

## Do large intraplate earthquakes occur in a region of large shear stress?

# Yoshihisa Iio[1]

[1] DPRI

In order to clarify whether or not large intraplate earthquakes occur in regions where differential stress is larger than in surrounding regions, we investigated the difference of stress magnitude in the above two regions, by using the simple mechanical model that consists of springs, sliders, and dashpots. We found that large intraplate earthquakes occur in regions where differential stress is smaller than in surrounding regions. This is because the lower crust sustains a part of the total force acting in the crust in regions where large intraplate earthquakes occur.