

## Postseismic deformation following the 2011 off the Pacific coast of Tohoku earthquake and its mechanism

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The postseismic deformation caused by the 2011 off Pacific coast of Tohoku earthquake exceeds 90 cm for 10 months after the main shock. The coseismic subsidence area begins to uplift except for the area in the Iwate prefecture. Estimated afterslip exceeds 3.0 m and extends to west, south and north of the coseismic slip area with a moment of  $9.15 \times 10^{21}$  Nm for 10 months. The area of the afterslip was extended westward and reaches a depth of approximately 90 km of the subducting plate. Northern and southern edges of the area of afterslip seems to be limited by the source region of the 1994 Sanriku-Haruka-oki earthquake and the north limit of the overriding Philippine Sea plates, respectively.

We report the latest status of the postseismic deformation and estimated afterslip model in the meeting. We also report the deformation due to the other mechanisms, such as viscoelastic and poroelastic rebound.

Keywords: 2011 off the Pacific coast of Tohoku earthquake, postseismic deformation, afterslip, viscoelastic relaxation, poroelastic rebound