

Communications of the
Dublin Institute for Advanced Studies
Series D, Geophysical Bulletin No. 29

A Reconnaissance Magnetic Map of the Continental Margin West of Ireland

by
D. G. G. YOUNG AND R. J. BAILEY

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The accompanying total field magnetic anomaly contour map drawn to an approximate scale of 1:1000,000 was compiled from data collected by the University College of North Wales Research Vessel Prince Madog during geophysical surveys of the continental margin west of Ireland, 1968-1972. The instrument used was a Varian proton magnetometer. The track chart, indicating the coverage on which the map is based, is shown as an insert.

The International Geomagnetic Reference Field values of total intensity for the epoch 1970.0 covering the area were obtained from an I.G.S. report No. 71/1 (Barracough and Malin, 1971). An overlay, constructed from these values, was used to effect a total field regional reduction. A secular variation correction of 32 gamma per year was applied uniformly over the survey area. Magnetograms supplied by Valentia Observatory were checked to eliminate any survey records collected during magnetic storms. Diurnal corrections have not been applied because of the large distance of much of the area from Valentia. The total field anomaly values have been contoured at 100 gamma intervals. A description and interpretation of the outstanding anomalies on the magnetic map is in preparation for separate publication.

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BARRACLOUGH, D. R. and MALIN, S. R. C. 1971. Synthesis of International Geomagnetic Reference Field Values. Rep. No. 71/1, Inst, geol. Sci. 26pp.

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June, 1973.

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Total Intensity Anomaly based on I.G.P.E.

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A Reconnaissance Magnetic Map
of the
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Total Intensity Anomaly based on I.G.R.F.

Contour Interval : 100 gamma

Positive Closures Shaded

Approximate Scale 1:1,000,000

