

Conrad-Moho-Slab Residual Gravity Anomaly, CMS-RGA: New Gravity Anomaly to give better Information of Geology of Japanese

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We proposed a new-type gravity anomaly, i.e. Conrad-Moho-Slab Residual Gravity Anomaly (CMS-RGA). This is a better indicator of geologic structures than usually defined gravity anomaly, eg. Bouguer Anomaly.

Bouguer anomalies indicate total gravity contribution due to subsurface materials. In the Japanese Islands, we can reduce the gravity contribution of slabs (Furuse, 1990; Kono and Furuse, 1989: Slab Residual Gravity Anomaly (SRGA)). We also can reduce the gravity contribution due to the Conrad and Moho undulations by employing Zhao et al.,'s model..

The resultant residual gravity anomaly (Conrad-Moho-Slab RGA; CMS-RGA) shows gravity contribution only due to shallow part of the crust.

The new gravity anomaly is a better indicator of geologic information of the Japanese Islands.