

INTERPRETATION OF REGIONAL GRAVITY DATA ACROSS SOUTH-CENTRAL PENINSULAR MALAYSIA

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Five major gravity traverses were made across Peninsular Malaysia, namely (i) from Klang to Karak; (ii) Maran to Raub via Jerantut; (iii) Sepang to Kuala Rompin via the Bahau-Keratong highway; (iv) Gemas to Masjid Tanah in Melaka and (v) Muar to Labis. Together with the gravity traverse made by P.J.C. Ryall from Kuala Selangor to Kuantan in 1976, a gravity contour map was drawn. In this gravity contour map, the major

features in P.J.C. Ryall's profile appear to be regional rather than localized in nature. The gravity minimum over the Main Range roughly follows the outcrop of the granite. The gravity maximum over the central Mesozoic basin appears to extend at least to Jerantut in the north but appears to close off somewhere east of Bahau in the south. The gravity minimum over the Main Range is probably due to thickening of the earth's crust under the Main Range, but is enhanced by the flanking higher density Palaeozoic meta-sedimentary rocks. The maximum over the central Mesozoic basin appears to be mainly caused by a crustal anomaly, either a thinning of the crust or an increase in density. The crustal origin of this gravity anomaly is supported by available aeromagnetic data over the same area.
