Bouguer anomaly in the vicinity of the Arima-Takatsuki tectonic line, Japan, in relation to the earthquake disaster zone

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The 1995 Hyogo-ken Nanbu earthquake caused serious damage around the Takarazuka-Minoh area along the Arima-Takatsuki tectonic line (ATL) eventhough it is at a distant from the source region. The Bouguer anomaly contour map, drawn after compiling the data of present measurement and other existing ones, shows the steep gradient of contour corresponding to the ATL and a high possibility is seen that the Minoh area lies in the graben structure. We also obtained the supporting evidence that a fault is possibly passing along the Ina River. The concentration of seismic wave and the resulting earthquake disaster zone around the sedimentary cover nearby the fault in present area can be correlated with the same situation as that of the Kobe area.