

## Seismic gravity changes of the 2004 Sumatra-Andaman earthquake and static gravity anomaly

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The 2004 Sumatra-Andaman earthquake (Mw9.1-9.3) is the first very large earthquake after the launch of the GRACE satellites in 2002. The results of the time series analysis of postseismic gravity changes indicate that those of the 2004 Sumatra-Andaman earthquake have almost ended. This is the first two-dimensional observation result of total seismic gravity changes.

These observation data may also allow us to research interseismic gravity changes because (1) the static gravity anomaly is formed by the repeat of inter-, co-, and postseismic gravity changes and (2) the data of the static gravity anomaly have been given and co- and postseismic gravity changes of one earthquake have been observed.

In my presentation, I will show several observation results and explain the details of what I wrote above.

Keywords: coseismic gravity changes, postseismic gravity changes, interseismic gravity changes, GRACE, The 2004 Sumatra-Andaman earthquake, earthquake cycle

