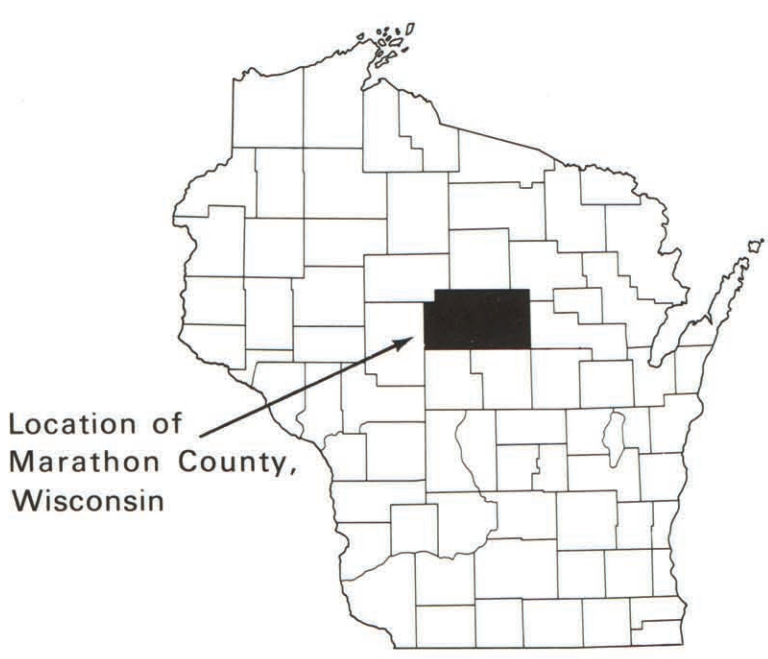


University of Wisconsin-Extension
GEOLOGICAL AND NATURAL HISTORY SURVEY
Meredith E. Ostrom, Director and State Geologist
1983

IGRF-65 GRID VALUES FOR MARATHON CO.



QUADRANGLE NAMES AND NUMBERS FOR WISCONSIN AEROMAGNETIC SURVEY



Location of Marathon County, Wisconsin

MAP NUMBER 83-6