

Crustal deformation in a wide area generated by the 2000 seismic and volcanic activity of the Izu islands

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Remarkable crustal deformation was observed in a wide region accompanied with the 2000 seismic and volcanic activity of the Izu islands. We investigated how far the influence of the event was extended and how the deformation proceeded by analyzing GEONET data. Followings are the main results of the analyses.

1. Displacement field

Eastward movement occurred in a wide area from the Boso Peninsula to the coast of Ise Bay. On the other hand displacement in the north-south direction was different between the Tokai and Kanto regions: Southward movement was observed in the former region, while northward movement in the latter.

2. Areal strain

Areal strain around Tokyo Bay was compressive, while positive areal strain was observed in the Tokai region and the Chubu district.

3. Maximum shear strain

Large maximum shear strain was produced in the region surrounding the Izu Peninsula.

4. Rotation

Noticeable anti-clockwise rotational field was generated to the north of the Izu Peninsula and on the eastern side.