

Activity of gravity faults in the Tateyama caldera, Hida Mountains, during the past 55 years

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Around Mt. Murodo (2668 m) located in the northeast edge of Tateyama caldera, one of the largest collapse sites in Japan, there are several gravity faults of 300-500 m in length which seem to be the precursory phenomena of deep catastrophic collapse. The gravity faults may still move, because the mountain trail which crosses the fault moves to the caldera side year by year, but the investigation has not been carried out. In this study, the precise measurement of the movement of the fault was carried out by installing many GPS observation points around the gravity fault, and it was confirmed whether it is stable or moving at present. We clarified the change of length and width of the gravity fault for the past 55 years from the aerial photograph interpretation.

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