

Spatial variation in propagation speed of postseismic slip on the subducting plate boundary (Part II)

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We formulate 3D numerical plate boundary models to explain the observed spatial variation in propagation speed of postseismic slip. One of the possible factors causing the non-uniform propagation speed is normal stress variation on the boundary. To investigate the effect, we compare several models having different parameters. Obtained results indicate that the lower effective normal stress causes the faster postseismic slip propagation, and that the shorter length of characteristic slip (dc) causes the shorter duration of postseismic slip propagation. The latter result means that any of millimeter-sized dc or smaller one cannot explain postseismic propagation lasting for several years.

Acknowledgments. This study is partly supported by Supercomputer System Information Synergy Center as the collaborative project.