

Bathymetry and Magnetic and Gravity Anomalies east of Okinawa Island

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During GH08 Cruise, multibeam echo sounding, shipboard gravity measurement and total field magnetic measurement with a cesium magnetometer were conducted east of Okinawa Island. Bathymetry obtained from multibeam echo sounding show submarine canyons developed east of Okinawa Island and sets of normal faults north and south of Okinawa Island including Kerama-gap. Free-air gravity anomaly is within ± 160 mgal and north and south of Okinawa Island show negative values compared with the central part. This may correspond to the subsidence of basement due to the formation of normal faults mentioned above. Total magnetic field anomaly is small in general, however, positive anomaly of about 100 nT can be observed around 26deg45minN, 128deg35minE, which may correspond to small volcanic intrusive body.