

## Comparison between crustal movement and seismicity in Izu Ohshima Island

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We observe not only a long period dilatation of a baseline but also a periodical contraction and dilatation of baseline in Izu Ohshima Island. We observe micro earthquakes around Izu Ohshima Island too. So, we compare between earthquake occurrence and baseline length.

We use JMA hypocenter catalogue from April, 2002 to January, 2017. The number of earthquakes are 9969. We check Magnitude-Cumulative plot. Then, we find good determination of earthquake larger than Magnitude 1.0. We use baseline length from GSI 96054 to GSI 96055. We average baseline length in each month. We count earthquakes in each month.

When we count earthquakes number in each month, sometime earthquakes number are large. 7 months are larger than 100 earthquakes. We divide 4 period in baseline. A is bottom to middle. B is middle to peak. C is peak to middle. D is middle to bottom. 4 months larger than 100 earthquakes are in period B. 3 months larger than 100 earthquakes are in period C. This means earthquake swarms occur in dilatation period.

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