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A Magnetic Map of the Continental Margin West of Ireland  
Including Part of the Rockall Trough and the Faeroe Plateau

by

Robin P. Riddihough

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*A Magnetic Map of the Continental Margin West of Ireland  
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A MAGNETIC MAP OF THE CONTINENTAL MARGIN WEST OF IRELAND INCLUDING  
PART OF THE ROCKALL TROUGH AND THE FAEROE PLATEAU

The enclosed map at a scale of approximately 1:650,000 has been contoured by hand from marine magnetic data collected during a detailed survey by USNS SGT. CURTIS F. SHOUP in June and July 1967. This data, made available by kind permission of the United States Naval Oceanographic Office, is kept on open file at the Geological Survey of Ireland, 14, Hume Street, Dublin. A broad scale analysis of some of the scientific implications of the data together with that in contiguous areas to the west, has been made by Vogt and Avery (1974).

The US Naval Oceanographic Office data is plotted on a Mercator projection at a scale of approximately 1:320,000 and the area included in the present map is covered by 6 separate sheets. Observed total magnetic field values are shown beside marks along the ship's tracks at 50 gamma intervals and at any maxima or minima between. The tracks are predominantly oriented east-west at an average spacing of 11 km with some irregularly spaced north-south tie lines. Navigation was by satellite and Loran C. The enclosed map is constructed from a total of 50 east-west tracks.

Because of the difficulties of predicting the diurnal variation over the continental margin, no diurnal corrections have been made to the observed magnetic values. However, Valentia Observatory records have been used to eliminate data collected during magnetic storms. Three tracks in the north of the area were partially affected in this way and contour lines are dashed accordingly. No regional field had been removed and the observed total magnetic field values are contoured at intervals of 100 gamma. Cartography is by Eilish Ryan.

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Vogt, P. R. and Avery, O. E. 1974. Detailed Magnetic Surveys in the Northwest Atlantic and Labrador Sea. *J. Geophys. Res.* 79, 363-389.

*January, 1975.*

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Dublin 2.



# A MAGNETIC MAP OF THE CONTINENTAL MARGIN WEST OF IRELAND INCLUDING PART OF THE ROCKALL TROUGH AND THE FAROE STRAIT

The enclosed map at a scale of approximately 1:650,000 has been constructed by hand from marine magnetic data collected during a detailed survey by USNSC SGT, CURTIS N. SHOLE in June and July 1967. This data, made available by kind permission of the United States Naval Oceanographic Office, is kept on open file at the Geological Survey of Ireland, 14 Haume Street, Dublin. A broad scale analysis of some of the significant implications of the data compared with that in contiguous areas to the west, has been made by Vost and Avery (1971).

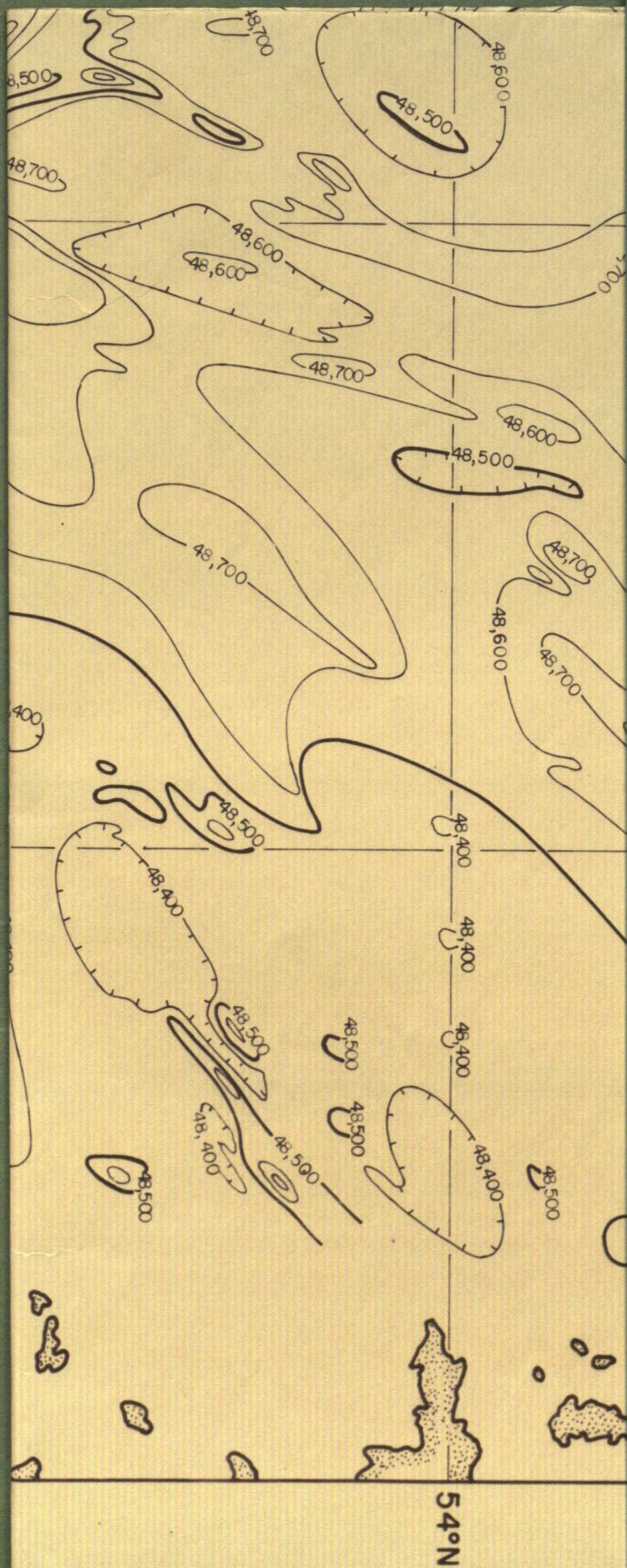
The US Naval Oceanographic Office data is plotted on a Mercator projection at a scale of approximately 1:420,000 and the area included in the present map is covered by 6 separate sheets. Observed total magnetic field values are shown beside tracks along the ship's track at 50 gamma intervals and at any maximum or minimum between. The tracks are predominantly oriented east-west at an average spacing of 21 km with some irregularly spaced north-south lines. Navigation was by satellite and Loran C. The enclosed map is constructed from a total of 50 east-west tracks.

Because of the difficulties of predicting the diurnal variation over the continental margin, no diurnal corrections have been made to the observed values. However, it is noted that observational records have been used to eliminate data collected during magnetic storms. These records in the north of the area were partially affected in this way and some of them are marked accordingly. No regional field had been removed and the density of total magnetic field values are contoured at intervals of 100 gamma. Contouring is by hand.

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