

Gravity anomaly in southern part of the Noto peninsula and it's interpretation

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Southern part of the Noto peninsula shows high gravity anomaly by Hida metamorphic rock and Funatu granite. Steep horizontal gradient belt of gravity anomaly generally correspond to active faults.

There are some earthquakes in the Noto Peninsula. In recent year, M6 class earthquakes don't occur in this area. Micro earthquakes are occurring a boundary zone between the Houdatsu hill and the Tonami plain. However there is no good correlation between epicenters and active faults. In this study we examined relationship among structures, earthquakes and active faults.

Studied area is southern part of the Noto Peninsula. In this area, gravity data measured by Kanazawa University are 3700 points. We added data that are measured by ex-GSI (about 1400 points) and other organization (about 2500 points).

It is widely recognized that earthquake is hard to occur in granitic bodies. Earthquakes don't occur in the Mt.Houdatsu and the Mt.Sekidousan, they are consists of granite. Earthquakes are rather occurring between the Houdatsu hill and the Tonami plain region where basement rock is suddenly deepen. Earthquake activity is different between northwest side of Houdastu hill and southeast side of that.

In north of the Himi area, clear topographic change doesn't exist and geological faults are not reported. Gravity anomalies in this area, however, steeply change. Sunami and Kono (1988) suggested that the existence ' North Himi tectonic line ' from gravity anomaly. Gravity anomalies and distribution of epicenters obtained from this study also support this tectonic line.