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## Enhancement of Interplate Coupling after Recent Megathrust Earthquakes

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Enhanced interplate coupling has been found for segments adjacent along-strike to megathrust faults after the 2003 Tokachi-Oki and the 2011 Tohoku-Oki earthquakes, NE Japan, and was interpreted as acceleration of the subducting Pacific Plate slab. A similar enhanced coupling was also reported for the segments to the north of the rupture area of the 2010 Maule earthquake, central Chile. We utilize available GNSS data to find such enhanced coupling in worldwide subduction zones including NE Japan, central and northern Chile, Sumatra, and Mexico to investigate their common features. Our study revealed that the accelerations of landward movement of 2.1-9.0 mm per year appeared in adjacent segments following the 2014 Iquique (Chile), the 2007 Bengkulu (Sumatra), and the 2012 Oaxaca (Mexico) earthquakes. We also confirmed that the enhanced coupling is associated with the increase of seismicity for all these six cases. We found that the degree of enhancement depends on the length of the slab and the magnitude of the earthquake, which is consistent with the simple 2-dimensional model proposed earlier.