

INTISARI

Telah dilakukan penyelidikan geofisika metode magnetik di daerah Selat Sunda. Penyelidikan dimaksudkan untuk memperoleh informasi mengenai penyebaran batuan beku di daerah tersebut.

Pengumpulan data di lapangan dilaksanakan dengan menggunakan Ground Magnetometer Geometric-866 dan Marine Proton Precession Magnetometer G-811/813 yang masing-masing mengukur variasi harian medan magnet di darat dan intensitas medan total magnet bumi di laut.

Setelah dilakukan koreksi medan normal (IGRF) dan koreksi variasi harian pada data intensitas medan magnet total bumi, diperoleh harga anomali magnet total bumi. Dari data ini dibuat peta kontur anomali magnet total.

Interpretasi semi kuantitatif dan kualitatif dilakukan dengan menganalisa peta tersebut di atas. Interpretasi semi kuantitatif dilakukan dengan membuat penampang tegak (profil) dari peta anomali magnet total untuk kemudian dihitung kedalaman batuan bekunya dengan metode Half Slope (Nettleton).

Hasil penyelidikan ini menunjukkan adanya beberapa daerah yang menarik untuk diselidiki lebih detail. Kedalaman batuan beku yang didapat berkisar antara 1600 m - 2600 m.

ABSTRACT

A geophysical survey using magnetic method has been carried out in Sunda Strait in order to get some informations about the extent of igneous rock in this area.

Data collecting in the field was done by using Ground Magnetometer Geometric G-866 and Marine Proton Precession Magnetometer Geometric G-811/813. The first one was used to measure diurnal variation on land, whereas the second one was used to measure intensity of earth magnetic field on marine.

After applying normal and diurnal variation corrections to the field data, the values of total magnetic anomalies were obtained. Based on these anomaly values a contour map of total magnetic anomalies was made.

Semi quantitative and qualitative interpretations were done by analyzing the contour map. In semi quantitative interpretation some profile of the contour map were drawn and the depth of igneous body were estimated using half slope method (Nettleton).

The survey showed some areas of interest that might be useful to be studied in detail. The basement depth were obtained, about 1600 m - 2600 m.