On the active fault structure of the southern part of Fossa Magna deduced from the distribution of gravity anomaly

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A precise qravity survey was carried out from 1984 to 1985 in the area of southern part of Fossa Magna across the Fuji River. More than 400 gravity stations were situated and the Bouguer anomaly map was made. The precise terrain correction method was carried out by using the 250 m meshed height data of KS 110-1 (Geographical Survey Institute) and the Bouguer anomaly map has the precision of 2 mgal. Following results were obtained from this survey.

The extreme low Bouguer anomalies are distributed on the western side of Fuji River which extend north to south from Kofu basin to Nanbu-cho, and this trend dissappear around Nanbu-cho where Fuji River changes its direction to the east. This trend of low Bouguer anomalies coincides with the active Minobu fault. This may be attributed to the fault gouge material similar to Atera fault (Ezaka, 1981).

Sharp decrease of Bouguer anomalies are recognized from Tenshu mountains to Fuji River. This pattern can be understand as the results of contact of rock bodies of different densities along this line. This line may be considered the boader line of Tanzawa block and Honshu block.