V. GEOMAGNETIC SURVEY IN THE GH78-1 AREA

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Measurement of total magnetic force was carried out with the marine proton magnetometer, GeoMetrics Model G801. Magnetic anomalies were calculated by subtracting IGRF 1975.0 from observed fields.

Result

There are many magnetic anomalies throughout the survey area. They have typical amplitude of 50–100 nT peak to peak and typical wavelength of 20–30 km with the exception of anomalies accompanying seamounts, which have larger amplitude (about 500 nT). Comparison with previous results reveals that amplitude of anomalies tends to decrease westward from the survey area of GH76-1 and GH77-1 cruises (TAMAKI *et al.*, 1979). The amplitude decrease and irregularities in the magnetic anomalies make it difficult to identify the magnetic lineations that probably exist, and they are perhaps due to the disturbance by the Cretaceous mid-plate volcanism, which was suggested by WINTERER (1976).

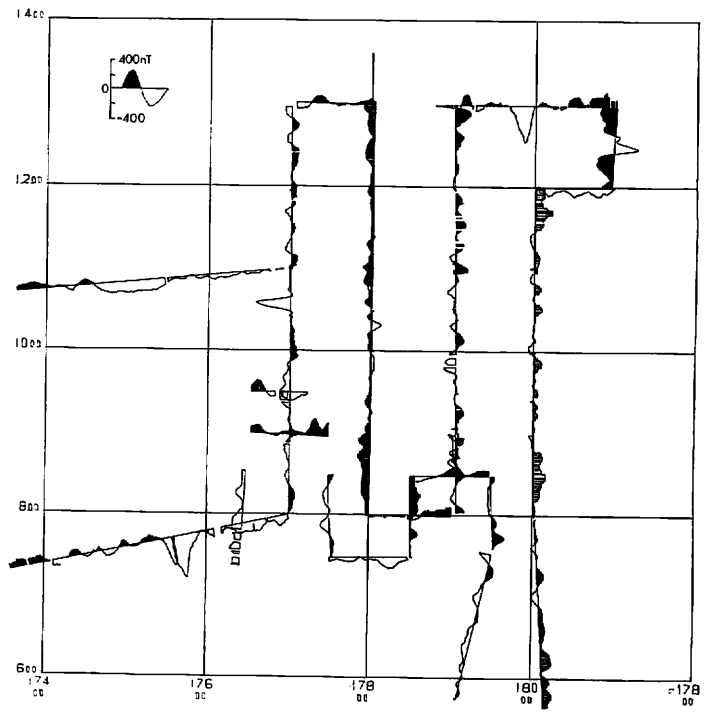

Fig. V-1 Magnetic anomaly profiles in the survey area.

References

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WINTERER, E. L. (1976) Anomalies in the Tectonic Evolution of the Pacific. The Geophysics of the Pacific Ocean Basin and Its Margin. *Geophys. Monogr. Ser.*, vol. 19, edited by G. H. SUTTON *et al.*, p. 269–278, AGU, Washington D.C.